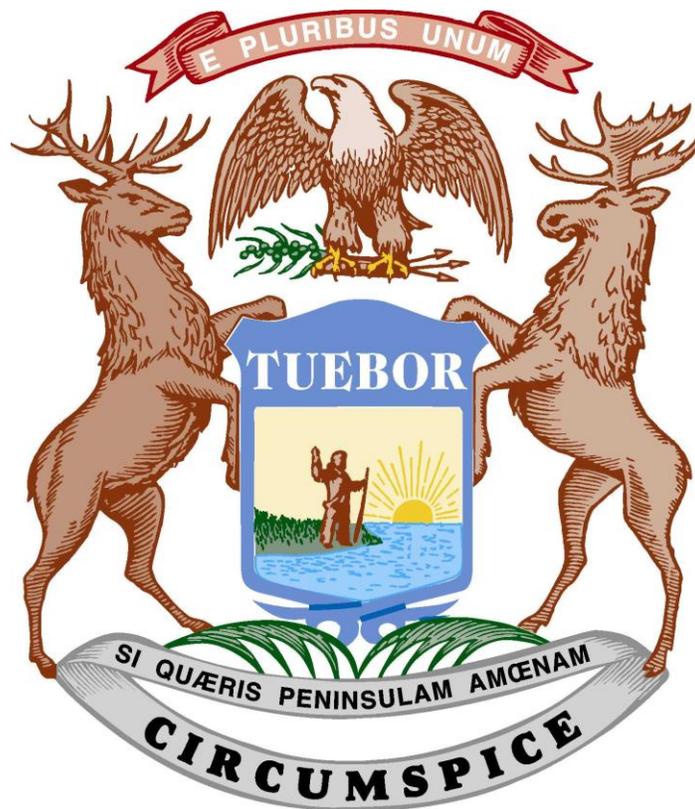


Administration Estimates Michigan Economic and Revenue Outlook



FY 2014-15, FY 2015-16 and FY 2016-17

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January 16, 2015**

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**ADMINISTRATION ESTIMATES
EXECUTIVE SUMMARY
January 16, 2015**

Revenue Review and Outlook

- FY 2014 General Fund-General Purpose (GF-GP) revenue totaled \$9,018.5 million, a 5.7 percent decrease from FY 2013. FY 2014 SAF revenue totaled \$11,520.5 million, a 2.2 percent increase from 2013.
- FY 2015 GF-GP revenue is forecast to increase 5.9 percent to \$9,551.2 million, down \$274.8 million from the May 2014 Consensus estimate. FY 2015 SAF revenue is forecast to increase 3.1 percent to \$11,876.2 million, up \$22.9 million from the May 2014 Consensus estimate.
- FY 2016 GF-GP revenue is forecast to increase 2.3 percent to \$9,773.5 million, down \$471.8 million the May 2014 Consensus estimate. FY 2016 SAF revenue is forecast to increase 3.4 percent to \$12,280.1 million, up \$21.9 million from the May 2014 Consensus estimate.
- FY 2017 GF-GP revenue is forecast to increase 2.8 percent to \$10,045.8 million. FY 2016 SAF revenue is forecast to increase 3.5 percent to \$12,703.5 million.

2015, 2016 and 2017 U.S. Economic Outlook

- After increasing 1.6 percent in 2011, real gross domestic product grew 2.3 percent in 2012. Real GDP rose 2.2 percent in 2013 and increased an estimated 2.3 percent in 2014. Economic growth is forecast to accelerate to 2.9 percent in 2015 and 3.2 percent in 2016. Real GDP growth is then expected to slow slightly to 3.0 percent in 2017.
- U.S. wage and salary employment rose 1.7 percent in 2012 and grew an additional 1.7 percent in 2013. National employment increased an estimated 1.8 percent in 2014. U.S. employment is expected to increase 1.9 percent in 2015, 1.7 percent in 2016 and 1.6 percent in 2017, marking the seventh consecutive annual increase in U.S. employment.
- The U.S. unemployment rate is forecast to decline each year over the forecast horizon. The unemployment rate averaged 8.1 percent in 2012 and 7.4 percent in 2013. The unemployment rate is estimated to have dropped to 6.2 percent in 2014. The national unemployment rate is then forecast to fall to 5.6 percent in 2015, 5.3 percent in 2016 and 4.9 percent in 2017.
- Housing starts increased a sharp 28.2 percent in 2012 and grew 18.5 percent in 2013. Housing starts are estimated to have increased 7.9 percent in 2014. Housing starts are forecast to continue to increase with starts rising 21.0 percent in 2015, 16.1 percent in 2016 and 7.7 percent in 2017. Consequently, housing starts are expected to rise above 1.0 million

units in 2015 for the first year since 2007 and are expected to increase above 1.5 million units in 2017 for the first year since 2006.

- Light vehicle sales are expected to post significant growth across the forecast. In 2013, vehicle sales increased to 15.5 million units – marking the first year that sales topped 15.0 million units since 2007. Sales are estimated to have totaled 16.4 million units in 2014. Sales are forecast to rise to 16.8 million units in 2015, 17.0 million units in 2016 and 17.2 million units in 2017, which would mark the second highest annual light vehicle sales total on record.
- Inflation is expected to remain moderate. Consumer prices edged up 2.1 percent in 2012 and rose 1.5 percent in 2013. In 2014, consumer prices are estimated to have increased 1.7 percent. Prices are and then forecast to rise 1.1 percent in 2015, 1.7 percent in 2016 and 1.8 percent in 2017.

2015, 2016 and 2017 Michigan Economic Outlook

- Michigan employment increased 2.3 percent or 88,500 jobs in 2011 – marking the first increase since 2000. Employment grew again in 2012, by 2.1 percent or 81,500 jobs. In 2013, employment increased 71,200 jobs (1.8 percent). In 2014, Michigan wage and salary employment grew an estimated 0.8 percent. State wage and salary employment is forecast to increase 1.2 percent in 2015, 1.3 percent in 2016 and 1.2 percent in 2017.
- The Michigan unemployment rate dropped from 12.7 percent in 2010 to 10.4 percent in 2011. The rate declined sharply in 2012 to 9.1 percent before falling to 8.8 percent in 2013. In 2014, the Michigan unemployment rate fell to an estimated 7.4 percent. The Michigan unemployment rate is forecast to continue to decline each year with the rate falling to 6.9 percent in 2015, 6.7 percent in 2016 and 6.5 percent in 2017.
- After dropping 8.3 percent in 2009 (the largest percent decline since 1945), Michigan wages and salaries increased 1.6 percent in 2010, grew 5.4 percent in 2011, rose 4.2 percent in 2012 and 2.9 percent in 2013. Michigan wages and salaries increased an estimated 4.9 percent in 2014. Michigan wages and salaries are forecast to increase 3.5 percent in 2015, 3.5 percent in 2016 and 3.8 percent in 2017.
- Michigan personal income fell 4.4 percent in 2009 – marking the first annual Michigan personal income drop since 1958 and the largest annual decline since 1938. Income increased 2.3 percent in 2010 and rose 5.9 percent in 2011. Personal income increased 3.9 percent in 2012 and rose 1.4 percent in 2013. In 2014, Michigan personal income increased an estimated 4.2 percent. Michigan personal income is forecast to increase 4.3 percent in 2015, 4.4 percent in 2016 and 4.4 percent in 2017.
- On a fiscal year basis, Michigan disposable income rose 1.9 percent in FY 2013 and increased an estimated 2.4 percent in FY 2014. Disposable income is forecast to grow 4.1 percent in FY 2015, 4.0 percent in FY 2016 and 4.1 percent in 2017. Wages and salaries increased 3.4 percent in FY 2013 and an estimated 4.0 percent in FY 2014. Wages and salaries are forecast to increase 4.0 percent in FY 2015, 3.6 percent in FY 2016 and 3.8 percent in FY 2017.

Forecast Risks

- Division among federal policymakers could substantially weaken consumer and investor confidence. Polarization could also substantially limit the federal government's ability to respond to negative financial and macroeconomic shocks.
- Europe's weak financial and economic recovery from its massive financial crises leaves the Continent vulnerable to still slower economic growth, which would have negative financial and economic impacts on the U.S. economy.
- Higher than forecast oil prices would lower consumers' discretionary income, increase many businesses' costs and depress economic activity.
- A stronger (weaker) housing market would boost (depress) the economy more than forecast.
- A severe drop in stock values would pose a substantial drag on the macroeconomy.
- Continued and strong job growth remains central to sustaining recent gains across the economy and to combating dampening factors such as weak consumer confidence.
- The Great Recession may have a longer negative effect on confidence than assumed. In particular, the after effects could lead businesses and consumers to react more negatively to an economic slowdown or mild decline than before the Great Recession.
- Uncertainty surrounds when the Federal Reserve will begin raising the federal funds rate from the rate's current 0.00-0.25 percent range. It is possible the Fed will begin raising the rate after 2016.

ECONOMIC REVIEW AND OUTLOOK

January 16, 2015

Current U.S. Economic Situation

Summary

The U.S. economy has continued to show signs of improvement over recent months.

Real Gross Domestic Product (GDP) has grown in all but two quarters since the end of the Great Recession (2009Q3 – 2014Q3). The U.S. economy rebounded sharply in 2014Q2 with real GDP growing at a 4.6 percent annual rate. Economic growth accelerated to 5.0 percent annual growth in 2014Q3 – its fastest growth since 2003Q3 when the economy posted 6.9 percent annualized growth.

U.S. wage and salary employment has risen each month since October 2010 with a cumulative gain of 9.7 million jobs over the past 50 months. In November 2014 (the most recent month for which data are available), a net 321,000 jobs were added. Consequently, November 2014 employment was 1.7 million jobs higher than the pre Great Recession peak employment level.

Housing Market

House Construction and Sales

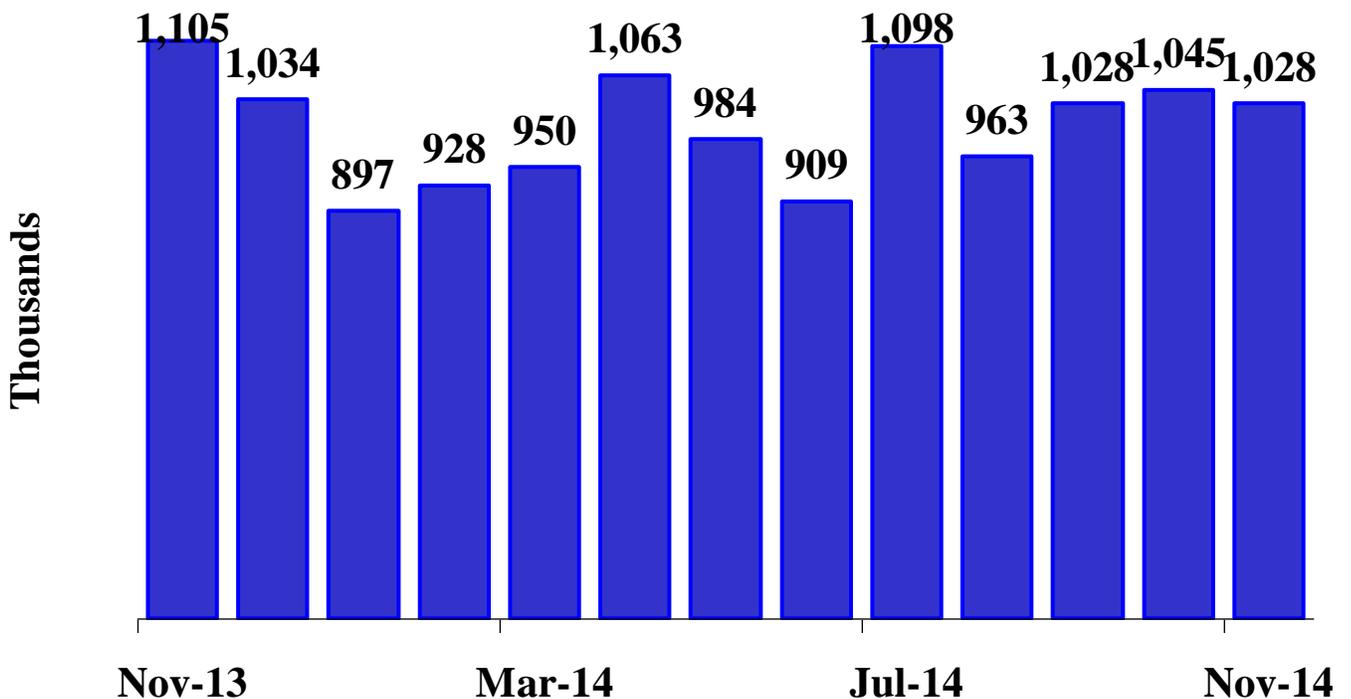
The housing market remains historically weak, but the market has strengthened recently. Calendar year (CY) 2013 marked the sixth year in which housing starts totaled fewer than 1.0 million units. Prior to 2008, starts had never fallen below 1.0 million units since at least 1959. During the first 11 months of 2014, housing starts at a seasonally adjusted annual rate averaged nearly 1.0 million units (990,000), up 7.6 percent from the 920,000 unit average of the first eleven months of 2013. (U.S. Census Bureau).

