



MICHIGAN ECONOMIC UPDATE

Office of Revenue and Tax Analysis
Michigan Department of Treasury

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

December 2015 Summary

U.S. Economy: Real gross domestic product slowed substantially in the fourth quarter of 2015 to 0.7 percent annualized growth – down from 2.0 percent growth in the third quarter and 3.9 percent growth in the second quarter. The Institute for Supply Management (ISM) reported the current expansion has now lasted 79 months; however, the ISM Production Management Index (PMI) dropped 7.1 points from last December. Further, at 48.0, the December 2015 PMI signaled a contracting manufacturing sector for the third straight month. The ISM non-manufacturing index (NMI) signaled service sector expansion for the 71st straight month, but was down 1.2 points from last December. Declining 1.8 percent from last December, industrial production experienced its largest year-over-year percent decline since December 2009. Similarly, the capacity utilization rate fell 2.5 points from December 2014 -- its largest year-over-year point drop since November 2009. New durable goods orders fell 0.6 percent from last December. Consumer sentiment fell 1.0 percentage point from December 2014. Retail sales rose 2.2 percent from last December. Housing starts were up 6.4 percent from last December and existing home sales increased 7.7 percent.

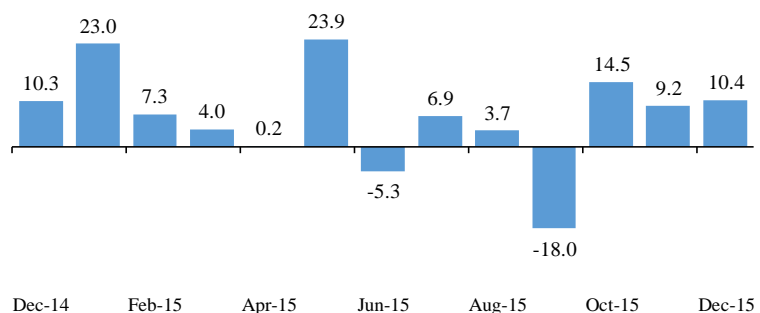
Employment: In December 2015, the Michigan unemployment rate remained unchanged from November at 5.1 percent but was down 1.3 percentage points from December 2014. The State rate has remained within 0.1 percentage point of the national rate in nine of the past ten months. The U.S. rate was 5.0 percent in December which was unchanged from last month and 0.6 of a point below a year ago. Between December 2014 and December 2015, Michigan payroll employment gained a net 79,800 jobs (1.9 percent). Michigan payroll employment in December 2015 was up 10,400 jobs compared to November 2015. Over the last year, U.S. payroll employment increased 2.7 million jobs (1.9 percent).

Auto Industry: In December 2015, U.S. light vehicle sales rose 2.5 percent from last December to 17.2 million units. Between December 2014 and December 2015, the three-month average of Michigan vehicle production rose 2.9 percent while the three-month national average was up 3.1 percent. Between 2014Q4 and 2015Q4, Michigan's share of national vehicle production was essentially unchanged at 19.1 percent.

Inflation: In December 2015, the overall U.S. consumer price index (CPI) rose 0.7 percent from a year ago while the Detroit CPI declined 0.1 percent. The U.S. producer price index fell 1.0 percent from last year. The price of oil per barrel fell \$22.08 from last December to \$37.21 – its lowest price since April 2004.

Michigan Metro Areas: Compared to a year ago, December 2015 unemployment rates fell in all of Michigan's 17 major labor markets and in 82 of the State's 83 counties. Household employment rose in all 17 Michigan major labor market areas.

