

MICHIGAN ECONOMIC UPDATE

Office of Revenue and Tax Analysis
Michigan Department of Treasury

<http://www.michigan.gov/treasury>

December 2016 Summary

U.S. Economy: In 2016Q4, real U.S. GDP growth slowed to 1.9 percent. New durable goods orders rose 1.6 percent from last December. Housing starts were up 5.7 percent from last December and existing home sales were up 0.7 percent. Retail sales increased 4.1 percent from last December. The Institute for Supply Management (ISM) reported the current expansion has now lasted 91 months. The ISM Production Management Index (PMI) rose 5.6 points from last December. At 54.7, the December 2016 PMI signaled an expanding manufacturing sector for the ninth month out of the last ten months. The ISM non-manufacturing index (NMI) signaled service sector expansion for the 83rd straight month. At 65, the 2016Q4 Conference Board CEO Confidence Index was up very sharply (20 points) from 2015Q4. Consumer sentiment was up 5.6 points from December 2015 and was up 4.4 points from a month ago. Following 15 straight months of year-over-year declines, December 2016 industrial production rose 0.5 percent from a year-ago. Similarly, following 21 straight months of year-over-year declines, the capacity utilization rate rose 0.1 of a point from December 2015.

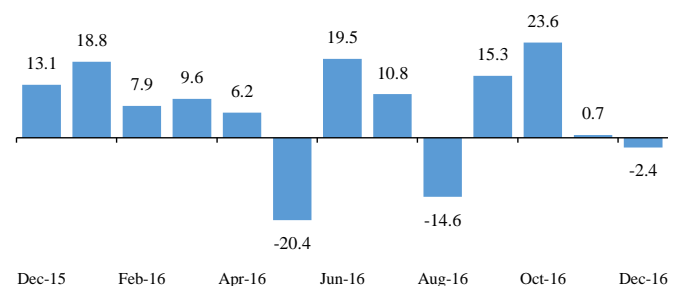
Employment: In December 2016, the Michigan unemployment rate rose 0.1 of a percentage point from October to 5.0 percent. The December 2016 Michigan rate was down 0.1 of a percentage point from December 2015. The U.S. rate was up 0.1 of a percentage point from November at 4.7 percent. Between December 2015 and December 2016, Michigan payroll employment gained a net 75,000 jobs (1.7 percent). Michigan payroll employment in December 2016 fell 2,400 jobs compared to November 2016. U.S. payroll employment was up 2.2 million jobs (1.5 percent) in December 2016 compared to a year ago. National payroll employment was up 156,000 jobs from November to December.

Auto Industry: In December 2016, U.S. light vehicle sales rose 5.1 percent from last December and totaled a very strong annualized 18.3 million units. Between December 2015 and December 2016, the three-month average of Michigan vehicle production rose 1.1 percent while the three-month U.S. average was up 4.4 percent. Between December 2015 and December 2016, Michigan's share of U.S. vehicle production fell 0.8 of a percentage point to 18.4 percent.

Inflation: In December 2016, the overall U.S. consumer price index (CPI) rose 2.1 percent from a year ago. The Detroit CPI was up 2.4 percent from last December. The U.S. producer price index was up 1.6 percent from last year. At \$51.97, the December 2016 price of oil per barrel was up \$14.78 (39.7 percent) from December 2015.

Michigan Metro Areas: Compared to a year ago, December 2016 unemployment rates rose in 16 of Michigan's 17 major labor markets. Household employment fell in 11 of Michigan's 17 major labor market areas.

