# Administration Estimates Michigan Economic and Revenue Outlook



## FY 2008-09 and FY 2009-10

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# ADMINISTRATION ESTIMATES EXECUTIVE SUMMARY

**January 9, 2009** 

#### **Revenue Review and Outlook**

- The preliminary total for FY 2008 General Fund-General Purpose (GF-GP) revenue is \$9,359.7 million, up \$195.6 million from the May 2008 Consensus estimate. GF-GP revenues grew 12.5 percent in FY 2008 with the growth largely due to the income tax rate increase and MBT surcharge enacted during FY 2008. School Aid Fund (SAF) revenue rose 3.2 percent to \$11,513.2 million, up \$138.2 million from the May Consensus estimate.
- Due to significant economic weakness and new tax credits, including the state earned income tax credit and film production credit, FY 2009 GF-GP revenue is forecast to decline 11.5 percent to \$8,280.4 million, down \$604.2 million from the May 2008 Consensus estimate. FY 2009 SAF revenue is forecast to decline 1.5 percent to \$11,335.1 million, which is \$372.3 million below the May 2008 Consensus estimate.
- FY 2010 GF-GP revenue is forecast to decrease 2.6 percent to \$8,067.9 million, which is \$212.5 million below the GF-GP estimate for FY 2009. FY 2010 SAF revenue is forecast to decline 0.4 percent to \$11,289.2 million, which is \$45.9 million less than the SAF estimate for FY 2009.

### 2009 and 2010 U.S. Economic Outlook

- Real gross domestic product is forecast to decline 1.6 percent in 2009 before growing 1.3 percent in 2010.
- Wage and salary employment is projected to decline through mid-2010 before rising over the second half of 2010. Between the end of 2008 and end of 2010, the U.S. economy is expected to lose a net 2.6 million jobs.
- The U.S. unemployment rate is forecast to average 8.0 percent in 2009 and 8.6 percent in 2010.
- Housing starts are projected to total fewer than 1.0 million units in both 2009 and 2010.
   Projected 2009 housing starts of 826,200 units would be the lowest annual level of starts in at least 50 years.
- In 2009, light vehicle sales are forecast to total 11.1 million units (a 27-year low) before rising to 12.5 million units in 2010.
- Driven by sharp declines in oil prices, consumer price inflation is forecast to average only 0.8 percent in 2009 -- a 50-year low. Inflation is then expected to accelerate to 2.6 percent growth in 2010.

## 2009 and 2010 Michigan Economic Outlook

- Michigan wage and salary employment is forecast to fall sharply in 2009 (-4.4 percent, its sharpest one-year decline since 1982). Employment is then expected to decline by an additional 1.8 percent in 2010, marking the tenth straight year of State employment declines.
- Private non-manufacturing employment is forecast to decline by 105,000 jobs in 2009 and 28,400 jobs in 2010. Manufacturing employment is projected to fall by 63,200 jobs in 2009 and 39,800 jobs in 2010. Thus, for 2009 and 2010 combined, Michigan wage and salary employment is forecast to fall by 256,500 jobs with 133,500 jobs lost in private non-manufacturing and 103,000 jobs lost in manufacturing.
- After averaging 8.4 percent in 2008, the Michigan unemployment rate is forecast to rise to 10.9 percent in 2009 and 11.0 percent in 2010.
- Wages and salaries are forecast to decrease 3.2 percent in CY 2009 and to rise 0.2 percent in CY 2010, compared with +0.6 percent growth in 2008. Personal income will fall 0.7 percent in 2009 and rise 0.6 percent in 2010.
- In FY 2009, Michigan wages and salaries income is expected to fall 2.5 percent before decreasing an additional 1.0 percent in FY 2010.
- Disposable income is forecast to rise 0.8 percent in FY 2009 and 0.2 percent in FY 2010.

## **Forecast Risks**

- More severe and broader than expected fallout from the subprime crisis and resultant credit crunch.
- Failure or delay in enacting fiscal stimulus package.
- Failure of one or more of the Big Three vehicle manufacturers.
- Higher oil prices.
- Michigan hit disproportionately harder because of its greater reliance on the manufacturing sector in general and the automotive industry in particular.
- Geopolitical factors.
- Less steep housing market downturn.

## ECONOMIC REVIEW AND OUTLOOK January 9, 2009

### **Current U.S. Economic Situation**

#### Summary

The U.S. economy has officially been in recession since December 2007 -- as determined by the National Bureau of Economic Research.

After two strong quarters in mid 2007 during which real (inflation adjusted) GDP grew at a 4.8 percent annual rate, the economy contracted slightly in the final quarter of 2007 (-0.2 percent). Then, in the first three quarters of 2008, real GDP expanded at a 1.1 percent annual rate. An improving trade balance (exports minus imports) played a major role in supporting even this meager growth. In each of the past six quarters, the trade deficit has shrunk -- the first such string of declines since mid-1991. *Excluding* the foreign trade sector, the domestic economy contracted at a 0.4 percent rate over the first three quarters of 2008. Overall real GDP (including the foreign trade sector) fell at a 0.5 percent rate in 2008Q3.

Comprising 70 percent of real GDP, real consumption is essential to U.S. economic growth. In each of the three quarters from 2007Q4 to 2008Q2, consumption grew at only around a 1.0 percent rate. In the third quarter of 2008, this key component fell dramatically (-3.8 percent annual rate) — its most severe decline in over 28 years. Both durable and non-durable consumption declined sharply (-14.8 percent rate and -7.1 percent rate, respectively). With services consumption flat, overall consumption subtracted 2.8 percentage points from overall economic growth.

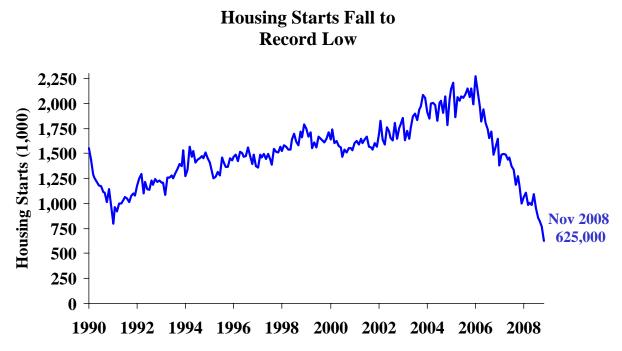
Sharply declining residential investment has led the overall decline in the economy, falling at an 18.3 percent annual rate of decline over the first three quarters of 2008. In the third quarter, the *level* of residential investment fell to a 13-year low. Compared to its peak (2005Q4), residential investment is down an astounding 41.2 percent. 2008Q3 marked the tenth consecutive quarter of double digit declines in residential investment -- the first such stretch over a recorded history extending back to 1947.

After posting rapid growth in mid 2007, *non*-residential investment slowed dramatically such that by the third quarter of 2008, non-residential investment actually declined slightly (-1.7 percent annual rate).

Compared to a year ago (2007Q3), the economy has expanded by only 0.7 percent. In contrast, the economy had grown 2.8 percent between 2006Q3 and 2007Q3.

#### **Housing Market**

The housing market has seen a substantial downturn in recent quarters. In the third quarter of 2008, the housing starts rate averaged 875,700 units -- the lowest quarterly average in nearly 27 years. In October 2008, starts fell to a 771,000 unit rate, setting a new record. Then, in November 2008, starts fell still further to a new record low 625,000 unit rate. These levels are in sharp contrast to the near 2.0 million unit pace in 2006 and even the 1.4 million unit pace in 2007.



Source: U.S. Census Bureau.

In November 2008, home builder sentiment hit a record low with the National Association of Home Builders (NAHB) index falling to 9, half its level a year earlier. Sentiment remained unchanged at 9 in December.

Through October, existing home sales had remained around a 5.0 million unit rate in 2008. However, existing home sales fell sharply in November to a 4.5 million unit rate – down 10.6 percent from a year ago and down more than 35.0 percent from peak sales. Similarly, while months of sales inventory had trended down between mid-2008 and October, they rose in November. Existing home sales have been propped up above where they otherwise would have been by foreclosure and other distress sales.

Construction employment was down 7.6 percent compared to a year ago -- compared to a 1.4 percent year-over-year decline in overall payroll employment.

The Federal Reserve's two most recent *Beige Books* (October and December) further corroborate the poor housing market *and* weakening commercial real estate market. In October's *Beige Book*, the Federal Reserve noted,

Residential real estate and construction activity weakened or remained low in all Districts. . . . Several Districts noted continuing downward price pressures and an increasing supply of homes for sale due to rising foreclosures. . . . Tighter credit conditions were cited as a limiting factor for demand in several Districts. Most Districts reported commercial real estate and construction activity had slowed . . . Several Districts reported project delays and cancellations due to tighter credit conditions and increased economic uncertainty.