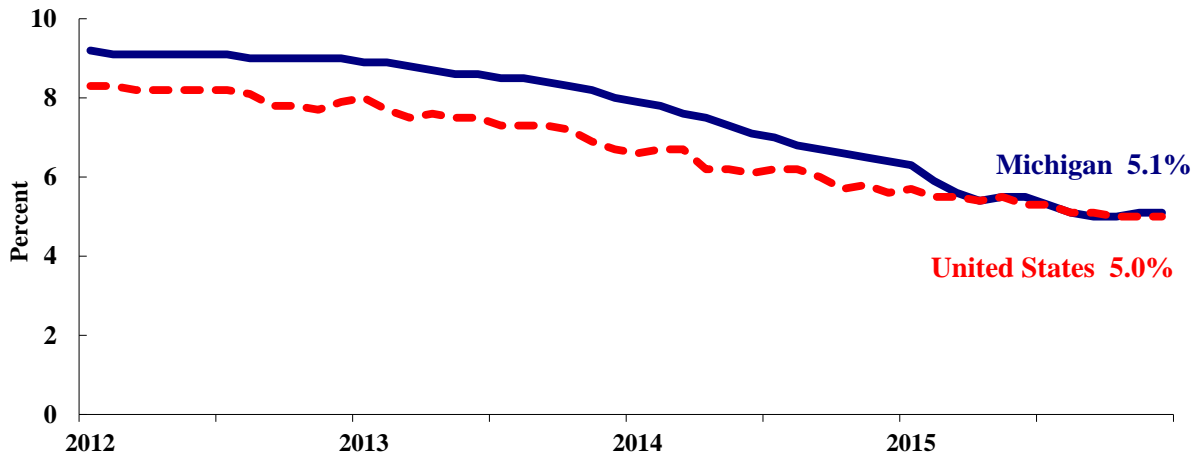
**Michigan Payroll Employment
Posts Recent Solid Gains
(Seasonally Adjusted) ^(a)**



Labor Market Statistics

- In December 2015, the Michigan unemployment rate remained unchanged from last month at 5.1 percent. The national unemployment rate remained unchanged at 5.0 percent in December from November. As a result, December 2015 marked the ninth time out of the last 10 months that the U.S. and Michigan unemployment rates were within 0.1 percentage point of one another.
- The December 2015 Michigan unemployment rate was down 1.3 percentage points from a year ago. The December U.S. unemployment rate decreased 0.6 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
December 2012 to December 2015**



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 rose 20,000 to 4,541,000 persons while the labor force rose 22,000. The statewide total number of unemployed rose 2,000 to 246,000.
- United States employment totaled 149.9 million persons in December. The labor force totaled 157.8 million and there were 7.9 million unemployed in December 2015.

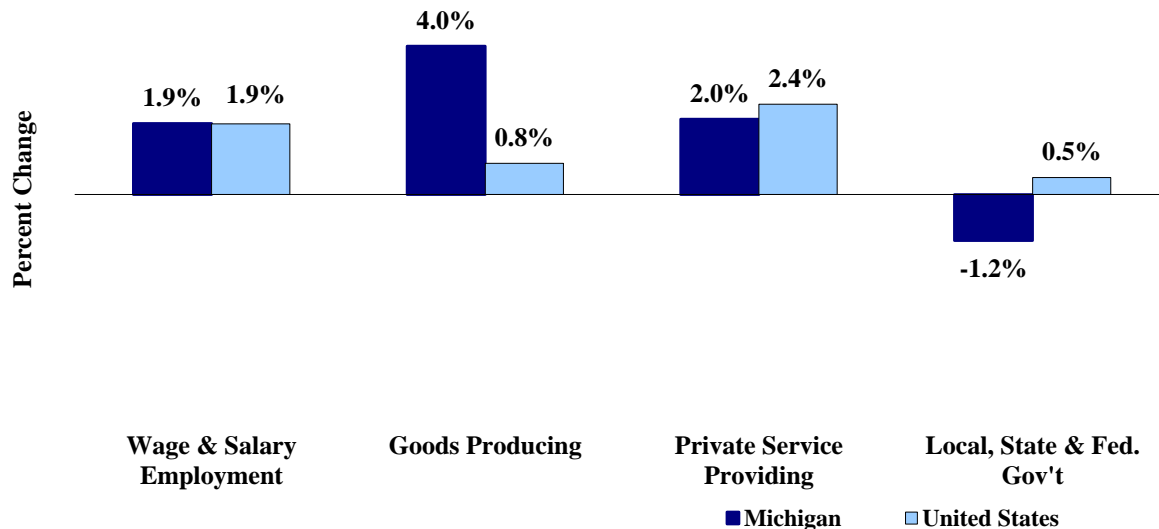
Employment by Place of Residence (in thousands)^(a)