**Michigan Payroll Employment
Down in December**
(change from previous month, thousands of jobs) ^(a)



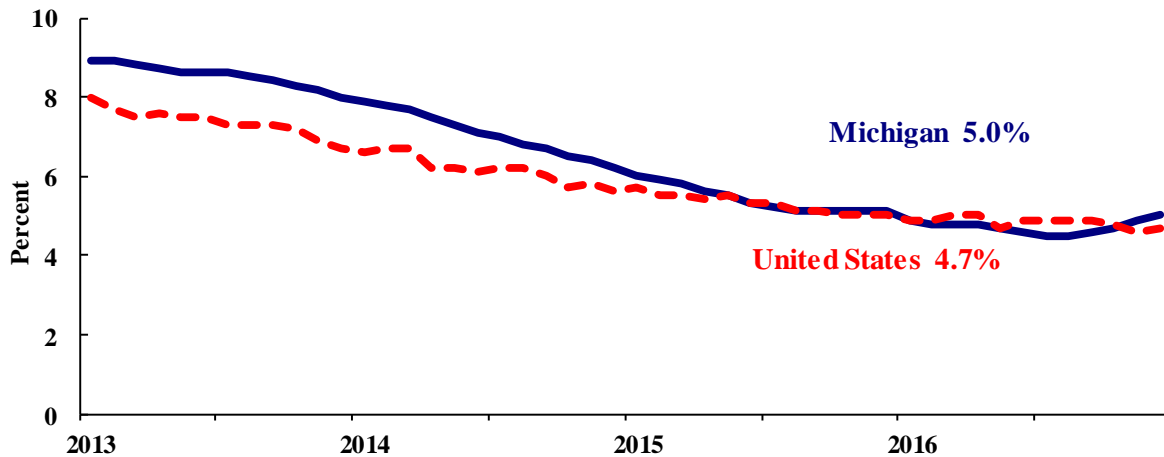
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- In December 2016, the Michigan unemployment rate increased 0.1 of a percentage point to 5.0 percent. The national unemployment rate increased 0.1 of a percentage point from November to December to 4.7 percent.
- In December 2016, Michigan’s unemployment rate was down 0.3 of a percentage point from a year ago. The December U.S. unemployment rate decreased 0.1 of a percentage point from a year ago. Monthly unemployment rates fluctuate in part due to statistical sampling errors and data revisions.

**Michigan and U.S. Monthly Unemployment Rates
January 2013 to December 2016**



Source: Michigan Dept. of Technology, Management & Budget and Bureau of Labor Statistics, U.S. Dept. of Labor

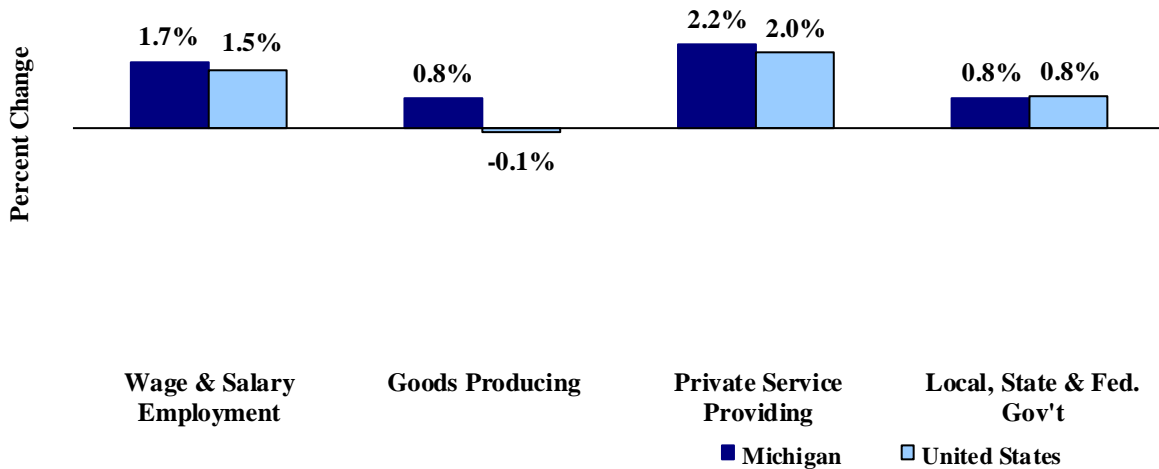
- In December, the total number of people employed in Michigan increased 9,000 to 4,642,000 persons while the labor force rose by 14,000. The statewide total number of unemployed workers rose by 5,000 to 245,000.
- United States employment totaled 152.1 million persons in December 2016. The labor force totaled 159.6 million and there were 7.5 million unemployed in December.