In April 2014 (the last month of data available at the May 2014 Consensus Conference), the **National Association of Home Builders (NAHB) sentiment** index fell to 46 -- indicating that fewer builders viewed conditions as favorable compared with the number who viewed conditions as unfavorable. However, the NAHB index rose above 50 in July and has remained above 50 in every month through December 2014, inclusive. In December 2014, the index stood at 57.

In 2013, **new home sales** remained below 500,000 units for the sixth straight year. Prior to 2008, new home sales last totaled fewer than 500,000 units in 1982. However, at 429,000 units, 2013 did represent the first year in which new home sales exceeded 400,000 units since 2008. Through the first eleven months of 2014, annualized new home sales averaged 432,500 units, which was slightly above (0.7 percent) the average of annualized sales in 2013 through November (U.S. Census Bureau).

Between the end of 2010 and mid-2013, **existing home sales** trended upward with the annualized sales rate peaking in July 2013 at 5.4 million units – the highest sales rate since late 2009. In addition, the annualized existing sales rate reported year-over-year increases each month between July 2011 and October 2013, inclusive. The existing home sales market then hit a slight lull. In all but one month between November 2013 and March 2014, existing home sales fell from the prior month. Then, existing home sales rose from the prior month in each of the following four months. The annualized existing home sales rate rose above 5.0 million units for the first month since October 2013. The existing home sales rate remained above 5.0 million until November 2013 when the rate fell to 4.9 million units. Through the first eleven months in 2014 the annualized sales rate averaged 4.9 million units, compared to 5.1 million units in calendar year 2013. (National Association of Realtors)

Annualized Housing Starts At Historically Low Levels



Source: U.S. Census Bureau. Seasonally adjusted annual rate (thousands).

House Prices

House prices have grown in recent months.

- Between October 2013 and October 2014, the **Core Logic Home Price Index** increased 6.1 percent. Furthermore October 2014 marked the 32nd consecutive month of year-over-year home price gains. However, the October 2014 level remained 12.4 percent below the index’s peak (April 2006).

- In 2013, the **Census Bureau's median new home sales price** reported its fourth straight annual price increase – rising 9.7 percent from 2012. At \$268,900, the 2013 annual median price represents the highest annual median new home sale price on record. Further, the median home sales price is likely to set a new record high annual price in 2014. Through November, the monthly median home sales price rose in nine months compared to a year ago. In August 2014, the monthly median home sales price rose 14.3 percent compared to August 2013 and set a new record high monthly median home price of \$291,700. Most recently, the median new home sales price rose 1.4 percent between November 2013 and November 2014.
- According to the **National Association of Realtors, the median existing-house price rose** 5.0 percent between November 2013 and November 2014 -- marking the 33rd consecutive month of year-over-year price gains.

Repercussions

In November, foreclosures declined from the year ago level for the 50th consecutive month. (RealtyTrac)

In October 2014, there were 41,000 **completed foreclosures** in the U.S. October 2014 foreclosures were down 34.1 percent from September 2014 and down 26.4 percent from a year ago. The total number of foreclosures for the 12 months ended in October (September 2013-October 2014 inclusive) declined for the 36th consecutive month and was the lowest aggregate sum since October 2007. Further, the October 2014 **rate of serious delinquencies** dropped to 4.2 percent, the lowest rate since July 2008. (CoreLogic)

In 2014Q1, **homeowner real estate equity** rose to a new record high and then increased further in 2014Q2 and 2014Q3 to still higher peaks. Compared to a year ago, 2014Q3 real estate equity was up \$0.4 trillion. At 53.9 points, the 2014Q3 homeowner equity rate was down 7.7 percentage points from the measure's all-time high, but 17.1 points higher than its all-time low (2009Q1). Over the past year, the equity rate rose by 3.1 percentage points. (Federal Reserve Bank, *Flow of Funds Accounts of the United States*).

At 4.00 percent, the **30-year fixed mortgage rate** in November 2014 was down 0.34 percentage point from April 2014, the last month for which interest rate data were available at the May Consensus Conference. Compared to a year ago, the November 2014 mortgage rate was down 0.26 percentage point. At 4.00 percent, the November 2014 mortgage rate was the lowest rate since May 2013. (Federal Reserve)

Despite lower mortgage rates and higher median family income over the last year, a substantial increase in home prices between November 2013 and November 2014 lowered the **National Association of Realtors housing affordability index**, which fell by 2.5 points between November 2013 and November 2014.

Stock prices have increased since the May 2014 Consensus Conference. Between the end of April 2014 and the end of December 2014, the **stock market (Wilshire 5000)** rose 8.6 percent. Compared to a year ago, the month-end December 2014 index was up 10.0 percent.

Monetary Policy

At the time of the May 2014 Consensus Revenue Estimating Conference, the Federal Open Market Committee (FOMC) stated that the Fed expects to maintain its 0.00-0.25 percent federal funds rate range well after the unemployment rate falls below 6.5 percent if the projected inflation rate remains under 2.0 percent. Similarly, the FOMC at its most recent meeting (December 17, 2014), maintained its 0.00-0.25 federal funds rate range and stated that the Fed would lean toward maintaining the low rate range in the near future:

Based on its current assessment, the Committee judges that it can be patient in beginning to normalize the stance of monetary policy. The Committee sees this guidance as consistent with its previous statement that it likely will be appropriate to maintain the 0 to 1/4 percent target range for the federal funds rate for a considerable time following the end of its asset purchase program in October, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

Since late 2008, the Fed has engaged in several rounds of quantitative easing (injecting substantial liquidity into financial markets by purchasing large amounts of longer term Treasury and agency mortgage-backed securities). In its December 19, 2013 statement the Fed indicated that it would begin reducing the size of the additions to its longer term holdings. Between September 2012 and December 2014, the FOMC added \$85 billion to its long term asset holdings each month. Beginning with the January 2014, the Fed slowed the size of its monthly additions to its assets by \$10 billion at each of its first six FOMC meetings of 2014 (January, March, April, June, July and September). Citing a stronger labor market and a stronger overall macro economy, the FOMC concluded its quantitative easing program (current asset purchase program) at its October 2014 meeting:

The Committee judges that there has been a substantial improvement in the outlook for the labor market since the inception of its current asset purchase program. Moreover, the Committee continues to see sufficient underlying strength in the broader economy to support ongoing progress toward maximum employment in a context of price stability. Accordingly, the Committee decided to conclude its asset purchase program this month.

While ending its quantitative easing program in October 2014, the FOMC will continue to reinvest principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction as a means to “help maintain accommodative financial conditions.”

At the FOMC's April 2014 meeting (the last FOMC meeting prior to the May 2014 Consensus Conference), the FOMC had provided itself with substantial latitude regarding future quantitative easing (asset purchases) and thus substantial uncertainty. Considerable uncertainty still surrounds the future impact of the program and its termination given the program's massive size and relative historical rarity. However, the FOMC's completion of the quantitative easing program helps lessen uncertainty.

Fiscal Policy

In December 2013, the President signed a budget agreement reached by Congress. The agreement eased sequestration by allowing spending to rise by \$62 billion combined in fiscal years 2014 and 2015. The budget agreement also included offsetting revenue and long-term spending cuts, so that the agreement overall would reduce the deficit by \$23 billion over 10 years. In addition, in mid-February 2014, the President, House and Senate reached an agreement to suspend the federal debt ceiling until March 16, 2015. In so doing, they allowed the federal government to increase its borrowing above the current \$17.2 trillion debt ceiling, against which actual borrowing was already pushing. Most recently, in December 2014, the FY 2015 government funding bill was signed into law by President Obama, fully funding the government for the entire fiscal year at the level agreed to by the December 2013 two-year budget agreement (with the exception of the Department of Homeland Security, which is funded through February 2015).

Inflation

In April 2014 (the most recent month for which monthly oil price data were available prior to the May 15, 2014 Consensus Revenue Estimating Conference), the price of oil averaged \$102.07 per barrel. However, after rising to \$105.79 per barrel, the price of oil has fallen sharply. In November 2014, the price of oil fell to \$75.79 per barrel – the lowest monthly average since September 2010. Through December 22, 2014, the December price of oil per barrel averaged \$54.18. (Federal Reserve Bank of St. Louis).

Similarly, the average price of regular gasoline in the U.S. fell 74.9 cents between April 2014 and November 2014 to \$2.91 per gallon -- its lowest monthly average in four years. Still more, in the week ending December 22, 2014, the weekly price of regular gasoline fell to \$2.40 per gallon – its lowest level since mid-May 2009. (U.S. Energy Information Administration)

In recent years and months, price inflation has remained mild. In 2013, **consumer prices** increased 1.5 percent. The increase follows a 0.4 percent decline in 2009, a 1.6 percent increase in 2010, a 3.2 percent rise in 2011 and a 2.1 percent rise in 2012. Similarly, through November 2014, consumer prices have averaged 1.7 percent above prices in the first eleven months of 2013. Through November 2014, **core consumer prices** (excluding food and energy) have averaged 1.8 percent higher than in the first eleven months of 2013. This follows annual core price inflation of 1.0 percent, 1.7 percent, 2.1 percent and 1.8 percent in 2010 through 2013 respectively. (U.S. Bureau of Labor Statistics)

The average **core personal consumption expenditures price deflator** in 2013 was up only 1.2 percent from 2012. Similarly, year-to-date through November, the 2014 deflator was up 1.4 percent from 2013. (U.S. Bureau of Economic Analysis)

Producer prices rose 6.0 percent in 2011, due primarily to increases in fuel prices. Producer prices then increased 1.9 percent in 2012 and 1.2 percent in 2013. Through the first eleven months of 2014, producer prices were up 2.1 percent. Core producer prices rose 1.5 percent in 2013 and increased 1.9 percent during the first 11 months of 2014. (Bureau of Labor Statistics)

Despite Recent Sharp Decline Oil Prices Remain Historically High



Source: Federal Reserve Bank of St. Louis

Major Economic Indicators

Since the May 2014 Conference, seven additional months of **ISM manufacturing index (PMI)** data have been released (May 2014-November 2014). The PMI rose 0.5 point in May 2014 before falling 0.1 point in June 2014. The index then reported two solid gains in July 2014 and August 2014, totaling 3.7 points. Then PMI fell substantially (2.4 points) in September, but then recouped the loss in October before falling slightly in November. The November 2014 PMI signaled growth in the overall economy for the 66th consecutive month, and indicated expansion in the manufacturing sector for the 18th consecutive month.

In November 2014, the **ISM non-manufacturing index (NMI)** marked the 58th straight month signaling sector expansion. In the seven months reported since the May 2014 Conference, the NMI gained a net 4.1 points. The net gains indicate an acceleration in the non-manufacturing sector during these seven months.

Through the first eleven months of 2014, **industrial production** increased a sharp 4.2 percent. As a result, 2014 will mark the fifth straight year of annual growth. Industrial production growth in 2014 will likely represent the second fastest increase over the five year period. Between November 2013 and November 2014, industrial production rose 5.2 percent -- the 59th straight monthly year-over-year increase in industrial production.

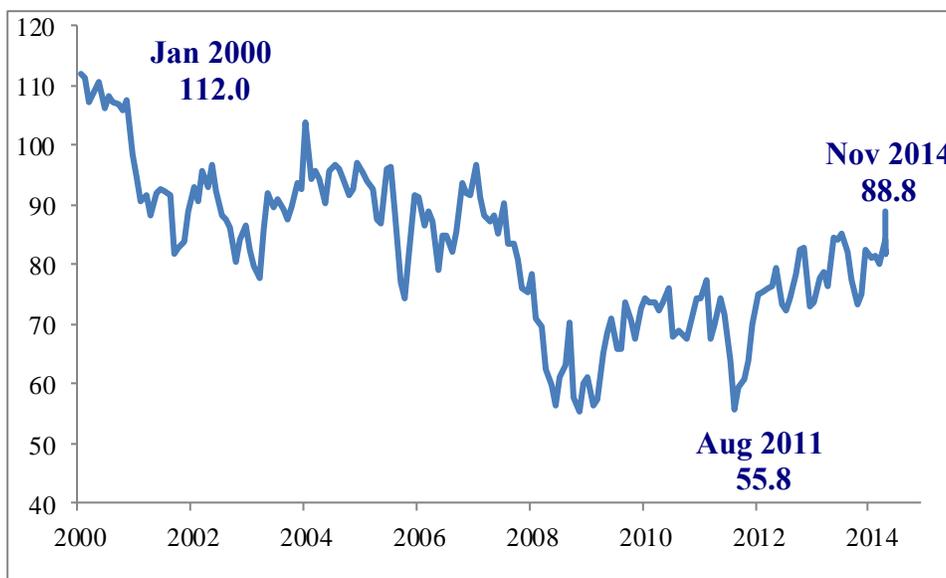
As with industrial production, the annual **capacity utilization rate** rose for the fifth straight year in 2014. The November 2014 capacity utilization rate represented the highest monthly rate since March 2008. Through the first eleven months of 2014, the capacity utilization rate was up 1.2 points from 2013.