Still again, December's Beige Book observed,

Residential real estate continued at a slow pace nationwide. . . . Boston, New York, Cleveland, Richmond, Atlanta, Chicago, Minneapolis, Kansas City and Dallas noted decreases in housing prices. Inventories of unsold homes remained high in the New York, Atlanta, Kansas City and San Francisco Districts, but declined in Chicago and Minneapolis. Philadelphia, Richmond, Chicago and Kansas City reported relatively stronger demand for lower- and middle-priced "starter homes."

Commercial real estate markets weakened broadly. Vacancy rates rose in Boston, New York, Richmond, Chicago, Kansas City and San Francisco, but were mixed across markets in the St. Louis District. Leasing activity was down in almost all Districts. Rents fell in the Boston, New York and Kansas City Districts. Despite reductions in construction materials costs, commercial building activity declined in many Districts with tighter credit conditions as a factor.

## Hous<u>e Prices</u>

There are three major housing price measures. All three price measures point to a sharp retrenchment in housing prices.

In October 2008, the Case-Shiller 20-metro area housing price index was down 18.0 percent from a year ago while the 10-metro area index fell 19.1 percent. On a year-over-year basis, housing prices have declined every month since January 2007, with the rate of decline accelerating each month.

The Federal Housing Finance Agency (formerly OFHEO), which excludes mortgages over \$417,000, reports similar, but not as dramatic, findings. Compared to a year ago, the October 2008 FHFA index was down 7.5 percent.

The National Association of Realtors (NAR) reported that the November 2008 median existing home price declined a record 13.2 percent compared with a year ago, worsening from an 11.3 percent decline in October.

#### **Repercussions**

The sharp housing market downturn and concomitant home price declines -- along with a worsening economy and jobs market -- have had serious repercussions.

Recent state actions to help homeowners avoid foreclosure pushed down the share of homes entering foreclosure between 2008Q2 and 2008Q3. However, tightening credit markets and a worsening jobs market will likely push rates up in coming quarters.

Rising delinquency rates point to higher future foreclosure rates. In 2008Q3, the mortgage delinquency rate rose to a record 6.99 percent. Compared to a year ago, the overall rate is up 1.40 percentage points. Delinquency rates rose for both prime and sub-prime loans. The prime loan delinquency rate rose 1.22 percentage points to 4.34 percent while the sub-prime delinquency rate was up 1.36 percentage points to 20.03 percent.

The percent of homeowners either delinquent or in foreclosure has risen sharply in the past year. While 7.3 percent were either delinquent or in foreclosure a year earlier, a record 10.0 percent of homeowners fit one of these categories in 2008Q3.

When the housing market was booming, lenders relaxed their lending standards and extended credit to subprime (more risky, less qualified) borrowers. Now that the booming market has gone bust, lenders in turn have tightened their lending standards – even beyond what they were prior to the boom.

According to the Federal Reserve's November 2008 Senior Loan Officer Opinion Survey, 69.2 percent of banks reported tighter lending conditions for *prime* mortgage loans in the fourth quarter of 2008. In contrast, only 15.1 percent of surveyed banks had reported tighter prime mortgage lending standards in mid 2007.

Financing has dried up for all potential borrowers – not just households. 83.6 percent of banks reported tighter lending standards for commercial and industrial loans to large and mid-sized firms. Just a year earlier, only 19.2 percent of banks had reported tighter commercial and industrial loan standards. Municipal bond and corporate bond rates have risen over the past year as investors became increasingly wary of the soundness of these other investments and have flocked to the safety of Treasury bills and bonds. Between November 2007 and November 2008, the high grade municipal bond rate rose from 4.45 percent to 5.28 percent while corporate Aaa bond rates have increased from 5.44 percent to 6.15 percent. As further indication of the investors' flight to safety, the 90-day Treasury bill rate fell to essentially zero percent in early December 2008. That is, investors were willing to sacrifice any return to assure themselves that their principal would be preserved in the midst of the current financial turmoil.

Traditionally, Fannie Mae and Freddie Mac – the nation's two largest holders of home mortgages – had been regarded as solid financial institutions given their status as GSEs (government sponsored enterprises) with the implied guarantees of the federal government. However, these institutions were battered by the sub-prime crisis and the accompanying sharp home price declines. Despite several measures taken by the federal government to bolster the

soundness of these institutions, their shares fell by 90 percent over the year ending August 2008. Finally, in September 2008, the companies were placed into federal government conservatorship administered by the newly formed Federal Housing Finance Agency.

Banks even became wary of lending to each other – concerned that the bank to which they might lend would not be able to pay back the loan. The difference between three-month LIBOR rate, a benchmark for the rate banks charge each other to borrow from one another, and the 90-day Treasury bill rate rose to 4.58 percentage points in mid-October in the wake of Lehman Brothers' failure. This spread has since narrowed as a result of aggressive monetary policy.

With more and more borrowers defaulting on their loans, financial institutions have written down large sums of sub-prime loans. Because many loan originators packaged and sold their loans to other companies, the housing market bust has extended beyond the original lenders. The write-offs are in the billions of dollars for many high-profile companies. These write downs have served to reduce monies available to lend (even outside the mortgage market). The write downs have also reduced funds to invest and impacted the stock market as publicly held companies holding risky loans have seen their stock values plummet. The result has been a credit crunch with repercussions that extend beyond the housing and mortgage markets, let alone just beyond the subprime mortgage market.

Declining home prices have meant lower homeowner equity (house value less mortgage debt). The Federal Reserve reported that homeowner equity fell to a record low 44.7 percent in 2008Q3. Prior to the current housing bust, homeowner equity had never fallen below 50 percent. The *amount* of homeowner equity fell 20.8 percent between 2007Q3 to 2008Q3.

In the third quarter of 2008, *overall* consumer net worth declined a record 11.1 percent compared to a year ago (-\$7.1 trillion). Spillover into broader financial markets has meant sharp declines in stock prices along with the sharp house price declines. Following the collapse of Lehman Brothers in mid-September 2008, the last month of 2008Q3, the Standard and Poor's 500 stock index plummeted. Between the end of 2008Q3 and the end of 2008Q4, the S&P 500 lost 22.5 percent of its value. Thus, net worth declines very likely accelerated further in the fourth quarter of 2008.

While households borrowed at an \$803.1 billion annual rate in 2007Q4, that rate nearly halved in 2008Q1 and fell by 82 percent in 2008Q2. In 2008Q3, for the first time in a history going back to 1952, household borrowing turned negative (-\$117.4 billion annual rate, -0.8 percent).

The turmoil in financial markets has spilled over into the "real" economy, depressing consumption of goods and services along with investment in structures and machinery. This curtailed current demand – coupled with uncertainty and pessimism about future demand – has resulted in massive job cuts. These jobs cuts in turm further reduce consumption and investment, which perpetuates a downward cycle.

Given the inter-connectedness of financial and economic markets, what began as a U.S. recession has become a global one. Economy.com's international business confidence index encompassing respondents in North America, South America, Europe and Asia plummeted in 2008Q4. While the index stood at +11.4 at the end of August 2008, the measure fell to -31.5 by

the middle of December. The synchronization of recessions around the world will serve to send the U.S. and other economies deeper into recession.

#### **Monetary Policy**

#### Interest Rates

Faced with credit market tightening, turmoil in the financial markets and the foundering housing market, the Federal Open Market Committee (FOMC) began cutting the target federal funds rate in September 2007. The FOMC cut the federal funds target rate by 50 basis points at its September 2007 meeting, 25 basis points at its October 2007 meeting and another 25 points in December 2007, pushing the target rate down to 4.25 percent.

In January 2008, the FOMC found itself faced with a deteriorating economic outlook and growing strains on financial markets. Consequently, the FOMC convened two unscheduled meetings on January 9 and January 21. At its January 21, 2008, meeting the FOMC cut the target federal funds rate by 75 basis points, lowering the target rate to 3.50 percent. The Committee also reduced the discount rate by the same amount, cutting that rate to 4.00 percent. Just a week later at a scheduled meeting on January 29/30, the FOMC cut the interest rates another 50 basis points citing many of the same reasons it had for the January 21 rate cuts. After these actions, at the end of January, the target federal funds rate and discount rate stood at 3.00 percent and 3.50 percent respectively.

At a weekend emergency meeting in mid March, the Federal Reserve cut the discount rate an additional 25 basis points to 3.25 percent, shrinking the spread between the discount rate (the rate the Fed charges at its borrowing window) and the target federal funds rate (the rate banks charge each other) to 25 basis points.

Shortly after, at a scheduled March 18, 2008 meeting, the FOMC cut the target federal funds rate and discount rate an additional 75 basis points, reducing the rates to 2.25 percent and 2.50 percent respectively. On April 30, 2008, the FOMC lowered both rates by another 25 basis points. The FOMC left rates unchanged until early October but further lowered both rates 50 basis points at its October 8, 2008 meeting and an additional 50 basis points on October 29, 2008. These actions cut the rates to 1.00 percent and 1.25 percent respectively.

Finally, at its December 16, 2008 meeting, the 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.

