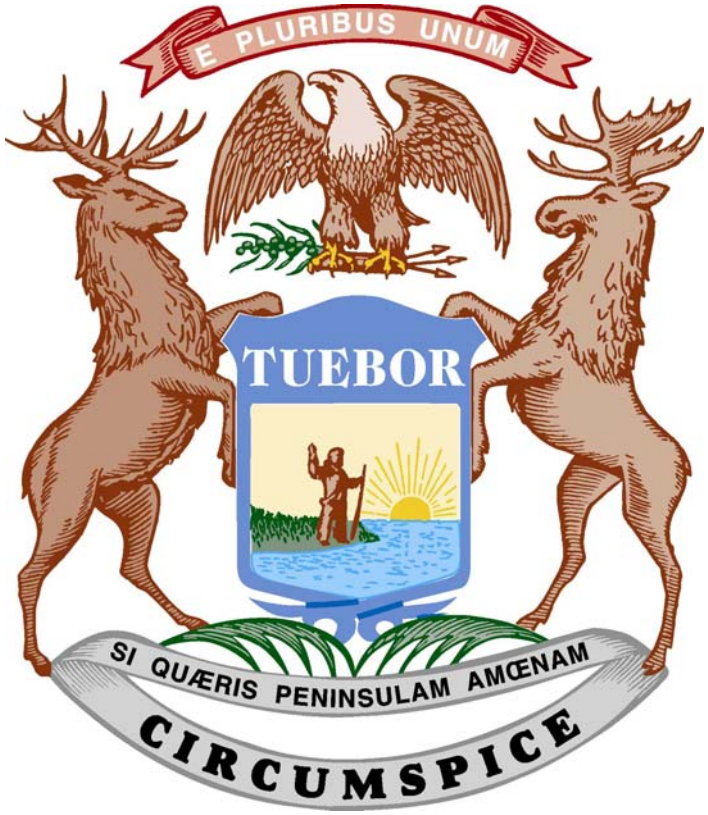
Administration Estimates Michigan Economic and Revenue Outlook



FY 2012-13, FY 2013-14 and FY 2014-15

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January 11, 2013

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ADMINISTRATION ESTIMATES
EXECUTIVE SUMMARY
January 11, 2013

Revenue Review and Outlook

- FY 2012 General Fund-General Purpose (GF-GP) revenue totaled $9,286.1 million, a 5.4 percent increase from 2011. FY 2012 School Aid Fund (SAF) revenue totaled $10,878.7 million, a 3.3 percent decrease from 2011. Tax restructuring and elimination of the Michigan Business Tax earmarking to the School Aid Fund are the primary reasons for the decline in 2012 SAF revenue.

- FY 2013 GF-GP revenue is forecast to decrease 4.8 percent to $8,836.4 million, down $133.5 million from the May 2012 Consensus estimate. FY 2012 SAF revenue is forecast to increase 2.5 percent to $11,151.8 million, which is $17.7 million below the May 2012 Consensus estimate.

- FY 2014 GF-GP revenue is forecast to increase 5.2 percent to $9,295.9 million, up $36.9 million from the May 2012 Consensus estimate. FY 2014 SAF revenue is forecast to increase 2.6 percent to $11,445.8 million, down $25.7 million from the May 2012 Consensus estimate.

- FY 2015 GF-GP revenue is forecast to increase 3.8 percent to $9,646.8 million. FY 2015 SAF revenue is forecast to increase 2.8 percent to $11,766.7.

2013, 2014 and 2015 U.S. Economic Outlook

- After increasing 1.8 percent in 2011, real gross domestic product grew an estimated 2.2 percent in 2012. Real GDP growth is expected to slow to 2.0 percent in 2013 before accelerating to 2.7 percent in 2014 and 2.9 percent in 2015.

- U.S. wage and salary employment rose 1.1 percent in 2011 and increased an estimated 1.4 percent in 2012. Wage and salary employment is expected to grow 1.4 percent in 2013 and then accelerate to 1.7 percent growth in 2014 and 1.9 percent growth in 2015.

- The U.S. unemployment rate is forecast to decline each year over the forecast horizon. The unemployment rate averaged an estimated 8.1 percent in 2012. The unemployment rate is projected to fall to 7.7 percent in 2013, to drop to 7.4 percent in 2014 and then decrease to 6.9 percent in 2015.

- In 2009, housing starts fell to a 50-year low (554,000 units) and then rose modestly in 2010 (5.9 percent) and 2011 (3.6 percent). Starts increased a sharp 27.8 percent (estimated) in 2012 and are forecast to rise 28.4 percent in 2013. In 2014, starts are expected to rise another

18.8 percent to 1.2 million units, which would mark the first year of starts in excess of 1.0 million units since 2007. Starts are then expected to rise moderately (7.4 percent) in 2015.

- Light vehicle sales are expected to post significant growth across the forecast. In 2012, sales rose to an estimated 14.3 million units from 12.7 million units in 2011. Sales in 2013 are expected to increase to 14.9 million units and then rise to 15.4 million units in 2014, marking the first year that sales would top 15.0 million units since 2007. Vehicle sales are expected to post further gains in 2015, rising to 15.9 million units.

- Consumer prices edged up an estimated 2.0 percent in 2012. Inflation is expected to slow very slightly to 1.9 percent in 2013. In 2014, prices will also rise 1.9 percent and then accelerate to 2.2 percent growth in 2015.

2013, 2014 and 2015 Michigan Economic Outlook

- In 2009, Michigan wage and salary employment plummeted 7.0 percent – the largest drop in over 50 years. After declining another 0.2 percent in 2010, employment increased 1.9 or 72,300 jobs in 2011 – marking the first increase since 2000. Employment grew again in 2012, by an estimated 1.3 percent. Employment growth is forecast to continue but slow to 0.9 percent in 2013 before accelerating to 1.3 percent in 2014 and 1.4 percent in 2015.

- The Michigan unemployment rate dropped from 12.7 percent in 2010 to 10.3 percent in 2011. The rate declined sharply in 2012 to an estimated 8.9 percent. The rate is expected to continue to drop over the forecast horizon to 8.8 percent in 2013, 8.2 percent rate in 2014 and 7.6 percent in 2015.

- After dropping 8.2 percent in 2009 (the largest percent decline since 1945), Michigan wages and salaries increased 1.7 percent in 2010, 5.5 percent in 2011 and rose an estimated 4.0 percent in 2012. Wage and salary payments are forecasted to rise 2.9 percent in 2013, 3.6 percent in 2014 and 3.9 percent in 2015.

- Michigan personal income fell 6.3 percent in 2009 – marking the first annual Michigan income drop since 1958 and the largest annual decline since 1938. Income increased 3.1 percent in 2010 and rose 5.6 percent in 2011. Personal income increased an estimated 3.8 percent in 2012. Personal income is expected to rise 2.6 percent in 2013, 4.4 percent in 2014 and 4.6 percent in 2015.

- On a fiscal year basis, Michigan disposable income is estimated to have risen 3.4 percent in FY 2012. Disposable income is expected to increase 2.5 percent in FY 2013, 3.2 percent in FY 2014 and 3.8 percent in FY 2015. Wages and salaries increased an estimated 4.6 percent in FY 2012 and are expected to rise 2.9 percent in FY 2013, 3.5 percent in FY 2014 and 3.8 percent in FY 2015.

Forecast Risks

- Continued and greater division among federal policymakers could substantially weaken consumer and investor confidence. Increased polarization also substantially limits the federal government's ability to respond to negative financial and macroeconomic shocks.

- Europe's widening financial crises may severely weaken the continent's economic growth and have negative financial and economic impacts on the U.S. economy.

- Political and military tensions have grown substantially since May 2012. Still greater unrest throughout the Middle East would seriously curtail world oil supplies, which, in turn, would dramatically raise oil and gasoline prices. Higher than forecast oil prices would lower consumers' discretionary income, increase many businesses' costs and depress economic activity.

- Substantially faster than forecast inflation would increase the likelihood of anti-inflation monetary policy, which would curtail economic growth.

- A stronger (weaker) housing market would boost (depress) the economy more than forecast.

- 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 term negative effect on confidence than assumed.

- Geopolitical factors, such as a domestic terrorist attack, would depress economic activity.

ECONOMIC REVIEW AND OUTLOOK
January 11, 2013

Current U.S. Economic Situation

Summary

In June 2009 (2009Q2), the Great Recession (the longest economic downturn (18 months/6 quarters) since the Depression ended – as determined by the National Bureau of Economic Research. Over the recession's six quarters, real GDP fell 4.7 percent – the greatest recessionary decline on record (dating back to 1948).

Real Gross Domestic Product (GDP) has grown each quarter since the recession's end (2009Q3 – 2012Q3). However, given the Great Recession's severity coupled with the modest recovery following the Recession, it required nine quarters (2009Q4-2011Q4) into the recovery before the U.S. economy returned to the level it was at prior to the Great Recession. In the previous ten recessions, it had taken no more than three quarters for post-recession real GDP to exceed real GDP at the recession's outset.

Real GDP growth accelerated to a 4.1 percent annual rate in 2011Q4 but then slowed to 2.0 percent in 2012Q1 and to 1.3 percent in 2012Q2. In the most recently reported quarter (2012Q3), real GDP accelerated to 3.1 percent growth. 2012Q3 real GDP was 7.5 percent larger than at the end of the Great Recession (2009Q2) but only 2.5 percent larger than real GDP at the recession's start.

Over the course of the recession, **U.S. wage and salary employment** shrank by 5.4 percent – the greatest recessionary employment decline since 1945. In addition, employment declined in the first eight months of the current recovery. As a result, between December 2007 and February 2010, the U.S. lost a net 8.7 million jobs (-6.3 percent). In early 2010, wage and salary employment recorded substantial gains between March and May (totaling 944,000 jobs) -- boosted significantly by temporary Census worker hiring. However, in part depressed by the end of many temporary Census jobs, the economy lost a net 303,000 jobs between June and September.

Employment has risen each month since October 2010 with a cumulative gain of 4.0 million jobs. In sharp contrast to a 5.1 million jobs decline in 2009, employment rose 1.0 million jobs in 2010 and added another 1.8 million jobs in 2011. Through November 2012, employment has increased by 1.7 million jobs in 2012. Consequently, the U.S. labor market has gained a net 3.3 million jobs since the Great Recession ended. However, November 2012 jobs still remain 4.1 million lower than at the beginning of the recession.

Housing Market

House Construction and Sales

In calendar year 2011, **housing starts** rose only slightly (3.6 percent) from 2010. Furthermore, at 608,800 units in 2011, starts remained below 1.0 million units for the fourth consecutive year. Through November, year-to-date (y-t-d) 2012 starts (seasonally adjusted annual rate) have averaged fewer than 800,000 units. Thus, 2012 will undoubtedly mark the fifth straight year that starts totaled less than 1.0 million units. Prior to 2008, starts had never fallen below 1.0 million since at least 1959. Performance over the past five years stands in sharp contrast to the 2.1 million units in 2005 or even the 1.8 million units and 1.4 million units in 2006 and 2007, respectively. However, recently the housing market has shown signs of recovery. In September 2012, the annualized starts rate rose above 800,000 units for the first time in four years. Further, the starts rate remained above 800,000 in both October and November (U.S. Census Bureau).

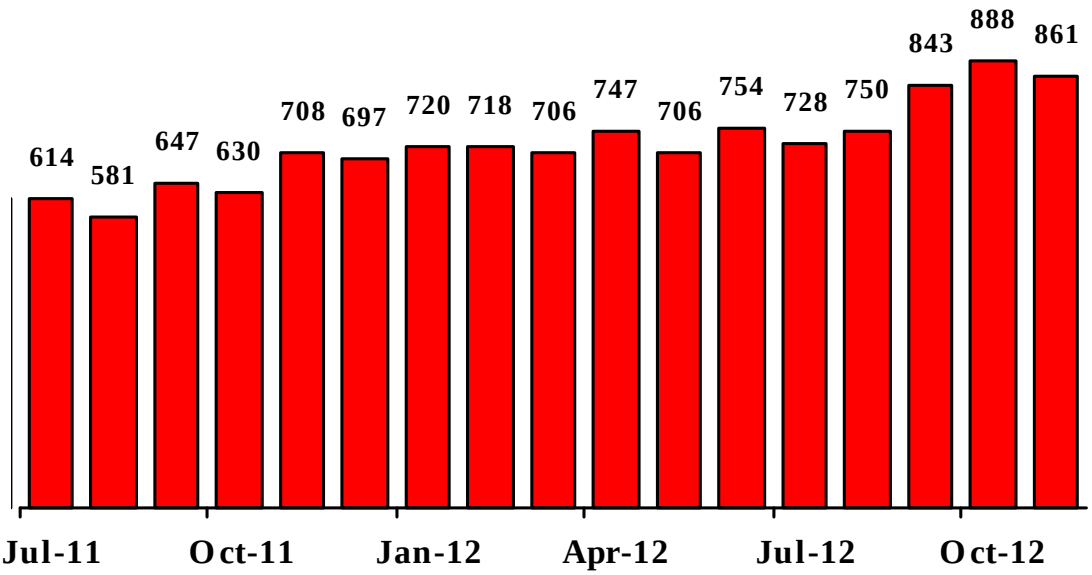
The **National Association of Home Builders (NAHB) sentiment index's** performance since the May 2012 Conference clearly points to sector recovery. Since April 2012 (the last month available before the May Conference), the index has risen each month. As a result, the index nearly doubled between April and December – rising from 24 to 47 – the index's highest reading since April 2006.