Following the May 2014 Consensus Conference, the **three-month moving average for new durable goods orders** increased from the prior month each month between April 2014 and August 2014. After falling slightly in September 2014, the average dropped sharply in October 2014 and then declined slightly in November 2014. Between April 2014 and November 2014, the average increased 2.9 percent. The three-month average in November 2014 was up 3.2 percent from last November.

Since December 2009, the **three-month moving average for retail sales** has increased every month from the year-ago level. Over this period, the median y-o-y percent increase has been 4.7 percent. After poor weather conditions slowed y-o-y increases to 2.3 percent in February 2014, growth accelerated in each of the next four months and rose to 4.6 percent in June 2014. After slowing to 4.4 percent in July 2014, the growth rate sped up slightly in each of the following four months with the November year-over-year increase rising to 4.7 percent.

Since the May 2014 Consensus Conference, the **University of Michigan index of consumer sentiment** has increased a net 9.5 points. While the index reported monthly declines in May 2014 and July 2014, the index rose in each of the other six months since the Conference. At 93.6, the December 2014 consumer sentiment index represents the index's highest reading since January 2007. Similarly, the index's annual average rose 4.9 points between 2013 and 2014. At 84.1, the 2014 consumer sentiment index represents its highest average annual level since 2007 when the index averaged 85.6. The 2014 average is up substantially (21.8 points) from the index's average in 2008 of 63.8, but is 23.5 points down from the average's peak of 107.6 in 2000.

Consumer Sentiment Up Substantially from August 2011 Trough But Well Below January 2000 Peak



Source: University of Michigan Survey of Consumers.

The **Conference Board Measure of CEO Confidence Index** reported net positive readings (over 50) in each of the past seven quarters with four quarters posting readings at or above 60. However, the index has posted declines in the two quarters of data reported since the May 2014 Consensus Conference (2014Q2 and 2014Q3).

The **Conference Board index of leading economic indicators (LEI)** rose 0.6 percent in November 2014. The index has increased in 14 of the past 16 months.

The **Economic Cycle Research Institute (ECRI) weekly leading index growth rate** accelerated from 1.8 percent at the end of December 2013 to 4.2 percent in late January 2014. Sharp declines brought the growth rate down to 1.7 percent by the end of February 2014. The growth rate then accelerated with the rate rising to 5.3 percent by the end of May 2014. Since the end of May 2014, the growth rate has slowed. The growth rate turned negative (pointing to an economic contraction in the near future) in mid-October 2014 for the first time since August 2012. The magnitude of decline has increased since mid-October with the growth rate of -3.3 percent in mid-December 2014 (the most recent weekly for which the growth rate is available). At -3.3 percent, the mid-December 2014 reading represents the growth rate's most negative reading since the end of February 2012.

Employment

Between early May 2014 and late October 2014, the four-week average of **initial unemployment claims** trended downward. Over this period, the average fell from 325,250 to 279,000 – the lowest four-week average since early May 2000. The average turned upward with a four-week average of 299,000 in late November 2014. Most recently, the four-week average

turned downward with an average of 290,250 in late December. The average has remained below 300,000 in each of the twelve most recently reported weeks -- representing the longest sub-300,000 streak since late July 2000 when the a sub-300,000 streak ended at 51 weeks. (U.S. Department of Labor)

Since October 2009 when the **U.S. unemployment rate** rose to 10.0 percent (the highest monthly unemployment rate since mid-1983), the U.S. unemployment rate has steadily declined. In October 2014, the U.S. unemployment rate fell to 5.8 percent, where the rate stayed in November 2014. In December 2014, the U.S. jobless rate fell to 5.6 percent, marking its lowest rate since June 2008 when it also equaled 5.6 percent.

The 5.8 percent U.S. unemployment rate represented the lowest rate in over since June 2008.

However, a portion of the inroads made into lowering the unemployment rate is attributable to substantial reductions in the labor force participation rate. At 62.7 percent, the labor force participation rate in September 2014 was the lowest participation rate since October 1977. The rate ticked up to 62.8 percent in October 2014 and remained at 62.8 percent in November 2014 (Bureau of Labor Statistics)

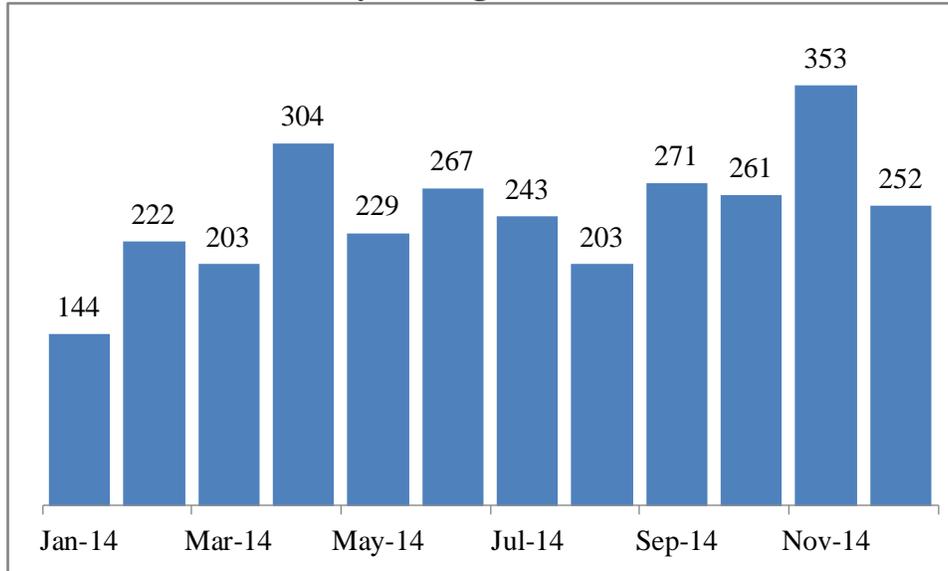
Since April 2014 (the last month whose data were reported before the May 2014 Consensus Conference), the U.S. unemployment rate has dropped 0.7 percentage point. The December 2014 rate was 1.1 percentage points lower than December 2013 reading. The December 2014 rate 2014 also marked the fourth straight month of sub-6.0 percent readings. The annual unemployment rate dropped for the third straight year in 2013 -- falling from 9.6 percent (a 30+ year record annual high) in 2010 to 8.9 percent in 2011, 8.1 percent in 2012 and 7.4 percent in 2013. Through November, the 2014 has averaged 6.2 percent.

Between February 2008 and December 2009, **U.S. wage and salary employment** fell every month, declining 8.7 million jobs to its lowest level since August 1999. With the exception of February 2010 and the months June 2010 through September 2010, wage and salary employment has risen each month since January 2010. On net, employment rose 10.6 million jobs between January 2010 and December 2014. Compared to a year ago, December 2014 employment was up 2.9 million jobs (2.1 percent). In December 2014 alone, employment rose by 252,000 jobs. At 140.3 million jobs, the December 2014 employment level represents the all-time high monthly U.S. employment level. Since April 2014 (the last month reported prior to the May 2014 Consensus Conference), U.S. wage and salary employment is up 2.1 million jobs.

In CY 2014, average U.S. wage and salary employment was up 1.9 percent. Given this, calendar year (CY) 2014 represents the fourth straight year in which U.S. wage and salary employment has increased. In addition, CY 2014 U.S. employment level is also the highest CY U.S. employment level on record.

In calendar year 2013, U.S. wage and salary employment increased for the third straight year with 1.2 percent growth in 2011 and 1.7 percent growth both in 2012 and in 2013. The 2013 average annual U.S. employment level was 1.1 percent below the 2007 record high level.

**U.S. Payroll Employment
2.9 Million Jobs Added in Past Year
(Monthly Change in Thousands)**



Source: Bureau of Labor Statistics, U.S. Department of Labor.

Manufacturing sector employment rose in each of the past four calendar years with increases of 1.7 percent both in 2011 and 2012, 0.7 percent in 2013 and 1.1 percent in 2014. Between March 2010 and December 2014, manufacturing sector employment has increased from the prior month in 49 of the past 58 months. Further, manufacturing employment has increased in each of the past 17 months and during this time has risen by 257,000 jobs. December manufacturing employment was up 186,000 jobs from a year ago. Since the end of the Great Recession (June 2009), manufacturing employment has increased a net 513,000 jobs. Despite these increases, December 2014 manufacturing employment was still down 1.5 million jobs from the start of the recession (December 2007). Since April 2014 (the last month reported prior to the May 2014 Consensus Conference), the sector’s employment has risen a net 145,000 jobs.

Construction sector employment is up by 156,000 jobs since the end of the recession (June 2009) but is down by 1.3 million jobs (-17.7 percent) compared to December 2007. In CY 2014, construction employment was up by 211,000 jobs. Since April 2014 (the last month reported prior to the May 2014 Consensus Conference), the sector’s employment has risen a net 166,000 jobs.

Vehicle Sales and Production

The vehicle sector has shown substantial growth over the past five years. **U.S. light vehicle sales** totaled slightly over 10.4 million units in 2009 – the worst annual sales year since 1982 when sales came in just under 10.4 million units. However, in 2010, sales rose to 11.6 million units and, in 2011, light vehicle sales increased to 12.7 million units. In 2012, sales grew to 14.4

million units. In 2013, light vehicle sales rose to 15.5 million units – the highest reported annual light vehicle sales since 2007.

Through the first 11 months of 2014, light vehicle sales averaged a 16.4 million units annual sales rate – up 5.4 percent from the first 11 months of 2013. Light vehicle sales have exceeded a 15.0 million unit rate in each of the past 25 months. Light vehicle sales have exceeded a 16.0 million unit rate in each of the past seven months. In addition, light vehicle sales exceeded a 17.0 million unit rate in August 2014 and November 2014. (Prior to August 2014, light vehicle sales last exceeded a 17.0 million unit rate in July 2006).

Between 2003 and 2009, inclusive, **U.S. vehicle production** declined each year. Between 2006 and 2009, annual production decreased a cumulative 5.6 million units (49.4 percent). However, U.S. vehicle production has risen in each of the past four years (2010-2013, inclusive). Consequently, 2013 national vehicle production was 93.0 percent higher than 2009 production. In 2014, through November, U.S. vehicle production is up 7.3 percent.

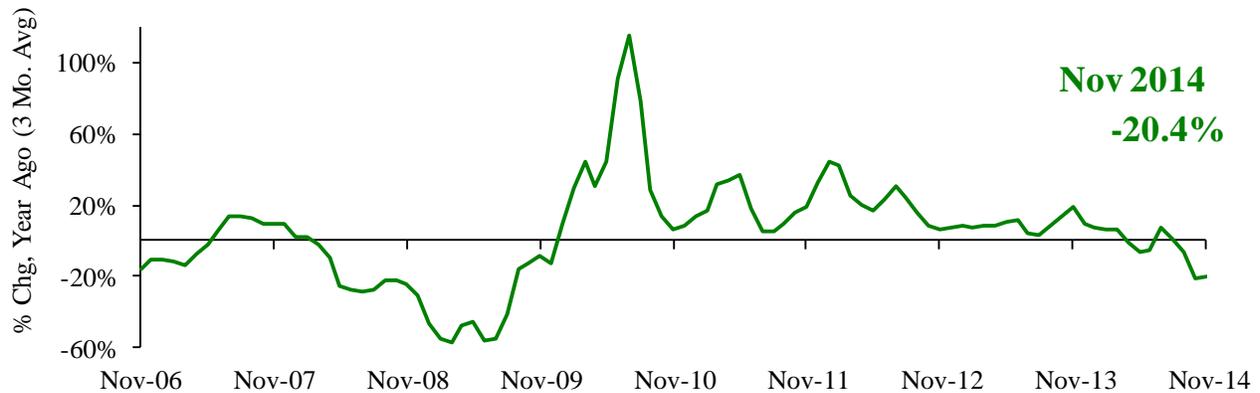
Current Michigan Economic Conditions

Vehicle Production

In 2013, **Michigan vehicle production** rose 9.5 percent. Coupled with double-digit annual increases each year between 2010 and 2012, inclusive, State vehicle production rose to 2.47 million units – Michigan’s highest vehicle production level since 2005. However, year-to-date through November 2014, Michigan vehicle production is down 5.6 percent compared to State production in the first eleven months of 2013. 2014Q1 Michigan vehicle production was up 6.3 percent compared to 2013Q1 Michigan vehicle production. However, 2014Q2 Michigan vehicle production was down 5.4 percent compared with 2013Q2 State vehicle production. Similarly, 2014Q3 vehicle production fell 6.6 percent. Still more, Michigan vehicle production dropped 21.2 percent between October 2013 and October 2014 and fell 20.9 percent between November 2013 and November 2014.

