

Workforce Data

November 15, 2010

Section 1: Talent

Engineering Occupations

Michigan and Southeast Michigan are rich in engineering talent. In 2009, Michigan was the top ranked state in the nation in terms of engineers and architects; with almost three percent of all occupations being found in the engineering and architecture fields.

Table 1

Top Five States in Density of Architecture and Engineering Occupations

State	Total Occupations	Architecture & Engineering Occupations	Share	Rank
Michigan	3,893,900	113,330	2.91%	1
Washington	2,789,670	79,790	2.86%	2
Alaska	308,140	8,630	2.80%	3
New Mexico	800,390	21,730	2.71%	4
Colorado	2,234,250	56,490	2.53%	5
United States	130,647,610	2,412,730	1.85%	n/a

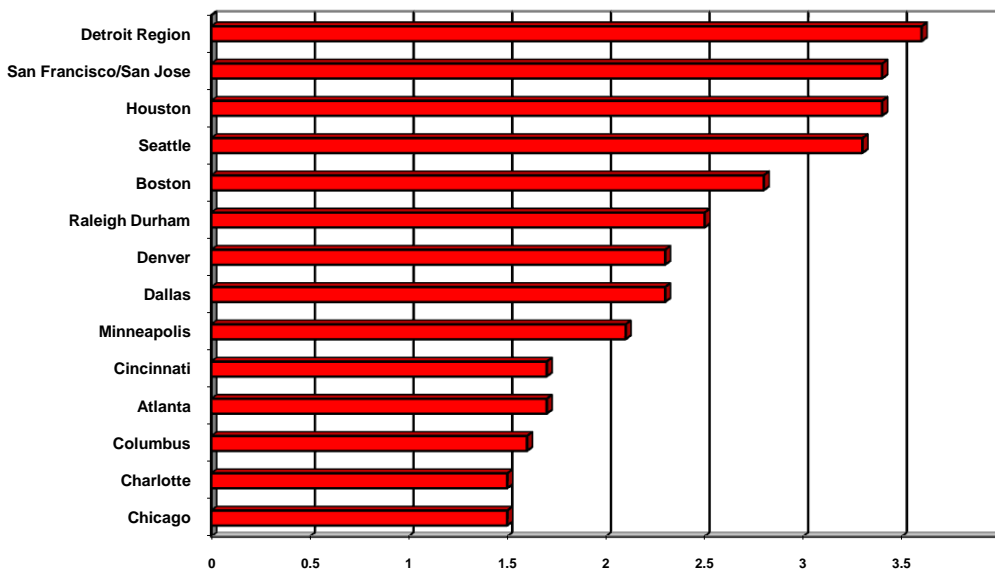
Source: Bureau of Labor Statistics.

Engineering Capacity in the Detroit Region

In 2009, there were more engineers per workers in the Detroit region than any other metro area in the United States. For every 100 people working, 3.6 were employed as an engineer or architect. There were more than 77,000 people working as engineers in the Detroit region; the largest group is industrial engineers.

Figure 1

Engineers per 100 Workers, Metro Areas 2009



Source:
Bureau of Labor Statistics.

Detroit Regional Chamber

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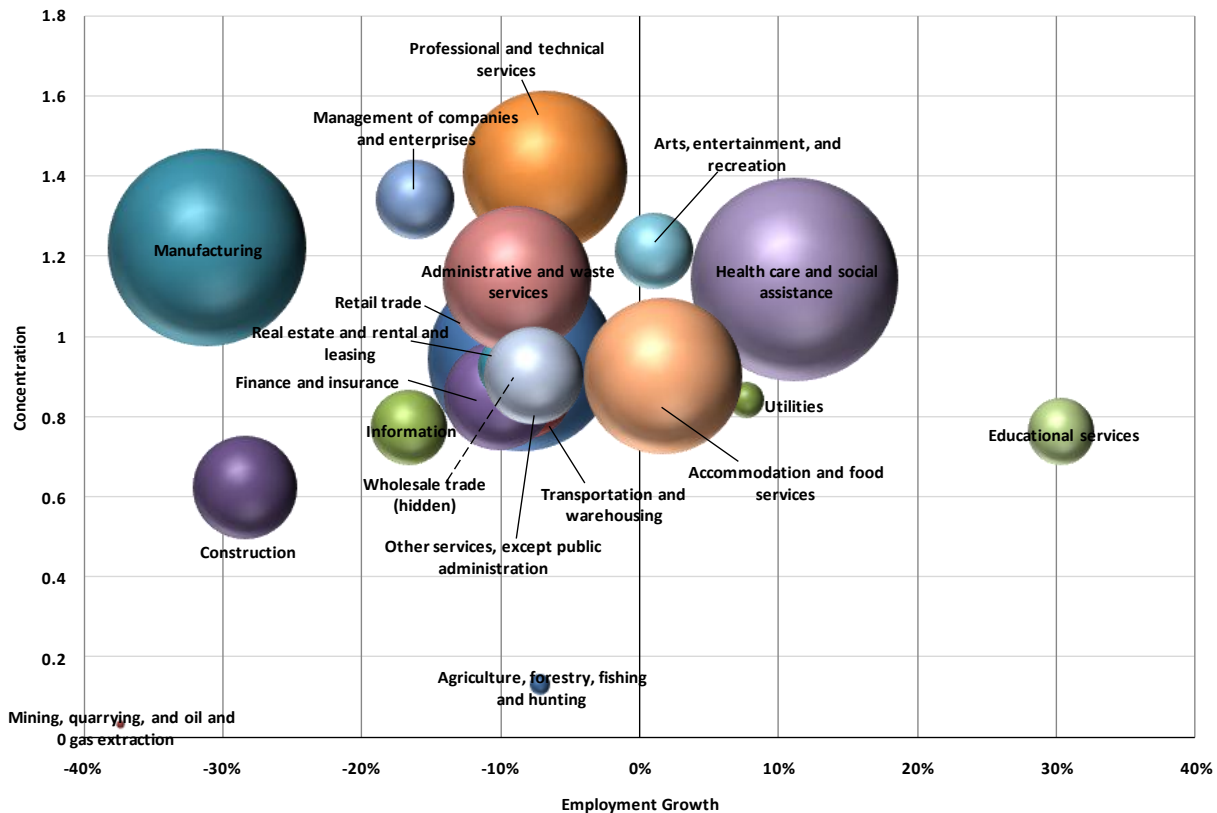
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Cluster Analysis

In Figure 2, the chart shows private sector employment growth (or loss) for 2002-2008 (graphed along the X-axis) and each sector's concentration compared to the nation - also called the "location quotient" (graphed along the Y-axis). The size of each bubble represents that sector's proportion of jobs in Southeast Michigan. Location quotients greater than 1.25 suggest that these are sectors with significantly higher concentrations of employment and support the regional economy as a whole.

Southeast Michigan's three most highly concentrated sectors – Professional and Technical Services, Management of Companies, and Manufacturing – show the region's range of talent. While most are historically tied to the automotive industry and lost jobs between 2002 and 2008, they also suggest an immense and diverse talent base in this region. In 2008, they accounted for 26 percent of all jobs in Southeast Michigan.

Figure 2
Southeast Michigan's Private Sector Growth (2002-2008) and Concentrations (2008)



Sources: Bureau of Labor Statistics, Michigan Labor Market Information, and SEMCOG.

Educational Attainment

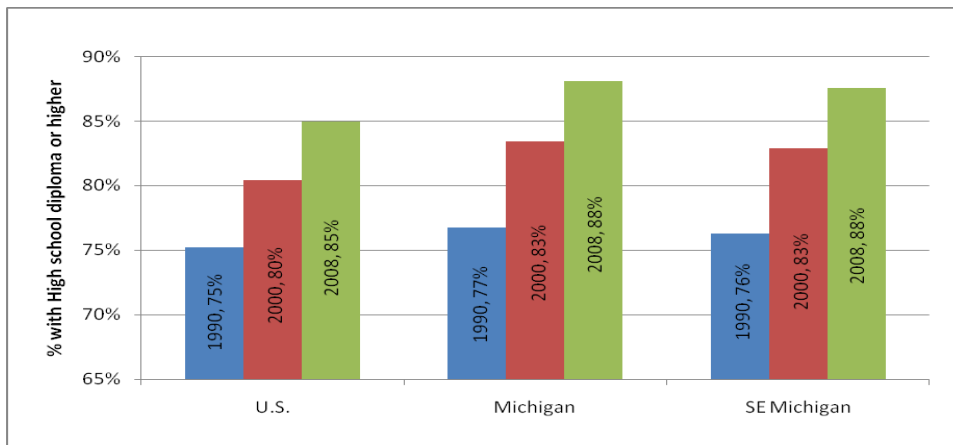
Education attainment has been increasing in Michigan, for the population 25 years and older.

Table 2
Educational Attainment, Population 25 years or older

Percent with High school diploma or higher	U.S.	Michigan	Southeast Michigan
1990	75%	77%	76%
2000	80%	83%	83%
2008	85%	88%	88%
Percent with Bachelor's degree or higher	U.S.	Michigan	Southeast Michigan
1990	20%	17%	19%
2000	24%	22%	25%
2008	28%	25%	28%
Percent with Master's degree or higher	U.S.	Michigan	Southeast Michigan
1990	7%	6%	7%
2000	9%	8%	10%
2008	10%	9%	11%

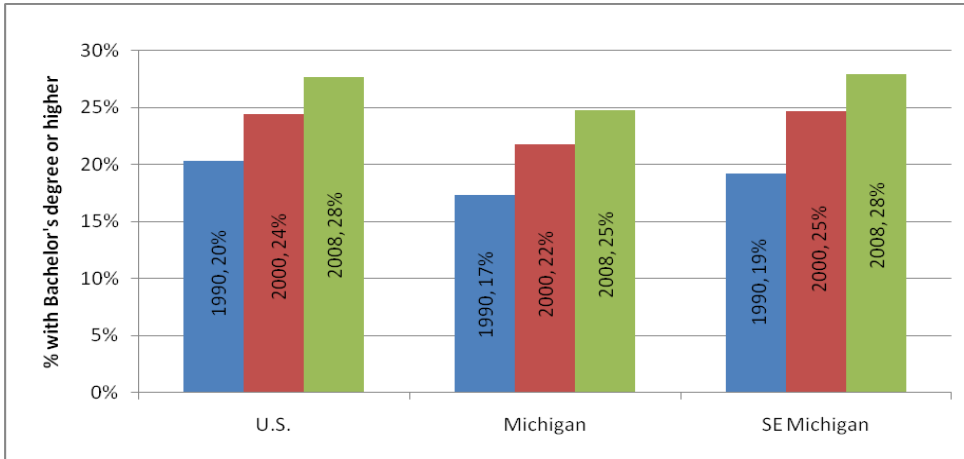
Source: Census Bureau.