| | 2014 Average | Oct 2015 | Nov 2015 | Dec 2015 | Change From | | | | |
|----------------------|-----------------|-------------|-------------|-------------|-------------|----------|-----------|-----------|--|
| | | | | | Prior Month | | Last Year | | |
| | | | | | Level | % | Level | % | |
| Michigan | | | | | | | | | |
| Labor Force | 4,750 | 4,743 | 4,765 | 4,787 | 22 | 0.5% | 39 | 0.8% | |
| Employed | 4,402 | 4,505 | 4,521 | 4,541 | 20 | 0.4% | 99 | 2.2% | |
| Unemployed | 348 | 238 | 244 | 246 | 2 | 0.9% | -60 | -19.5% | |
| Unemployment Rate | 7.3% | 5.0% | 5.1% | 5.1% | n.a. | 0.0% pts | n.a. | -1.3% pts | |
| United States | | | | | | | | | |
| Labor Force | 155,922 | 157,096 | 157,367 | 157,833 | 466 | 0.3% | 1,691 | 1.1% | |
| Employed | 146,305 | 149,197 | 149,444 | 149,929 | 485 | 0.3% | 2,490 | 1.7% | |
| Unemployed | 9,617 | 7,899 | 7,924 | 7,904 | -20 | -0.3% | -800 | -9.2% | |
| Unemployment Rate | 6.2% | 5.0% | 5.0% | 5.0% | n.a. | 0.0% pts | n.a. | -0.6% pts | |

Employment by Place of Work (Payroll)

- From December 2014 to December 2015, Michigan payroll employment increased 79,800 (1.9 percent). State payroll employment rose by 10,400 jobs in December from November. Nationally, December 2015 payroll employment rose 2,650,000 (1.9 percent) from a year ago and was up 292,000 from last month.

Payroll Employment Growth December 2014 to December 2015



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

- In the goods-producing sector, Michigan payroll employment increased 4.0 percent in December from a year ago while employment in the private service-providing sector increased 2.0 percent. From a year ago, December national payroll employment rose 0.8 percent in the goods-producing sector and increased 2.4 percent in the private service-providing sector. Government employment was down 1.2 percent from a year ago in Michigan. Nationwide, government employment was up 0.5 percent.
- Manufacturing weekly hours in Michigan were down 0.5 hour in December compared to last year.

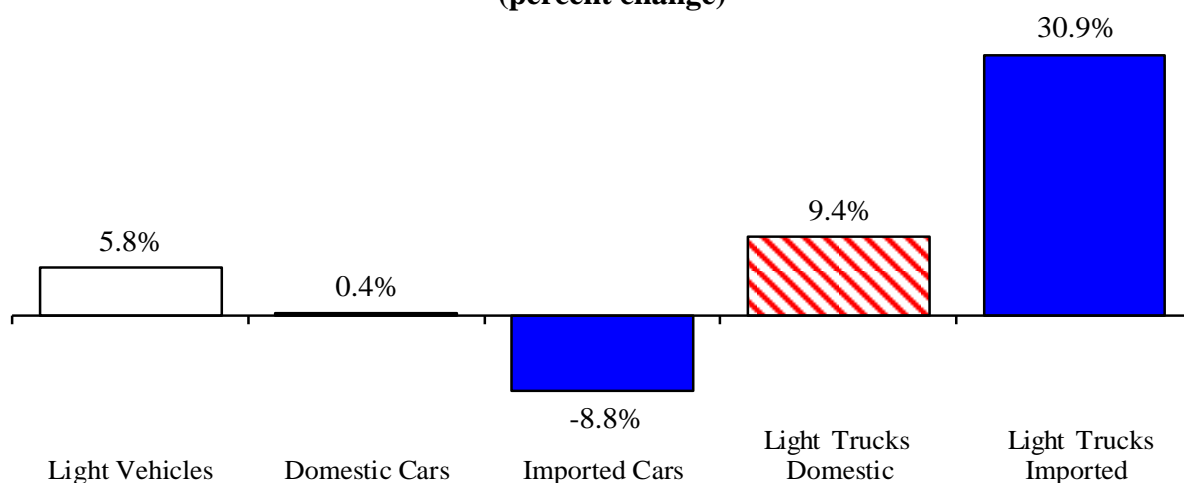
Wage and Salary (Payroll) Employment (in thousands)^(b)