In 2013, **Michigan’s share of U.S. vehicle production** rose 0.6 percentage point to 22.3 percent – matching 2011 for the State’s highest production share since 2003. However, year-to-date through November, the State’s 2014 share of U.S. vehicle production (19.6 percent) is down 2.7 percentage points from the first 11 months of 2013.

Michigan Vehicle Production Declining from Year Ago



Source: Automotive News and Michigan Department of Treasury.

Employment

In 2013, **Michigan wage and salary employment** rose for a third straight year with 1.8 percent growth, ranking 18th among U.S. states. Michigan employment had increased 2.3 percent in 2011 and had risen 2.1 percent in 2012. At 4.1 million jobs, 2013 Michigan wage and salary employment represented the State's highest employment level since 2008.

Rising by a combined 241,200 jobs between 2010 and 2013, Michigan wage and salary employment rose 6.2 percent (the 6th fastest percent growth among U.S. states).

Directly prior to the three recent annual increases, Michigan employment had fallen each year between 2001 and 2010, inclusive, and dropped a combined 813,100 jobs. Thus, Michigan's 2013 wage and salary employment level (4.1 million jobs) remained 571,900 jobs (12.2 percent) below the State's record high annual employment level of 4.7 million jobs set in 2000.

Through November, Michigan's 2014 employment level is up 0.8 percent from employment in the first 11 months of employment in 2013. This indicates that CY 2014 represents the fourth consecutive year in which Michigan employment rose, but at a slower pace than in the three immediately preceding years (2011-2013, inclusive).

Manufacturing employment in Michigan increased each year from 2010 to 2013 with gains of 2.3 percent in 2010, 7.6 percent in 2011, 5.5 percent in 2012 and 3.3 percent in 2013. Over the past three years, manufacturing employment increased by 81,200 jobs. Thus, manufacturing employment accounted for 33.7 percent of the overall State employment increase over the past

three years, even while comprising only 12.3 percent of the overall *level* of 2010 Michigan wage and salary employment. Through the first eleven months of 2014, Michigan manufacturing employment is up 2.1 percent.

In 2013, Michigan construction employment rose 3.3 percent after increasing 3.0 percent in 2011 and 2.3 percent in 2012. Through November, Michigan construction employment rose 3.3 percent compared with average construction employment in the first 11 months of 2013.

At 7.2 percent, Michigan's wage and salary employment percent increase since the end of the Great Recession (June 2009) ranks 9th among all U.S. states. Over the past year between November 2013 and November 2014, Michigan employment has risen 1.0 percent, ranking 36th among U.S. states.

In 2009, **Michigan's unemployment rate** rose to 13.5 percent – the State's highest rate since 1983 when the rate stood at 14.6 percent. However, in each year between 2010 and 2013, inclusive, the State's unemployment rate decreased. Over the past four years, Michigan's unemployment rate dropped a combined 4.7 percentage points with the largest share of the decline (-2.3 points) occurring in 2011. Michigan's 2013 unemployment rate stood at 8.8 percent, the State's lowest annual unemployment rate since 2008.

Michigan's unemployment rate fell in 12 of the most recent 15 months (September 2013-November 2014, inclusive). Over these months, the State's unemployment rate has dropped a net 2.3 percentage points from 9.0 percent in August 2013 to 6.7 percent in November 2014 (the most recent month for which data are available). At 6.7 percent, Michigan's November 2014 unemployment rate represented the State's lowest monthly rate since January 2003. Michigan's monthly unemployment rate remained below 8.0 percent in each of the 11 months for which 2014 data are available. Prior to January 2014, Michigan's monthly unemployment rate was last below 8.0 percent in June 2008.

After falling to 0.8 percentage points in March 2014, the **gap between Michigan's unemployment rate and the U.S. unemployment rate** trended upward and peaked at 1.5 points in July 2014. The gap then fell to 1.3 points and remained at that level through October 2014. The gap fell to 0.9 points in November 2014.

Month-over-month, **Michigan household employment** fell in each month between January 2007 and December 2009 with household employment falling a combined 594,800 persons (12.6 percent). Since January 2010, household employment has trended upward and has regained a net 285,500 persons. In the eight months directly prior to the May 2014 Consensus Conference as well as May 2014 itself, household employment rose each month. Over these nine months, household employment increased by 97,900 persons. Employment then fell in June and July 2014, but has increased in each of the four most recent months available (August 2014-November 2014). On net, since May, household employment rose by 26,800 persons. Compared to a year ago, State household employment is up by 120,200 persons in November 2014.

The **Michigan labor force** fell in all but three months between December 2006 and August 2012, inclusive. Over this period, the State's labor force dropped a net 414,000 persons (8.2 percent). Between September 2012 and June 2013, Michigan's labor force rose each month and increased a combined 55,400 persons. The State's labor force then decreased each month between July 2013 and December 2013 and dropped a combined 32,400 persons. The Michigan labor force posted gains in each of the first six months of 2014 and increased a combined 57,600 persons. Between July 2014 and November 2014, inclusive, the Michigan labor force fell in three months and rose in two months. Taken together, the labor force declined a net 9,000 persons over this five month period. Over the last year, Michigan's labor force has risen by 42,800 persons.

Over the past year, **Michigan household unemployment** is down 77,300 persons (19.5 percent). Compared to household unemployment at the end of the Great Recession, November 2014 unemployment is 358,700 persons lower. Compared to the *outset* of the Recession, November 2014 unemployment is 39,400 persons lower. At 319,400 persons, the number of Michigan unemployed in November 2014 represents the State's lowest monthly unemployment level since November 2002.

Housing Market

Despite not being one of the major participants in the housing boom, Michigan was hit disproportionately hard by the housing bust due to sharply declining employment. Nevertheless, the State's housing market has recently seen signs of improvement.

In 2013, **Michigan housing unit authorizations** increased sharply (34.8 percent), marking the fourth straight annual increase and the third increase greater than 25 percent in the past four years. Michigan's 2013 percent increase in housing unit authorizations ranked 6th among U.S. states. Nationally, housing unit authorizations increased 19.4 percent in 2013. Michigan accounted for 1.6 percent of total 2013 U.S. authorizations. (U.S. Census Bureau)

Nevertheless, in 2013, Michigan authorizations (15,757 units) were 69.5 percent below the State's 1996-2005 annual average (51,688 units). Total U.S. authorizations in 2013 were 42.5 percent below the national average from 1996-2005. As a result, while accounting for an average of 3.0 percent of overall U.S. authorizations between 1996 and 2005, Michigan authorizations accounted for only 1.6 percent of U.S. authorizations in 2013.

Year-to-date through November, 2014 total Michigan authorizations were down 1.3 percent compared to 2013. Nationally, year-to-date authorizations were up 5.8 percent between 2013 and 2014. Among the 21 states that reported a year-to-date decline in authorizations, Michigan had the fifth smallest drop.

In October 2014, according to **Case-Shiller house price measures** (seasonally adjusted), the Detroit MSA recorded a 3.6 percent year-over-year house price increase, compared to a 4.6 percent average increase for the 20 U.S. metro areas surveyed for the measure. Detroit's 3.6 percent year-over-year increase ranked 13th among the 20 metro areas.

According to CoreLogic, Michigan, had the 2nd highest number of **completed foreclosures** for the 12 months ending October 2014 with 45,000 completed foreclosures, behind Florida. However, Michigan had the 13th smallest **percent of homes in foreclosure**.

The **share of mortgage properties underwater (negative equity)** in Michigan is higher than the national average. In 2014Q2, 10.7 percent of residential properties with mortgages were underwater nationally. In Michigan, 14.5 percent of such properties were underwater –ranking Michigan 7th highest among the fifty states behind Nevada (26.3 percent), Florida (24.3 percent), Arizona (19.0 percent), Illinois (15.4 percent), Rhode Island (14.8 percent), and Ohio (14.7 percent). (CoreLogic)

Personal Income

Michigan annual personal income growth slowed from 3.9 percent in 2012 to 1.4 percent in 2013. Michigan's 1.4 percent income growth in 2013 ranked 38th among U.S. states. Nationally, personal income growth slowed from 5.2 percent in 2012 to 2.0 percent in 2013 with each of the 50 states reporting slowing growth in 2013. Michigan's 2013 per capita income increase (1.2 percent) ranked 29th among U.S. states. (Bureau of Economic Analysis)

Michigan's quarterly personal income grew from the prior year in all but one quarter between 2010Q1-2014Q3 (the latest quarter available). Most recently, in 2014Q3 Michigan personal income was up 4.5 percent from a year ago (ranking 9th among U.S. states).

Each quarter between 2010Q2 and 2013Q4, **Michigan wage and salary income** rose from a year ago with increases ranging between 3.5 percent and 20.5 percent. Most recently, year-over-year wage and salary growth accelerated from 4.1 percent growth in 2014Q2 to 5.1 percent growth in 2014Q3. At 5.1 percent, Michigan's 2014Q3 wage and salary growth ranked 8th among the 50 states. Nationally, wage and salary income rose 4.4 percent between 2013Q3 and 2014Q3.

After year-over-year declines in 12 straight quarters from 2007Q2 to 2010Q1, **Michigan manufacturing wages and salaries** has experienced 18 consecutive quarters of y-o-y increases. Manufacturing wage growth peaked in 2011Q1 (20.5 percent) and then slowed to 8.4 percent and 5.6 percent in the second and third quarters, respectively. After accelerating to 12.5 percent in 2011Q4, manufacturing wage growth fluctuated between 5.2 percent and 8.6 percent over the next four quarters. Manufacturing wage and salary growth slowed to 3.9 percent in 2013Q1 but then accelerated in the following two quarters with y-o-y wage and salary growth accelerating to 6.4 percent in 2013Q3. Wage and salary growth then slowed to 3.5 percent in 2013Q4 before accelerating to 5.1 percent in 2014Q1. Wages growth slowed to 4.3 percent growth and then accelerated to 5.4 percent in 2014Q3.

Michigan manufacturing wages have outpaced overall U.S. manufacturing sector wages for 19 straight quarters. In 2014Q3, Michigan manufacturing wages and salaries grew 1.4 percentage points faster than manufacturing wages and salaries nationally.

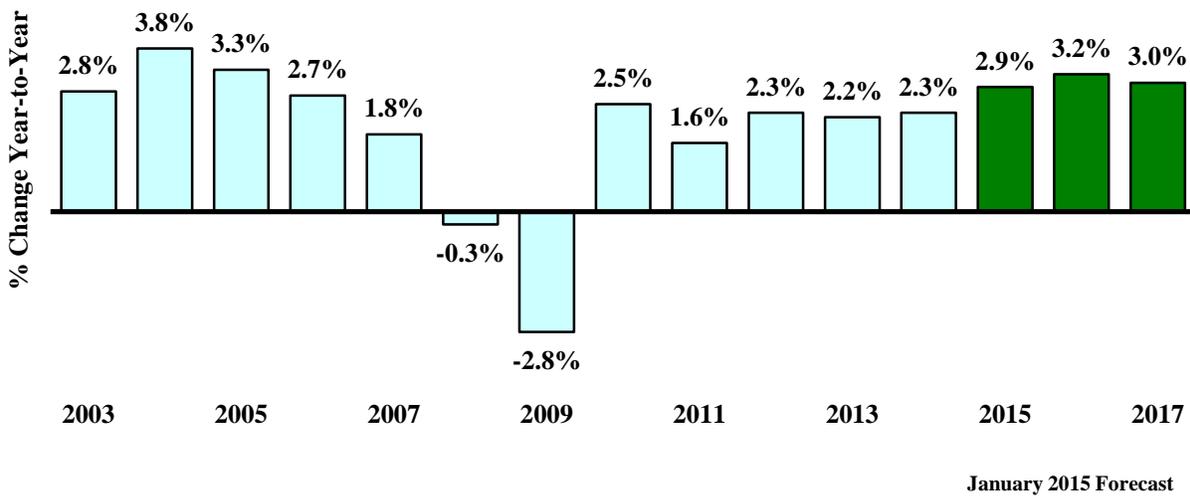
The manufacturing sector continues to play an important role in Michigan's wage growth. However, most recently, the manufacturing sector's share of Michigan's overall wage growth has moved closer in line with the manufacturing sector's share of total wages. The manufacturing sector accounted for 32.6 percent of the State's overall increase from 2012Q3 to 2013Q3, even while the sector comprised 17.5 percent of 2012Q3 wages. However, most recently, the manufacturing sector accounted for 19.1 percent overall Michigan wage growth between 2013Q3 and 2014Q3 – only 1.1 percentage points more than the Michigan's manufacturing sector share of total wages in 2013Q3 (18.0 percent).