In 2011, **new home sales** declined for the sixth straight calendar year. Each year between 2009 and 2011, inclusive, new home sales fell to a new record low since at least 1963. At 306,000 units, CY 2011 new home sales were down 5.3 percent from 2010 and down 76.1 percent from 2005's record high. However, quarterly sales (seasonally adjusted annual rate) have risen in each of the past four quarters. In addition, the 2012Q3 rate (367,000 units) was up 23.0 percent from a year ago and represented the highest sales rate in nearly three years (U.S. Census Bureau).

Existing home sales changed little between 2009 and 2011, inclusive. 2011 sales (4.26 million units, seasonally adjusted annual rate (SAAR)) were up slightly from 2010 (1.7 percent) but down somewhat from 2009 (-1.8 percent). Through November 2012, year-to-date existing home sales have averaged 4.64 million units – 9.0 percent higher than calendar year 2011 sales. In each of the past 17 months, monthly sales were up compared to a year earlier. The November 2012 existing home sales rate represented the highest rate since late 2009 (National Association of Realtors).

Finally, the November 2012 **pending home sales index** rose 1.7 percent from a month earlier and was up 9.8 percent from November 2011 – marking the 19th straight monthly increase from year-ago levels. Excluding months affected by the home tax credit, the November 2012 reading represented the index's highest level in more than five years (National Association of Realtors).

Housing Starts Rising But Remain At Historically Low Levels



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

House Prices

House price data has been mixed:

- In January 2012, the **Freddie Mac Home Price monthly index** dropped to its lowest reading in nine years. Since January, the index has risen each month through September (the most recent month available). However, the index's 2012Q3 average was up only 3.1 percent from a year earlier and was down 2.0 percent from 2010Q3. The 2012 monthly average through September was essentially unchanged compared to the first nine months of 2011 (+0.1 percent).

- Between October 2011 and October 2012, the **Core Logic Home Price Index** rose 6.3 percent – the eighth straight monthly increase from the year-ago level and the largest such increase since June 2006.

- The **Federal Housing Finance Agency's (FHFA) purchase-only home price index (HPI)** has reported monthly increases in 11 of the 12 most recent months for which data are available (November 2011 to October 2012, seasonally adjusted). As a result, the October 2012 index was up 5.6 percent from a year earlier. Further, in October 2012, the

index recorded its ninth straight monthly increase. However the October reading remains 15.7 percent below the index's all-time peak set in April 2007.

- The **Census Bureau's November 2012 median new home sales price** was up 14.9 percent from a year ago. In comparison, the median price increased 8.8 percent between March 2011 and March 2012 (the last month available prior to the May Conference). Between March 2012 and November 2012, the median price was down 2.7 percent. Compared to the record high median price set in March 2007 ($262,600), the November 2012 price was down 6.2 percent.

- According to the **National Association of Realtors, the median existing-house price** was up 10.1 percent from November 2011 to November 2012. Further, November 2012 marked the ninth straight monthly increase from the year-ago level.

- In February 2012, the **S&P/Case Shiller 20-city home price index** (seasonally adjusted) reported its second month-over-month increase since June 2010. June 2012 represented the index's first year-over-year increase since September 2010. Consequently, the October 2012 index was up 4.3 percent from a year earlier. However, the October 2012 reading remains 30.3 percent below the index's peak reading (April 2006).

Repercussions

The depressed housing market and concomitant home price declines -- along with a weak jobs market – have had serious repercussions including high delinquency and foreclosure rates, sharp drops in homeowner equity and consumer net worth and lower stock prices. While many factors are still poor, some have recently improved.

The most recent **Mortgage Bankers Association's (MBA) National Delinquency Survey,** released in November, 2012 showed substantial improvements from early 2010 but delinquency rates remain significantly higher than pre-recession levels. MBA reported that the mortgage delinquency rate decreased to a seasonally adjusted rate of 7.4 percent of all loans outstanding in 2012Q3. Compared to a year ago, the rate was down 59 basis points. The 7.4 percent rate is halfway between the rate's peak in 2010Q1 (10.1 percent) and the pre-recession rate (roughly 5.0 percent).

In 2012Q3, **foreclosure sales** were up 21 percent from 2012Q2 but were three percent lower than 2011Q3 based on data from RealtyTrac. In 2012Q1, foreclosures fell to their lowest level since 2007Q4; however, the reduction in foreclosures was largely due to a sizeable number of potential foreclosures that were on hold pending a settlement surrounding questionable foreclosure methods employed by many financial institutions. A settlement was reached in early January 2013.

In 2012Q3 **homeowner real estate equity** was down $5.8 trillion from its 2006Q1 peak. At 44.8 points, the 2012Q3 homeowner equity rate was off 14.6 percentage points from 2006Q1 but 7.6 points higher than its all-time low (2009Q1). Over the past year, homeowner equity increased $1.2 trillion and the equity rate rose by 4.8 percentage points. As a result, 2012Q3

real estate equity represented the highest equity level since 2008Q3 and the highest equity rate since 2008Q1 (Federal Reserve Bank, *Flow of Funds Accounts of the United States*).

During the Great Recession, **household net worth** dropped by $13.7 trillion (-20.7 percent). Thus far, during the subsequent economic recovery, household net worth has regained a net $12.4 trillion – leaving 2012Q3 net worth only 1.9 percent lower than at the beginning of the Great Recession. 2012Q3 marks the highest level of net worth since 2007Q4. Over the past year alone, household net worth has risen substantially ($6.1 trillion) -- accounting for nearly half of net worth's increase during the recovery (Federal Reserve, *Flow of Funds Accounts of the United States*).

Mortgage rates remain very near record lows, while overall housing affordability remains historically high. In November 2012, mortgage rates fell to a record low of 3.31 percent for a 30-year fixed mortgage rate. Through mid-December 2012, mortgage rates have risen only slightly – increasing to 3.37 percent (Freddie Mac). After reaching a record high in February 2012, the **National Association of Realtors housing affordability index** fell in each of the following four months. The index then rose each month between July and October (the latest data month available), inclusive. As a result, the October 2012 affordability index reading was 5.5 percent below the index's record high, but the median U.S. family income was still nearly twice the income needed to purchase a median-price home.

The **stock market (Wilshire 5000)** ended 2011 down 1.3 percent compared to the end of 2010. By the end of April 2012, the Wilshire 5000 was up 11.4 percent from the end of 2011. However, the index then trended downward through early June 2012 at which point the index was up only 1.5 percent from the end of 2011. The index then headed upward through mid-September at which point the index was up 16.5 percent for the year. The Wilshire 5000 trended downward through mid-November before heading up again. Between the end of 2011 and end of 2012, the Wilshire rose 13.6 percent.

Monetary Policy

Interest Rates

Between September 2007 and December 2008, the Federal Reserve cut the target federal funds rate ten times and the discount rate eleven times. At its December 16, 2008 meeting, the Federal Open Market Committee (FOMC) took an unprecedented step and lowered the **target federal funds rate** range to 0.00 percent to 0.25 percent. At the same time, the FOMC cut the **discount rate** to 0.50 percent, its lowest level since the 1940s.

Over the past three years, the FOMC has kept its rates at their exceptionally low levels set at its December 2008 meeting. The FOMC first anticipated that the conditions would warrant the low rates simply "for some time." The FOMC then saw warranting conditions "for an extended period of time." However, at its August 9, 2011 meeting, the FOMC stated that the Committee anticipated the need for the low rates though mid-2003. Further, at its first 2012 meeting, the

FOMC pushed the likely date forward from mid-2003 to mid-2004. At its September 13, 2012 meeting, the FOMC pushed the likely date to mid-2005. At the FOMC's December 12, 2012 meeting, the Committee stated that the low rates would be:

> appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.

By tying the need for the low rates to economic conditions, rather than a date, the Committee Chairman Bernanke explained:

> The modified formulation makes more explicit the FOMC's intention to maintain accommodation as long as needed to promote a stronger economic recovery in the context of price stability, a strategy that we believe will help support household and business confidence and spending. By tying future monetary policy more explicitly to economic conditions, this formulation of our policy guidance should also make monetary policy more transparent and predictable to the public.

Additional Recent Federal Reserve Bank Actions

In addition to maintaining key interest rates at record low levels, the Federal Reserve (Fed) also addressed the financial and economic crises by injecting substantial liquidity into financial markets. Between mid-September 2008 and mid-December 2008, Federal Reserve Bank credit more than doubled from $891.5 billion to $2,236.9 billion.

In a second round of **quantitative easing** (QE2), The Fed purchased an additional $600 billion of longer-term Treasuries between November 2010 and June 2011. As a result, Federal Reserve Bank credit rose to $2,843.2 billion – then a record high and more than three times its mid-September 2008 level. In late December 2011, Federal Reserve Bank credit stood at $2,920.2 billion – more that three times Fed credit in mid-2008 and an all-time record high. Since late December 2011, Fed credit has fluctuated and dropped slightly. Mid-April 2012 Fed credit totaled $2,865.9 billion – only 1.9 percent lower than the record level set late-December 2011.

At its September 2011 meeting, the Fed announced that, by June 2012, it would purchase $400 billion of longer-term Treasuries while selling $400 billion in shorter-term Treasuries **(Operation Twist)** over the same time period. In doing so, the Fed is aiming to depress longer-term interest rates and thus "contribute to a broad easing in financial market conditions that will provide additional stimulus to support the economic recovery." Faced with a still sluggish economy, the FOMC, at its June 20, 2012 meeting, extended Operation Twist through the end of 2012.

At its September 13, 2012 meeting, the FOMC reaffirmed Operation Twist through the end of the year and, announced a third round of quantitative easing (QE3) under which the FOMC would purchase additional mortgage-backed securities at a pace of $40 billion per month. Finally, at its December 12, 2012 meeting, the FOMC announced that, when Operation Twist

ends at the end of 2012, the Fed would begin to purchase an additional $45 billion per month in longer-term Treasury securities.

Fiscal Policy

In late-2012, concerns came to a head that the federal government would fail to reach the agreements, by the end of 2012, necessary to prevent sharp across-the-income-spectrum tax increases in addition to dramatic across-the-board spending cuts and go over the "fiscal cliff". The Congressional Budget Office projected that failure to avoid going over the cliff would push the U.S. economy into recession. In very early January 2013, the federal government enacted legislation to avoid going over the fiscal cliff – at least temporarily.

Under the legislation:

- For filers with incomes over $400,000 (single filers) or $450,000 (joint filers):
  - The top income tax rate would rise from 35.0 percent to 39.6 percent.
  - The top investment rate on long-term capital gains and dividends would rise from 15 percent to 20 percent. For taxpayers below the thresholds, the top rate would permanently be set at 15 percent.
- Essentially 99 percent of income taxpayers would see no *income* tax increase. However, the payroll tax rate would return to 6.2 percent from its temporarily lowered 4.2 percent. The tax rate increase would increase taxes for over ¾ of U.S. households.
- The alternative minimum tax would be permanently indexed to inflation.
- Several provisions that will reduce income tax liability would be extended for varying periods.
- The estate and gift tax exemption would remain $5 million or more per individual. However, the current 35 percent top tax rate on amounts above the exemption would increase to 40 percent.

On the spending side, the deal would extend unemployment benefits for another year. However, the proposal would delay, for only two months, the need for the federal government to take action to avoid sharp automatic spending cuts. In addition, Congress will need to vote on raising the federal government debt ceiling in about two months as well. Consequently, the federal government will face another fiscal cliff in early March 2013.

The U.S. military's troop scale back in Afghanistan will significantly reduce federal spending. .

In late December 2009, the U.S. Treasury Department said it would cover an unlimited amount of losses at mortgage giants Fannie Mae and Freddie Mac through 2012. The U.S. government now, directly or indirectly, underwrites nine of every 10 new residential mortgages, nearly twice the percentage before the crisis.

Inflation

In March 2011, **oil prices** rose above $100 per barrel for the first time since 2008 – rising to $102.94. Oil prices rose further in April – increasing to $110.04. Between May and October, oil prices trended downward – falling to $86.41 per barrel by October. However, oil prices rose each month between November 2011 and March 2012 ($106.19) before falling to $103.33 in April. Since May, oil prices have remained below $100 per barrel with prices fluctuating between $80 and $95 per barrel. In December 2012, oil prices stood at $88.25 per barrel. However, oil prices remain well above pre-2000 prices, when prices never rose above $40 per barrel (January 1946 - December 1999). (Federal Reserve Bank of St. Louis).

Between late December 2008 and May 2011, **gasoline prices** rose from $1.59 a gallon to $3.91 a gallon (Energy Information Administration, conventional regular U.S. average). Gasoline prices have fluctuated since mid-2011, but have remained above three dollars a gallon. Gasoline prices trended downward through mid-December 2011 – dropping to $3.18 a gallon and then trended upward and rose to $3.88 a gallon by early April 2012. Beginning in mid-April, gasoline prices declined – falling to $3.29 per gallon by July. Gasoline prices then trended upward – rising to $3.83 per gallon by mid-September before heading downward again. By late December, gasoline prices had fallen to $3.20 per gallon. However, gasoline prices remain historically high. In the 1990s, gasoline prices never rose above $1.35 a gallon.