| | Michigan | | | | United States | | | |
|----------------------------|-----------------|-------------|-------------|-------------------|-----------------|-------------|-------------|-------------------|
| | 2014 Average | Dec 2014 | Dec 2015 | Percent Change | 2014 Average | Dec 2014 | Dec 2015 | Percent Change |
| Wage & Salary Employment | 4,179.7 | 4,217.6 | 4,297.4 | 1.9% | 139,042 | 140,592 | 143,242 | 1.9% |
| Goods Producing | 725.6 | 738.1 | 767.3 | 4.0% | 19,223 | 19,489 | 19,651 | 0.8% |
| Manufacturing | 575.9 | 584.9 | 603.5 | 3.2% | 12,188 | 12,301 | 12,331 | 0.2% |
| Private Service Providing | 2,858.8 | 2,884.3 | 2,942.2 | 2.0% | 97,957 | 99,201 | 101,590 | 2.4% |
| Trade, Trans. & Utilities | 757.3 | 761.1 | 769.5 | 1.1% | 26,384 | 26,669 | 27,114 | 1.7% |
| Services | 1,839.7 | 1,860.3 | 1,905.1 | 2.4% | 60,854 | 61,716 | 63,463 | 2.8% |
| Local, State & Fed. Gov't | 595.4 | 595.2 | 587.9 | -1.2% | 21,863 | 21,902 | 22,001 | 0.5% |
| Manufacturing Weekly Hours | 43.9 | 44.3 | 43.8 | -0.5 hrs | 42.1 | 41.7 | 41.7 | 0.0 hrs |

Motor Vehicle Industry Sales

- December 2015 U.S. light vehicle sales were down 4.7 percent from November but were up 2.5 percent from December 2014. At 17.2 million units, December 2015 marks the 22st straight month that the light vehicle annualized sales rate has exceeded 16.0 million units and the sixth straight month with a sales rate over 17.0 million units. In 2015, non-adjusted light vehicle sales rose 5.8 percent to a record high 17.4 million units. In 2015, total car sales fell 2.1 percent while total light truck sales rose 12.7 percent. Total domestic sales rose 5.5 percent and foreign sales increased 6.8 percent.
- U.S. sales of domestic light vehicles increased 0.5 percent between December 2014 and December 2015, while foreign sales were up 10.1 percent over the same period. As a result, the foreign share of U.S. light vehicle sales rose 1.5 percentage points to 21.7 percent between December 2014 and December 2015.
- Auto sales decreased 9.0 percent compared to last December, while light truck sales were up 12.5 percent from December 2014. Heavy truck sales fell 0.9 percent to an annual rate of 416,000 units.

Calendar Year 2015 Light Truck Sales Up Sharply From Calendar Year 2014 (percent change)



Motor Vehicle Sales Statistics

(Millions, unless otherwise specified)

| Motor Vehicle Sales ^(c) | 2015 Total | Oct 2015 | Nov 2015 | Dec 2015 | 3 Month Average | Change from Year Ago | |
|------------------------------------|---------------|-------------|-------------|-------------|--------------------|-------------------------|--------|
| | | | | | | Level | % |
| Autos | 7.5 | 7.8 | 7.5 | 7.1 | 7.5 | (0.7) | -9.0% |
| Domestics | 5.6 | 5.9 | 5.6 | 5.4 | 5.6 | (0.3) | -5.8% |
| Imports | 1.9 | 1.9 | 1.9 | 1.7 | 1.8 | (0.4) | -17.9% |
| Import Share | 25.4% | 24.5% | 25.5% | 23.9% | 24.7% | -2.6% pts | |
| Light Trucks | 9.9 | 10.4 | 10.5 | 10.1 | 10.3 | 1.1 | 12.5% |
| Domestics | 8.1 | 8.3 | 8.4 | 8.0 | 8.3 | 0.4 | 5.3% |
| Imports | 1.8 | 2.1 | 2.1 | 2.0 | 2.1 | 0.7 | 54.8% |
| Import Share | 18.1% | 19.9% | 20.0% | 20.1% | 20.0% | 5.5% pts | |
| Total Light Vehicles | 17.4 | 18.1 | 18.1 | 17.2 | 17.8 | 0.4 | 2.5% |
| Heavy Trucks | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | (0.0) | -0.9% |
| Total Vehicles | 17.8 | 18.6 | 18.6 | 17.6 | 18.2 | 0.4 | 2.4% |