2015, 2016 and 2017 U.S. Economic Outlook

Summary

After declining 2.8 percent in 2009, real GDP rose 2.5 percent in 2010 and 1.6 percent in 2011. Real GDP then increased 2.3 percent in 2012 and 2.2 percent in 2013. Inflation adjusted GDP grew an estimated 2.3 percent in 2014. Real GDP is forecast to rise 2.9 percent in 2015, 3.2 percent in 2016 and 3.0 percent in 2017.

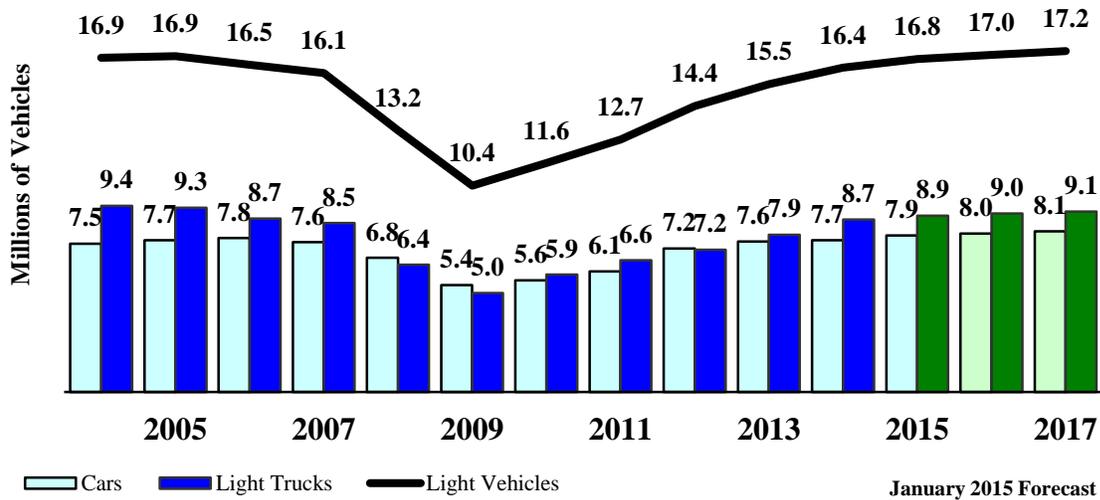
Real GDP Growth Accelerates Modestly



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2015.

Light vehicle sales totaled 14.4 million units in 2012 and increased to 15.5 million units in 2013. -- marking the first year in which light vehicle sales have exceeded 15.0 million units since 2007. In 2014, light vehicle sales totaled an estimated 16.4 million units in 2014. Annual light vehicle sales are expected to increase each year over the forecast horizon with sales of 16.8 million units in 2015, 17.0 million units in 2016 and 17.2 million units in 2017. At 17.2 million units, the 2017 would represent the second highest annual light vehicle sales on record.

Vehicle Sales Continue Their Rebound



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2015.

The U.S. unemployment rate has fallen in each of the past four years with the unemployment rate dropping from a near record high 9.6 percent in 2010 to an estimated 6.2 percent in 2014. The national unemployment rate is forecast to fall to 5.6 percent in 2015 and to 5.3 percent in 2016. In 2017, the unemployment rate is expected to fall to 4.9 percent, which would be the lowest annual U.S. unemployment rate since 2007.

U.S. wage and salary employment has increased in each of the past four years with national employment rising 1.2 percent in 2011, 1.7 percent in both 2012 and 2013 and an estimated 1.9 percent in 2014. National employment is forecast to increase 1.9 percent in 2015, 1.7 percent in 2016 and 1.6 percent in 2017. U.S. wage and salary employment in 2014 rose above the previous national peak employment level set in 2007. With employment increases forecast in 2015, 2016 and 2017, calendar year 2017 national employment is expected to be 6.0 percent above the prior 2007 peak employment level.

In 2013, U.S. consumer price inflation slowed to 1.5 percent, but rose an estimated 1.7 percent in 2014. Inflation is forecast to remain modest over the forecast horizon with overall annual consumer price increases of 1.1 percent in 2015, 1.7 percent in 2016 and 1.8 percent in 2017.

The short-term Treasury bill rate averaged 0.1 percent in each year between 2010 and 2013, inclusive. The rate is estimated to have fallen below 0.1 in 2014 and is projected to rise slightly to 0.3 percent in 2015. As a result of increases in the federal funds rate, the short-term Treasury bill rate is forecast to average 1.1 percent in 2016 and 2.0 percent in 2017.

Corporate interest rates are forecast to increase modestly over the forecast horizon. After rising to 4.2 percent in 2013, the corporate Aaa bond rate remained steady in 2014. Corporate rates are forecast to rise to 4.3 percent in 2015, 4.6 percent in 2016 and 4.9 percent in 2017.

The 30-year fixed mortgage rate fell to 3.7 percent in 2012 before rising to 4.0 percent in 2013. In 2014, the mortgage rate averaged an estimated 4.2 percent. Mortgage rates are forecast to increase over the forecast horizon with rates averaging 4.4 percent in 2015, 4.8 percent in 2016 and 5.1 percent in 2017.

Assumptions

The forecast expects real (inflation-adjusted) federal government expenditures to decrease 1.0 percent in calendar year (CY) 2015, 0.6 percent in CY 2016 and 0.9 percent in CY 2017.

In 2015, oil prices per barrel are expected to fall substantially with the average annual price per barrel dropping to \$72 per barrel. Oil prices are then expected to rise to \$75 per barrel in 2016 and then to increase to \$80 per barrel in 2017.

Throughout the forecast horizon, the housing market is expected to strengthen and housing starts are forecast to increase each year. Consequently, housing starts in 2017 (1.5 million units) will be 63.2 percent higher than starts in 2013. Nevertheless, 2016 starts will remain below the average 1.7 million annual starts in the ten years before the housing bust.

The Fed is expected to begin raising the federal funds rate in mid-2015. The forecast assumes that the Fed increases the federal funds rate gradually over the balance of the forecast horizon with the rate rising to 2.50 percent by the end of 2017.

The level of real state and local government expenditures is expected to increase approximately 2.0 percent in each year of the three-year forecast horizon.

The savings rate is assumed to rise from 5.1 percent in 2014 to 5.8 percent in 2015. The rate is expected to increase to 6.2 percent in 2016 before falling to 6.0 percent in 2017.

Rest-of-world growth is assumed to rise 2.6 percent in 2015, increase 2.7 percent in 2016 and then rise 2.7 percent in 2017.

Table 1
Administration Economic Forecast

January 2015

	Calendar 2013 Actual	Calendar 2014 Forecast	Percent Change from Prior Year	Calendar 2015 Forecast	Percent Change from Prior Year	Calendar 2016 Forecast	Percent Change from Prior Year	Calendar 2017 Forecast	Percent Change from Prior Year
United States									
Real Gross Domestic Product (Billions of Chained 2009 Dollars)	\$15,710	\$16,067	2.3%	\$16,533	2.9%	\$17,062	3.2%	\$17,574	3.0%
Implicit Price Deflator GDP (2009 = 100)	106.7	108.4	1.5%	109.9	1.4%	111.7	1.6%	113.8	1.9%
Consumer Price Index (1982-84 = 100)	232.957	236.818	1.7%	239.423	1.1%	243.493	1.7%	247.876	1.8%
Consumer Price Index - Fiscal Year (1982-84 = 100)	232.247	236.009	1.6%	238.369	1.0%	242.183	1.6%	246.542	1.8%
Personal Consumption Deflator (2009 = 100)	107.3	108.7	1.3%	109.7	0.9%	111.2	1.4%	113.0	1.6%
3-month Treasury Bills Interest Rate (percent)	0.1	0.03		0.3		1.1		2.0	
Aaa Corporate Bonds Interest Rate (percent)	4.2	4.2		4.3		4.6		4.9	
Unemployment Rate - Civilian (percent)	7.4	6.2		5.6		5.3		4.9	
Wage and Salary Employment (millions)	136.368	138.907	1.9%	141.550	1.9%	143.960	1.7%	146.260	1.6%
Housing Starts (millions of starts)	0.925	0.998	7.9%	1.208	21.0%	1.402	16.1%	1.510	7.7%
Light Vehicle Sales (millions of units)	15.5	16.4	5.8%	16.8	2.4%	17.0	1.2%	17.2	1.2%
Passenger Car Sales (millions of units)	7.6	7.7	1.3%	7.9	2.6%	8.0	1.3%	8.1	1.3%
Light Truck Sales (millions of units)	7.9	8.7	10.1%	8.9	2.3%	9.0	1.1%	9.1	1.1%
Big 3 Share of Light Vehicles (percent)	44.4	44.4		44.7		44.9		45.1	
Michigan									
Wage and Salary Employment (thousands)	4,105	4,137	0.8%	4,187	1.2%	4,241	1.3%	4,292	1.2%
Unemployment Rate (percent)	8.8	7.4		6.9		6.7		6.5	
Personal Income (millions of dollars)	\$386,471	\$402,777	4.2%	\$420,096	4.3%	\$438,581	4.4%	\$457,878	4.4%
Real Personal Income (millions of 1982-84 dollars)	\$176,084	\$181,028	2.8%	\$187,125	3.4%	\$192,645	2.9%	\$198,133	2.8%
Wages and Salaries (millions of dollars)	\$195,203	\$204,797	4.9%	\$211,965	3.5%	\$219,384	3.5%	\$227,721	3.8%
Detroit Consumer Price Index (1982-84 = 100)	219.481	222.494	1.4%	224.500	0.9%	227.663	1.4%	231.096	1.5%

Forecast Risks

As with any economic forecast, the current recovery faces some risks.

Fiscal Policy. Substantial divisions remain and partisanship will continue to impair the federal government's ability to address financial and macroeconomic issues.

Oil Prices. At the time of the May 2014 Consensus Conference, oil prices hovered around \$100 per barrel. However, most recently, oil prices have fallen substantially to around \$50 per barrel. The reduction will, in many respects, help bolster the U.S. economy. The forecast assumes that oil prices will average around \$75 to \$80 per barrel over the forecast horizon. Geopolitical concerns, increased demand, or a major supply disruption could raise oil prices well above the assumed range. Higher oil prices (and consequently higher gasoline prices) would retard domestic growth by depressing consumer sentiment, reducing households' discretionary income and increasing input costs to businesses. This risk is heightened as many other countries around the world recover and thus boost oil demand. Alternatively, if Asian oil demand decreases due to lower and more sustainable growth rates in China or if European demand weakens, oil prices could be lower than assumed.

Weak Foreign Economies. Europe's ongoing economic recovery has been slow and tenuous. Since the May 2014 Consensus Conference, new evidence (e.g., deflation) has emerged that some European economies could be contracting – not just slowing. At the same time, there is growing indication that resistance to employing “unconventional” measures (e.g., quantitative easing) to regenerate flagging European economies has waned. This lessened resistance may help to better equip many European nations in combatting economic slowdowns/contractions.

Slower economic growth in Asia also poses a downward risk to the U.S. economic forecast.

Monetary Policy. Substantial uncertainty surrounds when the Fed will begin raising the federal funds rate. On the one hand, there is concern that the Fed will begin raising rates too soon and halt U.S. economic growth. On the other hand, there is concern that the Fed will not begin to raise rates soon enough and “overheat” financial/economic markets.

Housing Market. Projected 2017 starts are about 50 percent higher than 2014 housing starts. If the housing market fails to grow as forecasted, the U.S. and Michigan economies would be weaker than expected. Higher than expected mortgage rates could severely curtail housing market growth. However, despite the large projected increases, forecasted 2017 starts total 1.5 million units – significantly below average starts in the ten years prior to the housing bust (1.7 million units). A stronger than forecasted housing market would boost the overall economy.

Great Recession. The Great Recession did serious damage to household balance sheets and psyches, and significantly tightened credit conditions. Recent economic data suggest that the Great Recession's negative impacts are softening in most respects. Nevertheless, substantial uncertainty surrounds the recession's negative impact on consumer and investor sentiment.