Employment by Place of Residence (in thousands)^(a)

	2015 Average	Oct 2016	Nov 2016	Dec 2016	Change From			
					Prior Month		Last Year	
					Level	%	Level	%
Michigan								
Labor Force	4,751	4,844	4,873	4,887	14	0.3%	116	2.4%
Employed	4,493	4,616	4,633	4,642	9	0.2%	115	2.5%
Unemployed	258	228	240	245	5	2.1%	2	0.8%
Unemployment Rate	5.4%	4.7%	4.9%	5.0%	n.a.	0.1% pts	n.a.	-0.1% pts
United States								
Labor Force	157,130	159,643	159,456	159,640	184	0.1%	1,683	1.1%
Employed	148,834	151,902	152,048	152,111	63	0.0%	2,081	1.4%
Unemployed	8,296	7,740	7,409	7,529	120	1.6%	-398	-5.0%
Unemployment Rate	5.3%	4.8%	4.6%	4.7%	n.a.	0.1% pts	n.a.	-0.3% pts

- From December 2015 to December 2016, Michigan payroll employment increased 75,000 jobs (1.7 percent). State payroll employment fell by 2,400 jobs in December from November. Nationally, December 2016 payroll employment rose 2,157,000 (1.5 percent) from a year ago and was up 156,000 from November.

**Payroll Employment Growth
December 2015 to December 2016**



Source: Bureau of Labor Statistics, Michigan Department of Technology, Management & Budget

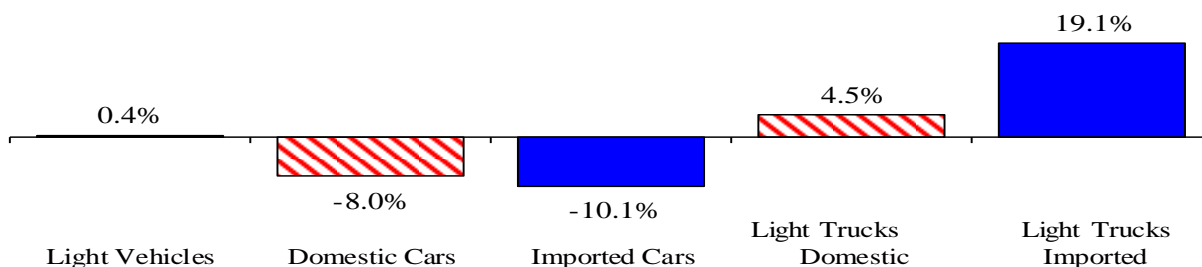
- In the goods-producing sector, Michigan payroll employment increased 0.8 percent in December from a year ago while employment in the private service-providing sector increased 2.2 percent. From a year ago, December national payroll employment declined 0.1 percent in the goods-producing sector and increased 2.0 percent in the private service-providing sector. Government employment was up 0.8 percent from a year ago in Michigan. Nationwide, government employment was also up 0.8 percent.
- Manufacturing weekly hours in Michigan were down 1.5 hours in December compared to last year.

Wage and Salary (Payroll) Employment (in thousands)^(b)

	Michigan				United States			
	2015 Average	Dec 2015	Dec 2016	Percent Change	2015 Average	Dec 2015	Dec 2016	Percent Change
Wage & Salary Employment	4,243.7	4,288.6	4,363.6	1.7%	141,865	143,146	145,303	1.5%
Goods Producing	742.9	753.3	759.2	0.8%	19,584	19,678	19,655	-0.1%
Manufacturing	587.3	593.6	596.1	0.4%	12,318	12,320	12,275	-0.4%
Private Service Providing	2,906.5	2,936.7	3,001.1	2.2%	100,275	101,428	103,425	2.0%
Trade, Trans. & Utilities	770.7	773.7	770.7	-0.4%	26,920	27,114	27,487	1.4%
Services	1,872.0	1,895.4	1,953.1	3.0%	62,480	63,361	64,828	2.3%
Local, State & Fed. Gov't	594.3	598.6	603.3	0.8%	22,007	22,040	22,223	0.8%
Manufacturing Weekly Hours	44.2	43.9	42.4	-1.5 hrs	41.8	41.7	41.8	0.1 hrs

