



# **FEBRUARY 2016**



**MINNESOTA** Management & Budget

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## Statutory Provisions

In accordance with Minnesota Statutes, section 16A.103, subdivision 1, the commissioner of Minnesota Management and Budget (MMB) must prepare a forecast of state revenue and expenditures in February and November of each year. This forecast must assume the continuation of current laws and reasonable estimates of projected growth in the national and state economies and affected populations.

Revenue must be estimated for all sources provided for in current law. Expenditures must be estimated for all obligations imposed by law and those projected to occur as a result of variables outside the control of the legislature. Expenditure estimates must not include an allowance for inflation.

A forecast prepared during the first fiscal year of a biennium must cover that biennium and the next biennium. A forecast prepared during the second fiscal year of a biennium must cover that biennium as well as the next two biennia.

## Notes

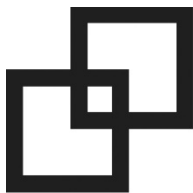
Numbers in the text and tables may not add to the totals due to rounding.

Unless otherwise noted, years used to describe the budget outlook are state fiscal years (FY), from July 1 to June 30, and years used to describe the economic outlook are calendar years (CY).

Supplemental budget and economic forecast material is available on MMB's website ([mn.gov/mmb](http://mn.gov/mmb)).

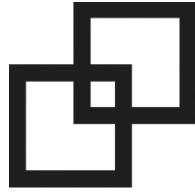
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## EXECUTIVE SUMMARY

Minnesota's economic and budget forecast mirrors a weaker U.S. economic outlook. Forecast revenues for FY 2016-17 are down \$427 million compared to estimates last November, mostly due to slower projected growth in income and sales tax collections. Lower revenues are partially offset by a \$129 million reduction in forecast spending, driven by changes to the Medical Assistance forecast. Total reserves increased by \$8 million leaving a projected \$900 million general fund budgetary balance for the current biennium. A weaker revenue forecast continues into the FY 2018-19 planning estimates. Projected revenues are now estimated to exceed current law spending by \$1.184 billion in the next biennium, less than the \$2.045 billion projected in November. Overall, Minnesota's budget outlook remains stable with positive balances in both biennia despite slower growth.

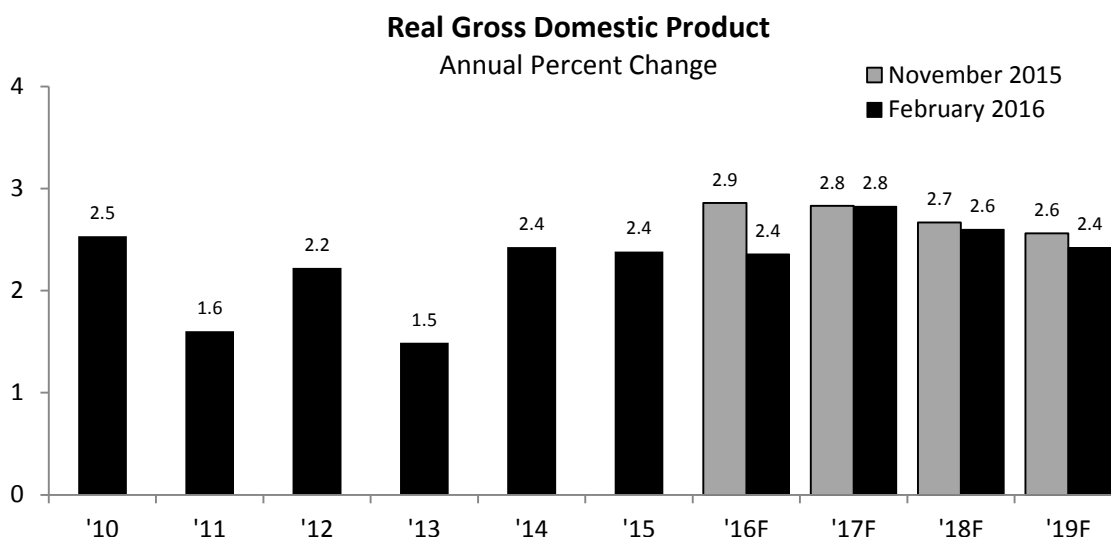
**U.S. Economic Outlook.** The outlook for U.S. economic growth has weakened since Minnesota's *Budget and Economic Forecast* was last prepared in November 2015. Economic activity is reported to have slowed more than expected at the end of 2015, mostly due to the continued drag from lower energy-related capital investment. A glut of business inventories and weak global trade were also sizable negatives for growth late last year. Going forward, the headwinds from inventories and energy-sector capital spending will likely diminish by mid-2016. The widening trade gap will prove a more persistent drag over the next several years given ongoing global economic weakness and the strong US dollar. Still, steady job gains, low energy prices, and modest consumer price inflation should support faster real income growth and, in turn, consumer spending and homebuilding activity. These factors are expected to bring economic growth back up to a moderate pace later this year.

There are three key downside risks to the economic outlook: a stronger dollar, lower oil prices, and financial market turmoil. First, a strong dollar weighs on U.S. economic growth by making American products more expensive overseas. If the dollar's strength persists longer than expected, that will cut deeper into foreign trade and further restrain domestic manufacturing. Second, low oil prices have already pressured energy companies to cut capital investments, lay off workers, sell assets, and scrap or delay projects. A prolonged period of global oversupply will keep oil prices lower for longer, forcing some oil producers to default on loans and possibly strain the financial positions of vulnerable oil-exporting nations. Finally, renewed concerns about the global economy and oil prices were catalysts for early-2016 financial market selloffs. Falling stock prices could weaken consumer and business sentiment, and dampen spending and investment.

The Federal Reserve has said it is closely monitoring global economic and financial developments. In mid-December, the Fed raised short-term interest rates from near-zero for the first time in almost a decade and signaled more tightening this year, even as its foreign counterparts are easing monetary policy. That signaled confidence in the strength of the U.S. economy. But the fragile global economy and troubled financial and commodity markets may complicate the central bank’s efforts to gradually move rates higher. Traders’ expectations—gleaned from fed funds futures contracts—have changed. Markets now expect Fed policymakers to hold off on another hike for the entire year, a dramatic turn from just a few months ago. That may limit the Fed’s ability to react to a negative economic shock.

The bright spot of the economy has been the labor market. The economy added over 2.7 million jobs in 2015, some of the strongest growth since the late 1990s. The number of available jobs across the country has surged, and the U.S. jobless rate is down to an eight-year low of 4.9 percent in January. A fast-tightening labor market closer to full employment should translate into improvements in household formation and labor force growth, and put upward pressure on productivity and wages, further boosting domestic demand for goods and services in 2016.

IHS Economics (IHS), Minnesota’s macroeconomic consultant, has lowered their overall U.S. growth expectations for 2016. The IHS February 2016 outlook calls for real GDP growth of 2.4 percent growth in 2016—the same as the past two years—followed by 2.8 percent growth in 2017. The November 2015 outlook projected stronger growth of 2.9 percent in 2016, followed by a 2.8 percent rise in 2017. Even so, the IHS February forecast for 2016 and 2017 is at the high end of a range of estimates from the Blue Chip survey of about 50 top business forecasters. The latest Blue Chip Consensus forecast is for 2.1 percent growth in 2016 and 2.4 percent growth in 2017.



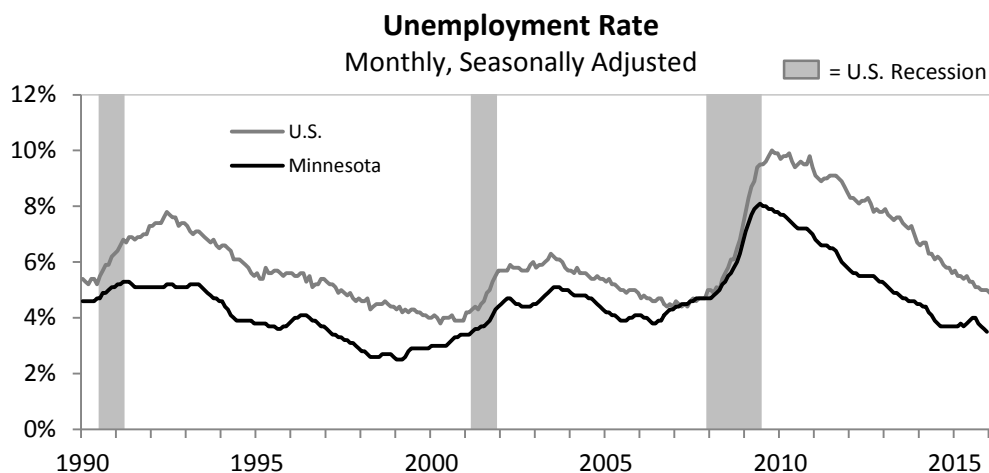
Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*The outlook for U.S. economic growth has weakened since Minnesota’s Budget and Economic Forecast was last prepared in November 2015.*

**Minnesota Economic Outlook.** Minnesota’s economy has felt the adverse effects of falling commodity prices, the stronger US dollar, and weak global growth. A sharp drop in global iron ore prices has led to significant cutbacks in the state’s important mining sector. Agricultural and manufacturing activity has also struggled. Ample supplies, a strong U.S. dollar, and slow growth in global demand have kept prices for corn and soybeans low, hurting the profits of Minnesota farmers. Likewise, the surging value of the dollar against the currencies of Minnesota’s largest trading partners—including Canada and Mexico—has hurt demand for the state’s manufactured exports. As a result, the pace of overall job growth in Minnesota slowed during the second half of 2015.

Nonetheless, Minnesota is weathering the recent global slowdown and slide in commodity prices reasonably well, a reflection of its large and diverse economic base. Job growth has remained widespread, with recent gains in education and health services, retail trade, and financial activities. Improved homebuilding activity has also meant greater need for construction tradespeople like carpenters and roofers. That broad based job growth has helped quickly absorb the underemployed and unemployed, and push down the state’s jobless rate in December to 3.5 percent, its lowest mark since the early 2000s and the lowest among states with a major metropolitan area. With the excess supply of workers rapidly diminishing, a tighter labor market is leading to some long-awaited wage acceleration.

MMB’s February 2016 economic forecast calls for Minnesota’s expansion to continue over the next several years, but at a generally slower pace. It appears that Minnesota is at or near its full employment potential, where job growth is becoming increasingly constrained by the impact of an aging population on the market supply of labor. As a result, both employment and total wage income growth are expected to remain modest in 2016 and 2017, with the average annual wage slowly accelerating throughout much of the forecast horizon. The forecast expects small improvements in household formation, labor force growth, and labor productivity.



*Minnesota is weathering the recent global slowdown and slide in commodity prices reasonably well. The state’s jobless rate fell to 3.5 percent in December.*



**Budget Outlook: Current Biennium.** When the *Budget & Economic Forecast* was last released in November 2015 a positive forecast balance of \$1.206 billion was projected for the current biennium. In February 2016, reductions in expected tax revenue collections, partially offset by lower expenditure estimates, result in a projected FY 2016-17 budgetary balance of \$900 million.

**Current Biennium: FY 2016-17 General Fund Budget**  
Forecast Comparison

(\$ in millions)	November 2015 Forecast	February 2016 Forecast	\$ Change	% Change
<b>Beginning Balance</b>	<b>\$2,103</b>	<b>\$2,103</b>	\$ -	0.0%
Revenues	42,716	42,289	(427)	(1.0)
Expenditures	41,653	41,524	(129)	(0.3)
Cash Flow & Budget Reserves	1,947	1,947	-	0.0
Stadium Reserve	13	21	8	61.5
<b>Forecast Balance</b>	<b>\$1,206</b>	<b>\$900</b>	<b>\$(306)</b>	

*Revenues.* Total general fund revenues for FY 2016-17 are now forecast to be \$42.289 billion, \$427 million (1.0 percent) less than the November forecast. Total tax revenues for the biennium are forecast to be \$40.439 billion, \$465 million (1.2 percent) below the prior estimate. Lower expected individual income, corporate, sales, and state general property tax receipts bring down the forecast, more than offsetting higher expected other tax revenue.

Individual income tax receipts are now forecast to be \$95 million (0.4 percent) less than the November estimate. Lower forecast income growth from 2015 to 2017 and a decrease in assumed tax liability for 2014, the base year for this forecast, contribute to the lower income tax estimate.

**Current Biennium: FY 2016-17 General Fund Revenues**  
Change From November 2015 Estimates

(\$ in millions)	February 2016 Forecast	\$ Change	% Change
Individual Income Tax	\$21,862	\$(95)	(0.4)%
General Sales Tax	10,719	(311)	(2.8)
Corporate Franchise Tax	2,551	(93)	(3.5)
State General Property Tax	1,688	(1)	(0.1)
Other Tax Revenue	3,619	35	1.0
<b>Subtotal</b>	<b>40,439</b>	<b>(465)</b>	<b>(1.2)%</b>
Non-Tax Revenues	1,462	36	2.5
Other Resources	388	2	0.6
<b>Total Revenue</b>	<b>\$42,289</b>	<b>\$(427)</b>	<b>(1.0)%</b>

Among major tax types, the sales tax shows the largest dollar amount decrease for FY 2016-17 from the prior estimate, \$311 million (2.8 percent). This change reflects lower than expected sales tax receipts so far in FY 2016, the base for this forecast, and weaker projected taxable sales growth in calendar year 2016 and the first half of 2017. Lower expected gross sales tax receipts and higher expected sales tax refunds both contribute to the net forecast change.

Lower projected gross corporate tax payments more than offset a reduced corporate refund forecast to bring expected net corporate tax revenues for FY 2016-17 \$93 million (3.5 percent) below the prior estimate.

Other tax revenue is now expected to exceed the prior estimate by \$35 million (1.0 percent). Among other taxes, the estate tax shows the largest dollar amount change, \$24 million (7.5 percent) more than in November.

*Expenditures.* Expenditures in the current budget period are estimated to be \$41.524 billion, \$129 million (0.3 percent) lower compared to prior estimates. An increase in the federal matching rate for the Children's Health Insurance Program (CHIP) results in lower state obligations for medical assistance (MA), and is the contributor to the spending savings in this forecast.

#### Current Biennium: FY 2016-17 General Fund Expenditures

Change From November 2015 Forecast

(\$ in millions)	February 2016 Forecast	\$ Change	% Change
E-12 Education	\$17,320	\$11	0.1%
Property Tax Aids & Credits	3,351	(4)	(0.1)
Health & Human Services	11,934	(130)	(1.1)
Debt Service	1,240	(1)	(0.1)
All Other	7,679	(4)	(0.1)
<b>Total Expenditures</b>	<b>\$41,524</b>	<b>\$(129)</b>	<b>(0.3)%</b>

*Reserves.* The general fund budget reserve balance of \$1.597 billion in this forecast is unchanged from November. This amount represents 3.8 percent of projected general fund revenue in FY 2016-17, lower than the target level of 4.8 percent of current biennium revenue recommended by Minnesota Management & Budget (MMB) in September 2015. The cash flow account balance of \$350 million is unchanged from November. The balance in the stadium reserve account is expected to be \$21 million at the end of FY 2017, \$8 million higher than estimates in November.

**Budget Outlook: Planning Estimates.** A reduced revenue forecast continues into FY 2018-19. Projected revenues are now estimated to exceed current law spending by \$1.184 billion, less than the \$2.045 billion projected in November. Projected inflation based on the Consumer Price Index (CPI) is expected to be 2.5 percent in FY 2018 and 2.7 percent in FY 2019.

Planning estimates for FY 2018-19 biennium, based on current law revenue and expenditures, are presented here to understand the impact of the forecast on future years, and to assist longer term financial planning.

The planning estimates continue to display structural balance – excluding reserves and any balance forecast for the current biennium. This balance will be affected, however, by both budget decisions made during subsequent legislative sessions and economic assumption changes in future forecasts. Any part of the \$900 million forecast balance for the current biennium that is not used within the next year or modified in a subsequent forecast will carry forward into the FY 2018-19 budget planning process.

Because of this, the planning estimates are not intended to predict surpluses or deficits several years into the future. Rather, their purpose is to assist in determining the extent to which future revenues support ongoing expenditures based on trends in Minnesota's economy as well as enrollment and other impacts on the cost of forecasted programs like MA and education aids.

**Planning Estimates: FY 2018-19 General Fund Budget**  
Forecast Comparison

(\$ in millions)	November 2015 Forecast	February 2016 Forecast	\$ Change	% Change
Forecast Revenues	\$46,600	\$45,703	\$(898)	(1.9)%
Projected Spending	44,555	44,519	(36)	(0.1)
<b>Difference</b>	<b>\$2,045</b>	<b>\$1,184</b>	<b>\$(861)</b>	
<i>Estimated Inflation (CPI) Applied to All Projected Spending</i>	<i>\$1,694</i>	<i>\$1,742</i>	<i>\$48</i>	

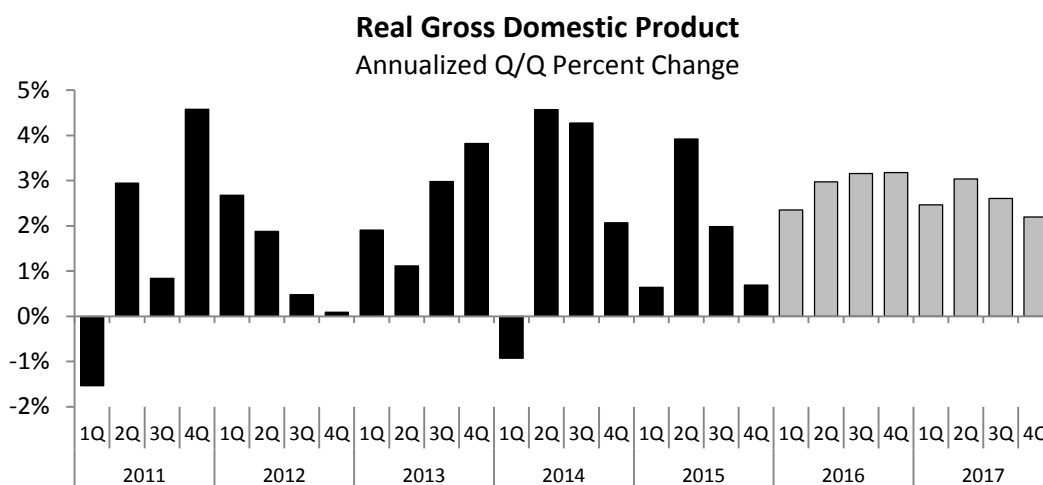


## ECONOMIC OUTLOOK

### U.S. Economic Outlook

The outlook for U.S. economic growth has weakened since Minnesota’s *Budget and Economic Forecast* was last prepared in November 2015. Economic activity is reported to have slowed more than expected at the end of 2015, mostly due to the continued drag from lower energy-related capital investment. A glut of business inventories and weak global trade were also sizable negatives for growth late last year. Going forward, the headwinds from inventories and energy-sector capital spending will likely diminish by mid-2016. The widening trade gap will prove a more persistent drag over the next several years given ongoing global economic weakness and the strong US dollar. Still, steady job gains, low energy prices, and modest consumer price inflation should support faster real income growth and, in turn, consumer spending and homebuilding activity. These factors are expected to bring economic growth back up to a moderate pace later this year.

There are three key downside risks to the economic outlook: a stronger dollar, lower oil prices, and financial market turmoil. First, a strong dollar weighs on U.S. economic growth by making American products more expensive overseas. If the dollar’s strength

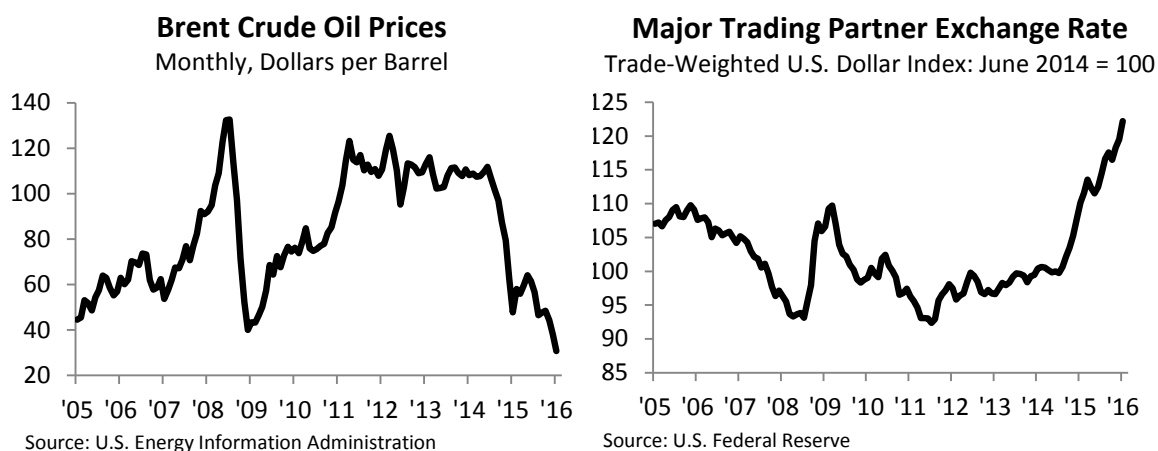


Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

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persists longer than expected, that will cut deeper into foreign trade and further restrain domestic manufacturing. Second, low oil prices have already pressured energy companies to cut capital investments, lay off workers, sell assets, and scrap or delay projects. A prolonged period of global oversupply will keep oil prices lower for longer, forcing some oil producers to default on loans and possibly strain the financial positions of vulnerable oil-exporting nations. Finally, renewed concerns about the global economy and oil prices were catalysts for early-2016 financial market selloffs. Falling stock prices could weaken consumer and business sentiment, and dampen spending and investment.

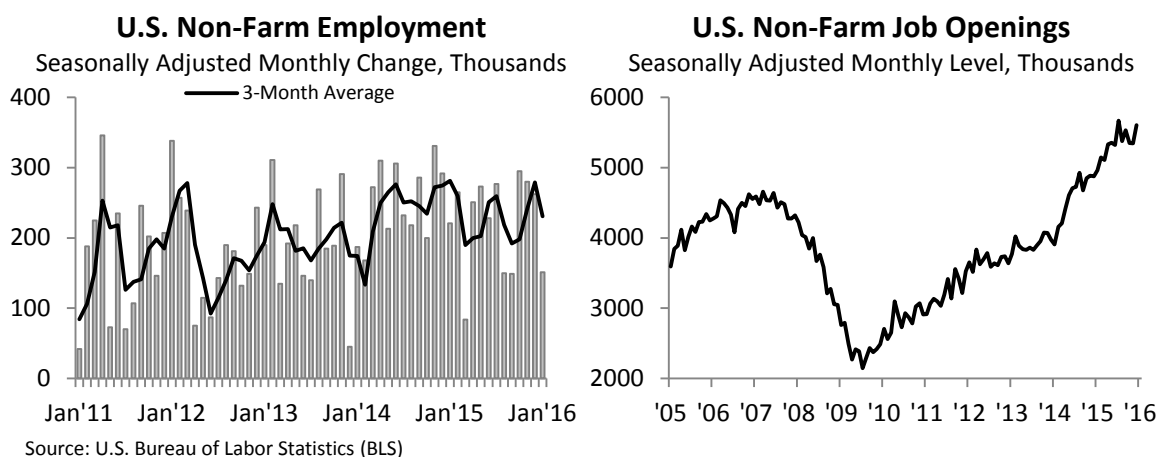
Ongoing uncertainties abroad tilt the balance of risks lower. The Chinese economy is undergoing a structural adjustment that is expected to result in slower economic growth. More recently, a lack of transparency and confusion about China's foreign exchange policy has roiled financial and commodity markets and affected currency valuations around the world. Capital flight from China and other emerging markets toward safety has accelerated, and many commodity exporters such as Mexico, Brazil, and Russia have experienced sizable currency depreciation against the US dollar. A soaring dollar makes it harder for foreign borrowers to repay dollar-denominated debt. That can threaten a broader tightening of credit conditions and further reduce aggregate demand, creating a vicious cycle in which capital flight and debt troubles are reinforcing.



*The fragile global economy and troubled financial and commodity markets may complicate the Federal Reserve's efforts to gradually tighten monetary policy.*

The Federal Reserve has said it is closely monitoring global economic and financial developments. In mid-December, the Fed raised short-term interest rates from near-zero for the first time in almost a decade and signaled more tightening this year, even as its foreign counterparts are easing monetary policy. That signaled confidence in the strength of the U.S. economy. But the fragile global economy and troubled financial and commodity markets may complicate the central bank's efforts to gradually move rates higher. Traders' expectations—gleaned from fed funds futures contracts—have changed. Markets now expect Fed policymakers to hold off on another hike for the entire year, a dramatic turn from just a few months ago. That may limit the Fed's ability to react to a negative economic shock.

The bright spot of the economy has been the labor market. The economy added over 2.7 million jobs in 2015, some of the strongest growth since the late 1990s. The number of available jobs across the country has surged, and the U.S. jobless rate is down to an eight-year low of 4.9 percent in January. A fast-tightening labor market closer to full employment should translate into improvements in household formation and labor force growth, and put upward pressure on productivity and wages, further boosting domestic demand for goods and services in 2016.



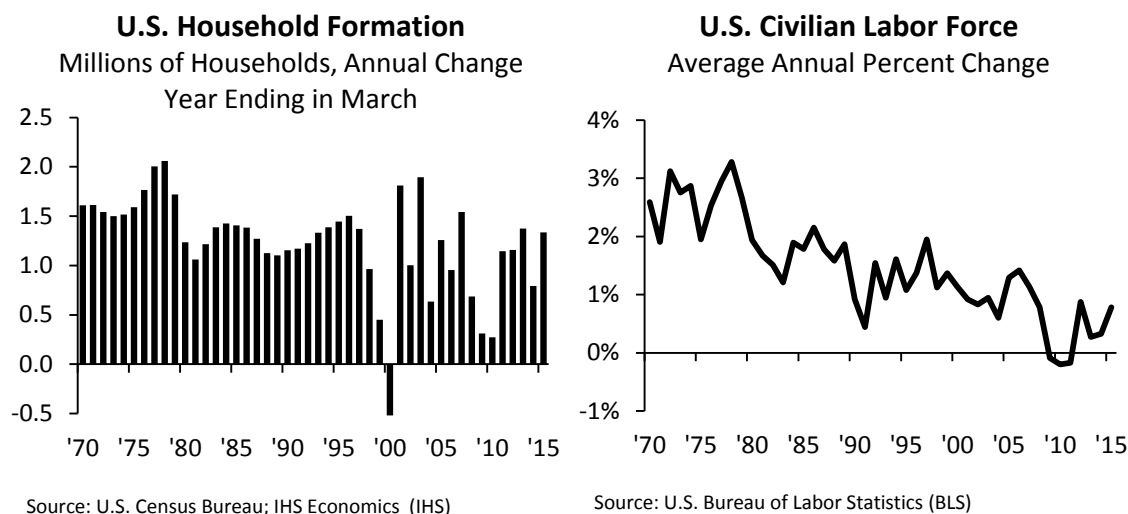
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**Last Quarter GDP and the Year Ahead.** The Fed's decision to raise its key rate was motivated in part by improving economic activity. Real GDP is estimated to have grown 2.4 percent in 2015. Subdued foreign growth and the strengthening dollar restrained net exports. But underlying domestic activity, led by consumer spending and homebuilding activity, was a strong force for the economy last year. The exception was capital expenditures by firms exposed to international competition, low oil prices, and falling agriculture prices.

Foreign trade and a sizeable inventory correction dragged down annualized real GDP growth in the fourth quarter to a meager 0.7 percent, according to the Bureau of Economic Analysis' (BEA). Real GDP increased 2.0 percent in the third quarter and 3.9 percent in the second quarter. Consumer spending was the main driver of fourth quarter growth, contributing 1.5 percentage points. Inventories and trade were big drags, each subtracting 0.5 percentage point from growth. Excluding inventories and trade from GDP, real final sales to domestic purchasers—an indicator of the strength of domestic demand—rose 1.6 percent in the fourth quarter, reducing concerns about the sub-1 percent headline figure. That follows a 2.9 percent gain in the third quarter and a 3.7 percent rise in the second quarter. For the full year, real final sales to domestic purchasers rose at a healthy 2.8 percent annual pace in 2015, much better than the 1.8 percent annual average gain since the recession ended in 2009.

Moving into the current and next quarters, Minnesota Management and Budget's macroeconomic consultant, IHS Economics (IHS), believes the evident strength of final

domestic demand will be lasting, and that the drags from inventories and energy-sector capital spending will begin to ease, supporting the case for a reacceleration of economic growth. IHS sees annualized real GDP growth being a modest 2.4 percent in the first quarter of 2016, before accelerating to around 3.0 percent in the subsequent three quarters. The February 2016 outlook from IHS calls for real GDP growth of 2.4 percent growth in 2016—the same as the past two years—followed by 2.8 percent growth in 2017. The November 2015 outlook projected stronger growth of 2.9 percent in 2016, followed by a 2.8 percent rise in 2017. Even so, the IHS February forecast for 2016 and 2017 is at the high end of a range of estimates from the Blue Chip survey of about 50 top business forecasters. The latest Blue Chip Consensus forecast is for 2.1 percent growth in 2016 and 2.4 percent growth in 2017.



*A fast-tightening labor market closer to full employment should translate into improvements in household formation and labor force growth, and put upward pressure on productivity and wages, further boosting domestic demand in 2016.*

Inflation continues to run well below the Federal Reserve's 2 percent objective, partly reflecting downward pressures from lower energy prices and the prices of non-energy imports, due to the stronger dollar. Consumer prices (CPI) rose just 0.1 percent in 2015. The November outlook similarly anticipated flat prices—or 0.0 percent inflation. Even so, the Fed's statements show that officials are reasonably confident inflation will return to 2 percent over the medium term, as transitory effects dissipate and the labor market strengthens further. IHS agrees, but has delayed expectations for the timing of the upturn. Their February outlook has CPI rising 0.6 percent in 2016 and 2.3 percent in 2017, down from the 1.4 and 2.7 percent growth IHS expected last November. The latest Blue Chip Consensus forecast is for 1.3 percent inflation growth in 2016 and a 2.3 percent inflation growth in 2017.