Thus, in total, between September 2007 and December 2008, the Federal Reserve cut the target federal funds rate ten times and the discount rate eleven times. As a result, the target federal funds rate was cut a total of 500-525 basis points and the discount rate was cut 525 basis points.

#### Additional Recent Federal Reserve Bank Actions

In addition to dramatically lowering its key interest rates to record low levels, the Federal Reserve has also been addressing the financial and economic crises by injecting substantial liquidity into financial markets. While having remained relatively flat over the past few years, Federal Reserve Bank reserves have exploded since mid-September 2008. Between mid-September and mid-December, Federal Reserve Bank credit more than doubled from \$890.4 billion to \$2,253.7 billion. The Fed injected this substantial liquidity through various lending facilities.

In late 2007, the Federal Reserve instituted the Term Auction Facility (TAF). The TAF was instituted to address limitations with banks' use of the discount window. In particular, the borrowing from the discount window bore a stigma and was typically only overnight borrowing. On the other hand, banks did not attach a stigma to TAF borrowing. In addition, TAF loans were extended for 28-days. In July 2008, the FOMC extended the facility through January 30, 2009 and introduced 84-day Term Auction Facility (TAF) loans to complement the 28-day TAF loan program.

In March 2008, the Federal Reserve instituted the Primary Dealer Credit Facility. The Facility allowed investment banks a means to borrow cash with highly rated assets from the Federal Reserve Bank at the rate the Fed charged commercial banks at its discount window. Doing so provided security brokers a means to bolster their financial balance sheets. The Fed had not taken such an action since the Great Depression.

Also in March 2008, the Federal Reserve instituted the Term Securities Lending Facility (TSLF) as a means to support the troubled agency-backed mortgage securities and loans markets. Under the TSLF, the Fed would accept a broad range of securities as collateral, including private mortgages and mortgage-backed securities, from the Fed's twenty primary dealers.

To address strains in the money market funds, many of which "broke the buck," the Federal Reserve instituted the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility. The Facility provides funding to U.S. depository institutions and bank holding companies to finance their purchases of high-quality asset-backed commercial paper (ABCP) from money market mutual funds. The program was intended to assist money funds that hold ABCP in meeting demands for redemptions by investors and to foster liquidity in the ABCP market and money markets more generally.

In addition to these facilities, the Federal Reserve created still other facilities designed to address liquidity strains in various markets: the Commercial Paper Funding Facility (CPFF), the Money Market Investor Funding Facility and the Term Asset-Backed Securities Loan Facility.

While financial markets remain strained, it is likely that without these aggressive actions, financial markets would have been in significantly greater disarray.

As a result of the Federal Reserve's rate cuts and additional actions, short-term rates (e.g., three month Treasury bill rate) have fallen significantly over the past year, falling from 3.49 percent in

November 2007 to 0.30 percent in November 2008 -- a 319 basis point reduction. Over the past year, long-term rates have also fallen, but by substantially less. Since November 2007, the 10 year Treasury note rate has fallen 62 basis points from 4.15 percent to 3.53 percent.

The Fed's actions have increased the willingness of bank's to lend to one another. Since mid-October, the spread between the three-month LIBOR rate and the three-month Treasury bill has halved to about 2.0 percentage points. Nevertheless, broader credit markets remain tight and even in many cases frozen.

In its December 16, 2008 statement, recognizing the continuing and still mounting challenges facing the Committee, the FOMC affirmed its commitment to do all within its power to help bolster financial markets and thus the economy in general:

The Federal Reserve will employ all available tools to promote the resumption of sustainable economic growth and to preserve price stability. In particular, the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.

More specifically, the FOMC indicated its readiness to employ new tools and broaden its reach into new areas of the credit market:

The focus of the Committee's policy going forward will be to . . . sustain the size of the Federal Reserve's balance sheet at a high level. As previously announced, over the next few quarters the Federal Reserve will purchase large quantities of agency debt and mortgage-backed securities to provide support to the mortgage and housing markets, and it stands ready to expand its purchases of agency debt and mortgage-backed securities as conditions warrant. The Committee is also evaluating the potential benefits of purchasing longer-term Treasury securities. Early next year, the Federal Reserve will also implement the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses. The Federal Reserve will continue to consider ways of using its balance sheet to further support credit markets and economic activity.

#### Fiscal Policy

In February 2008, the Congress passed and the President signed the Economic Stimulus Act of 2008. The Act provided for more than \$160 billion in fiscal stimulus. The centerpiece of the legislation was the \$120 billion in personal income tax rebates to be paid out between May 2008 and July 2008. The Act also provided for accelerated depreciation of assets purchased in 2008. Businesses were able to deduct an additional 50 percent of the cost of the 2008 investment.

In the wake of the Lehman Brothers' debacle, Congress passed a \$700 billion financial rescue package, the Troubled Asset Relief Program (TARP), designed to complement the Fed's actions to restart lending. As originally conceived, TARP was to buy toxic mortgage assets to help clean up financial institutions' books. However, Treasury was granted broad latitude in how it

implemented TARP. Consequently, Treasury instead used the appropriated funds to buy ownership into major financial institutions and instituted a program to assist companies issuing credit cards, car loans and/or student loans. The goal remained the same as originally conceived: to enhance liquidity and, hence, financial institutions' willingness to lend. TARP also raised the FDIC limit on insured deposits from \$100,000 to \$250,000.

In the face of a plummeting vehicle sales market, declining market share, and tightening credit standards, the Big Three vehicle manufacturers have fallen into serious financial straits. Consequently, in the late Fall of 2008, the Big Three twice went before Congress seeking a multi-billion financial assistance package. Both efforts failed. However, in late December, using TARP funds, the Bush Administration extended a \$17.4 billion bridge loan package to help General Motors and Chrysler keep afloat – at least in the very short-term. While originally opposing the use of TARP funds to assist faltering vehicle makers, the Administration reversed its position given the serious economic consequences it foresaw resulting from these companies' failure.

The incoming Obama Administration has indicated that it will move to implement a substantial fiscal package (exceeding \$500 billion) shortly after it takes office.

#### Inflation

Price pressures have eased considerably in recent months. In June 2008, oil prices rose to a record \$133.93 per barrel, almost double oil prices in June 2007. Oil prices remained essentially unchanged between June 2008 and July 2008. However, oil prices fell sharply in each of the four following months. Consequently, the average November 2008 oil price per barrel stood at \$57.44 – falling \$76.00 a barrel in just these four months. Compared to a year ago, November's average price is down almost 40 percent. Weakening economies around the world have sharply curtailed oil demand. In mid-December 2008, oil prices fell to nearly \$40 a barrel. Thus, in an effort to bolster oil prices in the face of flagging demand, OPEC announced that it would cut daily oil production by 2.2 million barrels beginning January 1, 2009. Despite this announcement, oil prices remained around \$40 a barrel.

Substantially lower oil prices have driven gasoline prices down sharply. The average price of unleaded gasoline had fluctuated around \$4.00 a gallon between mid-June and mid July -- rising to a record \$4.05 by mid July. Beginning in mid-July, gasoline prices began trending downward. By the end of September, the average price of gasoline had fallen by 41 cents. However, beginning in early October, gasoline prices dropped sharply – falling an additional \$1.85 a gallon by late November. In the week ending December 15, the price of gasoline had declined to \$1.64 a gallon – less than half mid-2008 prices and a four and a half year low. In the face of the current recession, these lower prices have served as a partial, but important, counter-balancing force as they have measurably increased consumers' discretionary spending.

Between July 2007 and July 2008, natural gas prices rose 78.8 percent to their second highest level in history – just shy of the record level set following Hurricane Katrina. However, like oil and gasoline prices, natural gas prices have fallen sharply since July. Between July and

November, natural gas prices fell 58.0 percent. Compared to a year ago, November 2008 natural gas prices are down 27.2 percent.

The Federal Reserve's December 2008 Beige Book reported that

District reports characterized price pressures as easing in light of some decreases in retail prices and declines in input prices, particularly for energy, fuel, and many raw materials and food products.

## Oil Prices Spike to Record High Then Fall Sharply



Source: Federal Reserve Bank of St. Louis.

While 80 percent of manufacturing firms surveyed by the Institute for Supply Management (ISM) reported paying higher prices in mid-2008, that figure fell to 60 percent in August. The figure then halved in each of the next three months so that by November only 8 percent of surveyed firms reported paying higher prices. Similarly, while more than 65 percent of non-manufacturing firms reported paying higher prices in mid-2008, that figure had fallen to just 11 percent by November with more than half of that decline taking place in the past two months.

Between July 2007 and July 2008, the overall producer price index rose 9.9 percent. However, that year-over-year increase slowed to 5.2 percent by October and to just 0.4 percent in November. Core producer inflation (excluding food and energy prices) has risen slightly between July and November with year-ago increases accelerating from 3.3 percent to 4.2 percent.