Figure 3
Educational Attainment – High School Diploma or Higher



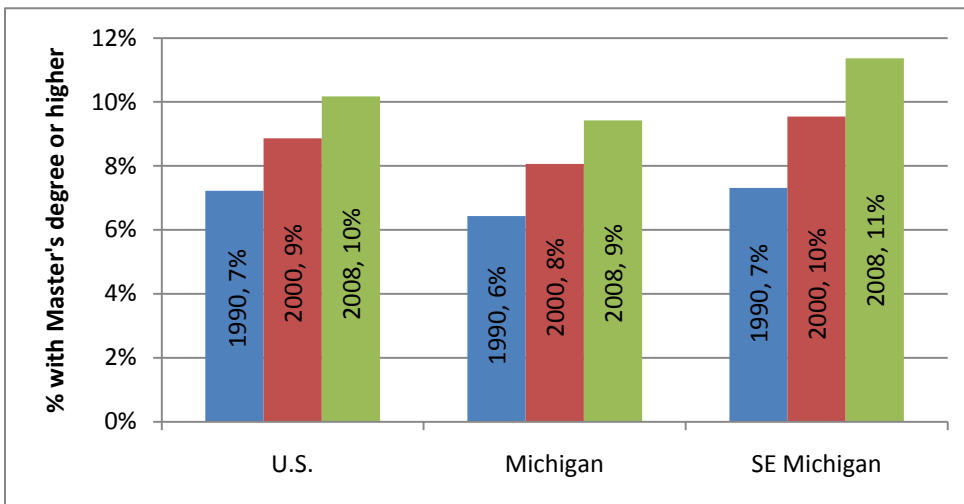
Source: Census Bureau.

Figure 4
Educational Attainment – Bachelor Degree or Higher



Source: Census Bureau.

Figure 5
Educational Attainment – Masters Degree or Higher



Source: Census Bureau.

Michigan colleges and universities ranked in the Top 10 for graduating students in each type of degree conferred (Table 3).

Table 3
Top 10 States by Number of Degrees Conferred 2007-2008

Rank	State	Number of Associates Degrees	State	Number of Bachelors Degrees	State	Number of Masters Degrees	State	Number of Doctorate Degrees	State	Number of First Professional Degree
1	California	97,010	California	158,652	New York	63,720	California	7,524	California	9,006
2	Florida	65,948	New York	118,387	California	59,652	New York	4,937	New York	8,849
3	New York	57,807	Texas	98,205	Illinois	39,339	Texas	3,833	Texas	5,439
4	Texas	43,867	Pennsylvania	82,132	Texas	33,929	Pennsylvania	3,798	Illinois	4,958
5	Illinois	34,013	Florida	77,460	Pennsylvania	29,867	Florida	3,457	Florida	4,942
6	Arizona	33,325	Illinois	69,621	Massachusetts	29,370	Massachusetts	3,136	Pennsylvania	4,835
7	Ohio	26,830	Ohio	59,385	Arizona	28,042	Illinois	3,024	Massachusetts	4,526
8	Pennsylvania	26,575	Michigan	54,526	Florida	26,576	Ohio	2,404	Ohio	3,521
9	Michigan	26,443	Massachusetts	49,526	Ohio	20,991	Minnesota	2,064	Michigan	3,502
10	Washington	21,194	Virginia	41,236	Michigan	20,858	Michigan	1,980	D.C.	2,837

Source: National Center for Education Statistics.

The Detroit Region's strong community college network collaborates with business through The Michigan New Jobs Training Program that provides free customized training for eligible employers who are creating new jobs. Nearly 140,000 students are enrolled in regional Detroit's nine community colleges, according to IPEDS Data Center - National Center for Education Statistics.

Table 4
Community College Enrollment, Fall 2009

Community College	Fall 2009 Enrollment
Henry Ford Community College	17,541
Macomb Community College	24,134
Monroe County Community College	4,624
Mott Community College	12,556
Oakland Community College	28,123
St Clair County Community College	5,007
Schoolcraft College	13,019
Washtenaw Community College	14,100
Wayne County Community College District	20,770
Total	139,874

Source: IPEDS Data Center - National Center for Education Statistics

Table 5
Michigan Immigrant Education and Workforce, 2008

Total Household Population of MI, Age 5 & older	1990		2000		2009	
	Number	Percent	Number	Percent	Number	Percent
Foreign Born Population	306,901	100	412,309	100	475,582	100
Bachelor Degree or Higher	73,834	24.1	136,712	33.2	173,498	36.5

Source: Migration Policy Institute. MPI DATA Hub.

Section 2: The New Economy

The Alternative Energy Economy

Production of alternative, or clean, energy has been identified as an emerging growth industry. Clean energy jobs are those jobs involved in clean energy production, increasing energy efficiency, reducing carbon emissions and other pollution, and conserving our natural resources. According to the Pew Center for the States report entitled *The Clean Energy Economy*, there were more than 770,000 clean energy jobs in the United States as of 2007. Michigan has become a leader in the clean energy economy, ranking 10th among all states in the number of clean energy jobs with 22,674 jobs and the 9th in the number of clean energy businesses with 1,932 businesses, as of 2007. The state's growth rate of 10.7 percent in clean energy jobs from 1998 to 2007 exceeded the national average of 9.1 percent, and considerably outperformed the overall economy in the state, which declined by 3.6 percent during the same time period.

Table 6
Top Ten States with Clean Energy Jobs, 2007

State	Clean Jobs 2007	Clean Businesses 2007	Clean Job Growth 1998-2007	Overall Job Growth 1998-2007
California	125,390	10,209	7.7%	6.7%
Texas	55,646	4,802	15.5%	6.7%
Pennsylvania	38,763	2,934	-6.2%	-3.1%
Ohio	35,267	2,513	7.3%	-2.2%
New York	34,363	3,323	-1.9%	-2.6%
Florida	31,122	3,831	7.9%	22.4%
Illinois	28,395	2,176	-2.5%	-2.5%
Massachusetts	26,678	1,912	4.3%	-4.4%
New Jersey	25,397	2,031	-9.6%	-2.7%
Michigan	22,674	1,932	10.7%	-3.6%
United States	770,385	68,203	9.1%	3.7%

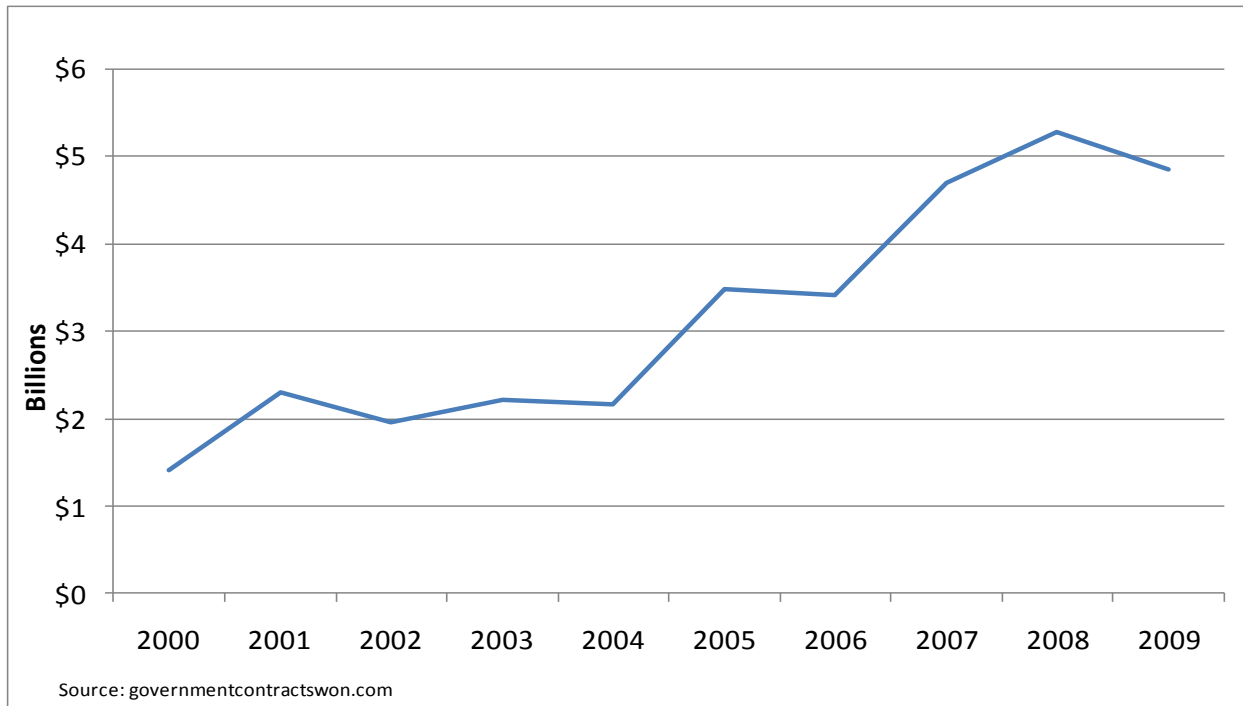
Source: Pew Charitable Trusts, 2009 The Clean Energy Economy report.

Defense Contracts

Federal Government spending in the Southeast Michigan region for defense contracts has steadily increased over the past 10 years. Based on data from governmentcontractswon.com, the region has approximately 2,200 defense contractors that won just over 26,000 contracts from 2005 to 2009. In 2009, contracts amounted to \$4.8 billion.

Figure 6

**Amount of Defense Contracts Awarded to Southeast Michigan, 2000-2009
In 2009 Dollars**

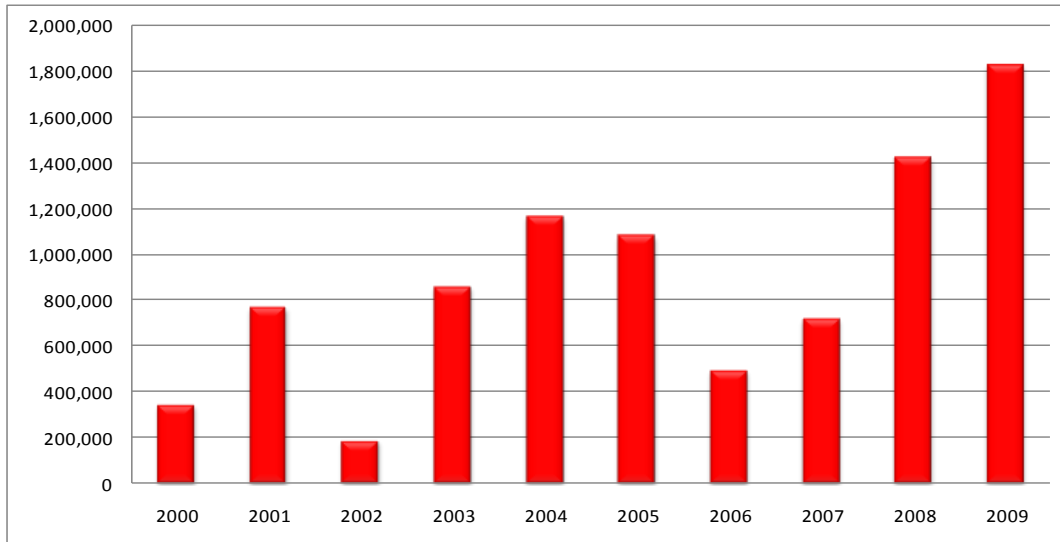


Healthcare Industry and Medical Facilities

The healthcare industry continues to lead employment growth in Southeast Michigan. It added 34,600 jobs, or 14.5%, from 2000 to 2009. Meanwhile, Southeast Michigan has experienced a significant uptick in development of hospitals and medical centers in recent years.