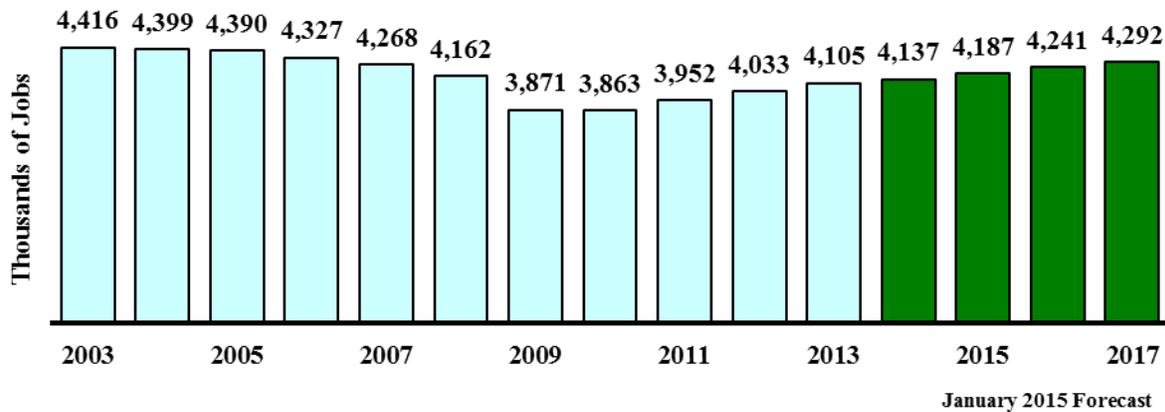
2015, 2016 and 2017 Michigan Economic Outlook

Following ten straight annual declines between 2001 and 2010, inclusive, Michigan employment reported its fourth straight annual employment increase in 2014. State employment rose 2.3 percent in 2011, increased 2.1 percent in 2012, was up 1.8 percent in 2013 and grew an estimated 0.8 percent in 2014. State employment is forecast to grow in each of the next three years: 1.2 percent in 2015, 1.3 percent in 2016 and 1.2 percent in 2017. At 4.3 million jobs, the forecasted Michigan employment level in 2017 would represent the State’s highest employment level since 2006. However, forecasted 2017 Michigan employment would remain 384,600 jobs (8.2 percent) below the State’s peak annual employment set in 2000 (4.7 million jobs).

Private non-manufacturing employment rose by 63,200 jobs in calendar year 2012, increased 63,000 jobs in 2013 and grew by an estimated 20,500 jobs in 2014. Private non-manufacturing employment is forecast to gain a net 43,500 jobs in 2015, 51,200 jobs in 2016 and 47,800 jobs in 2017.

After increasing a strong 7.6 percent in 2011, Michigan manufacturing employment grew 5.5 percent in 2012. Manufacturing employment growth slowed further to a 3.3 percent rate in 2013 and to an estimated 2.0 percent rate in 2014. Manufacturing employment growth is forecast to slow over the forecast with manufacturing employment increasing 1.2 percent in 2015, rising 1.0 percent in 2016 and growing 0.9 percent in 2017. Between 2013 and 2017, manufacturing employment is projected to rise by 29,000 jobs.

Michigan Wage and Salary Employment Continues to Rise



Source: Michigan Department of Labor and Economic Growth, U.S. Bureau of Labor Statistics, and January 2015 Administration Forecast.

Michigan transportation equipment employment rose 10.3 percent in 2011 and then increased 8.1 percent in 2012 and 6.8 percent in 2013. Transportation equipment employment grew an estimated 2.9 percent in 2014. Michigan’ transportation equipment employment is forecast to rise in each year of the forecast, with increases of 2.9 percent in 2015, 1.5 percent in 2016 and

1.2 percent in 2017. Despite the increases, forecasted 2017 transportation equipment employment of 181,600 jobs is down 47.5 percent from the sector’s CY 2000 employment of 346,100 jobs.

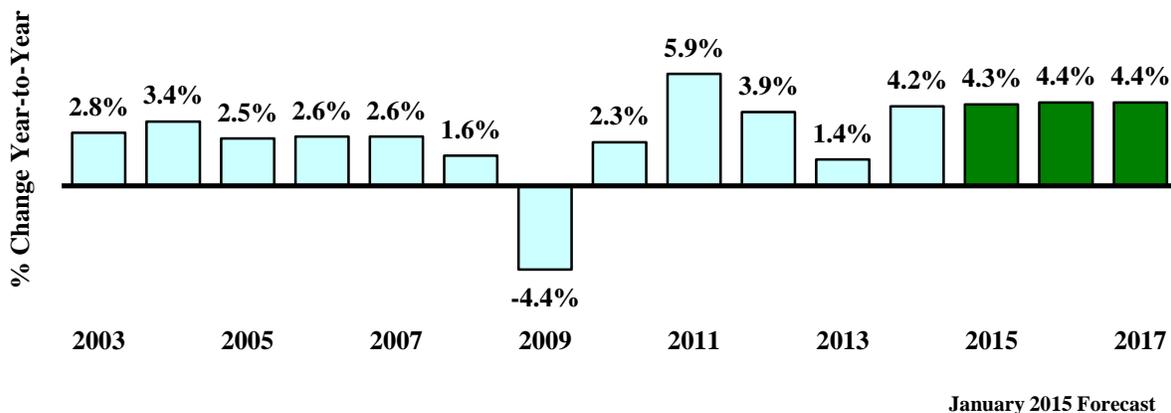
After soaring from 8.3 percent to 13.5 percent in 2009 (highest rate since 1983), Michigan’s unemployment rate declined to 12.7 percent in 2010, 10.4 percent in 2011, 9.1 percent in 2012, 8.8 percent in 2013 and 7.4 percent in 2014. The State’s rate is expected to continue to drop across the forecast horizon to 6.9 percent in 2015, 6.7 percent in 2016 and 6.5 percent in 2017.

After falling 8.3 percent in 2009 (the greatest decline since 1945), Michigan wages and salaries rose 1.6 percent in 2010, increased 5.4 percent in 2011 and rose 4.2 percent in 2012. Wages and salaries grew 2.9 percent in 2013 and rose an estimated 4.9 percent in 2014. Wages and salaries are forecast to increase 3.5 percent in 2015, 3.5 percent in 2016 and 3.8 percent in 2017.

In 2009, overall Michigan personal income declined 4.4 percent – the first personal income decline since 1958 and Michigan’s largest percent decline since 1938. Personal income rose 2.3 percent in 2010, increased 5.9 percent in 2011 and rose 3.9 percent in 2012. After slowing to 1.4 percent in 2013, State income grew an estimated 4.2 percent in 2014. Michigan personal income is forecast to rise 4.3 percent in 2015, 4.4 percent in 2016 and 4.4 percent in 2017.

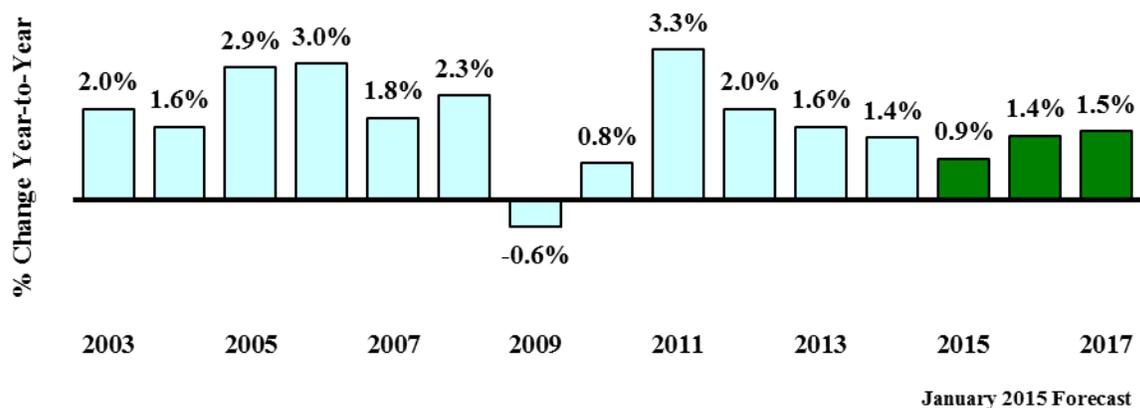
The overall CY price level, as measured by the Detroit CPI, increased 3.3 percent in 2011. Detroit CPI inflation was 2.0 percent in 2012. Detroit prices rose 1.6 percent in 2013 and an estimated 1.4 percent in 2014. Detroit price inflation is forecast to remain moderate with increases of 0.9 percent in 2015, 1.4 percent in 2016 and 1.5 percent in 2017.

Michigan Personal Income Reports Solid Growth



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2015.

Overall Price Level Rises Moderately Detroit CPI



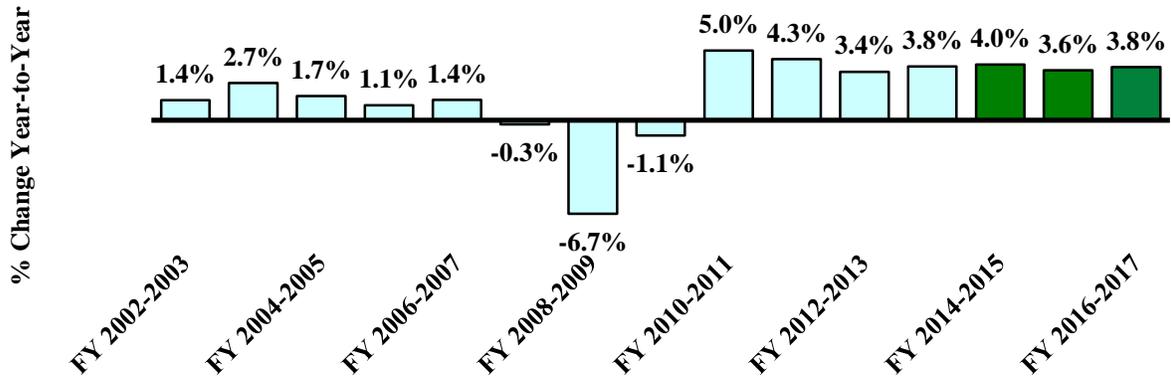
Source: U.S. Bureau of Labor Statistics and Administration Forecast, January 2015.

Fiscal Year Economics

Michigan's largest taxes are the individual income tax (\$9.9 billion in FY 2014), which includes refunds, and sales and use taxes (\$8.8 billion). Income tax withholding is the largest income tax component. Withholding (\$8.2 billion) is most affected by growth in wages and salaries. Michigan wages and salaries rose 4.3 percent in FY 2013 and increased 3.4 percent in FY 2014. State wages and salaries are forecast to increase 4.0 percent in FY 2015, 3.6 percent in FY 2016 and 3.8 percent in FY 2017.

Sales and use taxes depend primarily on Michigan disposable (after tax) income and inflation. Having risen 1.9 percent in fiscal year 2013, disposable income increased 2.4 percent in FY 2014, and is expected to increase 4.1 percent in FY 2015, 4.0 percent in FY 2016 and 4.1 percent in FY 2017. Prices, as measured by the Detroit CPI, rose 1.9 percent in FY 2013 and then increased an estimated 1.2 percent in FY 2014. The Detroit CPI is forecast to rise 0.9 percent in FY 2015, increase 1.4 percent in FY 2016 and rise 1.5 percent in FY 2017.

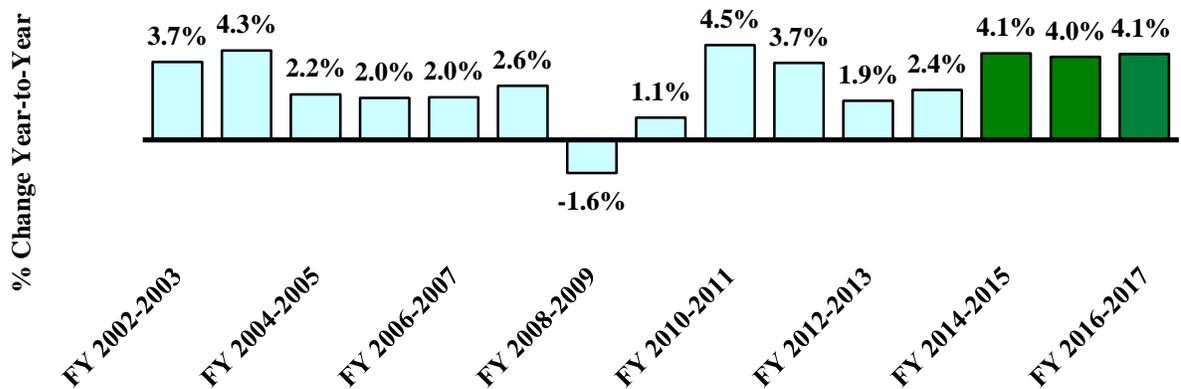
Michigan Wages and Salaries Rise Throughout Forecast Basis for Income Tax Withholding Collections



January 2015 Forecast

Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2015.

Michigan Disposable Income Increases Basis for Sales and Use Tax Collections



January 2015 Forecast

Source: Research Seminar in Quantitative Economics, University of Michigan, and Administration Forecast, January 2015.