**Forecast Risks.** The IHS February economic outlook depends on several key forecast assumptions. (1) Global production must align with demand for oil markets to rebalance in 2016. That will permit a gradual recovery in prices later this year. (2) International economic risk must not cause undue damage. Uncertainty over the outlook in China, low

oil prices, as well as the weak economies in Europe, Japan, and other emerging markets, heighten the forecast risk from the international trade sector. (3) The value of the US dollar must begin a slow, multiyear descent in the latter part of this year as world growth picks up. (4) The negative wealth effects from recent stock market volatility must not derail consumer confidence and spending. (5) Further actions this year by the Federal Reserve to normalize monetary policy next must go smoothly. In the February outlook, IHS assumes the Fed will keep raising interest rates, with the next increase coming in June, followed by at least one more hike in the second half of 2016. (6) Stronger labor market conditions must begin to translate into improvements in household formation and labor force growth. Higher household formation rates boost housing demand, and labor force growth is an important component of potential economic growth. (7) Finally, productivity growth must rebound to longer term trends, bringing higher living standards and stronger potential economic growth.

IHS assigns a probability of 65 percent to the February baseline outlook. A more pessimistic scenario in which contractions in international markets and the U.S. construction sector trigger a two-quarter U.S. recession in the second half of 2016 is assigned a probability of 20 percent. Of course, economic growth could also exceed projections. A more optimistic scenario where higher-than-expected productivity growth, household formation, and foreign growth deliver a boost to the U.S. economy in early 2016 is assigned probability of 15 percent.

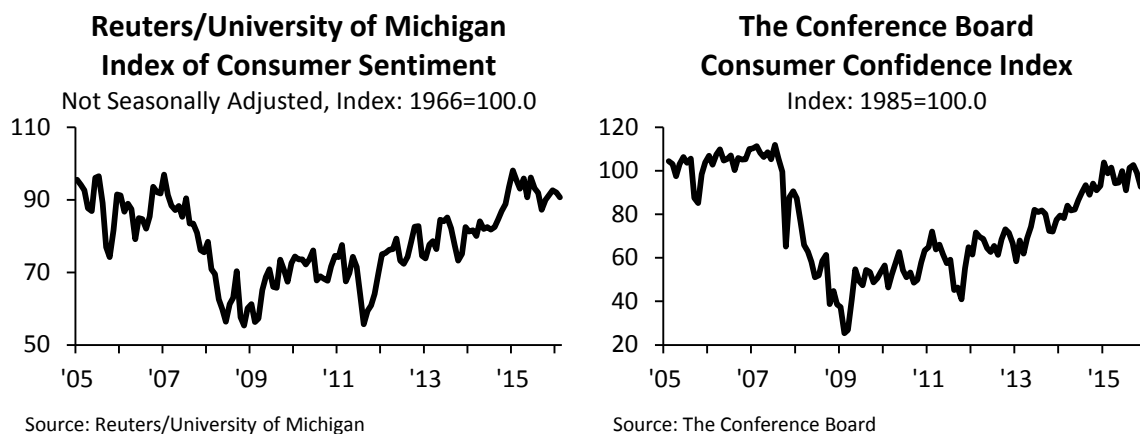
**Consumer Spending.** Solid economic fundamentals for the consumer are fueling better spending growth. Debt service burdens have fallen dramatically. Saving is at a four year high. Consumer credit growth is accelerating. Average U.S. gasoline prices are about half what they were 18 months ago, giving households more spending power. Inflation-adjusted disposable income grew almost a full percentage point faster last year than in 2014. And the strength in the jobs and housing markets is helping buoy household balance sheets and confidence. The one obvious negative is the early-year drop in stock prices. Recent declines have put major stock market indices at near 10 percent below year-ago levels. The negative wealth effects generated by falling stock values pose downside risk to consumer spending, particularly if widespread pessimism weakens sentiment about household finances.

The shrinking wealth effects from the drop in the stock market are being partially offset by rising home values. U.S. house price growth accelerated at the end of 2015 from a year earlier, according to the Federal Housing Finance Agency purchase-only home price index. National house prices have now surpassed what they were before nationwide home values began to unravel in early 2007. Looking ahead, lower equity values will negatively affect household finances in early 2016. But the improving economy is expected to support financial asset prices for the remainder of the year. In addition, tighter labor market conditions and rising real-estate values should help households restore their balance sheets, keeping confidence high and propping up spending.

Households have deleveraged, freeing up money in budgets to save or spend, and supporting credit quality. The Federal Reserve's financial obligations ratio, which measures the share of monthly household financial commitments to disposable income, is at the lowest levels since the early 1980s. Likewise, the household debt service ratio, the share



of total required household debt payments to disposable income, has never been lower in 35 years of available data. But ratios remain low largely because income growth is accelerating as labor markets tighten. Improvement in household finances from deleveraging appears about over. Consumers have been adding to debt to supplement spending, as borrowing is increasing. Credit growth in the form of lower-interest big-ticket items such as auto and student loans has already appeared. And the Federal Reserve reports that revolving credit outstanding, mostly department store charge cards and credit cards, shot up late last year to the highest levels since 2009. Thus normal credit and retail card lending appears to be back, and is expected to support consumer spending in 2016.



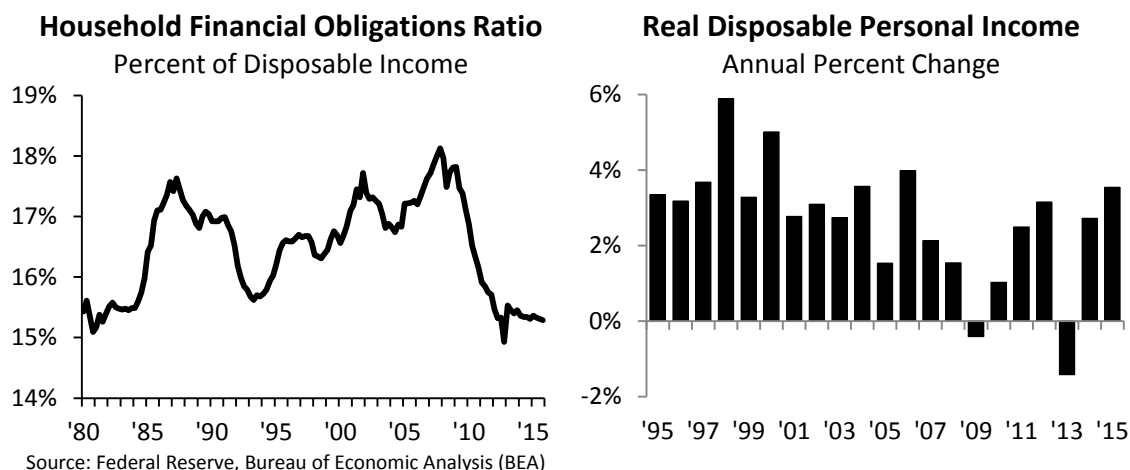
*Solid economic fundamentals for the consumer are fueling better spending growth. The strength in the jobs and housing markets is helping buoy confidence.*

The U.S. personal saving rate ended 2015 at its highest rate since 2012, thanks in part to cheap gasoline prices. The average price for a gallon of gasoline was just \$1.93 in mid-February, down 22 cents from a year earlier and \$1.80 since June 2014, according to the U.S. Energy Information Administration. Lower gas prices are comparable to a tax cut, freeing up disposable income for savings or spending on non-gasoline goods and services. Americans are estimated to have already saved \$750 per household on gasoline bills in 2015 compared to 2014, and IHS expects them to spend \$380 per household less at the pump in 2016 than in 2015. A higher savings rate suggests consumers have the ability to increase spending if they choose.

The labor market continues to make solid progress. The U.S. economy added an average of 228,000 jobs per month in 2015, below the 251,000 average gains recorded in 2014, but more than enough to keep pace with the growing labor force. Consistently strong job gains have helped quickly absorb the unemployed and underemployed and push the U.S. unemployment rate down to a post-recession low of 4.9 percent in January, from 5.7 percent at the start of last year. Unemployment has continued to recede across age, gender, educational, and racial cohorts. The number of long-term unemployed has declined sharply, as has the incidence of involuntary part-time work. Perhaps most encouraging is that the number of available jobs across the country has surged. The ratio of job seekers to open positions is near its lowest value since 2001. Openings are widespread among

industries, especially in healthcare and professional services. U.S. layoff announcements are also extraordinarily low.

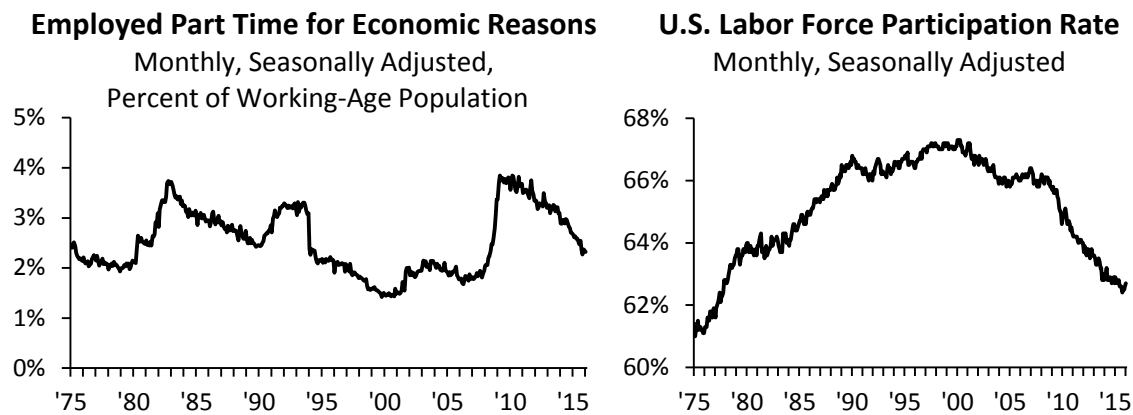
In 2016, labor force participation and wage growth are where improvement is needed. The U.S. labor force participation rate has fallen steadily since the end of the recession and is now as low as it was in the mid-to-late 1970s despite a tightening job market and greater willingness of sidelined workers to reenter the labor pool. Nominal wage growth also remains modest. Year-over-year growth in the employment cost index, a broad measure of nominal wage and benefits compensation, was 2.0 percent in the fourth quarter of 2015, near the average annual growth since the recession ended more than six years ago. But low consumer price inflation complicates that story. Thanks to lower oil and import prices last year, growth in total compensation per worker outpaced headline CPI inflation by more than 2 percent, the biggest margin since the late 1990s. Real disposable income climbed 3.5 percent in 2015, the most in nine years. Thus inflation-adjusted wage and income growth has been much healthier, especially for households with gasoline as a large share of their budget.



*Solid economic fundamentals for the consumer are fueling better spending growth. Debt service burdens have fallen dramatically and inflation-adjusted disposable income grew almost a full percentage point faster last year than in 2014.*

Ongoing slack in the labor market and the weak pace of wage growth have been the biggest constraints on consumer demand during the recovery. But in 2015 strong job gains, a boost in confidence, and redirected spending from lower gas prices revived spending. Real consumer spending grew at a solid 3.1 percent pace last year, up from 2.7 percent growth in 2014 and well above the 2.0 percent average rate since 2010. IHS believes consumer spending will remain strong as wage growth gains traction. Job growth is expected to cool somewhat over the next two years as productivity gains increasingly substitute for additional labor. Faster labor-force growth also slows the decline in the unemployment rate. Nevertheless, IHS expects labor market conditions to tighten further toward full employment, putting upward pressure on wage growth. Total compensation per worker is forecast to accelerate from 2.1 percent in 2015, to 2.2 percent in 2016 and 2.8 percent in 2017—still ahead of consumer price inflation. Real disposable income is expected to rise

a solid 3.2 and 3.1 percent in 2016 and 2017, respectively. Given households' financial ability to spend, and with wages picking up, real consumer spending growth is expected to hold steady at 2.9 percent in 2016 and 3.1 percent in 2017, led by autos and other big-ticket durable items.

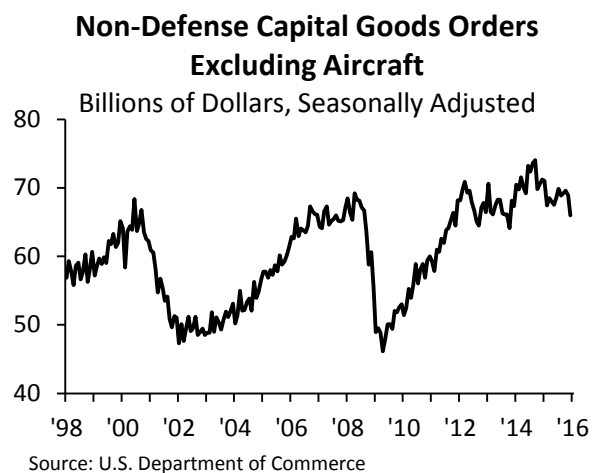


Source: U.S. Bureau of Labor Statistics (BLS)

*In the past year, the incidence of involuntary part-time work has declined sharply. However, the labor force participation rate remains very weak.*

**Industrial Production.** Manufacturing activity struggled in late 2015, as U.S. producers adjusted to unfavorable exchange rates, weakness abroad, lower energy prices, and business' efforts to work off a sizeable inventory glut. Survey results from the Institute of Supply Management (ISM) signal that the manufacturing sector in the U.S. contracted in January for a fourth consecutive month. The production, new orders, and hiring components of ISM's report have all waned since the middle of last year. The prices paid component continues to signal deflation in the industrial sector. Perhaps most notable, the drag from excessive inventories and foreign trade also remain apparent in recent reports.

Other measures of factory conditions reflect the same deteriorating conditions as in ISM's manufacturing survey. The Federal Reserve's manufacturing output index rose at just a 0.5 percent annual rate in the fourth quarter of 2015, down from an average of closer to 1.5 percent in the prior three quarters and 3.5 percent in 2014. The softness is consistent with data on manufacturing orders and shipments as well. New factory orders for manufactured goods fell in four of the last five months of last year, and shipments were down for the sixth straight month in December. Excluding the more volatile defense and aircraft sectors, there was still a sizable decline in capital goods orders late last year. Core capital goods orders—a key source of data used to estimate equipment spending in the GDP accounts—fell 3.4 percent in the fourth quarter of 2015 from a year earlier, suggesting firms were still hesitant to invest in their operations.



*Manufacturing activity struggled in late 2015, as U.S. producers adjust to unfavorable exchange rates, weakness abroad, lower energy prices, and business' efforts to work off a sizeable inventory glut.*

IHS believes further inventory cooling and more drag from foreign trade due to the strong dollar will keep manufacturing growth restrained for most, if not all, of the first half of 2016. But both drags should begin to moderate by late spring, allowing production growth to return. Manufacturing output is projected to slow from 2.0 percent annual growth in 2015, to a scant 0.4 percent in 2016, before reaccelerating to 2.3 percent growth in 2017.

**Business Investment.** A tighter labor market and reduced policy uncertainty have yet to result in a pickup in capital-goods spending, a key to a stronger expansion. Corporate profitability is still solid, cash reserves are at all-time highs, borrowing costs remain low, and rates of return on assets are strong compared to recent decades. Still, these favorable conditions have yet to jumpstart business equipment investment. Instead, more funds are being returned to shareholders, in the form of higher dividends and stock buybacks, and capital spending is still struggling to rebound to its pre-recession share of the economy. A slower pace of investment growth last year is attributable to the stronger dollar and a falloff in mining and petroleum activity. Some of the broader disconnect, however, likely has to do with the impact of new technologies and connectivity on investment—which may require less spending on physical capital—as well as firms' expectations of future profitability. This is consistent with a lower propensity to invest in traditional equipment despite higher profits.

Business investment in new labor-saving equipment and technologies is an important contributor to productivity growth, a major determinant of future living standards. Thus the equipment investment slowdown helps explain why productivity gains have stalled in recent years. Annual labor productivity growth in the U.S. has averaged only 0.5 percent since 2010—including growth of just 0.6 percent in 2015—compared to a 2.2 percent average in the two decades prior to 2008. Higher business savings over investment spending also implies slower growth, which has broader implications for the economy under the “secular stagnation” hypothesis—the idea that interest rates, inflation, and

growth will remain persistently low, because changing demographics and capital intensity have reduced opportunities for productive investment.

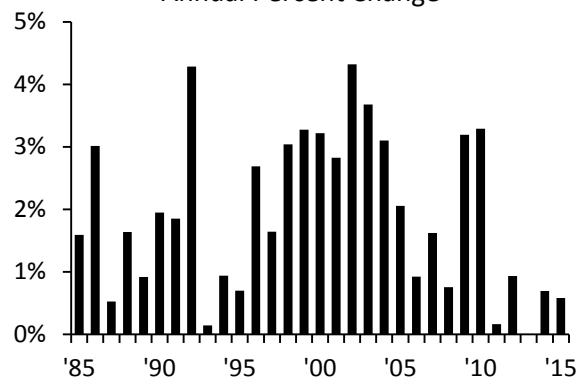
IHS has described the sluggish economic recovery in the U.S. as a “long adjustment” after a financial crisis—rather than secular stagnation—as private sector deleveraging and public-sector austerity have cut into economic growth rates. IHS believes these twin headwinds have eased. Households and banks have aggressively reduced debt levels, while public sector debt has stabilized. And there are other reasons to be optimistic. The labor market is tightening, labor costs are beginning to climb, and borrowing costs remain low, making new capital spending to improve productivity more attractive. On the other hand, lower stock values and higher credit spreads resulting from recent financial market turmoil increase business’ cost of capital, which is not good for investment. IHS expects equipment spending growth to accelerate from 3.1 percent in 2015, to 4.4 and 5.8 percent in 2016 and 2017, respectfully, as the drags from the stronger dollar and low energy prices dissipate and companies invest at rates consistent with an economy growing at a 2.5-3.0 percent rate. Rising capital expenditures help stimulate innovations that lead to a pickup in productivity growth, to 1.8 percent by 2018.

**Non-Residential Investment in Equipment**  
Share of Nominal GDP



Source: U.S. Bureau of Economic Analysis (BEA)

**Non-Farm Productivity**  
Annual Percent Change



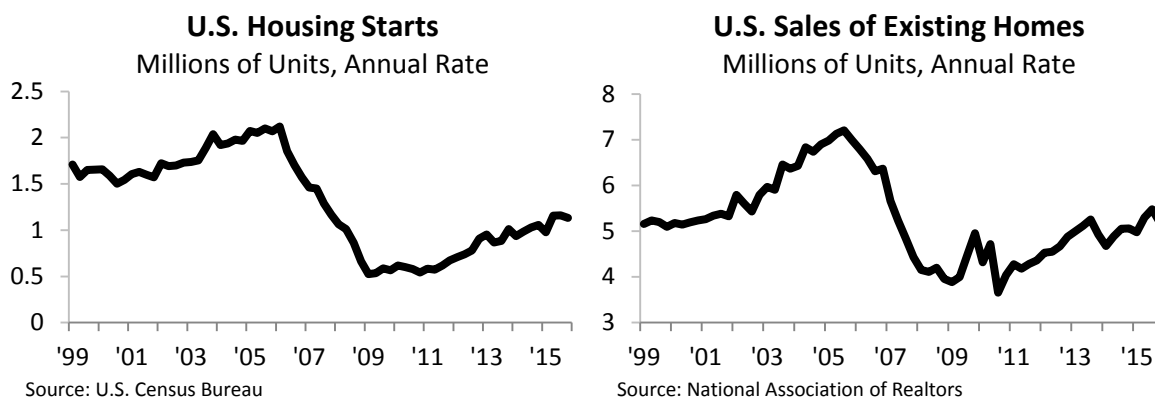
Source: U.S. Bureau of Labor Statistics (BLS)

*Capital spending is still struggling to rebound to its pre-recession share of the economy and labor productivity – a major determinant of future living standards – has stalled.*

Real investment in intellectual property (e.g. software; research and development) is forecast to make moderate gains of 3 to 4 percent over the forecast horizon, similar to recent years. Real spending on business structures, which contracted 1.5 percent in 2015 due to weakness in mining and petroleum exploration, is forecast to rebound to 2.6 and 2.5 percent growth in 2016 and 2017, respectively. Reduced inventory investment deducted more than a half-percentage point from real GDP growth in the last half of 2015. IHS forecasts that inventories will similarly cut growth by about half a percentage point in both the first and second quarters of 2016. For the full year, inventories cut growth by 0.4 percentage point, after adding 0.2 point to growth in 2015.

**Housing and Construction.** The nation's disappointing housing recovery has been a direct reflection of surprisingly sluggish household formation since the end of the recession. According to the latest data from the Census Bureau, the number of households in the U.S. has increased by an average of about 1.1 million each year since 2010, just below the long-term trend of 1.15 million prior to the recession and only a modest rebound considering the sizeable deficit caused by the severe recession. The leading cause of the unexpected sluggishness appears to be due to an increasing share of young adults not forming households, perhaps the result of poor wage growth and/or onerous student loan debts.

With consumer confidence high and the labor market tightening, IHS believes household formation and the demand for new homes are poised for improvement. After a pause in 2014—with an estimated 793,000 new households—IHS estimates that household formation picked up to 1.34 million in 2015, and will reach nearly 1.5 million by 2019, with the pickup in pace coming from young adults forming their own households. Furthermore, combined sales of new and existing homes just completed the strongest year since 2007. The 30-year fixed mortgage rate averaged 3.9 percent in 2015, and is expected to average just 4.0 percent in 2016, still very low relative to historic norms. And, overall housing affordability remains favorable, as house prices are holding steady at 5 to 6 percent year-over-year growth despite tighter housing inventory. There were 1.79 million homes available for sale at the end of December, according to the National Association of Realtors, down 3.8 percent from an already low level (1.86 million) a year earlier.

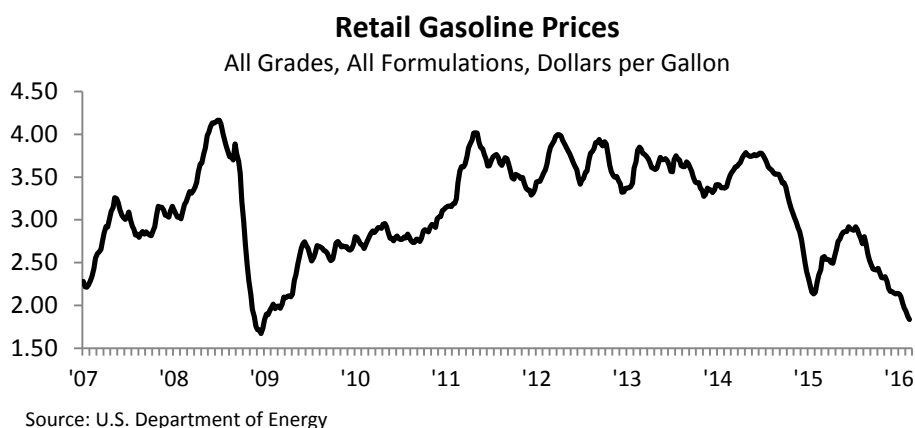


*With consumer confidence high and the labor market tightening, IHS believes household formation and the demand for new homes are poised for improvement.*

Why is housing inventory so low? Low inventory supply continues because the construction of new homes has not kept pace with rising demand. Housing starts averaged 1.11 million units in 2015, up from 1.0 million in 2014 and the highest since 2007, but still well below the long-term annual average of roughly 1.5 million starts prior to the recession. That imbalance points to a shortage of properties available to potential buyers. It also may mean stronger price appreciation and eroding affordability, unless homebuilding activity picks up further. In the February outlook, housing starts are forecast to reach 1.3 million by the end of 2016 and 1.46 million by late 2017. With the pickup in starts, IHS expects real residential investment to maintain momentum over the next couple years, rising 8.5 percent in 2016 and 10.3 percent in 2017, following 8.7 percent growth in 2015.

**Inflation.** U.S. consumers got a big break on gasoline and grocery store prices last year, but less relief from rising costs of rent and medical services. The Labor Department reports its headline inflation measure, the Consumer Price Index (CPI), rose just 0.5 percent in 2015—measured fourth-quarter to fourth-quarter—the slowest rise in inflation in over a half-century, after increasing 1.2 percent in 2014.

The biggest relief for consumers came at the gas pump. Crude oil prices have recently tumbled to \$30 per barrel—compared to near \$50 per barrel last November and \$100 per barrel in mid-2014—brought about by persistent fears of an oversupplied market. Tumbling oil prices drove down the average price for a gallon of gasoline in the U.S. to just \$2.14 at the end of 2015, from \$2.40 a year earlier and about \$3.70 in mid-2014. As measured by the CPI, gasoline prices were down 24.1 percent in 2015, after falling 12.1 percent the year before. Cheaper gasoline prices slow overall consumer price inflation.



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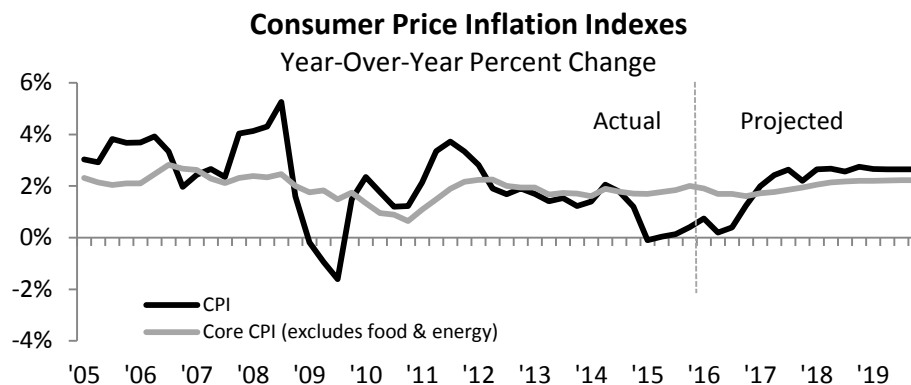
Meanwhile, grocery store food prices climbed just 0.2 percent in 2015, well below the historical average. Inflation varied widely across food categories. Prices for meat, poultry, and fish prices fell last year, along with a sharp decline in the price of dairy products. Fruit and vegetable prices experienced below-average price increases, due in part to cheaper import prices. And other food staples posted big price increases in 2015. Egg prices soared following the avian flu outbreak that struck the Midwest last spring and early summer. Dining out also cost more last year. Restaurant food prices rose 2.7 percent.

Underlying inflation pressures remain in check. Excluding more volatile prices of food and energy, the core CPI was up 2.0 percent in 2015—measured fourth-quarter to fourth-quarter—up from a 1.7 percent increase in 2014. The cost of renting a home continued to climb at a very strong pace, as did the cost of medical care services. But a stronger dollar is dampening prices for other core goods, such as new automobiles and apparel.

Overall, near-term inflation remains very low, as the impacts of low energy prices and cheaper imported goods persist. IHS agrees with the Federal Reserve's view that these drags on inflation are temporary and will correct in the medium-term. Thus consumer

prices are expected to firm in the first half of 2016 as oil prices stabilize and the dollar stops strengthening. In the February outlook, IHS expects Brent oil prices to struggle in the high \$20s to low \$30s/barrel for most of the first half of 2016. But over the next six months global production begins to align with demand, permitting a gradual rebound in prices, which reach near \$50/barrel by the end of the year and continue a slow ascent back to \$70/barrel by 2019. Likewise, the dollar is expected to slowly strengthen against trading partner currencies into the early part of next year, before beginning a slow, multiyear descent as world growth picks up.

Headline CPI inflation is forecast to move higher over the mid-term, from 0.5 percent in 2015—measured fourth-quarter to fourth-quarter—to 1.3 percent in 2016 and 2.2 percent in 2017. That is over the Federal Reserve’s 2 percent longer run objective, implying the Fed will let the labor market run hot for a while. Core CPI inflation holds steady at 1.6 percent in 2016 and 1.9 percent in 2017.



*Headline CPI inflation is forecast to move higher over the mid-term as oil prices stabilize and the dollar stops strengthening.*

**Monetary Policy.** The Federal Reserve raised short-term interest rates in mid-December for the first time in almost a decade. The widely anticipated action—the central bank lifting its benchmark federal funds rate by a quarter of a percentage point—signaled the end of an extraordinary seven-year period of record low borrowing rates and reflected confidence in the strength of the U.S. economy.