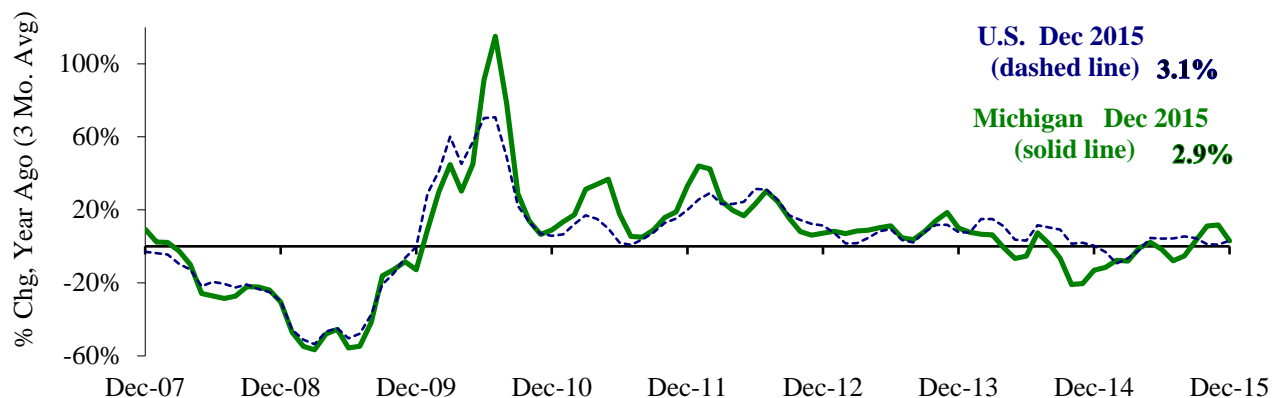
Retail Inventories, Motor Vehicle and Parts Dealers^(d) (billions of dollars)

| | 2014 | | | | 3 Month Average | Change from Year Ago | |
|-----------------------|---------|---------|---------|---------|--------------------|-------------------------|------|
| | Average | Sep-15 | Oct-15 | Nov-15 | | Level | % |
| Inventories | \$185.7 | \$182.5 | \$197.1 | \$196.2 | \$191.9 | \$13.7 | 7.5% |
| Inventory/Sales Ratio | 2.09 | 2.03 | 2.09 | 2.08 | 2.07 | 0.05 | |

Motor Vehicle Industry Production

- At 158,649 units, December 2015 Michigan motor vehicle production was down 8.8 percent from December 2014. National production increased 11.4 percent from last December. The three-month average of vehicle production (October 2015-December 2015) was up 2.9 percent in Michigan and up 3.1 percent nationally, compared to a year ago. In calendar year (CY) 2015, Michigan vehicle production totaled 2,327,142 units – down 1.3 percent from CY 2014. Nationally, vehicle production was up 1.2 percent.
- In December 2015, Michigan car production was down 15.8 percent from a year ago while State truck production fell 4.0 percent. Nationally, car production increased 1.2 percent while U.S. truck production increased 17.8 percent.
- Michigan's share of national vehicle production fell 4.2 percentage points to 19.1 percent in December 2015 from the year-ago level. Michigan's share of U.S. car production was down 4.1 percentage points to 20.4 percent. Michigan's share of U.S. truck production declined 4.2 percentage points to 18.5 percent.

Michigan and National Motor Vehicle Production Up Modestly in December ^(e,f)



Motor Vehicle Production Statistics

(Thousands, unless otherwise specified)

| | 2015 | | | | | Change from Year Ago for the Month | |
|---|-----------------|----------|----------|----------|-----------------|------------------------------------|--------|
| | Monthly Average | Oct 2015 | Nov 2015 | Dec 2015 | 3 Month Average | Level | % |
| U.S. Production ^(e) | | | | | | | |
| Autos | 355.8 | 363.5 | 315.1 | 292.3 | 323.6 | 3.6 | 1.2% |
| Trucks | 644.1 | 709.3 | 620.1 | 536.4 | 621.9 | 80.9 | 17.8% |
| Total | 1,000.0 | 1,072.8 | 935.2 | 828.7 | 945.6 | 84.5 | 11.4% |
| Michigan Production ^(f) | | | | | | | |
| Autos | 68.3 | 60.6 | 59.5 | 59.5 | 59.9 | (11.2) | -15.8% |
| Trucks | 125.6 | 140.0 | 122.8 | 99.1 | 120.6 | (4.1) | -4.0% |
| Total | 193.9 | 200.6 | 182.3 | 158.6 | 180.5 | (15.2) | -8.8% |
| Michigan as % of U.S. | 19.4% | 18.7% | 19.5% | 19.1% | 19.1% | -4.2% pts | |

Local Area Unemployment Rates Decline in All of Michigan's 17 Local Areas (Not Seasonally Adjusted)

December 2015 local area unemployment rates ranged from a low of 2.6 percent in the Ann Arbor Metropolitan Statistical Area (MSA) to a high of 7.1 percent in the Northeast Lower Michigan region. The December 2015 median unemployment rate was 4.0 percent, which is down 1.2 percentage points from last December's 5.2 percent median rate.

