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Tim Nash joined Northwood in 1980 and received a B.B.A. from the university, an M.A. in Economics from Central Michigan University, and his doctorate from Wayne State University. Dr. Nash leads specialty programs, research and continuing and executive education programming for Northwood University system-wide. He is a professor of Economics and Business for the undergraduate program and is a professor of Economics and Public Policy at the DeVos Graduate School. Nash is also the director of Northwood's McNair Center for the Advancement of Free Enterprise and Entrepreneurship. Nash is the holder of the David E. Fry Endowed Chair in Free Market Economics at Northwood University. His travels and research have taken him to over 30 countries from China and Mexico to Poland and Switzerland where he also participated in academic colloquiums. Dr. Nash is an adjunct scholar with the Mackinac Center for Public Policy in Midland, an adjunct scholar with the American Legislative Exchange Council (ALEC) in Washington, D.C., and is the former State Director of Economic Education for the clergy for the State of Michigan. Dr. Nash has co-authored four books including When We Are Free (with foreword by Dr. Milton Friedman) and In Defense of Capitalism (co-authored with Dr. Keith A. Pretty). Nash and his colleagues have conducted research and consulting for a number of Fortune 500 companies and their organizations including GM/UAW/PEL, the National Automobile Dealers Association (NADA), the Motor & Equipment Manufacturers Association (MEMA), the Automotive Aftermarket Industry Association (AAIA), the Michigan Chamber of Commerce Foundation, Chrysler, and Dow Corning Corporation. Nash is responsible for researching and publishing the Northwood University Monthly Economic Outlook, Auto Care Association's monthly industry indicator's report as well as its monthly Business and Economic Confidence Indexes which is done in conjunction with Northwood University. Nash has addressed national and international forums related to the economy and automobile industry in China, Europe and North America. He serves on the boards of the Free Enterprise Institute (FEI) in Houston, Texas, Junior Achievement of Central Michigan, the Great Lakes Bay Economic Club and Gerace Construction Incorporated. Nash is a frequent guest on Michigan-based ABC, NBC and CBS television stations, Michigan Talk Radio, and the Paul W. Smith and Frank Beckman Shows on WJR Radio. His writing and interviews have appeared in publications as diverse as The Detroit News, The Philadelphia Inquirer, Automotive News, Aftermarket Business, Aftermarket News, The New Jersey Star Ledger, USA Today, the Chicago Tribune, CNBC, Yahoo Finance, Wall Street Journal/MarketWatch, International Economic Review and Harvard University's *Better, Faster, Cheaper*. Nash resides in Midland, MI with his wife, Pam, and is the father of four adult children and is grandfather to Ella, John George, Brady, Caroline, Evelyn, Bennett, Gabriel, Graham and Oliver Gerard...his pride and joy!!

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Easing regulations might boost auto industry

Timothy Nash and Keith Pretty Published 11:25 p.m. ET Jan. 2, 2018



(Photo: Daniel Mears / Detroit News)

For a brief period after World War II, the United States produced roughly 74 percent of global GDP and more than 50 percent of the world's passenger and commercial motor vehicles.

The U.S. was the undisputed global leader in most areas of commerce with a generally market-based, pro-business environment and competitors in Europe and Asia whose factories and infrastructure were greatly damaged or destroyed by the fact that the bulk of major battles during WWII were fought in Europe and Asia.

By the 1960s the U.S. was losing market share as a percent of a rapidly growing global economy even in the motor vehicle space, a sector once monopolized by the "Big Three" (General Motors, Ford and Chrysler).

Research done by [Northwood's McNair Center](http://www.northwood.edu/mcnair) (<http://www.northwood.edu/mcnair>) shows Big Three losses in overall market share globally from 1950 to 2016 were due largely to the following five factors:

- The emergence of many European/Asian economies from the devastation of WWII.
- Increasing levels of relative labor productivity and product design, especially in manufacturing in economies outside of the U.S.
- Growing regulatory competitive advantages realized by many countries outside the U.S.
- Population and income growth in many countries in Europe and Asia.
- Lower tax rates on corporate income realized by America's competitors headquartered outside of the U.S. put the Big Three and other U.S. companies at a distinct disadvantage. In addition, many countries other than the U.S. began and continue to provide repatriation advantages to their companies by abandoning a territorial income tax system in favor of a world-wide tax system.

The change in motor vehicle production that took place from 1961 to 2016 is especially troubling for America. The data speaks to a dramatically changing global motor vehicle market in the post-World War II era; a period in which Germany rose from the ashes of Nazism and World War II while Asia emerged from the devastation largely rejecting imperialism and communism to dominate the global automobile industry.

In 1961, the U.S. produced roughly 40 percent of inflation adjusted global GDP, while motor vehicle assembly plants located in the U.S. produced roughly 44 percent of all motor vehicles (passenger and commercial) produced in the world. This does not take into account U.S. companies such as Ford and GM had production plants in Europe, Asia and South America as well. The U.S. produced 44 percent of passenger vehicles and 30 percent of all commercial vehicles manufactured in the world in 1961.

In 2016, the U.S. produced roughly 25 percent of inflation-adjusted global GDP while motor vehicle assembly plants located in the U.S. produced just 13 percent of all motor vehicles. The U.S. produced 36 percent of commercial vehicles and just 6 percent of passenger vehicles in 2016. If this trend continues where will America be by 2030? Or, is there reason to expect better?

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Over the past few decades, the U.S. has made strides in general productivity largely due to technology based innovations and wage concessions. In fact, the U.S. has ranked 5th, 8th, and 6th in global productivity since 2015 according to the OECD, and number two in the world for manufacturing productivity based on a 2016 study released by Deloitte. Could promising regulatory reform coupled with corporate income tax reform provide the needed final piece in the puzzle for an economic renaissance? A bridge from the glory days of American manufacturing to a modern surge in which American business and more specifically the American motor vehicle industry begins to regain market share at home and abroad? Only time will tell.

Keith Pretty is president and CEO of Northwood University. Timothy Nash is senior vice president and director of the McNair Center for the Advancement of Free Enterprise and Entrepreneurship at Northwood University.

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Column: Michigan's comeback accelerating

Timothy Nash, Keith Pretty, Rich Studley and Bob Thomas Published 10:40 p.m. ET Nov. 25, 2017



(Photo: Dale G. Young)

The 2017 Michigan Economic Competitiveness Study was recently released by the Michigan Chamber of Commerce Foundation and Northwood University. The sixth annual study confirms that Michigan is making great progress at the state level since the Great Recession ended in 2009.

The first decade of the 21st century has been referred to as "Michigan's Lost Decade," in which Michigan's economy was ranked at or near the bottom in key economic categories ranging from gross domestic product and wage growth to tax policy and job growth.

In fact, Michigan's economy was the only one to have actual population loss from 2000-10 according to the U.S. Census Bureau.

Michigan's population declined 0.6 percent, losing a net 54,804 people while the United States population increased 9.7 percent with the other 49 states adding more than 26 million people to the population.

The Great Recession saw the largest decline in United States GDP — 4 percent — and the sharpest increase in national unemployment, from 4.5 percent to 10.1 percent, since the Great Depression of the 1930s.

Michigan's unemployment rate hit a peak of 14.9 percent in June of 2009. Economic conditions were far worse in Michigan with the bankruptcy of General Motors and Chrysler, and new automobile, sport utility vehicle and light truck sales reaching a 40-year low nationally of 10.4 million vehicles sold in 2009.

The 2017 study ranks Michigan No. 1 in the Great Lakes region and the ninthmost economically competitive state nationally. Michigan ranks sixth in real GDP growth, second in real per capita GDP growth and 3rd in personal per capita income growth since 2009, according to U.S. Bureau of Economic Analysis data. Michigan's unemployment rate declined to 4.3 percent in September of 2017 according to recent data from the Bureau of Labor Statistics.

Michigan job growth was impressive in 2016 and many expect it will continue through 2017 at a somewhat slower pace. The most recent University of Michigan RSQE Forecast notes the state has averaged roughly 70,200 net new jobs created annually from the summer of 2009 through the summer of 2017 or a total estimate of 561,600 new jobs.

In fact, Michigan has averaged 1.7 percent annual job growth since the end of the Great Recession through this past summer while overall U.S. job growth averaged 1.5 percent.

The Tax Foundation's 2017 State Business Tax Climate Index ranks Michigan the 12th most competitive state relative to the overall business tax climate which notes tremendous progress since 2006, when it was ranked 28th.

Even more remarkably, Michigan has gone from having the 49th best corporate income tax environment in 2006, to number eight in 2017. After-tax income goes further in Michigan than in most states according to recently released data from the Missouri Economic Research and Information Center (MERIC).

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Michigan has the third lowest cost of living among the 50 states in categories ranging from housing and utility costs to transportation and health care, according to MERIC. The above are all important factors for job creation and the attraction of human and investment capital.

Clearly, the Michigan economy has come a long way since the trough of the Great Recession, a tribute to the hard working people of Michigan and sound public policy in Lansing.

Timothy Nash is senior vice president and director of the McNair Center at Northwood University. Keith Pretty is president and CEO of Northwood University. Rich Studley is president and CEO of the Michigan Chamber of Commerce. Bob Thomas is executive director of the Michigan Chamber Foundation.

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2017 Michigan Economic **COMPETITIVENESS STUDY**



An analysis of issues to advance Michigan in a complex global economy

Executive Brief

2017 Michigan Economic Competitiveness Study:

An Analysis of Issues to Advance Michigan in a
Complex Global Economy

Executive Brief

About the Michigan Chamber Foundation

The Michigan Chamber Foundation was established as a non-profit supporting organization to the Michigan Chamber of Commerce in 1985 for the following purposes:

- To plan and conduct non-partisan public education programs regarding free enterprise, productivity and basic economic issues affecting the state of Michigan;
- To establish and operate a leadership institute designed to provide promising future leaders assessment of Michigan's assets, challenges and opportunities to give participants the background and network of contacts necessary to make a positive impact on Michigan's future;
- To conduct non-partisan research and distribute policy studies on issues facing Michigan including, but not limited to, taxation, government regulation, government spending, health care and transportation.

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About Northwood University

Northwood University is committed to the most personal attention to prepare students for success in their careers and in their communities. It promotes critical thinking skills, personal effectiveness and the importance of ethics, individual freedom and responsibility.

Private, non-profit and accredited, Northwood University specializes in managerial and entrepreneurial education at one full-service, residential campus located in mid-Michigan. Adult Degree Programs are available in seven states with many course delivery options, including online. The DeVos Graduate School offers accelerated, evening and weekend programming in Michigan and Texas. The Alden B. Dow Center for Creativity and Enterprise provides system-wide expertise in family enterprise, entrepreneurship, creativity and innovation and new business development. International education is offered through study abroad and in Program Centers in Switzerland, China (Changchun and Wuxi), Malaysia and Sri Lanka.

The McNair Center for the Advancement of Free Enterprise and Entrepreneurship at Northwood University is a leading university think-tank, generating information, research, and programs focused on the study, advocacy and expansion of the market process and the creation and the cultivation of entrepreneurs.

Acknowledgements

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In particular, the Michigan Chamber Foundation would like to thank Northwood University President and CEO, Dr. Keith A. Pretty; and Dr. Timothy G. Nash, Senior Vice President for Strategic and Corporate Alliances and the Director of the McNair Center, for shepherding the project from inception to completion.

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Dr. Debasish Chakraborty, Professor of Economics, Central Michigan University

Dr. Richard Ebeling, Professor of Economics, The Citadel

Dr. Adam Okulicz-Kozaryn, Associate Professor of Public Policy, Rutgers University

Mr. Adam N. Matzke, Economics and Finance graduate, Northwood University

Finally, we would like to thank Joy Feeney, Ralph Wirtz, Morgen Panning and Rochelle Zimmerman for their assistance with the chart construction, editing, typing and researching of this project.

Introduction

The purpose of the study is to conduct a comprehensive analysis of the Michigan economy that builds upon research completed for 2012, 2013, 2014, 2015 and 2016 economic competitiveness studies and that provides benchmarks for measuring the state's economy against national and regional competitors.

The focus is on Michigan's economy as it compares to regional and national data over the last decade, as well as the trends that help forecast its future. Now in its sixth edition, Michigan is evaluated against over 200 metrics including Gross State Product (GSP) growth, tax policy, regulatory policy, employment growth and the cost of doing business. Researchers examined state tax structures, regulations and rules that govern business, educational attainment, workforce composition and the most current economic statistics available to give the most complete picture of the state's business climate.

The study also breaks out data comparing Right-To-Work states to Non-Right-To-Work states, Michigan to Great Lakes region states (Illinois, Indiana, Michigan, Ohio, and Wisconsin) and looks at some of the largest cities in the Great Lakes region as contributors to the state's economic success. **New with the 2017 study** is an analysis of the Michigan and U.S. automobile industry.

The Michigan economy began its eighth year of economic recovery in the summer of 2017. Job growth has slowed a bit, but still averaged about 1% growth in the first half of 2017. The University of Michigan projects good job growth for the second half of 2017 and solid job growth of 1.5% by the end of the first half of 2018. From December of 2010 to December of 2016, Michigan led the country in the creation of manufacturing jobs and was 6th in the creation of private sector jobs with more than 560,200 jobs created. Michigan's unemployment rate has dropped more than 67% since late 2009, making it the top-performing state in this category at the end of Q2 2017. Michigan remains the automotive management capital of the U.S. as well as its design and R&D center. In 2016, the U.S. automobile industry reached an all-time record for automobiles, SUVs and light trucks sold at just over 17,539,052 vehicles. Record breaking sales in 2016 were up just under 1%, with impressive gains by the Detroit three and a slowing, but promising 2017.

Methodology

Using statistical techniques called factor analysis, a process in which the values of observed economic data are expressed as functions of a number of possible causes or factors to find which are the most important to overall economic competitiveness, researchers studied the following factor categories: 1) General Macroeconomic Environment, 2) State Debt and Taxation, 3) Workforce Composition and Cost, 4) Labor and Capital Taxation 5) Regulatory Environment. These are the same five factor categories used in each year's installment of the study.

Factor 1 (General Macroeconomic Environment) - considers general measures of statewide economic health such as unemployment rates, labor force participation rates, per-capita income and life-satisfaction (another measure of well-being in addition to per-capita income).

Factor 2 (State Debt and Taxation) - considers state debt per capita, cost of living and tax burden per capita (tax burden considers state sales taxes, selective taxes, license taxes, corporate income taxes and state income taxes).

Factor 3 (Workforce Compensation and Cost) –considers percentage of the working population that is part of a union, percentage of the private working population that is a member of a union, percentage of the public working population that is a member of a union and cash payments to beneficiaries (including withdrawals of retirement contributions) of employee retirement, unemployment compensation, workers' compensation and disability benefit social insurance programs.

Factor 4 (Labor and Capital Formation) - considers employment growth, population growth, migration and organizational birth and death data.

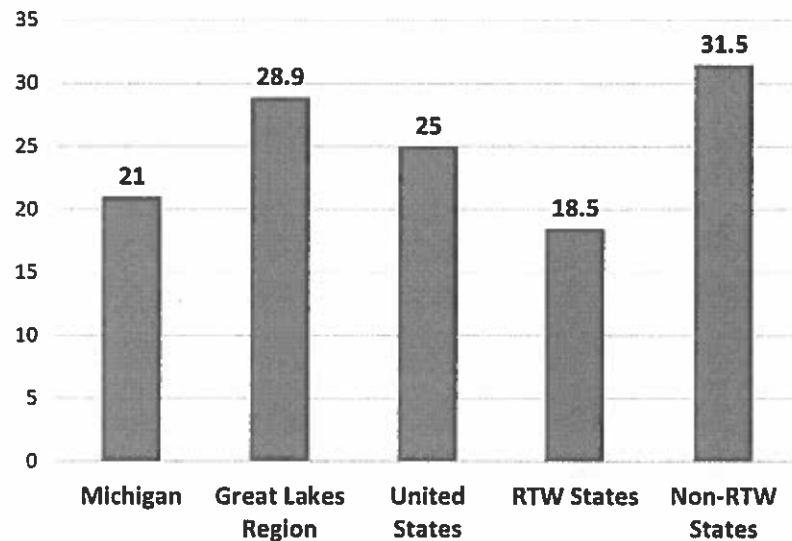
Factor 5 (Regulatory Environment) - is a composite of other indices that consider the business friendliness of a state's regulatory framework/environment.

The Northwood University Competitiveness Index

The Northwood University Competitiveness Index was developed for this study and is comprised of five factor categories measuring various areas of economic performance for all 50 states (1 is the most favorable and 50 is the least favorable). Unlike many other indices where the data and/or categories are assigned weights by the researchers, the Northwood Index assigns weights based on factor analysis which initially involved 200 variables. The weights are market sensitive and are susceptible to fluctuate with changes in economic conditions and data from year to year. Thus, the indices are based on these weights and are snapshots of current market conditions and key factors over said period. Therefore, the model delivers an overall ranking for a state, provides evidence of strengths and weaknesses relative to other states by category and the weights assigned in each category derived by the model may be useful in prioritizing efforts to improve a state's relative competitiveness (see Exhibits 108 and 109).