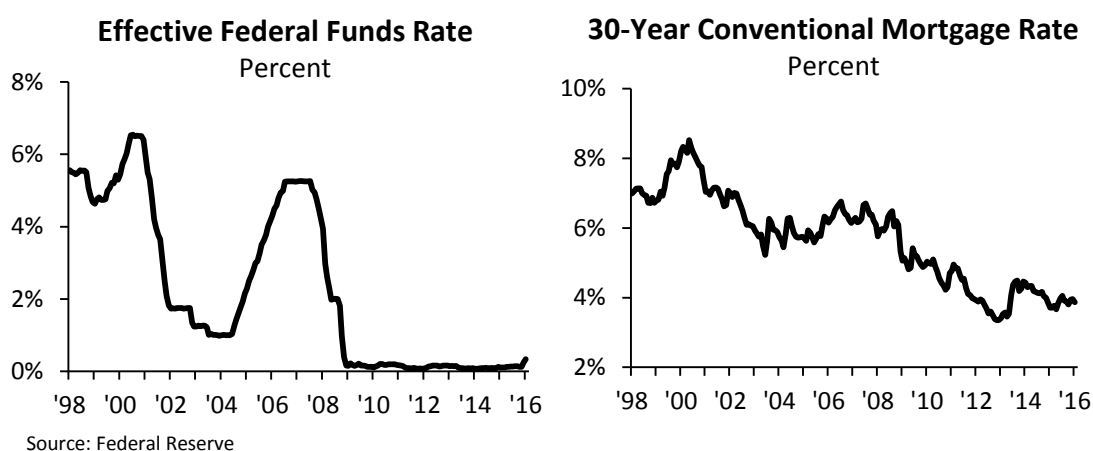
The Fed’s decision to raise its key rate was motivated in part by improving labor market conditions. The U.S. economy added a solid 2.7 million jobs in 2015, about the same gain as in the past two years, and employment now exceeds its pre-recession peak by over 4.8 million. Consistently strong job gains have helped quickly absorb the unemployed and underemployed, and push down the U.S. jobless rate to 4.9 percent in January, or near its longer-run normal level.

These developments are encouraging. Nevertheless, the Fed is still concerned about low inflation, partly reflecting declines in oil and non-energy import prices. At its first meeting of the year, in January, the Federal Open Market Committee (FOMC) said it expects inflation to remain low in the near term, in part because of the further declines in energy



prices, but rise to its 2 percent objective over the medium term as the transitory effects of declines in energy and import prices dissipate. The Committee’s post-meeting statement also noted that it is “closely monitoring global economic and financial developments” amid recent market volatility, and made clear that it expects the pace of subsequent rate hikes to be gradual and dependent on incoming economic data. It did not signal when it would next raise rates.

Based on its outlook for sustained US economic growth, IHS believes the next rate increase will come in June, followed by at least one more rate hike in the second half of 2016. In the February outlook, the federal funds rate target gradually reaches an equilibrium rate of 3.0 percent by 2019. IHS acknowledges that bad news about the labor market or inflation later this year could delay the pace of Fed rate hikes.



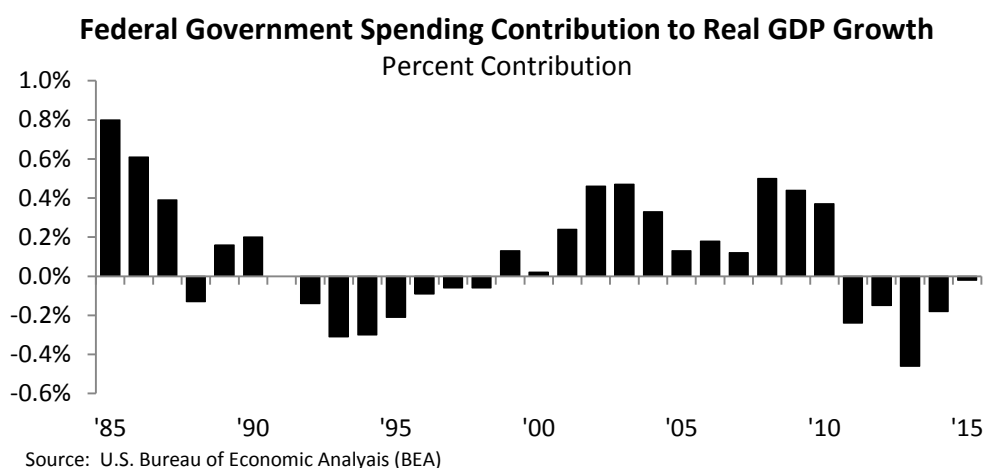
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**Fiscal Policy.** Fiscal policy headwinds that have been holding back economic growth throughout much of the recovery have subsided. Recent agreements between federal policymakers have helped stabilize the economic impact of federal tax and spending policy and fading fiscal austerity from recent years is beginning to support near-term growth. This will provide an additional boost to the economy in 2016. Nevertheless, lawmakers have yet to reach agreement on a sustainable and comprehensive solution to the nation’s long-term debt challenges, which put the long-run growth of the economy at risk.

A major source of economic uncertainty was removed in late October—just days before the Treasury was expected to exhaust extraordinary measures used to preserve the nation’s borrowing capacity—when Washington lawmakers passed the Bipartisan Budget Act of 2015. The broad budget deal effectively raises the debt limit until March 2017 and specifies a top-line framework for federal spending through September 2017. The legislation also averts a potentially market-rattling debt crisis, reduces the risk of a government shutdown, and eliminates short-term continuing resolutions or additional rounds of sequestration for the next two years. In mid-December, lawmakers passed an omnibus appropriations bill to

allocate the authorized funding into outlays by spending category for the remainder of fiscal 2016.

Washington lawmakers passed a five-year transportation funding package in early December that provides contract authority for spending on roads, bridges, and other infrastructure projects through 2020. The legislation reauthorizes collection of the 18.4 cents per gallon gas tax—the primary mechanism for federal transportation funding—and covers a shortfall in the Highway Trust Fund with transfers from other parts of the federal budget, unrelated to transportation. The last major multi-year federal highway authorization bill expired in 2009. Since then, Congress has passed a series of short-term patches—ranging in length from two years to just a week—to fund transportation, in effect shifting the costs away from a “user-pays” principle.

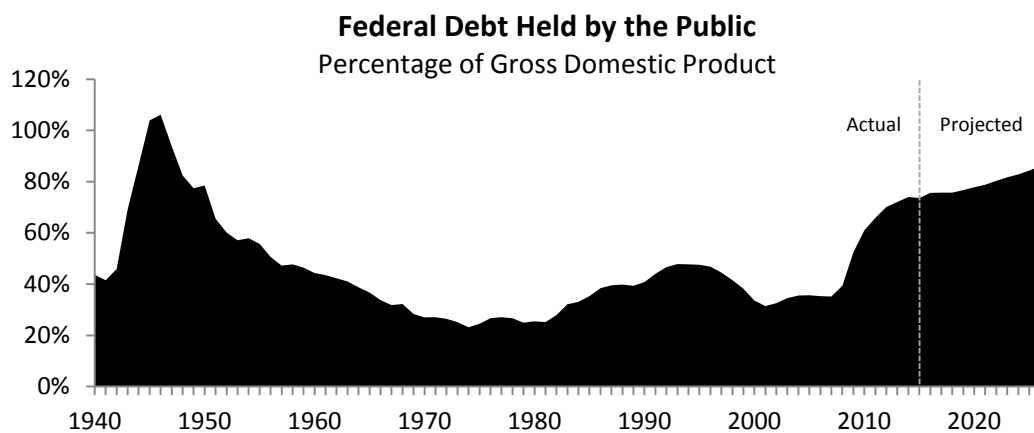


*Fiscal policy headwinds that have been holding back economic growth throughout much of the recovery have subsided. As a result, federal government spending is expected to start contributing to annual real GDP growth in 2016 for the first time since 2010.*

The recently completed federal budget negotiations also resulted in the extension of a bundle of tax credits and deductions that expired at the end of 2014. For years, Congress has reauthorized this mix of individual and business tax breaks, known as extenders, retroactively. This year, however, some were made permanent, including the research and development business tax credit, the deduction of state and local sales taxes in lieu of income taxes, and enhanced small business expensing. Bonus depreciation is extended for property placed in service through 2019, and the excise tax on medical device sales is postponed for two years. These tax breaks are not offset, and so will contribute to larger deficits.

The nation continues to face serious long-term fiscal challenges. After years of steady declines, due to an improving economy, the Congressional Budget Office (CBO) estimates the federal budget deficit will rise this year in relation to the size of the economy for the first time since 2009. CBO projects the deficit will total \$544 billion in fiscal 2016, nearly \$105 billion more than the shortfall from 2015—as outlays rise because of the spending packages approved by Congress. At approximately 2.9 percent of nominal GDP, that will

mark the first time the deficit has increased as a share of the economy since peaking at almost 10 percent in 2009. Moreover, if current laws remain unchanged, CBO estimates that the budget gap between revenues and spending will continue to grow over the next decade, as spending on health care and retirement programs and growing interest payments increase budgetary pressures. Without more broad-based structural changes to the tax code and entitlement programs, CBO projects higher annual deficits will lead to large and growing federal debt relative to the size of the economy. CBO warns that such high and rising debt could have serious negative consequences for the budget and economy.

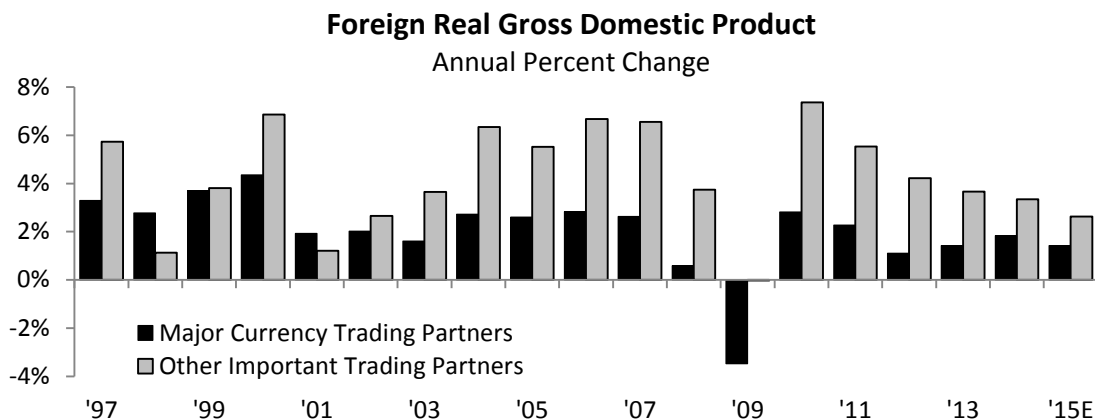


Source: Congressional Budget Office (CBO)

*Washington lawmakers have yet to reach agreement on a sustainable and comprehensive solution to the nation's long-term debt challenges.*

The IHS outlook incorporates specific details about the federal budget appropriations, the five-year highway spending bill, and modification and extension of expired tax credits. Much of this information was already included last November, so the changes are not dramatic. Similar to CBO, IHS expects the federal government deficit to rise from \$439 billion (or 2.4 percent of GDP) in FY 2015, to \$559 billion (or 3.0 percent) in FY 2016, and to \$518 billion (2.7 percent) in FY 2017. Likewise, federal government spending is expected to start contributing to annual real GDP growth this year for the first time since 2010.

**Global Economy.** Global economic activity was subdued in 2015. Advanced economies continued to recover at a modest but uneven pace, while slower growth was the dominating factor in emerging market economies. Going forward, three key factors will continue to affect the global outlook: (1) the Chinese economy is undergoing a structural adjustment that is expected to result in slower economic growth, (2) prices for oil and other commodities are falling, and (3) the U.S. central bank intends to gradually withdrawal extraordinary monetary support, as counterparts in other advanced economies continue to ease.



Source: IHS Economics (IHS)

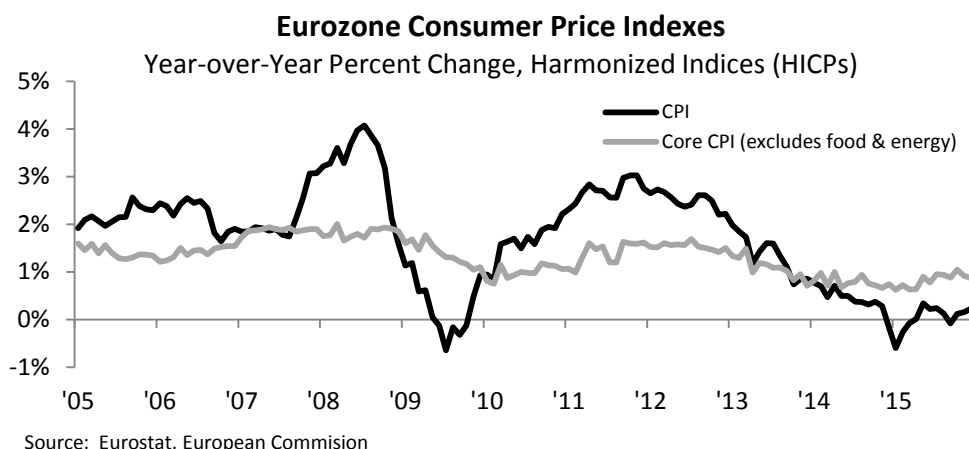
*Global economic activity was subdued in 2015. Advanced economies continued to recover at a modest but uneven pace, while slower growth was the dominating factor in emerging market economies.*

In Europe, the economic recovery is continuing at a slow pace, supported by lower oil prices and additional monetary stimulus. Among other things, this has led to sizeable depreciation of the euro, which makes Eurozone products more competitive overseas. Nevertheless, unemployment in the currency area is still in the double digits, highlighting the scars left by Europe's debt crisis. That excess slack is in turn exacerbating deflationary pressures. Prices in the Eurozone were up only 0.2 percent in December from a year earlier, well below the European Central Bank's (ECB) 2 percent target. Even core inflation, which excludes the effect of volatile items such as food and energy, rose just 0.9 percent from a year ago. Such low inflation makes it more difficult for troubled nations on the Eurozone's periphery, such as Greece, to achieve the relative price adjustments needed to regain competitiveness without having to withstand a protracted period of weak growth and high unemployment. The Greek jobless rate is the highest in Europe, with nearly a quarter of its population unemployed in October, the latest data available. Moreover, low inflation poses a threat to economies if it becomes entrenched in expectations, which can undermine spending and investment decisions and prolong economic sluggishness.

Progress toward dealing with the fiscal and structural challenges that face the Eurozone has been cumbersome and slow-moving, placing added pressure on the ECB to act more aggressively to boost inflation expectations and restore growth. The ECB already has cut a key interest rate to below zero—thereby charging depositors to keep their money at the central bank—provided cheap funding to Eurozone banks, and launched a private-sector bond-buying program meant to encourage lending in the region. Last year, the ECB took an unprecedented step of expanding its purchases to include government bonds from EU member states and committed to flooding the Eurozone economy with new euros until March 2017 to push up inflation. But price increases have been slow to respond mainly due to the collapse in oil prices, and market-based measures of medium-term inflation expectations are still well below ECB's target. As a result, ECB President Mario Draghi recently hinted at still more quantitative easing actions at ECB's next monetary policy meeting in March. IHS expects Europe's recovery to remain slow and bumpy. In their

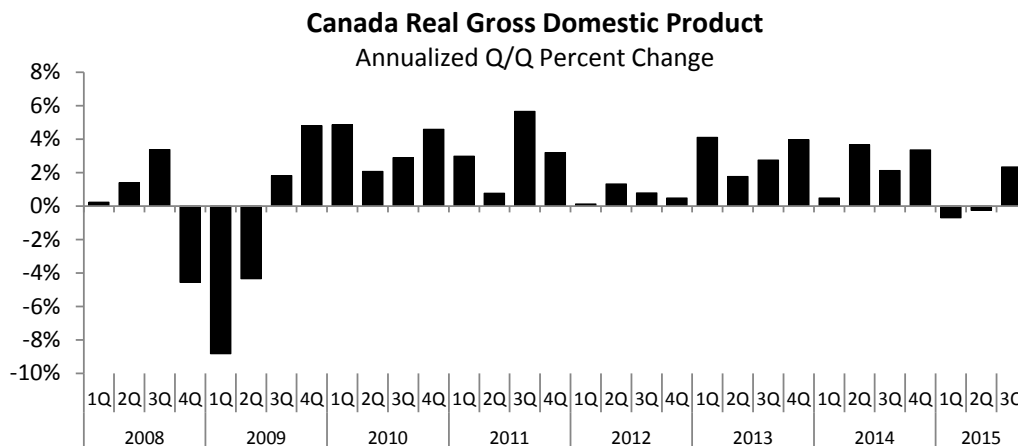
February outlook, real GDP growth in the Eurozone is projected to pick up from 1.5 percent in 2015, to just 1.6 and 1.9 percent in 2016 and 2017, respectively.

In Japan, the persistence of slow growth has raised fears that the government's strategy to reverse more than a decade of stagnation and chronic deflation is faltering. Real economic growth in Japan has averaged only 0.9 percent since Prime Minister Shinzo Abe took office in late 2012, and as in the Eurozone, inflation remains a long way off the Bank of Japan's (BOJ) 2 percent target. The Japanese consumer price index (CPI) is up only 0.2 in December from a year-ago, dragged down by falling oil prices. Excluding food and energy, core prices are up just 0.8 percent. Thus, the BOJ is facing pressure to expand already aggressive monetary stimulus. In late January, the central bank adopted a negative interest rate policy in an effort to boost bank lending—a strategy also being pursued by the ECB—for the first time in its history. It remains to be seen whether Japan's negative interest rates will spark stronger growth. In the February outlook, IHS expects real GDP in Japan to rise 0.6 percent in 2015, followed by growth of 0.9 and 0.6 percent in 2016 and 2017 respectively.



*In Europe, the economic recovery is continuing at a slow pace, supported by lower oil prices and additional monetary stimulus.*

In Canada, the collapse in global oil prices dried up capital investment in the energy sector, dragging the economy into a mild recession early last year. More recent data show signs that the Canadian downturn may be easing, but momentum is weak as declining energy prices have left the economy on shaky ground. With interest rates already extremely low, the Bank of Canada (BoC) is limited in its ability to influence activity. Prime Minister Justin Trudeau's government has promised a sizeable investment in infrastructure in the upcoming federal budget to help break out of the slump. In the February outlook, IHS projects real GDP growth in Canada—the United States' largest trading partner—to slowly pick up from 1.2 percent in 2015, to 1.3 percent in 2016 and 1.8 percent in 2017, supported by improved international competitiveness for its exports.



Source: Statistics Canada, Government of Canada

*In Canada, the collapse in global oil prices dried up capital investment in the energy sector, dragging the economy into a mild recession early last year.*

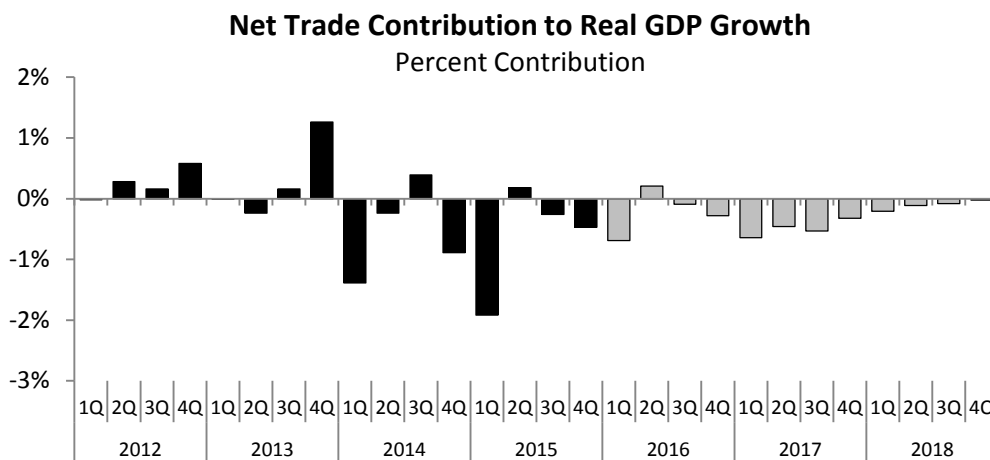
In China, the pace of economic growth is slowing, as the country copes with enormous excess capacity and debt. China's real GDP rose a reported 6.9 percent in 2015, much faster than any advanced economy, but the weakest growth the world's second largest economy has recorded in 25 years. Chinese policymakers are attempting to reduce the risk of a sharp and prolonged slowdown, or hard landing, by deliberately steering the economy away from a heavy reliance on exports and credit-fueled investment toward more balanced and sustainable consumer-led growth. That rebalancing of the Chinese economy has been bumpy, resulting in financial-market disruptions, a surge in capital outflows, exchange-rate volatility, and a slowdown in imports of key commodities—such as iron ore, crude oil, and soybeans—as the country cuts overcapacity. IHS also believes weak domestic demand and slow global growth will weigh on Chinese growth prospects. Thus, they expect real GDP growth in China to weaken further, to 6.3 percent in 2016 and 2017.

In other emerging market economies—especially oil exporters—the result of China's rebalancing, low oil prices, and diverging monetary policy around the world is lower relative return on asset values, adverse capital flows, financial market volatility, and further currency depreciation. That threatens to weaken growth and fan inflation by making the price of imported goods more expensive. These mixed developments highlight the dilemmas facing central bankers. Thus, the potential for policy missteps poses considerable downside risk.

India, a net importer of oil, has overtaken China as the fastest growing major economy in the world. Optimism about lower commodity prices, economic reforms, and progress in controlling inflation contributed to better growth. On the other hand, the two remaining BRICs—Brazil and Russia—which are net commodity exporters, are mired in economic crises fueled by weak investment, high inflation, and currency devaluation. Russia's economy is in severe recession, further affected by international sanctions and sharply lower oil prices, which are hammering the value of the Russian currency. The ruble has lost more than half its value against the dollar since mid-2014. Brazil is suffering its worst recession in decades, as rising interest rates, low business and consumer confidence, and

weak competitiveness are constraining domestic demand. Plummeting commodity prices and political dysfunction are also weighing on Brazil’s economic growth. The fear-inducing Zika virus outbreak is a particularly unwelcome development as well.

IHS expects economic growth of the United States’ major-currency trading partners to improve slightly in 2016, with better growth in Canada, Japan, and Europe. The economies of other important trading partners, such as India, are also expected to record robust performances this year. IHS projects world real GDP growth to accelerate modestly from 2.6 percent in 2015, to 2.7 and 3.1 percent growth in 2016 and 2017, respectively. The trade-weighted value of the dollar against major trading partners, which rose more than 16 percent in 2015, is expected to level off in mid-2016, before gradually retreating for the remainder of the forecast horizon as world growth picks up. As a result, net trade remains a heavy drag on domestic growth over the next several years, as import growth remains strong due to the strengthening U.S. dollar and steady domestic growth, and export growth remains tepid from subpar world growth and less competitive foreign markets. Real U.S. imports are projected to climb 3.4 and 6.9 percent in 2016 and 2017, respectively, following 5.0 percent growth in 2015. Exports are forecast to accelerate from 1.1 percent growth in 2015, to 1.9 and 5.1 percent growth in 2016 and 2017. IHS forecasts that net trade will annually cut growth by about 0.2 to 0.4 percentage point over the next three years, after subtracting 0.7 point from growth in 2015.



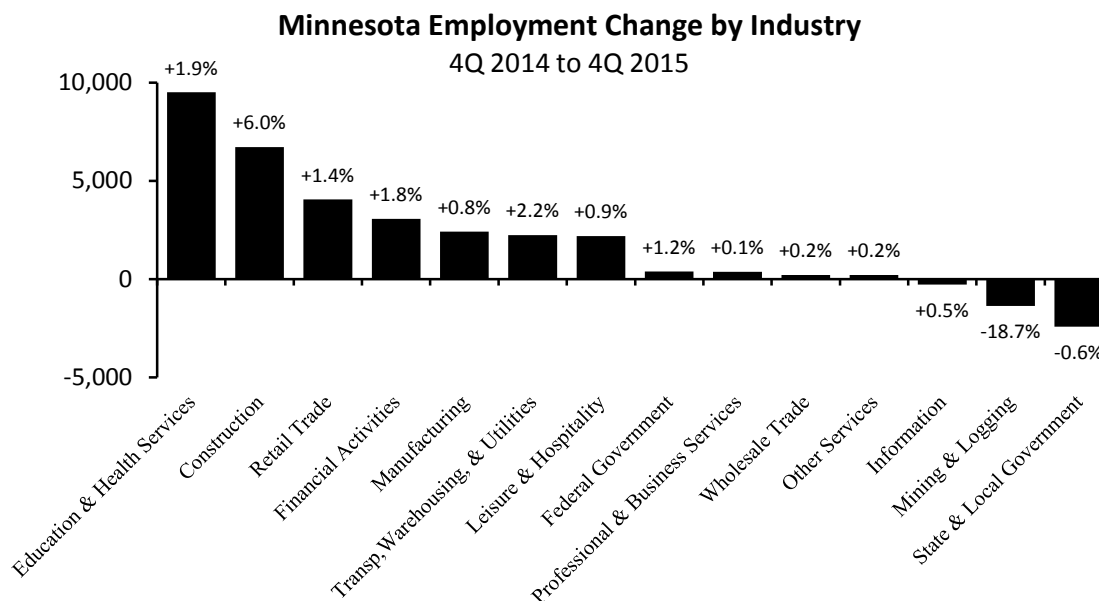
Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics

*Global trade will remain a heavy drag on domestic growth over the next several years, as imports pick up due to the stronger U.S. dollar and steady domestic growth, and export growth remains tepid from subpar world growth and less competitive foreign markets.*

## Minnesota Economic Outlook

Minnesota’s economy has felt the adverse effects of falling commodity prices, the stronger US dollar, and weak global growth. A sharp drop in global iron ore prices has led to significant cutbacks in the state’s important mining sector. Agricultural and manufacturing activity has also struggled. Ample supplies, a strong U.S. dollar, and slow growth in global demand have kept prices for corn and soybeans low, hurting the profits of Minnesota farmers. Likewise, the surging value of the dollar against the currencies of Minnesota’s largest trading partners—including Canada and Mexico—has hurt demand for the state’s manufactured exports. As a result, the pace of overall job growth in Minnesota slowed during the second half of 2015.

Nonetheless, Minnesota is weathering the recent global slowdown and slide in commodity prices reasonably well, a reflection of its large and diverse economic base. Job growth has remained widespread, with recent gains in education and health services, retail trade, and financial activities. Improved homebuilding activity has also meant greater need for construction tradespeople like carpenters and roofers. That broad based job growth has helped quickly absorb the underemployed and unemployed, and push down the state’s jobless rate in December to 3.5 percent, its lowest mark since the early 2000s and the lowest among states with a major metropolitan area. With the excess supply of workers rapidly diminishing, a tighter labor market is leading to some long-awaited wage acceleration.



Note: Includes MMB's projected benchmark revision.  
Source: Minnesota Dept. of Employment and Economic Development (DEED); Minnesota Management & Budget (MMB)

*Minnesota is weathering the recent global slowdown and slide in commodity prices reasonably well, a reflection of its large and diverse economic base. Job growth has remained widespread, with recent gains in healthcare, construction, retail trade, and financial activities.*



## Forecast Comparison: Minnesota &amp; U.S.

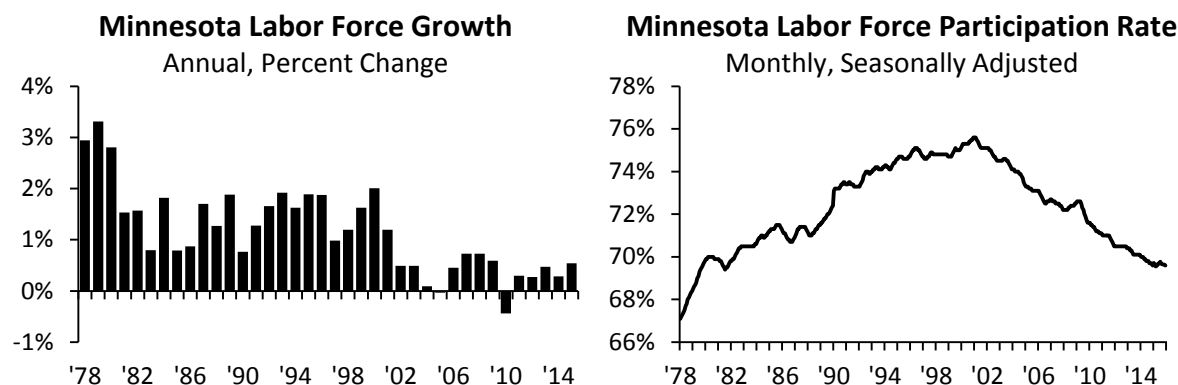
Forecast 2015 to 2019, Calendar Years

Blank	2012	2013	2014	2015	2016	2017	2018	2019
<b>Total Non-Farm Payroll Employment (Thousands)</b>								
<b>Minnesota</b>								
February 2016	2,730	2,776	2,815	2,853	2,882	2,907	2,931	2,953
%Chg	1.6	1.7	1.4	1.4	1.0	0.9	0.8	0.7
November 2015	2,730	2,776	2,816	2,858	2,894	2,929	2,957	2,980
%Chg	1.6	1.7	1.4	1.5	1.3	1.2	0.9	0.8
<b>U.S.</b>								
February 2016	134,173	136,381	138,939	141,832	144,322	145,921	147,427	148,898
%Chg	1.7	1.6	1.9	2.1	1.8	1.1	1.0	1.0
November 2015	134,098	136,394	139,023	141,898	144,120	146,092	147,939	149,545
%Chg	1.7	1.7	1.9	2.1	1.6	1.4	1.3	1.1
<b>Wage and Salary Disbursements (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
February 2016	135.4	139.6	145.9	152.8	158.6	166.0	173.7	181.3
%Chg	4.9	3.1	4.6	4.7	3.8	4.7	4.6	4.4
November 2015	135.4	139.6	145.9	153.0	160.0	167.6	175.4	183.9
%Chg	4.9	3.1	4.6	4.9	4.5	4.8	4.7	4.8
<b>U.S.</b>								
February 2016	6,930	7,114	7,478	7,839	8,216	8,618	9,035	9,468
%Chg	4.5	2.7	5.1	4.8	4.8	4.9	4.8	4.8
November 2015	6,930	7,114	7,478	7,778	8,143	8,577	9,015	9,468
%Chg	4.5	2.7	5.1	4.0	4.7	5.3	5.1	5.0
<b>Non-Wage Personal Income (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
February 2016	119.1	117.5	121.5	124.5	127.6	133.2	140.2	146.9
%Chg	5.7	-1.3	3.4	2.5	2.5	4.3	5.3	4.7
November 2015	119.1	117.5	121.5	125.1	130.9	137.6	145.3	152.4
%Chg	5.7	-1.3	3.4	3.0	4.6	5.1	5.6	4.9
<b>U.S.</b>								
February 2016	6,985	6,954	7,216	7,519	7,744	8,105	8,529	8,960
%Chg	5.5	-0.4	3.8	4.2	3.0	4.7	5.2	5.0
November 2015	6,985	6,954	7,216	7,531	7,853	8,275	8,726	9,171
%Chg	5.5	-0.4	3.8	4.4	4.3	5.4	5.5	5.1
<b>Total Personal Income (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
February 2016	254.5	257.1	267.4	277.4	286.2	299.2	313.9	328.2
%Chg	5.2	1.0	4.0	3.7	3.2	4.5	4.9	4.6
November 2015	254.5	257.1	267.4	278.1	290.8	305.2	320.7	336.3
%Chg	5.2	1.0	4.0	4.0	4.6	4.9	5.1	4.9
<b>U.S.</b>								
February 2016	13,915	14,068	14,694	15,357	15,960	16,722	17,564	18,427
%Chg	5.0	1.1	4.4	4.5	3.9	4.8	5.0	4.9
November 2015	13,915	14,068	14,694	15,310	15,996	16,851	17,742	18,639
%Chg	5.0	1.1	4.4	4.2	4.5	5.3	5.3	5.1

Source: IHS Economics and Minnesota Management and Budget (MMB)

**Revised Economic Forecast.** Forecasts for state employment and wages have been revised based on recent Minnesota-specific information and the IHS Economics (IHS) February 2016 baseline. The February baseline informs the same MMB model of the Minnesota economy used in November. That model incorporates updated information on forthcoming revisions to Minnesota’s non-farm payroll employment, as well as new data from the Quarterly Census of Employment and Wages (QCEW) and income tax withholding collections since November.