- The seven-county Southeast Michigan region has over 20 health systems/hospital groups serving residents, with 60 hospitals, over 16,000 licensed beds, and over 350 affiliated centers providing a full range of health care.
- Since 2008, ALL of the major hospitals/health systems in the region have experienced some construction activity.
- In just the two year period of 2008 and 2009, over 35 medical facility/hospital projects were completed with a reported construction/improvement value of \$1.5 billion.
- The region currently has \$1.2 billion of medical facility projects underway or planned, comprising 2.9 million square feet of floorspace.

Figure 7
Total Square Feet of Medical Floorspace Completed by Year



Source: SEMCOG

Table 7
Quality Health Care, Best Hospitals, 2010

DMC Hospitals Children’s Hospital of Michigan Harper University Hospital Sinai-Grace Hospital	Beaumont Hospitals Beaumont Hospital – Royal Oak Beaumont Hospital – Grosse Pointe
St. John Health Systems St. John Hospital & Medical Center	Henry Ford Health Systems Henry Ford Hospital
Genesys Hospitals Genesys Regional Medical Center	University of Michigan Hospitals University Hospital

Source: U.S. News and World Report.

Skills for the New Economy

The transition to a new economy requires an emphasis on a different range of skills than we have seen in the past. Occupations related to green design and manufacturing, biology, logistics, and medical services will be among the fastest growing fields in the future. Educating our adult population in these growing fields is the key to a healthy economy in the future.

Michigan post-secondary institutions ranked 15th overall among states in the number of degrees completed per capita in all fields related to green design and manufacturing in 2009. However, the state ranked 3rd in science and engineering degrees (defined as degrees in Chemistry, Engineering, Engineering Technology, and Geology), an important component of green design and manufacturing and one that builds on our historic strength in producing engineering talent. And Michigan ranked 2nd in the number of degrees completed per capita in the emerging logistics field, while also outpacing the national average in degrees awarded in medical services (defined as all medical science, technology, and administration degrees other than actual medical degrees – MDs and DOs).

Table 8

Degrees Completed Per One Million Adults (Age 18+) in New Economy Related Occupations, by State, 2008-2009

Geographic Area	Alternative Energy and Green Design and Manufacturing				Other New Economy Occupations		
	Agriculture and Conservation	Science and Engineering ¹	Design and Construction ²	Total Green Related	Biology	Logistics	Medical Services ³
United States	187.7	713.1	243.0	1,143.8	438.5	14.2	3,210.3
Alabama	153.4	1,337.0	170.0	1,660.4	447.9	272.5	3,109.3
Alaska	98.9	611.2	116.7	826.8	237.4	41.5	1,839.6
Arizona	132.7	559.4	351.6	1,043.7	352.4	14.8	5,214.0
Arkansas	193.7	431.6	74.3	699.7	305.2	21.4	3,530.4
California	171.7	624.5	274.3	1,070.5	493.5	3.8	2,874.0
Colorado	290.9	855.1	622.3	1,768.4	518.4	5.1	3,591.0
Connecticut	153.9	775.8	308.2	1,237.9	507.4	0.0	2,505.6
Delaware	319.4	713.7	34.5	1,067.5	376.3	4.5	2,817.2
District of Columbia	50.0	837.7	618.9	1,506.7	1,613.0	0.0	6,183.0
Florida	109.3	493.0	153.3	755.6	269.1	6.8	3,889.2
Georgia	136.6	543.3	338.6	1,018.6	354.9	42.7	3,061.1
Hawaii	150.5	500.2	124.6	775.2	364.7	0.0	1,380.0
Idaho	454.9	719.8	147.7	1,322.4	460.3	0.0	2,594.4
Illinois	207.1	657.0	216.9	1,081.0	381.0	7.2	3,284.6
Indiana	156.9	1,002.9	201.1	1,360.9	387.0	0.8	3,050.5
Iowa	516.8	786.7	260.3	1,563.8	586.1	25.3	3,905.2
Kansas	342.4	853.2	324.4	1,520.0	398.5	3.3	4,599.5
Kentucky	210.1	903.8	661.8	1,775.7	328.5	0.0	3,951.0
Louisiana	199.8	717.7	407.8	1,325.3	475.6	0.0	4,150.2
Maine	337.9	497.3	193.0	1,028.1	465.6	0.0	2,567.9
Maryland	86.7	635.5	205.2	927.4	562.6	6.3	2,336.4
Massachusetts	145.6	1,076.1	260.4	1,482.1	670.5	2.2	3,056.9
Michigan	130.0	1,154.2	174.8	1,458.9	423.1	57.3	3,433.9
Minnesota	313.1	602.2	494.6	1,409.9	554.8	0.0	4,099.2
Mississippi	173.0	606.9	193.3	973.2	398.0	0.0	2,855.5
Missouri	200.2	749.2	168.1	1,117.6	462.8	6.9	3,651.2
Montana	593.1	882.9	332.8	1,808.8	480.4	0.0	1,584.7
Nebraska	484.7	736.0	386.0	1,606.7	584.2	0.0	3,436.3
Nevada	57.4	310.0	83.3	450.8	196.7	6.2	1,910.8
New Hampshire	349.9	735.1	175.0	1,260.0	374.4	1.0	2,251.1

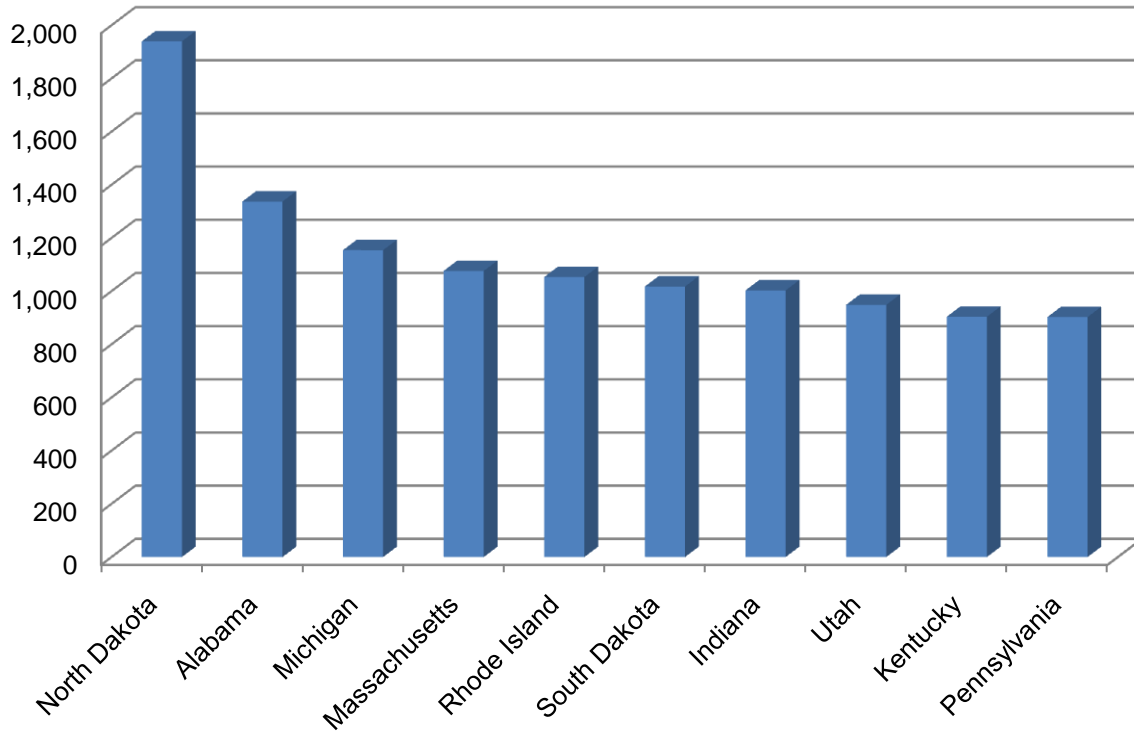
Geographic Area	Alternative Energy and Green Design and Manufacturing				Other New Economy Occupations		
	Agriculture and Conservation	Science and Engineering ¹	Design and Construction ²	Total Green Related	Biology	Logistics	Medical Services ³
New Jersey	53.5	540.1	98.1	691.7	376.7	0.0	2,331.8
New Mexico	153.8	767.6	371.6	1,293.0	306.9	0.0	2,277.7
New York	127.4	715.4	225.6	1,068.4	448.2	2.3	2,587.4
North Carolina	305.9	727.6	289.6	1,323.1	449.1	6.4	2,274.5
North Dakota	609.9	1,939.6	517.9	3,067.3	587.9	0.0	3,803.1
Oklahoma	281.8	689.3	297.9	1,268.9	445.9	0.4	3,378.0
Oregon	283.7	559.1	175.9	1,018.6	370.9	25.3	2,488.6
Pennsylvania	124.2	902.6	337.0	1,363.9	498.4	10.9	3,459.7
Rhode Island	266.3	1,053.2	417.1	1,736.6	574.0	0.0	2,804.4
South Carolina	118.4	522.5	79.7	720.5	471.2	0.0	2,145.2
South Dakota	689.3	1,017.4	293.5	2,000.2	526.0	0.0	3,504.1
Tennessee	136.6	545.4	92.7	774.7	288.0	43.9	3,015.8
Texas	202.7	648.9	153.5	1,005.0	429.3	8.2	3,148.5
Utah	177.1	948.5	331.9	1,457.4	692.4	26.5	4,296.0
Vermont	774.0	731.3	727.2	2,232.5	650.0	0.0	1,761.2
Virginia	144.0	662.9	152.9	959.9	433.7	0.2	3,172.7
Washington	195.8	632.6	275.5	1,103.8	379.3	2.8	2,812.9
West Virginia	314.2	650.1	156.7	1,121.0	378.6	1.4	3,242.6
Wisconsin	294.9	726.1	316.0	1,337.0	670.5	9.5	4,788.1
Wyoming	689.4	822.8	237.2	1,749.4	444.8	0.0	2,606.9

1. Science and Engineering consists of Chemistry, Engineering, Engineering Technology and Geology degrees.
2. Design and Construction consists of Architecture, Construction Trades and Geography degrees.
3. Medical Services does not include MD and DO degrees.

Source: National Center for Education Statistics, 2008-2009 Integrated Post-Secondary Education Survey.

Figure 8

Top Ten States in Science and Engineering Degrees Completed in New Economy Related Occupations per One Million Adults (Age 18+), 2008-2009



Source: National Center for Education Statistics, 2008-2009 Integrated Post-Secondary Education Survey.

Supply Chain Management

- The Detroit region has over 100 years of established supply chain system design and execution experience. Automotive production, assembly and distribution accounts for the most complex supply chain system in the world.
- Nearly 230,000 people or 11 percent of the workforce works in supply chain management and is expected to grow by 10 percent in the next decade.
- There are 25 transportation & logistics educational programs at Michigan-based higher-learning institutions.