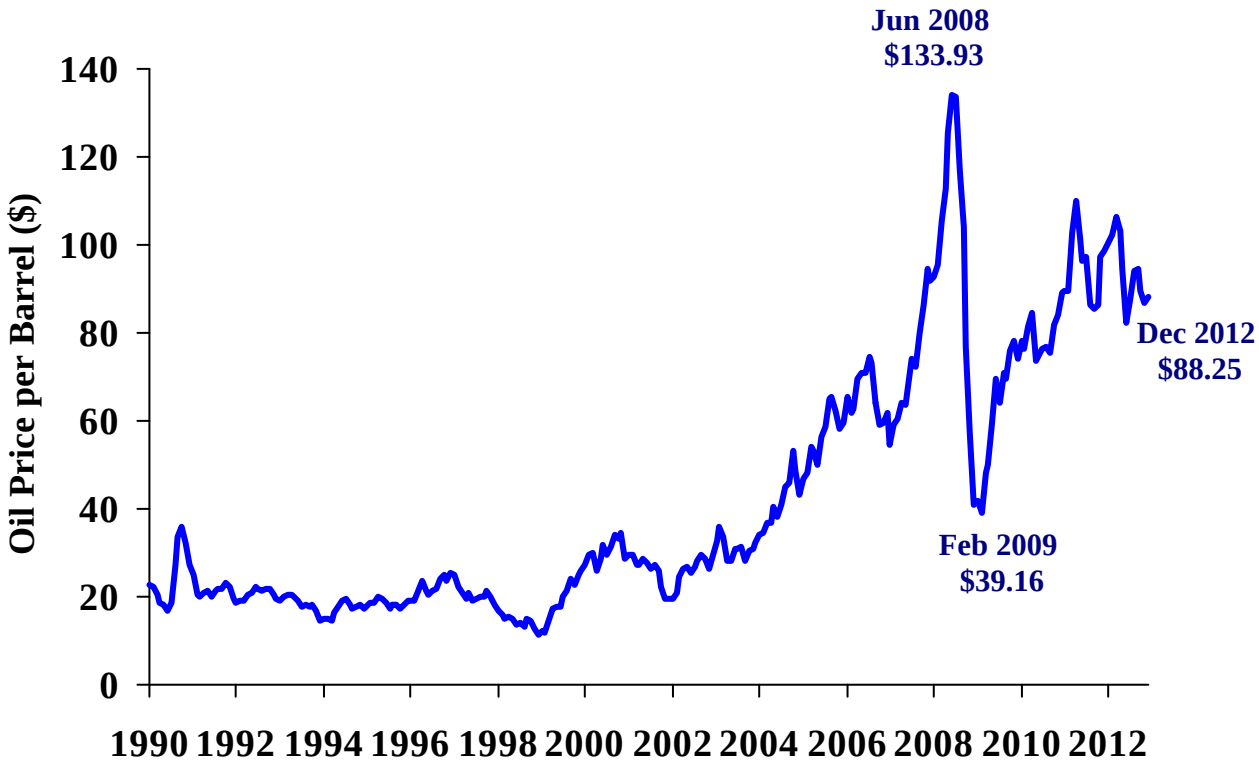
In calendar year (CY) 2011, **consumer prices** increased 3.2 percent. The increase follows a 0.4 percent decline in CY 2009 and a 1.6 increase in CY 2010. Year-to-date through November 2012, the consumer price index is up 2.1 percent. Core consumer price inflation (excluding food and energy) has remained relatively tame over the past four years with core prices rising 1.7 percent in 2011 following core inflation of 1.7 percent in 2009 and 1.0 percent in 2010. Through the first eleven months of 2012, core prices are up 2.1 percent.

Producer prices rose 6.0 percent in CY 2011, due primarily to increases in fuel prices. In contrast, 2011 core producer prices (excluding food and energy) were up only 2.4 percent. Year-to-date through November 2012, overall producer prices increased 2.0 percent while core producer prices were up 2.6 percent.

Following an aberrantly high October 2012 reading (103.6), the **Economic Cycle Research Institute's (ECRI) future inflation gauge (FIG)** fell to 102.5 in November. ECRI cautions, "Despite its latest dip, the USFIG remains above the lows of the summer . . . Thus, U.S. inflation pressures are still somewhat elevated." However, Economy.com sees the FIG's 2012 readings, taken collectively, as supporting its own forecast for tame inflation in CY 2013.

At its December 12, 2012 meeting, the **Federal Open Market Committee s**tated, "Inflation has been running somewhat below the Committee's longer-run objective, apart from temporary variations that largely reflect fluctuations in energy prices. Longer-term inflation expectations have remained stable."

Oil Prices Falling but Still Sharply Up from Early 2009



Source: Federal Reserve Bank of St. Louis

Major Economic Indicators

In the heart of the Great Recession (December 2008), the **ISM manufacturing index (PMI)** fell to 33.1 – the index's lowest reading since June 1980. However, by August 2009, the PMI had risen above the key 50.0 threshold (readings over 50.0 indicate sector expansion). The index remained above 50.0 in each month between August 2009 and May 2012. Over these 34 months, the PMI peaked at 59.9 – the index's highest reading since June 2004. Over the seven months of index data not available until after the May 2012 Consensus Conference (May 2012-November 2012), the ISM manufacturing index has alternately signaled slight sector growth or slight sector declines. Over these seven months, the index has averaged 50.8 -- 2.3 points lower than the average of the seven index readings available directly prior to the May Conference (53.1). The November 2012 ISM manufacturing index reading (49.5) was 2.7 points below the index's November 2011 reading. In addition, the November 2012 index represented the lowest PMI reading since July 2009.

Midway through the 2007-2009 recession, in November 2008, the **ISM non-manufacturing index (NMI)** fell to 37.6 -- its lowest reading in at least 11 years. Then – albeit haltingly – the NMI increased to 50.2 by September 2009. September 2009 marked the first month that the index signaled sector growth in just over a year. Between September 2009 and November 2012, the index signaled growth in all but two months (November and December 2009) when the index fell slightly below 50.0. November 2012 marked the 35th straight month that the NMI signaled sector growth. Compared to a year ago, the November 2012 mark was 2.1 points higher than a year earlier. In the seven months of index data reported since the May Conference, the NMI averaged 53.7 -- 0.8 point lower than the average of the seven months available directly prior to the May Conference.

Industrial production, based on a three-month moving average, increased each month from March 2010 to November 2012 after experiencing dramatic declines during the Great Recession. However, after accelerating to 7.8 percent in July 2010, increases slowed through July 2011 when the year-over-year gain slowed to 3.2 percent. Between July 2011 and February 2012, gains grew larger with the average rising 4.5 percent between February 2011 and February 2012. Over the next five months, the growth ranged narrowly between 4.4 percent to 4.7 percent. However, growth has slowed in recent months with y-o-y increases slowing in November to 2.4 percent – the smallest y-o-y increase since March 2010.

Between February 2008 and July 2009, the three-month moving average of **capacity utilization** fell every month compared to the prior month. As a result, the average fell to a record low (67.1 percent) for the series which dates back to 1967. Between August 2009 and March 2012, the average rose in all but one month with a net increase totaling 11.6 points. Over the next four months (April 2012 – July 2012) the average changed very little – ranging between 78.7 points and 78.9 points. The average dropped each month between August 2012 and October 2012, inclusive before rising very slightly in November. The November 2012 average was 0.7 point higher than a year earlier. However, the November 2012 average represented the second lowest 2012 reading and was 2.3 points lower than the average in December 2007 (the first month of the Great Recession).

New durable goods orders experienced double-digit percentage declines each month in 2009 based on a new durable goods orders three-month average compared to the year-ago level. In sharp contrast, the new durable goods orders three-month average experienced double-digit y-o-y increases each month between February 2010 and May 2011. Over each of the following six months, the three-month moving average then recorded single-digit y-o-y increases each month. The average then recorded double-digit increases between December 2011 and February 2012. After registering single-digit increases between May 2012 and August 2012, the average then fell slightly over the following two months. In November 2012, the three-month average was up 2.0 percent from November 2011. The three-month average of core new capital goods rose y-o-y each month between February 2012 and June 2012. However, the average has declined in each month since June 2012. In November 2012, the three-month average was down 4.5 percent compared to a year earlier.

In October 2008, the three-month average of **retail sales** fell compared to a year ago for the first time in a history extending back to 1992. Each month between October 2008 and November

2009, the three-month average fell compared to a year ago. However, declines lessened beginning in the second half of 2009. As a result, while retail sales were down 11.1 percent in May 2009 from a year earlier, the three-month average dropped just 3.2 percent between November 2008 and November 2009. Over the first eight months of 2011, year-over-year increases trended upward so that by August 2011 the three-month average was up 8.9 percent from a year earlier. Year-over-year increases then grew smaller each month between September 2011 and August 2012. As a result, the August 2012 three-month average was up only 4.1 percent from a year ago. The y-o-y increase grew to 4.8 percent in September 2012, but shrank in both October and November so that between November 2011 and November 2012, the three-month average rose 4.3 percent.

In November 2008, the **University of Michigan index of consumer sentiment** fell to 55.3 – a 28-year record low. The index then haltingly trended upward through June 2010 with sentiment rising to 76.0. In July 2010 the index fell sharply – dropping to 67.8 before trending upward into February 2011 when sentiment rose slightly above its mid-2010 level to a three-year high (77.5). However, the index then trended downward through August 2011 when the index fell to 55.8 – a 33-month low. Over the following nine months, the index rose each month. By May 2012, the index had risen to 79.3. After falling in June and July, the index rose each month between July and November. At 82.7, the November index represented the index's highest reading in over five years. The index, under the weight of fiscal cliff concerns, fell sharply (-9.8 points) in December 2012. The December 2012 reading was still 3.0 points higher than in December 2011. However, at 72.9, the December 2012 index represented the second lowest reading recorded in 2012. Further, the December 2012 reading was 21.2 points lower than the index's average over the ten years directly prior to the Great Recession.

Consumer Sentiment Falls Sharply Just After Setting Five Year High
Still At Historically Low Levels

Source: University of Michigan Survey of Consumers.

In 2011Q1, the **Conference Board Measure of CEO Confidence** rose to 67.0 – the index's highest reading in over two years. The index fell sharply in each of the next two quarters – losing a combined 25 points over the two quarters – falling to 42.0 in 2011Q3. The index regained 21 of the 25 lost points in the two following quarters. As a result, the measure stood at 63.0 in 2012Q1 – the most recent quarter available prior to the May Consensus Conference. In the two quarters available since the May Conference (2012Q2 and 2012Q3), the index dropped a combined 21 points to 42.0 points -- matching the measure's reading a year earlier. Commenting on the 2012Q3 data release (the most recent available), the Conference Board observed:

> This latest report reflects ongoing concern about the strength of the economy. CEOs' assessment of current conditions remains weak and they have grown increasingly pessimistic about the short-term outlook. Sluggish growth and a persistent cloud of uncertainty have played a role in CEOs curtailing spending plans this year.

In November 2012, the **National Federation of Independent Business Optimism index** dropped 5.6 points from October 2012. At 87.5 (1984 index value equals 100), the November 2012 index value represented the NFIB index's lowest reading since March 2009. Excluding readings during the Great Recession, the November 2012 index represented the second lowest value in the monthly index's history, which dates back to 1986. In addition, prior to 1986 when the survey was conducted on a quarterly basis, only two readings were below the December 2012 level.

The **Conference Board index of leading economic indicators (LEI)** has alternately risen and then fallen since April 2012. As a result, according to the most recent release, the November 2012 index value is little changed compared to the index value just prior to the May 2012 Conference. In contrast, according to the LEI release just prior to the time that the Administration's May Conference Report was completed, the LEI recorded monthly increases each month between September 2011 and March 2012 with the index growing at a 5.4 percent annual rate over the six-month period.

The **Economic Cycle Research Institute (ECRI) weekly leading index growth rate** indicated worsening conditions from mid-April 2011 through late October 2011. By mid-August 2011, the growth rate had turned negative, pointing toward a contracting economy. The growth rate continued to worsen until mid-October 2011. Fluctuating through the end of the year, the rate had only slightly improved by late December. In early 2012, the growth rate saw substantive improvements each week through the first week of April. The growth rate turned positive in late March, indicating a growing economy. However, the rate slowed over the balance of April with growth turning flat by the end of April. The rate turned negative in late May and the rate of decline accelerated over the next month. The rate of decline then slowed between late June and mid-August at which point the growth rate turned positive. Growth accelerated between late-August and mid-October, but slowed between mid-October and late-November. However, over the first half of December, the growth rate has accelerated.

Employment

At the end of the Great Recession, the four-week average of **initial unemployment claims** stood at 601,000 – dramatically above the key 400,000 threshold. In mid-October 2011, the average fell below 400,000 for the first time since the recession's end. Between late October 2011 and mid-November 2012, the average remained under 400,000. Between late October 2011 and late March 2012, the average trended downward – falling to 363,000 by the last week in March. The average increased between early April and mid-June – rising to 387,500. The average then trended downward over the next two months with the average falling to 364,500 by mid-August. However, the average rose in each of the following five weeks with the average rising to 378,500 in mid-September. In the next three weeks, the average nearly erased its gains in the prior five weeks with the average falling to 364,750 in early October. However, the average rose sharply over the next month. As a result, in late November the average rose above 400,000 for the first time in over a year. However, after remaining above the key threshold for only one additional week, the average reported sharp declines in each of the first three weeks in December. As a result, by late December the average fell to 356,750 – the average's lowest mark since mid-March 2008.