In July 2008, the overall year-over-year consumer price inflation rate stood at 5.6 percent, a 17-year high. However, by October, that inflation rate had slowed to 3.7 percent. Then, with a

record monthly price decline, the year-ago inflation rate fell sharply to just 1.1 percent in November.

Core consumer inflation decelerated slightly between July and November, slowing from 2.5 percent to 2.0 percent.

The Economic Cycle Research Institute's (ECRI) future inflation gauge indicates that price pressures will remain contained at least in the near term. The gauge's November 2008 reading was the lowest since 1961.

### Major Economic Indicators

Major economic indicators confirm that the U.S. economy has fallen into a severe and long-lasting recession.

After signaling a flat or slightly declining manufacturing sector the first eight months of 2008 with readings around 50, the ISM manufacturing index (PMI) plummeted in September to 43.5. The index then fell again in both October and November to 38.9 and 36.2 respectively. The November 2008 reading was the index's lowest since May 1982. After falling sharply in January 2008 to 41.9, its lowest level since October 2001, the non-manufacturing business activity index signaled flat or slightly rising non-manufacturing activity between February and September. However, the index fell sharply in October to 44.2 and again in November to 33.0, the lowest reading in the index's eleven year history.

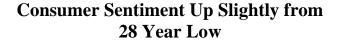
Industrial production has worsened considerably during 2008. While the three-month average of industrial production was up 1.9 percent compared to a year ago in the first quarter, year-ago growth flattened in the second quarter and turned significantly negative in the third quarter (-3.0 percent). By November, the three month-average of industrial production was down 5.4 percent – its sharpest year-ago decline since December 2001.

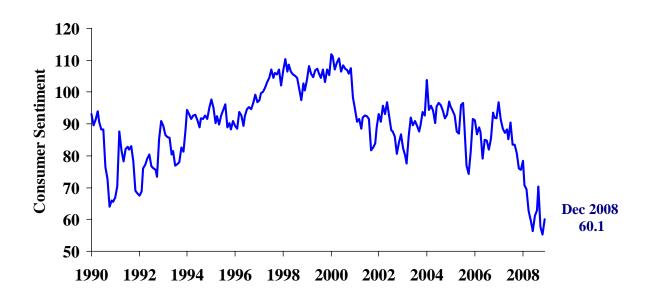
Compared to a year ago, the three-month average of retail sales, excluding motor vehicle and gasoline sales, increased only 0.7 percent in November, its slowest growth since at least early 1993.

Both major consumer confidence readings continued to signal greater weakness in consumption. The Conference Board index of consumer confidence plummeted in October from 61.4 to 38.8. While rebounding in November to 44.7, the index fell in December to 38.0, its lowest level in the index's 40-year history.

The University of Michigan index of consumer sentiment declined sharply in October, falling from 70.3 to 57.6. The index fell further in November to 55.3 – its lowest level since 1980 before rebounding to 60.1 in December. December's reading is 15.4 points below its year-ago reading.

In late November 2008, the ABC News/Washington Post Consumer Comfort Index fell to -54, an all-time low in the index's 22-year history, before improving only slightly. Compared to a year ago, the late December 2008 index reading (-49) was down 29 points.





Source: University of Michigan Survey of Consumers.

The Conference Board index of leading economic indicators fell in four of the last five months. Compared to a year ago, the index is down 3.7 percent. Compared to its January 2006 high, the index is already down 5.4 percent – exceeding the 3.6 percent peak-to-trough decline in the 2001 recession and approaching the 5.9 percent decline from the 1990-1991 recession.

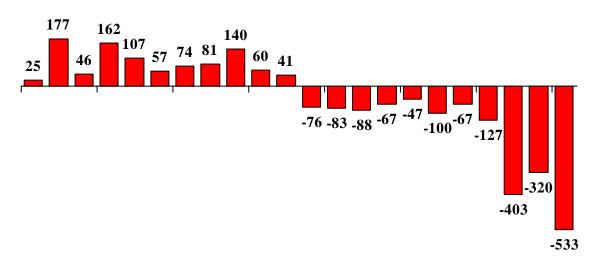
The ECRI weekly leading index points to a lengthy and severe recession. The index has been declining for well over a year. Deteriorating significantly between mid-September and early December, the index's smoothed annualized growth rate worsened from -11.6 to -30.3, the lowest reading in the index's forty year history. The growth rate has improved over the past two weeks – but only slightly (now at -29.2).

#### **Employment**

U.S. payroll employment rose each month between September 2003 and December 2007. By December 2007, employment exceeded its pre-2001 recession peak (February 2001) by 5.5 million jobs.

However, in each of the past eleven months, employment has fallen, declining a total of 1.9 million jobs with 1.3 million of this job loss coming in just the past three months. In November, employment fell by 533,000 jobs -- the greatest number of jobs lost in a single month since December 1974 and the largest percentage monthly decline (-0.4 percent) in nearly 28 years.

# U.S. Economy Sheds 1.3 Million Jobs in Just Three Months (Monthly Change in Thousands)



Feb-07 May-07 Aug-07 Nov-07 Feb-08 May-08 Aug-08 Nov-08

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

Manufacturing employment remains particularly hard hit with year-to-date 2008 employment losses amounting to 604,000 jobs – a 4.4 percent reduction. In addition, the bursting housing bubble and credit crunch have exacted an enormous toll on the construction industry. Year-to-date, construction employment has fallen by 513,000 jobs – a 6.9 percent decline.

Temporary help services employment, a leading indicator for the overall jobs market, points to continued overall weakness. While temporary employment fell in 2007, the sector's losses have ballooned in 2008. Temporary employment, which fell by 78,600 jobs in 2007, has seen a five-fold greater decline in 2008 (-393,300 jobs).

The U.S. unemployment rate has risen sharply since April 2008. Between January and April the unemployment rate fluctuated in the narrow band between 4.9 percent and 5.1 percent. However, between April and November, the rate rose to 6.7 percent – the highest monthly U.S.

unemployment rate in 15 years. Further, in November 2008, the number of workers underemployed for economic reasons was up 63 percent from a year ago to a record 7.3 million.

Several other employment indicators also point to a weak labor market.

Increases in the four-week moving average of initial unemployment claims have accelerated substantially since the May 2008 Consensus Conference. Consequently, by mid-December, the four-week average had risen from 373,000 initial claims to 558,000 initial claims, the highest average in 26 years.

According to the Challenger Report, November 2008 layoff announcements rose 148.4 percent compared to a year ago to their highest level since January 2002.

Between November 2007 and November 2008, the ISM manufacturing employment index has signaled shrinking manufacturing sector employment (index less than 50.0) in all but one month. In November 2008, the index stood at 34.2, its lowest reading since March 1991.

In the first eleven months of 2008, the ISM non-manufacturing component index signaled shrinking employment in the services sector in all but one month. In November, the sub-index registered 31.3 – its first reading under 40.0 since the index's inception in July 1997. While only five percent of those surveyed in November 2008 reported employment increases, 43 percent recorded employment declines.

#### Vehicle Sales and Production

In November, light vehicle sales fell to a 10.1 million unit annual rate – their lowest monthly level since October 1982. Compared to a year ago, vehicle sales are down an astounding 36.7 percent with the foreign sales share up 2.1 percentage points. Falling 38.5 percent from a year ago, domestic vehicle sales also fell to a 26-year low (7.6 million unit rate). Big Three sales were similarly down 40 percent compared to a year ago.

Through the first eleven months of 2008, light vehicle sales have averaged only 13.4 million units – on pace to a 16-year calendar year low and down from 16.1 million units in 2007. Prior to 2008, light vehicle sales had topped 16.0 million units in nine consecutive years (1999-2007). Domestic sales are on pace to a 17-year low with a 10.0 million unit rate.

Vehicle sales have flagged under the weight of weaker employment, substantially tighter credit markets and dramatic declines in household assets. Consequently, the Big Three vehicle manufacturers now find themselves in severe financial straits and even on the brink of bankruptcy. The Big Three's precarious situation seriously harms Michigan's economy, which is tightly linked to the Big Three as the State's three largest private sector employers, directly employing over 150,000 workers and indirectly providing the State several times this number of jobs.

In November 2008, the three-month average of U.S. vehicle production was down 25.0 percent compared to a year ago. Year-to-date, U.S. vehicle production is down 19.2 percent.

#### **Current Michigan Economic Conditions**

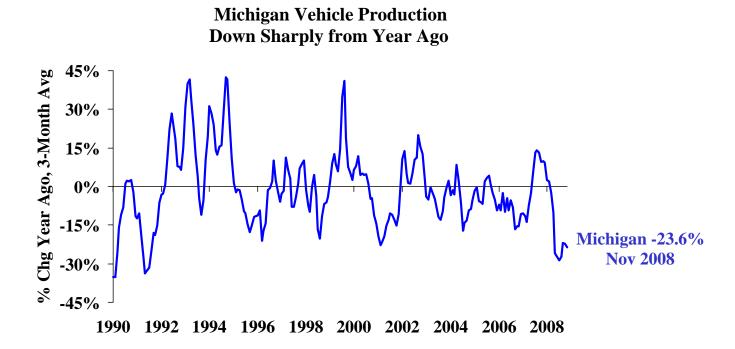
#### Vehicle Production

In November, the three-month average of Michigan vehicle production was down 23.6 percent. While State auto production was down only 4.0 percent from a year ago, higher-margin light truck production was down sharply (38.1 percent).