ADMINISTRATION REVENUE ESTIMATES

January 16, 2015

Revenue Estimate Overview

The revenue estimates presented in this section consist of baseline revenues, revenue adjustments, and net revenues. Baseline revenues provide an estimate of the effects of the economy on tax revenues. For these estimates, FY 2014 is the base year. Any non-economic changes to the taxes occurring in FY 2015, FY 2016 and FY 2017 are not included in the baseline estimates. Non-economic changes are referred to in the tables as "tax adjustments". The net revenue estimates are the baseline revenues adjusted for tax adjustments.

This treatment of revenue is best illustrated with an example. Suppose tax revenues are \$10.0 billion in a given year, and that based on the economic forecast, revenues are expected to grow by 5.0 percent per year. Baseline revenue would be \$10.0 billion in Year 1, \$10.5 billion in Year 2, and \$11.0 billion in Year 3. Assume a tax rate cut is in place that would reduce revenues by \$100 million in Year 1, \$200 million in Year 2, and \$300 million in Year 3. If Year 1 is the base year, the revenue adjustments for Year 1 would be \$0 since the tax cut for this year is included in the base. The revenue adjustments for Year 2 would be \$100 million, and the revenue adjustments for Year 3 would be \$200 million, since the revenue adjustments are compared to the base year.

In the example above, the baseline revenues would be \$10.0 billion, \$10.5 billion, and \$11.0 billion, for Years 1 through 3, respectively. The revenue adjustments would be \$0 in Year 1, \$100 million in Year 2, and \$200 million in Year 3. The \$200 million in Year 3 represents the tax cuts since Year 1. Net revenue would be \$10.0 billion in Year 1, \$10.4 billion in Year 2, and \$10.8 billion in Year 3.

The following revenue figures are presented on a Consensus basis. Generally speaking, the Consensus estimates do not include certain one-time budget measures, such as withdrawals from the Budget Stabilization Fund, the sale of buildings, and so on. The figures also do not include constitutional revenue sharing payments to local governments from the sales tax. In addition, the estimates only include enacted legislation and do not include the effects of any proposed changes. The School Aid Fund estimates consist of taxes plus the transfer from the State Lottery Fund.

FY 2014 Revenue Outlook

FY 2014 GF-GP revenue totaled \$9,018.5 million, a 5.7 percent decrease compared to FY 2013. The FY 2014 GF-GP total is \$300.8 million below the May 2014 Consensus estimate.

SAF revenue totaled \$11,520.5 million, representing a 2.2 percent increase compared to FY 2013. The FY 2014 SAF total is \$24.2 million above the May 2014 Consensus estimate. (see Table 2).

Table 2
FY 2013-14 Administration Revenue Estimates
(millions)

	Preliminary FY 2014	
	Amount	Growth
General Fund - General Purpose		
Baseline Revenue	\$9,748.1	-2.1%
Tax Cut Adjustments	(\$729.6)	-----
Net Resources	\$9,018.5	-5.7%
School Aid Fund		
Baseline Revenue	\$11,562.8	2.5%
Tax Cut Adjustments	(\$42.3)	-----
Net Resources	\$11,520.5	2.2%
<hr/>		
Combined		
Baseline Revenue	\$21,310.9	0.3%
Tax Cut Adjustments	(\$771.9)	-----
Net Resources	\$20,539.0	-1.4%

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

FY 2015 Revenue Outlook

FY 2015 GF-GP revenue is estimated to be \$9,551.2 million, a 5.9 percent increase compared to FY 2014. The FY 2015 GF-GP revenue estimate is \$274.8 million below the May 2014 Consensus estimate. SAF revenue is forecast to be \$11,876.2 million; representing a 3.1 percent increase compared to FY 2014. The FY 2015 SAF estimate is \$22.9 million above the May 2014 Consensus estimate (see Table 3).

Table 3
FY 2014-15 Administration Revenue Estimates
(millions)

	Consensus May 15, 2014		Administration January 16, 2015		Change
	Amount	Growth	Amount	Growth	
General Fund - General Purpose					
Baseline Revenue	\$10,268.4	4.0%	\$10,248.7	5.1%	(\$19.7)
Tax Cut Adjustments	(\$442.4)		(\$697.5)	-----	(\$255.1)
Net Resources	\$9,826.0	5.4%	\$9,551.2	5.9%	(\$274.8)
School Aid Fund					
Baseline Revenue	\$11,900.9	2.5%	\$11,930.6	3.2%	\$29.7
Tax Cut Adjustments	(\$47.6)		(\$54.4)	-----	(\$6.8)
Net Resources	\$11,853.3	2.2%	\$11,876.2	3.1%	\$22.9
Combined					
Baseline Revenue	\$22,169.3	3.5%	\$22,179.4	4.1%	\$10.1
Tax Cut Adjustments	(\$490.0)		(\$751.9)	-----	(\$261.9)
Net Resources	\$21,679.3	4.2%	\$21,427.4	4.3%	(\$251.9)

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

FY 2016 Revenue Outlook

FY 2016 GF-GP revenue is estimated to be \$9,773.5 million, a 2.3 percent increase compared to FY 2015. The FY 2016 GF-GP revenue estimate is \$471.8 million below the May 2014 Consensus estimate. SAF revenue is forecast to be \$12,280.1 million; representing a 3.4 percent increase compared to FY 2015. The FY 2016 SAF estimate is \$21.9 million above the May 2014 Consensus estimate (see Table 4).

Table 4
FY 2015-16 Administration Revenue Estimates
(millions)

	Consensus May 15, 2014		Administration January 16, 2015		Change
	Amount	Growth	Amount	Growth	
General Fund - General Purpose					
Baseline Revenue	\$10,708.8	4.3%	\$10,651.6	3.9%	(\$57.2)
Tax Cut Adjustments	(\$463.5)		(\$878.1)	-----	(\$414.6)
Net Resources	\$10,245.3	4.3%	\$9,773.5	2.3%	(\$471.8)
School Aid Fund					
Baseline Revenue	\$12,301.9	3.4%	\$12,347.5	3.5%	\$45.6
Tax Cut Adjustments	(\$43.8)		(\$67.4)	-----	(\$23.7)
Net Resources	\$12,258.1	3.4%	\$12,280.1	3.4%	\$21.9
Combined					
Baseline Revenue	\$23,010.7	4.0%	\$22,999.1	3.7%	(\$11.6)
Tax Cut Adjustments	(\$507.3)		(\$945.5)	-----	(\$438.2)
Net Resources	\$22,503.4	4.1%	\$22,053.6	2.9%	(\$449.9)

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

FY 2017 Revenue Outlook

FY 2017 GF-GP revenue is estimated to be \$10,045.8 million, a 2.8 percent increase compared to FY 2015. SAF revenue is forecast to be \$12,703.5 million; representing a 3.4 percent increase compared to FY 2015 (see Table 5).

Table 5
FY 2016-17 Administration Revenue Estimates
(millions)

	Administration January 16, 2015	
	Amount	Growth
General Fund - General Purpose		
Baseline Revenue	\$11,031.7	3.6%
Tax Cut Adjustments	(\$986.0)	-----
Net Resources	\$10,045.8	2.8%
School Aid Fund		
Baseline Revenue	\$12,777.6	3.5%
Tax Cut Adjustments	(\$74.1)	-----
Net Resources	\$12,703.5	3.4%
<hr/>		
Combined		
Baseline Revenue	\$23,809.3	3.5%
Tax Cut Adjustments	(\$1,060.1)	-----
Net Resources	\$22,749.2	3.2%

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

Constitutional Revenue Limit

Article IX, Section 26, of the Michigan Constitution establishes a limit on the amount of revenue State government can collect in any given fiscal year. The revenue limit for a given fiscal year is equal to 9.49 percent of the State's personal income for the calendar year prior to the year in which the fiscal year begins. For example, FY 2013 revenue is compared to CY 2011 personal income. If revenues exceed the limit by less than 1 percent, the State may deposit the excess into the Budget Stabilization Fund (BSF). If the revenues exceed the limit by more than 1 percent, the excess revenue is refunded to taxpayers.

FY 2013 revenues were \$6.5 billion below the revenue limit. State revenues will also be well below the limit for FY 2014 through FY 2017. FY 2014 revenues are expected to be \$8.7 billion below the limit, FY 2015 revenues \$8.6 billion below the limit, FY 2016 revenues \$9.4 billion below the limit, and FY 2017 revenues \$10.3 billion below the limit (See Table 6).

Table 6
Administration Revenue Limit Calculation
(millions)

	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>
	<u>Final</u>	<u>Admin</u>	<u>Admin</u>	<u>Admin</u>	<u>Admin</u>
	<u>June 2014</u>	<u>Jan 2015</u>	<u>Jan 2015</u>	<u>Jan 2015</u>	<u>Jan 2015</u>
Revenue Subject to Limit	\$27,441.0	\$27,189.9	\$28,207.4	\$28,938.3	\$29,736.7
Revenue Limit	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015
Personal Income	\$358,152	\$378,443	\$388,053	\$404,351	\$421,738
Ratio	9.49%	9.49%	9.49%	9.49%	9.49%
Revenue Limit	\$33,988.6	\$35,914.2	\$36,826.2	\$38,372.9	\$40,022.9
<u>Amount Under (Over) Limit</u>	\$6,547.6	\$8,724.4	\$8,618.8	\$9,434.6	\$10,286.3

Budget Stabilization Fund Calculation

The Management and Budget Act contains provisions for calculating a recommended deposit or withdrawal from the BSF. The calculation looks at personal income net of transfer payments. The net personal income figure is adjusted for inflation. The change in this figure for the calendar year determines whether a pay-in or pay-out is recommended. If the formula calls for a deposit into the BSF, the deposit is made in the next fiscal year. If the formula calls for a withdrawal, the withdrawal is made during the current fiscal year.

If real personal income grows by more than 2 percent in a given calendar year, the fraction of income growth over 2 percent is multiplied by the current fiscal year's GF-GP revenue to determine the pay-in for the next fiscal year. If real personal income declines, the percentage

deficiency under zero is multiplied by the current fiscal year's GF-GP revenue to determine the withdrawal available for the current fiscal year. If the change in real personal income is between 0 and 2 percent, no pay-in or withdrawal is indicated.

Real calendar year personal income for Michigan is expected to increase 2.9 percent in 2014. Thus, the formula has a pay-in for FY 2015 of \$72.1 million (See Table 7). In 2015, real calendar year personal income for Michigan is forecast to increase 2.6 percent, so the formula calls for a pay-in of \$57.3 million for FY 2016 (See Table 8). In 2016, real calendar year personal income for Michigan is forecast to increase 2.8 percent, so the formula calls for a pay-in of \$88.0 million in FY 2017 (See Table 9). Based on the personal income numbers, there is no pay-out in FY 2017 (See Table 10).

Table 7
Budget and Economic Stabilization Fund Calculation
Based on CY 2014 Personal Income Growth
Administration Calculation

	<u>CY 2013</u>	<u>CY 2014</u>
Michigan Personal Income	\$388,053 ⁽¹⁾	\$404,351 ⁽¹⁾
less Transfer Payments	<u>\$ 83,546 ⁽¹⁾</u>	<u>\$ 87,232 ⁽¹⁾</u>
Income Net of Transfers	\$ 304,507	\$ 317,119
Detroit CPI	2.182 ⁽²⁾	2.210 ⁽²⁾
for 12 months ending	(June 2013)	(June 2014)
Real Adjusted Michigan Personal Income	\$ 139,554	\$ 143,493
Change in Real Adjusted Personal Income		2.8%
Excess over 2%		0.8%
GF-GP Revenue Fiscal Year 2013-2014		\$ 9,018.5
		<u>FY 2014-2015</u>
BSF Pay-In Calculated for FY 2015		\$ 72.1
		<u>FY 2013-2014</u>
BSF Pay-Out Calculated for FY 2014		NO PAY-OUT

Notes:

⁽¹⁾ Personal Income and Transfer Payments, Administration Forecast, January 2015.

⁽²⁾ Detroit Consumer Price Index, Administration Forecast, January 2015.

Table 8
Budget and Economic Stabilization Fund Calculation
Based on CY 2015 Personal Income Growth
Administration Calculation

	CY 2014	CY 2015
Michigan Personal Income	\$ 404,351 ⁽¹⁾	\$ 421,738 ⁽¹⁾
less Transfer Payments	\$ 87,232 ⁽¹⁾	\$ 92,820 ⁽¹⁾
Income Net of Transfers	\$ 317,119	\$ 328,918
Detroit CPI	2.210 ⁽²⁾	2.233 ⁽²⁾
for 12 months ending	(June 2014)	(June 2015)
Real Adjusted Michigan Personal Income	\$ 143,493	\$ 147,271
Change in Real Adjusted Personal Income		2.6%
Excess over 2%		0.6%
GF-GP Revenue Fiscal Year 2014-2015		\$ 9,551.2
		<u>FY 2015-2016</u>
BSF Pay-In Calculated for FY 2016		\$ 57.3
		<u>FY 2014-2015</u>
BSF Pay-Out Calculated for FY 2015		NO PAY-OUT

Notes:

⁽¹⁾ Personal Income and Transfer Payments, Administration Forecast, January 2015.