- December 2016 U.S. light vehicle sales were up 3.1 percent from November and were up 5.1 percent from December 2015. At 18.3 million units, December 2016 marked the 34th straight month that the light vehicle annualized sales rate exceeded 16.0 million units and the 18th month out of the most recent 22 months that the sales rate exceeded 17.0 million units. For 2016 as a whole, light vehicle sales rose to a new calendar year record high of 17.5 million units.
- U.S. sales of domestic light vehicles increased 4.5 percent between December 2015 and December 2016. Foreign sales were up 7.2 percent over the same period. As a result, the foreign share of U.S. light vehicle sales rose 0.5 of a percentage point to 22.4 percent in December 2016.
- Auto sales decreased 3.8 percent compared to last December, while light truck sales were up 11.4 percent from December 2015. As a result, December 2016 marked the ninth straight month in which the light truck share of total sales exceeded 60.0 percent. Prior to the last nine months, the light truck sales share exceeded 60.0 percent only once (July 2005). Year-over-year, heavy truck sales declined 7.9 percent in December 2016.

**Calendar Year (CY) 2016 Light Vehicle Sales
Rise Slightly from CY 2015
(percent change)**



Motor Vehicle Sales Statistics

(Millions, unless otherwise specified)

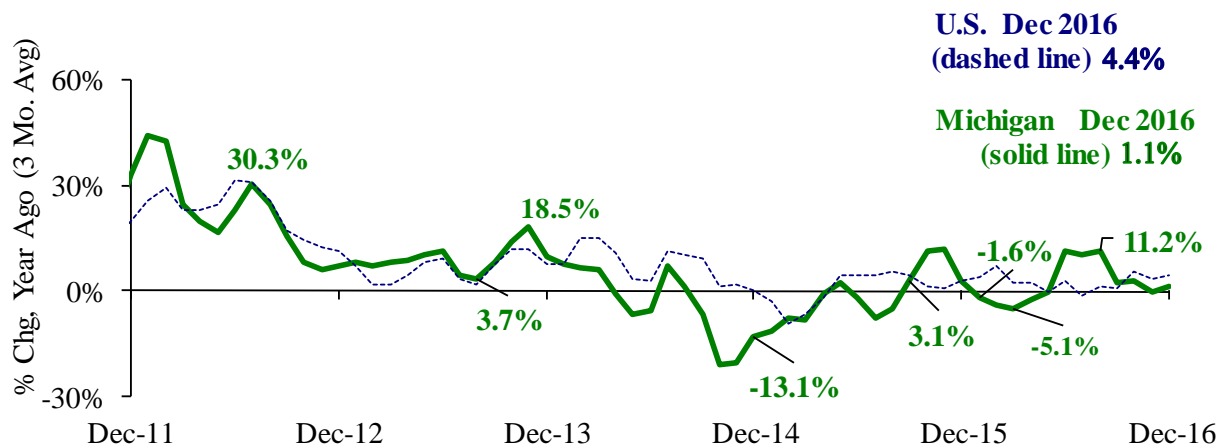
Motor Vehicle Sales ^(c)	2015 Total	Oct 2016	Nov 2016	Dec 2016	3 Month Average	November Change from Year Ago	
						Level	%
Autos	7.5	6.8	6.9	7.0	6.9	(0.3)	-3.8%
Domestics	5.6	5.1	5.2	5.2	5.2	(0.2)	-4.3%
Imports	1.9	1.7	1.7	1.7	1.7	(0.0)	-2.5%
Import Share	25.6%	25.3%	24.8%	24.8%	25.0%	0.3% pts	
Light Trucks	9.9	11.1	10.9	11.3	11.1	1.2	11.4%
Domestics	8.1	9.0	8.7	8.9	8.9	0.8	10.4%
Imports	1.8	2.1	2.2	2.4	2.2	0.3	15.7%
Import Share	18.0%	19.2%	20.4%	21.0%	20.2%	0.8% pts	
Total Light Vehicles	17.4	17.9	17.7	18.3	18.0	0.9	5.1%
Heavy Trucks	0.4	0.4	0.4	0.4	0.4	(0.0)	-7.9%
Total Vehicles	17.8	18.3	18.1	18.7	18.4	0.9	4.8%