Year-to-date, 2008 State vehicle production has fallen 20.4 percent with auto production essentially flat (+0.6 percent) but truck production down 36.3 percent.

#### **Employment**

Michigan's economy relies heavily on the performance of the manufacturing sector in general and the auto industry specifically. Given extremely weak manufacturing employment performance, declining vehicle production, continued declines in Big Three market share along with continued supply rationalization among vehicle suppliers, Michigan's employment performance has been below the national average. Substantial productivity gains in the vehicle industry have also contributed to Michigan's weaker employment performance.



Source: Automotive News and Michigan Department of Treasury.

Michigan wage and salary employment is on pace to decline for the eighth consecutive year in 2008. Through November 2008, State employment is down 1.6 percent, compared to last calendar year's 1.5 percent decline. Michigan manufacturing employment is on pace to fall for the ninth straight year, having declined 6.1 percent year-to-date.

Between November 2007 and November 2008, Michigan's monthly employment fell by 112,700 jobs. Over this time period, manufacturing employment accounted for the largest share of the decline (38,100 jobs) among major sectors. Construction declined by 17,200 jobs, while retail trade lost 15,300 jobs.

In the last four months alone, overall Michigan employment has fallen by 101,200 jobs.

From Michigan's employment peak in June 2000 to November 2008, Michigan has lost 576,200 jobs (-12.3 percent). Since June 2000, Michigan manufacturing employment has fallen by 343,500 jobs, more than one out of every three manufacturing jobs the sector had at the State's employment peak (-37.8 percent).

In May 2008, Michigan's unemployment rate rose sharply, rising from 6.9 percent to 8.5 percent. Since May, the State's unemployment rate has risen still more with November's rate at 9.6 percent – Michigan's highest unemployment rate since March 1992. In November 2008, Michigan had the highest state unemployment rate in the nation.

#### **Housing Market**

Despite not being one of the major participants in the housing boom, Michigan has been hit disproportionately hard from the housing bust. According to the OFHEO, among all states, Michigan ranked sixth in year-over-year home price declines in 2008Q3 (-7.3 percent).

In October 2008, according to Case-Shiller house price measures, the Detroit MSA recorded a 20.4 percent year-over-year house price decline, compared with an 18.0 percent average decline for the twenty U.S. metro areas surveyed for the measure.

Michigan's 2008Q3 mortgage delinquency rate (9.7 percent) ranked third among U.S. states behind Mississippi and Louisiana (Mortgage Bankers Association).

Michigan's November 2008 foreclosure rate was up more than 25 percent both from a month ago and a year ago. Michigan ranked fifth among U.S. states in foreclosure rates with one for every 309 housing units -- compared to one for every 488 units nationally (Realty Trac).

Compared to a year ago, November 2008 housing unit authorizations in Michigan were down 42.2 percent in Michigan compared to a 34.5 percent drop nationally.

#### Personal Income

Compared to a year ago, third quarter 2008 Michigan personal income grew 2.3 percent compared with 3.7 percent growth nationally. Similarly, Michigan wages and salaries rose 0.6 percent compared with substantially faster growth nationally (3.0 percent). Manufacturing wages and salaries were down sharply in Michigan compared to a year ago (-3.9 percent) compared with essentially flat manufacturing wages nationally (+0.1 percent).

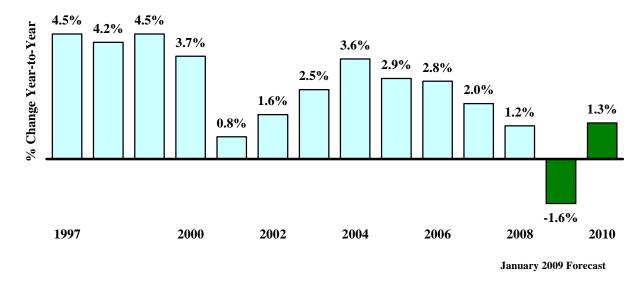
### 2009 and 2010 U.S. Economic Outlook

#### Summary

After growing 1.2 percent in 2008, real GDP is forecast to decline 1.6 percent in 2009 and then rise only 1.3 percent in 2010. High consumer debt levels, the credit crunch and a weak housing market are expected to shrink the economy in 2009 and to substantially restrain growth in 2010. The projected 2009 decline would be the economy's worst annual performance since the 1982 drop (a 1.9 percent decline).

After declining slightly in 2008Q3, the U.S. economy is estimated to have contracted severely (-4.9 percent annual rate) in 2008Q4. Real GDP is forecast to decline substantially in 2009Q1 (-2.8 percent annual rate) before shrinking slightly in the second quarter. After reporting slow third quarter growth, real GDP is expected to decline slightly in the final quarter of 2009. Real GDP is then expected to remain slow to moderate throughout 2010.

## **U.S. Economy Contracts in 2009**



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2009.

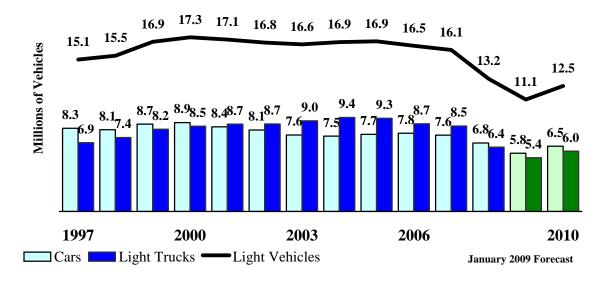
Light vehicle sales are projected to decline to 11.1 million units in 2009 (a 27-year low) before rising to 12.5 million units in 2010.

After reporting a slight decline in 2008, U.S. wage and salary employment is forecast to fall 1.9 percent in 2009 and an additional 0.8 percent in 2010. The U.S. unemployment rate rises to 8.0 percent and 8.6 percent in 2009 and 2010, respectively.

Overall consumer prices are forecast to rise only slightly (0.8 percent) in 2009 – their smallest increase since 1959 – before accelerating to 2.6 percent growth in 2010.

As a result of substantial Federal Reserve rate cuts and investors' flight to safety, short-term Treasury rates are estimated to have fallen from 4.4 percent to 1.4 percent in 2008. Short-term rates are forecast to decline still further to 0.3 percent in 2009 before rising slightly to 1.0 percent in 2010. Given slower inflation and lower risk premia, corporate interest rates are expected to fall from 5.7 percent in 2008 to 5.2 percent and 4.9 percent, respectively, in 2009 and 2010.

#### **Motor Vehicle Sales Fall to 27-Year Low in 2009**



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2009.

#### <u>Assumptions</u>

Oil prices are expected to remain little changed from their current levels until the second half of 2010 when prices are forecast to rise to \$70 a barrel. Natural gas prices are forecast to begin rising by the end of 2009.

The housing market is expected to remain extremely weak throughout the forecast horizon. 2008 housing starts are estimated at 967,100 units. Starts are then forecast to fall to 826,200 units in 2009 (a record low) before rising to 907,900 units in 2010. These three years would represent

the only years since at least 1959 in which annual housing starts totaled fewer than 1.0 million units.

The forecast assumes that the FOMC will hold the target federal funds rate constant at a record low 0.25 percent through 2009 as the Fed continues to contend with shaky financial markets and a weak economy. The FOMC is assumed to increase the rate gradually in 2010.

The value of the U.S. dollar is expected to fall slightly in early 2009 but then remain relatively stable over the balance of the forecast horizon.

With more households unwilling or unable to borrow and more households becoming increasingly restrained in their spending habits, the household savings rate is assumed to rise above 5.0 percent in mid 2009. The savings rate is then expected to decline to 3.3 percent – still in sharp contrast to the near zero rate in late 2007 and early 2008.

#### **Forecast Risks**

The U.S. economy has been in recession for over a year. The questions now are "How long?" and "How deep?". The baseline forecast sees the current recession as lasting longer than any other post World War II recession. At the same time, the baseline forecast expects the recession to be more severe than the two most recent recessions, but not as severe as the early 1980s recessions. Like most other forecasters' predictions, the baseline forecast expects that the current recession's sharpest real GDP decline is in 2008Q4. In large part, the risks to these expectations represent the three major factors that precipitated the recession: the housing market, the roiled financial markets and the accompanying credit crunch and oil prices.

**Housing Market.** The baseline forecast assumes an extremely weak housing market with housing starts remaining below 1.0 million units for both 2009 and 2010. The severe stressors on the housing market suggest that such assumed weakness is justified. Such poor performance would be unprecedented since at least 1959. A stronger housing market would boost the overall economy.