Compared to a year ago, the December unemployment rate fell in all of Michigan's 17 labor market areas. The Muskegon MSA reported the largest rate decrease of 1.5 percentage points, followed by the Northeast Lower Michigan region and Northwest Lower Michigan region with reported rate declines of 1.4 percentage points. Ann Arbor MSA recorded the smallest rate decline of 0.7 percentage point.

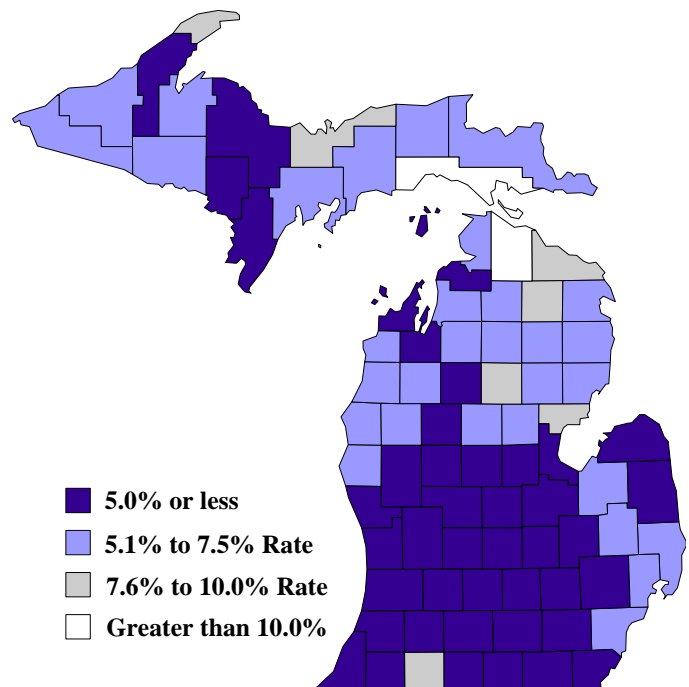
Between December 2014 and December 2015, household employment rose in all of Michigan's 17 labor market areas. The median employment increase was 2.5 percent. The Grand Rapids-Wyoming MSA reported the largest year-over-year employment increase at 4.6 percent, followed by the Kalamazoo-Portage MSA with a 4.0 percent increase. The Flint MSA and the Upper Peninsula each reported the smallest year-over-year employment increase at 1.1 percent. The labor force rose in 15 labor market areas, fell in one area and was unchanged in one area. The Grand Rapids-Wyoming MSA reported the largest percent increase in labor force at 3.7 percent, followed by the Kalamazoo-Portage MSA with a 2.8 percent rise. The Flint MSA recorded a slight 0.1 percent decline, while the Upper Peninsula labor force was unchanged.

Between December 2014 and December 2015, the unemployment rate fell in 82 of Michigan's 83 counties. The median December 2015 rate decline was 1.3 percentage points. Lake County and Oscoda County each reported the largest unemployment rate decline at 2.6 percentage points. Schoolcraft County reported a slight 0.1 percentage point increase in its unemployment rate from last December. In December 2015, the unemployment rate was below 7.0 percent in 69 of Michigan's 83 counties. In December 2014, 51 Michigan counties had an unemployment rate below 7.0 percent.

Local Area Unemployment Rates^(g)