Retail Inventories, Motor Vehicle and Parts Dealers^(d)
(billions of dollars)

	2015 Average	Sep-16	Oct-16	Nov-16	3 Month Average	Change from Year Ago	
						Level	%
Inventories	\$190.4	\$213.1	\$211.1	\$215.0	\$213.1	\$19.2	9.8%
Inventory/Sales Ratio	2.10	2.23	2.19	2.23	2.22	0.12	

- At 164,910 units, December 2016 Michigan motor vehicle production was up 3.9 percent from December 2015. National production increased 8.4 percent from last December. Calendar year (CY) 2016 Michigan motor vehicle production rose 2.6 percent to 2.4 million units. Nationally, CY 2016 vehicle production was up 2.5 percent to 12.3 million units.
- In December 2016, Michigan car production was down 6.9 percent from a year ago while State truck production rose 10.5 percent. Nationally, car production decreased 1.2 percent while U.S. truck production was up 13.6 percent. In CY 2016, Michigan car production was up 2.9 percent while State truck production rose 2.4 percent. Nationally, CY 2016 auto production fell 2.7 percent and truck production rose 5.4 percent.
- Michigan’s share of national vehicle production fell 0.8 of a percentage point in December 2016 from the year-ago level to 18.4 percent. For 2016 as a whole, Michigan’s share of national vehicle production was unchanged at 19.4 percent. In CY 2016, the State’s share of national car production rose 1.1 percentage points to 20.3 percent and Michigan’s share of national truck production fell 0.5 of a percentage point to 19.0 percent.

**Michigan Vehicle Production
Trends Slightly Upward**



Motor Vehicle Production Statistics

(Thousands, unless otherwise specified)

	2015					Change from Year Ago for November	
	Monthly Average	Oct 2016	Nov 2016	Dec 2016	3 Month Average	Level	%
U.S. Production ^(e)							
Autos	355.8	355.3	336.4	288.7	326.8	(3.6)	-1.2%
Trucks	644.1	725.0	647.7	609.5	660.7	73.1	13.6%
Total	1,000.0	1,080.3	984.2	898.2	987.5	69.5	8.4%
Michigan Production ^(f)							
Autos	68.3	65.8	72.1	55.4	64.5	(4.1)	-6.9%
Trucks	125.6	132.0	112.6	109.5	118.0	10.4	10.5%
Total	193.9	197.8	184.8	164.9	182.5	6.3	3.9%
Michigan as % of U.S.	19.4%	18.3%	18.8%	18.4%	18.5%	-0.8 pts	

In December 2016, the unemployment rates in Michigan’s 17 labor market areas ranged from a low of 2.6 percent in the Ann Arbor Metropolitan Statistical Area (MSA) to a high of 8.3 percent in the Northeast Lower Michigan region. The November 2016 median unemployment rate was 4.5 percent, which is up 0.5 of a percentage point from last December’s 4.0 percent median rate.

Compared to a year ago, the December 2016 unemployment rate rose in 16 of Michigan’s 17 labor market areas. The median rate increase was 0.3 of a percentage point. The unemployment rate in Detroit-Warren-Dearborn MSA fell 0.3 of a percentage point from last December. The Northeast Lower Michigan region reported the largest rate increase of 1.2 percentage points, followed by the Upper Peninsula that reported a 0.7 of a percentage point increase.