**Credit Crunch Impact**. The baseline forecast assumes that financial markets will stabilize soon. However, the credit crunch and its impacts could substantially worsen. Financial markets, which had already been shaken earlier in the year, have spiraled sharply downward since mid-September. The extreme fragility of the financial system poses a substantial downward risk to the baseline forecast.

**Oil Prices.** Geopolitical concerns, increased demand, or a major supply disruption could raise prices well above the assumed range (\$50-\$70 a barrel). Higher oil prices (and consequently higher gasoline prices) would retard domestic growth by depressing consumer sentiment, reducing households' disposable income and increasing input costs to businesses. Higher oil prices may lead the Federal Reserve to hike rates sooner than is assumed. At the same time, the synchronized world recession could lead to further reductions in the demand for oil and its price.

# Length and Severity Post World War II U.S. Recessions

Recession	Length (Months)	Real GDP
Mar 01 to Nov 01	8	-0.4%
Jul 90 to Mar 91	8	-1.3%
Jul 81 to Nov 82	16	-2.7%
Jan 80 to Jul 80	6	-2.2%
Nov 73 to Mar 75	16	-3.1%
Dec 69 to Nov 70	11	0.0%
Apr 60 to Feb 61	10	-1.6%
Aug 57 to Apr 58	8	-3.8%
Jul 53 to May 54	10	-2.4%
Nov 48 to Oct 49	11	-1.8%
Average	10	-1.9%
Baseline Forecast Dec 07 to Jun 09	18	-1.9%

**Fiscal Policy.** The baseline forecast assumes that a sizeable federal fiscal stimulus package will be enacted early in 2009. Failing or even delaying to enact such a package represents a substantial downside risk to the forecast.

**Auto Industry.** The baseline does forecast extremely low light vehicle sales. However, the forecast assumes that all three Big Three vehicle manufacturers remain viable. The failure of one or more of the Big Three constitutes an extremely large downside risk to the national forecast, but especially to the Michigan economic forecast.

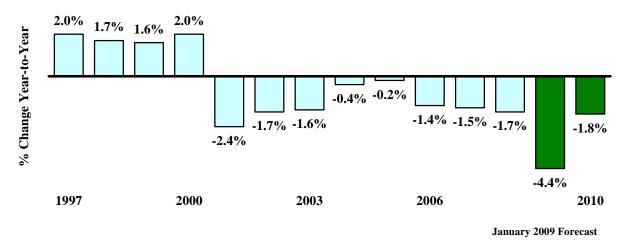
**Geopolitical Factors.** Geopolitical factors (such as a domestic terrorist attack) remain a downside risk to the baseline forecast.

### 2009 and 2010 Michigan Economic Outlook

Michigan employment is forecast to fall 4.4 percent in 2009 and 1.8 percent in 2010. Private non-manufacturing employment is projected to decline by 105,000 jobs in calendar year 2009 and by 28,400 jobs in 2010. Manufacturing employment is forecast to fall by 10.9 percent in 2009 and by 7.7 percent in 2010. Between CY 2008 and CY 2010, manufacturing employment falls by 103,000 jobs. Struggles at the domestic Big Three automakers and concomitant restructurings will depress manufacturing employment along with continued rationalization among vehicle suppliers. Transportation equipment employment is forecast to decline sharply, falling 23.7 percent in 2009 and an additional 17.2 percent in 2010.

Total Michigan employment is forecast to decline substantially each quarter of 2009, falling an average of 39,100 jobs per quarter. State employment continues to decline in each quarter of 2010, but those declines are smaller averaging 9,400 jobs across the year. 2010 would mark the tenth straight year of Michigan employment declines; 2010 State wage and salary employment would be Michigan's lowest calendar year employment in 18 years. Michigan's unemployment rate is expected to rise from 8.4 percent to 10.9 percent in 2009 before rising in 2010 to 11.0 percent – a 26-year high.

## Michigan Wage and Salary Employment Declines for Tenth Straight Year



Source: Michigan Department of Labor and Economic Growth, U.S. Bureau of Labor Statistics, and January 2009 Administration Forecast.

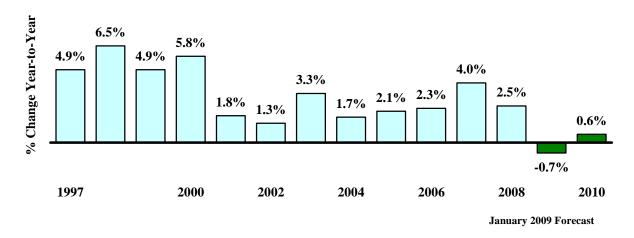
Michigan wages and salaries are projected to fall sharply in 2009 (-3.2 percent) and then to rise 0.2 percent in 2010. Michigan personal income is forecast to fall 0.7 percent in 2009 before rising 0.6 percent in 2010. Inflation, as measured by the Detroit CPI, is forecast to be 0.8 percent in 2009 and 2.0 percent in 2010. As a result, real (inflation adjusted) Michigan personal income is expected to fall 1.5 percent in 2009 and decline 1.4 percent in 2010.

Table 1
Administration Economic Forecast

January 2009

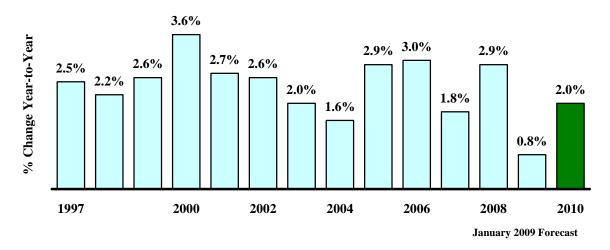
	Calendar 2007 Actual	Calendar 2008 Estimated	Percent Change from Prior Year	Calendar 2009 Forecast	Percent Change from Prior Year	Calendar 2010 Forecast	Percent Change from Prior Year
<b>United States</b>							
Real Gross Domestic Product (Billions of Chained 2000 Dollars)	\$11,524	\$11,662	1.2%	\$11,475	-1.6%	\$11,624	1.3%
Implicit Price Deflator GDP (2000 = 100)	119.8	123.0	2.6%	126.9	3.2%	129.6	2.1%
Consumer Price Index (1982-84 = 100)	207.3	216.0	4.0%	217.7	0.8%	223.4	2.6%
Personal Consumption Deflator (2000 = 100)	117.7	122.0	3.5%	123.2	1.0%	125.5	1.9%
3-month Treasury Bills Interest Rate (percent)	4.4	1.4		0.3		1.0	
Aaa Corporate Bonds Interest Rate (percent)	5.6	5.7		5.2		4.9	
Unemployment Rate - Civilian (percent)	4.6	5.7		8.0		8.6	
Light Vehicle Sales (millions of units)	16.1	13.2	-18.0%	11.1	-15.7%	12.5	12.2%
Passenger Car Sales (millions of units)	7.6	6.8	-10.4%	5.8	-15.0%	6.5	12.3%
Light Truck Sales (millions of units)	8.5	6.4	-24.7%	5.4	-16.4%	6.0	12.1%
Import Share of Light Vehicles (percent)	23.3	25.2		25.5		26.2	
Michigan							
Wage and Salary Employment (thousands)	4,262	4,190	-1.7%	4,006	-4.4%	3,934	-1.8%
Unemployment Rate (percent)	7.2	8.4		10.9		11.0	
Personal Income (millions of dollars)	\$345,885	\$354,377	2.5%	\$351,896	-0.7%	\$353,857	0.6%
Real Personal Income (millions of 1982-84 dollars)	\$172,831	\$172,028	-0.5%	\$169,507	-1.5%	\$167,071	-1.4%
Wages and Salaries (millions of dollars)	\$188,062	\$189,281	0.6%	\$183,198	-3.2%	\$183,557	0.2%
Detroit Consumer Price Index (1982-84 = 100)	200.1	206.0	2.9%	207.6	0.8%	211.8	2.0%
Detroit CPI Fiscal Year (1982-84 = 100)	199.0	205.0	3.0%	207.1	1.0%	210.8	1.8%

## Michigan Personal Income Growth Slows Sharply



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2009.

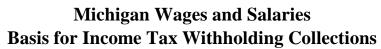
## Inflation Falls Sharply in 2009 Detroit CPI

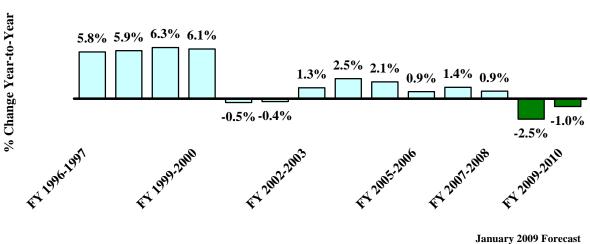


Source: U.S. Bureau of Labor Statistics and Administration Forecast, January 2009.