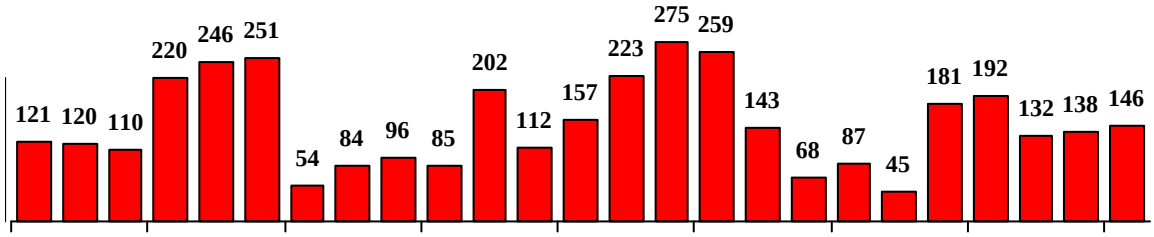
The **U.S. unemployment rate** rose sharply between April 2008 and October 2009. Over this period, the unemployment rate doubled, rising from 5.0 percent to 10.0 percent – the highest monthly rate since June 1983. Between October 2009 and April 2012, the rate trended downward – although haltingly. By April 2012, the rate had fallen to 8.1 percent, but then edged up and by July 2012, it had risen to 8.3 percent. However, the rate fell below 8.0 percent in September 2012 and has remained below 8.0 percent through November 2012. In November 2012, the rate stood at 7.7 percent – the lowest rate since December 2008.

November 2012 marked the 27th straight month in which **household employment** was higher than a year earlier. The November 2012 employment level was 2.6 million persons above a year earlier and was 3.3 million persons higher than June 2009 (the last month of the recession). However, the November 2012 employment level was 3.0 million persons lower than December 2007 (first month of the Great Recession). In November 2012, 2.7 million fewer persons were classified as unemployed than in June 2009.

Between February 2008 and February 2010, **wage and salary employment** fell every month, declining 8.8 million jobs to its lowest level since July 1999. With the exception of the months June 2010 through September 2010, wage and salary employment has risen each month since March 2010. On net, employment has risen by 4.6 million jobs between March 2010 and November 2012. Compared to a year ago, November 2012 employment is up by 1.9 million jobs. In 2011, gains averaged 153,000 jobs per month. Through the first eleven months of 2012, increases have averaged 151,500 per month.

Compared to June 2009 (the last month of the recession), November 2012 wage and salary employment is up by 3.3 million jobs. Nevertheless, November 2012 employment remains 4.1 million jobs below employment in December 2007 (the recession's first month).

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



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

Between July 2006 and January 2010, **manufacturing sector employment** fell every month. Over this period, the sector lost 2.8 million jobs. Manufacturing employment job losses were particularly severe between late 2008 and the first half of 2009. Between February 2010 and November 2012, manufacturing employment has increased in 28 of 34 months. On net, the sector gained 496,000 jobs over this period. In the past year, manufacturing employment has risen by 174,000.

While manufacturing employment is up by 229,000 jobs compared to the end of the Great Recession, sector employment is down by 2.0 million jobs compared to the start of the recession. Further, during the seven months of data newly available since the May 2012 Conference (May-November), sector employment has fallen in three of the four most recent months. On net, over the past seven months, manufacturing employment has increased by only 12,000 jobs. In contrast, manufacturing sector employment rose by 134,000 jobs in the first four months of 2012. In three of the most recent four months (August-November), manufacturing employment fell with a net loss of 26,000 jobs.

Construction employment is *down* by 493,000 jobs since the end of the recession (June 2009) and is down by 2.0 million jobs (-26.4 percent) compared to December 2007. Over the past year, construction employment is down by 32,000 jobs. In four of the most recent seven months, construction employment has fallen with an overall net decline of 28,000 jobs over the seven months.

The **ISM manufacturing employment index** has improved dramatically from early 2009. In 2009Q1, the index averaged 27.6 (a record low for a series that dates back to 1948). In 2011Q1, the index averaged 61.3 – the highest quarterly reading since 1973Q1. The index signaled an improving sector employment picture every month between October 2009 and October 2012. In November 2012, the index dropped below 50.0 to 48.4. In the first half of 2011, the index averaged 60.6 with five of the six monthly readings above 60; however, the average fell to 54.2 during the second half of 2011. During the first six months of 2012, the index averaged 55.7, but has averaged just 51.8 from July through November.

In 24 of the past 26 months (September 2010 to November 2012), the **ISM non-manufacturing employment index** has signaled growing sector employment (reading above 50.0). In the first four months of 2012, the index remained solidly over 50.0 each month with a 56.0 average reading. Since April, the index has fluctuated between 49.3 and 54.9 with an average reading of 51.8. In November 2012, the index stood at 50.3 – unchanged from a year ago.

The **National Federation of Independent Business net percent of small businesses planning to increase employment** has remained weak throughout 2012. The net percent fell each month between December 2011 and March 2012. In March 2012, the net percent fell to 0. In April 2012, the net percent rose to five percent. However, with the exception of August 2012, when the index rose to 10, the index has remained within a narrow range from three to six during 2012. According to NFIB, the net percent should be in double digits during an expansion.

Vehicle Sales and Production

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. In 2010, sales rose to 11.6 million units and, in 2011, light vehicle sales increased to 12.7 million units. Nevertheless, 2011 sales were below the 13.2 million units sold in 2008 and substantially lower than the 16.1 million unit sales in 2007. Further, 2011 marked the fourth year of sub-10 million unit sales of domestically made vehicles – the first such string since the early 1980s.

During the first four months of 2012, light vehicle sales averaged 14.1 million units (seasonally adjusted annual rate) – up significantly from the first four months of 2011. In the seven months for which data were released after the May Conference (May-November), the average rose to 14.5 million units. So far in 2012, light vehicle sales have averaged 14.4 million units. After Hurricane Sandy lowered the October 2012 sales rate to 14.2 million units, the rate rebounded to 15.5 million units in November (the highest rate since January 2008). Averaging October 2012 and November 2012 sales rates to account for the hurricane's impact, the two-month average equals 14.9 million units – the highest two-month average since March 2008.

In calendar year 2011, **U.S. vehicle production** rose 11.5 percent from 2010 -- increasing to 8.6 million units (the highest level since 2007). CY 2011 production was 50.1 percent higher than CY 2009 production but 20.7 percent lower than in 2007. Year-to-date through November 2012,

national production is up 22.3 percent compared to the first eleven months of 2011. November 2012 marked the 16th straight increase from a year ago.

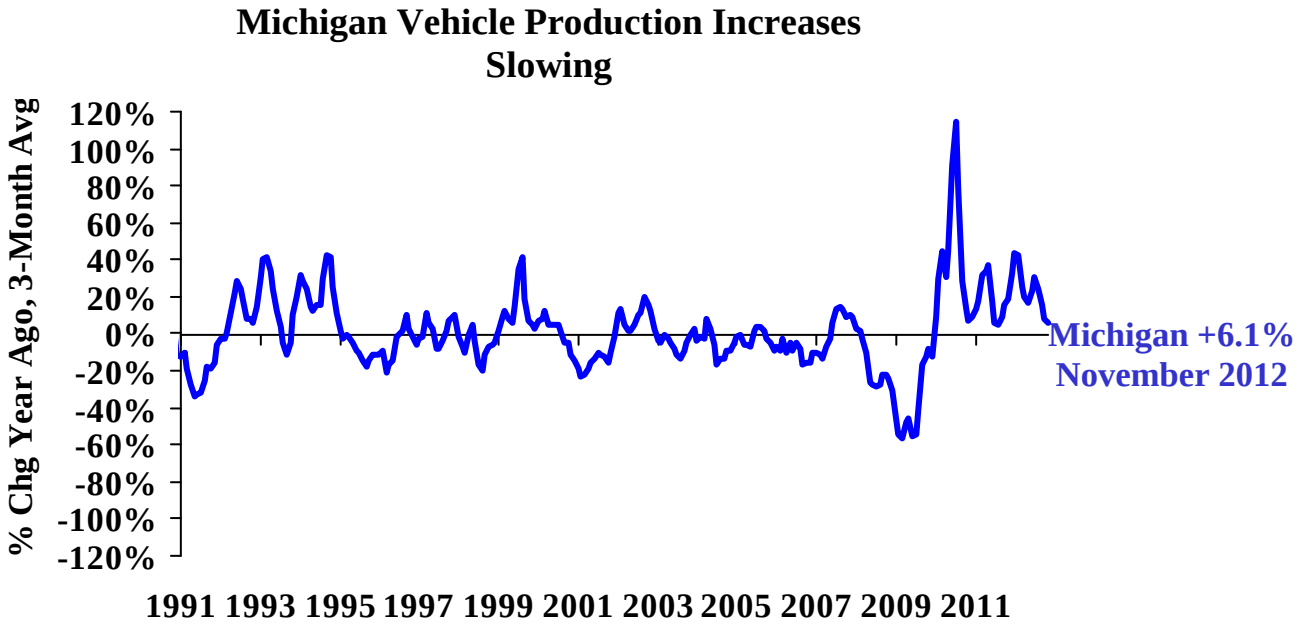
Current Michigan Economic Conditions

Vehicle Production

Following national trends, **Michigan vehicle production** fell 20.9 percent in 2008 and dropped 37.9 percent in 2009. Consequently, annual Michigan vehicle production fell by 1.2 million units between 2007 and 2009. In 2010, Michigan production regained 36.4 percent of its total losses from the two prior years. In 2011, production regained another 29.3 percent of combined 2008 and 2009 losses. As a result, 2011 production, at 1.9 million units, was 68.0 percent higher than in 2009 but 17.5 percent lower than in 2007.

CY 2011 Michigan vehicle production was 22.0 percent higher than in 2010. So far in 2012 (through November 2012), state production is up 18.7 percent. November 2012 marked the 16th straight monthly year-over-year Michigan production increase and the 33rd monthly year-over-year production increase in the last 35 months. November 2012 Michigan vehicle production was up 5.1 percent from November 2011. The September 2012 to November 2012 three-month average of Michigan vehicle production was up 6.1 percent from the comparable year-ago period.

In 2011, Michigan car production rose 27.5 percent from 2010 while State truck production was up 19.2 percent. Between 2010 and 2011, Michigan's share of national vehicle production rose from 20.4 percent to 22.3 percent. Year-to-date through November 2012, Michigan's share of national production (21.6 percent) was down 0.7 percentage point compared to the first eleven months of 2011.



Source: Automotive News and Michigan Department of Treasury.

Employment

After reporting ten straight annual declines, totaling 813,000 jobs (-17.4 percent), overall Michigan employment turned the corner with an increase of 72,300 jobs (1.9 percent) in 2011. Construction employment rose 2.3 percent. Manufacturing employment increased 6.4 percent. Increasing by 30,400 jobs, the manufacturing sector accounted for 42.0 percent of the overall Michigan employment increase while the construction sector accounted for an additional 4.3 percent.

Through the first eleven months of 2012, **Michigan wage and salary employment** is up 1.3 percent from 2011. Manufacturing sector employment has increased 4.3 percent and accounted for 43.1 percent of the overall year-to-date increase. Construction sector employment has fallen 3.6 percent. Between May 2012 and November 2012, inclusive, overall Michigan wage and salary employment reported monthly declines in five of the seven months. On net, the State lost 5,100 jobs over these seven months. Most recently, Michigan employment rose by 10,200 jobs between October 2012 and November 2012.

In 2009, **Michigan's unemployment rate** rose to 13.4 percent – the State's highest rate since 1983 when the rate stood at 14.6 percent. However, between 2009 and 2011, the State's unemployment rate fell a combined 3.1 percentage points with the majority of the decline (-2.4 points) occurring in 2011. Michigan's 2011 unemployment rate stood at 10.3 percent.

Between December 2008 and September 2011, Michigan's unemployment rate remained in double-digits. Over this time, the State's unemployment rate peaked in August 2009 at 14.2 percent – the State's highest rate since July 1983. However, between September 2009 and April 2012, the State's unemployment rate declined in 27 months, remained unchanged in four months and increased in only one month. As a result, in April 2012, the State's unemployment rate dropped to 8.3 percent – the State's lowest rate in over three years. In addition, in April 2012, the gap between the Michigan unemployment rate and U.S. unemployment rate fell to 0.2 percent -- the smallest gap since the end of 2000. However, the unemployment rate rose in each of the following four months with the rate rising to 9.4 percent in August 2012 and the gap between the Michigan and U.S. rates increasing to 1.5 percentage points in September 2012. Since August, the rate has fallen each month and the rate dropped to 8.9 percent in November. The Michigan-U.S rate gap fell to 1.2 percentage points in November 2012.

Between April 2011 and July 2011, **Michigan household employment** fell each month – dropping a cumulative 16,200 persons. However, between August 2011 and April 2012, employment increased each month with the overall total rising by 105,700 persons. Household employment then dropped each month between May 2012 and August 2012 – declining by a cumulative 47,900 persons. Household employment rose in both September 2012 and October 2012, but fell in November 2012. Consequently, Michigan household employment has dropped a net 32,100 persons over the past seven months. Compared to a year ago, November 2012 household employment is up by 46,400 persons.

Compared to a year ago, the November 2012 **Michigan labor force** is up by 13,900 persons. However, over the past seven months, the labor force has *declined* by 9,300 persons.

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 some signs of improvement.

Between 2005 and 2009, **Michigan housing unit authorizations** fell 84.8 percent, declining from 45,328 units to 6,884 units. Nationally, authorizations dropped 73.0 percent over this period. In 2010 Michigan authorizations rose 31.8 percent from 2009. Nevertheless, 2010 Michigan authorizations were 82.0 percent below the State's 1996-2005 average (51,688 units). In 2011, Michigan authorizations (9,341 units) were up 2.9 percent from 2010, while U.S. authorizations were up 3.2 percent (based on U.S. Census Bureau data). Year-to-date through October 2012, Michigan authorizations were up 26.0 percent, compared to a national increase of 33.1 percent.