The Film Industry

- Michigan has the leading business incentive for the film industry, resulting in filming expenditures skyrocketing from barely \$2 million in 2007 to an estimated \$223 million in 2009.
- According to the Michigan Film Office, Michigan ranks in the top 3 in the United States for shooting all types of media.
- In the past two years 66 films and 24 television shows were filmed at Michigan locations.

Section 3: Innovation

In 2009, Michigan ranked 7th in total number of patents (3,516) in the nation. In terms of population size, Michigan ranked 13th in the country with 35.3 patents per 100,000 residents. The U.S. average was 31.0 patents per 100,000 residents.

Table 9
Patents by State, 2009

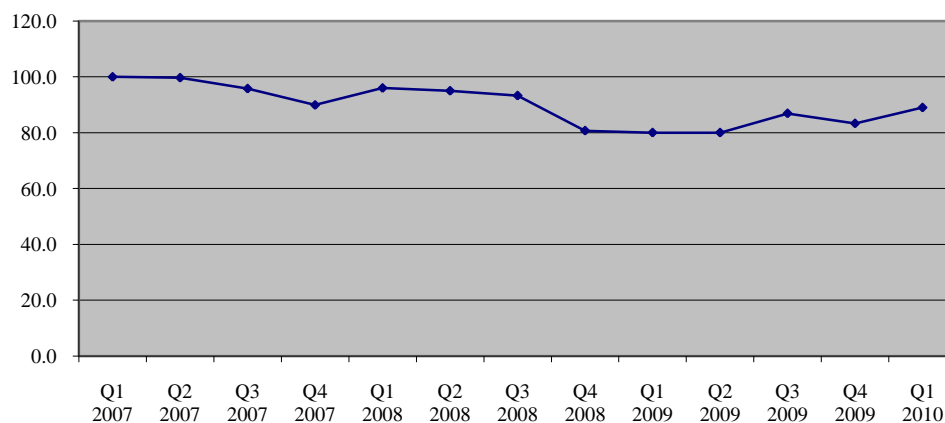
Rank	State	Patents	Patents per 100,000 residents, 2009
	U.S. TOTALS	95,037	31.0
1	CALIFORNIA	23,354	63.2
2	TEXAS	6,436	26.0
3	NEW YORK	6,127	31.4
4	WASHINGTON	4,856	72.9
5	MASSACHUSETTS	4,038	61.2
6	ILLINOIS	3,615	28.0
7	MICHIGAN	3,516	35.3
8	NEW JERSEY	3,259	37.4
9	PENNSYLVANIA	3,066	24.3
10	OHIO	3,023	26.2
11	MINNESOTA	2,972	56.4
12	FLORIDA	2,899	15.6
13	NORTH CAROLINA	2,298	24.5
14	OREGON	2,014	52.6
15	COLORADO	1,968	39.2
16	WISCONSIN	1,887	33.4
17	ARIZONA	1,759	26.7
18	GEORGIA	1,666	16.9
19	CONNECTICUT	1,661	47.2
20	MARYLAND	1,445	25.4
21	INDIANA	1,246	19.4
22	VIRGINIA	1,209	15.3
23	IDAHO	985	63.7
24	MISSOURI	877	14.6
25	UTAH	855	30.7
26	TENNESSEE	785	12.5
27	IOWA	730	24.3
28	NEW HAMPSHIRE	608	45.9
29	SOUTH CAROLINA	579	12.7
30	KANSAS	509	18.1
31	VERMONT	500	80.4
32	KENTUCKY	457	10.6
33	OKLAHOMA	446	12.1
34	NEVADA	426	16.1
35	ALABAMA	377	8.0
36	DELAWARE	342	38.6
37	NEW MEXICO	329	16.4

Rank	State	Patents	Patents per 100,000 residents, 2009
38	LOUISIANA	315	7.0
39	RHODE ISLAND	305	29.0
40	NEBRASKA	226	12.6
41	ARKANSAS	154	5.3
42	MISSISSIPPI	144	4.9
43	MAINE	130	9.9
44	WEST VIRGINIA	102	5.6
45	HAWAII	96	7.4
46	NORTH DAKOTA	92	14.2
47	MONTANA	91	9.3
48	WYOMING	64	11.8
49	DC	62	10.3
50	SOUTH DAKOTA	56	6.9
51	ALASKA	55	7.9

Source: U.S. Patent and Trademark Office

Figure 9 shows the Michigan Innovation Index that measures acceleration or deceleration of economic activities based on six categories: trademark applications, innovation workers, SBA loans granted, venture capital, incorporations, and gross job gains. The recent uptick in the index for the first quarter 2010 is due mostly to trademark applications and gross job creation.

Figure 9
Michigan Innovation Index



Source: The University of Michigan-Dearborn, College of Business, iLabs

Other facts about innovation include the following:

- Seventy percent of the research performed at Michigan universities is conducted in the Detroit Region.
- Michigan ranks second in R&D intensity. (R&D/GSP)
- In 2007, the University of Michigan ranked fifth for university R&D spending and the 7th top patenting university.
- There are more than 1,800 companies performing R&D in the Detroit Region.
- In 2009, only seven countries (Japan 38,066, Germany 10,353, South Korea 9,566, Taiwan 7,781, Canada 4,393, United Kingdom, 4,011 & France 3,805) surpassed Michigan in the U.S. patents granted. Michigan consistently ranks in the Top 10 patenting states.
- Seven of the Top 20 Global R&D spenders have a facility in the Detroit region.
- The region is home to three business incubators focused on diversifying the economy.

Section 4: Entrepreneurship/Small Businesses

Michigan is a Strong Entrepreneurship State

Michigan was ranked the 23rd best state for entrepreneurship & small businesses, moving up 21 spots from 44th in 2008, according to the Small Business & Entrepreneurship Council’s Annual Small Business Survival Index for 2009. Individual category highlights include:

Taxes

- Among states with a personal income tax, Michigan ranks as having the 7th lowest rate and 15th lowest overall.
- Among states with an individual capital gains tax rate, Michigan ranks as having the 8th lowest rate and 16th overall. With respect to corporate capital gains tax rates, Michigan ranked as having the 6th lowest rate and 11th lowest rate overall.
- Among states with a corporate tax rate, Michigan ranks as having the 4th lowest rate and 9th lowest rate overall.
- Michigan ranks as having the 19th lowest state & local sales, gross receipts & excise tax rate.

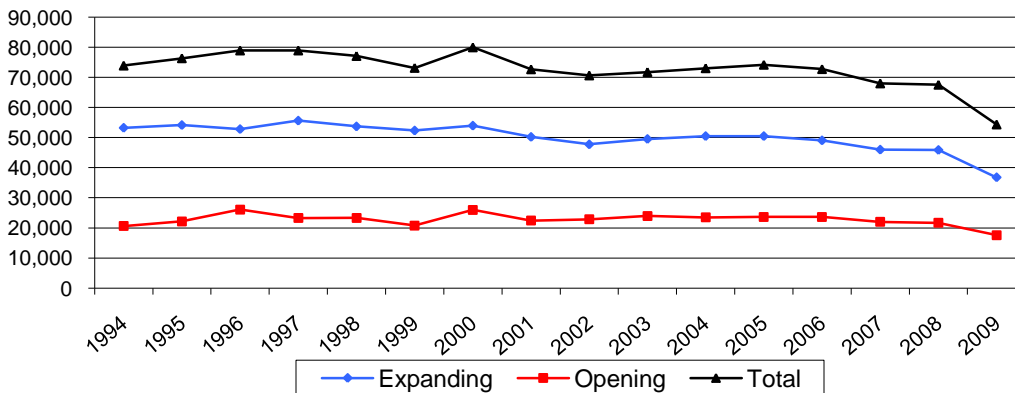
Regulatory

- Michigan has the 5th lowest state and local government workers per 100 residents.
- Michigan has the 5th lowest number of Health Care mandates for businesses in the country.

Small Businesses

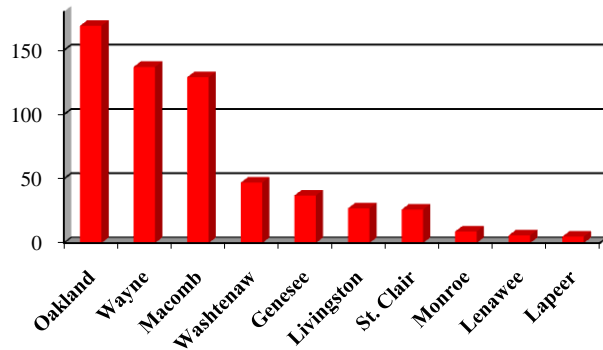
- In 2008, Michigan based microenterprises (less than 5 employees & non employer establishments) accounted for 87.3 percent or 760,728 businesses.
 - These very small businesses employ nearly one million people or 18 percent of the state’s workforce.
- Source: Association for Enterprise Opportunity and U.S. Census Bureau.

Figure 10
Private Sector Business Start Ups and Expansions, 1994-2009 Michigan



Source: U.S. Bureau of Labor Statistics, Annual Business Employment Dynamics Data.

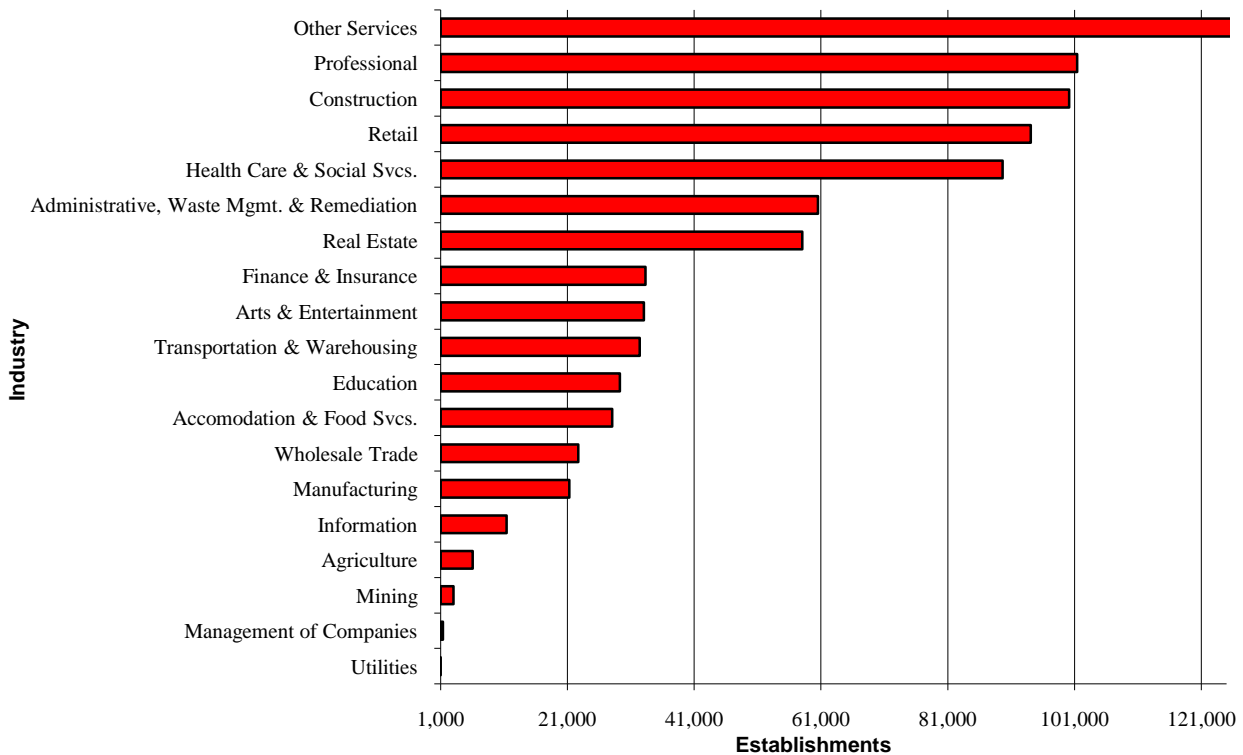
Figure 11
Small Business Loans Granted by County, 2009, All Types



Source: Small Business Administration, Michigan District Office 2009 Annual Report.