## **Fiscal Year Economics**

Michigan's largest taxes are the individual income tax (\$7.2 billion in FY 2008), which includes refunds, and sales and use taxes (\$8.2 billion). Income tax withholding is the largest income tax component. Withholding (\$7.3 billion) is most affected by growth in wages and salaries. Michigan wages and salaries are expected to fall 2.5 percent in FY 2009 and to decline 1.0 percent in FY 2010.

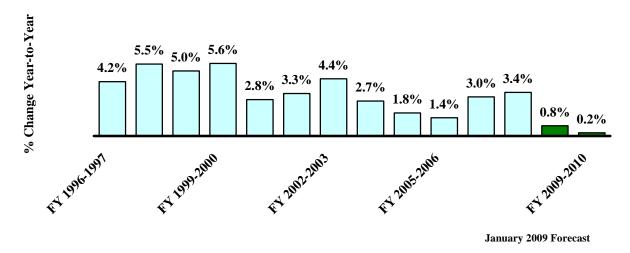




Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2009.

Sales and use taxes depend primarily on Michigan disposable (after tax) income and inflation. Disposable income is expected to increase 0.8 percent in FY 2009 and then to rise slightly (0.2 percent increase) in FY 2010. The inflation rate is forecast to average 1.0 percent in FY 2009 and 1.8 percent in FY 2010.

## Michigan Disposable Income Basis for Sales and Use Tax Collections



Source: Research Seminar in Quantitative Economics, University of Michigan, and Administration Forecast, January 2009.

Given Michigan's manufacturing mix and that Michigan has been hit disproportionately harder by the housing bust, it is very possible that Michigan manufacturing would grow substantially more slowly than U.S. economic growth itself would imply. This would retard Michigan economic growth, employment and income growth.

# ADMINISTRATION REVENUE ESTIMATES January 9, 2009

#### **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 2008 is the base year. Any non-economic changes to the taxes occurring in FY 2009 and FY 2010 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, etc. The figures also assume the full statutory amount for 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 2008 Revenue Review

The preliminary total for FY 2008 GF-GP revenue is \$9,359.7 million on a Consensus basis, a 12.5 percent increase over FY 2007, and \$195.6 million above the May 2008 Consensus estimate. FY 2008 GF-GP revenues were increased by an increase in the income tax rate from 3.9 percent to 4.35 percent and by the enactment of the MBT surcharge. The preliminary total for FY 2008 SAF revenues is \$11,513.2 million, a 3.2 percent increase compared to FY 2007, and \$138.2 million above the May 2008 Consensus estimate (See Table 2).

Table 2

FY 2007 - 08 Administration Revenue Estimates (millions)

	Conse May 16		Prelim FY 2		
	Amount	• /		Growth	Change
General Fund - General Purpos	se				
Baseline Revenue			\$8,167.5		
Tax Cut Adjustments			\$1,192.2		
Net Resources	\$9,164.1	10.2%	\$9,359.7	12.5%	\$195.6
School Aid Fund					
Baseline Revenue			\$11,249.3		
Tax Cut Adjustments			\$263.9		
Net Resources	\$11,375.0	2.0%	\$11,513.2	3.2%	\$138.2
Combined Baseline Revenue			\$19,416.8		
Tax Cut Adjustments Net Resources	\$20.520.1	5.5%	\$1,456.1	7.2%	\$333.8
net resources	\$20,539.1	3.5%	\$20,872.9	1.2%	фэээ.8

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

## FY 2009 Revenue Outlook

FY 2009 GF-GP revenue is expected to be \$8,280.4 million, a 7.2 percent baseline decline, and an 11.5 percent decline after tax adjustments. The FY 2009 estimate is \$604.2 million below the May 2008 Consensus estimate. The significant weakening of the national and state economies resulted in the weaker revenue estimate.

SAF revenue is forecast to be \$11,335.1 million, representing a 4.7 percent baseline revenue decline and a 1.5 percent decline after tax adjustments. The FY 2009 SAF estimate is \$372.3 million below the May 2008 Consensus estimate (See Table 3).

Table 3

FY 2008 - 09 Administration Revenue Estimates (millions)

	Conse	ensus	Adminis	tration	
	May 16, 2008		January		
	Amount	Growth	Amount	Growth	Change
General Fund - General Purpos	e				
Baseline Revenue			\$7,577.5	-7.2%	
Tax Cut Adjustments			\$702.9		
Net Resources	\$8,884.6	-3.0%	\$8,280.4	-11.5%	(\$604.2)
School Aid Fund					
Baseline Revenue			\$10,719.8	-4.7%	
Tax Cut Adjustments			\$615.3		
Net Resources	\$11,707.4	2.9%	\$11,335.1	-1.5%	(\$372.3)
Combined					
Baseline Revenue			\$18,297.4	-5.8%	
Tax Cut Adjustments			\$1,318.1		
Net Resources	\$20,592.0	0.3%	\$19,615.5	-6.0%	(\$976.5)

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

## FY 2010 Revenue Outlook

FY 2010 GF-GP revenue is estimated to be \$8,067.9 million, a 1.3 percent baseline decrease and a 2.6 percent decrease after tax adjustments. FY 2010 GF-GP revenue is \$212.4 million below the current GF-GP estimate for FY 2009. SAF revenue is forecast to be \$11,289.2 million; representing a 0.2 percent baseline decrease and a 0.4 percent net decline. The FY 2010 SAF estimate is \$45.9 million below the current estimate for FY 2009 (see Table 4).

Table 4

FY 2009 - 10 Administration Revenue Estimates
(millions)

	Administration		
	January	9, 2009	
	Amount	Growth	
General Fund - General Purpose			
Baseline Revenue	\$7,477.7	-1.3%	
Tax Cut Adjustments	\$590.2		
Net Resources	\$8,067.9	-2.6%	
School Aid Fund			
Baseline Revenue	\$10,700.2	-0.2%	
Tax Cut Adjustments	\$589.0		
Net Resources	\$11,289.2	-0.4%	
Combined			
Baseline Revenue	\$18,177.9	-0.7%	
Tax Cut Adjustments	\$1,179.2		
Net Resources	\$19,357.1	-1.3%	

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. FY 2007 revenue is compared to CY 2005 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 2007 revenues were \$5.3 billion below the revenue limit. State revenues will also be well below the limit for FY 2008 through FY 2010. FY 2008 revenues are expected to be \$4.7 billion below the limit, FY 2009 revenues \$6.3 billion below the limit, and FY 2010 revenues are expected to be \$7.3 billion below the limit (See Table 5).

Table 5
Administration Constitutional Revenue Limit Calculation
(millions)

	FY 2007	FY 2008	FY 2009	FY 2010
	Actual	Admin	Admin	Admin
	April 2008	Jan 2009	Jan 2009	Jan 2009
Revenue Subject to Limit	\$26,118.4	\$27,671.1	\$26,521.1	\$26,374.1
Revenue Limit	CY 2005	CY 2006	CY 2007	CY 2008
Personal Income	\$331,304	\$341,075	\$345,885	\$354,377
Ratio	9.49%	9.49%	9.49%	9.49%
Revenue Limit	\$31,440.7	\$32,368.0	\$32,824.5	\$33,630.4
Amount Under (Over) Limit	\$5,322.4	\$4,696.9	\$6,303.4	\$7,256.3

## **Budget Stabilization Fund Calculation**

The Management and Budget Act contains provisions for calculating a recommended deposit or withdrawal from the BSF. The calculation looks at personal income net of transfer payments. The net personal income figure is adjusted for inflation. The change in this figure for the calendar year determines whether a pay-in or pay-out is 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 decrease 4.6 percent in 2009. Thus, the formula has a withdrawal of \$380.9 million for FY 2009 (See Table 6). In 2010, real calendar year personal income for Michigan is forecast to decrease 1.2 percent, and the formula calls for a withdrawal of \$96.8 million (See Table 7). Withdrawals will be limited by the available balance of the BSF. The BSF is projected to have a balance of just over \$2 million at the end of FY 2008.

Table 6
Budget and Economic Stabilization Fund Calculation
Based on CY 2009 Personal Income Growth
Administration Calculation

	CY 2008			CY 2009
Michigan Personal Income	\$	354,377 <sup>(1)</sup>	\$	351,896 <sup>(1)</sup>
less Transfer Payments	\$	64,989 (1)	\$	69,739 (1)
Income Net of Transfers	\$	289,388	\$	282,157
Detroit CPI	202.820 (2)		207.343 (3)	
for 12 months ending	(June 2008)		(June 2009)	
Real Adjusted Michigan Personal Income	\$	1,427	\$	1,361
Change in Real Adjusted Personal Income				-4.6%
Amount Under 0%				-4.6%
GF-GP Revenue Fiscal Year 2008-2009			\$	8,280.4
				FY 2008-2009
BSF Pay-Out Calculated for FY 2009		•	\$	(380.9)

#### Notes:

<sup>(1)</sup> Personal Income and Transfer Payments, Adminstration Forecast, January 2009.

<sup>&</sup>lt;sup>(2)</sup> Detroit Consumer Price Index, Average of 6 monthly values reported by BLS for each 12-month period.