| <u>Local Area</u> | <u>Dec 2014 Rate</u> | <u>Nov 2015 Rate</u> | <u>Dec 2015 Rate</u> |
|-------------------------|----------------------|----------------------|----------------------|
| Michigan | 5.6% | 4.5% | 4.5% |
| Ann Arbor | 3.3% | 2.9% | 2.6% |
| Battle Creek | 4.8% | 4.1% | 3.9% |
| Bay City | 5.6% | 4.3% | 4.3% |
| Detroit-Warren-Dearborn | 6.5% | 5.2% | 5.4% |
| Flint | 5.8% | 4.8% | 4.6% |
| Grand Rapids-Wyoming | 3.7% | 3.0% | 2.8% |
| Jackson | 5.1% | 4.2% | 4.0% |
| Kalamazoo-Portage | 4.7% | 3.7% | 3.5% |
| Lansing-East Lansing | 4.2% | 3.4% | 3.2% |
| Midland | 4.6% | 3.9% | 3.8% |
| Monroe | 4.3% | 3.6% | 3.3% |
| Muskegon | 5.7% | 4.6% | 4.2% |
| Niles-Benton Harbor | 5.2% | 4.2% | 4.0% |
| Saginaw | 5.5% | 4.4% | 4.2% |
| Upper Peninsula | 6.8% | 5.5% | 5.7% |
| Northeast Lower Mich | 8.5% | 6.6% | 7.1% |
| Northwest Lower Mich. | 6.4% | 4.7% | 5.0% |

County Unemployment Rates December 2015^(g)



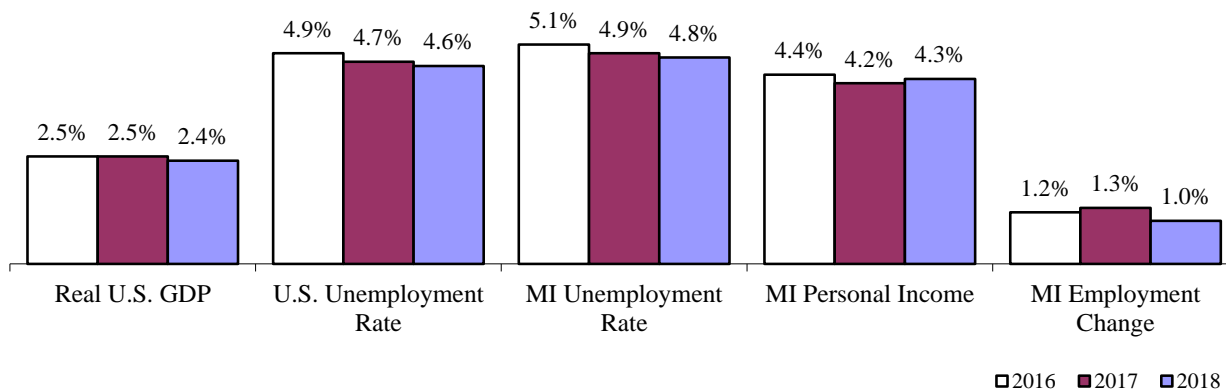
Consensus Economic Forecast Continued Recovery

On January 14, 2016, the Administration, House Fiscal Agency and Senate Fiscal Agency met and agreed to a consensus economic forecast for 2016, 2017 and 2018. Below are highlights of that consensus agreement:

- Real GDP is forecast to increase 2.5 percent in 2016. Real GDP is then expected to grow 2.5 percent in 2017 and 2.4 percent in 2018. The January 2016 Conference’s projected growth rate for 2016 is down 0.3 percentage point from May 2015 Conference projections and projected growth in 2017 is down 0.4 percentage point from May projections. The May 2015 Consensus did not include 2018.
- The U.S. unemployment rate is forecast to fall over the next three years from the estimated 5.3 percent rate in 2015. The rate is forecast to fall to 4.9 percent for 2016 and then decline to 4.7 percent in 2017 and 4.6 percent in 2018. Compared with the May 2015 Conference forecast, the January 2016 Consensus forecast of the U.S. unemployment rate is down 0.3 percentage point for 2016 and down 0.4 point for 2017.
- The January 2016 Consensus forecasts light vehicle sales to total a record 18.0 million units in both 2016 and 2017. The 18.0 million unit projection is up 0.9 million units from the May 2015 forecast of 17.1 million units for both 2016 and 2017. The January 2016 Consensus projects light vehicle sales to fall slightly in 2018 but remain at a very strong level of 17.9 million units.
- The January 2016 Consensus projects that Michigan wage and salary employment will rise 1.2 percent in 2016 – matching the May 2015 forecast. The January Consensus forecasts a 1.3 percent employment increase in 2017 which is 0.3 percentage point faster than the May forecast. The January 2016 Consensus projects a 1.0 percent employment increase in 2018.
- According to the January 2016 Consensus, the Michigan unemployment rate will fall to 5.1 percent in 2016, 4.9 percent in 2017 and 4.8 percent in 2018. Compared to the May 2015 Consensus forecast, the January Consensus Michigan jobless rate forecast is down 0.4 percentage point for 2016 and down 0.5 point for 2017.
- Michigan personal income is projected to rise 4.4 percent in 2016, increase 4.2 percent in 2017 and rise 4.3 percent in 2018. Wages and salaries are expected to increase 4.6 percent in 2016, rise 3.9 percent in 2017 and increase 3.8 percent in 2018.