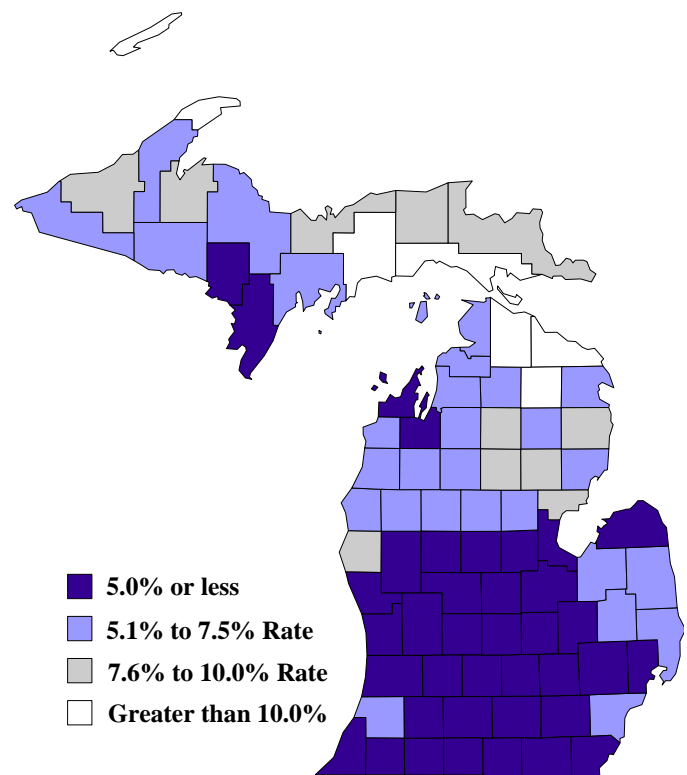
Between December 2015 and December 2016, household employment fell in 11 of Michigan’s 17 labor market areas and increased in six areas. The median employment decline was 0.9 percent. The Jackson MSA reported the largest year-over-year employment decrease at 1.7 percent, followed by the Bay City MSA with a 1.6 percent decrease. The Detroit-Warren-Dearborn MSA reported the largest year-over-year employment increase of 4.0 percent. The labor force rose in eight labor market areas, fell in seven areas and was unchanged in two areas. The Detroit-Warren-Dearborn MSA reported the largest percent increase in labor force at 3.3 percent, followed by the Ann Arbor MSA at 2.7 percent. The Jackson MSA recorded the largest percent decline in labor force at 1.4 percent.

Between December 2015 and December 2016, the unemployment rate rose in 73 of Michigan’s 83 counties, fell in eight counties and was unchanged in two counties. The median November 2016 rate increase was 0.4 of a percentage point. Cheboygan County reported the largest unemployment rate increase at 3.0 percentage points, followed by Mackinac County with a 2.8 percentage points increase. In December 2016, the unemployment rate was below 5.0 percent in 37 of Michigan’s 83 counties compared with 39 counties with rates below 5.0 percent in December 2015.

Local Area Unemployment Rates^(g)

<u>Local Area</u>	<u>Dec 2015 Rate</u>	<u>Nov 2016 Rate</u>	<u>Dec 2016 Rate</u>
Michigan	4.5%	4.5%	4.4%
Ann Arbor	2.5%	3.0%	2.6%
Battle Creek	3.9%	4.1%	4.2%
Bay City	4.4%	4.4%	4.9%
Detroit-Warren-Dearborn	5.4%	5.1%	4.8%
Flint	4.6%	4.7%	5.0%
Grand Rapids-Wyoming	2.8%	3.1%	3.0%
Jackson	4.0%	4.3%	4.3%
Kalamazoo-Portage	3.5%	3.8%	3.9%
Lansing-East Lansing	3.2%	3.4%	3.3%
Midland	3.8%	4.1%	4.1%
Monroe	3.3%	3.7%	3.4%
Muskegon	4.3%	4.6%	4.6%
Niles-Benton Harbor	4.0%	4.4%	4.6%
Saginaw	4.2%	4.4%	4.5%
Upper Peninsula	5.8%	5.7%	6.5%
Northeast Lower Mich	7.1%	6.8%	8.3%
Northwest Lower Mich.	5.0%	4.7%	5.5%