MMB’s February 2016 economic forecast calls for Minnesota’s expansion to continue over the next several years, but at a generally slower pace. It appears that Minnesota is at or near its full employment potential, where job growth is becoming increasingly constrained by the impact of an aging population on the market supply of labor. As a result, both employment and total wage income growth are expected to remain modest in 2016 and 2017, with the average annual wage slowly accelerating throughout much of the forecast horizon. The forecast expects small improvements in household formation, labor force growth, and labor productivity.



Source: Minnesota Department of Employment and Economic Development (DEED), Minnesota Management & Budget (MMB)

*Minnesota’s labor force growth remains very weak. In the February 2016 economic forecast, improved job prospects and faster wage growth encourage some people to reenter the labor force, thus slowing the decline in labor force participation rate through at least early 2017.*

Minnesota total non-farm employment rose an estimated 1.4 percent in 2015, the same as in 2014 and less than the national rate of 2.1 percent. In MMB’s February 2016 economic outlook, Minnesota employment grows at a somewhat slower annual pace of 1.0 percent in 2016 and 0.9 percent growth in 2017, reflecting an economy running at or near its full potential and job gains more consistent with demographic trends. In November 2015, MMB’s forecast called for a bit stronger annual job growth of 1.5 percent in 2015, followed by 1.3 and 1.2 percent in 2016 and 2017, respectively. MMB’s near-term employment forecast is slower than the IHS February 2016 outlook for U.S. job growth, which calls for 1.8 percent annual growth in 2016, followed by 1.1 percent growth in 2017.

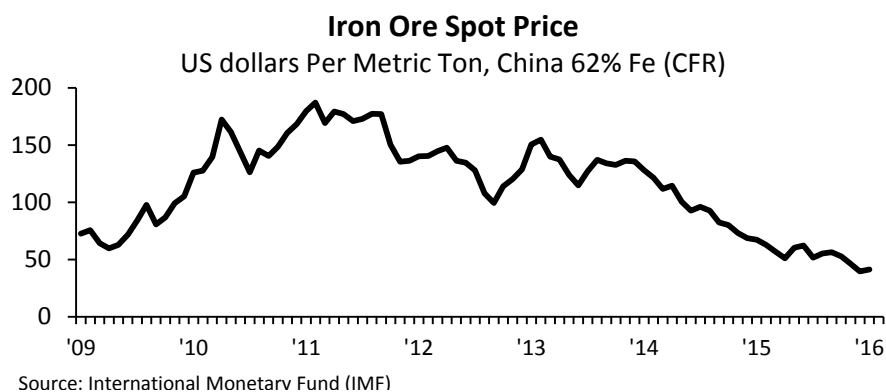
Information from income tax withholding collections and the QCEW suggest nominal growth in Minnesota’s total wage and salary income rose 4.7 percent in 2015, up from 4.6

percent growth in 2014. Total wage income growth is now expected to ease to 3.8 percent in 2016, before rising 4.7 percent in 2017. In November, MMB's forecast called for stronger gains of 4.9 percent in 2015, followed by 4.5 and 4.8 percent in 2016 and 2017, respectively. The IHS February 2016 outlook for U.S. total wage income calls for growth of 4.8 percent in 2015, followed by 4.8 percent in 2016 and 4.9 percent in 2017.

MMB's Minnesota economic forecast assumes that IHS Economics' February 2016 baseline forecast of the U.S. economy materializes. Any unanticipated adverse developments that affect the U.S. economy, such as further appreciation of the dollar or weaker global growth, will have unfavorable effects on the Minnesota economy.

**Iron Ore Mining.** Global influences continue to have a significant impact on Minnesota's Iron Range. Cooling demand in China, combined with a global supply glut of steel, has led to a collapse in prices for both finished steel and its primary raw material, iron ore. Prices for iron ore have plummeted by nearly 75 percent in the past three years, from \$150/ton in early 2013 to below \$40/ton at the beginning of this year—less than it costs some higher-cost producers to mine it.

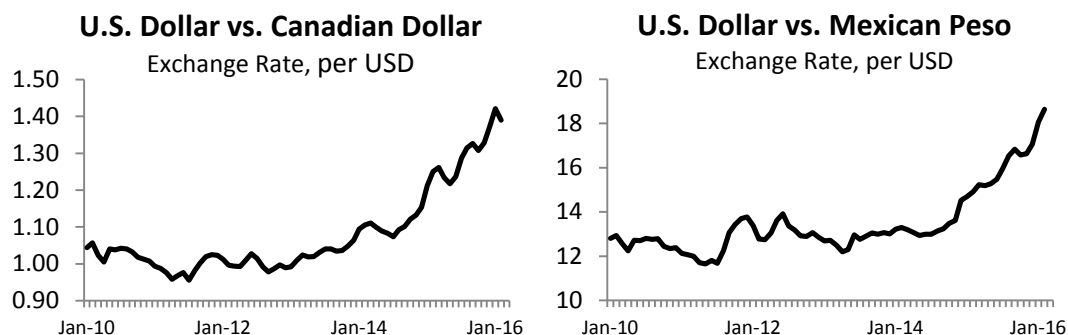
Slumping global prices coupled with the stronger dollar is also making foreign steel less expensive, sparking a surge in U.S. imports from overseas. In response, domestic steelmakers have cut prices, curbed production, and reduced demand for Minnesota taconite iron ore, the source of approximately 75 percent of total U.S. production. This has led to the idling or slowing of mining operations on Minnesota's Iron Range since the beginning last year, directly affecting over 2,000 workers. That accounts for nearly half of northeastern Minnesota's 4,500 iron ore mining jobs in early 2015. It also impacts jobs and income in support industries, including utilities, transportation, manufacturing, and local services, that rely on the mines. Rebalancing of the global iron ore market could take years, as additions to supply by low-cost producers in Australia and Brazil continues to outpace demand.



*Cooling demand in China, combined with a global supply glut of steel, has led to a collapse in prices for both finished steel and its primary raw material, iron ore. This has led to the idling or slowing of mining operations on Minnesota's Iron Range since the beginning last year.*

**Exports and Manufacturing.** A global economic slowdown and the relative strength of the U.S. economy are attracting foreign investors, which has driven up the value of the US dollar. The trade-weighted dollar has risen by a staggering 22 percent against major trading partners since mid-2014—with many commodity exporters such as Mexico and Canada experiencing sizable currency depreciation.

A stronger dollar relative to major trading partners makes Minnesota produced goods and commodities more expensive elsewhere in the world, reducing demand for the state's products abroad. Already, according to data from the Minnesota Department of Employment and Economic Development (DEED), Minnesota's exports fell 6 percent during the first nine months of 2015 compared to 2014, when the state's businesses sent a record \$21.4 billion—about 6.8 percent of the state's GDP—worth of agricultural, mining, and manufactured goods abroad. Canada, the state's largest trading partner, is estimated to have reduced Minnesota product orders last year by 23 percent. The recent collapse in global oil prices dried up capital investment in Canada's energy sector, dragging its economy into a mild recession early last year. Some bright spots for Minnesota exports last year include Germany and the United Kingdom, where economic growth remains steady amid global woes.



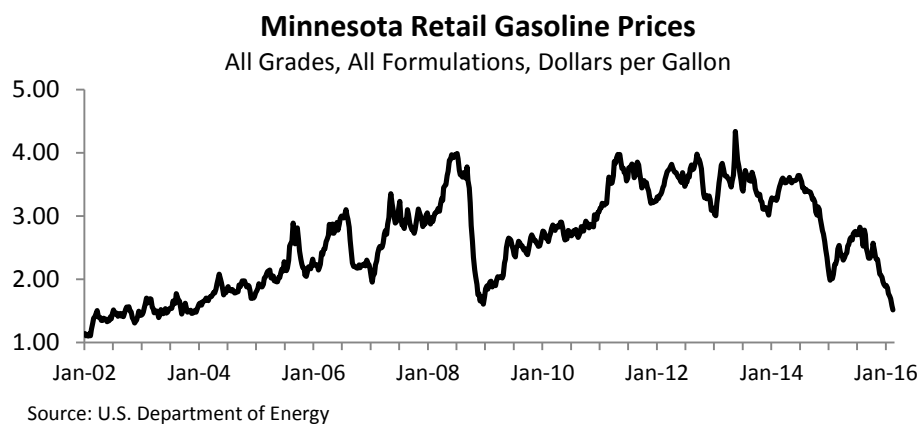
Source: Federal Reserve

*A stronger dollar relative to major trading partners makes Minnesota produced goods and commodities more expensive in Canada, Mexico, and elsewhere in the world, reducing demand for the state's products abroad.*

Minnesota's manufacturing activity has also cooled, as the state's producers adjust to weaker foreign growth and the strong dollar. Results from a survey of supply managers for the Mid-America Business Conditions Index signal that Minnesota's manufacturing sector dropped back into contractionary territory late last year. The new orders component of the index has recently fallen to the lowest levels since the global financial crisis of 2009. This raises concerns of weak, or even negative manufacturing output growth in late 2015 and early 2016, as exports slide even lower. Indeed, manufacturing is expected to shed 3,000 jobs (-0.9 percent) in 2016—measured fourth quarter to fourth quarter—followed by a modest gain of 1,800 jobs (0.6 percent) in 2017 as world growth picks up.

**Lower Oil Prices.** Some Minnesota businesses have benefitted from the oil and gas boom in neighboring North Dakota in recent years, which has helped boost parts of construction, mining, and manufacturing activity. But sluggish global demand and excess supply have sent crude oil prices plummeting. The price of a barrel of oil has fallen more than 70 percent since mid-2014. Lower prices mean big savings for consumers of gasoline and other petroleum products, but also scaled back capital investment and drilling exploration among energy producers. The number of currently active drilling rigs in western North Dakota's Bakken oil fields has dropped to the fewest since mid-2009, and many are at risk of bankruptcy.

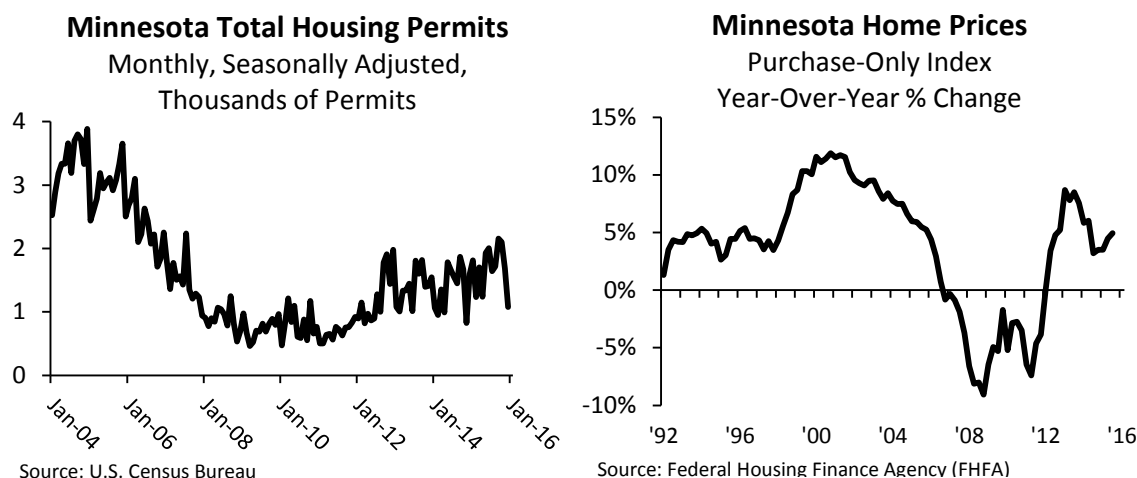
While economic activity from oil drilling in the Bakken region is important for some of the state's workers and businesses, Minnesota is not an oil-producing state. Thus MMB economists believe the net positive effects from the recent decline in crude prices on the state's economy are likely outweighing the negative impacts on the energy sector. According to the U.S. Energy Information Administration, the average price of a gallon of gasoline in Minnesota was just \$1.51 in mid-February, down from 3.60/gallon (or almost 60 percent) in mid-2014 and the lowest in more than a decade. Cheap gas prices mean big savings for Minnesotans, and frees up disposable income for spending on non-gasoline goods and services if they choose. MMB economists estimate that Minnesotans already saved \$700 per household on gasoline bills in 2015 compared to 2014, and—if the IHS February outlook materializes—expect them to spend \$350 per household less at the pump in 2016 than in 2015.



*The average price of a gallon of gasoline in Minnesota was just \$1.51 in mid-February, down from 3.60/gallon (or 58 percent) in June, 2014 and the lowest in more than a decade.*

**Homebuilding Activity.** The state's housing market just finished the strongest year in more than a decade. Closed sales of homes in Minnesota ended 2015 with its best performance since 2005, and with labor market conditions tightening and wage growth beginning to accelerate, household formation appears poised for improvement. After six years of persistent low levels, annual household formation is forecast to have picked up to 21,000 in 2015, consistent with continued employment growth and improving headship rates among young adults. In 2016 and 2017, annual net new formations are similarly forecast to be 23,000 and 22,000, respectively.

Furthermore, the 30-year fixed mortgage rate—at 3.65 percent in mid-February—is still very low relative to historic norms. And, overall housing affordability remains favorable, with Minnesota home prices holding steady near 4 to 5 percent year-over-year growth despite very low housing inventory. Statewide, there were only about 20,500 homes available for sale at the end of January, according to the Minnesota Association of Realtors, down more than 16 percent from an already very low level (24,500) a year earlier. Indeed, many communities across Minnesota are experiencing a dearth of housing.



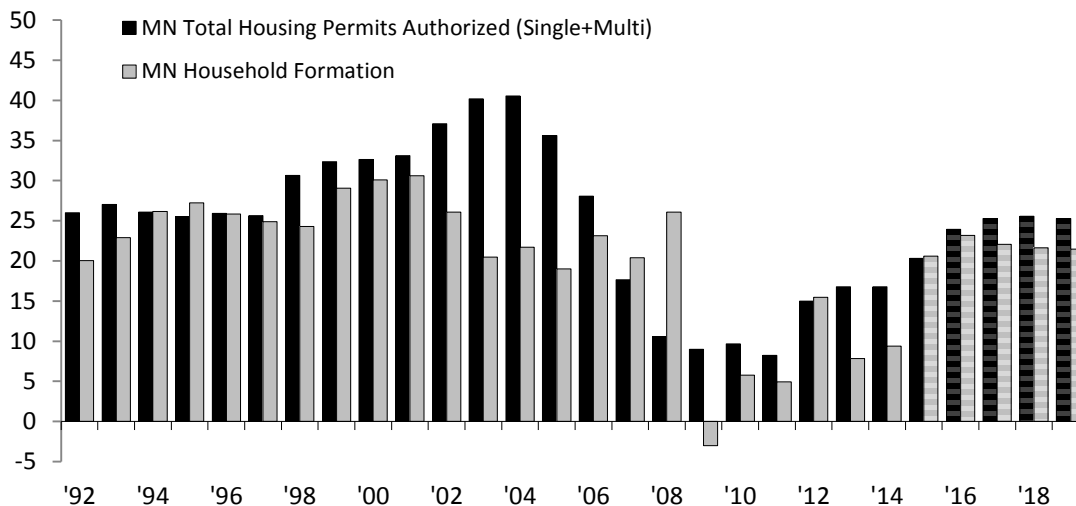
*There are encouraging signs that household formations are poised for improvement. The demand for housing appears to have returned in 2015.*

Increasing home sales, pent-up housing demand from young adults, and an inventory shortage suggest that residential construction activity should be picking up. Indeed, the Census Bureau reports the total number of authorized residential building permits in Minnesota rose to 20,300 in 2015, up from 16,800 the previous two years, although still well below the long-term annual trend of 30,000 permits per annum. In MMB's February 2016 outlook, total housing permits are forecast to be 23,900 in 2016 and to 25,300 in 2017.

New housing construction means greater need for building tradespeople like carpenters and roofers. Residential construction employment, including specialty trade contractors, is estimated to add 5,300 jobs (5.7 percent) in 2015—measured fourth quarter to fourth quarter—followed by continued gains of 4,600 jobs (4.7 percent) in 2016 and 3,600 jobs (3.4 percent) in 2017. Therefore, some of the assumed job losses in the mining and energy industries will be absorbed by a thriving construction sector.

Economists at MMB believe that if household formation rates remain sluggish, due to weaker-than-expected labor market conditions or headship rates among young adults, Minnesota's housing recovery is unlikely to perform as forecast.

**Minnesota Household Formation and Total Housing Permits**  
History and MMB February 2016 Forecast, Thousands of Units/Permits



Source: U.S. Census Bureau; Minnesota Management and Budget (MMB)

*Abnormally slow household formations since the end of the recession helps explain why housing sales and starts in Minnesota have been similarly restrained in recent years, despite a fast improving labor market.*

**Employment.** The latest employment data suggests low commodity prices, the strong dollar, and a tightening labor market are starting to constrain job growth across the state. At the beginning of each year, DEED realigns Minnesota's monthly, sample-based employment estimates with state unemployment insurance (UI) tax records filed by nearly all employers, a process referred to as benchmarking. A preliminary benchmark revision by MMB demonstrates that annual Minnesota employment grew at a slower pace in 2014 and 2015 than in previous years, and about a half percentage point less than the national average.

A slower pace of job growth last year is largely attributable to low commodity prices and the strong dollar, which is taking their tolls on employment in Minnesota's mining, agriculture, and manufacturing sectors. These factors may tamp down growth for several years. Some of the broader slowdown, however, likely has to do with the state nearing its full employment potential, as job growth is being increasingly constrained by slower labor force growth and demographic trends.

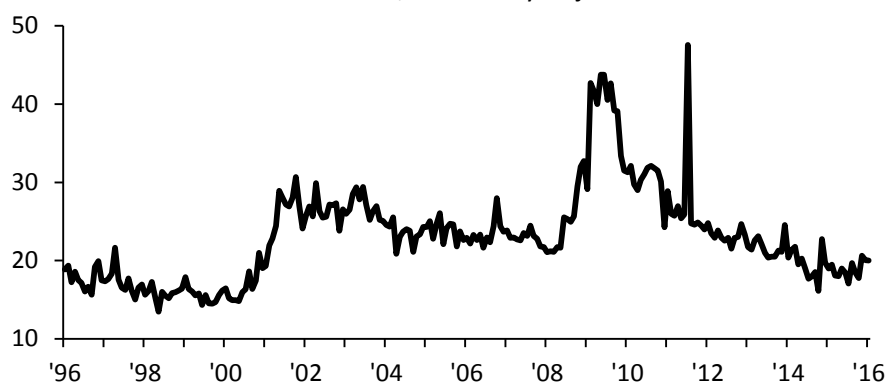
MMB's February 2016 economic forecast expects revised employment growth of 27,200 in 2015—measured fourth quarter to fourth quarter—down from 37,200 in 2014 and 45,400 in 2013. The prospects for 2016 are similarly modest, with job gains of 34,500, led by healthcare, professional and business services, and construction. Mining and manufacturing are expected to be drags on employment growth this year due to ongoing global factors. Employment growth downshifts again in 2017 and 2018 as businesses focus toward improving productivity to keep labor costs down.

**Labor Market.** Minnesota’s labor market continues to tighten up. Steady job growth has helped push the state’s unemployment rate down to 3.5 percent in December, one of the lowest among states with major metropolitan areas. This is below the low point (3.8 percent) of the previous 2002-2007 economic expansion. DEED reports unemployment has fallen across age and gender cohorts, and both the number of officially long-term unemployed—lasting 27 weeks or longer—and the rate of involuntary part-time employment are back to near pre-recession levels.

Labor market conditions have also tightened as a result of fewer people being laid off. According to DEED, the number of Minnesotans filing new claims for unemployment benefits, generally barometer of short-term labor market trends, averaged about 18,800 per month in 2015, down from a recessionary peak of nearly 44,000 during the summer of 2009 and back to levels not seen since the late 1990s, after adjusting for population growth.

### Minnesota Initial Claims for Unemployment Insurance

Thousands, Seasonally Adjusted



Source: Minnesota Department of Employment and Economic Development (DEED)

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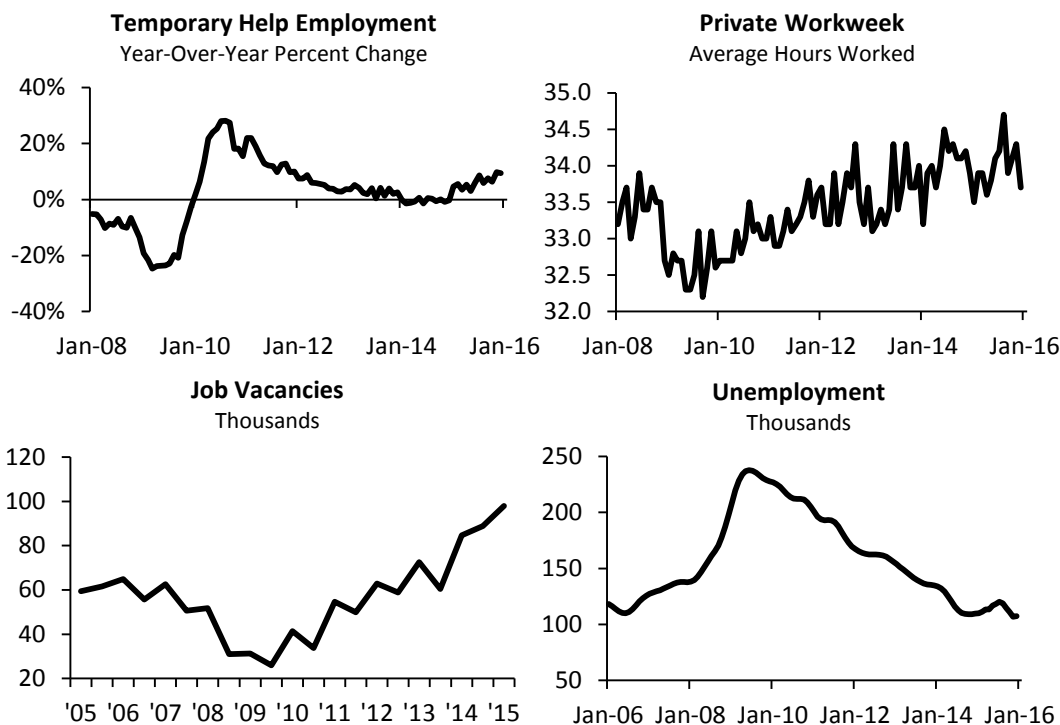
Other leading indicators, such as average hours worked, temporary help employment, and job vacancies are also at levels consistent with a firming labor market. The average workweek in the private sector, for instance, is holding steady near 34 hours, the highest in a series of data dating back to 2008. Temporary help jobs, often a bellwether of broader employment growth, have settled into a healthy growth path. Finally, DEED reports that the number of Minnesota job vacancies reached a 14-year high during the second quarter of 2015. Employers registered 98,000 openings, the highest since 2001. That worked out to only about 1.2 unemployed people for each vacancy last spring. Vacancies were widespread among occupations, especially in the healthcare and professional fields.

Despite recent momentum, Minnesota’s labor force participation rate remains very low compared to recent decades. The portion of working-age Minnesotans who have or are looking for a job has dropped from about 72 percent near the start of the recession in late 2007, to just below 70 percent at the end of last year, matching the 34-year low that has



prevailed since late-2014. People generally leave the labor force for two reasons: because they have retired, or grown increasingly discouraged with employment prospects and stopped looking for work. DEED figures show that the number of discouraged workers in Minnesota has already fallen close to a normal, pre-recession level. Therefore, most of the drop in labor force participation is likely a result of demographic forces related to Minnesota’s aging population. Indeed, between 2007 and 2014, the number of retired Minnesotans age 65 and older drawing social security benefits rose by about 131,000, a labor force exodus that could account for about a 1.6 percentage point drop in the state’s labor force participation rate compared to previous trends.

**Minnesota Leading Indicators**



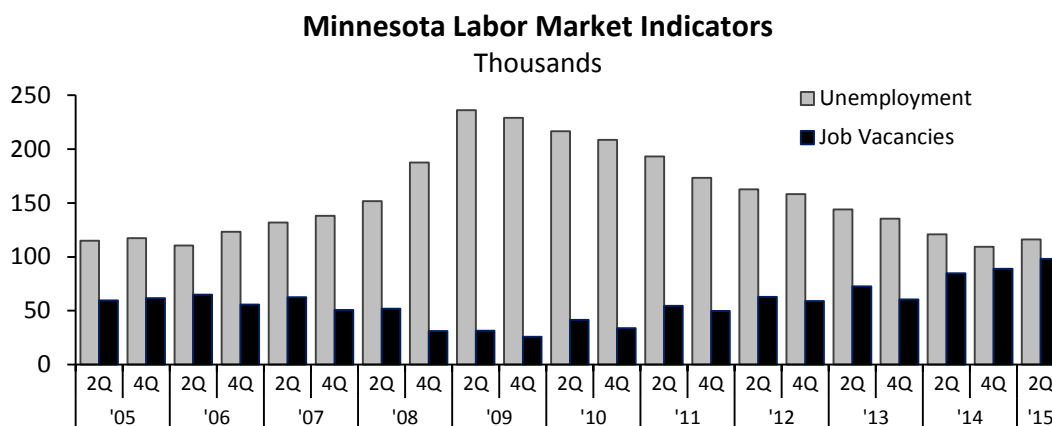
Source: Minnesota Department of Employment and Economic Development (DEED)

*Minnesota’s leading labor market indicators, such as average hours worked, temporary help employment, and job vacancies are at levels consistent with a firming labor market.*

In the February 2016 economic forecast, Minnesota’s labor market settles into its full potential this year. The state’s unemployment rate is likely to ease down further in coming months as more slack in the job market, particularly among disadvantaged segments of the population, is taken up by an improving economy. Better economic fundamentals both nationally and in Minnesota also support an upturn in productivity, and thereby acceleration in wage growth. Improved job prospects and faster average wage growth encourage some people to reenter the labor force, thus slowing the decline in Minnesota’s labor force participation rate through at least early 2017. As a result, annual labor force growth is assumed to pick up steadily, from an average of just 0.4 percent in 2014 and 2015, to 0.6 percent in 2016 and 2017. Beyond that, Minnesota’s job growth becomes

increasingly constrained by the impact of an aging population on the market supply of labor.

Barring sizeable increases in domestic and international migration or an unexpected pick up in labor force participation, MMB economists believe job growth in the medium-term may be constrained to annual increases of only 10,000 to 25,000 jobs. By comparison, actual employment has increased an average of over 40,000 per annum in the past five years.



Source: Minnesota Department of Employment and Economic Development (DEED)

*Minnesota's labor market continues to tighten up. The number of job vacancies in the state has soared to the highest level since 2001, and broad based job growth has helped quickly absorb Minnesota's unemployed.*

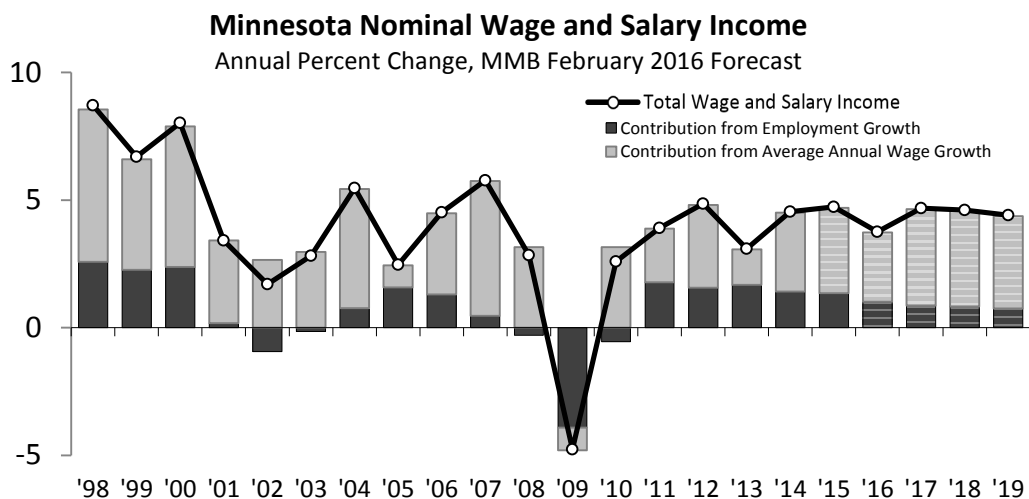
**Wage and Salary Income.** Total wage and salary income is one of the most important variables used to determine Minnesota's individual income tax liability. According to the state's income tax sample, for example, it accounted for over 70 percent of federal adjusted gross income for Minnesota residents in 2014. In MMB's model of Minnesota's economy, total wage income is derived largely as a function of the hourly cost of labor (or average hourly wages), hours worked, and employment. Therefore, tracking the direction of these three important indicators provides a useful account concerning the underlying path of total wage income.