U.S. Economic Forecast Modest Growth

Michigan Economic Forecast Growing Labor Market



U.S. Economic Conditions

| | <u>Sep-15</u> | <u>Oct-15</u> | <u>Nov-15</u> | <u>Dec-15</u> | <u>Change from Year Ago</u> |
|---|---------------|---------------|---------------|---------------|---|
| KEY ECONOMIC INDICATORS | | | | | |
| Consumer Sentiment ^(h) | 87.2 | 90.0 | 91.3 | 92.6 | -1.0 point |
| ISM Manufacturing Index ⁽ⁱ⁾ | 50.0 | 49.4 | 48.4 | 48.0 | -7.1 points |
| ISM Non Manufacturing Index ⁽ⁱ⁾ | 56.7 | 58.3 | 56.6 | 55.8 | -0.7 points |
| | <u>2015.1</u> | <u>2015.2</u> | <u>2015.3</u> | <u>2015.4</u> | |
| Business Executives' Confidence ^(j) | 57.0 | 58.0 | 48.0 | 45.0 | -15.0 points |
| INFLATION ^(k) | | | | | |
| 1982-84 = 100 (CPI) | <u>Sep-15</u> | <u>Oct-15</u> | <u>Nov-15</u> | <u>Dec-15</u> | <u>Change from Year Ago</u> |
| Nov 2009 = 100 (PPI) | | | | | |
| U.S. Consumer Price Index | 237.9 | 237.8 | 237.3 | 236.5 | 0.7% |
| Detroit CPI | NA | 220.5 | NA | 217.8 | -0.1% |
| U.S. Producer Price Index | 109.9 | 109.6 | 109.6 | 109.2 | -1.0% |
| INTEREST RATES | | | | | |
| 90 Day T-Bill ^(l) | 0.02% | 0.02% | 0.12% | 0.23% | 0.20% points |
| Aaa Corporate Bonds ^(l) | 4.07% | 3.95% | 4.06% | 3.97% | 0.18% points |
| INDUSTRIAL PRODUCTION ^(l) | | | | | |
| | 107.6 | 107.4 | 106.4 | 106.0 | -1.8% |
| CAPACITY UTILIZATION ^(l) | | | | | |
| | 77.9% | 77.7% | 76.9% | 76.5% | -2.5% points |
| RETAIL SALES ^(d) | | | | | |
| | \$446.9 | \$446.9 | \$448.6 | \$448.1 | 2.2% |
| HOUSING STARTS and SALES | | | | | |
| (Millions Annual Rate) | <u>Sep-15</u> | <u>Oct-15</u> | <u>Nov-15</u> | <u>Dec-15</u> | <u>% Change From Year Ago</u> |
| Housing Starts ^(d) | 1.207 | 1.071 | 1.179 | 1.149 | 6.4% |
| Existing Home Sales ^(m) | 5.550 | 5.320 | 4.760 | 5.460 | 7.7% |
| DURABLE GOODS ORDERS ^(p) | | | | | |
| | \$232.0 | \$238.6 | \$237.4 | \$225.4 | -0.6% |
| PERSONAL INCOME ^(c) | | | | | |
| (Billions of Dollars) | <u>2014.4</u> | <u>2015.1</u> | <u>2015.2</u> | <u>2015.3</u> | <u>% Change From Year Ago</u> |
| Michigan | \$409.9 | \$413.1 | \$418.2 | \$424.0 | 4.6% |
| U.S. | \$14,945.2 | \$15,057.0 | \$15,254.1 | \$15,449.6 | 4.6% |
| GROSS DOMESTIC PRODUCT | | | | | |
| (Billions of Chained 2009 Dollars) ^(c) | <u>2015.1</u> | <u>2015.2</u> | <u>2015.3</u> | <u>2015.4</u> | <u>Annualized % Chg From Last Qtr</u> |
| | \$16,177.3 | \$16,333.6 | \$16,414.0 | \$16,442.3 | 0.7% |

SOURCES AND NOTES:

- ^(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.