- The Small Business Administration granted 587 loans to regional Detroit businesses in 2009, accounting for 46 percent of the loans granted in Michigan.
- Regional Detroit small businesses were granted nearly \$147 million from the Small Business Administration, accounting for 47 percent of the loans distributed throughout the state.

Figure 12
Michigan Small Business by Industry, 2008

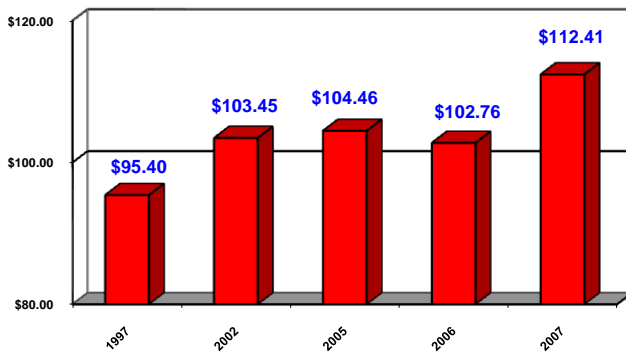


Source: U.S. Census Bureau, County Business Patterns & Nonemployer Statistics.

Section 5: Labor Productivity

We earn what we produce. This is why productivity is so important. Over time, labor productivity growth ultimately drives gains in wages, incomes, and living standards. Labor productivity growth is closely tied to and provides a measure of economic competitiveness. Michigan's labor productivity continues to remain competitive as demonstrated by the following figures and tables.

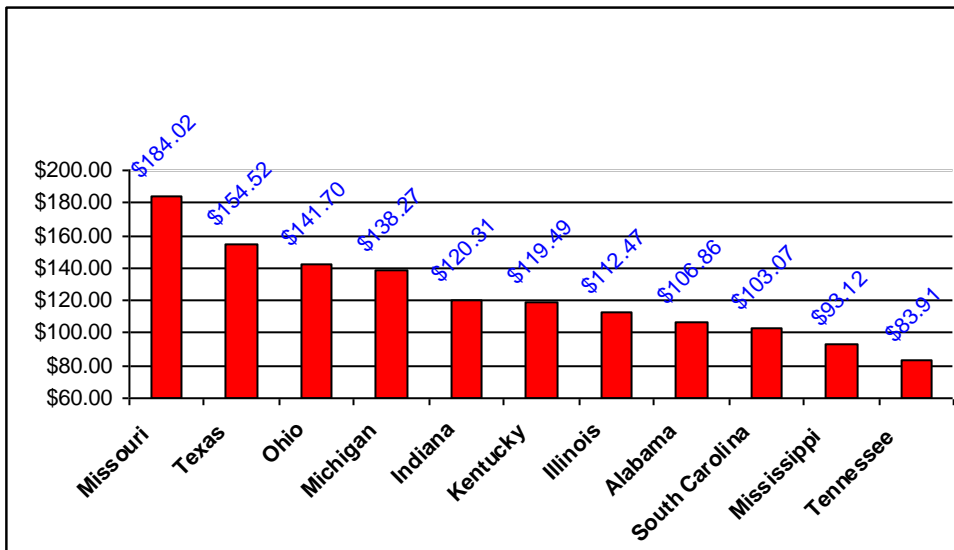
Figure 13
Value Added Per Production Hour in Michigan, 1997-2007
All Manufacturing Total Workforce, in 2007 dollars



Value Added per Production Hour is the total value added of manufactured products divided by the number of manufacturing hours and measures how much of a manufactured product's value is added for each hour spent producing that product. The larger the number, the more productive the work force. This is a widely-accepted measure of worker productivity.

Source: Detroit Regional Chamber using data from the U.S. Census Bureau, Annual Survey of Manufacturers.

Figure 14
Value Added Per Production Hour, 2007
Transportation Equipment Manufacturing
States with More than One Automotive Manufacturing Plant

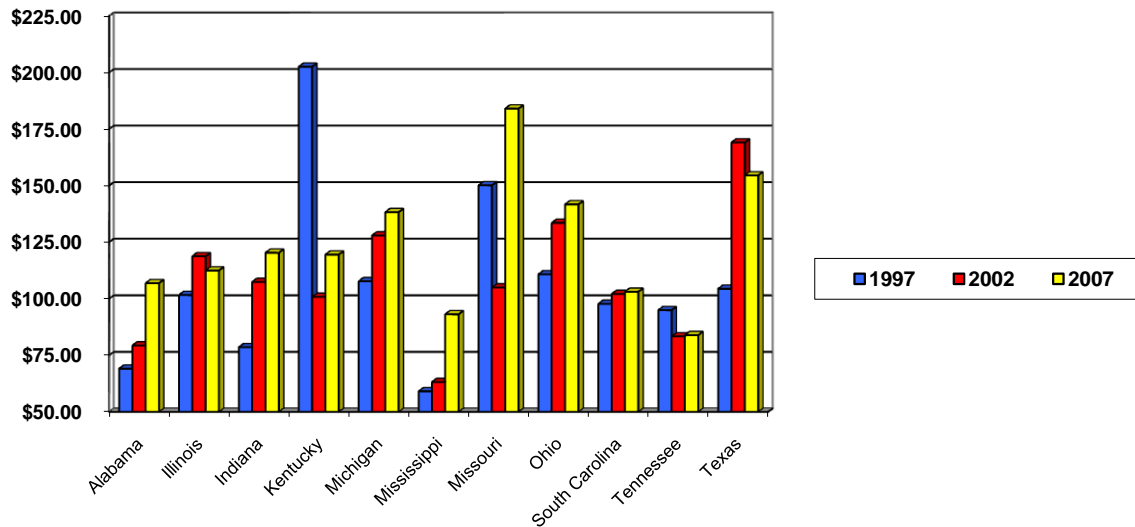


Michigan ranks as the 4th most productive state in transportation equipment manufacturing among states with more than one automotive manufacturing plant.

Source: U.S. Census Bureau, 2007 Economic Census.

Figure 15

**Value Added Per Production Hour, 1997, 2002, 2007
Transportation Equipment Manufacturing Total Workforce, in 2007 dollars
States with More than One Automotive Manufacturing Plant**



Source: U.S. Bureau of the Census, Economic Census.

Table 10
Manufacturing Production by State, 2007

Geographic Area	Value Added by Manufacturer	Value Added per Production Hour	Value per Production Worker	Value per Production Wages	Total value of Shipments (\$1,000)
United States	\$2,390,643,058,000	\$ 126.39	\$254,709	\$6.77	\$5,041,597,581
Alabama	\$43,137,817,000	\$100.84	\$206,595	\$5.60	\$112,858,843
Alaska	\$2,275,607,000	\$92.93	\$207,647	\$6.57	\$8,204,030
Arizona	\$32,435,899,000	\$153.74	\$307,176	\$8.18	\$57,977,827
Arkansas	\$24,805,373,000	\$84.71	\$168,254	\$5.42	\$60,735,582
California	\$249,562,672,000	\$137.40	\$272,431	\$7.58	\$491,372,092
Colorado	\$24,068,597,000	\$130.42	\$264,455	\$6.69	\$46,331,953
Connecticut	\$34,919,720,000	\$148.06	\$299,611	\$6.96	\$58,404,898
Delaware	\$9,152,569,000	\$181.46	\$365,810	\$8.61	\$25,679,939
District of Columbia	\$201,624,000	\$86.76	\$162,600	\$4.20	\$332,844
Florida	\$55,686,388,000	\$120.99	\$240,530	\$7.16	\$104,832,907
Georgia	\$65,001,711,000	\$101.11	\$206,143	\$6.19	\$144,280,774
Hawaii	\$3,013,731,000	\$172.31	\$317,670	\$10.24	\$8,799,266
Idaho	\$9,203,793,000	\$94.45	\$188,970	\$5.07	\$18,010,976
Illinois	\$111,842,223,000	\$118.44	\$242,952	\$6.32	\$257,760,713
Indiana	\$105,188,368,000	\$129.98	\$262,558	\$6.56	\$221,877,814
Iowa	\$41,884,753,000	\$125.69	\$254,640	\$6.98	\$97,592,051
Kansas	\$28,910,605,000	\$109.42	\$226,027	\$5.85	\$76,751,828
Kentucky	\$43,220,821,000	\$113.58	\$226,899	\$5.78	\$119,105,421

Geographic Area	Value Added by Manufacturer	Value Added per Production Hour	Value per Production Worker	Value per Production Wages	Total value of Shipments (\$1,000)
Louisiana	\$59,057,861,000	\$259.90	\$542,442	\$11.87	\$205,054,723
Maine	\$8,676,436,000	\$102.85	\$204,411	\$5.29	\$16,363,192
Maryland	\$21,948,385,000	\$136.32	\$273,585	\$7.03	\$41,456,097
Massachusetts	\$48,953,028,000	\$141.71	\$282,813	\$7.14	\$86,428,959
Michigan	\$97,353,707,000	\$112.41	\$230,177	\$5.02	\$234,455,768
Minnesota	\$50,575,982,000	\$112.92	\$224,332	\$6.05	\$107,563,060
Mississippi	\$22,810,607,000	\$90.84	\$181,428	\$5.81	\$59,869,456
Missouri	\$52,521,827,000	\$121.45	\$240,627	\$6.23	\$110,907,604
Montana	\$3,921,739,000	\$146.44	\$284,328	\$7.42	\$10,638,145
Nebraska	\$13,451,384,000	\$85.09	\$175,450	\$5.23	\$40,157,999
Nevada	\$9,151,409,000	\$130.85	\$258,931	\$7.61	\$15,735,787
New Hampshire	\$9,792,330,000	\$95.18	\$192,025	\$5.25	\$18,592,406
New Jersey	\$56,049,398,000	\$140.28	\$284,866	\$7.26	\$116,608,094
New Mexico	\$7,591,119,000	\$158.77	\$312,701	\$8.20	\$17,122,725
New York	\$89,312,490,000	\$127.69	\$252,706	\$6.92	\$162,720,173
North Carolina	\$106,231,884,000	\$138.44	\$276,929	\$8.50	\$205,867,299
North Dakota	\$4,158,533,000	\$107.00	\$209,741	\$6.53	\$11,349,799
Ohio	\$129,183,927,000	\$115.45	\$234,098	\$5.73	\$295,890,890
Oklahoma	\$23,873,547,000	\$110.35	\$227,953	\$6.31	\$60,681,358
Oregon	\$39,557,131,000	\$154.11	\$302,705	\$8.31	\$66,880,653
Pennsylvania	\$109,667,091,000	\$118.13	\$238,393	\$6.23	\$234,840,418
Rhode Island	\$6,312,653,000	\$93.71	\$184,236	\$5.38	\$12,061,517
South Carolina	\$38,976,952,000	\$104.03	\$210,975	\$5.90	\$93,977,455
South Dakota	\$5,928,943,000	\$93.90	\$190,893	\$5.93	\$13,051,128
Tennessee	\$60,269,688,000	\$112.10	\$224,875	\$6.33	\$140,447,760
Texas	\$214,235,777,000	\$171.65	\$352,008	\$9.13	\$593,541,502
Utah	\$20,239,201,000	\$123.51	\$246,007	\$6.69	\$42,431,657
Vermont	\$4,045,104,000	\$90.07	\$177,129	\$4.82	\$10,751,461
Virginia	\$50,108,533,000	\$120.66	\$251,329	\$6.95	\$92,417,797
Washington	\$52,804,461,000	\$153.14	\$297,795	\$7.70	\$112,053,283
West Virginia	\$9,736,591,000	\$105.97	\$212,980	\$5.46	\$25,080,573
Wisconsin	\$75,761,615,000	\$107.80	\$215,227	\$5.75	\$163,563,195
Wyoming	\$3,871,454,000	\$210.60	\$429,255	\$9.66	\$8,834,810