In October 2012, according to **Case-Shiller house price measures** (seasonally adjusted), the Detroit MSA recorded a 9.9 percent year-over-year house price increase, compared to a 4.3 percent average increase for the twenty U.S. metro areas surveyed for the measure. However, the October 2012 Detroit price measure was 39.1 percent below Detroit's peak measure (March 2006). In comparison, the 20-city reading was 30.3 percent below its peak reading (April 2006).

Between 2011Q3 and 2012Q3, the Michigan **FHFA Purchase-Only House Price Index** rose 7.2 percent compared to a 4.0 percent increase nationally. However, the Michigan index is off 25.0 percent compared to its 2005Q3 peak.

In September 2012, the **Michigan Freddie Mac Home Price monthly index** was up 10.9 percent from a year ago – compared to a 4.3 percent year-over-year increase nationally. However, the September Michigan index was still down 30.5 percent from its peak (July 2005). Nationally, the September 2012 reading was down 22.5 percent from its peak (July 2006).

The **Core Logic Home Price Index** for Michigan rose 7.8 percent between October 2011 and October 2012 – placing Michigan with the eighth largest year-over-year increase. However, the current Michigan index is 35.3 percent below the State's peak – placing Michigan with the fifth largest percent peak to current reading decline among U.S. states.

In 2012Q1, Michigan had the eighth worst **foreclosure rate** among the states with one foreclosure for each 201 households. However, the number of Michigan foreclosures fell 28 percent between 2011Q3 and 2012Q3 – the sixth largest percent reduction among U.S. states. In addition, Michigan reported the third largest percent reduction in foreclosure starts (RealtyTrac).

The **share of mortgage properties underwater (negative equity)** in Michigan is substantially higher than the national average. In 2012Q2, 22.3 percent of residential properties with mortgages were underwater nationally. In Michigan, 33 percent of such properties were underwater – placing Michigan fifth among the fifty states behind Nevada (59 percent), Florida (43 percent), Arizona (40 percent) and Georgia (36 percent).

Personal Income

In 2009, **Michigan personal income** fell in every quarter compared to a year earlier. In the first three quarters of 2009, the declines ranged narrowly from 6.2 percent to 6.9 percent. In 2009Q4, the decline shrank to 5.2 percent. Michigan personal income has grown in every quarter between 2010Q1 and 2012Q3 (the latest quarter released). Year-over-year increases accelerated between 2010Q1 (0.4 percent) and 2010Q3 (4.9 percent). In 2011Q1, the y-o-y increase accelerated to 7.6 percent, but then slowed over the next three quarters with a 3.0 percent increase in 2012Q1. In each of the two most recent quarters released, Michigan personal income increased 3.5 percent from a year earlier -- slightly faster than national increases (3.0 percent and 3.2 percent). Michigan's 2011Q3-2012Q3 increase ranked 20th among U.S. states. Average Michigan personal income in the first three quarters of 2012 was up 3.3 percent from the average of the first three quarters of 2011 – ranking 19th.

In each of the quarters between 2008Q3 and 2010Q1, **Michigan wage and salary income** fell compared to a year ago with all four 2009 declines sizeable -- ranging between -6.6 percent and -9.8 percent. Between 2010Q2 and 2012Q3, year-over-year increases ranged between 1.0 percent (2010Q2) and 8.0 percent (2011Q1). Between 2011Q3 and 2012Q3, Michigan wages rose 3.5 percent – faster than 3.0 percent nationally and ranking 18th among the 50 states.

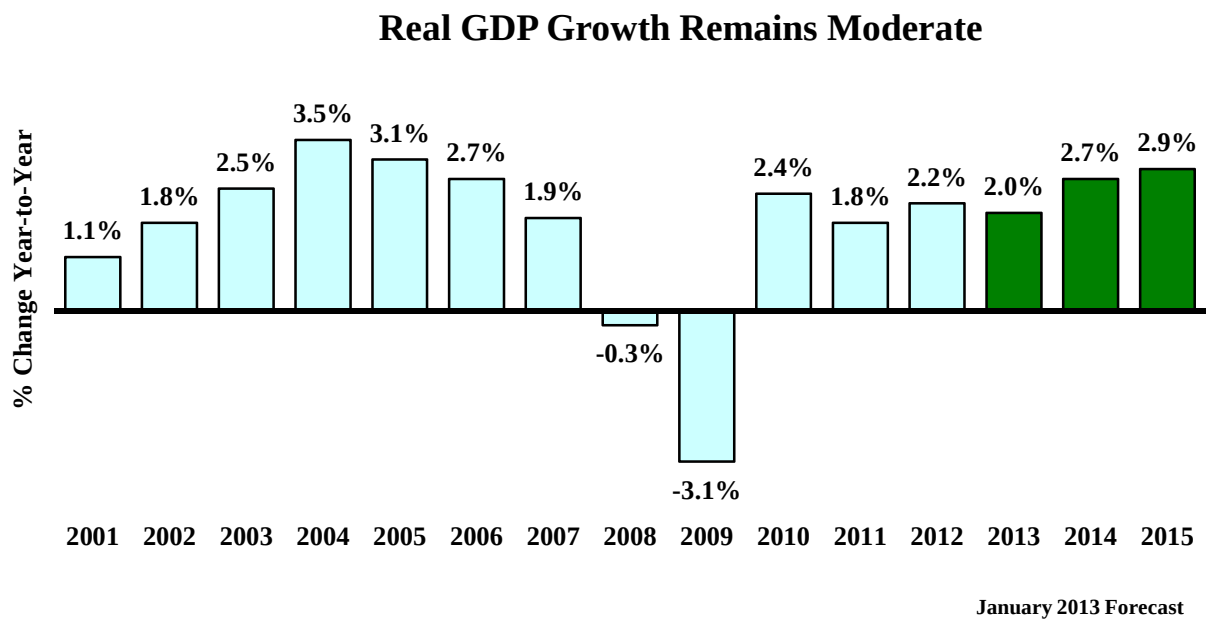
Michigan manufacturing wages and salaries reported declines compared to year-ago levels in 12 straight quarters between 2007Q2 and 2010Q1. As with overall wages and salaries, 2009 saw the four largest sector drops – ranging between -15.5 percent and -24.3 percent. In 2010Q1 manufacturing wages and salaries declined 2.9 percent.

Michigan manufacturing wages and salaries have increased in each of the last ten reported quarters. Growth peaked in 2011Q1 (19.8 percent) and then slowed over the next two quarters to 9.8 percent and 6.5 percent in the second and third quarter, respectively. In three of the four most recently reported quarters (2011Q4 to 2012Q3), Michigan manufacturing wages recorded double digit y-o-y increases. Between 2011Q3 and 2012Q3, Michigan manufacturing wages rose 11.0 percent – considerably faster than the 5.6 percent national manufacturing wages. While comprising 17.3 percent of 2011Q3 overall Michigan wages, the manufacturing sector accounted for more than half (54.7 percent) of the overall Michigan wage increase between 2011Q3 and 2012Q3.

2013, 2014 and 2015 U.S. Economic Outlook

Summary

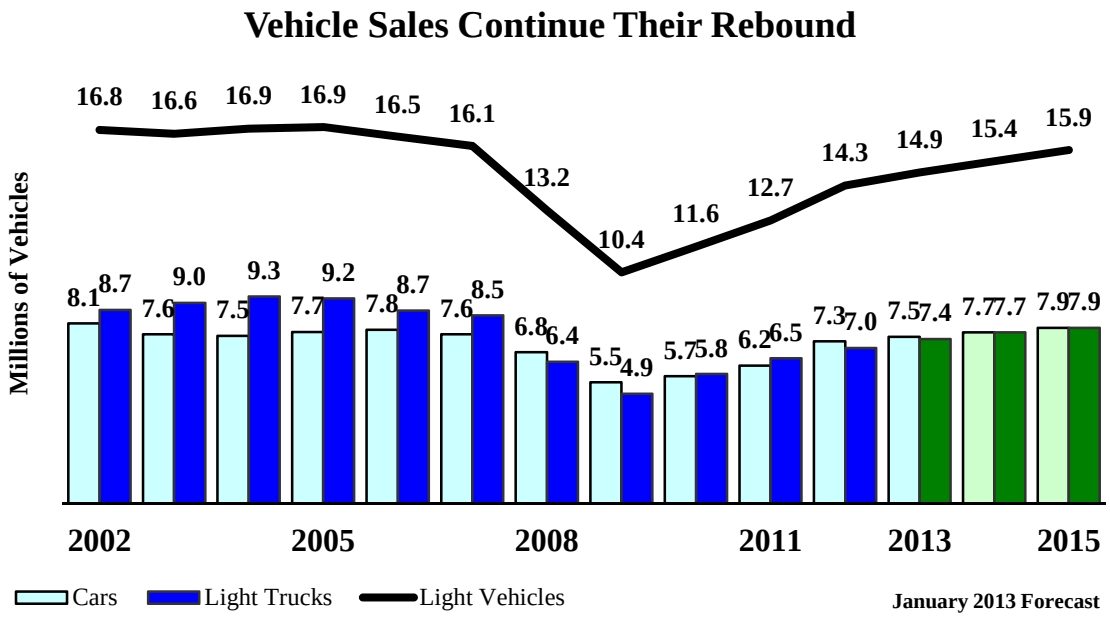
After declining GDP fell 3.1 percent in 2009, real GDP rose 2.4 percent in 2010 and 1.8 percent in 2011. Real GDP then increased an estimated 2.2 percent in 2012 and is expected to grow at a rate of 2.0 percent in 2013, 2.7 percent in 2014 and 2.9 percent in 2015.



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2013.

Real GDP growth (seasonally adjusted annual rate) is expected to accelerate in each quarter of 2013 with growth accelerating from 1.6 percent in 2013Q1 to 2.9 percent in 2013Q4. Over the eight quarters of 2014 and 2015, growth rates are forecast to range between 2.6 percent and 3.2 percent.

Light vehicle sales totaled 12.7 million units in 2011 and increased to an estimated 14.3 million units in 2012. Vehicle sales are forecast to rise to 14.9 million units in 2013, 15.4 million units in 2014 and 15.9 million units in 2015.



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2013.

The U.S. unemployment rate rose to a 9.6 percent rate in 2010 – just below the record high 9.7 percent rate set in 1982 (going back to 1947). In 2011, the U.S. unemployment rate fell to 8.9 percent and then declined to an estimated 8.1 percent in 2012. The unemployment rate is forecast to decline to 7.7 percent in 2013, 7.4 percent in 2014 and 6.9 percent in 2015.

After falling 4.4 percent in 2009, at its fastest rate of decline since at least 1940, U.S. wage and salary employment fell modestly in 2010 (-0.7 percent). In 2011, employment rose 1.1 percent and then rose an estimated 1.4 percent in 2012. Over the forecast horizon, employment is expected to rise 1.4 percent in 2013, 1.7 percent in 2014 and 1.9 percent in 2015.

After accelerating to 3.2 percent in 2011, inflation moderated to an estimated 2.0 percent in 2012. Inflation is forecast to remain in a very narrow band with inflation of 1.9 percent both in 2013 and 2014 and 2.2 percent inflation in 2015.

In 2009, the short-term Treasury bill rate averaged 0.2 percent – down substantially from 1.4 percent reported in 2008. The rate averaged 0.1 percent in 2010, 2011 and 2012 (estimated). The rate is forecast to remain extremely low over the forecast horizon with a 0.1 percent rate both in 2013 and 2014, followed by a 0.2 percent rate in 2015. After falling from 4.6 percent in 2011 to 3.7 percent (estimated) in 2012, corporate interest rates are forecast to change slightly over the balance of the forecast horizon. The rate will fall to 3.6 percent in 2013 before increasing to 3.8 percent in 2014 and 4.0 percent in 2015. Down from 5.0 percent in 2009, mortgage rates averaged 4.7 percent in 2010 and 4.5 percent in 2011. Mortgage rates fell to an estimated 3.7 percent in 2012. Rates are forecast to rise over the forecast horizon but remain at historically low levels with a 3.5 percent rate in 2013, 3.9 percent in 2014 and 4.2 percent in 2015.

Assumptions

The forecast assumes that the federal government will not go over the looming late February/early March 2013 fiscal cliff. The forecast also assumes that Congress will raise the federal debt ceiling by early March 2013. The forecast assumes that real (inflation-adjusted) federal government expenditures do decline in 2013 and 2014 – but only modestly (falling 1.4 percent in 2013 and dropping 1.3 percent in 2014). In 2015, real federal expenditures are assumed to grow – but only slightly (0.60 percent)

Oil prices per barrel are expected to rise gradually across the forecast horizon – rising from $86 at the end of 2012 to $100 by the end of 2015. Natural gas prices dropped an estimated 28.0 percent in 2012. Natural gas prices are expected to rise sharply in 2013 (20.5 percent) before slowing to 5.0 percent growth in both 2014 and 2015.

Throughout the forecast horizon, the housing market is expected to strengthen but still remain historically weak. Starts are forecast to increase each year. Consequently, housing starts in 2015 (1.3 million units) will be more than double 2011 starts. Nevertheless, 2015 starts will remain well below the average 1.7 million annual starts in the ten years before the housing bust.