<sup>(3)</sup> Detroit Consumer Price Index, Administration Forecast, January 2009.

Table 7
Budget and Economic Stabilization Fund Calculation
Based on CY 2010 Personal Income Growth
Administration Calculation

	CY 2009			CY 2010
Michigan Personal Income	\$	351,896 <sup>(1</sup>	\$	353,857 <sup>(1)</sup>
less Transfer Payments	\$	69,739 (1	\$	71,922 (1)
Income Net of Transfers	\$	282,157	\$	281,935
Detroit CPI	207.343 (2)		)	$209.665^{(2)}$
for 12 months ending	(June 2008)		(June 2009)	
Real Adjusted Michigan Personal Income	\$ 1,361		\$	1,345
Change in Real Adjusted Personal Income				-1.2%
Amount Under 0%				-1.2%
GF-GP Revenue Fiscal Year 2009-2010			\$	8,067.9
				FY 2008-2009
BSF Pay-Out Calculated for FY 2010			\$	(96.8)

#### Notes:

## **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 2010 SAF revenue adjustment factor is calculated by dividing the sum of FY 2009 and FY 2010 SAF revenue by the sum of FY 2008 and FY 2009 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 2010, the SAF revenue adjustment factor is calculated to be 0.9763 (See Table 8).

<sup>(1)</sup> Personal Income and Transfer Payments, Adminstration Forecast, January 2009.

<sup>&</sup>lt;sup>(2)</sup> Detroit Consumer Price Index, Administration Forecast, January 2009.

Table 8
Administration School Aid Revenue Adjustment Factor
For Fiscal Year FY 2010

	FY 2008	FY 2009	FY 2010
Baseline SAF Revenue	\$11,249.3	\$10,719.8	\$10,700.2
Balance Sheet Adjustments	\$263.9	\$615.3	\$589.0
Net SAF Estimates	\$11,513.2	\$11,335.1	\$11,289.2
Subtotal Adjustments to FY 2010 Base	\$325.1	(\$26.3)	\$0.0
Baseline Revenue on a FY 2010 Base	\$11,838.3	\$11,308.8	\$11,289.2
School Aid Fund Revenue Adjustment Calcula Sum of FY 2008 & FY 2009 Sum of FY 2009 & FY 2010	\$11,838.3 \$11,308.8	010 + \$11,308.8 = + \$11,289.2 =	
FY 2010 Revenue Adjustment Factor			0.9763

Note: Factor is calculated off a FY 2010 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 9 and 10). Tax totals for the income, sales, use, tobacco and casino taxes for all funds are also included (See Table 11).

Table 9
Administration General Fund General Purpose Revenue Detail (millions)

	FY 2	008	FY 2009		FY 2010	
-	Amount	Growth	Amount	Growth	Amount	Growth
<b>GF-GP Tax Amounts</b>						
Income Tax	\$5,106.6	17.9%	\$4,455.6	-12.7%	\$4,098.4	-8.0%
Sales	\$76.5	-8.1%	\$48.1	-37.2%	\$92.4	92.2%
Use	\$911.6	-0.9%	\$849.7	-6.8%	\$901.3	6.1%
Cigarette	\$212.9	-5.5%	\$207.9	-2.3%	\$203.3	-2.3%
Beer & Wine	\$50.9	-1.2%	\$51.5	1.2%	\$53.5	3.9%
Liquor Specific	\$37.3	3.0%	\$37.0	-0.8%	\$37.5	1.4%
Single Business Tax	\$573.8	-68.4%	(\$43.2)	-107.5%	\$0.0	NA
Insurance Co. Premium	\$223.2	-0.3%	\$239.0	7.1%	\$243.4	1.9%
Michigan Business Tax	\$1,551.6	NA	\$1,894.2	22.1%	\$1,922.8	1.5%
Telephone & Telegraph	\$80.8	-7.4%	\$76.0	-5.9%	\$76.0	0.0%
Inheritance Estate	\$0.2	0.0%	\$0.0	0.0%	\$0.0	0.0%
Casino Wagering	\$15.4	-66.6%	\$4.2	-72.9%	(\$0.0)	NA
Horse Racing	\$0.0	0.0%	\$0.0	0.0%	\$0.0	0.0%
Oil & Gas Severance	\$97.1	34.9%	\$71.0	-26.9%	\$66.0	-7.0%
GF-GP Other Taxes	\$48.1	-7.5%	\$44.6	-7.3%	\$44.4	-0.4%
<b>Total GF-GP Taxes</b>	\$8,986.0	13.1%	\$7,935.6	-11.7%	\$7,739.0	-2.5%
GF-GP Non-Tax Revenue	9					
Federal Aid	\$14.8	-21.3%	\$15.0	1.4%	\$15.0	0.0%
From Local Agencies	\$0.1	-75.0%	\$0.1	0.0%	\$0.1	0.0%
From Services	\$18.4	124.4%	\$17.1	-7.1%	\$17.1	0.0%
From Licenses & Permits	\$22.3	-12.9%	\$24.0	7.6%	\$23.0	-4.2%
Miscellaneous	\$46.4	-3.7%	\$44.4	-4.3%	\$46.4	4.5%
Driver Responsibility Fees	\$105.7	3.1%	\$103.0	-2.6%	\$103.0	0.0%
Short Term Note Interest	\$0.0	0.0%	\$0.0	0.0%	\$0.0	0.0%
Interfund Interest	(\$54.4)	-16.3%	(\$76.0)	39.7%	(\$99.0)	30.3%
Liquor Purchase	\$159.2	3.0%	\$159.2	0.0%	\$162.2	1.9%
Charitable Games	\$11.6	7.4%	\$11.0	-5.2%	\$11.2	1.8%
Transfer From Escheats	\$49.6	-28.6%	\$47.0	-5.2%	\$50.0	6.4%
Other Non Tax	\$0.0	0.0%	\$0.0	0.0%	\$0.0	0.0%
Total Non Tax	\$373.7	0.1%	\$344.8	-7.7%	\$329.0	-4.6%
<b>Total GF-GP Revenue</b>	\$9,359.7	12.5%	\$8,280.4	-11.5%	\$8,067.9	-2.6%

Table 10 Administration School Aid Fund Revenue Detail

	FY 2008		FY 2009		FY 2010	
	Amount	Growth	Amount	Growth	Amount	Growth
<b>School Aid Fund</b>						
Income Tax	\$2,117.7	0.4%	\$1,975.4	-6.7%	\$1,925.7	-2.5%
Sales Tax	\$4,928.1	3.3%	\$4,661.3	-5.4%	\$4,692.9	0.7%
Use Tax	\$459.3	-0.2%	\$424.8	-7.5%	\$450.7	6.1%
Liquor Excise Tax	\$36.9	3.4%	\$37.0	0.3%	\$37.5	1.4%
Cigarette & Tobacco	\$424.7	-5.7%	\$413.7	-2.6%	\$403.3	-2.5%
State Education Tax	\$2,079.7	-0.1%	\$2,028.5	-2.5%	\$1,954.7	-3.6%
Real Estate Transfer	\$169.8	-28.5%	\$154.0	-9.3%	\$177.0	14.9%
Michigan Business Tax	\$341.0	NA	\$729.0	113.8%	\$750.9	3.0%
Industrial Facilities Tax	\$86.1	-37.0%	\$79.9	-7.2%	\$73.4	-8.1%
Casino (45% of 18%)	\$112.1	5.1%	\$109.1	-2.6%	\$109.0	-0.1%
Commercial Forest	\$3.1	0.0%	\$3.1	0.0%	\$3.1	0.0%
Other Spec Taxes	\$14.0	0.0%	\$14.0	0.0%	\$14.0	0.0%
<b>Subtotal Taxes</b>	\$10,772.5	3.5%	\$10,630.0	-1.3%	\$10,592.2	-0.4%
Lottery Transfer	\$740.7	-1.1%	\$705.1	-4.8%	\$697.0	-1.1%
<b>Total SAF Revenue</b>	\$11,513.2	3.2%	\$11,335.1	-1.5%	\$11,289.2	-0.4%

Table 11 **Administration Major Tax Totals** 

	FY 2008		FY 2009		FY 2010			
	Amount	Growth	Amount	Growth	Amount	Growth		
Major Tax Totals (Includes all Funds)								
Income Tax	\$7,225.5	12.2%	\$6,432.5	-11.0%	\$6,025.6	-6.3%		
Sales Tax	\$6,773.3	3.4%	\$6,414.3	-5.3%	\$6,459.2	0.7%		
Use Tax	\$1,377.0	-0.2%	\$1,274.5	-7.4%	\$1,352.0	6.1%		
Cigarette and Tobacco	\$1,073.6	-90.5%	\$1,040.0	-3.1%	\$1,016.0	-2.3%		
Casino Tax	\$129.7	-18.6%	\$113.7	-12.3%	\$108.9	-4.2%		