Exhibit 108 : Northwood's State Competitiveness Index Rank (1998-2017)			
Alabama	32	Montana	22
Alaska	40	Nebraska	6
Arizona	29	Nevada	17
Arkansas	19	New Hampshire	26
California	11	New Jersey	48
Colorado	2	New Mexico	38
Connecticut	49	New York	45
Delaware	37	North Carolina	18
Florida	33	North Dakota	10
Georgia	12	Ohio	30
Hawaii	47	Oklahoma	4
Idaho	8	Oregon	9
Illinois	35	Pennsylvania	42
Indiana	23	Rhode Island	50
Iowa	14	South Carolina	24
Kansas	28	South Dakota	16
Kentucky	43	Tennessee	13
Louisiana	27	Texas	3
Maine	44	Utah	1
Maryland	41	Vermont	39
Massachusetts	46	Virginia	5
Michigan	21	Washington	7
Minnesota	34	West Virginia	20
Mississippi	31	Wisconsin	36
Missouri	25	Wyoming	15

Exhibit 109 : Northwood's State Competitiveness Index Rank (1998-2017)



The research concluded and the analysis shows that Michigan's economy improved similarly to the U.S. economy and, while making gains in its overall competitiveness, still has strides to make relative to other states. The overall factor analysis making up the Northwood University State Competitiveness Index shows Michigan moving from 47th in 2012 to 21st in 2017.

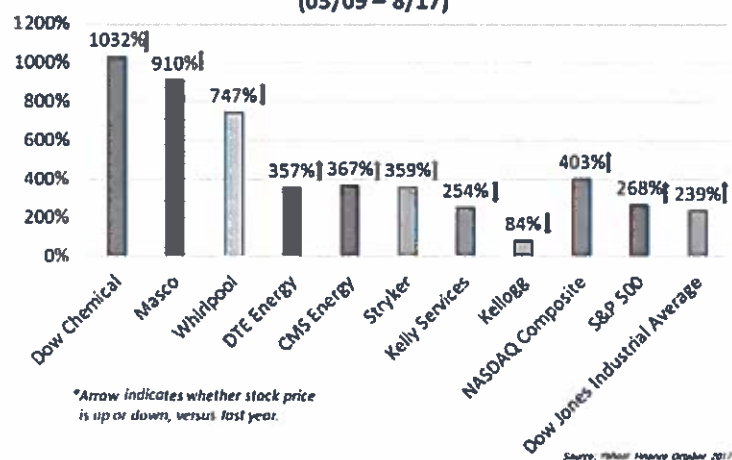
Overall, Michigan ranks 21st out of the 50 states in the Index. Consequently, the state's relatively strong performance in terms of Debt and Taxation and Regulatory Environment is outweighed by its relatively weak performance in the factor categories of Workforce Composition, Cost and Labor and Capital Formation. The key reason for Michigan's overall rank improvement in 2017 had much to do with a stronger Macroeconomic Environment and a Competitive Tax and Regulatory Environment.

New with the 2017 study is a snapshot of Michigan's overall economic performance since 2012 and a look at the Michigan and U.S. automobile industries. The above chart shows Michigan's economic performance through two difficult recessions beginning with data in 1998. Exhibit 128 shows that Michigan, driven by tax and regulatory reform and strong public policy, has been the 9th most competitive state economically since 2011, something all Michiganders played a role in and should be proud of (see Exhibit 128).

Exhibit 128: Northwood's State Competitiveness Index Rank (2011-2017)			
Alabama	38	Montana	16
Alaska	37	Nebraska	14
Arizona	26	Nevada	27
Arkansas	35	New Hampshire	28
California	15	New Jersey	46
Colorado	6	New Mexico	45
Connecticut	49	New York	43
Delaware	42	North Carolina	4
Florida	2	North Dakota	7
Georgia	25	Ohio	24
Hawaii	36	Oklahoma	33
Idaho	13	Oregon	10
Illinois	31	Pennsylvania	34
Indiana	8	Rhode Island	50
Iowa	22	South Carolina	18
Kansas	30	South Dakota	23
Kentucky	32	Tennessee	5
Louisiana	47	Texas	3
Maine	41	Utah	1
Maryland	39	Vermont	44
Massachusetts	17	Virginia	12
Michigan	9	Washington	11
Minnesota	18	West Virginia	48
Mississippi	40	Wisconsin	29
Missouri	21	Wyoming	19

GDP growth in Michigan over the last few years has been led by a resurgence in the automobile, agriculture, tourism sectors and manufacturing in general. In fact, Michigan-based Fortune 500 Company Stock Prices (Non-Automotive) on average have outperformed the three major stock indices since the trough of the "Great Recession" at 505% growth

Exhibit 124: Percent Increase in Michigan Based Fortune 500 Company Stock Price (Non-Automotive) (03/09 – 8/17)



compared with 303% growth for an average of the stock markets (see Exhibit 124). A careful analysis of factor categories 3 and 4 coupled with sound public policies designed to address said issues with workforce development and labor costs will enhance Michigan's competitiveness.

Michigan's economic performance in the five categories ranked as follows:

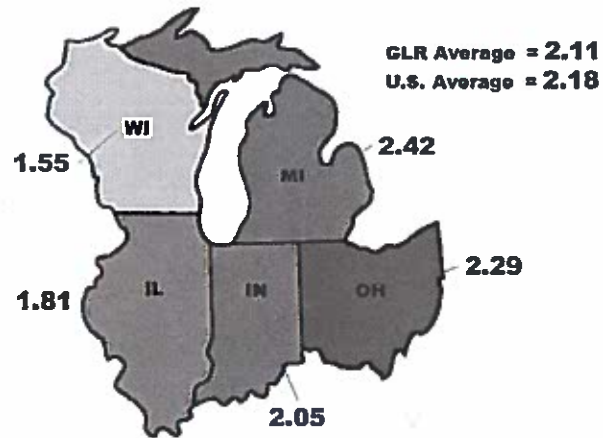
Exhibit 120: Michigan's Economic Performance Ranking
(1998-2017 Data)

	2017	2016	2015	2014	2013	2012
NU State Competitiveness Index: Michigan	21	25	29	30	39	47
Factor 1 – General Macroeconomic Environment	7	10	11	20	31	48
Factor 2 – State Debt and Taxation	11	13	13	12	14	10
Factor 3 – Workforce Composition and Cost	35	38	39	38	43	45
Factor 4 – Labor and Capital Formation	32	35	36	38	44	45
Factor 5 – Regulatory Environment	18	19	25	23	26	24

The factor analysis again shows Michigan improving in the General Macroeconomic Environment. This is largely due to relative improvements in Gross State Product growth and reductions in unemployment. Job growth in Michigan was positive in 2011, 2012, 2013, 2014, 2015 and 2016 with more than 550,000 jobs created since the end of 2010. Researchers believe much of this growth can be attributed to Michigan's state business tax environment and regulatory structure. Michigan's labor cost still remains among the highest nationally in some sectors while net population migration and new business startups are improving in Michigan since 2000, yet remain somewhat challenging nationally. The 2017 Kauffman Foundation Entrepreneurial Index shows Michigan slightly lower than the national average, yet leading the Great Lakes Region. Michigan shows general promise in entrepreneurial activity, which can significantly improve rankings given continued development in economic attractiveness.

Michigan led the Great Lakes Region states in economic growth and was a strong performing state nationally over the last five years. It is also of note that the Great Lakes Region was the fifth best performing region in the country (out of eight regions) over the same period with good performance coming from Michigan, Indiana and Ohio. The

**Exhibit 26: Gross State Product Growth
(2011 - 2016)**



region showed average growth in the Gross State Product (GSP) of 2.11% and Michigan GSP growth of 2.42%. The region did not outperform the U.S. national average in personal income growth per capita as it did in previous studies. The Great Lakes region realized only 2.11% growth compared to the national average of 2.18% over the last five years. Michigan's recovery outpaced the national average and was more broad-based, as many non-automotive Michigan Fortune 500 companies have dramatically improved in the stock market since the "Great Recession" trough of March 2009.

The 2017 study includes a feature analyzing eight of the Great Lake states' largest economic areas and principle cities. The Detroit and Grand Rapids economic areas show signs of strong economic improvement since 2009, after facing challenging economic times in the first decade of the 21st century, and outperformed Chicago, Cleveland, Indianapolis and Milwaukee. Grand Rapids was the top performing major Great Lakes Region city at 3.7% economic growth with Columbus, OH next at 3.2% growth, while Detroit exhibited good growth at 2.7% from 2009-2016, signaling economic recovery for the city.

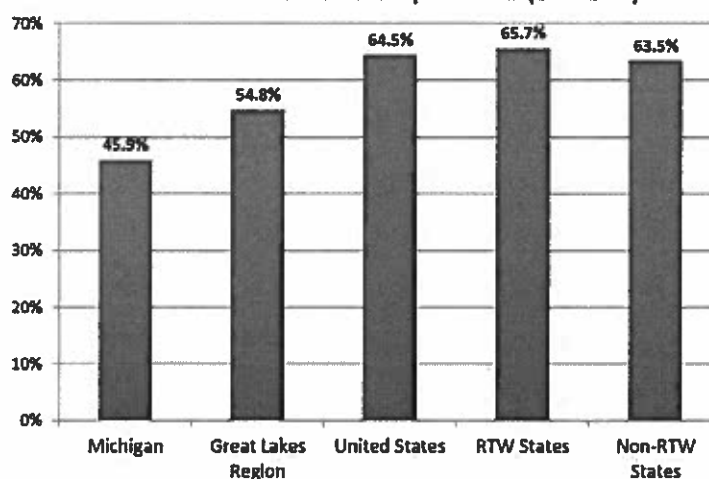
Key Findings

The following are examples of the many factors used in this study to evaluate the competitiveness of the Michigan economy relative to the U.S. as a whole, the Great Lakes Region, as well as Right-To-Work (RTW) states and Non-Right-To-Work (NRTW) states:

1. Growth in Personal Income

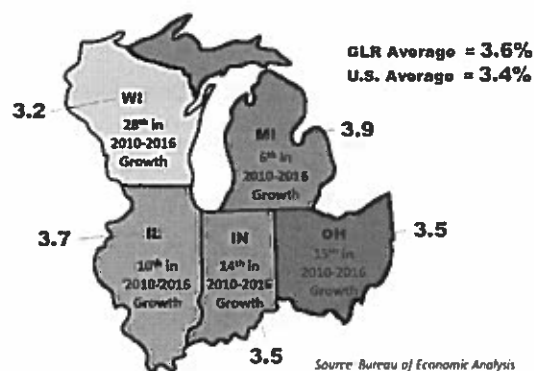
Personal income per capita growth in Michigan grew 45.9% from 2000-2016 while the U.S. average income grew at 64.5% over the same period. Personal income growth over the period grew at just over 66% in RTW states, at 63.5% in NRTW states and 54.8% in the Great Lakes region. Also of note, Michigan did not lead the Great Lakes region from 2010 – 2016 and the national average for per capita personal income growth (see Exhibits 37 and 38). Increasing per capita income growth in Michigan over the last few years is still a leading indicator of a strengthening economy and job market.

Exhibit 37: Personal Income Per Capita Growth (2000-2016)



Source: Computed with data from Bureau of Economic Analysis (2000 - 2016)

Exhibit 38: Great Lakes Average Personal Income Per Capita Growth (2010-2016)



Source: Bureau of Economic Analysis

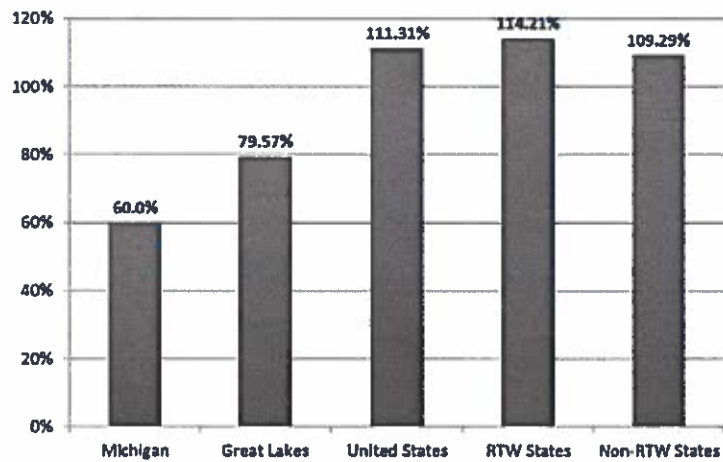
2. Real Gross State Product (GSP)

Growth

From 1998-2016, Michigan Real Gross State Product (GSP) lagged behind the national average significantly. While the U.S. economy grew from an overall real Gross Domestic Product (GDP) level of more than \$8 trillion in 1998 to just over \$17 trillion in 2016 or just over 100%, the Michigan economy grew by only 60%. Gross State Product grew at an average rate of roughly 114% over the same period in RTW states while realizing a slower growth rate in NRTW states of just 109% and 80% in the Great Lakes Region.

Michigan's GSP growth was impressive from 2011-2016. The Michigan average of 2.42, leads the Great Lakes Region and was above the U.S. average of 2.18 for the same period. The Great Lakes Region average was just below the average of the U.S. over the same time period. If Michigan were its own economic region, it would have ranked fourth in economic growth trailing only the Southwest, Far West and Rocky Mountain regions of the U.S., signaling recent improvement in the Michigan economy (see Exhibits 19, 28, and 29).

Exhibit 19: Gross State Product Growth (1998-2016)



Source: Computed with data from Bureau of Economic Analysis (1998 - 2016)

Exhibit 28: U.S. GSP Growth in Great Lakes Region (2011 - 2016)

State	2011	2012	2013	2014	2015	2016	Average GSP
Illinois	2.07	1.91	0.9	1.2	2.3	2.5	1.81
Indiana	2.19	3.30	2.1	0.4	1.7	2.6	2.05
Michigan	3.45	2.25	2.0	1.9	1.4	3.5	2.42
Ohio	2.88	2.16	1.8	2.1	1.8	3	2.29
Wisconsin	1.28	1.45	1.7	1.0	1.8	2.6	1.55
Great Lakes	2.43	2.17	1.6	1.4	2.14	2.9	2.11
U.S.	1.68	1.28	2.68	2.49	1.94	3	2.18

Exhibit 29: U.S. GSP Growth by Region (2011 - 2016)

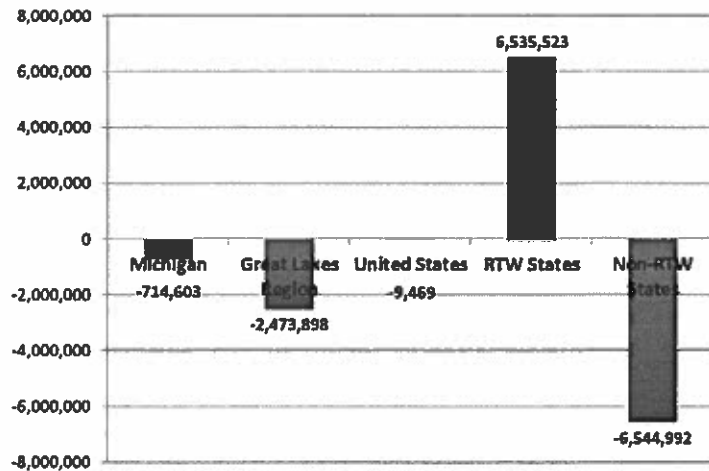
Region	2011	2012	2013	2014	2015	2016	Average
New England	1.04	1.24	1.3	1.6	1.3	3.6	1.68
Mid East	1.20	1.48	0.7	1.7	1.6	2.9	1.59
Great Lakes	2.43	2.17	1.6	1.4	2.14	2.9	2.11
Plains	1.96	2.74	2.5	1.3	1.3	1.7	1.92
South East	0.97	2.12	1.6	1.7	2.2	3.4	2.0
South West	2.97	4.07	3.3	4.3	3.1	0.6	3.06
Rocky Mountains	1.52	2.10	4.1	3.9	3.1	2.9	2.9
Far West	1.51	3.33	2.0	2.7	3.8	4.4	2.96
U.S.	1.68	1.28	2.68	2.49	1.94	3	2.18

3. Net Population Migration

Michigan's population net migration from 2000-2016 was among the worst in the United States, ranking 44th with a loss of 714,603 people. Net migration is defined by the difference in people leaving a state relative to people migrating to a state over a given period of time. The overall U.S.

population net migration for the same period was just over 9,469 people net negative with RTW states experiencing a positive net migration total of 6,535,523 and NRTW states suffering a net migration loss of 6,544,992 with the Great Lakes region realizing a loss of just under 2.5 million people. (see Exhibit 17). Even though population net migration is still negative, it is slowing with the net job creation that has taken place in Michigan over the last seven years.