Consistent with recent FOMC statements, the Fed is expected to keep the federal funds rate within the record low 0.00-0.25 percent range through the end of 2015.

The level of real state and local government expenditures is expected to remain relatively unchanged over the forecast horizon with a 0.2 percent decline in 2013, a 0.2 percent increase in 2014 and 0.3 percent rise in 2015.

The savings rate is assumed to fall from 3.7 percent in 2012 to 3.0 percent in 2013. The rate is then expected to rise to 3.2 percent in 2014 and to 3.4 percent in 2015.

Rest-of-world growth is assumed to rise 2.2 percent in 2013 and increase 2.7 percent both in 2014 and 2015.

Table 1
Administration Economic Forecast

January 2013

	Calendar 2011 Actual	Percent Change from Prior Year	Calendar 2012 Forecast	Percent Change from Prior Year	Calendar 2013 Forecast	Percent Change from Prior Year	Calendar 2014 Forecast	Percent Change from Prior Year	Calendar 2015 Forecast	Percent Change from Prior Year
United States										
Real Gross Domestic Product (Billions of Chained 2005 Dollars)	13,299	1.8%	$13,592	2.2%	$13,864	2.0%	$14,238	2.7%	$14,651	2.9%
Implicit Price Deflator GDP (2005 = 100)	113.4	2.1%	115.5	1.9%	117.6	1.8%	119.6	1.7%	121.8	1.8%
Consumer Price Index (1982-84 = 100)	224.939	3.2%	229.532	2.0%	233.845	1.9%	238.388	1.9%	243.736	2.2%
Consumer Price Index - Fiscal Year (1982-84 = 100)	223.137	2.7%	228.526	2.4%	232.722	1.8%	237.229	1.9%	242.198	2.1%
Personal Consumption Deflator (2005 = 100)	113.8	2.4%	115.7	1.7%	117.4	1.5%	119.3	1.6%	121.4	1.8%
3-month Treasury Bills Interest Rate (percent)	0.1		0.1		0.1		0.1		0.2	
Aaa Corporate Bonds Interest Rate (percent)	4.6		3.7		3.6		3.8		4.0	
Unemployment Rate - Civilian (percent)	8.9		8.1		7.7		7.4		6.9	
Wage and Salary Employment (millions)	131.359	1.1%	133.200	1.4%	135.060	1.4%	137.360	1.7%	139.970	1.9%
Housing Starts (millions of starts)	0.608	3.6%	0.777	27.8%	0.998	28.4%	1.186	18.8%	1.274	7.4%
Light Vehicle Sales (millions of units)	12.7	9.5%	14.3	12.6%	14.9	4.2%	15.4	3.4%	15.9	3.2%
Passenger Car Sales (millions of units)	6.2	8.8%	7.3	17.7%	7.5	2.7%	7.7	2.7%	7.9	2.6%
Light Truck Sales (millions of units)	6.5	12.1%	7.0	7.7%	7.4	5.7%	7.7	4.1%	8.0	3.9%
Big 3 Share of Light Vehicles (percent)	46.2		44.4		44.9		45.1		45.3	
Michigan										
Wage and Salary Employment (thousands)	3,936	1.9%	3,987	1.3%	4,023	0.9%	4,075	1.3%	4,132	1.4%
Unemployment Rate (percent)	10.3		8.9		8.8		8.2		7.6	
Personal Income (millions of dollars)	$358,152	5.6%	$371,762	3.8%	$381,428	2.6%	$398,210	4.4%	$416,528	4.6%
Real Personal Income (millions of 1982-84 dollars)	$169,131	1.2%	$172,256	1.8%	$173,678	0.8%	$178,168	2.6%	$182,649	2.5%
Wages and Salaries (millions of dollars)	$183,000	5.5%	$190,320	4.0%	$195,839	2.9%	$202,890	3.6%	$210,802	3.9%
Detroit Consumer Price Index (1982-84 = 100)	211.760	3.3%	215.819	1.9%	219.618	1.8%	223.503	1.8%	228.048	2.0%

Forecast Risks

The economic recovery continues to face significant challenges.

Oil Prices. Geopolitical concerns, increased demand, or a major supply disruption could raise oil prices well above the assumed range ($86-$100 a barrel). Still 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 demand. Alternatively, if Asian oil demand decreases due to lower and more sustainable growth rates in China or if European demand weakens as a result of financial crises, prices could be lower than assumed.

Europe Debt Crisis. Europe remains in the midst of a credit crisis spurred by the need for European banks and governments to refinance or sell substantial amount of debt – raising serious concerns that there will not be enough demand to buy such a tremendously large amount of debt. Depending upon the eventual magnitude and severity of the credit problems, these strains could spread to other nations' financial markets and economies including the U.S. A flight to safety would raise the value of the dollar – making U.S. exports more costly.

Complicating the crisis, austerity measures (spending cuts, tax hikes) represent a major tool being employed by several European countries to address their debt problems. However, austerity measures hamper a nation's economic growth. Given the ill effects of massive indebtedness on the one hand and of austerity measures on the other, the forecast's assumed modest growth among the United States' major trading partners may be too optimistic. In addition, there is growing dissatisfaction among electorates in many European nations with the depressing impacts of austerity measures. Social and political opposition to austerity measures heightens growing uncertainty. Greece, Italy, Spain and Portugal – who have adopted austerity measures to combat financial instability – have seen dramatic economic declines.

Fiscal Policy. The federal legislation enacted at the very beginning of 2013 to address the end-of-year fiscal cliff postponed many issues. The federal government will need to take action by early March in order not to go over a new fiscal cliff. Going over the new cliff would result in steep federal spending cuts. At the same time, Congress will need to raise the debt ceiling by early March. Without an increase, the U.S. government would eventually default on its debt obligations, potentially sparking a financial crisis. In any case, inaction will likely result in rating agency's downgrading federal debt issues. The conjunction of the automatic spending cut and the debt ceiling deadlines, in the context of continued fierce partisanship, will very likely result in another round of brinksmanship. The Administration forecast laid out in this Report assumes that the federal government will not go over the new fiscal cliff and will raise the federal debt ceiling. The federal government's failure to take the necessary actions would weaken the U.S. economy. Further, even if the federal government meets the late February/early March deadlines, the uncertainty surrounding the new round of brinksmanship could have a severe impact on consumer and business confidence and, consequently, on the economy and financial markets.

In addition, the continuing substantial divisions among the House, Senate and President will reduce the federal government's ability to counter negative financial and macroeconomic shocks to the economy.

Monetary Policy. The Federal Reserve has taken several actions since May 2012 which lessen concerns of inadequate monetary policy:

- Enacting a third round of quantitative easing.
- Replacing Operation Twist (which increased the average maturity of the Fed's holdings, but did not increase the size of the Fed's portfolio) with additional quantitative easing (which not only increases average maturity but also the size of the Fed's holdings). Under programs enacted in September 2012 and December 2012, the Fed will now purchase an additional $85 billion of long-term assets each month.
- The Federal Reserve first extended the timeline for maintaining dramatically low interest rates from mid-2014 to mid-2015 and then replaced the time based criteria with a set of economic conditions required for continuing low rates (6.5 percent unemployment rate and 2.5 percent inflation). The rule-based interest rate policy helps provide greater certainty for consumers, businesses and financial markets.

A major concern now facing monetary policy is that its increased potency may push inflation above its target level (2.5 percent) and require that the Fed raise interest rates -- even if the economy remains weak (e.g., unemployment rate over 6.5 percent). In addition, unlike for its interest rate policy, the FOMC has not set forth clear guidance as to when or under what conditions the Fed would lessen, increase or terminate current quantitative easing. This lack of guidance leaves significant uncertainty among consumers, businesses and financial markets.

Housing Market. Projected 2015 starts are more than double 2010 housing starts. If the housing market fails to pick up as forecasted, the U.S. and Michigan economies would be weaker than expected. However, despite the large projected increases, forecasted 2015 starts total 1.3 million units – substantially 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. Historically low mortgage interest rates and record high overall affordability support prospects for a stronger than forecasted housing market. The average 30-year mortgage rate fell to a record low (3.31 percent) in November 2012 and has risen only slightly in subsequent weeks. The National Association of Realtors housing affordability index remains historically high.

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. Recent employment gains are encouraging, but the labor market remains at risk of being harmed by a negative economic shock.

Other Factors. Geopolitical factors (such as a domestic terrorist attack) remain a downside risk to the baseline forecast.

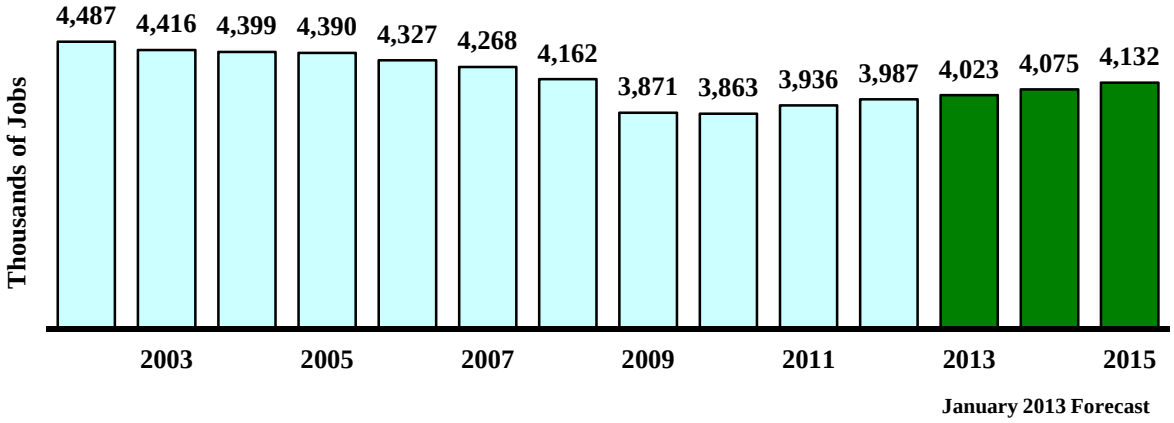
2013, 2014 and 2015 Michigan Economic Outlook

Michigan employment fell 7.0 percent in 2009 – its sharpest decline since 1958 when State employment dropped 9.8 percent. Michigan employment dropped another 0.2 percent in 2010, but increased 1.9 percent in 2011 – marking the first calendar year Michigan employment increase since 2000 and increased an estimated 1.3 percent in 2012. State employment is forecast to increase 0.9 percent in 2013, 1.3 percent in 2014 and 1.4 percent in 2015. Compared to 2000, forecasted 2015 employment is still down by 544,000 jobs or 11.6 percent.

Private non-manufacturing employment rose by 59,000 jobs in 2011 and gained an estimated 41,000 jobs in calendar year 2012. Private non-manufacturing employment is forecast to gain a net 37,600 jobs in 2013, 46,300 jobs in 2014 and 48,600 jobs in 2015.

After increasing a strong 6.4 percent in 2011, manufacturing employment grew by an estimated 4.2 percent in 2012. Manufacturing employment growth is forecast to slow to 0.8 percent in 2013 before accelerating to 2.2 percent in 2014 and then slowing to 2.1 percent in 2015. Between CY 2012 and CY 2015, manufacturing employment is projected to rise by 27,200 jobs.

Michigan Wage and Salary Employment Rises Slightly



Source: Michigan Department of Labor and Economic Growth, U.S. Bureau of Labor Statistics, and January 2013 Administration Forecast.

Michigan transportation equipment employment rose 7.2 percent in 2011 and then increased an estimated 5.8 percent in 2012. Transportation equipment employment is forecast to grow each year between 2013 and 2015 with annual increases of 1.6 percent in 2013, 3.7 percent in 2014 and 3.7 percent in 2015. Despite the increases, forecasted 2015 transportation equipment

employment of 162,200 jobs is down 53.1 percent from the sector's 2000 employment of 346,100 jobs.

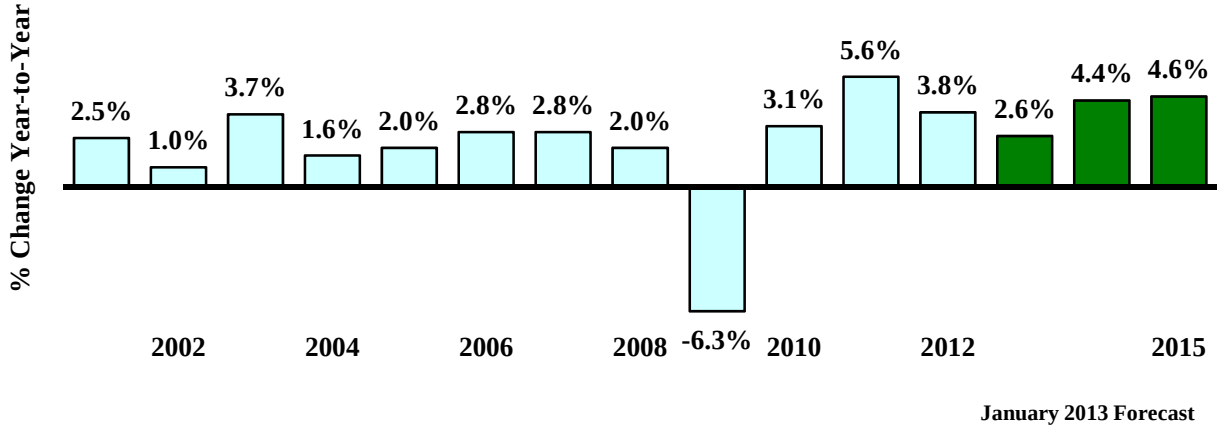
After soaring from 8.3 percent to 13.4 percent in 2009 (highest rate since 1983), Michigan's unemployment rate declined to 12.7 percent in 2010, 10.3 percent in 2011 and to an estimated 8.9 percent in 2012. The State's rate is expected to continue to drop across the forecast horizon to 8.8 percent in 2013, 8.2 percent in 2014 and 7.6 percent in 2015.