Average hourly wage growth in Minnesota has been weak for several years due in part to high overall slack in the labor market and the lack of productivity growth. MMB's proxy measure for the change in workers' average hourly wages in Minnesota is the Employment Cost Index (ECI)—defined as nominal wage compensation per employee hour worked. The ECI has averaged only about 2 percent annual growth since the recession ended more than six years ago. Likewise, the length of the average workweek, MMB's proxy measure for hours worked, declined during the Great Recession, then rebounded to near pre-recession levels by early 2012, and has since fluctuated only little in recent years. Therefore, nominal gains in total wage and salary income throughout much of the recovery have been largely driven by solid job growth. Employment rebounded in the early years

following the recession, but unlike hours worked, has since continued to grow at a steady 1.4 to 1.7 percent pace.

As Minnesota’s labor market settles into its full potential, employment cannot grow beyond gains in the labor force without causing accelerating wage pressures. To keep labor costs down, MMB economists expect businesses to refocus on labor-saving capital investments, and take other steps to boost productivity—the amount each worker produces. As productivity gains increasingly substitute for additional labor, job growth is expected to cool toward slower demographic trends. But more and better quality jobs should put further upward pressure on average annual wage growth, which is expected to reach near 3.5 to 4 percent per annum when the labor market is at full-potential. This is equal to the sum of 1.5 to 2 percent productivity growth and 2 percent inflation—the Federal Reserve’s target. In the February forecast, slow acceleration in average annual wages offsets slowing employment growth, allowing total wage and salary income to grow modestly between 4 and 5 percent over the next several years.

Economists at MMB believe that without a substantive rebound in productivity growth in the forecast horizon, total wage and salary income is likely to rise slower than expected.



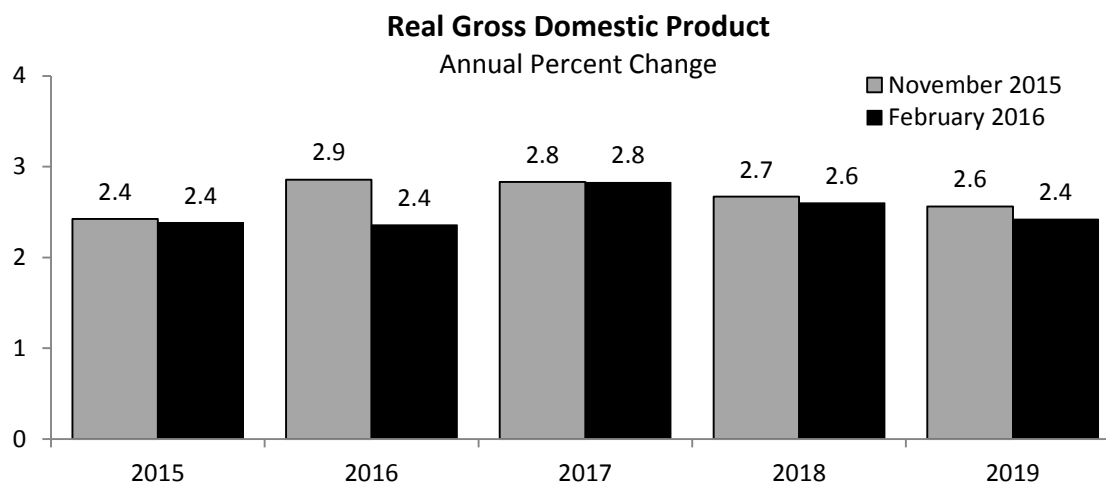
*With average wages slowly accelerating, growth in total wage and salary income is expected to remain modest in 2016 and 2017, despite slowing employment growth.*

## Council of Economic Advisors' Statement

Minnesota's Council of Economic Advisors (CEA) met on February 12, 2016, to review the IHS Economics (IHS) outlook for U.S. economic growth, which includes the assumptions underlying Minnesota's February 2016 *Budget and Economic Forecast*. Council members noted that since November, IHS has decreased their growth expectations for 2016 to 2019. The largest change occurs early in the forecast, with projected real GDP growth in 2016 decreasing from 2.9 percent in November's outlook to 2.4 percent in February. In the February outlook, business investment and consumer spending both contribute less to 2016 real GDP growth relative to November, and an inventory correction subtracts more. The February forecast for 2.8 percent real GDP growth in 2017 matches the November outlook. Growth expectations for the later years have been reduced, from 2.7 to 2.6 percent in 2018 and from 2.6 to 2.4 percent in 2019.

Council members also note that IHS identifies three main, temporary drags on real GDP growth—an inventory correction, a decline in energy-related business capital spending, and a slowdown in net exports due to the strong U.S. dollar—with the first two diminishing in mid-2016, and the third lasting through 2018. IHS expects the combination of employment growth, low energy prices, modest consumer price inflation, and appreciating home values to offset negative wealth effects from stock market volatility and buoy consumer spending. Consumption, therefore, is expected to support real GDP growth as the temporary factors fade.

Most Council members expect somewhat weaker growth in both 2016 and 2017 than IHS projects. Because they foresee a continuation of sluggish global growth and over-production of oil, they expect the strong dollar impact on net exports and the oil price drag on business investment to persist longer than IHS projects.

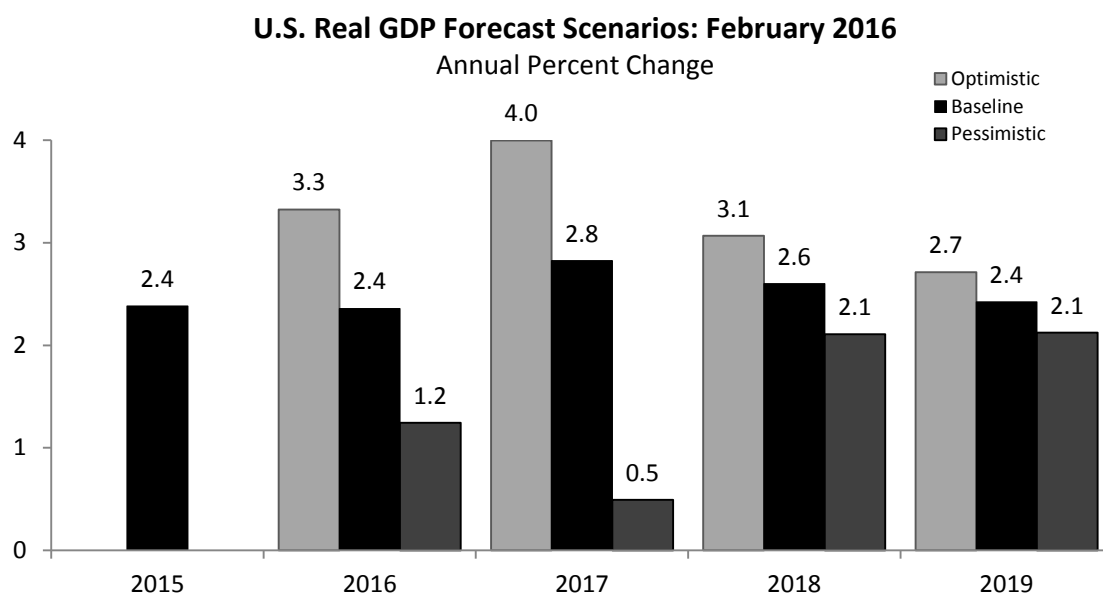


Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*Minnesota's Council of Economic Advisors noted that since November, IHS has decreased their growth expectations for 2016 to 2019. The largest change occurs early in the forecast, with projected real GDP growth in 2016 decreasing from 2.9 percent in November's outlook to 2.4 percent in February.*

While most Council members agreed that IHS’s expectations for U.S. growth are a reasonable starting point for MMB’s February 2016 economic forecast, they emphasized risks to the economy over the forecast period. Lower-than-forecast global growth and financial market volatility that dampens spending, investment and hiring, can lead to lower-than-forecast U.S. economic performance. On the other hand, stronger wage growth that boosts consumer spending would improve the U.S. outlook. Council members believe that for 2016 and 2017 the risk of the economy growing more slowly than IHS expects is larger than the potential for faster growth. They also think that the difficulty of projecting long range economic conditions warrants caution when using forecasts for 2018 and 2019.

The IHS February outlook is above that of some other macroeconomic forecasters. IHS expects 2.4 percent growth in 2016, while the Blue Chip Consensus forecast is 2.1 percent. For 2017, IHS expects 2.8 percent growth compared to 2.4 for Blue Chip.



Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*Most Council members agreed that IHS’s expectations for U.S. growth are a reasonable starting point for MMB’s February 2016 Budget & Economic forecast. However, they emphasized risks to the economy over the forecast period.*

As it has done every year since 2003, the CEA recommends that budget planning estimates for the next biennium include expected inflation in both the spending and revenue projections. The CEA noted that Minnesota’s current practice of excluding projected changes in the prices of goods and services from a majority of the spending estimate is fundamentally misleading. It is inconsistent with both sound business practices and CBO methods and potentially encourages legislators and the public to regard the state’s financial position more optimistically than the facts warrant. The omission of inflation in the spending estimates in the November 2015 *Budget and Economic Forecast* understated the cost of current services as provided by law in FY 2018-19 by roughly \$1.7 billion, and thus made the difference between projected revenues and the cost of providing services to

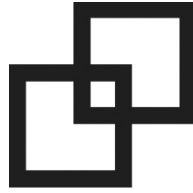
appear to be larger than it actually is. This distortion will increase if and when inflation accelerates from current historically low levels.

Council members believe that Minnesota's budget reserve policy affords policymakers crucial financial flexibility during economic downturns and can promote long-term fiscal stability. The statutory policy assigns an adequate target reserve level based on MMB's annual evaluation of volatility in Minnesota's general fund tax system. Based on MMB's most recent analysis, the target level is 4.8 percent of biennial (two-year) general fund revenues. The target is a percentage of forecast revenues, allowing reserves to adjust with revenue changes over time. Finally, the policy automatically transfers 33 percent of a positive forecast balance each November into the reserves until the target is reached.

Nevertheless, council members note that the state's currently funded budget reserve remains below the level bond rating agencies expect from AAA-rated credits. State bond ratings depend on a number of factors, but both Standard and Poor's and Moody's specifically include a measure of the adequacy of statutory budget reserves in their credit analyses. In Standard and Poor's analytical framework, states with statutory reserve levels of 4 percent or more of biennial revenue or spending receive top marks. Moody's ratings guidelines indicate that Aaa-rated states should have statutory reserves of at least 5 percent of biennial revenue. Minnesota's current \$1.597 billion budget reserve is only about 3.8 percent of forecast FY 2016-17 revenues. Minnesota also has a cash flow account, which is intended to offset potential cash shortages caused by a mismatch between monthly revenue collections and spending. If the cash flow account—currently \$350 million—is included, reserves are about 4.6 percent of projected biennial revenues.<sup>1</sup>

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<sup>1</sup> This reflects the levels of reserves and projected revenues at the time of the February 12, 2016, Council meeting. With the release of the February 2016 *Budget and Economic Forecast*, the budget reserve is \$1.597 billion, or 3.8 percent of FY 2016-17 general fund non-dedicated revenues. If the cash flow account is included, reserves are 4.6 percent of biennial revenues.



## BUDGET OUTLOOK

### Current Biennium

When the *Budget & Economic Forecast* was last released in November 2015 a positive forecast balance of \$1.206 billion was projected for the current biennium. This February, a reduction of \$306 million is reflected in the forecast for a total current budgetary balance of \$900 million in FY 2016-17.

#### Current Biennium: FY 2016-17 General Fund Budget Forecast Comparison

(\$ in millions)	November 2015 Forecast	February 2016 Forecast	\$ Change	% Change
<b>Beginning Balance</b>	<b>\$2,103</b>	<b>\$2,103</b>	<b>\$ -</b>	<b>0.0%</b>
<b>Revenues</b>				
Taxes	40,905	40,439	(466)	(1.1)
Non-Tax Revenues	1,426	1,462	36	2.5
Transfers, Other Resources	386	388	2	0.6
<b>Total Revenues</b>	<b>\$42,716</b>	<b>\$42,289</b>	<b>\$(427)</b>	<b>(1.0)%</b>
<b>Expenditures</b>				
E-12 Education	17,309	17,320	11	0.1
Property Tax Aids	3,356	3,351	(4)	(0.1)
Health & Human Services	12,064	11,934	(130)	(1.1)
Debt Service	1,241	1,240	(1)	(0.1)
All Other	7,683	7,679	(4)	(0.1)
<b>Total Expenditures</b>	<b>\$41,653</b>	<b>\$41,524</b>	<b>\$(129)</b>	<b>(0.3)%</b>
Reserves	1,947	1,947	-	
Stadium Reserve	13	21	8	
<b>Budgetary Balance</b>	<b>\$1,206</b>	<b>\$900</b>	<b>\$(306)</b>	

In this forecast, slower than expected economic growth at the end of calendar year 2015, coupled with lower projections for future growth, leads to a decrease in projected revenue collections for the remaining 16 months of the current biennium. Revenues in the FY 2016-17 biennium are now projected to be \$42.289 billion, \$427 million (1.0 percent) lower than November forecast projections. Decreases in forecast income, sales and corporate franchise tax revenues drive the forecast balance reduction.

Slightly lower expenditures in FY 2016-17 partially offset the overall forecast balance reduction. Expenditures in the current budget period are estimated to be \$41.524 billion, \$129 million (0.3 percent) lower compared to prior estimates. An increase in the federal matching rate for the Children's Health Insurance Program (CHIP) results in lower state obligations for medical assistance (MA), and is the contributor to the spending savings in this forecast.

The general fund budget reserve balance of \$1.597 billion in this forecast is unchanged from November. This amount represents 3.8 percent of projected general fund revenue in FY 2016-17, lower than the target level of 4.8 percent of current biennium revenue recommended by Minnesota Management & Budget (MMB) in September 2015. As required by Minnesota Statutes (M.S. 16A.152) MMB economists will update the recommended target in September 2016. The cash flow account balance remains unchanged at \$350 million.

The balance in the stadium reserve account is expected to be \$21 million at the end of FY 2017, \$8 million higher than estimates in November. While stadium related spending remains largely unchanged, higher projected gambling revenues over the forecast period result in less reliance on the stadium reserve to fund stadium obligations in the current biennium compared to previous estimates. With this forecast, use of the stadium reserve is now projected for FY 2016 only, and not the entire forecast horizon as previously estimated.

## Planning Estimates

Planning estimates for FY 2018-19 biennium, based on current law revenue and expenditures, are presented to understand the impact of the forecast on future years, and to assist longer term financial planning.

### Planning Estimates: FY 2018-19 General Fund Budget

#### Forecast Comparison

(\$ in millions)	November 2015 Forecast	February 2016 Forecast	\$ Change	% Change
Forecast Revenues	\$46,600	\$45,703	\$(898)	(1.9)%
Projected Spending	44,555	44,519	(36)	(0.1)
<b>Difference</b>	<b>\$2,045</b>	<b>\$1,184</b>	<b>\$(861)</b>	
<i>Estimated Inflation (CPI) Applied to Projected Spending</i>	<i>\$1,694</i>	<i>\$1,742</i>	<i>\$48</i>	

Projections for slower economic growth compared to the November forecast significantly impact the planning estimates in this forecast. Revenue in the FY 2018-19 is now forecast to be \$45.703 billion, \$898 million (1.9 percent) lower than prior estimates. Spending in the planning years is largely unchanged from prior estimates and is now projected to be \$44.519 billion, \$36 million (0.1 percent) lower than November estimates. Revenue projections are based on IHS Economics February baseline forecast for 2018 and 2019.



Expenditure projections in the next biennium assume that current funding levels and policies continue unchanged, adjusted only for caseload and enrollment as well as specific formula driven changes. The majority of expenditure projections do not include an adjustment for projected inflation.

“Structural balance” refers to the extent to which revenues and spending within a biennium are balanced, without considering balances from the previous biennium nor other one-time impacts such as changes to reserve balances. In the November *Budget & Economic Forecast*, the structural balance in the FY 2018-19 biennium was projected to be \$2.045 billion. This forecast now projects the structural balance in the next biennium to be \$1.184 billion, a reduction of \$861 million. Projected inflation based on the Consumer Price Index (CPI) is expected to be 2.5 percent in FY 2018 and 2.7 percent in FY 2019. In addition, revenues are now project to grow by 4 percent each year, while expenditure growth is 3.5 percent.

Because of this, the planning estimates are not intended to predict surpluses or deficits several years into the future. Rather, their purpose is to assist in determining the extent to which future revenues support ongoing expenditures based on trends in Minnesota’s economy as well as enrollment and other impacts on the cost of forecasted programs like MA and education aids.

The FY 2018-19 planning estimates provide an important baseline against which the longer-term impacts and affordability of current biennium supplemental budget proposals and decisions in the 2016 legislative session can be measured.

#### Biennial Comparison: FY 2016-17 vs. FY 2018-19 General Fund Budget

February 2016 Forecast

(\$ in millions)	FY 2016-17	FY 2018-19	Annualized	
			\$ Change	% Change
Forecast Revenues	\$42,289	\$45,703	\$3,414	4.0%
Projected Spending	41,524	44,519	2,995	3.5



## REVENUE OUTLOOK

### Current Biennium

Total general fund revenues for FY 2016-17 are now forecast to be \$42.289 billion, \$427 million (1.0 percent) less than the November 2015 forecast. Total tax revenues for the biennium are forecast to be \$40.439 billion, \$466 million (1.1 percent) below the prior estimate. Lower expected individual income, corporate, sales, and state general property tax receipts bring down the forecast, more than offsetting higher expected other tax revenue.

#### Current Biennium: FY 2016-17 General Fund Revenues

Forecast Comparison

(\$ in millions)	November 2015 Forecast	February 2016 Forecast	\$ Change	% Change
Individual Income Tax	\$21,957	\$21,862	\$(95)	(0.4)%
General Sales Tax	11,031	10,719	(311)	(2.8)
Corporate Franchise Tax	2,644	2,551	(93)	(3.5)
State General Property Tax	1,689	1,688	(1)	(0.1)
Other Tax Revenue	3,584	3,619	35	1.0
<b>Total Tax Revenues</b>	<b>\$40,905</b>	<b>40,439</b>	<b>(466)</b>	<b>(1.1)%</b>
Non-Tax Revenues	1,426	1,462	36	2.5
Other Resources	386	388	2	0.6
<b>Total Revenues</b>	<b>\$42,716</b>	<b>\$42,289</b>	<b>\$(427)</b>	<b>(1.0)%</b>

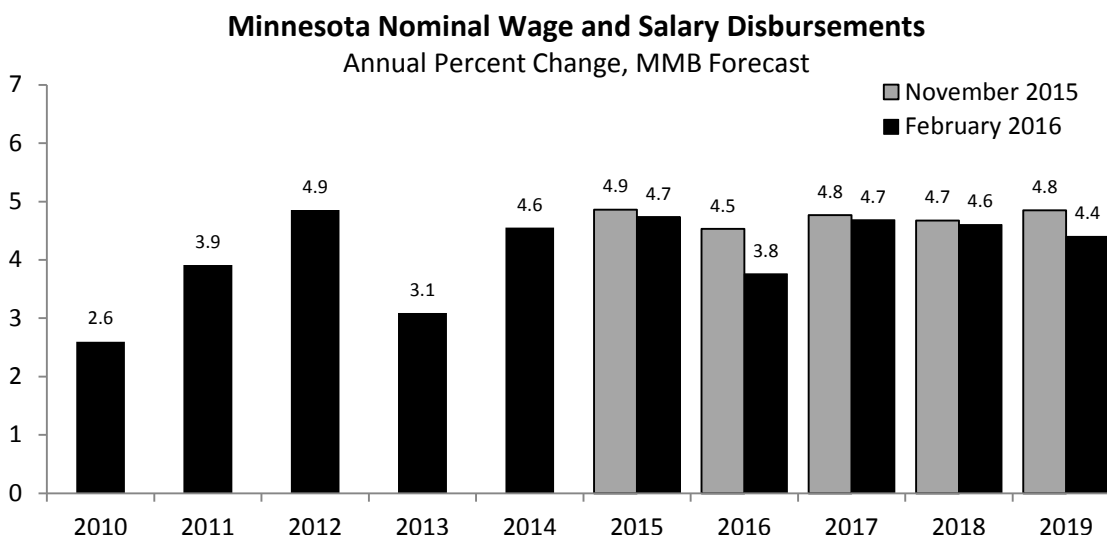
**Individual Income Tax.** Individual income tax receipts are now forecast to be \$95 million (0.4 percent) less than the November estimate. Lower forecast income growth from 2015 to 2017 and a decrease in assumed tax liability for 2014, the base year for this forecast, contribute to the lower income tax estimate.

This forecast builds from final 2014 income tax liability. Using information from processed tax returns, MMB economists estimate that final 2014 income tax liability is \$9.370 billion, \$27.5 million less than estimated in November.

Calibrating the individual income tax model to produce MMB's base year tax liability generally requires making assumptions about base year growth rates for particular income types. In this forecast, based on evidence from a preliminary sample of 2014 returns, assumed 2014 growth in Minnesota business income was lowered from 5.9 percent in the

November forecast to 5.0 percent. Dividend income is now assumed to have grown 15.0 percent, compared to 20.0 percent in November. Net capital gains realizations by Minnesota residents are now assumed to have grown by 39.0 percent in 2014, the same growth rate assumed in the November forecast.

A lower forecast of income growth in 2015 and 2016 combines with the reduced tax year 2014 liability to lower the forecast for FY 2016-17 income tax revenues. Information from the Bureau of Economic Analysis (BEA), the Quarterly Census of Employment and Wages (QCEW), and income tax withholding collections suggest that Minnesota’s growth in wage and salary income has been weaker than forecast in November, and that slower wage income growth is forecast to continue. Annual wage growth in 2015 is now expected to be 4.7 percent, down from 4.9 percent in the November forecast. Annual wage growth in 2016 and 2017 is projected to be 3.8 and 4.7 percent, respectively, compared to 4.5 and 4.8 percent in the prior forecast.



Source: U.S. Bureau of Economic Analysis (BEA), Minnesota Management & Budget (MMB)

*A lower forecast of income growth in 2015 and 2016 combines with the reduced tax year 2014 liability to lower the forecast for FY 2016-17 income tax revenues.*

Changes in expected growth in some other income types in CY 2015 and 2016 also reduce the FY 2016-17 income tax forecast. Business income is forecast to grow 4.9 and 3.5 percent in 2015 and 2016, respectively, compared to 5.5 and 6.8 percent in November. Dividend income is now assumed to grow 2.5 percent in 2016, down from 5.1 percent in the prior forecast. Expected growth in interest income is now 6.7 percent in 2016, compared to 9.3 percent in November. Lower expected equity values and interest income reduce the forecast for 2016 growth in taxable IRA distributions to 1.2 percent from 2.8 percent in November.

Lower expected capital gains realizations also reduce the income tax revenue forecast. Compared to the November assumptions, capital gains realizations reported by Minnesota

residents are now assumed to grow about 1.5 percentage points slower between 2014 and 2016.

A higher base for income taxes paid by fiduciaries and nonresident partnerships is offset by lower expected income growth for these taxpayers—primarily due to reduced expectations for capital gains realizations—lowering the income tax revenue forecast for FY 2016-17.

Three other changes add to the FY 2016-17 income tax forecast. First, decreased inflation expectations result in a small forecast revenue gain from income tax indexing. Second, an addition to capital gains realizations in tax year 2015 arising from one-time Minnesota-based corporate activity was increased. Third, an upward off-model adjustment to income tax liability corrects for an understatement in business income growth due to distorting effects of Section 179 and bonus depreciation. This adjustment has been included in past forecasts. However, the adjustment was enlarged in this forecast in response to new information arising from the federal Protecting Americans from Tax Hikes (PATH) Act of 2015. Relative to November, this adjustment adds \$80.5 million to forecast 2015 income tax liability and \$68.8 million in tax year 2016.

To date, tax year 2015 estimated tax payments exceed the November forecast by \$105 million. In this forecast, projected 2015 income tax liability has been increased by about \$37 million, an amount consistent with MMB economists' assumptions about income growth in 2015. The remaining amount of excess estimated payments are assumed to result in either higher refunds or lower final payments when taxpayers file their tax year 2015 returns. If that does not occur, we will observe a positive income tax variance at the close of FY 2016.

**General Sales Tax.** Among major tax types, the sales tax shows the largest dollar amount decrease for FY 2016-17 from the prior estimate, \$311 million (2.8 percent). This change reflects lower than expected sales tax receipts so far in FY 2016, the base for this forecast, and weaker projected taxable sales growth in CY 2016 and the first half of 2017. Gross sales tax receipts—net of the Motor Vehicle Lease (MVL) transfer—are now expected to be \$229 million lower than the prior estimate, and the sales tax refunds forecast has been increased by \$81 million.

Since November, gross sales tax collections (net of the MVL transfer) have fallen \$14 million short of expectations, lowering the base for this forecast. Minnesota's synthetic sales tax base, a proxy for the actual sales tax base, is now expected to grow more slowly in 2016 and 2017 than had been assumed in November.

A law change taking effect in mid-2015 replaced Minnesota's capital equipment sales tax refund with an up-front exemption and adds considerable uncertainty to the sales tax forecast. Currently, capital equipment refunds continue to be paid, because purchasers were allowed up to three years to apply for their refunds. The forecast for sales tax refunds has been raised, in part because of an increase in estimated capital equipment refunds remaining in the pipeline.

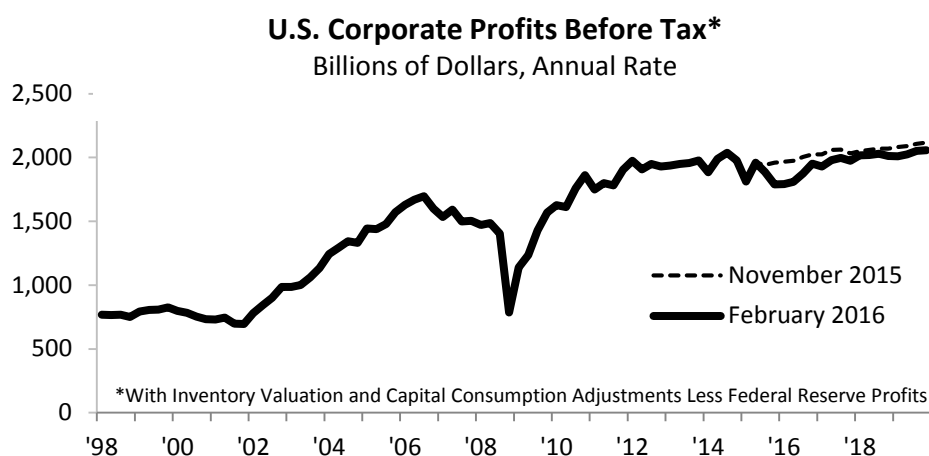
**Corporate Franchise Tax.** Lower projected gross corporate tax payments for FY 2016-17 more than offset a reduced corporate refund forecast to bring expected net corporate tax revenues \$93.4 million (3.5 percent) below the prior estimate. Corporate refunds are now expected to be \$8.2 million below the prior estimate, and the gross corporate receipts forecast has been reduced by \$101.7 million.

This forecast builds from MMB’s estimate of implied CY 2014 corporate franchise tax liability. MMB economists estimate total corporate tax liability attributable to CY 2014 to be \$1.326 billion, \$6 million less than the November estimate.

Lower estimated 2014 corporate tax liability, lower-than-expected advance payments during November and December, 2015, and a weaker corporate profits forecast combine to reduce MMB’s estimate of implied CY 2015 corporate tax liability. According to the Bureau of Economic Analysis (BEA), annual corporate profit growth now appears to have fallen 5.6 percent in 2015, compared to a 2.7 percent decline assumed in November.

In addition to lower CY 2015 implied liability, new assumptions for corporate profits growth in 2016 and 2017 affect the corporate tax revenue forecast for FY 2016-17. Annual profits are now expected to fall by 0.3 percent in 2016, compared to 3.9 percent growth in November. While projected profit growth for 2017 has been increased to 6.1 percent from 2.6 percent in the prior forecast, overall profit growth from 2015 to 2017 is lower in this forecast.

The corporate income tax forecast includes an off-model adjustment for the impact of the Historic Structure Rehabilitation Credit (HSRC). MMB’s practice is to forecast the full revenue impact of the HSRC within corporate refunds, even though some credits accrue to non-corporate taxpayers, and some credits reduce tax payments rather than increase refunds. Total HSRCs are now forecast to be less than \$1 million lower in FY 2016-17 than in the November estimate.