Exhibit 17: Population Net Migration (2000-2016)

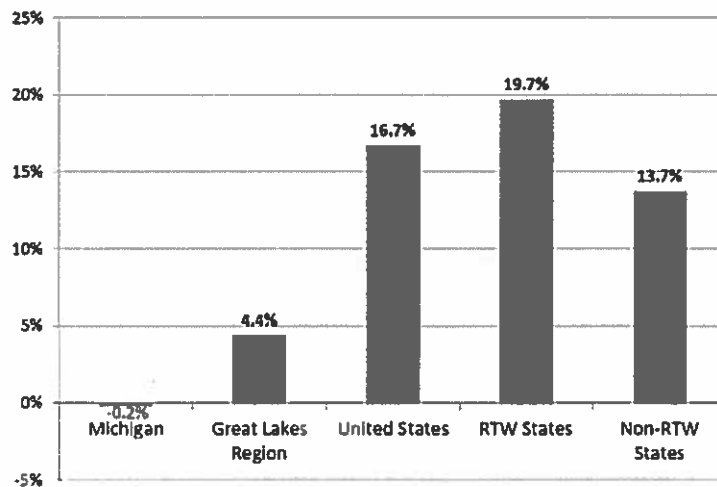


Source: Computed with data from Bureau of Labor Statistics (2000 - 2016)

4. Job Growth by State

During the same period between 2000 and 2016, Michigan Non-Farm Employment growth declined 0.2% while U.S. overall jobs grew 16.7%. RTW states saw employment growth at just under 20% while NRTW states job growth was 13.7%. The Great Lakes Region realized slightly positive growth (see Exhibit 33).

Exhibit 33: Non-farm Payroll Employment Growth (2000-2016)

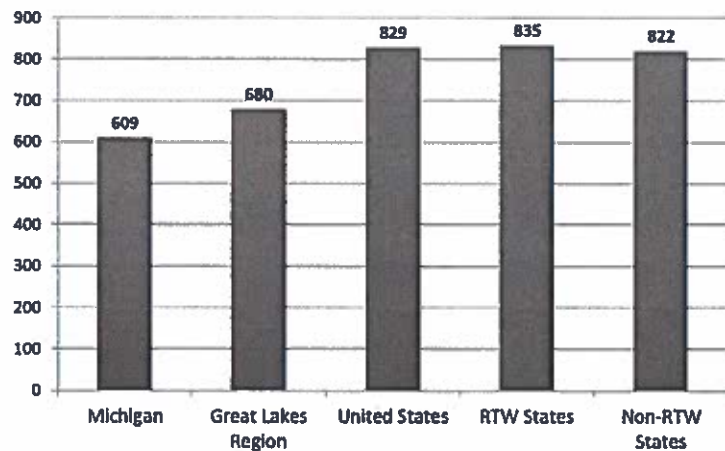


Source: Computed with data from Bureau of Economic Analysis (2000 - 2016)

5. Total Government Employees per 10,000 People

Michigan, as of 2016, has 609 government employees per 10,000 people, ranking it 4th best in the country again with this study (see Exhibit 62). This is a slight decrease from the 2016 study when Michigan had 612 government employees per 10,000 people, and is a sign of increasing government efficiency.

Exhibit 62: Total Government Employees per 10,000 People (2016)

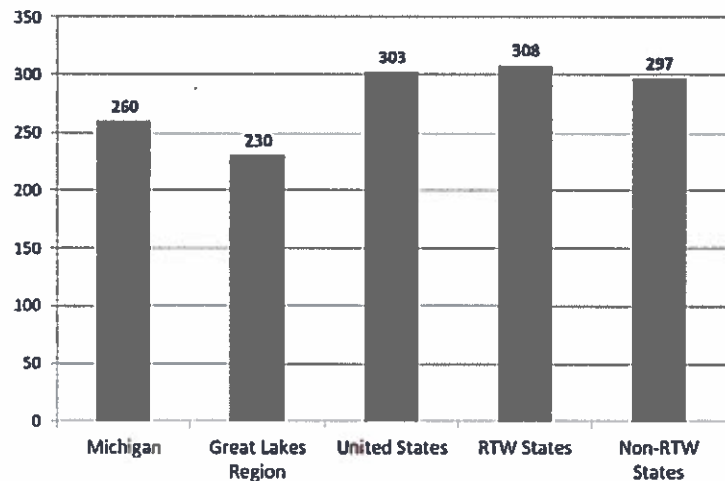


Source: Computed with data from Bureau of Economic Analysis (2016)

6. Index of Entrepreneurial Activity per 100,000

The Kauffman Foundation ranked new business activity per month per state per 100,000 people in 2016 with the national average being 303 and the Michigan average at 260. The RTW state average was 308, the NRTW state average was 297 and the Great Lakes Region was 230 (see Exhibit

Exhibit 88: Kauffman Index of Entrepreneurial Activity (2017)



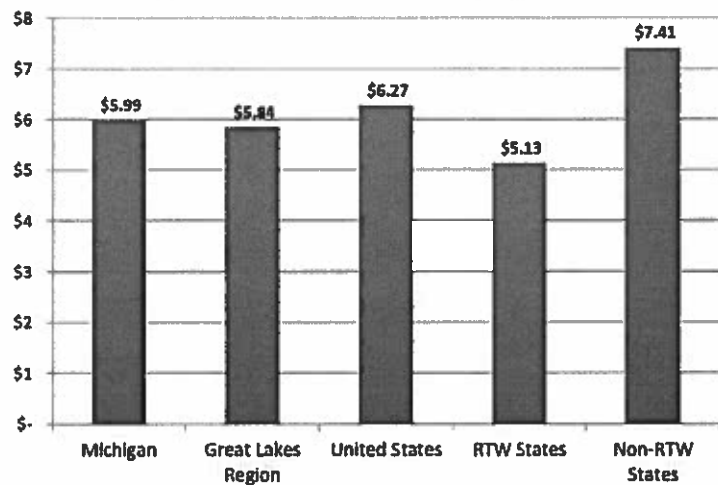
Source: Computed with data from The Kauffman Foundation (2017)

88). Since the "Great Recession," the Michigan economy has shown strong growth in both income and gross state product and has adopted a more business friendly tax policy clearly improving the environment to bring new business to Michigan and encouraging entrepreneurial growth as we no longer lag behind the national average and are far above Michigan's average level of 180 in our 2015 study.

7. Industrial Cost of Natural Gas

Michigan seems to be somewhat competitive in the area of average cost of electricity, but trails natural gas per unit relative to the Great Lakes Region and RTW averages. It was above the national average for electricity and below the RTW average price for electricity per unit in 2013. However, the RTW average for natural gas was below the national, NRTW, Great Lakes Region and Michigan averages in industrial natural gas costs we studied for 2013 (see Exhibit 80). Michigan's industrial natural gas price increased from last year's study to this year's study, and so did the cost for the rest of the country leaving Michigan at a slight competitive disadvantage, continuing to suggest an opportunity for public policy debate relative to pricing structure.

Exhibit 80: Industrial Natural Gas Prices (Avg. Jan.-Apr. 2017)



Source: Computed with data from U.S. Energy Information Administration (Average Jan.-Apr. 2017)

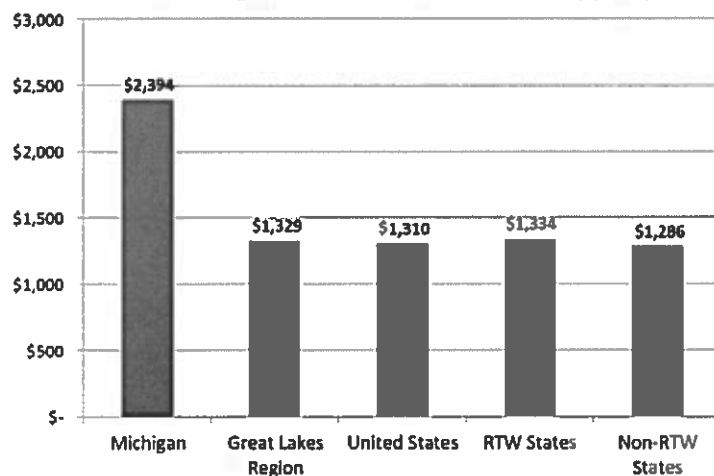
8. Automobile Insurance Cost

The cost of doing business in Michigan is high by a number of key metrics. The median price for an automobile insurance policy in Michigan is the highest in the country, according to a recent study released by

CarInsuranceQuotes.com. The median average in Michigan is

\$2,394, the national average is just over \$1,310, the RTW average is \$1,334, the NRTW average is just under \$1,286 and the Great Lakes Region is \$1,329. Michigan requires long-term catastrophic care as a part of its no-fault coverage; the cost figures out to be 4.42% of median

Exhibit 68: Average Price of Annual Car Insurance Policy (2017)



Source: Computed with data from CarInsuranceQuotes.com (2017)

household income to purchase insurance. New Hampshire is the best bargain at 1.49% of median household income (see Exhibit 68). Again with the 2017 study, we used the same broad measure of cost with Michigan remaining 50th as the most costly state. Again an area for public policy consideration and improvement.

9. State Business Tax Climate Index

The *State Business Tax Climate Index* is produced annually by the Tax Foundation, one of this country's leading fiscal policy think tanks. The index is a measure of how each state's tax law affects economic performance. An overall index rank of 1 means the state's tax system is most favorable for business; a rank of 50 means least. Rankings are weighted and do not average across to total. The chart depicts a strong and improving climate for business in Michigan in 2017. Michigan Ranks 12th overall, 8th best relative to corporate taxes, 14th in individual income taxes and 9th in sales tax. Michigan is number 2 in the Great Lakes Region trailing Indiana which is ranked 8th in the country (see Exhibit 107).

Exhibit 107: State Business Tax Climate Index 2017

State	Overall Index Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemp. Insurance Tax Rank	Property Tax Rank
Wyoming	1	1	1	6	31	38
South Dakota	2	1	1	32	40	23
Alaska	3	27	1	5	29	22
Florida	4	19	1	28	2	10
Nevada	5	34	1	41	43	8
Montana	6	13	21	3	19	9
New Hampshire	7	46	9	2	41	43
Indiana	8	23	11	10	10	4
Utah	9	3	12	17	22	5
Oregon	10	35	32	4	33	18
Great Lakes Region						
Michigan	12	8	14	9	47	25
Illinois	23	26	10	35	38	46
Wisconsin	39	30	43	7	36	34
Ohio	45	45	47	29	4	11

Source: Tax Foundation (2017)

A Snapshot of Key Great Lakes Region Cities

Using the most current data available, we took a close look at how key cities in the Great Lakes Region have functioned since 2000. We looked at eight cities from the five Great Lakes region states including Detroit, Grand Rapids and Lansing.

Michigan was clearly the hardest hit state economy in the country over the last 17 years. The data also shows that Detroit was one of the most— if not the most— adversely affected city while Grand Rapids and Lansing had economic challenges as well. The inspiring news is that Grand Rapids was the top performer of the eight cities we analyzed between 2009 and 2016, with Detroit and Columbus, OH close behind. Columbus and Milwaukee were the only cities in the region to outperform the national average for GDP growth 2008-11 while Detroit, Grand Rapids and Columbus, OH performed at a significantly higher level than the U.S. metro average 2009 to 2016 based on the Bureau of Economic Analysis data. Chicago, Cleveland, Indianapolis and Milwaukee all trailed Grand Rapids, Columbus and Detroit in economic growth from 2009-2016 with Milwaukee falling below the national average over the period (see Exhibit 122).

Exhibit 122: An Economic Snapshot of Key Great Lakes Region Cities (2000-2016)

	Metro Compounded Annual GDP Growth Rate (2000-2011)	Metro Compounded Annual GDP Growth Rate (2008-2011)	Metro Compounded Annual GDP Growth Rate (2009-2016)	Metro GDP (2016)	Rank Metro GDP (2011)	Rank Metro GDP (2016)	Number of Employers	City Population (City Proper) (2016)	City Median Household Income/State (2011-2015)
Chicago	0.64	-0.14	1.4	\$651 B	3	3	291,000	2,705,000	\$48,522/\$57,574
Cleveland	-0.15	-1.3	1.5	\$129 B	27	30	232,680	386,000	\$26,150/\$49,429
Columbus	0.53	-1.1	3.2	\$131 B	32	29	64,363	806,064	\$45,659/\$49,429
Detroit	-1.12	-0.6	2.7	\$253 B	14	13	61,868	672,795	\$24,017/\$49,576
Grand Rapids	0.10	-0.2	3.7	\$59 B	68	53	16,153	196,445	\$40,355/\$49,576
Indianapolis	1.14	-0.2	1.4	\$136 B	28	26	69,366	855,164	\$41,987/\$49,255
Lansing	0.10	-0.2	1.2	\$22 B	112	113	15,563	116,020	\$35,563/\$49,576
Milwaukee	1.10	0.3	0.7	\$101 B	35	38	38,017	595,047	\$43,873/\$53,357
U.S. Metro Areas	1.48	0.2	2.0	\$16.8 T					

Source: Bureau of Economic Analysis in Real Dollars (2017)

A Changing Michigan: Comparing the 2012-2017 Michigan Competitiveness Studies

Michigan is showing stronger growth and a brighter economic picture when comparing our 2017 study to our 2012-2017 studies. Six of the nine key factors outlined in last year's Executive Summary have shown some or much improvement (Factors 1, 2, 4, 5, 8 and 9) in 2017, while the other factors outline areas for concern or improvement (Factors 3, 6 and 7). It should be noted that the cost of natural gas has declined overall nationally since 2012 due to increases in the U.S. supply related to the discovery, drilling and processing of new deposits domestically. However, Michigan is still a high-cost state for industrial natural gas. It should also be noted that we used a broad-based metric again to measure automobile insurance costs in the 2017 study. Even with a broader based analysis, Michigan is the top cost state for automobile insurance in the country, yet the average cost decreased in 2017 (see Exhibit 123).

Exhibit 123: Comparison of Key Michigan Data from 2012 - 2017 Studies

	2012 Study	2013 Study	2014 Study	2015 Study	2016 Study	2017 Study
Average Personal Income Per Capita Growth	2000-2010 20.3%	2000-2012 27.5%	2000-2013 30.0%	2000-2014 35.1%	2000-2015 41.3%	2000-2016 45.9%
Gross State Product Growth	1998-2011 26.5%	1998-2012 31.5%	1998-2013 42.1%	1998-2014 48.3%	1998-2015 53.2%	1998-2016 60%
U.S. Population Net Migration	2001-2010 -554,374	2001-2012 -590,635	2001-2013 -619,174	2000-2014 -647,853	2000-2015 -686,764	2000-2016 -714,603
U.S. Employment Growth	2001-2010 -16.90%	2001-2011 -13.90%	2001-2012 -5.8%	2000-2013 -4.3%	2000-2014 -2.5%	2000-2016 -0.2%
Total Government Employees Per 10,000 People	2010 657	2012 618	2013 630	2014 616	2015 612	2016 609
The Kauffman Index of Entrepreneurial Activity	2011 220	2012 180	2013 290	2015 260	2016 290	2017 260
Industrial Natural Gas Prices	2010 \$8.23	2012 \$7.42	2013 \$7.92	2015 \$6.58	2016 \$5.73	2017 \$5.99
Median Price of Annual Car Insurance Policy	2012 \$4,490	2013 \$2,520	2014 \$2,551	2015 \$2,476	2016 \$2,738	2017 \$2,394
Northwood University Competitiveness Index	2012 47	2013 39	2014 30	2015 29	2016 25	2017 21

Michigan has made dramatic progress over the 6 years of the *Michigan Chamber Foundation's Competitiveness Study*. Michigan has moved from a ranking of 47 in 2012 to 21 in 2017 using data from 1998-2017. It is also important to note that when measuring Michigan's overall competitiveness using data from 2011-2017, Michigan now ranks 9th nationally. This is a clear tribute to effective public policy decisions in Lansing and a highly productive Michigan work force.

Michigan has also made tremendous progress in the five factor categories, improving an average of 14 places per category since 2012 (see Exhibit 120). Through August 2017, Michigan-based non-automotive, Fortune 500 companies have on average outperformed the Dow Jones Industrial Average, the NASDAQ Composite Index and the S&P 500 since the trough of the Great Recession (see Exhibit 124). Michigan has led the Great Lakes Region in average GDP growth and job creation since 2010. There is much yet to do in areas ranging from energy cost and infrastructure to the cost of automobile insurance, yet there is no doubt that near the end of 2017 it can clearly be said that Michigan's economic comeback continues. If one reflects on where the state was just a decade ago, Michigan has truly experienced a remarkable transformation.