After falling 8.2 percent in 2009 (the greatest decline since 1945), Michigan wages and salaries rose 1.7 percent in 2010, increased 5.5 percent in 2011 and increased an estimated 4.0 percent in 2012. Wages are forecast to grow 2.9 percent in 2013, 3.6 percent in 2014 and 3.9 percent in 2015.

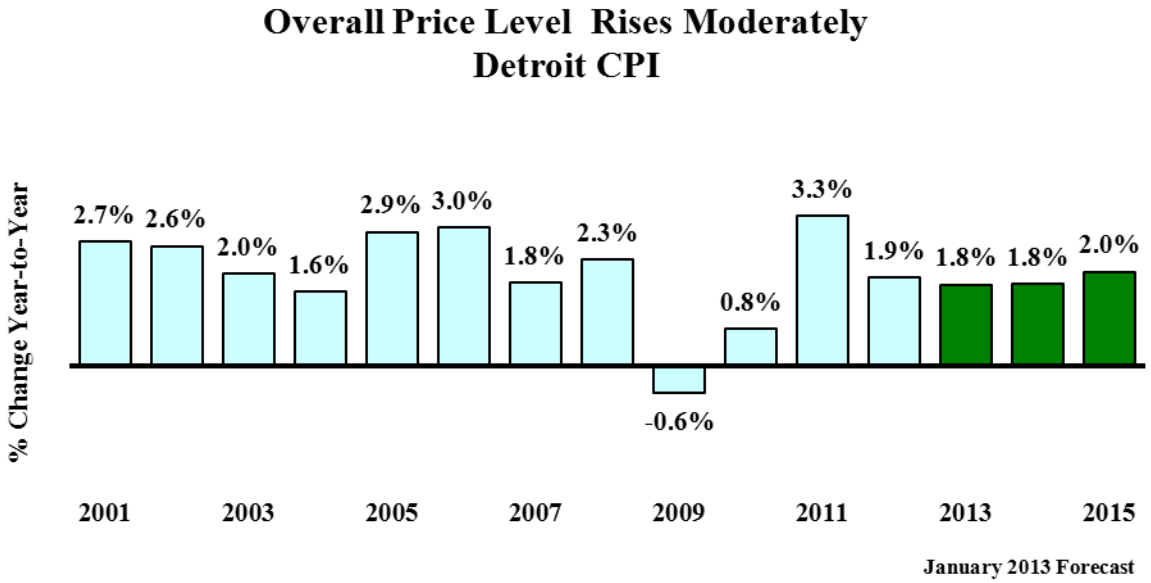
In 2009, overall Michigan personal income declined 6.3 percent – the largest Michigan personal income decline since 1938. Personal income rose 3.1 percent in 2010, increased 5.6 percent in 2011 and rose an estimated 3.8 percent in 2012. After slowing to a forecasted 2.6 percent income growth in 2013, income is expected to rise 4.4 percent in 2014 and 4.6 percent in 2015.

The overall CY price level, as measured by the Detroit CPI, increased 3.3 percent in 2011. Detroit CPI inflation is estimated to be 1.9 percent in 2012. Detroit price increases are forecast to remain moderate with a 1.8 percent annual increase in both 2013 and 2014. The Detroit CPI is then expected to rise 2.0 percent in 2015.

Michigan Personal Income Reports Solid Growth



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2013.



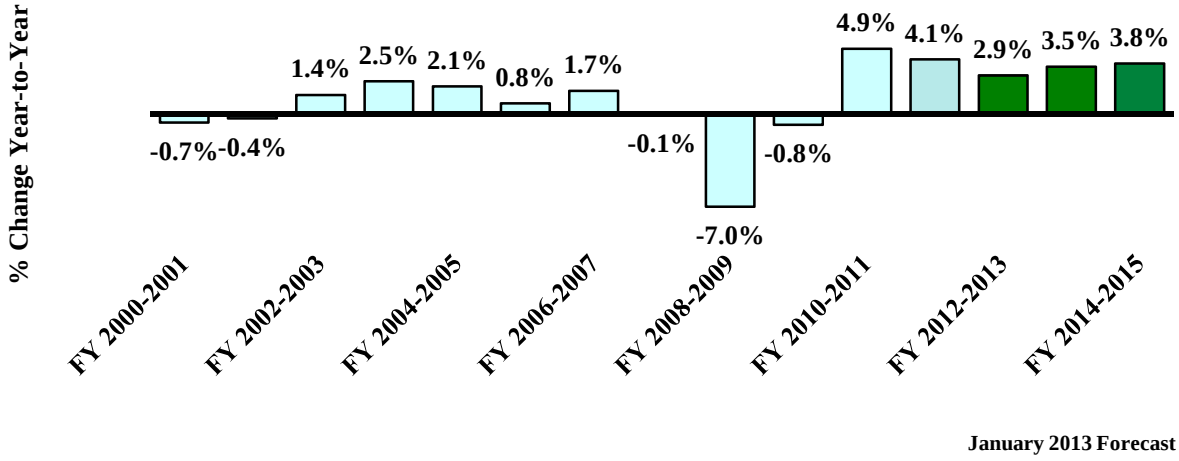
Source: U.S. Bureau of Labor Statistics and Administration Forecast, January 2013.

Fiscal Year Economics

Michigan's largest taxes are the individual income tax ($6.4 billion in FY 2011), which includes refunds, and sales and use taxes ($7.8 billion). Income tax withholding is the largest income tax component. Withholding ($7.2 billion) is most affected by growth in wages and salaries. Michigan wages and salaries rose an estimated 4.1 percent in FY 2012 and are forecast to increase 2.9 percent in 2013, 3.5 percent in FY 2014 and 3.8 percent in FY 2015.

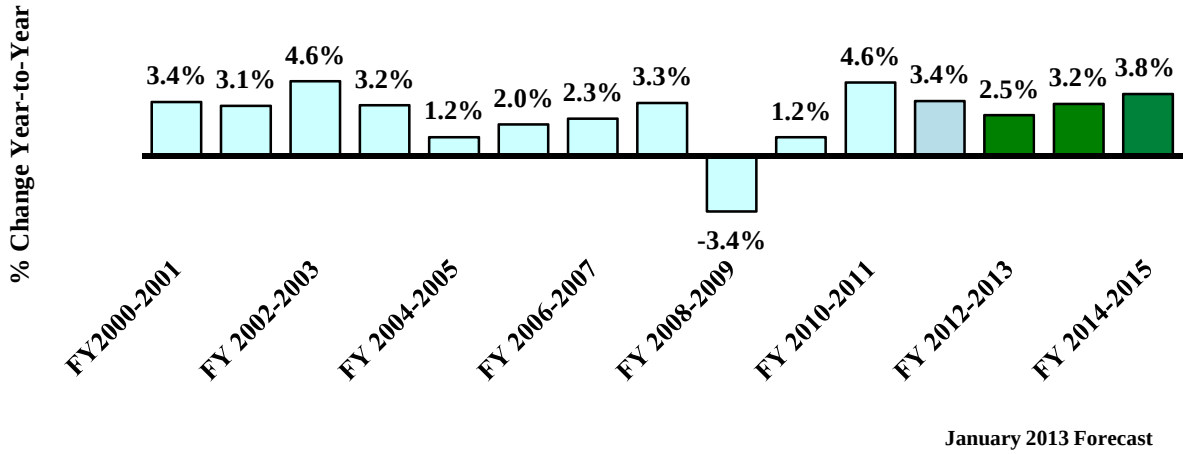
Sales and use taxes depend primarily on Michigan disposable (after tax) income and inflation. Estimated to have risen 3.4 percent in fiscal year 2012, disposable income is expected to rise 2.5 percent in FY 2013, 3.2 percent in FY 2014 and 3.8 percent in FY 2015. Prices, as measured by the Detroit CPI, rose 2.5 percent in FY 2012. Over the forecast horizon, prices are forecast to increase 1.7 percent in FY 2013, rise 1.8 percent in FY 2014 and grow 2.0 percent in FY 2015.

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



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2013.

Michigan Disposable Income Increases
Basis for Sales and Use Tax Collections



Source: Research Seminar in Quantitative Economics, University of Michigan, and Administration Forecast, January 2013.

ADMINISTRATION REVENUE ESTIMATES
January 11, 2013

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 2012 is the base year. Any non-economic changes to the taxes occurring in FY 2013, FY 2014 and FY 2015 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 2012 Revenue Outlook

FY 2012 GF-GP revenue totaled $9,286.1 million, a 5.4 percent increase compared to FY 2011. The FY 2012 GF-GP total is $221.3 million above the May 2012 Consensus estimate.

SAF revenue totaled $10,878.7 million, representing a 3.3 percent decline compared to FY 2011. The FY 2012 SAF total was $2.7 million above the May 2012 Consensus estimate (See Table 2).

Table 2

FY 2011-12 Administration Revenue Estimates

(millions)

	Preliminary FY 2012 Amount	Growth
General Fund - General Purpose		
Baseline Revenue	$8,172.9	6.7%
Tax Cut Adjustments	$1,113.2	
Net Resources	$9,286.1	5.4%
School Aid Fund		
Baseline Revenue	$11,613.7	3.1%
Tax Cut Adjustments	($734.9)	
Net Resources	$10,878.7	-3.3%
Combined		
Baseline Revenue	$19,786.6	4.6%
Tax Cut Adjustments	$378.2	
Net Resources	$20,164.8	0.5%

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

FY 2013 Revenue Outlook

FY 2013 GF-GP revenue is estimated to be $8,836.4 million, a 4.8 percent decrease compared to FY 2012. The FY 2013 GF-GP revenue estimate is down $133.5 million from the May 2012 Consensus estimate. SAF revenue is forecast to be $11,151.8 million; representing a 2.5 percent increase compared to FY 2012. The FY 2013 SAF estimate is $17.7 million below the May 2012 Consensus estimate (see Table 3).

Table 3

FY 2012-13 Administration Revenue Estimates

(millions)

	Consensus May 15, 2012		Administration January 11, 2013		
	Amount	**Growth**	**Amount**	**Growth**	**$ Change**
General Fund - General Purpose					
Baseline Revenue	$8,324.8	2.2%	$8,337.1	2.0%	$12.4
Tax Cut Adjustments	$645.1		$499.3		($145.9)
Net Resources	$8,969.9	-1.0%	$8,836.4	-4.8%	($133.5)
School Aid Fund					
Baseline Revenue	$11,878.8	2.3%	$11,870.9	2.2%	($7.8)
Tax Cut Adjustments	($709.3)		($719.2)		($9.8)
Net Resources	$11,169.5	2.7%	$11,151.8	2.5%	($17.7)
Combined					
Baseline Revenue	$20,203.5	2.3%	$20,208.1	2.1%	$4.5
Tax Cut Adjustments	($64.2)		($219.9)		($155.7)
Net Resources	$20,139.3	1.0%	$19,988.2	-0.9%	($151.2)

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

FY 2014 Revenue Outlook

FY 2014 GF-GP revenue is estimated to be $9,295.9 million, a 5.2 percent increase compared to FY 2013. The FY 2014 GF-GP revenue estimate is $36.9 million above the May 2012 Consensus estimate. SAF revenue is forecast to be $11,445.8 million; representing a 2.6 percent increase compared to FY 2013. The FY 2014 SAF estimate is $25.7 below the May 2012 Consensus estimate (see Table 4).

Table 4

FY 2013-14 Administration Revenue Estimates

(millions)

	Consensus May 15, 2012		Administration January 11, 2013		
	Amount	**Growth**	**Amount**	**Growth**	**$ Change**
General Fund - General Purpose					
Baseline Revenue	$8,711.1	4.6%	$8,697.1	4.3%	($13.9)
Tax Cut Adjustments	$547.9		$598.8		$50.8
Net Resources	$9,259.0	3.2%	$9,295.9	5.2%	$36.9
School Aid Fund					
Baseline Revenue	$12,184.5	2.6%	$12,172.7	2.5%	($11.8)
Tax Cut Adjustments	($713.0)		($726.9)		($13.9)
Net Resources	$11,471.5	2.7%	$11,445.8	2.6%	($25.7)
Combined					
Baseline Revenue	$20,895.6	3.4%	$20,869.8	3.3%	($25.8)
Tax Cut Adjustments	($165.1)		($128.1)		$37.0
Net Resources	$20,730.5	2.9%	$20,741.7	3.8%	$11.2

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 $9,646.8 million, a 3.8 percent increase compared to FY 2014. SAF revenue is forecast to be $11,766.7 million; representing a 2.8 percent increase compared to FY 2014 (see Table 5).