**County Unemployment Rates
December 2016^(g)**

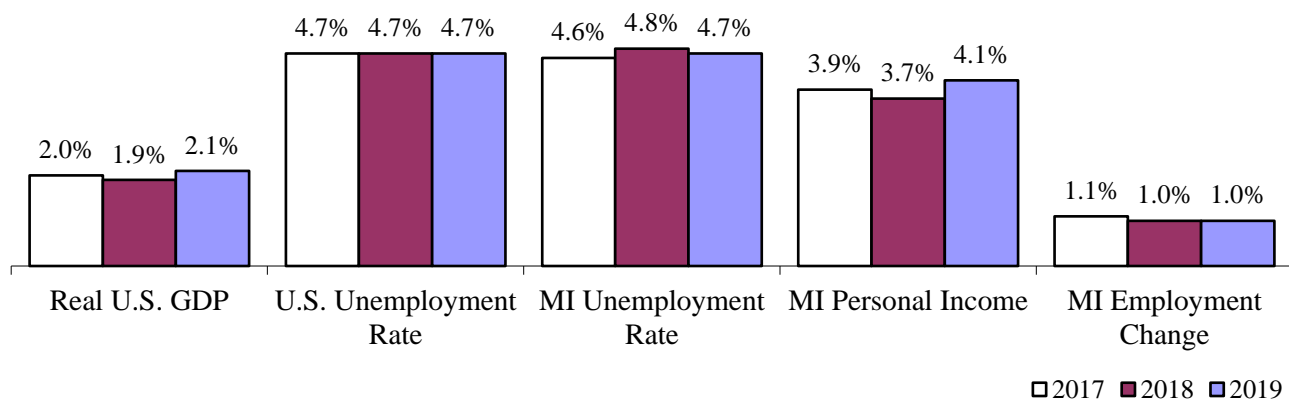


On January 12, 2017, the Administration, House Fiscal Agency and Senate Fiscal Agency met and agreed to a consensus economic forecast for 2017, 2018 and 2019. Below are highlights of that consensus agreement:

- Real GDP is forecast to increase 2.0 percent in 2017. Real GDP is then expected to grow 1.9 percent in 2018 and 2.1 percent in 2019. The January 2017 Conference’s projected growth rate for 2017 is down 0.6 of a percentage point from May 2016 Conference projections and projected growth in 2018 is down 0.3 of a percentage point from May projections. The May 2015 Consensus did not include 2019.
- In 2017, the U.S. unemployment rate is forecast to fall to 4.7 percent and then remain unchanged at 4.7 percent in both 2018 and 2019. Compared with the May 2016 Conference forecast, the January 2017 Consensus forecast of the U.S. unemployment rate is down 0.1 percentage point for 2017 and up 0.1 point for 2018.
- The January 2017 Consensus forecasts light vehicle sales to total 17.2 million units in 2017, 17.0 million units in 2018 and 16.9 million units in 2019. The January 2017 light vehicle forecast for 2017 is 0.5 million units below the May 2016 forecast of 17.7 million units. For 2018, the January 2017 forecast is down 0.7 million units from the May 2016 forecast.
- The January 2017 Consensus projects that Michigan wage and salary employment will rise 1.1 percent in 2017 – 0.1 percentage point faster than the May 2016 forecast of 1.0 percent growth. However, the January 2017 forecast of 1.0 percent growth in 2018 is 0.2 of a percentage point slower than the May 2016 forecast of 1.2 percent growth. The January 2017 Consensus projects a 1.0 percent employment increase in 2019.
- According to the January 2017 Consensus, the Michigan unemployment rate will measure 4.6 percent in 2017, 4.8 percent in 2018 and 4.7 percent in 2019. Compared to the May 2016 Consensus forecast, the January 2017 Consensus Michigan jobless rate forecast is down 0.3 percentage point for 2017 and up 0.1 point for 2018.
- Michigan personal income is projected to rise 3.9 percent in 2017, increase 3.7 percent in 2018 and rise 4.1 percent in 2019. Wages and salaries are expected to increase 3.4 percent in 2016, rise 3.1 percent in 2018 and increase 3.5 percent in 2019.