Source: U.S. Bureau of Economic Analysis (BEA); IHS Economics; Minnesota Management & Budget (MMB)

*New assumptions for U.S. corporate profits growth in 2016 and 2017 affect the corporate tax revenue forecast for FY 2016-17.*

**Other Tax Revenue, Non-Tax Revenue, Other Resources.** Other tax revenue is now expected to exceed the prior estimate by \$35 million (1.0 percent). Among other taxes, the estate tax shows the largest dollar amount change, \$24 million (7.5 percent) more than in November. Lawful gambling tax receipts in November through January are ahead of the November estimate, increasing the forecast for that revenue source by \$9 million (8.9 percent). Lower expectations for nominal home sales reduce forecast revenues from the mortgage registry and deed transfer taxes by a combined \$2 million (0.5 percent). Insurance gross earnings tax receipts from November through January have exceeded the November forecast, offsetting slower projected growth in direct written premiums. Consequently, the insurance gross earnings tax forecast for FY 2016-17 is \$2 million (0.2 percent) higher than the prior estimate.

## Planning Estimates

Total revenues for FY 2018-19 are estimated to be \$45.703 billion, an increase of \$3.414 billion (8.1 percent) over the current forecast for FY 2016-17 revenues. Total tax revenues for FY 2018-19 are estimated to be \$44.059 billion, a 9.0 percent increase over FY 2016-17 forecast revenues.

### Biennial Comparison: FY 2016-17 vs. FY 2018-19 General Fund Revenues

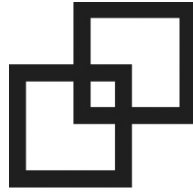
February 2016 Forecast

(\$ in millions)	FY 2016-17	FY 2018-19	\$ Change	% Change
Individual Income Tax	\$21,862	\$24,215	\$2,354	10.8%
General Sales Tax	10,719	11,849	1,129	10.5
Corporate Franchise Tax	2,551	2,544	(7)	(0.3)
State General Property Tax	1,688	1,734	46	2.7
Other Tax Revenue	3,619	3,717	98	2.7
<b>Total Tax Revenues</b>	<b>40,439</b>	<b>44,059</b>	<b>3,620</b>	<b>9.0%</b>
Non-Tax Revenues	1,462	1,409	(53)	(3.6)
Other Resources	388	235	(153)	(39.4)
<b>Total Revenues</b>	<b>\$42,289</b>	<b>\$45,703</b>	<b>\$3,414</b>	<b>8.1%</b>

Together, the individual income and general sales taxes account for almost all of the projected biennial tax revenue growth. The individual income tax shows the largest increase, growing \$2.354 billion (10.8 percent), and contributing 65 percent of the total biennial tax revenue biennial changes. The general sales tax estimate exceeds the FY 2016-17 forecast by \$1.129 billion, (10.5 percent), accounting for 31 percent of the projected revenue growth. Projections for the state general property and all other taxes show growth over the biennia, and the corporate franchise tax forecast shows a small decline.

The planning estimates for 2018-19 should be used with caution. First, the projections will be affected by any revenue changes in the enacted supplemental budget for the 2016-17 biennium. Second, in subsequent forecasts to MMB's estimates of individual and corporate income tax liability for 2017 and 2018, as well as changes in the base levels of other

revenue types for FY 2016 through FY 2017 will change the FY 2018-19 planning estimates. Third, even small deviations from assumed growth rates for factors affecting revenue will compound and produce sizable changes in revenues. Should the economy grow more slowly than forecast, or should some volatile income item such as capital gains or corporate profits fall well below forecast, the revenue outlook for FY 2018-19 will deteriorate. Finally, Minnesota's Council of Economic Advisers warn that the difficulty of projecting long range economic conditions warrants caution when using economic forecasts of 2018 and 2019.



## EXPENDITURE OUTLOOK

### Current Biennium

Spending estimates for FY 2016-17 are slightly lower than prior estimates for the current biennium. Expenditures are now expected to be \$41.524 billion, a reduction of \$129 million (0.3 percent) from November forecast estimates.

#### Current Biennium: FY 2016-17 General Fund Expenditures

Forecast Comparison

(\$ in millions)	November 2015 Forecast	February 2016 Forecast	\$ Change	% Change
E-12 Education	\$17,309	\$17,320	\$11	0.1%
Property Tax Aids & Credits	3,356	3,351	(4)	(0.1)
Health & Human Services	12,064	11,934	(130)	(1.1)
Debt Service	1,241	1,240	(1)	(0.1)
All Other	7,683	7,679	(4)	(0.1)
<b>Total Expenditures</b>	<b>\$41,653</b>	<b>\$41,524</b>	<b>\$(129)</b>	<b>(0.3)%</b>

**E-12 Education.** E-12 Education is the largest category of state general fund spending. It consists of aid programs for general education, special education, early childhood education, charter schools, and integration programs. In the current biennium the state is projected to spend \$17.320 billion in the E-12 bill area.

E-12 aids can be divided into two major funding streams: 1) general education, the primary source of basic operating funds for schools, and 2) categorical aid, tied to specific activities or categories of funding.

E-12 spending is forecast to increase by \$11 million (0.1 percent) in FY 2016-17 compared to the November forecast. This increase is largely attributable to a \$16 million increase (0.7 percent) in special education expenditures, offset slightly by a \$2 million decrease in general education expenditures and a \$3 million net decrease in other categorical aids.

Special education spending is projected to increase by \$16 million (0.7 percent) in FY 2016-17. Increased actual special education spending by school districts in FY 2015 compared to what was projected in November drove special education aid slightly up over the entire forecast period. The increased cost growth was primarily observed in the fringe benefit and transportation costs categories.



General education is down \$2 million from previous estimates, a net change that is negligible on a percentage basis. Final pupil data for FY 2015 was very slightly higher than projected in November, driving a small upward adjustment in the basic formula over the forecast period (\$13 million, 0.1 percent). However this was more than offset by a decrease in the poverty concentration which determines compensatory aid expenditures. Final FY 2015 data revealed that the actual poverty concentration decreased slightly from FY 2014 to FY 2015. This drove a reduction in the projected growth of the poverty concentration over the entire forecast period. Compensatory aid decreased \$21 million (2.0 percent) in FY 2016-17 relative to November estimates due to the decrease in the assumed pace of growth in the poverty concentration.

Long term facilities maintenance aid, which begins in FY 2017 for the first time, increased in the current biennium by \$2 million (4.3 percent). This change is due an error included in the November forecast that excluded charter schools from the calculation of the aid. Charter school lease aid decreased by \$2 million (1.5 percent) relative to November estimates. This reduction is due to fewer pupils enrolling in charter schools than were previously estimated.

**Health and Human Services.** Health and Human Services is approximately one-third of total state general fund spending. The majority of these expenditures (85 percent) are forecast programs including Medical Assistance (MA), Chemical Dependency (CD), the Minnesota Family Investment Program (MFIP), MFIP Child Care, Alternative Care (AC), General Assistance, Group Residential Housing, Minnesota Supplemental Aid and Northstar Care for Children.

General fund forecast changes are generally driven by changes to the MA forecast, since it accounts for the largest portion of forecasted program expenditures. MA is for low-income individuals and families, persons with disabilities, and elderly individuals who are low-income or cannot afford needed long term care. MA costs are split between the state and federal government, though only the state share of expenditures is reflected as part of the general fund forecast.

Health and human services spending is forecast to be \$11.934 billion in FY 2016-17. This is a reduction of \$130 million (1.1 percent) relative to November 2015 estimates. The table on the next page identifies major forecast expenditure changes from November estimates.

*Medical Assistance Program.* Medical Assistance (MA) spending is forecast to be \$123 million lower than November estimates, a 1.4 percent reduction. Increased federal funding for the Children's Health Insurance Program (CHIP) results in \$133 million in lower state expenditures for families with children. CHIP is a program that provides enhanced federal funding to encourage states to expand coverage to children. In Minnesota, it reduces state expenditures for children above 133 percent of the poverty level and for noncitizen pregnant women. Federal legislation passed in 2015 increased the enhanced match available to states for CHIP expenditures. In January 2016, Minnesota was notified that the amount of federal funding available increased by almost 200 percent, approximately \$65 million more per year.

### FY 2016-17 General Fund Health and Human Services Expenditures

November 2015 vs. February 2016 Forecast

(in millions)	\$ Change	% Change
Families with Children: Higher CHIP Funding	(133)	(5.0)
Families with Children: Higher Enrollment	74	(2.8)
All other MA	(64)	(0.7)
<b>Total MA Change</b>	<b>(123)</b>	<b>(1.4)</b>
<b>Total Non-MA Change</b>	<b>(7)</b>	<b>(0.1)</b>
<b>Total HHS General Fund Forecast Change</b>	<b>(130)</b>	<b>(1.1)</b>

An uptick in enrollment of families with children in Medical Assistance at the end of calendar year 2015 led to \$74 million (2.8 percent) in higher forecast spending in FY 2016-17. Other changes in the Medical Assistance forecast yield \$64 million (0.7 percent) in lower forecast expenditures in FY 2016-17. This is driven primarily by lower average payments for basic care coverage.

**Property Tax, Aids, and Credits.** Property tax aids and credits are approximately eight percent of general fund spending. They are paid to local governments, including cities, counties, towns, public schools, and special taxing districts. These aids and credits help offset costs of service delivery, defray costs of state mandates, and reduce local property taxes by substituting state funds for revenues that would otherwise need to be raised locally. Direct payments to individuals, like property tax refunds for homeowners and renters, are also included in this category because they reduce property tax burdens.

FY 2016-17 spending for property tax aids and credits is forecast to be \$3.351 billion, \$4 million (0.1 percent) lower than November estimates. This reduction is largely driven by a \$4 million (0.3 percent) reduction in homeowners and renters property tax refunds due to stronger personal income growth in calendar year 2015, lowering estimated refunds in fiscal year 2017. The interest paid on tax refunds is also reduced by \$3 million (10 percent), reflecting a continued reduction in refund activity. These reductions are somewhat offset by increases in the targeted property tax refund program (\$2 million) and the border city disparity reduction credit (\$2 million).

**Debt Service & Other.** The forecast debt service costs in the current biennium are \$1.240 billion, \$1 million (0.1 percent) less than November forecast estimates. Current law allows MMB to use premiums paid by bond purchasers to lower or reduce the size of actual bond issue. The estimates reflect slightly lower interest rate assumptions on future bond sales resulting in higher bond premiums than previously estimated, thereby lowering the estimated size of the bond issue and forecast debt service payments in the current biennium. Spending in the “all other” category is reduced by \$4 million largely due to the correction of a November forecast error related to the general fund obligation for legislator pension benefits.

## Planning Estimates

Compared to November estimates, statewide spending in FY 2018-19 is expected to be \$36 million (0.1 percent) lower. Both E-12 and Health and Human Services are expected to see slight expenditure reductions, which are somewhat offset by slight increases in the Aids and Credits bill area.

### Planning Estimates: FY 2018-19 General Fund Expenditures

Forecast Comparison

(\$ in millions)	November 2015 Forecast	February 2016 Forecast	\$ Change	% Change
E-12 Education	\$18,114	\$18,096	\$(18)	(0.1)%
Property Tax Aids & Credits	3,443	3,454	10	0.3
Health & Human Services	14,286	14,255	(31)	(0.2)
Debt Service	1,207	1,207	0	0.0
All Other	7,505	7,505	3	0.0
<b>Total Expenditures</b>	<b>\$44,555</b>	<b>\$44,519</b>	<b>\$(36)</b>	<b>(0.1)%</b>

**E-12 Education.** Total E-12 expenditures in FY 2018-19 are expected to decrease by \$18 million (0.1 percent) compared to the November forecast. General education spending is reduced \$52 million (0.4 percent) compared to previous estimates. This reduction in general education spending is driven by a downward adjustment in compensatory aid calculations in the FY 2016-17 biennium that continues into the planning years. Compensatory aid estimates in FY 2018-19 are reduced by \$80 million (7.2 percent) compared to the November forecast due to reduced poverty concentration growth estimates. The reduction in compensatory aid (a component of general education) is somewhat offset by a slight upward adjustment in pupil projection estimates since November which increases

The reduction in general education is offset by increases in categorical aids. Special education aid is projected to increase \$23 million (0.9 percent) in the planning years. This change is a continuation of increased cost estimates in the current biennium. The decrease in general education is also offset by a \$14 million increase in the long term facilities maintenance program. This 8.4 percent increase over previous estimates is due to a correction of an error in November forecast calculations that excluded charter schools. All other categorical changes net to an increase of \$3 million relative to previous estimates.

**Health & Human Services.** In FY 2018-19, overall general fund HHS spending is down \$31 million (0.2 percent) compared to November estimates. As in the current biennium, changes to MA drive the reduction with a decrease of \$33 million (0.3 percent) from November.

Many of the trends impacting Health and Human Services spending in the FY 2016-17 biennium continue to impact spending estimates in the FY 2018-19 biennium. Higher federal funding for children's health insurance coverage results in \$132 million in forecast savings. These savings are offset by higher enrollment among families with children (\$133

million). Other small changes in Medical Assistance result in \$34 million (0.3 percent) in lower forecast spending.

**Property Tax, Aids, and Credits.** Property tax aids and credits spending is expected to increase by \$10 million (0.3 percent) compared to November estimates. In the planning biennium, homeowners and renters property tax refunds are expected to increase by \$14 million (1.0 percent) as personal income growth slows relative to the November forecast. The border city disparity reduction credit also continues to grow, increasing by \$3 million in the next biennium. These changes are somewhat offset by reductions in the interest paid on tax refunds (\$3 million) and political contribution refund spending (\$2 million).

**Debt Service & Other.** The forecast debt service costs on state general obligation bonds for FY 2018-19 shows minimal change from the November forecast estimates. The forecast assumes future capital budgets of \$800 million in each even-numbered legislative session and \$230 million in each odd-numbered session.

State aid payments for the Destination Medical Center project in the City of Rochester have been updated. This forecast reflects a net increase in the anticipated private investment that triggers state aid, resulting in an FY 2018-2019 biennium increase of \$1 million (5.7 percent) in state aid. The first year that state aid is forecast to be paid remains FY 2018.

## Biennial Comparison

Total state expenditures are anticipated to grow by \$2.995 billion from FY 2016-17 to FY 2018-19. The vast majority of this change is in the Health and Human Services and E-12 Education areas. These growth areas are slightly offset by a decrease of \$102 million in all other spending.

### Biennial Comparison: FY 2016-17 vs. FY 2018-19 General Fund Revenues

February 2016 Forecast

(\$ in millions)	FY 2016-17	FY 2018-19	\$ Change	% Change
E-12 Education	\$ 17,320	\$ 18,096	\$776	4.5%
Health & Human Services	11,934	14,255	2,322	19.5
All Other	12,270	12,168	(102)	(0.8)
<b>Total Expenditures</b>	<b>\$41,524</b>	<b>44,519</b>	<b>2,995</b>	<b>7.2%</b>

**E-12 Education.** Total spending for education aids is anticipated to grow by \$775 million (4.5 percent) between FY 2016-17 and FY 2018-19. This is largely driven by policy changes enacted in 2014 and 2015. The largest share of growth, nearly \$290 million, comes from general education aid which is driven by continued growth in pupils and an annual 2.0 percent basic formula increase in FY 2016 and FY 2017 enacted in the 2015 session.

The second largest source of biennial growth is special education aid. Special education spending is anticipated to be \$287 million (11.8 percent) higher in FY 2018-19. The special

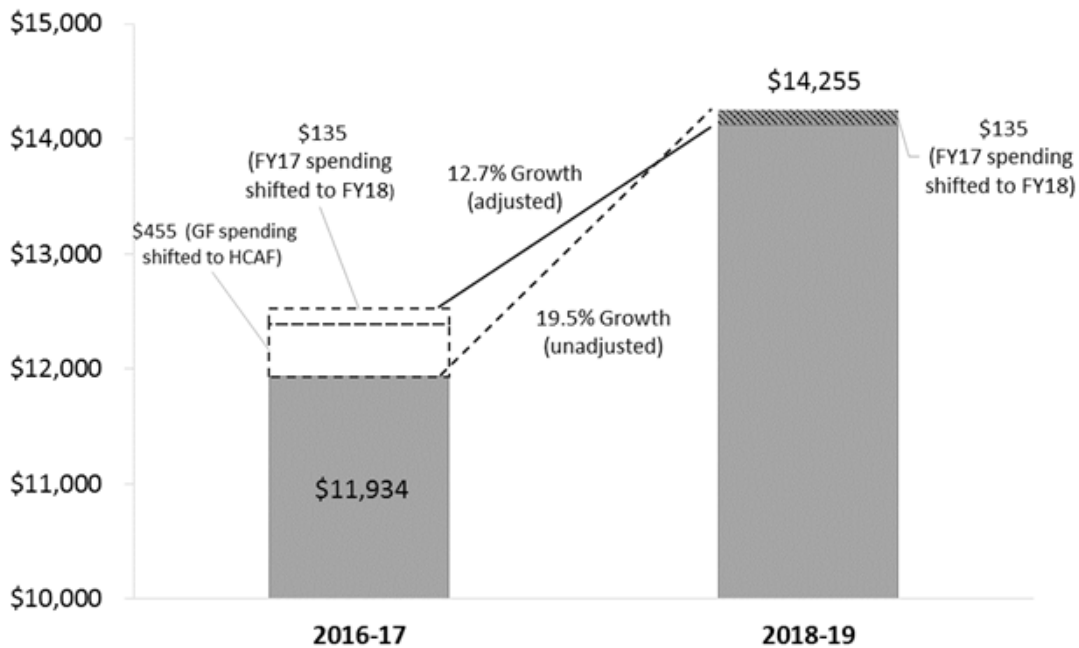
education formula is calculated based on the number of special education pupils, actual special education costs, and allows for an inflationary factor to calculate aid.

Finally, the long term facilities maintenance aid formula grows by \$133 million between the current and upcoming biennia. This funding formula was enacted into law during the 2015 legislative session based on recommendations made by the Capital Facilities Working Group convened in 2013. Long term facilities maintenance aid consolidates several other facilities funding streams and guarantees that districts will not lose revenue under the new formula compared to what they would have received under previous facilities formulas.

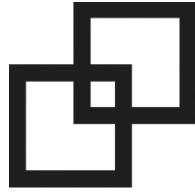
**Health & Human Services.** HHS spending in FY 2018-19 is expected to grow by \$2.321 billion compared to FY 2016-17. Though spending estimates are reduced in both the current and next biennium relative to previously forecast amounts, HHS spending continues to grow year over year. General fund spending is expected to grow by 19.5 percent from the FY 2016-17 biennium to the FY 2018-19 biennium.

Biennial growth in the general fund appears larger than it would otherwise be due to one time, inter-fund transfers enacted in law in the 2015 legislative session, as well as a managed care payment delay from FY 2017 to FY 2018. As shown in the figure below, these two factors lower spending in FY 2016-17 and lead to higher general fund spending growth in the FY 2018-19 biennium. Adjusting for these shifts, spending growth for one biennium to the next is 12.7 percent or 6.2 percent average annual growth.

**Health and Human Services Biennial Expenditure Growth**  
 FY 2016-17 to FY 2018-19  
 (\$ in millions)



*After adjusting for shifts, Health and Human Services biennial growth is 12.7 percent or 6.2 percent average annual growth.*



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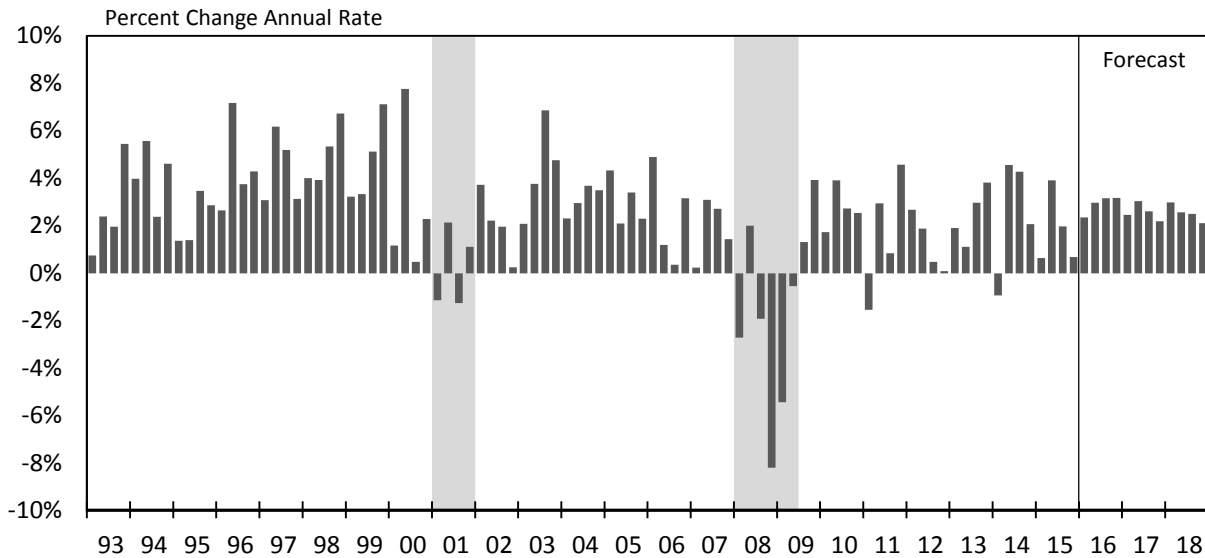
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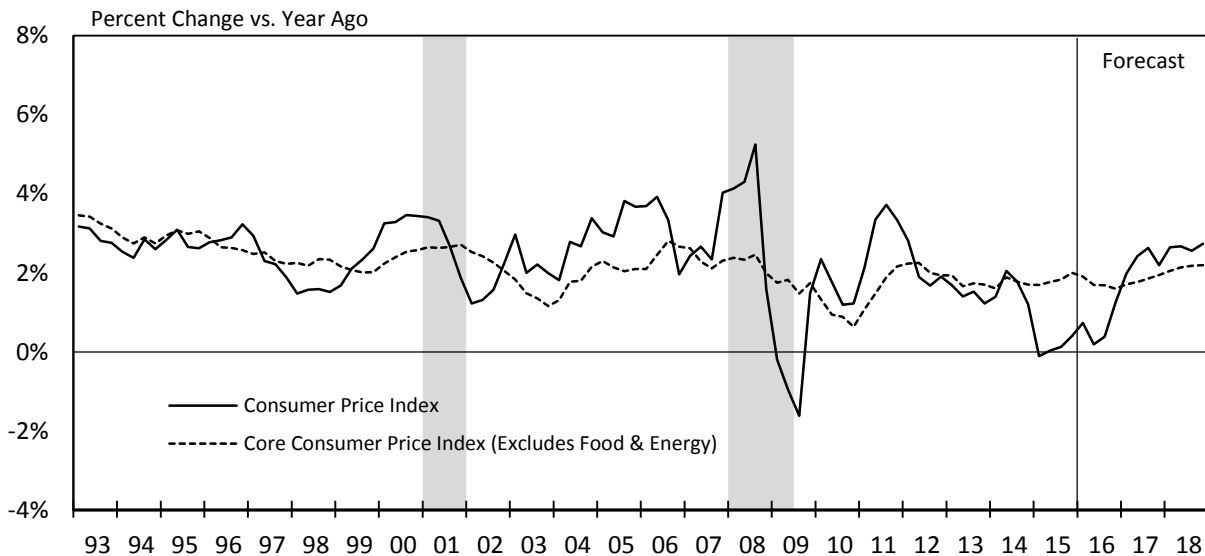
### Real Gross Domestic Product



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*Economic activity is reported to have slowed more than expected at the end of 2015. But IHS Economics (IHS) believes that the drags from inventories and energy-sector capital spending will begin to ease, supporting the case for a reacceleration of economic growth.*

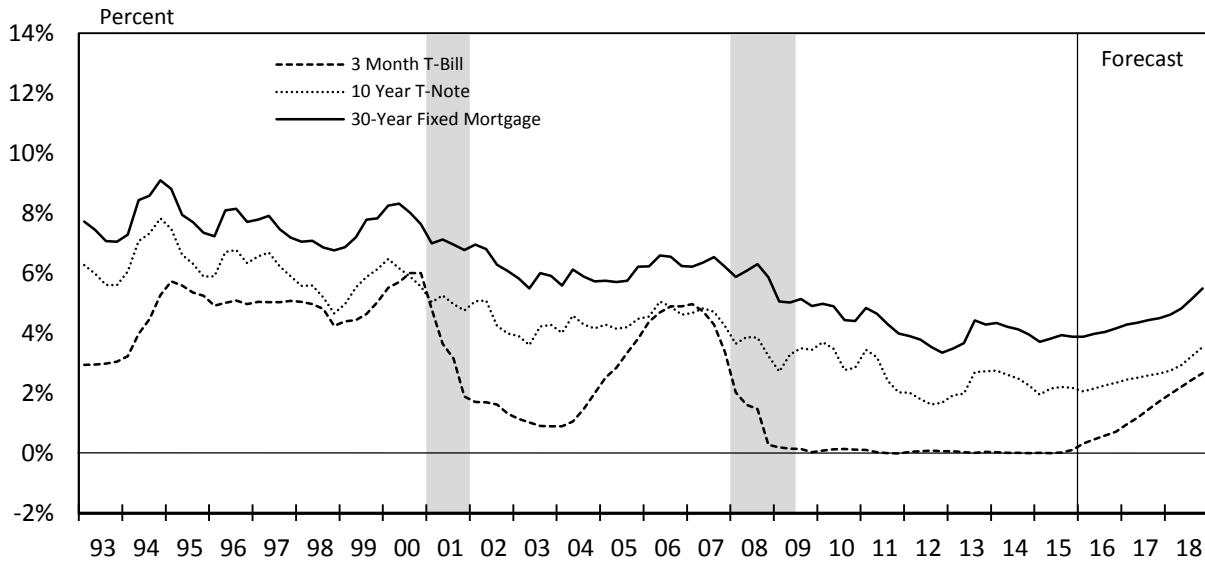
### Consumer Price Indexes



Source: Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*Near-term inflation remains very low, as the impacts of low energy prices and cheaper imported goods persist. Consumer prices are expected to firm in the first half of 2016 as oil prices stop falling and the dollar stops strengthening.*

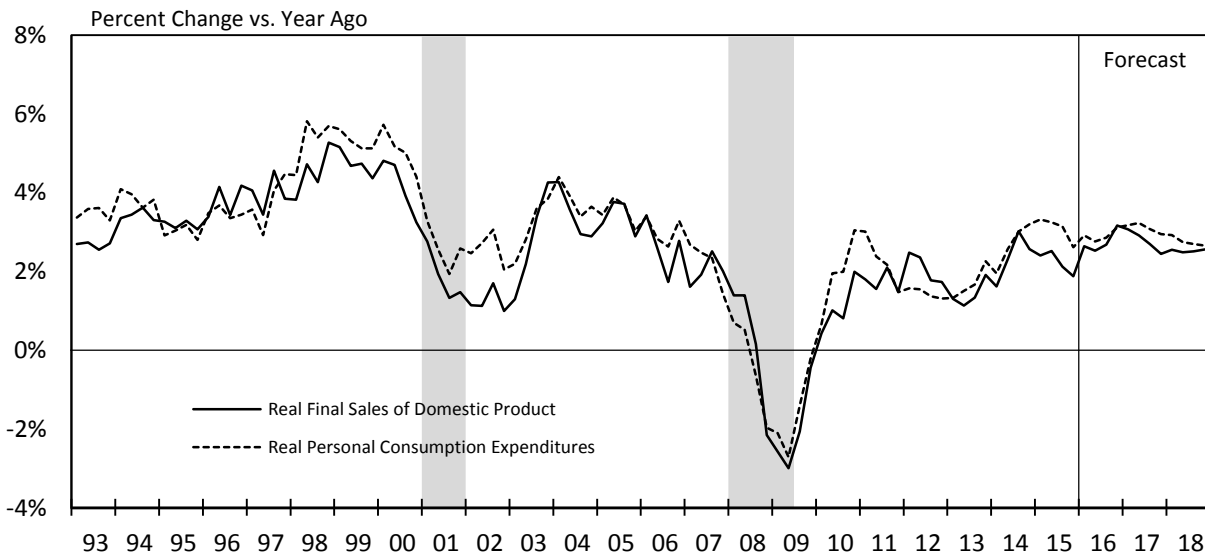
### Interest Rates



Source: Federal Reserve Board, Freddie Mac, National Bureau of Economic Research, and IHS Economics

*The Federal Reserve raised short-term interest rates in mid-December for the first time in almost a decade. The widely anticipated action signals the end of an extraordinary seven-year period of record low borrowing rates and reflects confidence in the strength of the U.S. economy.*