Source: U.S. Bureau of the Census, 2007 Manufacturing Economic Census

Unions Inspire Higher Productivity

Over the past decade unions and business have collaborated in an effort to reinvent the automotive industry within the Detroit region. Buyouts and negotiations over the past few years have caused a decline in union membership. Ford, General Motors, Chrysler LLC and AutoAlliance International (Ford/Mazda) employ the majority of the Detroit region's unionized autoworkers. Other small to medium-sized businesses tend to rely more on informal worker-management relations.

According to the 2008 Harbour Report, the Top 10 most efficient (defined as the fewest hours per vehicle) automotive assembly plants in North America were unionized plants.

Table 11
Top Performing Plants in the United States, 2007
Fewest Hours per Vehicle

Segment	Plant	Vehicles	Union Representation
Compact Non-Premium Conventional	Chrysler Belvedere	Caliber	UAW Local 1761 & 1268
Compact Non-Premium CUV	Chrysler Belvedere	Compass, Patriot	UAW Local 1761 & 1268
Compact Non-Premium	Chrysler Toledo South	Wrangler, Wrangler Extended	UAW Local 12
Midsized Premium Conventional	GM Lansing Grand River	STS	UAW Local 602
Midsized Premium Sports Car	GM Bowling Green	Corvette, XLR	UAW Local 2164
Midsized Premium CUV	Ford Oakville	MKX	CAW
Midsized Non-Premium Pickup	Ford Twin Cities	Mazda B-Series, Ranger	UAW Local 789
Midsized Non-Premium Utility	Chrysler Jefferson North	Grand Cherokee	UAW Locals 7, 889 & 412
Midsized Non-Premium Utility	GM Moraine	Saab9-7x	IUE-CAW Local 798
Large Premium Conventional	GM Detroit-Hamtramck	DTS	UAW Local 21
Large Premium Pickup	Ford Dearborn Truck	Mark LT	UAW Local 600
Large Non-Premium Utility	GM Arlington	Suburban, Tahoe, Yukon, Yukon XL	UAW Local 276
Large Premium Utility	GM Arlington	Escalade, Escalade ESV	UAW Local 276
Large Non-Premium Van	GM Wentzville	Express, Savana	UAW Local 2250

Source: Oliver Wyman.

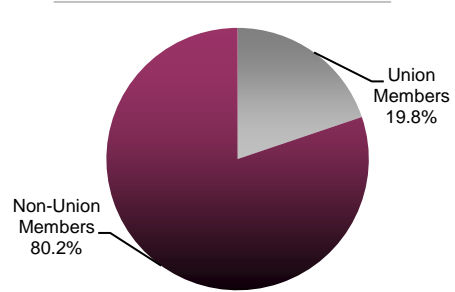
Figure 16

Union Membership Estimates

Total Union Membership Michigan, 2009

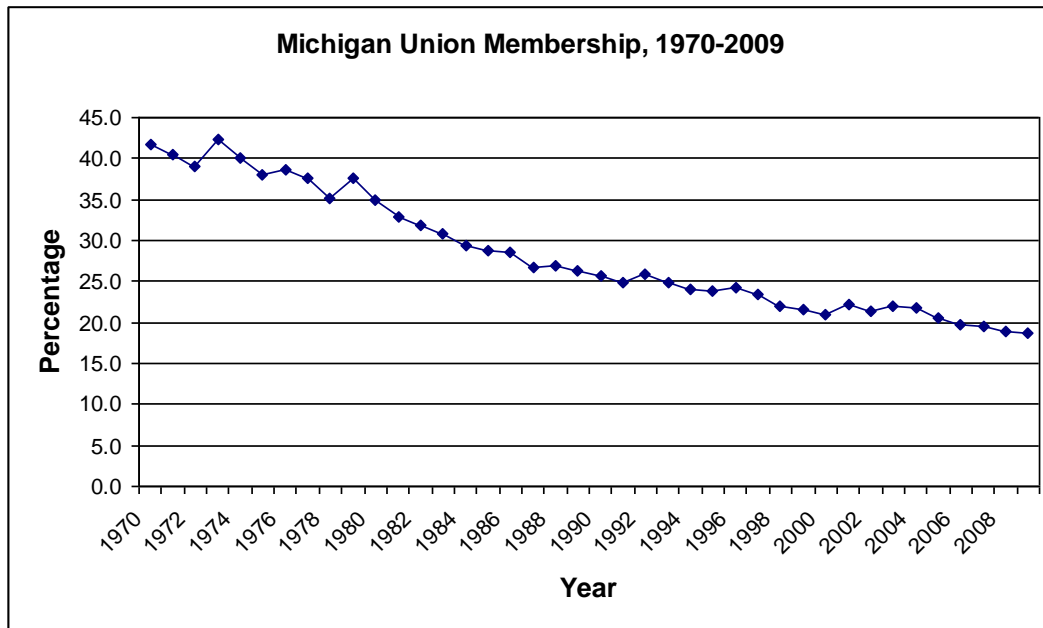
% Union Members	
All Sectors	18.8%
Private Manufacturing	17.9%

Detroit Region Private Manufacturing Unionization Estimate



Total Union Membership Detroit CMSA, 2009

% Union Members	
All Sectors	18.1%
Private Manufacturing	19.8%



Source: UnionStats.

Table 12

Top Ten Largest States by 2009 Union Membership

Ranked by Count			Ranked by Percentage		
State	Total Employment (000s)	2009 Membership (000s)	State	Total Employment (000s)	% Membership
California	14,297	2,453	New York	8,021	25.2
New York	8,021	2,019	Hawaii	2,575	23.5
Illinois	5,432	951	Alaska	292	22.4
Pennsylvania	5,220	782	Washington	2,847	20.6
New Jersey	3,734	721	New Jersey	3,734	19.3
Michigan	3,785	710	Michigan	3,785	18.8
Ohio	4,827	685	Rhode Island	444	18.0
Washington	2,847	574	Illinois	5,432	17.5
Texas	9,920	503	California	14,297	17.4
Massachusetts	2,864	476	Oregon	1,470	17.4

Source: UnionStats and U.S. Bureau of Labor Statistics.

Michigan Investments by Ford, General Motors and Chrysler – 2009 and 2010**General Motors**

- Lake Orion - \$145 million invested in a plant that had been slated for closure. Will manufacture small cars that had previously been imported from South Korea.
- Bay City Powertrain – Multiple investments totaling \$62.5 million to retool the plant to make components for Ecotec four-cylinder engine.
- Detroit Hamtramck - \$121 million investment to manufacture the next generation Chevrolet Malibu; \$336 million for production of the Chevrolet Volt.
- Brownstown Township - \$43 million investment to prepare an empty facility for production of lithium-ion battery packs for the Chevrolet Volt and other extended range electric vehicles.
- *Total Michigan investment in production of Chevrolet Volt and key components (including at facilities not enumerated above): \$700 million.*

Ford

- Michigan Assembly - \$550 million invested to convert truck plant to manufacture the new Ford Focus. When production begins, the revamped plant will be Ford's most flexible high-volume manufacturing facility anywhere in the world.
- Various locations - \$135 million invested in Michigan to create a “center of excellence” for vehicle electrification. Includes major investments at Ford's Rawsonville plant, where battery packs will be assembled – bringing work back from Mexico – and at the Van Dyke transmission plant, which will build electric transaxles.

Chrysler

- \$179 million investment in Dundee engine plant (GEMA) for the production of an advanced-technology, fuel efficient 1.4 liter engine based on Fiat technology.

Section 6: Wages

Union and Nonunion Wages and Earnings

In recent years, wages in Michigan have become more competitive – for both union and nonunion workers. In 1999, Michigan’s average hourly wage was almost one dollar higher than the national average. Union and nonunion wages were also higher than the nation’s average (Table 13). But the differences in wages and earnings have now reversed. In 2009, Michigan’s average hourly wage was 61 cents *lower* than the national average. For unionized workers, hourly wages are more than one dollar below the national average; and as far as two dollars below the national average for unionized workers in private firms. For nonunionized workers, hourly wages are about 76 cents lower than the national average.

Table 13

Union Membership, Employment, and Earnings, 1999 and 2009, Michigan and U.S.

		Employment	Union Membership	Percent Members	Total		Union		Nonunion	
					Weekly Earnings	Hourly Wages	Weekly Earnings	Hourly Wages	Weekly Earnings	Hourly Wages
1999	All States									
	Total	118,963,500	16,476,700	13.9	779	19.16	951	23.21	751	18.50
	Private	100,025,400	9,418,600	9.4	764	18.70	922	22.38	748	18.32
	Public	18,938,100	7,058,100	37.3	856	21.48	985	24.23	777	19.79
	Priv Manuf	19,322,900	3,024,000	15.6	895	20.79	910	21.34	892	20.68
	Michigan									
	Total	4,490,000	963,200	21.5	828	20.14	1,002	23.64	780	19.18
	Private	3,923,200	666,500	17.0	817	19.79	981	22.87	785	19.18
Public	566,800	296,800	52.4	897	22.47	1,042	25.18	721	19.15	
Priv Manuf	1,122,700	338,900	30.2	1,094	24.38	1,123	25.42	1,082	23.95	
2009	All States									
	Total	124,489,900	15,327,300	12.3	849	20.79	988	24.32	828	20.26
	Private	103,357,300	7,430,800	7.2	834	20.35	948	23.55	825	20.09
	Public	21,132,600	7,896,500	37.4	921	22.87	1,025	25.01	855	21.49
	Priv Manuf	13,454,000	1,469,500	10.9	1,008	23.25	882	21.21	1,024	23.51
	Michigan									
	Total	3,785,300	710,000	18.8	808	20.18	907	23.11	785	19.50
	Private	3,234,900	395,500	12.2	800	19.79	829	21.46	796	19.56
Public	550,400	314,500	57.1	855	22.33	995	25.01	664	18.71	
Priv Manuf	594,500	106,700	17.9	1,131	25.69	979	24.20	1,164	26.01	

Source: The Bureau of National Affairs.