⁽²⁾ Detroit Consumer Price Index, Administration Forecast, January 2015.

Table 9
Budget and Economic Stabilization Fund Calculation
Based on CY 2016 Personal Income Growth
Administration Calculation

	CY 2015	CY 2016
Michigan Personal Income	\$ 421,738 ⁽¹⁾	\$ 440,295 ⁽¹⁾
less Transfer Payments	<u>\$ 92,820 ⁽¹⁾</u>	<u>\$ 97,556 ⁽¹⁾</u>
Income Net of Transfers	\$ 328,918	\$ 342,739
Detroit CPI	2.233 ⁽²⁾	2.261 ⁽²⁾
for 12 months ending	(June 2015)	(June 2016)
Real Adjusted Michigan Personal Income	\$ 147,271	\$ 151,579
Change in Real Adjusted Personal Income		2.9%
Excess over 2%		0.9%
GF-GP Revenue Fiscal Year 2015-2016		\$ 9,773.5
		<u>FY 2016-2017</u>
BSF Pay-In Calculated for FY 2017		\$ 88.0
		<u>FY 2015-2016</u>
BSF Pay-Out Calculated for FY 2016		NO PAY-OUT

Notes:

⁽¹⁾ Personal Income and Transfer Payments, Administration Forecast, January 2015.

⁽²⁾ Detroit Consumer Price Index, Administration Forecast, January 2015.

Table 10
Budget and Economic Stabilization Fund Calculation
Based on CY 2017 Personal Income Growth
Administration Calculation

	CY 2016	CY 2017
Michigan Personal Income	\$ 440,295 ⁽¹⁾	\$ 459,668 ⁽¹⁾
less Transfer Payments	<u>\$ 97,556 ⁽¹⁾</u>	<u>\$ 102,172 ⁽¹⁾</u>
Income Net of Transfers	\$ 342,739	\$ 357,496
Detroit CPI	2.261 ⁽²⁾	2.294 ⁽²⁾
for 12 months ending	(June 2015)	(June 2016)
Real Adjusted Michigan Personal Income	\$ 151,579	\$ 155,861
Change in Real Adjusted Personal Income		2.8%
Excess over 2%		0.8%
GF-GP Revenue Fiscal Year 2016-2017		\$ 10,045.8
BSF Pay-Out Calculated for FY 2017		FY 2016-2017 NO PAY-OUT

Notes:

⁽¹⁾ Personal Income and Transfer Payments, Administration Forecast, January 2015.

⁽²⁾ Detroit Consumer Price Index, Administration Forecast, January 2015.

School Aid Fund Revenue Adjustment Factor

The School Aid Fund (SAF) revenue adjustment factor for the next fiscal year is calculated by dividing the sum of current year and subsequent year SAF revenue by the sum of current year and prior year SAF revenue. For example, the FY 2014 SAF revenue adjustment factor is calculated by dividing the sum of FY 2013 and FY 2014 SAF revenue by the sum of FY 2012 and FY 2013 SAF revenue. The SAF revenue totals are adjusted for any change in the rate and base of the SAF taxes. The year for which the adjustment factor is being calculated is used as the base year for any tax adjustments. For FY 2015, the SAF revenue adjustment factor is calculated to be 1.0286 (See Table 11). For FY 2016, the SAF revenue adjustment factor is calculated to be 1.0324 (See Table 12). For FY 2017, the SAF revenue adjustment factor is calculated to be 1.0351 (See Table 13).

Table 11
Administration School Aid Revenue Adjustment Factor
For Fiscal Year 2015

	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>
Baseline SAF Revenue	\$11,279.6	\$11,562.8	\$11,930.6
Balance Sheet Adjustments	<u>(\$10.0)</u>	<u>(\$42.3)</u>	<u>(\$54.4)</u>
Net SAF Estimates	\$11,269.6	\$11,520.5	\$11,876.2
Subtotal Adjustments to FY 2015 Base	<u>(\$44.4)</u>	<u>(\$12.1)</u>	<u>\$0.0</u>
Baseline Revenue on a FY 2015 Base	\$11,225.2	\$11,508.4	\$11,876.2

School Aid Fund Revenue Adjustment Calculation for FY 2015

Sum of FY 2013 & FY 2014	\$11,225.2	+	\$11,508.4	=	\$22,733.6
Sum of FY 2014 & FY 2015	\$11,508.4	+	\$11,876.2	=	\$23,384.6

FY 2015 Revenue Adjustment Factor	1.0286
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Note: Factor is calculated off a FY 2015 base year.

Table 12
Administration School Aid Revenue Adjustment Factor
For Fiscal Year 2016

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
Baseline SAF Revenue	\$11,562.8	\$11,948.0	\$12,354.2
Balance Sheet Adjustments	(\$42.3)	(\$60.8)	(\$65.4)
Net SAF Estimates	<u>\$11,520.5</u>	<u>\$11,887.2</u>	<u>\$12,288.8</u>
Subtotal Adjustments to FY 2016 Base	<u>(\$23.1)</u>	<u>(\$4.6)</u>	<u>\$0.0</u>
Baseline Revenue on a FY 2016 Base	\$11,497.4	\$11,882.6	\$12,288.8
<u>School Aid Fund Revenue Adjustment Calculation for FY 2016</u>			
Sum of FY 2014 & FY 2015	\$11,497.4	+ \$11,882.6	= \$23,380.0
Sum of FY 2015 & FY 2016	\$11,882.6	+ \$12,288.8	= \$24,171.4

FY 2016 Revenue Adjustment Factor	1.0338
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Note: Factor is calculated off a FY 2016 base year.

Table 13
Administration School Aid Revenue Adjustment Factor
For Fiscal Year 2017

	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>
Baseline SAF Revenue	\$11,930.6	\$12,347.5	\$12,777.6
Balance Sheet Adjustments	(\$54.4)	(\$67.4)	(\$74.1)
Net SAF Estimates	<u>\$11,876.2</u>	<u>\$12,280.1</u>	<u>\$12,703.5</u>
Subtotal Adjustments to FY 2017 Base	<u>(\$19.7)</u>	<u>(\$6.7)</u>	<u>\$0.0</u>
Baseline Revenue on a FY 2017 Base	\$11,856.5	\$12,273.4	\$12,703.5
<u>School Aid Fund Revenue Adjustment Calculation for FY 2017</u>			
Sum of FY 2015 & FY 2016	\$11,856.5	+ \$12,273.4	= \$24,129.9
Sum of FY 2016 & FY 2017	\$12,273.4	+ \$12,703.5	= \$24,976.8

FY 2017 Revenue Adjustment Factor	1.0351
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Note: Factor is calculated off a FY 2017 base year.

Revenue Detail

The estimated tax and revenue totals include the effects of all enacted tax changes except sales tax savings resulting from reductions in revenue sharing payments to local units. The revenue totals by tax are presented separately for GF-GP and for the SAF (See Tables 14 and 15). Tax totals for the income, sales, use, CIT/MBT, tobacco and casino taxes for all funds are also included (See Table 16).

Table 14
Administration General Fund General Purpose Revenue Detail
(millions)

	FY 2015		FY 2016		FY 2017	
	Amount	Growth	Amount	Growth	Amount	Growth
GF-GP Tax Amounts						
Income Tax	\$5,986.3	5.8%	\$6,227.3	4.0%	\$6,498.0	4.3%
Sales	\$1,183.9	1.2%	\$1,245.6	5.2%	\$1,293.4	3.8%
Use	\$962.1	3.8%	\$902.2	-6.2%	\$655.6	-27.3%
Cigarette	\$179.9	-6.7%	\$177.6	-1.3%	\$173.9	-2.1%
Beer & Wine	\$52.0	1.6%	\$53.0	1.9%	\$54.0	1.9%
Liquor Specific	\$46.8	0.9%	\$47.4	1.3%	\$48.0	1.3%
Single Business Tax	(\$10.0)	NA	\$0.0	NA	\$0.0	NA
Insurance Co. Premium	\$412.0	13.7%	\$425.5	3.3%	\$440.0	3.4%
CIT/MBT	\$276.9	-79.4%	\$181.8	-34.3%	\$372.8	105.1%
Telephone & Telegraph	\$47.0	-2.1%	\$46.0	-2.1%	\$43.5	-5.4%
Oil & Gas Severance	\$62.5	2.5%	\$64.5	3.2%	\$66.5	3.1%
Essential Services Assess.	\$0.0	NA	\$55.0	NA	\$73.1	NA
GF-GP Other Taxes	(\$20.2)	NA	(\$19.2)	-5.0%	(\$18.2)	-5.2%
Total GF-GP Taxes	\$9,179.2	6.4%	\$9,406.7	2.5%	\$9,700.6	3.1%
GF-GP Non-Tax Revenue						
Federal Aid	\$36.6	18.4%	\$36.6	0.0%	\$36.6	0.0%
From Local Agencies	\$0.1	0.0%	\$0.1	0.0%	\$0.1	0.0%
From Services	\$7.2	0.0%	\$7.2	0.0%	\$7.2	0.0%
From Licenses & Permits	\$14.4	0.0%	\$14.4	0.0%	\$14.4	0.0%
Miscellaneous	\$9.8	12.6%	\$9.8	0.0%	\$9.8	0.0%
Driver Responsibility Fees	\$57.4	-24.8%	\$56.7	-1.2%	\$38.0	-33.0%
Interfund Interest	(\$3.0)	-1100.0%	(\$5.0)	66.7%	(\$5.0)	0.0%
Liquor Purchase	\$178.5	1.0%	\$181.0	1.4%	\$183.0	1.1%
Charitable Games	\$6.0	106.9%	\$6.0	0.0%	\$6.0	0.0%
Transfer From Escheats	\$65.0	-14.1%	\$60.0	-7.7%	\$55.0	-8.3%
Other Non Tax	\$0.0	0.0%	\$0.0	0.0%	\$0.0	0.0%
Total Non Tax	\$372.0	-5.4%	\$366.8	-1.4%	\$345.1	-5.9%
Total GF-GP Revenue	\$9,551.2	5.9%	\$9,773.5	2.3%	\$10,045.8	2.8%

Table 15
Administration School Aid Fund Revenue Detail

	FY 2015		FY 2016		FY 2017	
	Amount	Growth	Amount	Growth	Amount	Growth
School Aid Fund						
Income Tax	\$2,455.4	4.1%	\$2,546.3	3.7%	\$2,646.6	3.9%
Sales Tax	\$5,512.9	3.0%	\$5,724.7	3.8%	\$5,941.6	3.8%
Use Tax	\$481.1	3.7%	\$499.2	3.8%	\$518.1	3.8%
Liquor Excise Tax	\$46.4	0.9%	\$47.0	1.3%	\$47.6	1.3%
Cigarette & Tobacco	\$345.7	-3.8%	\$339.7	-1.8%	\$330.9	-2.6%
State Education Tax	\$1,849.3	2.5%	\$1,899.9	2.7%	\$1,966.9	3.5%
Real Estate Transfer	\$250.3	7.2%	\$264.0	5.5%	\$276.8	4.8%
Industrial Facilities Tax	\$36.1	7.8%	\$37.0	2.5%	\$37.0	0.0%
Casino (45% of 18%)	\$109.0	2.0%	\$109.0	0.0%	\$109.0	0.0%
Commercial Forest	\$3.5	2.9%	\$3.5	0.0%	\$3.5	0.0%
Other Spec Taxes	\$28.5	0.7%	\$28.5	0.0%	\$28.5	0.0%
Subtotal Taxes	\$11,118.2	3.1%	\$11,498.7	3.4%	\$11,906.5	3.5%
Lottery Transfer	\$758.0	3.3%	\$781.3	3.1%	\$797.0	2.0%
Total SAF Revenue	\$11,876.2	3.1%	\$12,280.1	3.4%	\$12,703.5	3.4%

Table 16
Administration Major Tax Totals

	FY 2015		FY 2016		FY 2017	
	Amount	Growth	Amount	Growth	Amount	Growth
Major Tax Totals (Includes all Funds)						
Income Tax	\$8,442.5	5.3%	\$8,774.4	3.9%	\$9,145.4	4.2%
Sales Tax	\$7,575.8	3.0%	\$7,865.7	3.8%	\$8,162.7	3.8%
Use Tax	\$1,443.2	3.8%	\$1,401.4	-2.9%	\$1,173.7	-16.2%
CIT/MBT	\$276.9	-86.5%	\$181.8	-34.3%	\$372.8	105.1%
Cigarette and Tobacco	\$913.5	-2.9%	\$901.2	-1.3%	\$882.6	-2.1%
Casino Tax	\$109.0	1.6%	\$109.0	0.0%	\$109.0	0.0%