Conclusion

Economists fundamentally agree on the sources that drive economic growth. Robert Barro (1991) in his seminal paper, "Economic Growth in a Cross Section of Countries," studied the key economic and political factors that determined 98 countries' competitiveness that led to economic growth and standards of living. It is clear from this and other studies that economic growth is helped by investments in human capital, lower tax rates, a lower regulatory burden on businesses and emphasis on human development. It is also clear that the U.S. in recent times has been steadily falling behind in these critical investment areas, or at least unable to keep up with the investments vis-à-vis many of its competitors. One factor might be that government in the United States is becoming increasingly more important in the overall scheme of things as compared to the private sector. In addition, the federal government budget deficit and national debt are growing alarmingly high and the financing of the deficit has been instrumental in increasing the cost of capital, making it difficult for private businesses to invest in critical areas. Many economists would argue that this unprecedented increase in government spending and national debt that exceeds 105% of U.S. GDP has been the primary reason behind the relative decline in American competitiveness (see Exhibit 9).

U.S. economic growth began to slow toward the end of the 20th century and experienced additional challenges in the early 21st century. Government was becoming more significant to the U.S. economy with the U.S. experiencing the highest corporate income tax rate in the industrialized world according to the U.S. Tax Foundation. Taxes continue to plague American businesses disproportionately to its competitors. The 2017 Heritage Foundation/Wall Street Journal's *Index of Economic Freedom* measures political freedom, prosperity and economic freedom across 10 metrics to gauge the economic success of 184 countries around the world. In 1995, the U.S. was ranked fourth in the world on the index, and in 2017 the U.S. fell to 13th.

It is important to understand how large and important the Michigan economy still is within the U.S. and global economy. Michigan's 2017 GSP makes it one of the 24 largest economies in the world if it were a country. The 2017 study paints a more positive picture of Michigan's competitive position relative to most other U.S. states in comparison to our 2012, 2013, 2014,

2015 and 2016 studies. Michigan's ranking on *The Northwood University Competitiveness Index* of 21 indicates Michigan has made strong progress driven by a more friendly tax and regulatory environment over the years since our initial study in 2012. **It is also important to note Michigan ranks 9th in overall competitiveness since 2011.** This study again indicates more time and study are needed to better determine the causal relationship between RTW legislation and competitiveness; for most of the time period measured in this study, Michigan was still a NRTW state. However, the study shows that RTW states generally were more productive than NRTW states. The research contained in this study should serve as a guidepost and tool for benchmarking for Michigan public policy leaders. For many years Michigan was the economic catalyst for much of the U.S. economy.

Michigan is once again moving in the right direction and deserves to be studied. A few good years of data do not make a trend nor spell "Mission Accomplished." Michigan continues to be: A) blessed with highly educated and skilled white and blue collar workforces, B) in possession of an improving tax and regulatory environment which is favorable for job creation, C) the center of the world's largest deposit of fresh water, D) at the center of waterway transportation for the Great Lakes Region, the Mississippi, and to Ontario, Canada, E) a hub for rail, trucking, cargo and air transportation, F) headquarters to many of the world's leading manufacturing and technology companies, G) home to world-class colleges and universities, and H) poised to realize an energy boom via safe oil and natural gas recovery if the public is afforded a rational and open debate.

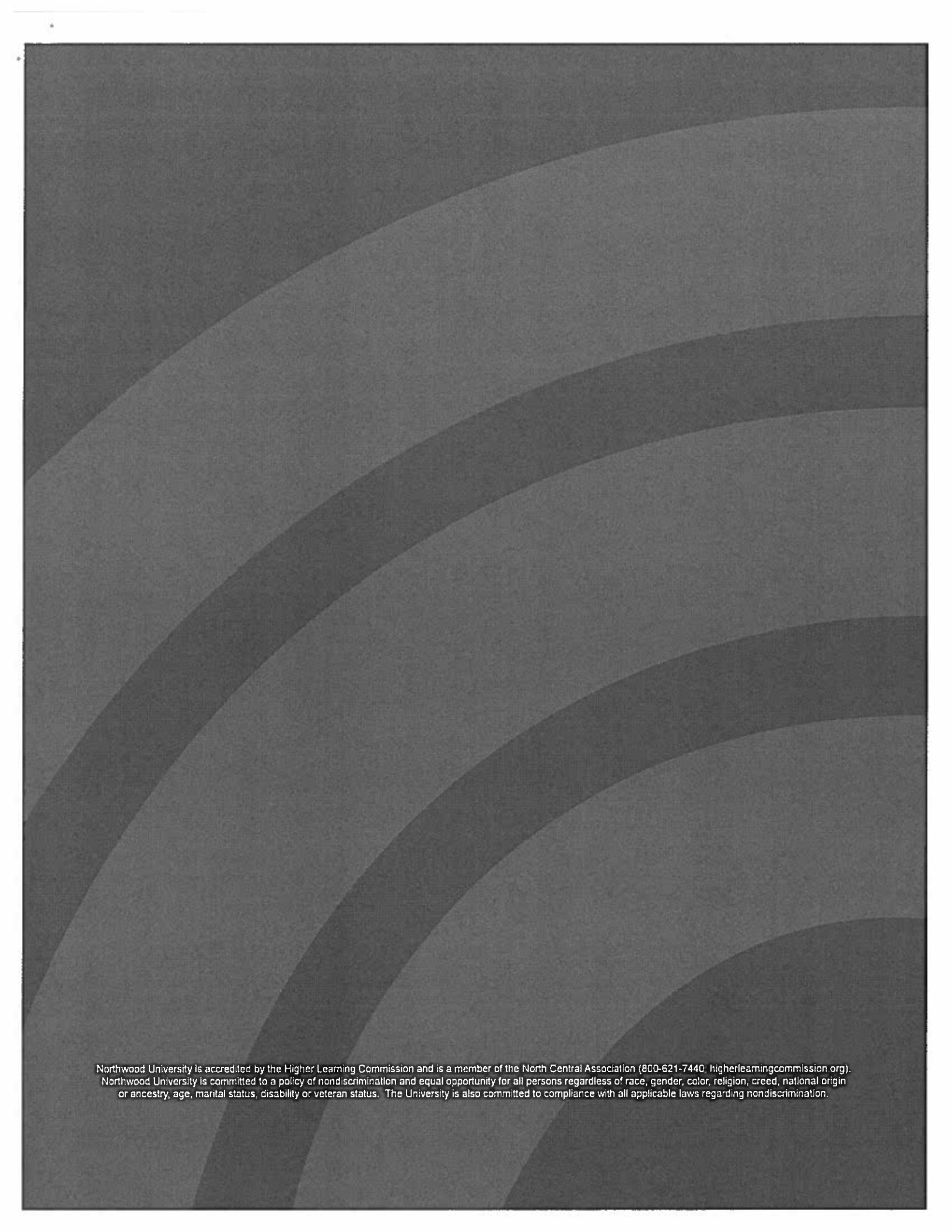
Michigan has made it through the economically difficult first decade of the 21st century and continues to show strong signs of an economic turnaround. Michigan is showing that its economic growth is not only outpacing the other Great Lake states, but is a strong example for growth on a national level as well. There is no doubt that Michigan continues down a come-back path but it has not arrived yet. Can Michigan return to the position of greatness it once occupied in the U.S. business structure? We again answer unequivocally yes, but only if we continue to adopt growth-friendly public policies. Michigan must continue to set its sights high and benchmark best economic and political practices of this country's top performing states.

The good news is that many good things have happened in Michigan since last year's study causing other states to benchmark to our progress.

Finally, RTW has been an important factor, but not the answer or significant policy to date in advancing Michigan's economic competitiveness. Michigan's improvement on the Northwood University competitiveness index has been impressive since 2012 and is to be lauded.

However, it is important to understand that state policy can only "go so far" in driving a state economy forward in today's complex global economy. The U.S. federal government still takes the lion's share of income taxes placed on businesses and individuals and determines much of the regulatory burden faced by households and commerce in America today (see Exhibit 3). Not only must Michigan continue to compete against an ever-changing, aggressive tax policy from other states trying to attract new business, it must also compete against international competitors whose federal tax policies are often more attractive as well (see Exhibit 5, 6 and 12).

The United States is still the strongest and most vibrant economy in a world rattled with challenges, complexities and much uncertainty. It is a country burdened with the highest corporate income tax in the industrial world, a national debt that is approaching \$20 trillion (roughly 105% of GDP) and a regulatory environment that is increasing the cost of doing business relative to other countries. These and other factors have slowed U.S. growth for nearly a decade with U.S. GDP growth averaging less than 2% since 2009, while its historic yearly average growth rate since WWII is 3.23% (see Exhibit 24). Michigan's economic comeback has been and continues to be impressive. If Michigan, and the other 49 states, are to realize significant growth in the future, policy makers in Lansing will need congruent policies from Washington, policies that will complement and supplement pro-growth and pro-business policies at the state level, such as federal tax and regulatory reform.



Northwood University is accredited by the Higher Learning Commission and is a member of the North Central Association (800-621-7440; higherlearningcommission.org). Northwood University is committed to a policy of nondiscrimination and equal opportunity for all persons regardless of race, gender, color, religion, creed, national origin or ancestry, age, marital status, disability or veteran status. The University is also committed to compliance with all applicable laws regarding nondiscrimination.



NORTHWOOD
UNIVERSITY



2017 Michigan Economic

COMPETITIVENESS STUDY

Exhibit 108 : Northwood's State Competitiveness Index Rank (1998-2017)

Alabama	32	Montana	22
Alaska	40	Nebraska	6
Arizona	29	Nevada	17
Arkansas	19	New Hampshire	26
California	11	New Jersey	48
Colorado	2	New Mexico	38
Connecticut	49	New York	45
Delaware	37	North Carolina	18
Florida	33	North Dakota	10
Georgia	12	Ohio	30
Hawaii	47	Oklahoma	4
Idaho	8	Oregon	9
Illinois	35	Pennsylvania	42
Indiana	23	Rhode Island	50
Iowa	14	South Carolina	24
Kansas	28	South Dakota	16
Kentucky	43	Tennessee	13
Louisiana	27	Texas	3
Maine	44	Utah	1
Maryland	41	Vermont	39
Massachusetts	46	Virginia	5
Michigan	21	Washington	7
Minnesota	34	West Virginia	20
Mississippi	31	Wisconsin	36
Missouri	25	Wyoming	15

Exhibit 109 : Northwood's State Competitiveness Index Rank (1998-2017)

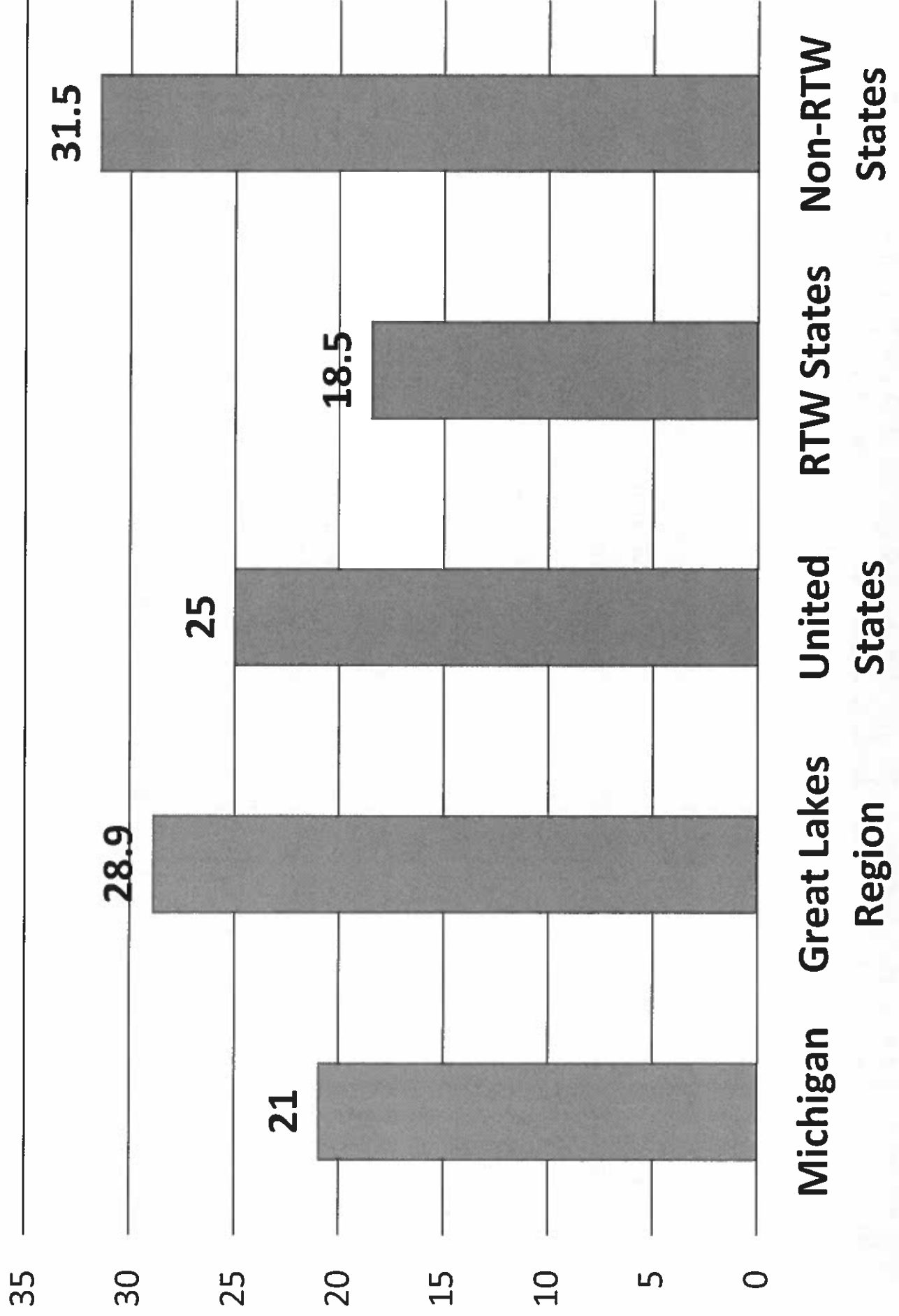
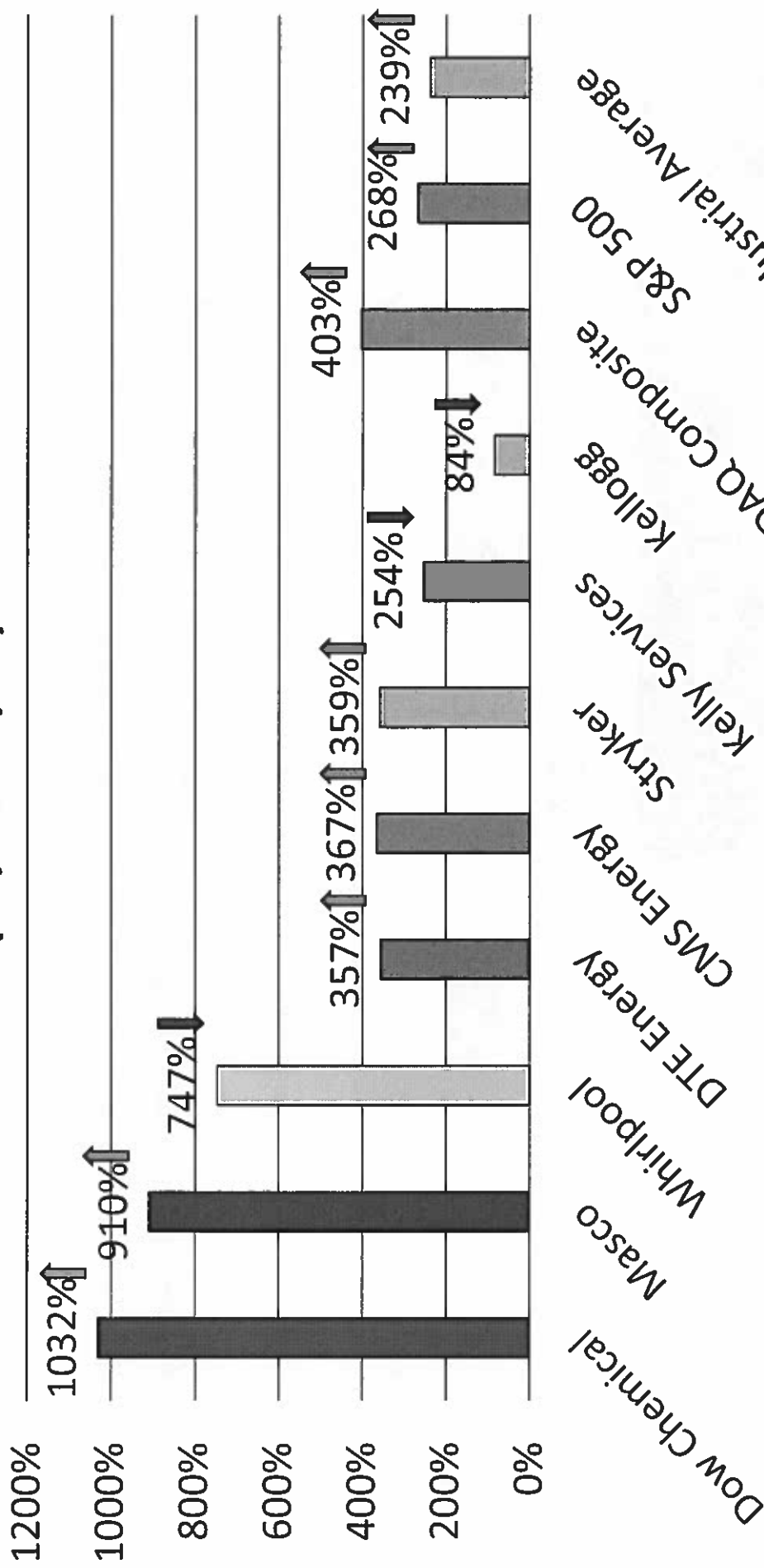


Exhibit 128: Northwood's State Competitiveness Index Rank (2011-2017)

Alabama	38	Montana	16
Alaska	37	Nebraska	14
Arizona	26	Nevada	27
Arkansas	35	New Hampshire	28
California	15	New Jersey	46
Colorado	6	New Mexico	45
Connecticut	49	New York	43
Delaware	42	North Carolina	4
Florida	2	North Dakota	7
Georgia	25	Ohio	24
Hawaii	36	Oklahoma	33
Idaho	13	Oregon	10
Illinois	31	Pennsylvania	34
Indiana	8	Rhode Island	50
Iowa	22	South Carolina	18
Kansas	30	South Dakota	23
Kentucky	32	Tennessee	5
Louisiana	47	Texas	3
Maine	41	Utah	1
Maryland	39	Vermont	44
Massachusetts	17	Virginia	12
Michigan	9	Washington	11
Minnesota	18	West Virginia	48
Mississippi	40	Wisconsin	29
Missouri	21	Wyoming	19

Exhibit 124: Percent Increase in Michigan Based Fortune 500 Company Stock Price (Non-Automotive) (03/09 – 8/17)



*Arrow indicates whether stock price is up or down, versus last year.