### Real Final Sales & Consumption

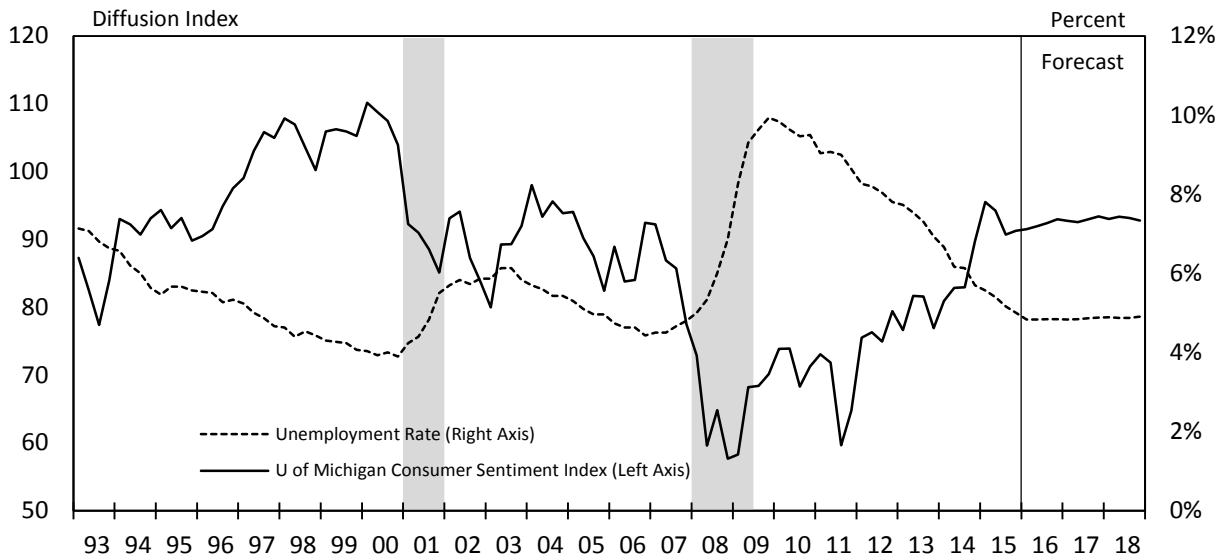


Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*Solid economic fundamentals for the consumer fueled ramped up spending growth last year. IHS expects real consumer spending growth to hold steady at a solid 2.9 percent in 2016 and 3.1 percent in 2017, led by autos and other big-ticket durable items.*



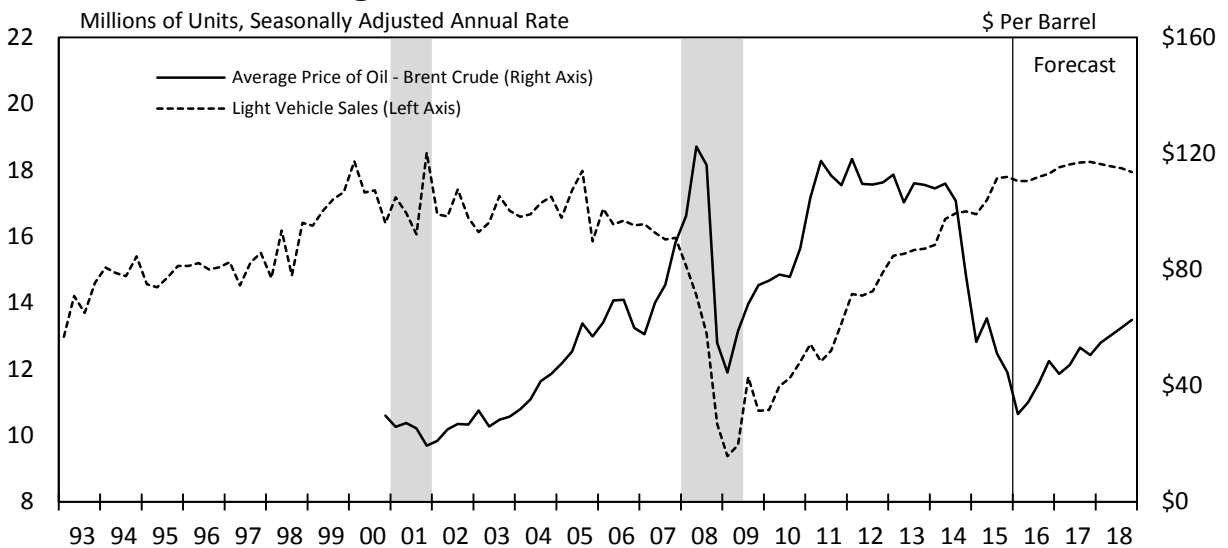
### Consumer Sentiment and Unemployment Rate



Source: University of Michigan, Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*The job market continues to make solid progress and improving demand is quickly absorbing remaining labor market slack. The U.S. jobless rate is down to a near-normal 4.9 percent in January.*

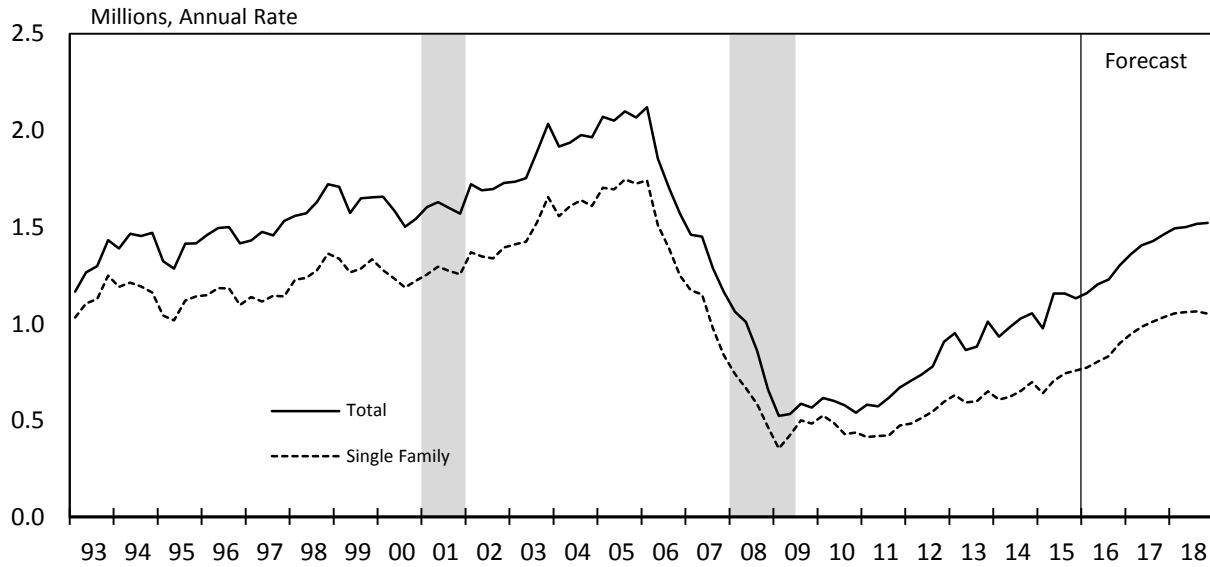
### Light Vehicle Sales and Oil Prices



Source: Bureau of Economic Analysis, Investors' Business Daily, National Bureau of Economic Research, and IHS Economics

*Brent oil prices have fallen more than 70 percent since mid-2014. Cheap oil means big savings for consumers and businesses that use petroleum products, but lower investment among energy producers.*

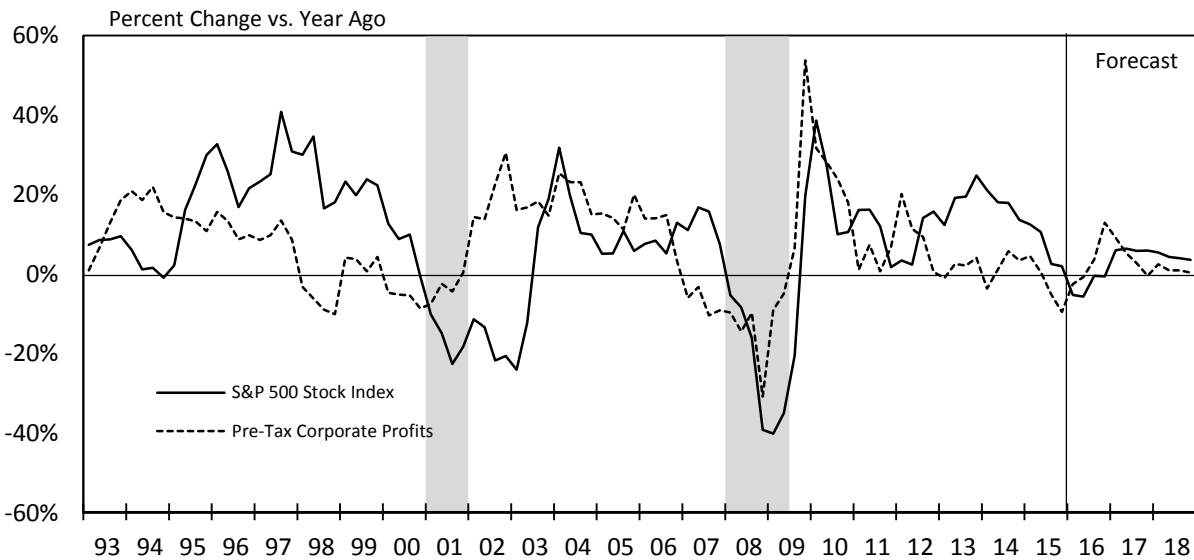
### Housing Starts



Source: U.S. Census Bureau, National Bureau of Economic Research, and IHS Economics

*The construction of new homes has not kept pace with rising demand. Housing starts climbed to 1.11 million last year, up from 1.0 million in 2014, but still well below long-term annual average of roughly 1.5 million starts prior to the recession.*

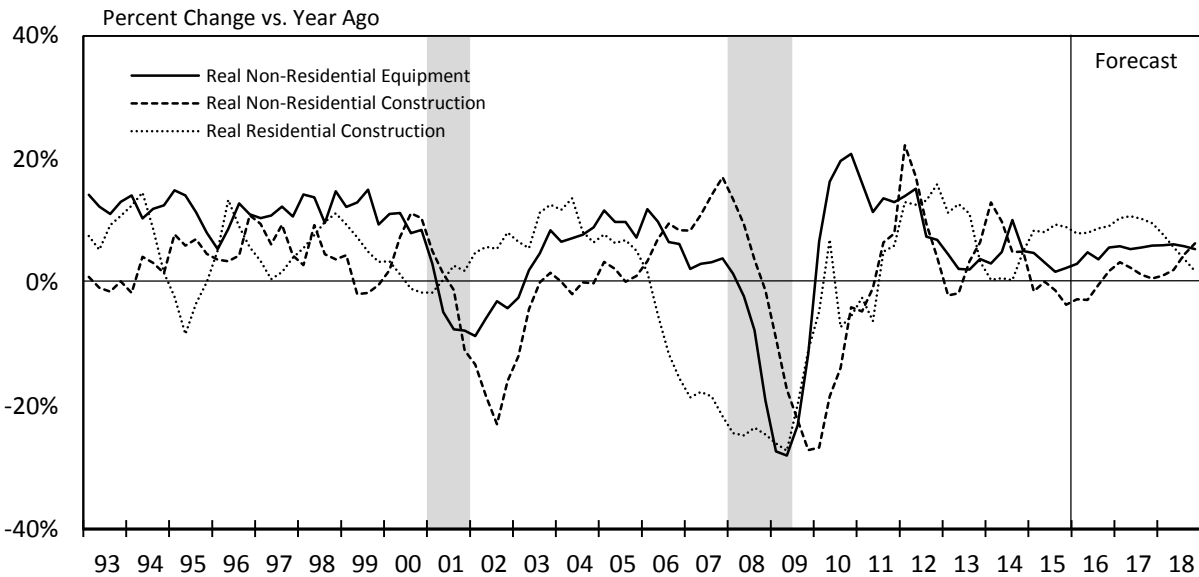
### S&P 500 Stock Index and Pre-Tax Corporate Profits



Source: Standard and Poor's, National Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*Recent declines have put major stock market indices at almost 10 percent below year-ago levels. The negative wealth effects generated by falling stock values pose downside risk to consumer spending.*

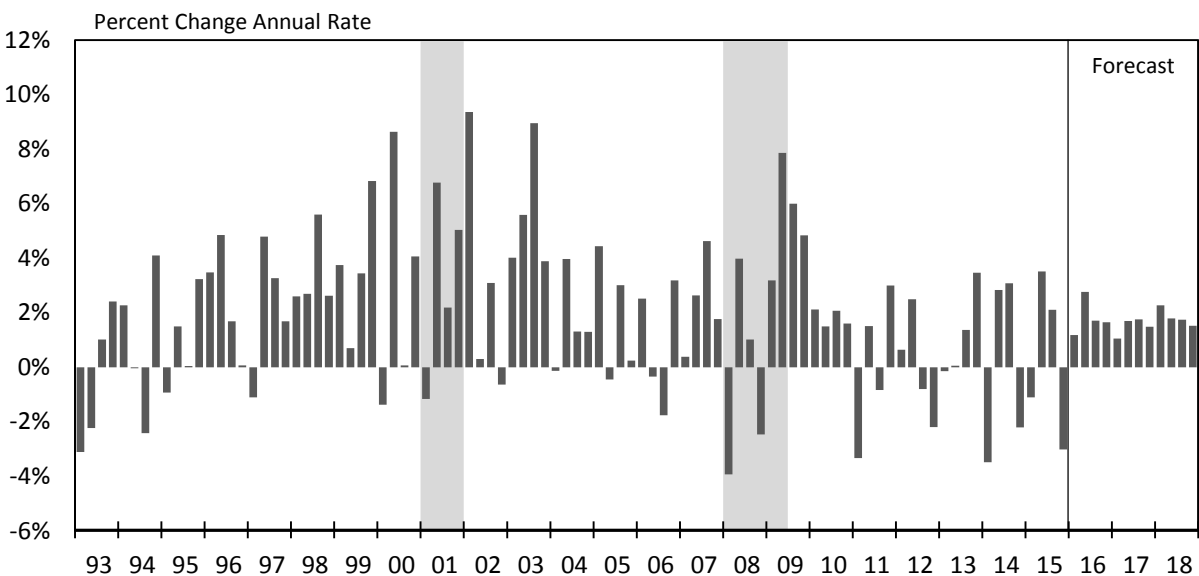
### Real Private Investment



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*A slower pace of investment growth last year was attributable to the stronger dollar and a falloff in drilling activity. Some of the broader disconnect, however, likely has to do with the impact of new technologies as well as firms' expectations of future profitability.*

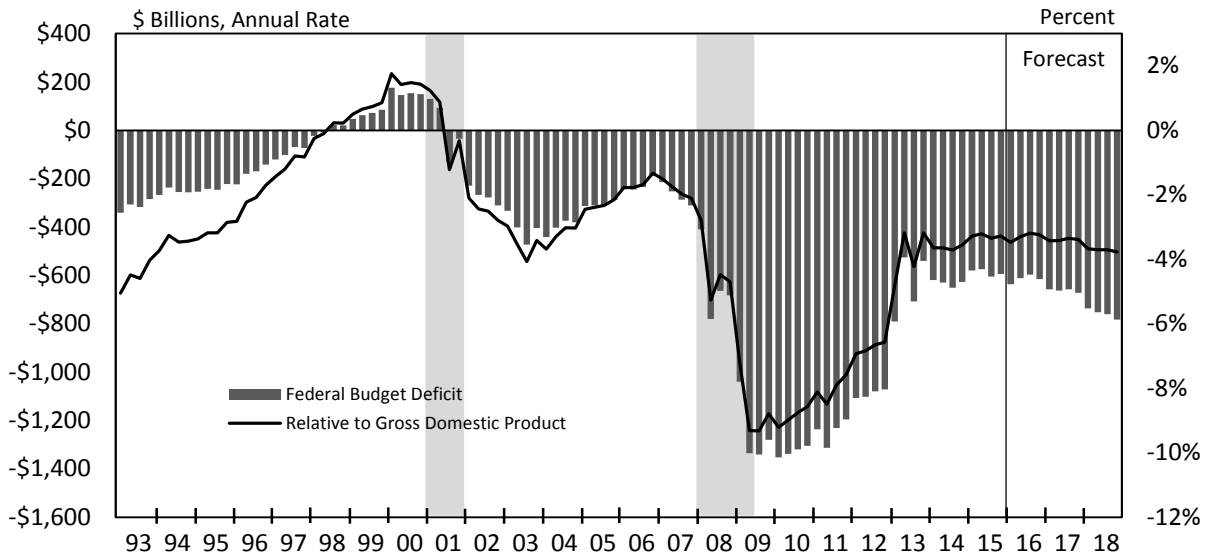
### Total Non-Farm Productivity



Source: Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*Business investment in new labor-saving equipment and technologies is an important contributor to productivity growth. Thus the investment slowdown helps explain why productivity gains have stalled in recent years.*

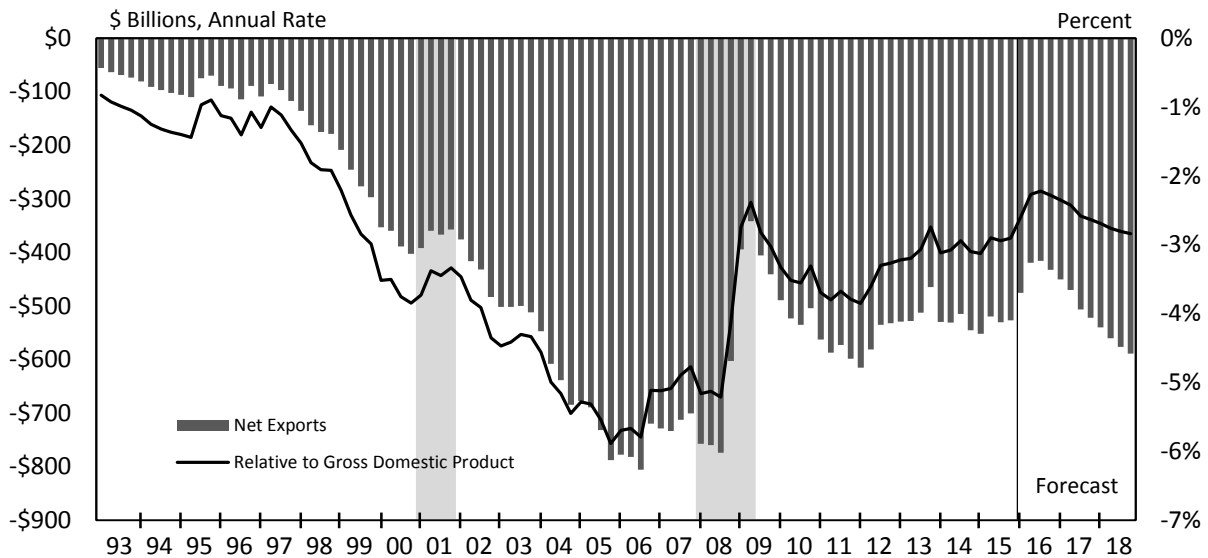
### Federal Budget Deficit (NIPA Basis)



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*The Congressional Budget Office projects the deficit will total \$544 billion in fiscal 2016, nearly \$105 billion more than the shortfall from 2015—as outlays rise because of the spending packages recently approved by Congress.*

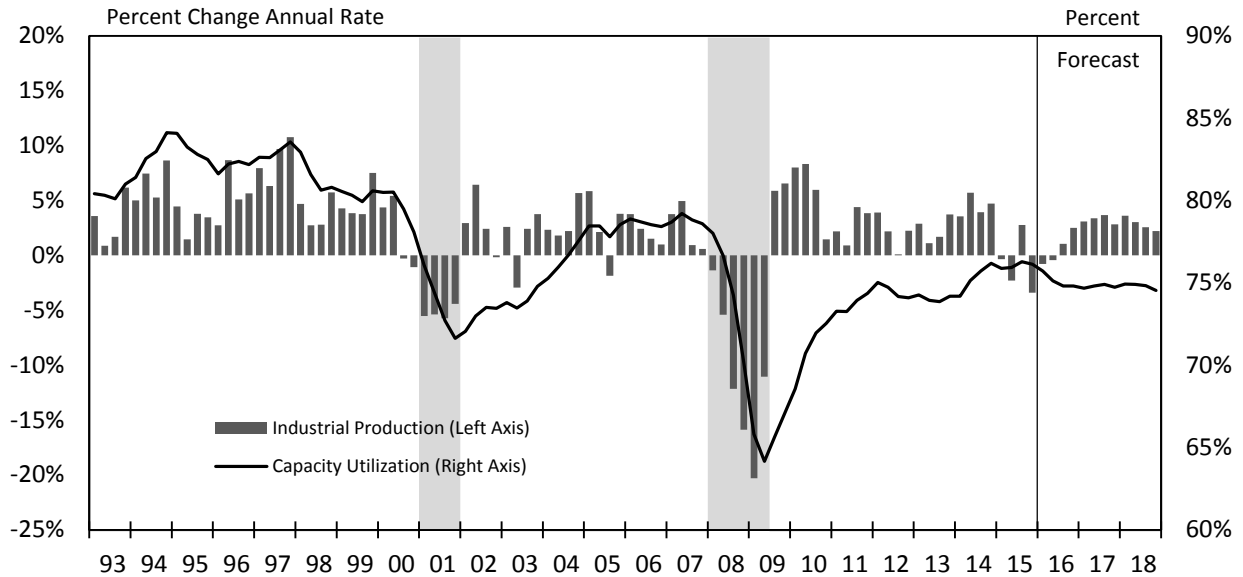
### Balance of Trade (Net Exports)



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*The stronger dollar means U.S. exports are less competitive in global markets and imported goods are more affordable to domestic consumers. As a result, IHS expects net trade to remain a drag on GDP growth, through both reduced export growth and increased import gains.*

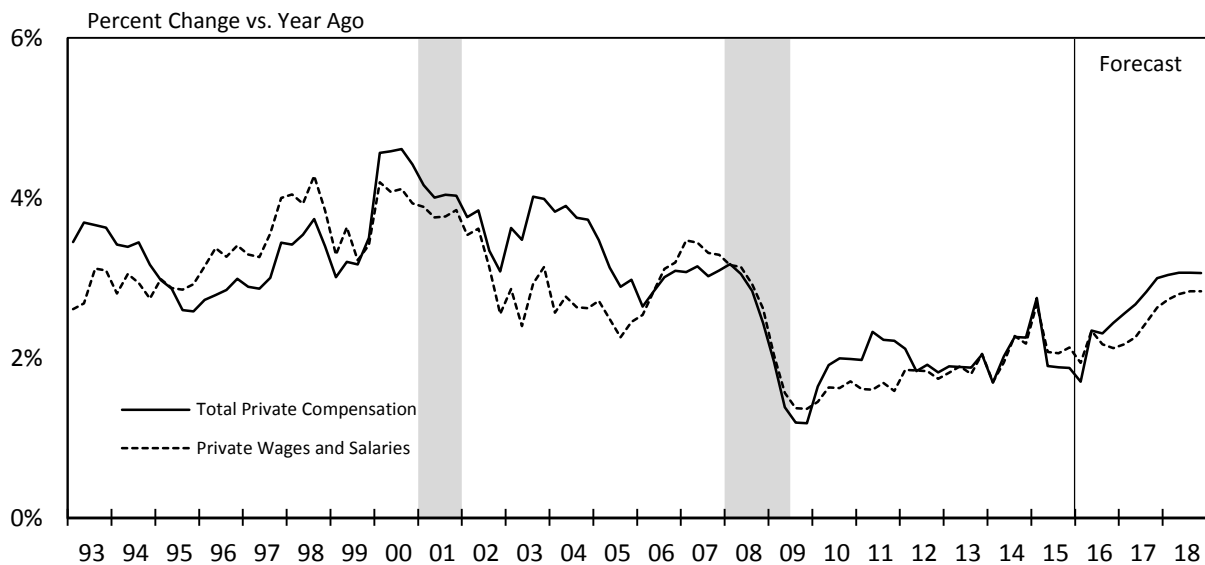
### Industrial Production and Factory Operating Rate



Source: Federal Reserve Board, National Bureau of Economic Research, and IHS Economics

*Manufacturing activity struggled in 2015, as U.S. producers adjusted to the stronger dollar, weakness abroad, lower energy prices, and business' efforts to work off a sizeable inventory glut in the second half of the year.*

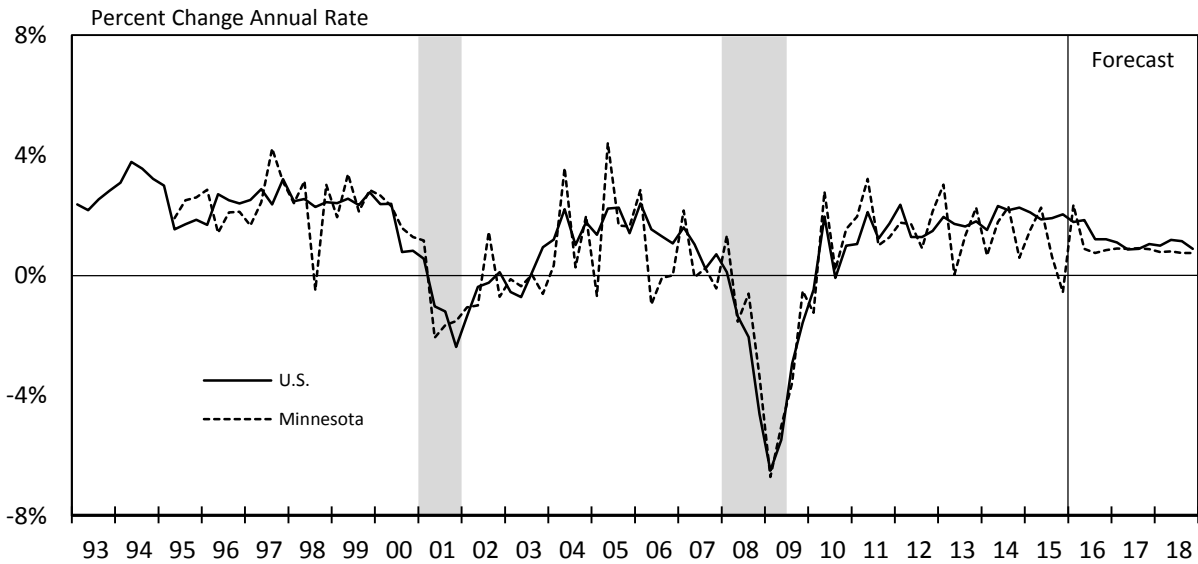
### Employment Cost Index



Source: Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*Wage growth has remained modest relative to the growth in employment. The employment cost index, a broad measure of nominal wage and benefits compensation, has averaged only about 2 percent annual growth since the recession ended more than six years ago.*

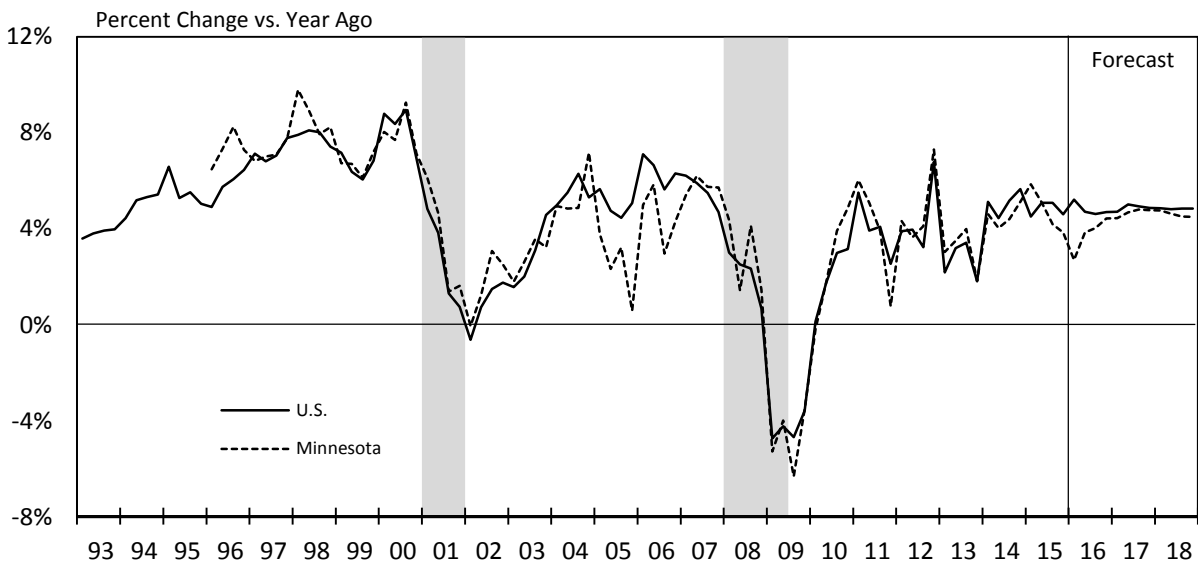
### Total Non-Farm Employment



Source: Bureau of Labor Statistics, National Bureau of Economic Research, IHS Economics, and MN Management & Budget

*The February 2016 forecast for Minnesota’s economy expects job growth to remain modest. Minnesota employment is forecast to grow between 0.9 and 1.0 percent through 2017, before faster productivity gains result in slower job growth for the remainder of the forecast horizon.*

### Wage and Salary Disbursements



Source: Bureau of Economic Analysis, National Bureau of Economic Research, IHS Economics, and MN Management & Budget

*Preliminary labor market data and income tax withholding collections suggests Minnesota’s nominal wage and salary income rose 4.7 percent in 2015, up from 4.6 percent growth in 2014. MMB forecasts Minnesota wage income growth to slow to 3.8 percent in 2016.*