**U.S. Economic Forecast
Modest Growth**

**Michigan Economic Forecast
Growing Labor Market**



	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>Change from Year Ago</u>
KEY ECONOMIC INDICATORS					
Consumer Sentiment ^(h)	91.2	87.2	93.8	98.2	5.6 points
ISM Manufacturing Index ⁽ⁱ⁾	51.5	51.9	53.2	54.7	6.7 points
ISM Non Manufacturing Index ⁽ⁱ⁾	57.1	54.8	57.2	57.2	1.4 points
	<u>2016.1</u>	<u>2016.2</u>	<u>2016.3</u>	<u>2016.4</u>	
Business Executives' Confidence ^(j)	47.0	52.0	50.0	65.0	20.0 points
INFLATION ^(k)					
1982-84 = 100 (CPI)	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>Change from Year Ago</u>
Nov 2009 = 100 (PPI)					
U.S. Consumer Price Index	241.4	241.7	241.4	241.4	2.1%
Detroit CPI	NA	224.3	NA	223.0	2.4%
U.S. Producer Price Index	110.7	110.7	110.8	110.9	1.6%
INTEREST RATES					
90 Day T-Bill ^(l)	0.29%	0.33%	0.45%	0.51%	0.28% points
10 Year Treasury Securities ^(l)	1.63%	1.76%	2.14%	2.49%	0.25% points
INDUSTRIAL PRODUCTION ^(l)	104.2	104.4	103.7	104.6	0.5%
CAPACITY UTILIZATION ^(l)	75.3%	75.4%	74.9%	75.5%	0.1% points
RETAIL SALES ^(d)	\$462.3	\$465.3	\$466.2	\$469.1	4.1%
HOUSING STARTS and SALES					
(Millions Annual Rate)	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>% Change From Year Ago</u>
Housing Starts ^(d)	1.052	1.320	1.102	1.226	5.7%
Existing Home Sales ^(m)	5.490	5.570	5.650	5.490	0.7%
DURABLE GOODS ORDERS ^(p)	\$228.2	\$239.5	\$228.0	\$227.0	1.6%
PERSONAL INCOME ^(c)					
(Billions of Dollars)	<u>2015.4</u>	<u>2016.1</u>	<u>2016.2</u>	<u>2016.3</u>	<u>% Change From Year Ago</u>
Michigan	\$433.1	\$433.1	\$438.2	\$443.4	3.9%
U.S.	\$15,694.3	\$15,742.4	\$15,931.6	\$16,109.2	3.5%
GROSS DOMESTIC PRODUCT					
(Billions of Chained 2009 Dollars) ^(c)	<u>2016.1</u>	<u>2016.2</u>	<u>2016.3</u>	<u>2016.4</u>	<u>Annualized % Chg From Last Qtr</u>
	\$16,525.0	\$16,583.1	\$16,727.0	\$16,804.8	1.9%

- (a) Seasonally adjusted. Sources: Bureau of Labor Statistics, U.S. Department of Labor and Michigan Department of Technology, Management and Budget.
- (b) Bureau of Labor Statistics, U.S. Department of Labor (BLS 790).
- (c) Seasonally adjusted annual rates. Source: Bureau of Economic Analysis, U.S. Department of Commerce.
- (d) Bureau of the Census, U.S. Department of Commerce
- (e) Automotive News.
- (f) Michigan Department of Treasury.
- (g) Michigan Department of Technology, Management and Budget.
- (h) University of Michigan Survey of Consumers.
- (i) Institute for Supply Management (ISM), formerly NAPM.
- (j) The Conference Board.
- (k) Bureau of Labor Statistics, U.S. Department of Labor.
- (l) Seasonally adjusted rates (except interest rates). Federal Reserve System Board of Governors. 2007 equals 100. Treasury bill rate (secondary market).
- (m) National Association of Realtors.