Exhibit 120: Michigan's Economic Performance Ranking

(1998-2017 Data)

	2017	2016	2015	2014	2013	2012
NU State Competitiveness Index: Michigan	21	25	29	30	39	47
Factor 1 – General Macroeconomic Environment	7	10	11	20	31	48
Factor 2 – State Debt and Taxation	11	13	13	12	14	10
Factor 3 – Workforce Composition and Cost	35	38	39	38	43	45
Factor 4 – Labor and Capital Formation	32	35	36	38	44	45
Factor 5 – Regulatory Environment	18	19	25	23	26	24

Exhibit 26: Gross State Product Growth (2011 - 2016)

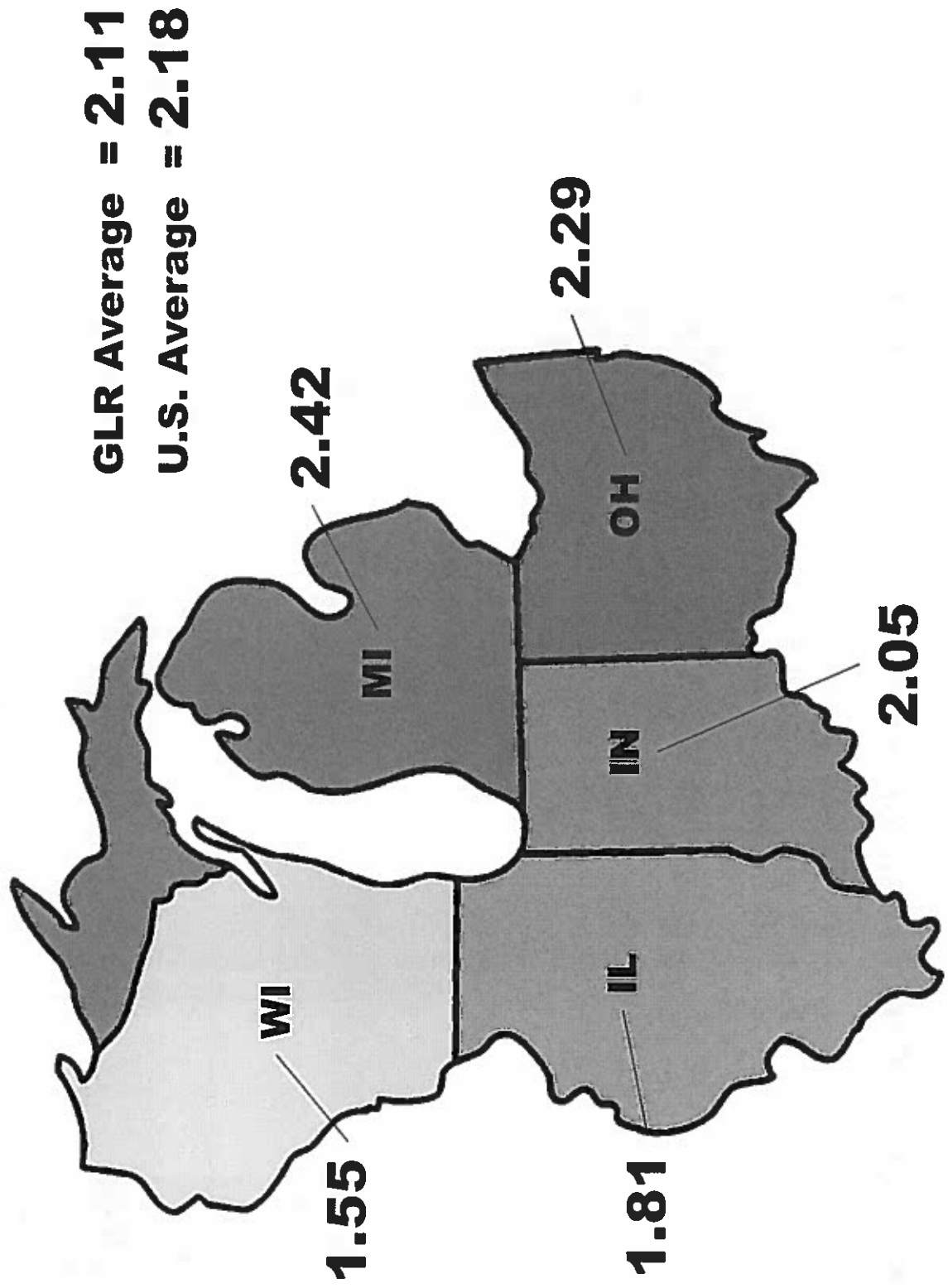
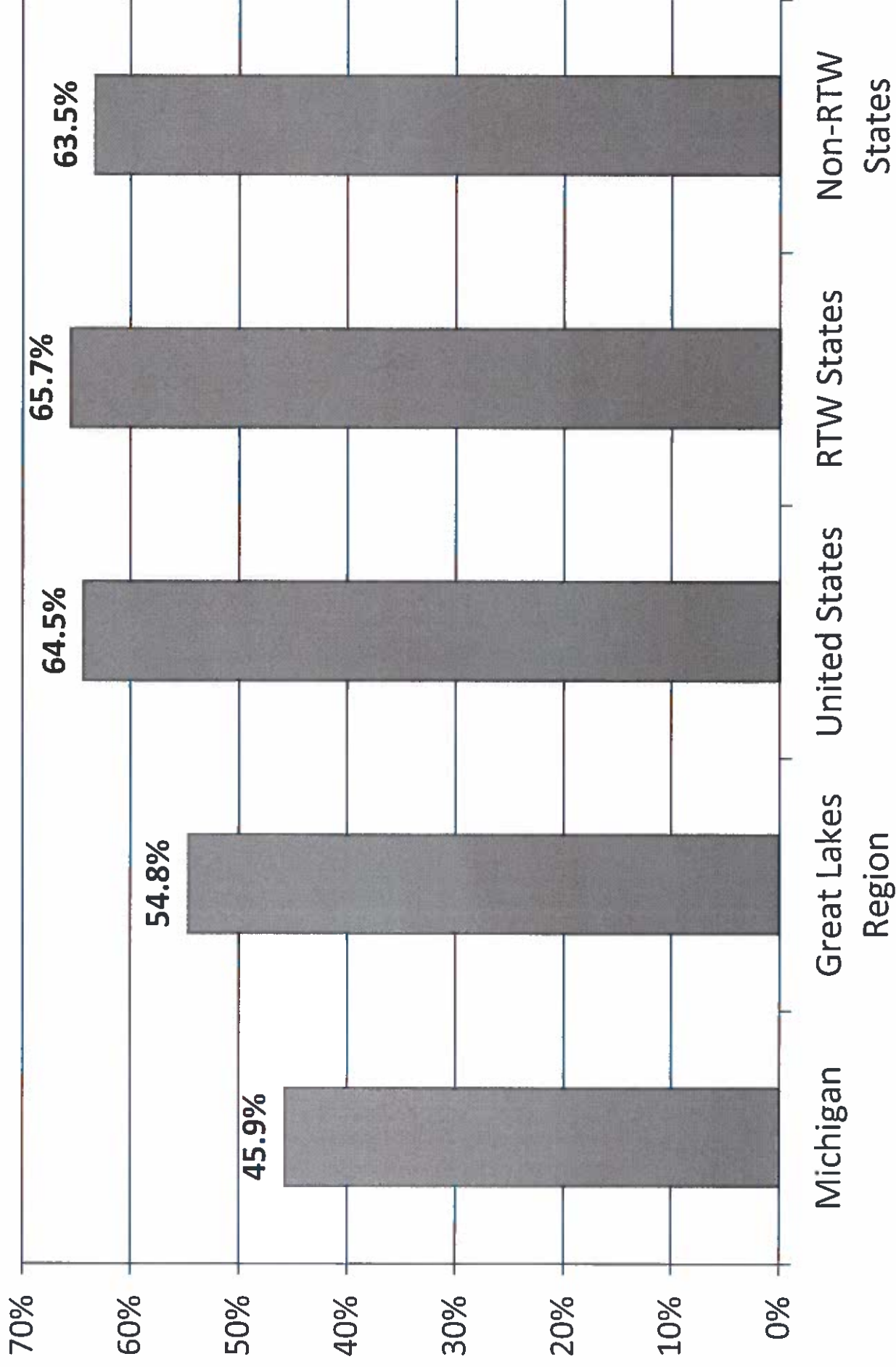
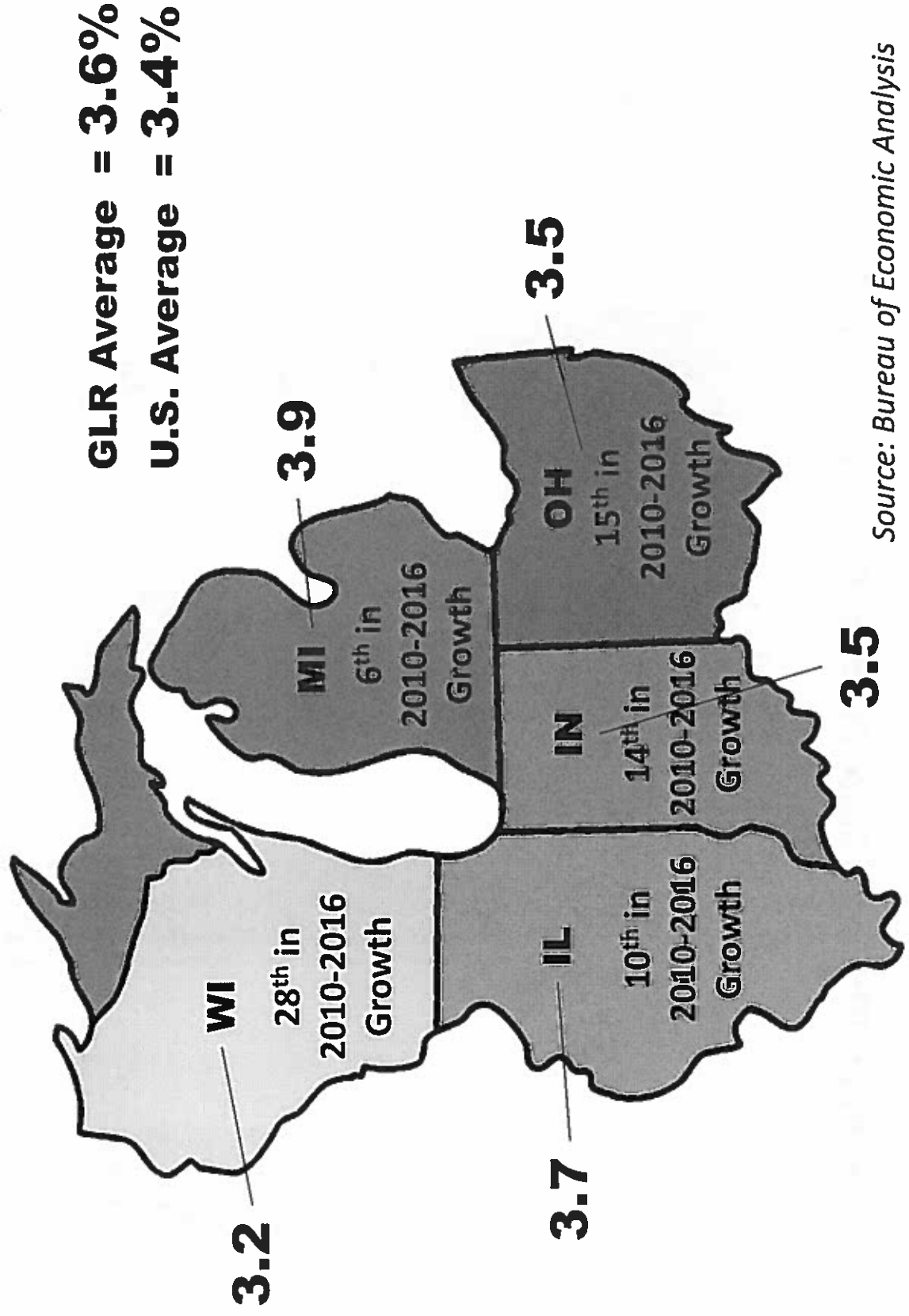


Exhibit 37: Personal Income Per Capita Growth (2000-2016)



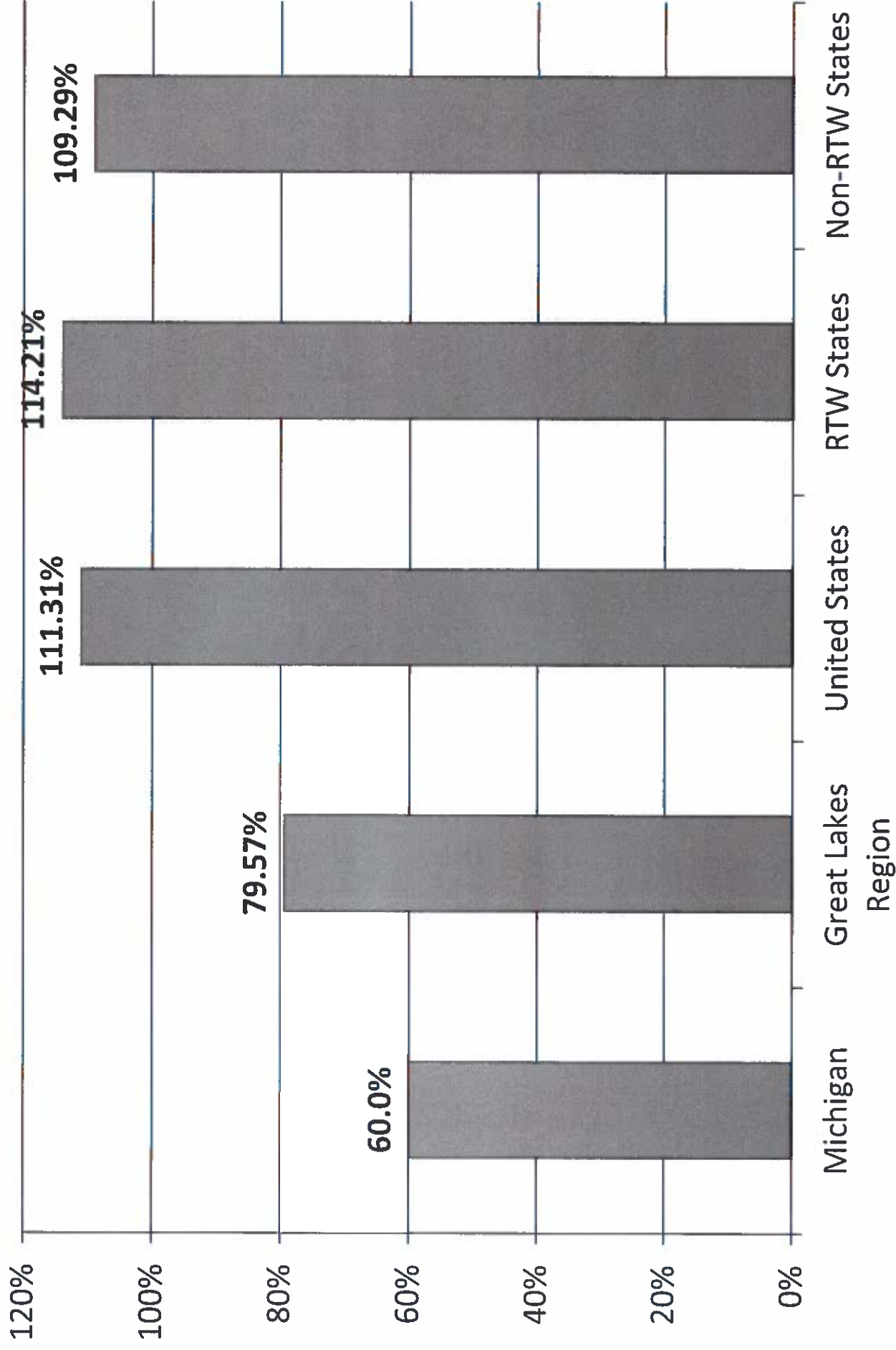
Source: Computed with data from Bureau of Economic Analysis (2000 - 2016)