New Hire Earnings and Average Earnings

Average monthly earnings for all jobs have been falling. Between 2008 and 2009, the region's estimated average monthly earnings fell by \$302, or seven percent. New hire earnings are substantially lower than total monthly earnings - \$1,999 per month for new hires compared to \$3,835 for all workers. New hire earnings also fell between 2008 and 2009 - \$115 per month, or five percent (Table 14).

Table 14
Average and New Hire Earnings in Southeast Michigan, First Quarter 2008 and 2009

	Q1 2008	Q1 2009	Change	Percent Change
Estimated Average Monthly Earnings	\$4,137	\$3,835	-\$302	-7.3%
Estimated Average New Hire Earnings	\$2,114	\$1,999	-\$115	-5.4%
Estimated Gross Monthly Earnings	\$8,456,854,118	\$7,189,485,244	-\$1,267,368,874	-15.0%
Estimated Gross New Hire Earnings	\$492,006,193	\$327,440,953	-\$164,565,240	-33.4%

Source: SEMCOG analysis of Local Employment Dynamics data.

Compared to the rest of the nation, Michigan's average earnings and new hire earnings are both significantly lower than the U.S. average (Table 15). While major metropolitan areas typically have higher earnings than average, Southeast Michigan's earnings are just about the same as U.S. average. New hire earnings in the region are more than 11% lower than the U.S. average.

Table 15
Average and New Hire Earnings in SE Michigan, Michigan, and U.S., First Quarter 2009

	Southeast Michigan	Michigan	U.S.
Estimated Average Monthly Earnings	3,835	\$3,466	\$3,804
Estimated Average New Hire Earnings	1,999	\$1,777	\$2,253

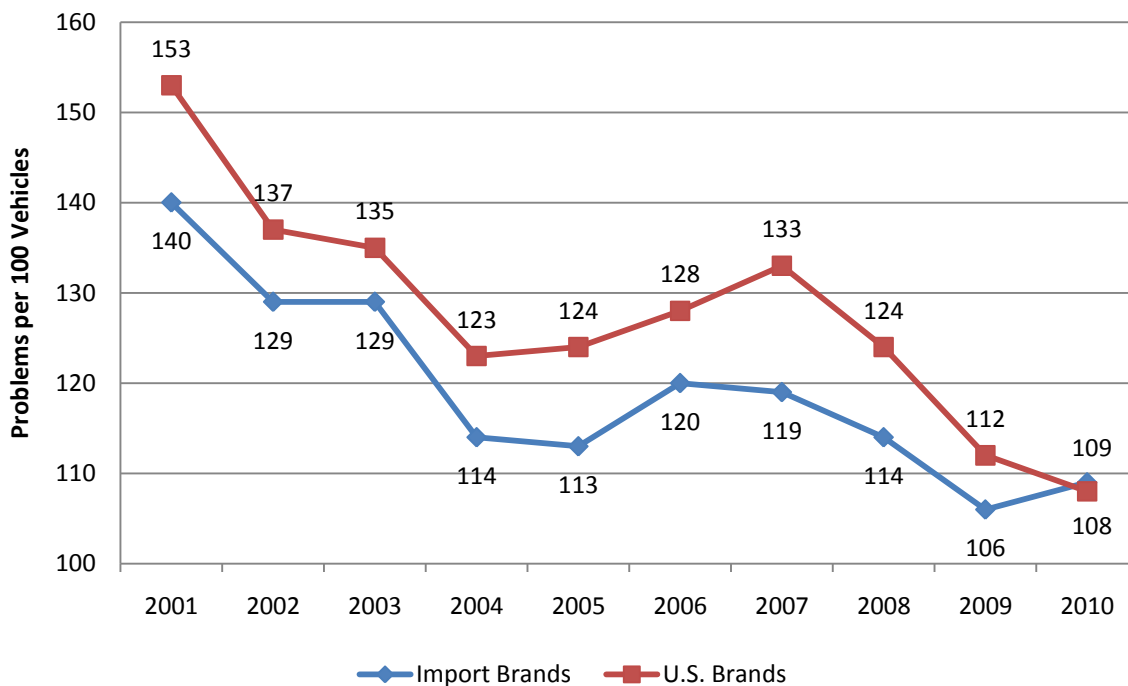
Section 7: Automobile Quality

U.S. Auto Brands Close Quality Gap

Domestic auto manufacturers' quality is on par with import brands, as U.S. automakers had fewer initial quality problems than import brands for the first time this decade. According to the J.D. Power and Associates 2010 Initial Quality Survey, domestic auto brands had 108 problems per 100 vehicles in 2010, slightly better than the 109 problems per 100 vehicles for import brands.

Figure 17

Initial Quality of U.S. and Import Brands by Survey Year, 2001-2010



Source: J.D. Power and Associates, 2010 Initial Quality Survey.

- In 2008, Ford and General Motor's Chevrolet brand had nearly eliminated the quality gap with Toyota.
- By 2009, Ford, General Motors, and Chrysler had improved their initial quality rankings by 10 percent over 2008, surpassing the industry average of eight percent.
- And in 2010, the domestic automakers continued to improve their quality rankings by more than the industry average, registering a 3.5 percent gain in quality while the industry average declined by one percent.

Section 8: Quality of Life

Homeownership

In Detroit region, 71.4% of the households own their homes, placing the region at 4th among the 43 Metropolitan areas with population 1,000,000 or more in the nation (Table 16).

Table 16

Homeownership by Metropolitan Area with 1 Million People or more, 2009

Rank	Areas	Percent owner occupied	Total Population
1	Grand Rapids-Muskegon-Holland, MI CSA	76.3	1,327,366
2	Minneapolis-St. Paul-St. Cloud, MN-WI CSA	72.6	3,604,460
3	Salt Lake City-Ogden-Clearfield, UT CSA	71.9	1,744,437
4	Detroit-Warren-Flint, MI CSA	71.4	5,327,764
5	Knoxville-Sevierville-La Follette, TN CSA	71	1,053,627
6	St. Louis-St. Charles-Farmington, MO-IL CSA	70.8	2,889,653
7	Birmingham-Hoover-Cullman, AL CSA	70.6	1,212,848
8	Pittsburgh-New Castle, PA CSA	70.5	2,445,117
9	Greenville-Spartanburg-Anderson, SC CSA	70	1,264,930
10	Rochester-Batavia-Seneca Falls, NY CSA	70	1,127,483
11	Philadelphia-Camden-Vineland, PA-NJ-DE-MD CSA	69.8	6,533,122
12	Hartford-West Hartford-Willimantic, CT CSA	69.7	1,313,516
13	Orlando-Deltona-Daytona Beach, FL CSA	68.6	2,747,614
14	Atlanta-Sandy Springs-Gainesville, GA-AL CSA	68.5	5,833,229
15	Cincinnati-Middletown-Wilmington, OH-KY-IN CSA	68.4	2,213,886
16	Greensboro--Winston-Salem--High Point, NC CSA	68.4	1,581,122
17	Louisville-Jefferson County--Elizabethtown-Scottsburg, KY-IN CSA	68.3	1,396,018
18	Charlotte-Gastonia-Salisbury, NC-SC CSA	68.2	2,389,763
19	Nashville-Davidson--Murfreesboro--Columbia, TN CSA	68.1	1,666,210
20	Albany-Schenectady-Amsterdam, NY CSA	67.9	1,151,653
21	Kansas City-Overland Park-Kansas City, MO-KS CSA	67.8	2,137,315
22	Indianapolis-Anderson-Columbus, IN CSA	67.4	2,065,892
23	Chicago-Naperville-Michigan City, IL-IN-WI CSA	67.1	9,804,887
24	Cleveland-Akron-Elyria, OH CSA	67	2,891,988
25	Buffalo-Niagara-Cattaraugus, NY CSA	67	1,203,493
26	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV CSA	66.9	8,440,617
27	Raleigh-Durham-Cary, NC CSA	66.8	1,742,816
28	Dayton-Springfield-Greenville, OH CSA	66.7	1,066,261
29	Denver-Aurora-Boulder, CO CSA	65.8	3,112,715
30	Oklahoma City-Shawnee, OK CSA	65.8	1,297,552

31	New Orleans-Metairie-Bogalusa, LA CSA	65.8	1,235,650
32	Boston-Worcester-Manchester, MA-RI-NH CSA	64.6	7,609,358
33	Columbus-Marion-Chillicothe, OH CSA	64.2	2,031,229
34	Seattle-Tacoma-Olympia, WA CSA	63.4	4,158,293
35	Milwaukee-Racine-Waukesha, WI CSA	63.1	1,760,268
36	Dallas-Fort Worth, TX CSA	62.7	6,803,314
37	Sacramento--Arden-Arcade--Yuba City, CA-NV CSA	62.6	2,436,819
38	Houston-Baytown-Huntsville, TX CSA	62.3	5,966,183
39	San Jose-San Francisco-Oakland, CA CSA	57.5	7,427,940
40	Las Vegas-Paradise-Pahrump, NV CSA	57.3	1,944,086
41	Fresno-Madera, CA CSA	55.6	1,063,899
42	New York-Newark-Bridgeport, NY-NJ-CT-PA CSA	55	22,232,494
43	Los Angeles-Long Beach-Riverside, CA CSA	54.7	17,820,893

Healthcare Costs

Health care costs in Michigan are under the national average. According to Michigan Health & Hospital Association, Michigan citizens paid \$1.2 billion less in hospital costs in 2007 compared to the national average. That figure represents a savings of more than \$522 million for Michigan employers. Detroit's cost of living health care index is significantly lower than national average (Table 17).

Table 17
Cost of Living Health Care Index, 2nd Quarter 2010

Place	Health Care Cost Index
Detroit	93.1
Houston	93.9
Orlando	96.2
United States	100.0
Denver	103.0
Dallas	103.1
Cleveland	103.5
Atlanta	104.0
Green Bay	105.1
Minneapolis	105.6
Philadelphia	107.5
Phoenix	108.3
Chicago	109.2
San Francisco	116.3
Seattle	119.5
Lafayette, IN	121.4
Boston	123.5
New York (Manhattan)	132.3

Source: C2ER-Council for Community and Economic Research

Cost of Living

- The Detroit region’s cost of living is 2.6 % above the national average.
- The Detroit region is below the national average in the categories of Grocery, Housing, & Health Care.