Table 5

FY 2014-15 Administration Revenue Estimates

(millions)

	Administration January 11, 2013	
	Amount	**Growth**
General Fund - General Purpose		
Baseline Revenue	$8,969.0	3.1%
Tax Cut Adjustments	$677.8	
Net Resources	$9,646.8	3.8%
School Aid Fund		
Baseline Revenue	$12,520.8	2.9%
Tax Cut Adjustments	($754.2)	
Net Resources	$11,766.7	2.8%
Combined		
Baseline Revenue	$21,489.9	3.0%
Tax Cut Adjustments	($76.4)	
Net Resources	$21,413.4	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 2011 revenue is compared to CY 2009 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 2011 revenues were $5.6 billion below the revenue limit. State revenues will also be well below the limit for FY 2012 through FY 2015. FY 2012 revenues are expected to be $4.8 billion below the limit, FY 2013 revenues $6.3 billion below the limit, FY 2014 revenues $6.5 billion below the limit, and FY 2015 revenues $6.4 billion below the limit (See Table 6).

Table 6

Administration Revenue Limit Calculation

(millions)

	FY 2011 Final June 2012	FY 2012 Admin Jan 2013	FY 2013 Admin Jan 2013	FY 2014 Admin Jan 2013	FY 2015 Admin Jan 2013
Revenue Subject to Limit	$27,248.2	$27,669.5	$27,735.9	$28,792.2	$29,787.8
Revenue Limit	**CY 2009**	**CY 2010**	**CY 2011**	**CY 2012**	**CY 2013**
Personal Income	$345,933	$342,663	$358,152	$371,762	$381,428
Ratio	9.49%	9.49%	9.49%	9.49%	9.49%
Revenue Limit	$32,829.0	$32,518.7	$33,988.6	$35,280.2	$36,197.5
Amount Under (Over) Limit	**$5,580.9**	**$4,849.2**	**$6,252.7**	**$6,488.0**	**$6,409.7**

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 dictated. 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 0.8 percent in 2012. Thus, the formula has no pay-in or pay-out for FY 2013 (See Table 7). In 2014, real calendar year personal income for Michigan is forecast to increase 2.2 percent, so the formula calls for a pay-in of $18.6 million for FY 2015 (See Table 8). In 2015, real calendar year personal income for Michigan is forecast to increase 2.4 percent, so the formula calls for a pay-in of 38.6 million in FY 2016 (See Table 9).

Table 7

Budget and Economic Stabilization Fund Calculation Based on CY 2013 Personal Income Growth Administration Calculation

	CY 2012	CY 2013
Michigan Personal Income	$ 371,762 [1]	$ 381,428 [1]
less Transfer Payments	$ 83,442 [1]	$ 86,196 [1]
Income Net of Transfers	$ 288,320	$ 295,232
Detroit CPI	2.144 [2]	2.177 [3]
for 12 months ending	(June 2012)	(June 2013)
Real Adjusted Michigan Personal Income	$ 134,478	$ 135,587
Change in Real Adjusted Personal Income		0.8%
Between 0 and 2%		0.0%
GF-GP Revenue Fiscal Year 2012-2013		$ 8,836.4

	FY 2012-2013
BSF Pay-In Calculated for FY 2013	NO PAY-IN OR PAY-OUT

Notes:

[1] Personal Income and Transfer Payments, Administration Forecast, January 2013.

[2] Detroit Consumer Price Index, Average of 6 monthly values reported by BLS for each 12-month period.

[3] Detroit Consumer Price Index, Administration Forecast, January 2013.

Table 8

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

	CY 2013	CY 2014
Michigan Personal Income	$381,428 [1]	$398,210 [1]
less Transfer Payments	$ 86,196 [1]	$ 91,126 [1]
Income Net of Transfers	$ 295,232	$ 307,084
Detroit CPI	2.177 [2]	2.216 [2]
for 12 months ending	(June 2013)	(June 2014)
Real Adjusted Michigan Personal Income	$ 135,587	$ 138,577
Change in Real Adjusted Personal Income		2.2%
Excess over 2%		0.2%
GF-GP Revenue Fiscal Year 2013-2014		$ 9,295.9

	FY 2014-2015
BSF Pay-In Calculated for FY 2015	$ 18.6

Notes:

[1] Personal Income and Transfer Payments, Administration Forecast, January 2013.

[2] Detroit Consumer Price Index, Administration Forecast, January 2013.

Table 9

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

	CY 2014	CY 2015
Michigan Personal Income	$ 398,210 [1]	$ 416,528 [1]
less Transfer Payments	$ 91,126 [1]	$ 96,238 [1]
Income Net of Transfers	$ 307,084	$ 320,290
Detroit CPI	2.216 [2]	2.257 [2]
for 12 months ending	(June 2014)	(June 2015)
Real Adjusted Michigan Personal Income	$ 138,577	$ 141,897
Change in Real Adjusted Personal Income		2.4%
Excess over 2%		0.4%
GF-GP Revenue Fiscal Year 2014-2015		$ 9,646.8

	FY 2015-2016
BSF Pay-In Calculated for FY 2016	$ 38.6

Notes:

[1] Personal Income and Transfer Payments, Administration Forecast, January 2013.

[2] Detroit Consumer Price Index, Administration Forecast, January 2013.

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 2013 SAF revenue adjustment factor is calculated by dividing the sum of FY 2012 and FY 2013 SAF revenue by the sum of FY 2011 and FY 2012 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 2013, the SAF revenue adjustment factor is calculated to be 1.0280 (See Table 10). For FY 2014, the SAF revenue adjustment factor is calculated to be 1.0254 (See Table 11). For FY 2015, the SAF revenue adjustment factor is calculated to be 1.0288 (See Table 12).

Table 10

Administration School Aid Revenue Adjustment Factor

For Fiscal Year 2013

	FY 2011	FY 2012	FY 2013
Baseline SAF Revenue	$11,260.6	$11,613.9	$11,871.0
Balance Sheet Adjustments	($12.2)	($735.0)	($719.2)
Net SAF Estimates	$11,248.3	$10,878.9	$11,151.8
Subtotal Adjustments to FY 2013 Base	($697.0)	$15.8	$0.0
Baseline Revenue on a FY 2013 Base	$10,551.3	$10,894.7	$11,151.8

School Aid Fund Revenue Adjustment Calculation for FY 2013

Sum of FY 2011 & FY 2012	$10,551.3	+	$10,894.7	=	$21,446.0
Sum of FY 2012 & FY 2013	$10,894.7	+	$11,151.8	=	$22,046.5

FY 2013 Revenue Adjustment Factor	**1.0280**

Note: Factor is calculated off a FY 2013 base year.

Table 11

Administration School Aid Revenue Adjustment Factor

For Fiscal Year 2014

	FY 2012	FY 2013	FY 2014
Baseline SAF Revenue	$11,613.9	$11,871.0	$12,172.7
Balance Sheet Adjustments	($735.0)	($719.2)	($727.0)
Net SAF Estimates	$10,878.9	$11,151.8	$11,445.8
Subtotal Adjustments to FY 2014 Base	$8.0	($7.8)	$0.0
Baseline Revenue on a FY 2014 Base	$10,887.0	$11,144.0	$11,445.8

School Aid Fund Revenue Adjustment Calculation for FY 2014

Sum of FY 2012 & FY 2013	$10,887.0	+	$11,144.0	=	$22,031.0
Sum of FY 2013 & FY 2014	$11,144.0	+	$11,445.8	=	$22,589.8

FY 2014 Revenue Adjustment Factor	**1.0254**

Note: Factor is calculated off a FY 2014 base year.

Table 12

Administration School Aid Revenue Adjustment Factor

For Fiscal Year 2015

	FY 2013	FY 2014	FY 2015
Baseline SAF Revenue	$11,871.0	$12,172.7	$12,520.8
Balance Sheet Adjustments	($719.2)	($727.0)	($754.2)
Net SAF Estimates	$11,151.8	$11,445.8	$11,766.7
Subtotal Adjustments to FY 2015 Base	($35.0)	($27.2)	$0.0
Baseline Revenue on a FY 2015 Base	$11,116.8	$11,418.6	$11,766.7

School Aid Fund Revenue Adjustment Calculation for FY 2015

Sum of FY 2013 & FY 2014	$11,116.8	+	$11,418.6	=	$22,535.4
Sum of FY 2014 & FY 2015	$11,418.6	+	$11,766.7	=	$23,185.2

FY 2015 Revenue Adjustment Factor	**1.0288**

Note: Factor is calculated off a FY 2015 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 13 and 14). Tax totals for the income, sales, use, CIT/MBT, tobacco and casino taxes for all funds are also included (See Table 15).

Table 13

Administration General Fund General Purpose Revenue Detail

(millions)

	FY 2013		FY 2014		FY 2015	
	Amount	**Growth**	**Amount**	**Growth**	**Amount**	**Growth**
GF-GP Tax Amounts						
Income Tax	$5,546.1	15.1%	$5,806.2	4.7%	$6,020.3	3.7%
Sales	$1,018.2	-5.8%	$1,163.5	14.3%	$1,209.4	3.9%
Use	$866.3	9.1%	$900.6	4.0%	$932.6	3.6%
Cigarette	$189.7	-1.5%	$186.4	-1.7%	$181.7	-2.5%
Beer & Wine	$52.5	3.3%	$52.5	0.0%	$52.5	0.0%
Liquor Specific	$42.4	1.4%	$42.9	1.2%	$43.4	1.2%
Single Business Tax	$0.0	NA	$0.0	NA	$0.0	NA
Insurance Co. Premium	$308.4	6.3%	$317.2	2.9%	$326.0	2.8%
CIT/MBT	$325.9	-76.0%	$377.0	15.7%	$427.4	13.4%
Telephone & Telegraph	$57.3	-3.2%	$57.3	0.0%	$57.3	0.0%
Oil & Gas Severance	$56.0	4.5%	$57.2	2.1%	$59.0	3.1%
GF-GP Other Taxes	$0.5	-97.9%	$3.6	620.0%	$7.0	94.4%
Total GF-GP Taxes	$8,463.3	-2.9%	$8,964.5	5.9%	$9,316.6	3.9%
GF-GP Non-Tax Revenue						
Federal Aid	$20.0	-63.5%	$20.0	0.0%	$20.0	0.0%
From Local Agencies	$1.0	-68.8%	$1.0	0.0%	$1.0	0.0%
From Services	$11.0	4.8%	$11.0	0.0%	$11.0	0.0%
From Licenses & Permits	$20.0	22.7%	$20.0	0.0%	$20.0	0.0%
Miscellaneous	$37.0	-35.1%	$38.0	2.7%	$38.0	0.0%
Driver Responsibility Fees	$91.0	-9.0%	$81.0	-11.0%	$81.0	0.0%
Interfund Interest	($3.2)	68.4%	($3.8)	18.8%	($5.0)	31.6%
Liquor Purchase	$157.2	-10.1%	$159.0	1.1%	$159.0	0.0%
Charitable Games	$9.0	-3.2%	$9.0	0.0%	$9.0	0.0%
Transfer From Escheats	$30.2	-78.9%	($3.8)	-112.6%	($3.8)	0.0%
Other Non Tax	$0.0	0.0%	$0.0	0.0%	$0.0	0.0%
Total Non Tax	$373.2	-34.2%	$331.4	-11.2%	$330.2	-0.4%
Total GF-GP Revenue	$8,836.4	-4.8%	$9,295.9	5.2%	$9,646.8	3.8%

Table 14
Administration School Aid Fund Revenue Detail

	FY 2013		FY 2014		FY 2015	
	Amount	**Growth**	**Amount**	**Growth**	**Amount**	**Growth**
School Aid Fund						
Income Tax	$2,225.4	6.0%	$2,317.7	4.1%	$2,385.7	2.9%
Sales Tax	$5,202.6	2.9%	$5,378.3	3.4%	$5,571.4	3.6%
Use Tax	$433.2	5.0%	$450.4	4.0%	$466.4	3.6%
Liquor Excise Tax	$42.4	2.7%	$42.9	1.2%	$43.4	1.2%
Cigarette & Tobacco	$364.1	-2.7%	$357.1	-1.9%	$347.2	-2.8%
State Education Tax	$1,794.4	0.3%	$1,796.4	0.1%	$1,833.6	2.1%
Real Estate Transfer	$173.6	15.7%	$190.0	9.4%	$200.0	5.3%
Michigan Business Tax	$0.0	NA	$0.0	NA	$0.0	NA
Industrial Facilities Tax	$37.9	6.2%	$38.5	1.6%	$39.0	1.3%
Casino (45% of 18%)	$108.3	-6.5%	$110.4	1.9%	$112.9	2.3%
Commercial Forest	$3.1	6.9%	$3.1	0.0%	$3.1	0.0%
Other Spec Taxes	$22.0	2.8%	$22.0	0.0%	$22.0	0.0%
Subtotal Taxes	$10,407.2	3.0%	$10,706.8	2.9%	$11,024.7	3.0%
Lottery Transfer	$744.7	-4.3%	$739.0	-0.8%	$742.0	0.4%
Total SAF Revenue	$11,151.8	2.5%	$11,445.8	2.6%	$11,766.7	2.8%

Table 15
Administration Major Tax Totals

	FY 2013		FY 2014		FY 2015	
	Amount	**Growth**	**Amount**	**Growth**	**Amount**	**Growth**
Major Tax Totals (Includes all Funds)						
Income Tax	$7,772.5	12.3%	$8,124.9	4.5%	$8,407.0	3.5%
Sales Tax	$7,151.7	2.9%	$7,392.7	3.4%	$7,657.6	3.6%
Use Tax	$1,299.5	7.7%	$1,351.0	4.0%	$1,399.0	3.6%
CIT/MBT	$325.9	-84.1%	$377.0	15.7%	$427.4	13.4%
Cigarette and Tobacco	$941.9	-2.2%	$925.4	-1.8%	$901.4	-2.6%
Casino Tax	$108.3	-6.5%	$110.4	1.9%	$112.9	2.3%