Exhibit 38: Great Lakes Average Personal Income Per Capita Growth (2010-2016)



Source: Bureau of Economic Analysis

Exhibit 19: Gross State Product Growth (1998-2016)



Source: Computed with data from Bureau of Economic Analysis (1998 – 2016)

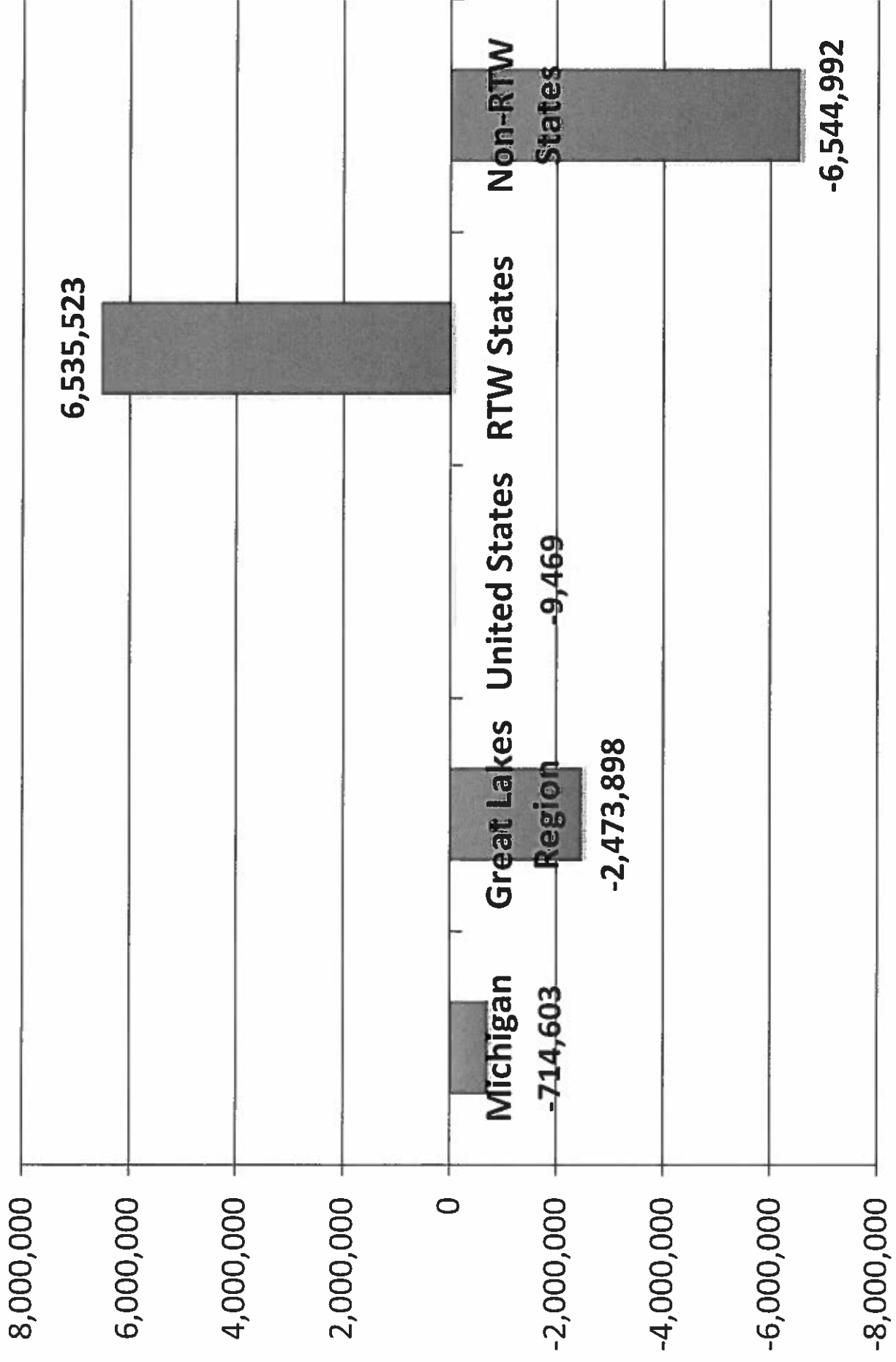
Exhibit 28: U.S. GSP Growth in Great Lakes Region (2011 - 2016)

State	2011	2012	2013	2014	2015	2016	Average GSP
Illinois	2.07	1.91	0.9	1.2	2.3	2.5	1.81
Indiana	2.19	3.30	2.1	0.4	1.7	2.6	2.05
Michigan	3.45	2.25	2.0	1.9	1.4	3.5	2.42
Ohio	2.88	2.16	1.8	2.1	1.8	3	2.29
Wisconsin	1.28	1.45	1.7	1.0	1.8	2.6	1.55
Great Lakes	2.43	2.17	1.6	1.4	2.14	2.9	2.11
U.S.	1.68	1.28	2.66	2.49	1.94	3	2.18

Exhibit 29: U.S. GSP Growth by Region (2011 - 2016)

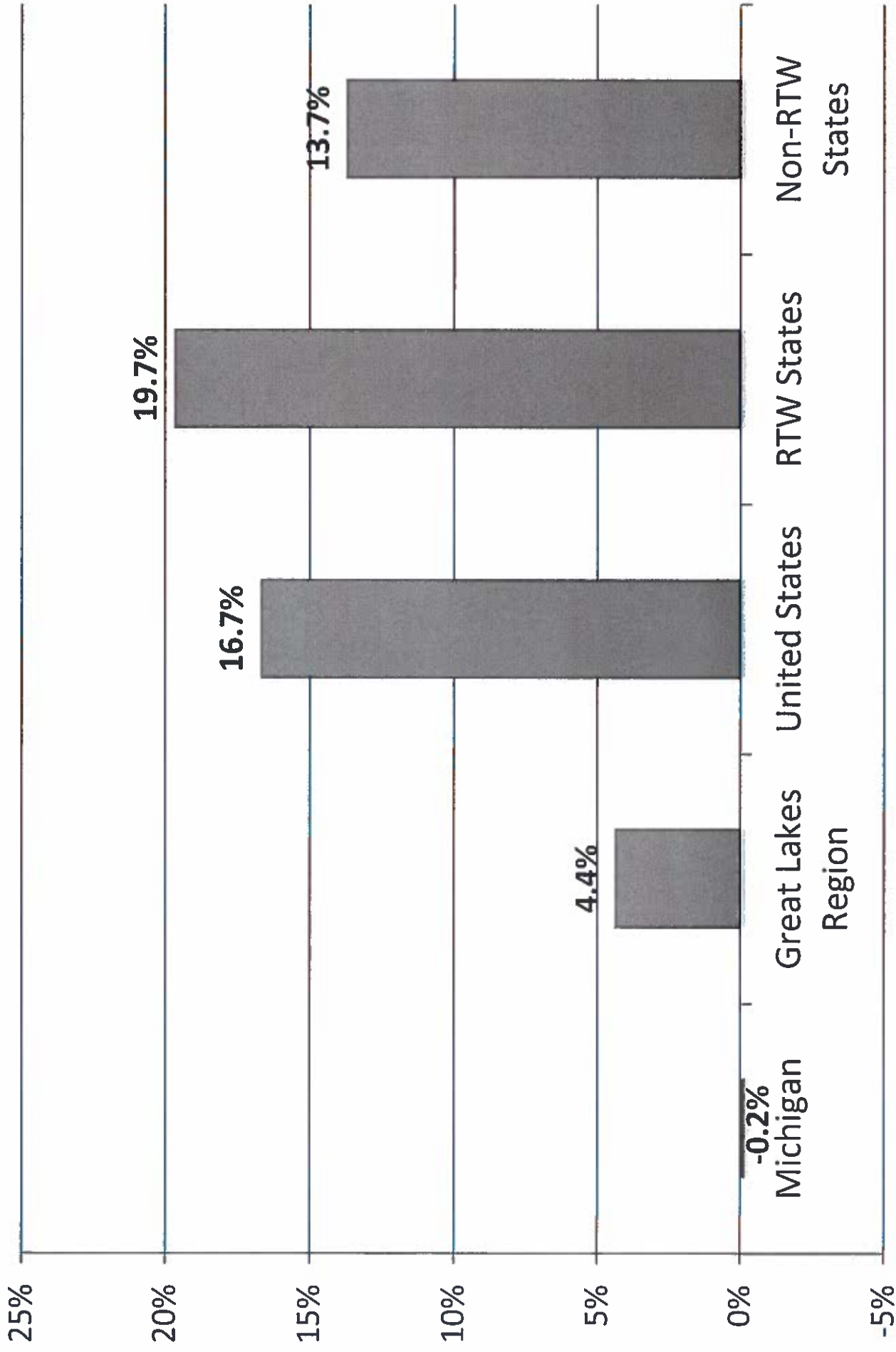
Region	2011	2012	2013	2014	2015	2016	Average
New England	1.04	1.24	1.3	1.6	1.3	3.6	1.68
Mid East	1.20	1.48	0.7	1.7	1.6	2.9	1.59
Great Lakes	2.43	2.17	1.6	1.4	2.14	2.9	2.11
Plains	1.96	2.74	2.5	1.3	1.3	1.7	1.92
South East	0.97	2.12	1.6	1.7	2.2	3.4	2.0
South West	2.97	4.07	3.3	4.3	3.1	0.6	3.06
Rocky Mountains	1.52	2.10	4.1	3.9	3.1	2.9	2.9
Far West	1.51	3.33	2.0	2.7	3.8	4.4	2.96
U.S.	1.68	1.28	2.66	2.49	1.9	3.0	2.18

Exhibit 17: Population Net Migration (2000-2016)



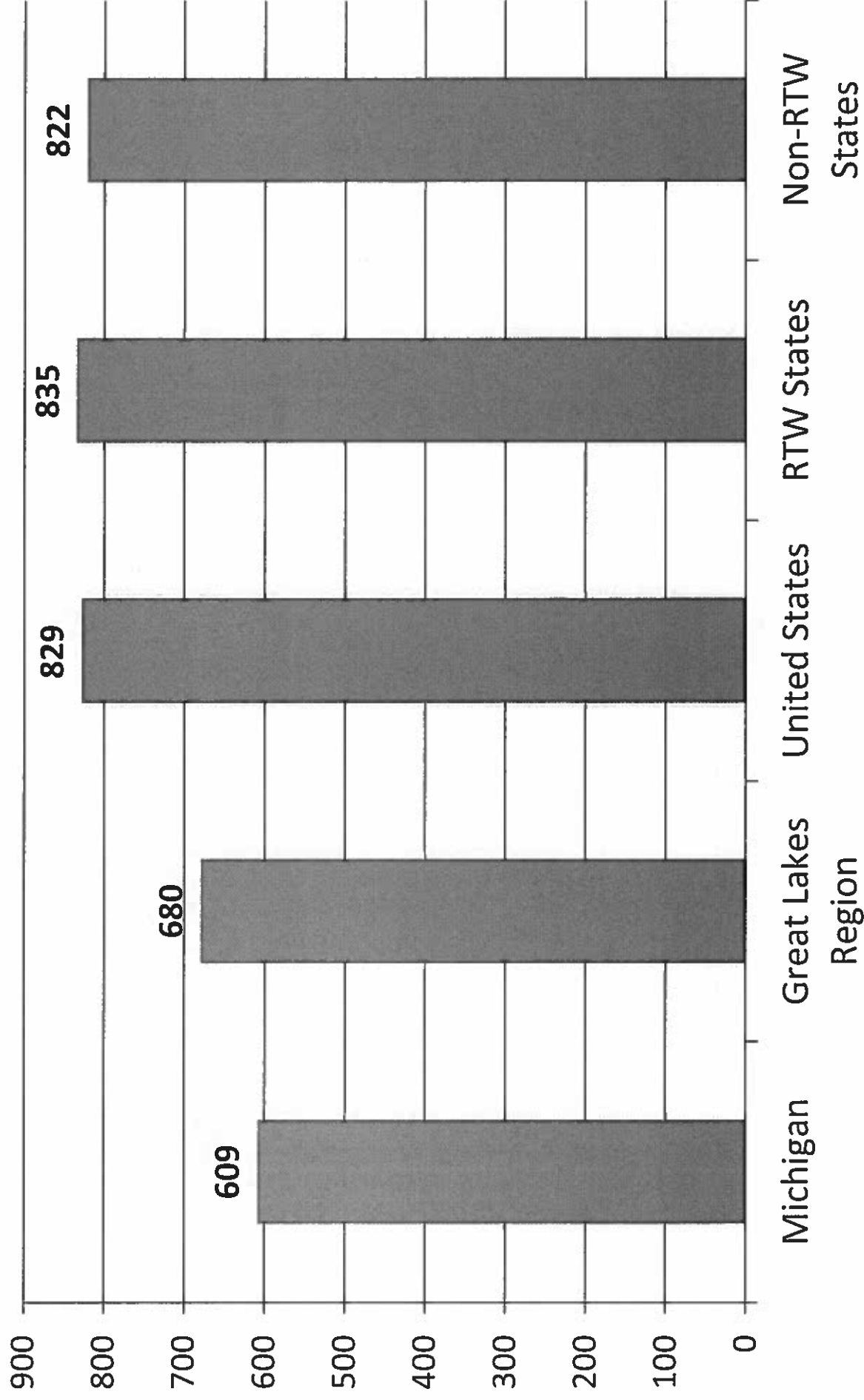
Source: Computed with data from Bureau of Labor Statistics (2000 – 2016)

Exhibit 33: Non-farm Payroll Employment Growth (2000-2016)



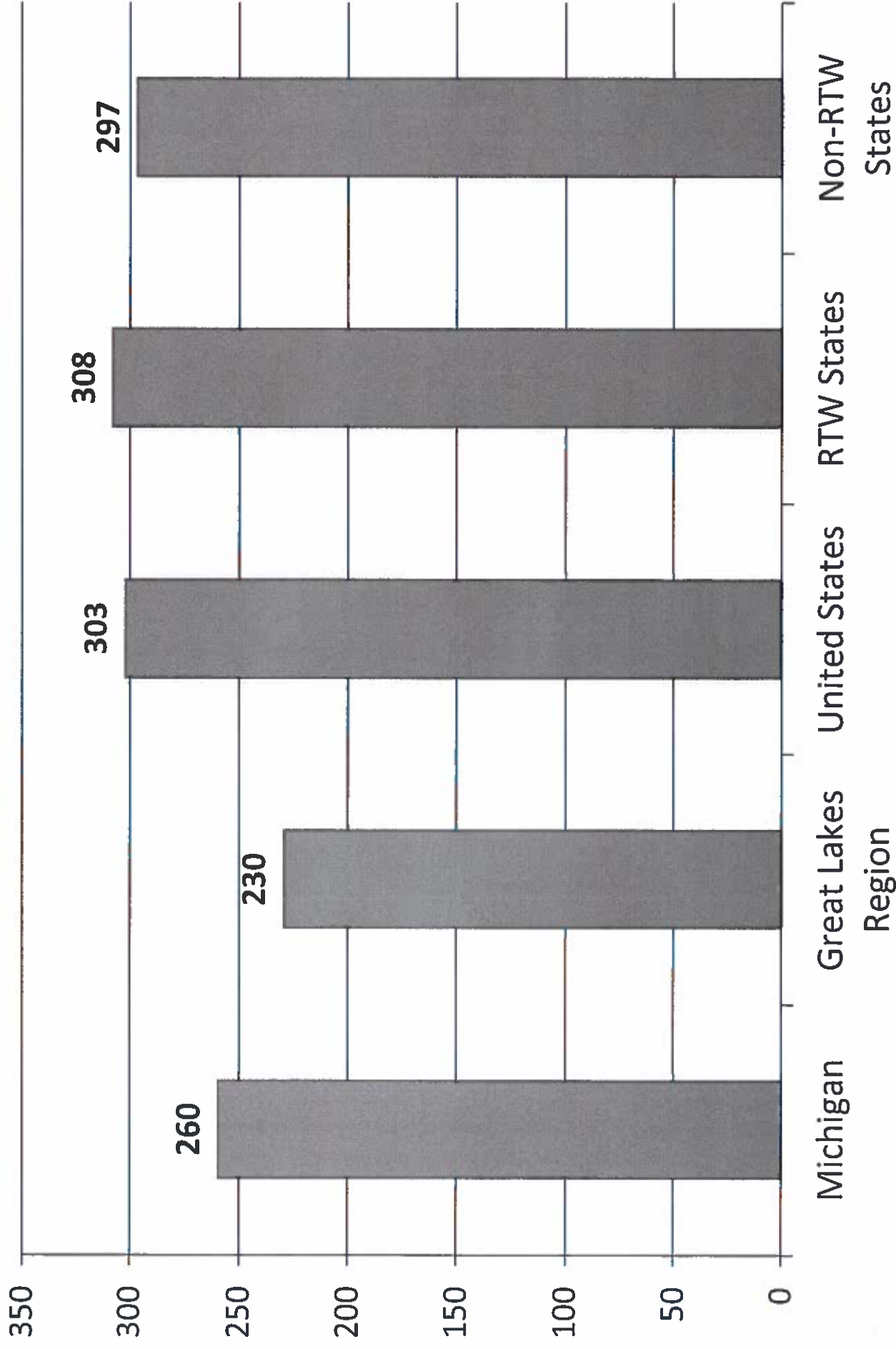
Source: Computed with data from Bureau of Economic Analysis (2000 - 2016)