Table 18
Cost of Living, U.S.=100, First Quarter 2010

Metro Area	Index	Metro Area	Index	Metro Area	Index	Metro Area	Index
Akron, OH	99.0	Dallas, TX	90.8	Lafayette, LA	101.7	Raleigh, NC	98.4
Albany, GA	91.4	Dayton, OH	90.8	Las Cruces, NM	100.7	Reno-Sparks, NV	101.4
Albuquerque, NM	95.7	Denver, CO	102.0	Lawrence, KS	93.8	Riverside City, CA	110.5
Amarillo, TX	89.2	Des Moines, IA	92.1	Lexington, KY	91.5	Rochester, NY	100.9
Anchorage, AK	128.8	Detroit, MI	102.6	Lima, OH	92.3	San Diego, CA	132.3
Atlanta, GA	96.2	Durham, NC	96.1	Little Rock, AR	96.4	San Francisco, CA	162.1
Austin, TX	91.7	Enid, OK	92.6	Louisville, KY	87.7	San Jose, CA	155.0
Baltimore, MD	119.1	Erie, PA	93.9	Manhattan, NY	218.0	Sarasota, FL	100.7
Baton Rouge, LA	95.8	Fairbanks, AK	139.9	Memphis, TN	90.2	Savannah, GA	94.5
Boston, MA	131.1	Farmington, NM	98.0	Midland, TX	93.6	South Bend, IN	91.6
Bowling Green, KY	90.6	Flagstaff, AZ	116.9	Mobile, AL	92.3	Springfield, IL	87.3
Camden, SC	97.2	Florence, AL	90.9	Montgomery, AL	99.6	St. Cloud, MN	98.9
Carlsbad, NM	96.6	Ft. Lauderdale, FL	114.8	New Haven, CT	120.9	St. Louis, MO	90.1
Champaign-Urbana, IL	98.3	Glenn Falls, NY	110.0	Oakland, CA	137.0	Stillwater, OK	89.7
Charleston, WV	92.5	Grand Junction, CO	95.5	Oklahoma City, OK	91.9	Tampa, FL	92.6
Charlotte, NC	93.5	Grand Rapids, MI	94.7	Omaha, NE	87.9	Thomasville-Lexington, NC	91.1
Chattanooga, TN	89.6	Hartford, CT	119.6	Orlando, FL	97.4	Tucson, AZ	96.8
Chicago, IL	118.3	Honolulu, HI	163.0	Panama City, FL	99.5	Tulsa, OK	88.3
Cincinnati, OH	93.7	Houston, TX	91.4	Peoria, IL	95.0	Tupelo, MS	88.2
Cleveland, OH	100.6	Indianapolis, IN	88.8	Philadelphia, PA	126.5	Twin Falls, ID	91.2
Columbia, SC	101.5	Jacksonville, FL	91.3	Pittsburgh, PA	91.5	West Palm Beach, FL	107.1
Columbus, OH	92.7	Kalamazoo, MI	92.6	Phoenix, AZ	99.5	Wilmington, DE	103.4
Corpus Christi, TX	90.7	Knoxville, TN	89.0	Portland, OR	109.5	Winston-Salem, NC	93.0

Other Quality of Life Facts

- Michigan has 3,121 miles of Great Lakes shoreline, more shoreline than any other state except Alaska.
- Michigan has over 11,000 inland lakes, and 36,000 miles of rivers and streams.
- Michigan ranks 3rd nationally in surface water area.
- Tourism related to Michigan's Great Lakes and other water resources generates billions of dollars each year.
- Michigan ranks 4th in registered boaters and you are never more than 6 miles from a body of water.
- Michigan 2nd in number of theater seats east of the Mississippi river due to its more than 40 theaters.
- Michigan is home to more than 30 museums, including the Detroit Institute of Arts, the sixth largest fine arts museum.
- Plymouth Township and Rochester Hills were both recognized as "best places to live" in 2009.
- Michigan has more public golf course than any other state in the United States.
- Detroit was ranked the #1 sporting city by Sporting News.

Section 9: Additional Data

Table 19
Information Technology Occupations

Information		Detroit Region		Michigan	
		Employees	Establishment	Employees	Establishment
NAICS	Description				
	51 Information	50,812	2,153	78,365	3,907
	5112 Software Publishers	4,036	133	5,026	189
	51121 Software Publishers	4,036	133	5,026	189
	511210 Software Publishers	4,036	133	5,026	189
	516 Internet Publishing and Broadcasting	454	31	508	39
	5161 Internet Publishing and Broadcasting	454	31	508	39
	51611 Internet Publishing and Broadcasting	454	31	508	39
	516110 Internet Publishing and Broadcasting	454	31	508	39
	518 Internet Service Providers, Web Search Portals & Data Processing Services	11,544	510	14,364	771
	5181 Internet Service Providers and Web Search Portals	559	63	769	117
	51811 Internet Service Providers and Web Search Portals	559	63	769	117
	518111 Internet Service Providers	550	56	725	105
	518112 Web Search Portals	40	7	44	12
	5182 Data Processing, Hosting, and Related Services	11,070	447	13,595	654
	51821 Data Processing, Hosting, and Related Services	11,070	447	13,595	654
	518210 Data Processing, Hosting, and Related Services	11,070	447	13,595	654
Professional Services					
	54 Professional, Scientific, and Technical Services	198,740	14,327	268,711	23,005
	5415 Computer Systems Design and Related Services	24,428	1,858	29,749	2,602
	54151 Computer Systems Design and Related Services	24,428	1,858	29,749	2,602
	541511 Custom Computer Programming Services	11,360	837	13,826	1,185
	541512 Computer Systems Design Services	7,148	607	9,227	866
	541513 Computer Facilities Management Services	3,500	105	3,827	149
	541519 Other Computer Related Services	2,521	320	2,869	402
	5416 Management, Scientific, and Technical Consulting Services	20,688	2,200	29,353	3,376
	54169 Other Scientific and Technical Consulting Services	1,053	192	1,373	318
	541690 Other Scientific and Technical Consulting Services	1,053	192	1,373	318
	5417 Scientific Research and Development Services	33,349	257	33,507	367
	54171 Research and Development in the Physical, Engineering, and Life Sciences	33,154	228	33,129	317
	541710 Research and Development in the Physical, Engineering, and Life Sciences	33,154	228	33,129	317
	5419 Other Professional, Scientific, and Technical Services	10,184	1,281	17,118	2,404
	54199 All Other Professional, Scientific, and Technical Services	2,525	434	3,667	713
	541990 All Other Professional, Scientific, and Technical Services	2,525	434	3,667	713

Source: U.S. Bureau of the Census.

Table 20

Advanced Manufacturing Employment, 2008

NAICS	Description	Detroit Region		Michigan	
		Jobs	Businesses	Jobs	Businesses
32411	Petroleum Refineries	385	2	375	5
3251	Basic Chemical Mfg.	1,699	23	4,713	65
3252	Resin, rubber, and artificial fibers mfg	3,376	33	5,485	61
3253	Agricultural chemical mfg.			304	13
32531	Fertilizer manufacturing			241	9
3254	Pharmaceutical and medicine mfg.	1,992	20	7,899	39
3255	Paint, coating, and adhesive mfg.	2,713	42	3,789	84
3256	Soap, cleaning compound, and toilet preparation mfg.	441	26	3,114	46
3259	All other chemical product and preparation mfg.	1,557	51	3,066	87
332992	Small arms ammunition manufacturing	60	2	60	2
332994	Small arms manufacturing	20	4	26	6
3331	Agriculture, construction, and mining machinery mfg.	264	12	2,662	71
3332	Industrial machinery manufacturing	2,021	99	5,839	226
3333	Commercial and service industry machinery mfg.	1,183	32	2,144	71
3336	Engine, turbine, and power transmission equipment mfg.	5,452	38	6,836	60
3339	Other general purpose machinery manufacturing	8,535	227	18,200	423
3341	Computer and peripheral equipment manufacturing	411	16	446	25
3342	Communications equipment manufacturing	570	13	961	23
3343	Audio and video equipment manufacturing			321	8
3344	Semiconductor and other electronic component mfg.	4,219	63	5,692	101
3345	Electronic instrument manufacturing	4,325	114	9,817	178
3346	Manufacturing and reproducing magnetic and optical media	1,840	15	1,750	17
3353	Electrical equipment manufacturing	1,521	72	3,030	106
33599	All other electrical equipment and component mfg.	437	19	989	35
3361	Motor vehicle manufacturing	32,742	26	33,737	35
3362	Motor vehicle body and trailer manufacturing	674	18	2,631	62
3363	Motor vehicle parts manufacturing	64,588	460	107,729	733
33641	Aerospace product and parts manufacturing	1,948	28	4,326	52
3391	Medical equipment and supplies manufacturing	2,222	200	7,722	381
	Total	145,205	1,655	243,904	3024

Source: U.S. Census Bureau, County Business Patterns.

Table 21

Annual population estimates by census metropolitan area, Canada

	2004	2005	2006	2007	2008	2009
Canada	31,940,676	32,245,209	32,576,074	32,931,956	33,327,337	33,739,859
All metropolitan areas	22,815,502	23,085,869	23,380,267	23,702,359	24,065,430	24,442,425
Windsor	333,380	335,393	336,087	334,816	333,416	331,537

Source: www.statcan.gc.ca

Table 22

Post Secondary Educators, Michigan 2009

OCC_CODE	OCC_TITLE	TOT_EMP
25-1011	Business teachers, postsecondary	2,080
25-1021	Computer science teachers, postsecondary	1,010
25-1022	Mathematical science teachers, postsecondary	1,590
25-1031	Architecture teachers, postsecondary	290
25-1032	Engineering teachers, postsecondary	1,600
25-1042	Biological science teachers, postsecondary	870
25-1051	Atmospheric, earth, marine, and space sciences teachers, postsecondary	180
25-1052	Chemistry teachers, postsecondary	510
25-1053	Environmental science teachers, postsecondary	150
25-1054	Physics teachers, postsecondary	340
25-1061	Anthropology and archeology teachers, postsecondary	220
25-1062	Area, ethnic, and cultural studies teachers, postsecondary	250
25-1063	Economics teachers, postsecondary	430
25-1064	Geography teachers, postsecondary	130
25-1065	Political science teachers, postsecondary	430
25-1066	Psychology teachers, postsecondary	720
25-1067	Sociology teachers, postsecondary	660
25-1069	Social sciences teachers, postsecondary, all other	230
25-1071	Health specialties teachers, postsecondary	5,090
25-1072	Nursing instructors and teachers, postsecondary	1,440
25-1081	Education teachers, postsecondary	1,710
25-1082	Library science teachers, postsecondary	140
25-1111	Criminal justice and law enforcement teachers, postsecondary	340
25-1112	Law teachers, postsecondary	440
25-1113	Social work teachers, postsecondary	320
25-1121	Art, drama, and music teachers, postsecondary	2,100
25-1122	Communications teachers, postsecondary	700
25-1123	English language and literature teachers, postsecondary	1,900
25-1124	Foreign language and literature teachers, postsecondary	610
25-1125	History teachers, postsecondary	590
25-1126	Philosophy and religion teachers, postsecondary	480
25-1191	Graduate teaching assistants	8,990
25-1192	Home economics teachers, postsecondary	70
25-1193	Recreation and fitness studies teachers, postsecondary	380
25-1194	Vocational education teachers, postsecondary	1,880
25-1199	Postsecondary teachers, all other	6,690
	TOTAL	45,560

Source: Bureau of Labor Statistics.