**Exhibit 62: Total Government Employees per 10,000 People
(2016)**



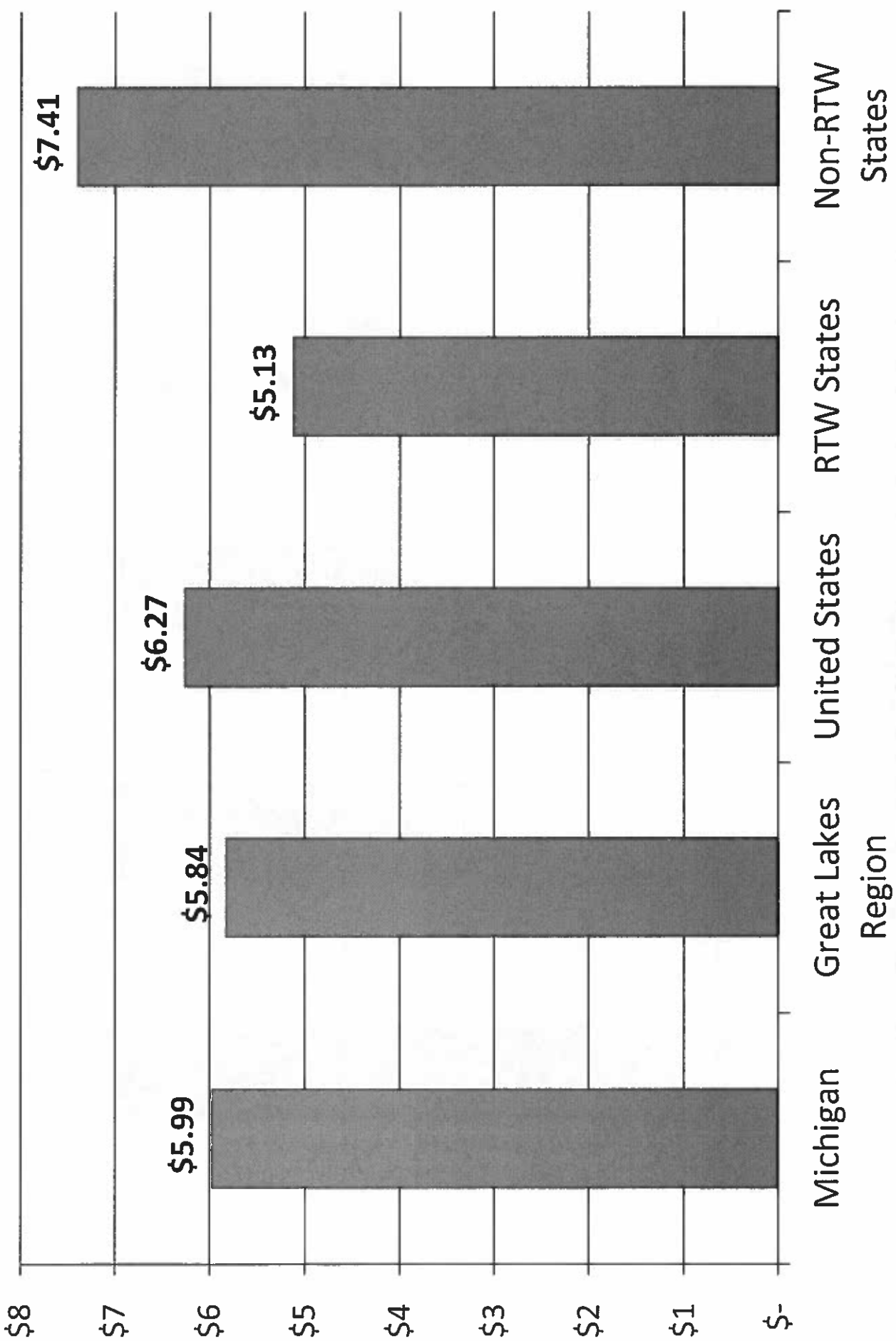
Source: Computed with data from Bureau of Economic Analysis (2016)

Exhibit 88: Kauffman Index of Entrepreneurial Activity (2017)



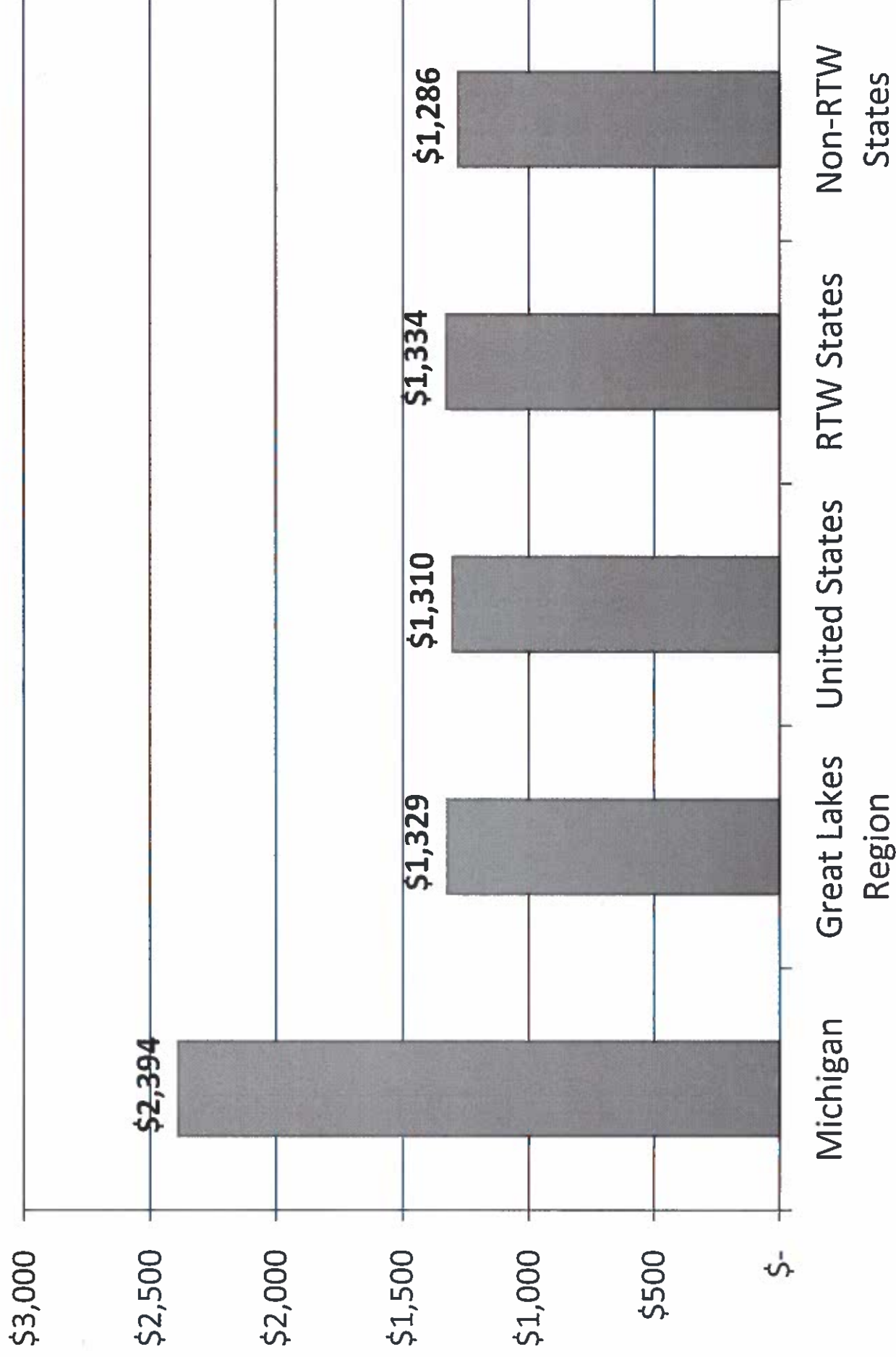
Source: Computed with data from The Kauffman Foundation (2017)

Exhibit 80: Industrial Natural Gas Prices (Avg. Jan.-Apr. 2017)



Source: Computed with data from U.S. Energy Information Administration (Average Jan.-Apr. 2017)

Exhibit 68: Average Price of Annual Car Insurance Policy (2017)



Source: Computed with data from CarInsuranceQuotes.com (2017)

Exhibit 107: State Business Tax Climate Index 2017

State	Overall Index Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemp. Insurance Tax Rank	Property Tax Rank
Wyoming	1	1	1	6	31	38
South Dakota	2	1	1	32	40	23
Alaska	3	27	1	5	29	22
Florida	4	19	1	28	2	10
Nevada	5	34	1	41	43	8
Montana	6	13	21	3	19	9
New Hampshire	7	46	9	2	41	43
Indiana	8	23	11	10	10	4
Utah	9	3	12	17	22	5
Oregon	10	35	32	4	33	18
Great Lakes Region						
Michigan	12	8	14	9	47	25
Illinois	23	26	10	35	38	46
Wisconsin	39	30	43	7	36	34
Ohio	45	45	47	29	4	11

Source: Tax Foundation (2017)

Exhibit 122: An Economic Snapshot of Key Great Lakes Region Cities (2000-2016)

	Metro Compounded Annual GDP Growth Rate (2000-2011)	Metro Compounded Annual GDP Growth Rate (2008-2011)	Metro Compounded Annual GDP Growth Rate (2009-2016)	Metro GDP (2016)	Rank Metro GDP (2011) (2016)	Rank Metro GDP (2016)	Number of Employers	City Population (City Proper) (2016)	City Median Household Income/State Income/State (2011-2015)
Chicago	0.64	-0.14	1.4	\$651 B	3	3	291,000	2,705,000	\$48,522/\$57,574
Cleveland	-0.15	-1.3	1.5	\$129 B	27	30	232,680	386,000	\$26,150/\$49,429
Columbus	0.53	-1.1	3.2	\$131 B	32	29	64,363	806,064	\$45,659/\$49,429
Detroit	-1.12	-0.6	2.7	\$253 B	14	13	61,868	672,795	\$24,017/\$49,576
Grand Rapids	0.10	-0.2	3.7	\$59 B	66	53	16,153	196,445	\$40,355/\$49,576
Indianapolis	1.14	-0.2	1.4	\$136 B	28	26	69,366	855,164	\$41,987/\$49,255
Lansing	0.10	-0.2	1.2	\$22 B	112	113	15,563	116,020	\$35,563/\$49,576
Milwaukee	1.10	0.3	0.7	\$101 B	35	38	38,017	595,047	\$43,873/\$53,357
U.S. Metro Areas	1.48	0.2	2.0	\$16.8 T					

Source: Bureau of Economic Analysis in Real Dollars (2017)

Exhibit 123: Comparison of Key Michigan Data from 2012 - 2017

Studies

	2012 Study	2013 Study	2014 Study	2015 Study	2016 Study	2017 Study
Average Personal Income Per Capita Growth	2000-2010 20.3%	2000-2012 27.5%	2000-2013 30.0%	2000-2014 35.1%	2000-2015 41.3%	2000-2016 45.9%
Gross State Product Growth	1998-2011 26.5%	1998-2012 31.5%	1998-2013 42.1%	1998-2014 48.3%	1998-2015 53.2%	1998-2016 60%
U.S. Population Net Migration	2001-2010 -554,374	2001-2012 -590,635	2001-2013 -619,174	2000-2014 -647,853	2000-2015 -686,764	2000-2016 -714,603
U.S. Employment Growth	2001-2010 -16.90%	2001-2011 -13.90%	2001-2012 -5.8%	2000-2013 -4.3%	2000-2014 -2.5%	2000-2016 -0.2%
Total Government Employees Per 10,000 People	2010 657	2012 618	2013 630	2014 616	2015 612	2016 609
The Kauffman Index of Entrepreneurial Activity	2011 220	2012 180	2013 290	2015 260	2016 290	2017 260
Industrial Natural Gas Prices	2010 \$8.23	2012 \$7.42	2013 \$7.92	2015 \$6.58	2016 \$5.73	2017 \$5.99
Median Price of Annual Car Insurance Policy	2012 \$4,490	2013 \$2,520	2014 \$2,551	2015 \$2,476	2016 \$2,738	2017 \$2,394
Northwood University Competitiveness Index	2012 47	2013 39	2014 30	2015 29	2016 25	2017 21

Exhibit 1: Michigan is the Comeback State

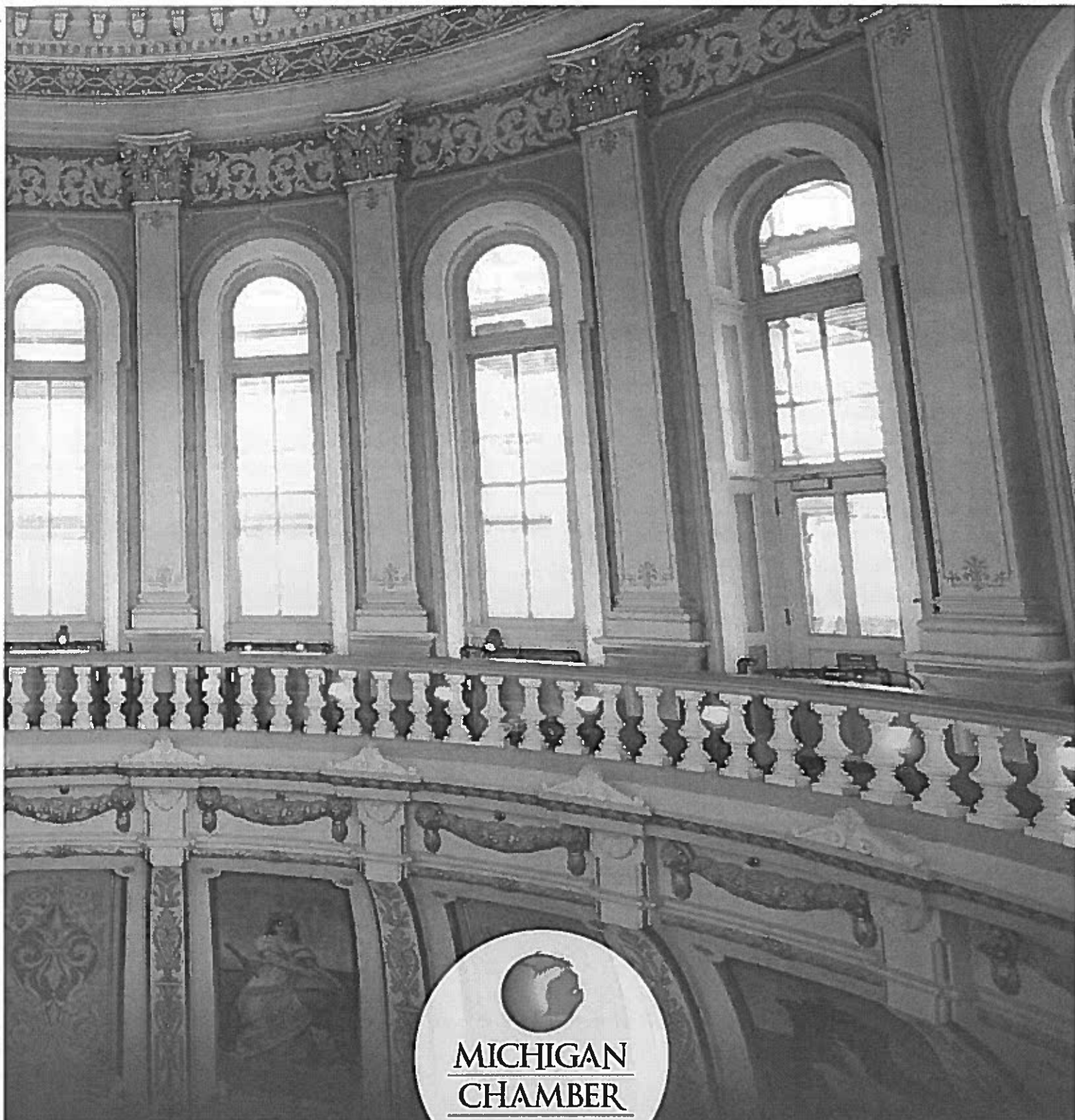
Michigan			Region Rank	National Rank
1	U.S. Real GDP Growth 1998 – 2016		5 th	50 th
2	U.S. Real GDP Growth 2009 – 2016		1 st	6 th
3	U.S. Per Capita Personal Income Growth 1998–2016		5 th	50 th
4	U.S. Per Capita Personal Income Growth 2009-2016		1 st	3 rd
5	State Corporate Tax Rate 2017		1 st	8 th
6	Overall Business Tax Friendliness 2017		2 nd	12 th

Exhibit 2: Michigan Real GDP Growth in 2017

Period				Percent Growth	Rank
1	Michigan Real GDP Growth	$Q_4 - Q_1$ '16 '17		-0.1%	33 rd
2	Michigan Real GDP Growth	$Q_1 - Q_2$ '17 '17		5.5%	4 th
3	Michigan Real GDP Growth	$Q_4 - Q_2$ '16 '17		2.7%	13 th

Exhibit 3: Top Metropolitan Areas for Real GDP Growth (2009 – 2016)

National Rank	Metro Area	Growth Rate	State Rank
24 th	Grand Rapids, MI Area	3.7%	1 st
25 th	Midland, MI	3.5%	2 nd
45 th	Detroit, MI Area	2.7%	3 rd
Total 382	National Average	2%	



2017–2018 Legislative Priorities

An Agenda for Growing Michigan's Economy,
Strengthening Communities and Reshaping Government



MICHIGAN CHAMBER

of Commerce

We are pleased to provide you with this copy of the Michigan Chamber's **2017-2018 Legislative Priorities**. These priorities were developed by the Chamber's advisory policy committees with input from over 440 business leaders from across the state and were reviewed on January 31, 2017 by the Michigan Chamber's Board of Directors. The Michigan Chamber represents over 6,500 job providers throughout the state who are strongly committed to moving Michigan forward by advancing this agenda to grow Michigan's economy, strengthen communities and reshape government.

We will use these legislative priorities to focus lawmakers' attention on public policy initiatives to encourage job creation and business success.

Michigan Chamber members and staff will continue to play a leading role in shaping Michigan's future. We are dedicated to an economic future that includes more and better jobs for Michigan families; more efficient state and local government for taxpayers; and stronger communities with a better quality of life for every resident of the Great Lakes State.

Prior to the August 2018 primary election, the Chamber will publish its *2017-2018 Legislative Voting Record: A Competitiveness Scorecard for Michigan*. This publication will provide detailed information regarding the voting record of every State Senator and State Representative on these priorities.

Contents:

- 1..... Education & Workforce Readiness
- 2..... Employer Rights
- 3..... Energy & Environment
- 4..... Federal Entitlement Reform
- 5..... Health Care
- 6..... Legal Reform
- 7..... Tax Climate
- 8..... Transportation & Infrastructure

cover photo: Trumpie Photography

2017-18 Legislative Priorities: *Education & Workforce Readiness*

GOAL: Ensure Michigan Job Providers Have Access to the Talent Needed to Compete in a Global Economy

Chamber Members Advocate:

- Supporting parental choice and charter schools to expand and enhance high quality educational opportunities for all Michigan students.
- Assisting students in reaching their full potential by insisting that all schools adhere to a challenging curriculum based on high academic standards.
- Narrowing the skills gap by encouraging parental involvement and holding students, teachers and administrators accountable for student achievement, including postsecondary and workforce readiness.
- Urging the State Board of Education to do a better job holding all public schools, traditional and charter, to high standards for student achievement.
- Increasing competition and lower the cost of school construction by exempting school projects from the State's costly prevailing wage law.
- Supporting the reallocation of resources in K-12 and higher education to better match workplace gaps and needs.

WHY?

A more effective education system is crucial to ensuring Michigan's economic competitiveness. Every decision impacting public education should be based on what is best for students and how we can best prepare them to compete for jobs in a global economy. The business community must play a more active role in demanding that students emerge from high school prepared for college or be workforce ready. By better integrating the needs of the business community into K-12 education, Michigan can better attract jobs and investment, thereby driving growth and fostering economic freedom.

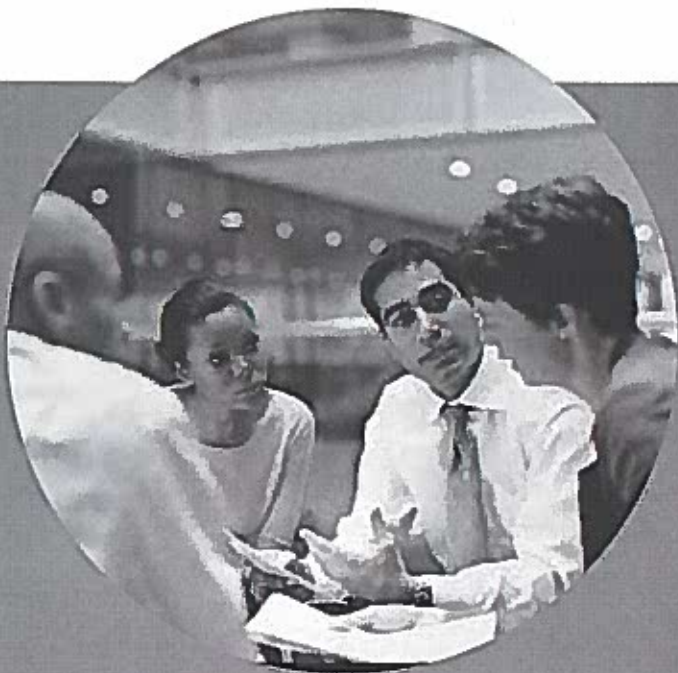


2017-18 Legislative Priorities: *Employer Rights*

GOAL: Protect Employer Rights in the Workplace

Chamber Members Advocate:

- Supporting the right of employers of all sizes to manage their workplaces and financial resources free of undue interference by local, state and federal governments in areas such as leave time, wages, hours of work, hiring decisions, drug free workplace policies and weapons.
- Opposing state and federal governmental overreach via regulation, enforcement guidance or overly broad Executive Orders.
- Improving the unemployment insurance and workers' compensation claims processes to prevent and intercept fraudulent claims, including claims using false and stolen identities.
- Preserving and protecting Michigan's landmark Right-to-Work law.



WHY?

Protecting employer rights is a high-priority issue for the Michigan Chamber because for Michigan to be a leader in job creation and economic growth, our state's employment laws must be fair, practical and affordable. Michigan job providers need the flexibility to operate their businesses – and attract and retain good and talented employees – without intrusive government mandates, regulations and restrictions.

2017-18 Legislative Priorities: *Energy & Environment*

GOAL: Promote Sound Energy Policy for Michigan and Streamline the Regulatory Process

Chamber Members Advocate:

- Ensuring that implementation of the 2016 energy law sustains retail open access programs, provides for competitive bidding for investments in generation and protects reliability for all business customers.
- Protecting Michigan's energy future by taking all steps necessary, both in the legislative and legal arenas, to prevent a ban on hydraulic fracturing.
- Stopping efforts to create patchwork environmental regulations through local zoning or ordinances that would adversely affect economic growth.
- Demanding transparency in the Michigan Department of Environmental Quality's (DEQ) budget process to ensure fees collected are being utilized as directed and dollars are not being inappropriately diverted.
- Reinventing Michigan's environmental rulemaking process to increase stakeholder involvement and ensure rules are implemented by agencies in a manner consistent with legislative intent.
- Opposing attempts by the DEQ to unlawfully expand its authority through administrative rules, departmental policies and/or procedures.

WHY?

We must remain focused on the goal of making Michigan an ideal place to do business. Critical changes have been accomplished, but more work remains. A firm commitment to restructuring the regulatory bureaucracy and enhancing stakeholder input will assure Michigan continues to move forward with strong but fair environmental regulations. The energy sector is changing quickly and with Michigan's newly-passed energy law in place, we will be better prepared for the future, but we must ensure that the new law is implemented as intended.

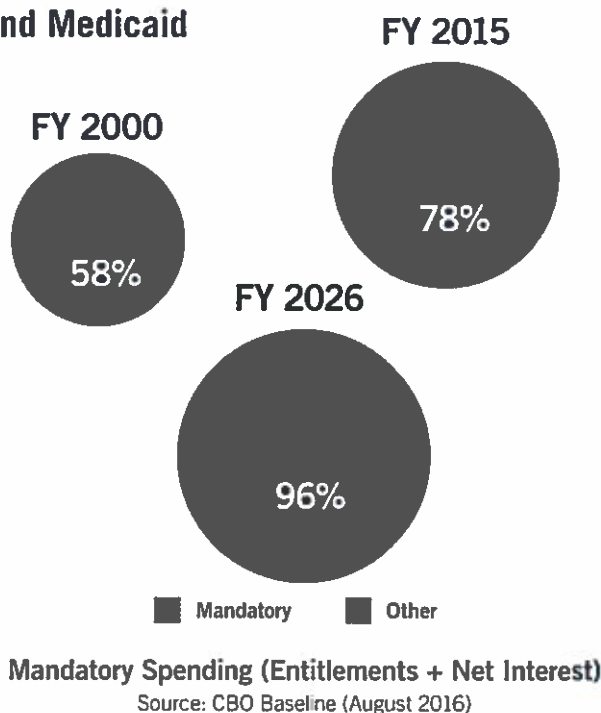


2017-18 Legislative Priorities: *Federal Entitlement Reform*

GOAL: Lead a State and National Discussion About the Growing Need to Reform and Modernize America's Entitlement Programs, Especially Social Security, Medicare and Medicaid

Chamber Members Advocate:

- Supporting a nationwide communications and outreach campaign to alert the business community, general public and news media about the serious financial programs facing federal entitlement programs.
- Practical reforms including: reasonable adjustments in payments, benefit options, eligibility, and efficiencies in administration.
- Urging all members of Michigan's Congressional delegation to make this key economic issue a priority in 2017-18.



U.S. CHAMBER OF COMMERCE

WHY?

We agree with the US Chamber. Inaction on federal entitlement reform represents a clear and present danger to job creation and economic growth.

The looming federal entitlement crisis is a national challenge. However, state and local government in Michigan are not immune to the consequences of inaction. Growing federal budget pressures stemming from the growing cost of entitlement programs will increasingly have a negative impact on every

level of government, forcing governors and state lawmakers to make difficult choices on raising taxes and/or cutting spending.

Inaction on federal entitlement reform would also short change the next generation, saddling younger American with mounting debt and higher taxes, while cutting back on investments in education and infrastructure or reducing necessary spending on national defense.

2017-18 Legislative Priorities: *Health Care*

GOAL: Advocate Market-Friendly, Consumer-Driven Health Care Options

Chamber Members Advocate:

- Repealing the onerous burdens on job providers and insurers under the federal Patient Protection and Affordable Care Act to reverse the trend of sharp rate increases and avoid further departure of insurers from the federal exchange.
- Supporting state and federal efforts that enable employers to provide cost-effective health care benefits, expand flexibility, competition and choice in the health insurance marketplace and promote and improve employee health status while opposing taxes on health insurance claims or premiums.
- Opposing state and federal health insurance mandates and policy changes that ignore pricing differentials and/or the important role of the free market, especially in the area of benefit plan design including benefit mandates, development of preferred networks, pharmacy management tools and wellness programs.
- Opposing efforts to limit an employer or insurer's ability to use mail-order pharmacies, preferred pharmacy networks or other innovative pharmacy benefit management (PBM) tools to help manage pharmaceutical utilization and costs.
- Fighting fraud, waste and abuse in Michigan public service programs, including Medicaid, Healthy Michigan and the Women, Infants and Children (WIC) program.



WHY?

Rising health care costs continue to be a significant financial threat to Michigan's businesses. Policymakers should avoid implementing costly state and federal health insurance mandates and other plan design restrictions and instead focus on implementing market-friendly, consumer-driven reforms that will enable job providers and individuals to purchase affordable coverage in the private health insurance marketplace.

2017-18 Legislative Priorities: *Legal Reform*

GOAL: Maintain a Sound Legal Climate

Chamber Members Advocate:

- Opposing efforts to expand the types of claims that can be filed against Michigan job providers.
- Protecting and strengthening Michigan's laws that provide balance pertaining to general tort, medical liability, consumer protection, products liability and the recovery of attorney's fees.
- Supporting reasonable reforms to Michigan's auto insurance system to reduce premium costs for individuals and commercial purchasers.



WHY?

Michigan has long been considered a leader in the national legal reform movement and must continue to work proactively to strengthen and improve the state's legal climate. Common-sense reforms should be pursued to control auto insurance premiums and protect job providers against frivolous lawsuits and excessive legal bills.

2017-18 Legislative Priorities:

Tax Climate

GOAL: Make Michigan's Tax Climate the Best in the Country

Chamber Members Advocate:

- Opposing efforts to impose a graduated income tax on Michigan families, entrepreneurs and business taxpayers.
- Opposing expansion of sales and use tax to services.
- Opposing any attempts to shift the burden of collection and enforcement of taxes from government to employers.
- Expanding personal property tax relief to include all taxpayers.
- Opposing new or expanded excise taxes.
- Holding Treasury accountable for improved transparency and a customer-centric approach to administration of taxes and incentives.

WHY?

Michigan job providers still contribute heavily to the state and local tax system; paying over \$14 billion a year in state and local taxes, according to a recent report compiled by the Anderson Economic Group. That said, Michigan is making significant improvement to its business tax environment and its standing among the states. To truly transform Michigan, we must fully eliminate the burdensome business personal property tax for all taxpayers. State-level administration of taxes, and the general treatment of taxpayers has improved, but more work needs to be done in order to minimize disputes and avoid litigation, and strengthen and honor taxpayer rights. Michigan should continue to be a leader in maintaining a flat state income tax, and minimizing local option taxes.

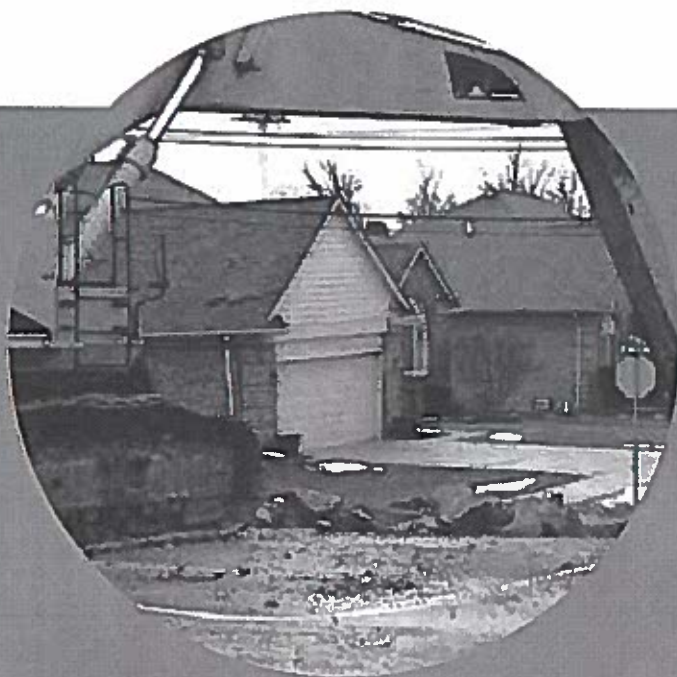


2017-18 Legislative Priorities: *Transportation and Infrastructure*

GOAL: Strengthen the Basic Foundation for Economic Development by Maintaining and Improving Michigan's Public Infrastructure

Chamber Members Advocate:

- Supporting full implementation of the recently approved \$1.2 billion five-year plan to fix Michigan's roads and bridges financed through user fees and the re-prioritization of current spending. Any reduction in the commitment to use general funds for roads and bridges must be offset dollar-for-dollar with user fee increases.
- Supporting the development and funding of a long-term strategy to modernize and maintain Michigan's critical economic development infrastructure.
- Supporting modernization of the Soo Locks.
- Moving forward with construction of the new international trade crossing between Detroit and Windsor, Canada.



WHY?

Michigan's economic competitiveness and the health and well-being of citizens depends on a safe, reliable and affordable infrastructure. For too long, we have utilized a band-aid approach to addressing critical infrastructure needs and that strategy has exacerbated problems. It is vital that policymakers identify both long-term needs and appropriate funding mechanisms. Roads and bridges are often the most identifiable facet of infrastructure but serious consideration must also be given to water and wastewater treatment systems, storm sewers, and ports and airports. If Michigan is to continue to prosper, we must not neglect the hard task of planning for the future and taking the steps necessary to implement long-term strategies for success.



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