## U.S. Economic Forecast Summary

Forecast 2015 to 2019, Calendar Years

	2013	2014	2015	2016	2017	2018	2019
<b>Real National Income Accounts (Billions of 2009 Dollars)</b>							
Real Gross Domestic Product (GDP)	15,583.3	15,961.7	16,341.8	16,727.2	17,199.7	17,646.7	18,074.0
%Chg	1.5	2.4	2.4	2.4	2.8	2.6	2.4
Real Consumption	10,590.4	10,875.7	11,211.3	11,538.9	11,898.2	12,227.1	12,540.7
%Chg	1.7	2.7	3.1	2.9	3.1	2.8	2.6
Real Nonresidential Fixed Investment	2,023.8	2,148.3	2,209.7	2,273.5	2,376.0	2,489.9	2,604.9
%Chg	3.0	6.2	2.9	2.9	4.5	4.8	4.6
Real Residential Investment	478.0	486.4	529.0	573.8	632.6	662.9	663.8
%Chg	9.5	1.8	8.7	8.5	10.3	4.8	0.1
Real Personal Income	13,077.9	13,467.6	14,034.1	14,488.5	14,916.5	15,345.9	15,764.3
%Chg	-0.3	3.0	4.2	3.2	3.0	2.9	2.7
<b>Current Dollar National Income Accounts (Billions of Dollars)</b>							
Gross Domestic Product (GDP)	16,663.2	17,348.1	17,937.9	18,624.1	19,502.9	20,418.8	21,340.4
%Chg	3.1	4.1	3.4	3.8	4.7	4.7	4.5
Personal Income	14,068.4	14,694.2	15,357.4	15,959.7	16,722.5	17,564.3	18,427.4
%Chg	1.1	4.4	4.5	3.9	4.8	5.0	4.9
Wage & Salary Disbursements	7,114.4	7,477.8	7,838.7	8,215.9	8,617.6	9,035.1	9,467.6
%Chg	2.7	5.1	4.8	4.8	4.9	4.8	4.8
Non-Wage Personal Income	6,954.0	7,216.5	7,518.7	7,743.8	8,104.9	8,529.2	8,959.9
%Chg	-0.4	3.8	4.2	3.0	4.7	5.2	5.0
<b>Price and Wage Indexes</b>							
U.S. GDP Deflator (2005=1.0)	106.936	108.694	109.776	111.335	113.386	115.704	118.068
%Chg	1.6	1.6	1.0	1.4	1.8	2.0	2.0
U.S. Consumer Price Index (1982-84=1.0)	2.330	2.367	2.370	2.385	2.441	2.505	2.572
%Chg	1.5	1.6	0.1	0.6	2.3	2.7	2.7
Employment Cost Index (Dec 2005=1.0)	1.188	1.212	1.238	1.265	1.300	1.340	1.382
%Chg	1.9	2.1	2.1	2.2	2.8	3.1	3.2
<b>Employment (Thousands)</b>							
Employment - Total Non-Farm Payrolls	136.4	138.9	141.8	144.3	145.9	147.4	148.9
%Chg	1.6	1.9	2.1	1.8	1.1	1.0	1.0
Construction	5.9	6.1	6.4	6.8	7.1	7.4	7.6
%Chg	3.7	5.0	4.8	5.1	4.9	3.6	2.8
Manufacturing	12.0	12.2	12.3	12.4	12.5	12.6	12.7
%Chg	0.8	1.4	1.1	0.3	0.9	0.8	1.1
Private Service-Providing	95.8	97.8	100.2	102.4	103.5	104.3	105.2
%Chg	2.1	2.1	2.5	2.2	1.0	0.8	0.8
Government	21.8	21.9	22.0	22.1	22.2	22.4	22.6
%Chg	-0.3	0.1	0.6	0.3	0.5	1.1	1.0
U.S. Civilian Labor Force	155.4	155.9	157.1	159.5	161.5	163.3	164.9
Employment - Household Survey	143.9	146.3	148.8	151.6	153.6	155.3	156.6
Unemployment Rate (%)	7.4	6.2	5.3	4.8	4.9	4.9	5.0
<b>Other Key Measures</b>							
Non-Farm Productivity (index, 2005=1.0)	1.044	1.052	1.058	1.069	1.086	1.105	1.125
%Chg	0.0	0.7	0.6	1.0	1.6	1.8	1.8
Total Ind. Production (index, 2007=100)	101.934	105.727	107.090	106.616	109.403	112.820	115.701
%Chg	1.9	3.7	1.3	-0.4	2.6	3.1	2.6
Manhours in Private Non-Farm Estab. Billions of Hours							
%Chg	193.0	197.6	202.1	206.0	209.9	212.5	214.8
Average Weekly Hours	2.0	2.4	2.3	2.0	1.9	1.3	1.1
Manufacturing Workweek	32.4	32.5	32.5	32.5	32.7	32.8	32.8

Source: IHS Economics (IHS); February 2016 Baseline

**Minnesota Economic Forecast Summary**

Forecast 2015 to 2019 - Calendar Years

	2013	2014	2015	2016	2017	2018	2019
<b>Current Dollar Income (Billions of Dollars)</b>							
Personal Income	257.058	267.389	277.353	286.193	299.163	313.865	328.155
%Chg	1.0	4.0	3.7	3.2	4.5	4.9	4.6
Wage & Salary Disbursements	139.574	145.926	152.842	158.588	166.015	173.658	181.303
%Chg	3.1	4.6	4.7	3.8	4.7	4.6	4.4
Non-Wage Personal Income	117.485	121.464	124.508	127.605	133.150	140.210	146.853
%Chg	-1.3	3.4	2.5	2.5	4.3	5.3	4.7
Supplements to Wages & Salaries	30.770	32.457	33.965	35.266	37.030	38.645	40.169
%Chg	2.3	5.5	4.6	3.8	5.0	4.4	3.9
Dividends, Interest, & Rent Income	45.706	47.508	49.405	49.921	52.211	56.026	59.535
%Chg	-1.2	3.9	4.0	1.0	4.6	7.3	6.3
Farm Proprietors Income	5.443	3.718	1.384	1.271	0.922	0.906	0.848
%Chg	0.1	-31.7	-62.8	-8.2	-27.5	-1.6	-6.4
Non-Farm Proprietors Income	18.358	19.440	20.397	21.107	22.109	22.877	23.607
%Chg	1.3	5.9	4.9	3.5	4.7	3.5	3.2
Personal Current Transfer Receipts	40.803	42.753	44.887	46.480	48.587	50.851	53.181
%Chg	3.5	4.8	5.0	3.5	4.5	4.7	4.6
Less: Contrib. for Gov. Social Ins.	22.383	23.183	24.141	25.026	26.295	27.678	29.074
%Chg	17.5	3.6	4.1	3.7	5.1	5.3	5.0
<b>Real Income (Billions of 2009 Dollars)</b>							
Real Personal Income	238.961	245.067	253.460	259.808	266.855	274.225	280.730
%Chg	-0.3	2.6	3.4	2.5	2.7	2.8	2.4
Real Wage & Salary Disbursements	129.746	133.744	139.679	143.965	148.088	151.723	155.103
%Chg	1.7	3.1	4.4	3.1	2.9	2.5	2.2
<b>Employment (Thousands)</b>							
Employment - Total Non-Farm Payrolls	2,775.7	2,815.0	2,853.1	2,881.9	2,907.0	2,931.0	2,952.9
%Chg	1.7	1.4	1.4	1.0	0.9	0.8	0.7
Construction	100.5	107.6	115.3	119.1	122.3	124.7	125.5
%Chg	5.8	7.1	7.1	3.3	2.7	2.0	0.6
Manufacturing	307.4	312.0	317.0	314.6	315.0	317.2	318.6
%Chg	0.6	1.5	1.6	-0.8	0.1	0.7	0.4
Private Service-Providing	1,946.4	1,967.1	1,992.0	2,018.3	2,036.7	2,050.2	2,064.3
%Chg	1.9	1.1	1.3	1.3	0.9	0.7	0.7
Government	414.4	421.1	422.0	424.2	427.3	432.9	438.3
%Chg	0.5	1.6	0.2	0.5	0.7	1.3	1.2
Minnesota Civilian Labor Force	2,965.3	2,973.7	2,989.8	3,012.1	3,027.8	3,040.9	3,053.8
Employment - Household Survey	2,823.1	2,855.5	2,888.2	2,917.8	2,931.3	2,942.0	2,951.5
Unemployment Rate (%)	4.8	4.0	3.4	3.1	3.2	3.3	3.3
<b>Demographic Indicators (Millions)</b>							
Total Population	5.421	5.457	5.490	5.529	5.566	5.603	5.639
%Chg	0.7	0.7	0.6	0.7	0.7	0.7	0.6
Total Population Age 16 & Over	4.284	4.318	4.349	4.386	4.421	4.454	4.488
%Chg	0.9	0.8	0.7	0.8	0.8	0.7	0.8
Total Population Age 65 & Over	0.756	0.780	0.805	0.834	0.864	0.895	0.926
%Chg	3.6	3.2	3.1	3.6	3.7	3.5	3.5
Total Households	2.120	2.129	2.150	2.173	2.195	2.217	2.238
%Chg	0.4	0.4	1.0	1.1	1.0	1.0	1.0
<b>Housing Indicators (Thousands)</b>							
Total Housing Permits (Authorized)	16.792	16.770	20.313	23.919	25.280	25.581	25.298
%Chg	12.0	-0.1	21.1	17.8	5.7	1.2	-1.1
Single-Family	10.572	10.257	12.314	14.514	15.436	15.718	15.642
%Chg	23.6	-3.0	20.1	17.9	6.4	1.8	-0.5

Source: Minnesota Management & Budget (MMB) February 2016 Forecast



## Economic Forecast Comparison: Minnesota &amp; U.S.

Forecast 2015 to 2019, Calendar Years

	2012	2013	2014	2015	2016	2017	2018	2019
<b>Personal Income (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
February 2016	254.5	257.1	267.4	277.4	286.2	299.2	313.9	328.2
%Chg	5.2	1.0	4.0	3.7	3.2	4.5	4.9	4.6
November 2015	254.5	257.1	267.4	278.1	290.8	305.2	320.7	336.3
%Chg	5.2	1.0	4.0	4.0	4.6	4.9	5.1	4.9
<b>U.S.</b>								
February 2016	13,915	14,068	14,694	15,357	15,960	16,722	17,564	18,427
%Chg	5.0	1.1	4.4	4.5	3.9	4.8	5.0	4.9
November 2015	13,915	14,068	14,694	15,310	15,996	16,851	17,742	18,639
%Chg	5.0	1.1	4.4	4.2	4.5	5.3	5.3	5.1
<b>Wage and Salary Disbursements (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
February 2016	135.4	139.6	145.9	152.8	158.6	166.0	173.7	181.3
%Chg	4.9	3.1	4.6	4.7	3.8	4.7	4.6	4.4
November 2015	135.4	139.6	145.9	153.0	160.0	167.6	175.4	183.9
%Chg	4.9	3.1	4.6	4.9	4.5	4.8	4.7	4.8
<b>U.S.</b>								
February 2016	6,930	7,114	7,478	7,839	8,216	8,618	9,035	9,468
%Chg	4.5	2.7	5.1	4.8	4.8	4.9	4.8	4.8
November 2015	6,930	7,114	7,478	7,778	8,143	8,577	9,015	9,468
%Chg	4.5	2.7	5.1	4.0	4.7	5.3	5.1	5.0
<b>Total Non-Farm Payroll Employment (Thousands)</b>								
<b>Minnesota</b>								
February 2016	2,730	2,776	2,815	2,853	2,882	2,907	2,931	2,953
%Chg	1.6	1.7	1.4	1.4	1.0	0.9	0.8	0.7
November 2015	2,730	2,776	2,816	2,858	2,894	2,929	2,957	2,980
%Chg	1.6	1.7	1.4	1.5	1.3	1.2	0.9	0.8
<b>U.S.</b>								
February 2016	134,173	136,381	138,939	141,832	144,322	145,921	147,427	148,898
%Chg	1.7	1.6	1.9	2.1	1.8	1.1	1.0	1.0
November 2015	134,098	136,394	139,023	141,898	144,120	146,092	147,939	149,545
%Chg	1.7	1.7	1.9	2.1	1.6	1.4	1.3	1.1
<b>Average Annual Non-Farm Wage (Current Dollars)</b>								
<b>Minnesota</b>								
February 2016	49,598	50,284	51,839	53,571	55,028	57,109	59,250	61,399
%Chg	3.2	1.4	3.1	3.3	2.7	3.8	3.7	3.6
November 2015	49,598	50,284	51,825	53,542	55,275	57,214	59,330	61,720
%Chg	3.2	1.4	3.1	3.3	3.2	3.5	3.7	4.0
<b>U.S.</b>								
February 2016	51,652	52,165	53,820	55,267	56,928	59,056	61,285	63,584
%Chg	2.7	1.0	3.2	2.7	3.0	3.7	3.8	3.8
November 2015	51,680	52,161	53,788	54,817	56,499	58,707	60,940	63,310
%Chg	2.7	0.9	3.1	1.9	3.1	3.9	3.8	3.9

Source: IHS Economics (IHS) and Minnesota Management and Budget (MMB)

## Alternative U.S. Economic Forecast Comparison

Calendar Years

	15Q3	15Q4	16Q1	16Q2	16Q3	16Q4	2014	2015	2016	2017
<b>Real Gross Domestic Product (GDP), Percent Change, Seasonally Adjusted at Annual Rate</b>										
Blue Chip Consensus (02-16)	2.0	0.7	2.1	2.5	2.5	2.5	2.4	2.4	2.1	2.4
IHS Economics Baseline (02-16)	2.0	0.7	2.4	3.0	3.2	3.2	2.4	2.4	2.4	2.8
Moody's Analytics (02-16)	2.0	0.7	2.1	2.6	3.3	3.1	2.4	2.4	2.3	3.1
Wells Fargo (02-16)	2.0	0.7	1.0	2.4	2.4	2.3	2.4	2.4	1.8	2.3
UBS (02-16)	N/A						2.4	2.4	1.5	2.5
Congressional Budget Office (01-16)	2.0	1.5	2.9	2.5	2.6	2.7	2.4	2.4	2.5	2.6
<b>Consumer Price Index (CPI), Percent Change, Seasonally Adjusted at Annual Rate (except where noted)</b>										
Blue Chip Consensus (02-16)	1.6	0.2	0.3	2.1	2.3	2.3	1.6	0.1	1.3	2.3
IHS Economics Baseline (02-16)	1.6	0.2	-1.8	0.8	2.4	3.7	1.6	0.1	0.6	2.3
Moody's Analytics (02-16)	1.6	0.2	-0.8	2.8	2.9	3.1	1.6	0.1	1.3	3.1
Wells Fargo (02-16)*	0.1	0.4	1.1	1.0	1.2	1.7	1.6	0.1	1.3	2.2
UBS (02-16)	N/A						1.6	0.1	1.5	2.7
Congressional Budget Office (01-16)	1.6	0.4	0.2	2.1	2.2	2.3	1.6	0.1	1.3	2.3

\* Year-over-Year Percent Change

## IHS Economics Baseline Comparison: U.S. Economic Forecast

Calendar Years

	2012	2013	2014	2015	2016	2017	2018	2019
<b>Real Gross Domestic Product (GDP), Annual Percent Change</b>								
February 2011	2.9	3.1	3.3	2.9	-	-	-	-
November 2011	1.6	2.5	3.5	3.3	-	-	-	-
February 2012	2.1	2.3	3.3	3.2	-	-	-	-
November 2012	2.1	1.9	2.8	3.3	2.9	2.1	-	-
February 2013	2.2	1.9	2.8	3.3	2.9	2.8	-	-
November 2013	2.8	1.7	2.5	3.1	3.3	3.1	-	-
February 2014	2.8	1.9	2.7	3.3	3.4	3.1	-	-
November 2014	2.3	2.2	2.2	2.6	2.8	3.0	2.6	2.6
February 2015	2.3	2.2	2.4	3.0	2.7	2.8	2.6	2.8
November 2015	2.2	1.5	2.4	2.4	2.9	2.8	2.7	2.6
February 2016	2.2	1.5	2.4	2.4	2.4	2.8	2.6	2.4
<b>Consumer Price Index (CPI), Annual Percent Change</b>								
February 2011	1.7	1.9	2.2	2.2	-	-	-	-
November 2011	1.5	1.7	2.0	2.1	-	-	-	-
February 2012	2.0	1.8	1.9	1.9	-	-	-	-
November 2012	2.1	1.3	1.8	1.7	1.9	1.9	-	-
February 2013	2.1	1.4	1.7	1.6	1.7	1.8	-	-
November 2013	2.1	1.4	1.4	1.7	1.9	1.9	-	-
February 2014	2.1	1.5	1.3	1.7	1.8	1.8	-	-
November 2014	2.1	1.5	1.7	1.0	1.6	2.2	2.2	2.3
February 2015	2.1	1.5	1.6	-0.7	2.3	2.7	2.7	2.5
November 2015	2.1	1.5	1.6	0.0	1.4	2.7	2.4	2.4
February 2016	2.1	1.5	1.6	0.1	0.6	2.3	2.7	2.7

Source: IHS Economics (IHS)

## Economic Factors Affecting Tax Revenue

Billions of Current Dollars

	2012	2013	2014	2015	2016	2017	2018	2019
<b>Individual Income Tax (Calendar Years)</b>								
<b>Minnesota Non-Farm Tax Base</b>								
November 2013	196.327	204.957	214.980	225.805	237.873	250.970	-	-
%Chg	5.3	4.4	4.9	5.0	5.3	5.5		
February 2014	196.327	203.603	213.810	225.420	238.065	251.045	-	-
%Chg	5.3	3.7	5.0	5.4	5.6	5.5		
November 2014	199.980	206.101	213.919	222.743	234.048	247.250	259.688	271.678
%Chg	6.9	3.1	3.8	4.1	5.1	5.6	5.0	4.6
February 2015	199.980	206.101	214.375	224.873	236.323	249.318	261.988	274.210
%Chg	6.9	3.1	4.0	4.9	5.1	5.5	5.1	4.7
November 2015	199.755	203.638	212.873	222.897	232.633	244.093	256.625	269.365
%Chg	7.0	1.9	4.5	4.7	4.4	4.9	5.1	5.0
February 2016	199.755	203.638	212.873	222.646	229.615	240.335	252.558	264.448
%Chg	7.0	1.9	4.5	4.6	3.1	4.7	5.1	4.7
<b>Minnesota Wage and Salary Disbursements</b>								
November 2013	135.435	141.108	147.160	154.325	161.890	169.563	-	-
%Chg	4.8	4.2	4.3	4.9	4.9	4.7		
February 2014	135.435	140.128	147.110	154.948	162.930	170.663	-	-
%Chg	4.8	3.5	5.0	5.3	5.2	4.7		
November 2014	135.558	139.720	145.147	151.563	158.495	165.898	173.420	181.153
%Chg	5.0	3.1	3.9	4.4	4.6	4.7	4.5	4.5
February 2015	135.558	139.720	145.733	153.655	161.100	168.953	176.765	184.913
%Chg	5.0	3.1	4.3	5.4	4.8	4.9	4.6	4.6
November 2015	135.389	139.574	145.926	153.019	159.958	167.580	175.413	183.918
%Chg	4.9	3.1	4.6	4.9	4.5	4.8	4.7	4.8
February 2016	135.389	139.574	145.926	152.842	158.588	166.015	173.658	181.303
%Chg	4.9	3.1	4.6	4.7	3.8	4.7	4.6	4.4
<b>Minnesota Dividends, Interest, &amp; Rental Income</b>								
November 2013	43.487	45.385	48.313	50.864	54.301	58.723	-	-
%Chg	6.0	4.4	6.5	5.3	6.8	8.1		
February 2014	43.487	45.086	47.300	49.877	53.438	57.725	-	-
%Chg	6.0	3.7	4.9	5.4	7.1	8.0		
November 2014	46.062	47.043	48.489	49.808	53.303	58.403	62.585	65.879
%Chg	10.4	2.1	3.1	2.7	7.0	9.6	7.2	5.3
February 2015	46.062	47.043	48.454	49.863	52.930	57.410	61.539	64.549
%Chg	10.4	2.1	3.0	2.9	6.2	8.5	7.2	4.9
November 2015	46.238	45.706	47.508	49.369	50.773	53.305	56.838	59.868
%Chg	11.6	-1.2	3.9	3.9	2.8	5.0	6.6	5.3
February 2016	46.238	45.706	47.508	49.405	49.921	52.211	56.026	59.535
%Chg	11.6	-1.2	3.9	4.0	1.0	4.6	7.3	6.3
<b>Minnesota Non-Farm Proprietors' Income</b>								
November 2013	17.405	18.465	19.508	20.619	21.681	22.684	-	-
%Chg	6.8	6.1	5.6	5.7	5.1	4.6		
February 2014	17.405	18.390	19.403	20.595	21.700	22.656	-	-
%Chg	6.8	5.7	5.5	6.1	5.4	4.4		
November 2014	18.360	19.338	20.282	21.372	22.248	22.948	23.683	24.644
%Chg	13.2	5.3	4.9	5.4	4.1	3.1	3.2	4.1
February 2015	18.360	19.338	20.188	21.356	22.291	22.957	23.681	24.747
%Chg	13.2	5.3	4.4	5.8	4.4	3.0	3.2	4.5
November 2015	18.128	18.358	19.440	20.510	21.901	23.204	24.374	25.578
%Chg	11.8	1.3	5.9	5.5	6.8	6.0	5.0	4.9
February 2016	18.128	18.358	19.440	20.397	21.107	22.109	22.877	23.607
%Chg	11.8	1.3	5.9	4.9	3.5	4.7	3.5	3.2

## Economic Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2012	2013	2014	2015	2016	2017	2018	2019
<b>General Sales Tax (Fiscal Year)</b>								
<b>Minnesota Synthetic Sales Tax Base (Fiscal Year)</b>								
November 2013	71.869	74.932	77.285	81.086	84.764	88.492	-	-
%Chg	5.2	4.3	3.1	4.9	4.5	4.4		
February 2014	73.764	77.085	80.121	84.742	89.234	93.625	-	-
%Chg	5.3	4.5	3.9	5.8	5.3	4.9		
November 2014	73.746	76.929	80.113	83.634	87.403	91.537	95.285	98.523
%Chg	5.1	4.3	4.1	4.4	4.5	4.7	4.1	3.4
February 2015	73.771	76.948	80.213	83.568	88.120	92.585	96.380	100.037
%Chg	5.1	4.3	4.2	4.2	5.4	5.1	4.1	3.8
November 2015	73.662	76.441	78.560	81.685	85.626	90.097	94.537	98.470
%Chg	5.3	3.8	2.8	4.0	4.8	5.2	4.9	4.2
February 2016	73.628	76.460	78.587	81.588	84.158	87.161	91.571	95.695
%Chg	5.3	3.8	2.8	3.8	3.1	3.6	5.1	4.5
<b>Minnesota's Proxy Share of U.S. Consumer Durable Spending (Excluding Autos)</b>								
November 2013	13.866	14.519	15.253	15.862	16.467	17.091	-	-
%Chg	5.4	4.7	5.1	4.0	3.8	3.8		
February 2014	13.866	14.507	15.141	15.746	16.512	17.212	-	-
%Chg	5.4	4.6	4.4	4.0	4.9	4.2		
November 2014	13.820	14.400	14.844	15.336	15.920	16.601	17.316	17.943
%Chg	5.2	4.2	3.1	3.3	3.8	4.3	4.3	3.6
February 2015	13.820	14.400	14.851	15.403	16.139	16.759	17.363	17.964
%Chg	5.2	4.2	3.1	3.7	4.8	3.8	3.6	3.5
November 2015	13.808	14.299	14.605	15.163	15.803	16.555	17.184	17.870
%Chg	5.2	3.6	2.1	3.8	4.2	4.8	3.8	4.0
February 2016	13.808	14.299	14.605	15.155	15.805	16.376	17.055	17.678
%Chg	5.2	3.6	2.1	3.8	4.3	3.6	4.1	3.7
<b>Minnesota's Proxy Share of U.S. Capital Equipment Spending</b>								
November 2013	12.827	13.602	14.293	15.653	17.022	18.358	-	-
%Chg	7.8	6.0	5.1	9.5	8.7	7.8		
February 2014	12.827	13.580	14.119	15.649	17.368	18.748	-	-
%Chg	7.8	5.9	4.0	10.8	11.0	7.9		
November 2014	12.820	13.487	14.079	15.116	16.412	17.910	19.108	20.061
%Chg	7.8	5.2	4.4	7.4	8.6	9.1	6.7	5.0
February 2015	12.820	13.487	14.087	15.280	16.932	18.491	19.807	20.946
%Chg	7.8	5.2	4.4	8.5	10.8	9.2	7.1	5.8
November 2015	13.005	13.547	13.835	14.697	15.382	16.677	18.007	19.165
%Chg	9.3	4.2	2.1	6.2	4.7	8.4	8.0	6.4
February 2016	13.005	13.547	13.835	14.686	15.102	15.725	17.017	18.326
%Chg	9.3	4.2	2.1	6.2	2.8	4.1	8.2	7.7
<b>Minnesota's Proxy Share of U.S. Construction Spending</b>								
November 2013	5.441	5.944	6.693	7.396	8.196	8.869	-	-
%Chg	11.6	9.2	12.6	10.5	10.8	8.2		
February 2014	5.439	5.965	6.684	7.483	8.173	8.819	-	-
%Chg	11.5	9.7	12.1	12.0	9.2	7.9		
November 2014	5.514	5.930	6.721	7.363	7.899	8.319	8.713	9.026
%Chg	12.7	7.5	13.3	9.6	7.3	5.3	4.7	3.6
February 2015	5.513	5.925	6.653	7.122	7.468	8.023	8.486	8.861
%Chg	12.7	7.5	12.3	7.0	4.9	7.4	5.8	4.4
November 2015	5.522	5.902	6.598	7.187	7.675	8.214	8.764	9.142
%Chg	12.9	6.9	11.8	8.9	6.8	7.0	6.7	4.3
February 2016	5.522	5.901	6.596	7.122	7.465	7.793	8.315	8.707
%Chg	12.9	6.9	11.8	8.0	4.8	4.4	6.7	4.7

## Economic Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2012	2013	2014	2015	2016	2017	2018	2019
<b>Corporate Franchise Tax (Calendar Year)</b>								
<b>U.S. Corporate Profits (w/ IVA and capital consumption adjustment, less profits from Federal Reserve)</b>								
November 2013	1,947.8	2,012.2	2,097.9	2,209.0	2,311.5	2,371.8	-	-
%Chg	4.8	3.3	4.3	5.3	4.6	2.6		
February 2014	1,947.8	2,027.7	2,167.7	2,270.4	2,352.2	2,412.5	-	-
%Chg	4.8	4.1	6.9	4.7	3.6	2.6		
November 2014	1,960.6	2,024.0	1,994.3	2,183.5	2,282.4	2,295.8	2,331.1	2,427.9
%Chg	8.4	3.2	-1.5	9.5	4.5	0.6	1.5	4.2
February 2015	1,960.6	2,024.0	2,116.7	2,209.6	2,303.6	2,259.0	2,276.9	2,383.0
%Chg	8.4	3.2	4.6	4.4	4.3	-1.9	0.8	4.7
November 2015	1,940.7	1,954.6	1,972.5	1,918.5	1,993.1	2,045.1	2,062.6	2,099.7
%Chg	7.3	0.7	0.9	-2.7	3.9	2.6	0.9	1.8
February 2016	1,940.7	1,954.6	1,972.5	1,862.5	1,857.1	1,970.2	2,020.1	2,036.4
%Chg	7.3	0.7	0.9	-5.6	-0.3	6.1	2.5	0.8
<b>Insurance Gross Premiums Tax (Calendar Year)</b>								
<b>Minnesota Direct Premiums Written: Property and Life (Index: 2003=100.0)</b>								
November 2013	-	-	-	-	-	-	-	-
%Chg								
February 2014	-	-	-	-	-	-	-	-
%Chg								
November 2014	121.521	124.190	129.157	131.687	133.996	135.511	136.147	136.934
%Chg	5.0	2.2	4.0	2.0	1.8	1.1	0.5	0.6
February 2015	121.521	124.190	129.033	134.232	137.048	138.884	140.414	142.209
%Chg	5.0	2.2	3.9	4.0	2.1	1.3	1.1	1.3
November 2015	121.521	124.190	126.037	129.424	132.180	136.152	139.059	142.272
%Chg	5.0	2.2	1.5	2.7	2.1	3.0	2.1	2.3
February 2016	121.521	124.190	126.037	129.280	131.720	134.918	137.551	140.192
%Chg	5.0	2.2	1.5	2.6	1.9	2.4	2.0	1.9
<b>Deed &amp; Mortgage Tax (Fiscal Year)</b>								
<b>U.S. New and Existing Home Sales (Current \$ Value)</b>								
November 2013	937.7	1,140.5	1,334.6	1,509.4	1,574.1	1,548.1	-	-
%Chg	9.7	21.6	17.0	13.1	4.3	-1.7		
February 2014	937.7	1,140.6	1,273.5	1,472.5	1,574.3	1,559.7	-	-
%Chg	9.7	21.6	11.7	15.6	6.9	-0.9		
November 2014	937.7	1,140.9	1,221.3	1,339.7	1,455.0	1,517.0	1,525.4	1,600.0
%Chg	9.5	21.7	7.0	9.7	8.6	4.3	0.6	4.9
February 2015	937.7	1,140.9	1,221.3	1,362.5	1,547.8	1,642.4	1,701.4	1,807.2
%Chg	9.5	21.7	7.0	11.6	13.6	6.1	3.6	6.2
November 2015	940.3	1,142.4	1,221.3	1,341.3	1,481.1	1,634.6	1,748.7	1,796.7
%Chg	9.8	21.5	6.9	9.8	10.4	10.4	7.0	2.7
February 2016	940.3	1,142.2	1,221.3	1,341.3	1,458.2	1,611.1	1,712.1	1,747.0
%Chg	9.8	21.5	6.9	9.8	8.7	10.5	6.3	2.0

\* Series revised in part due to law changes.

\*\* Beginning November 2013 includes rest-of-world profits to account for change in the Minnesota tax base.

\*\*\* Beginning November 2014 primary factor became Minnesota Direct Premiums Written: Property and Life.

**Current Fiscal Year-to-Date 2016**  
**November 2015 Forecast vs. Actual Revenue Comparison**  
 (July 2015 to January 2016)

(\$ in Thousands)	Nov'15 Fcst FYTD 2016	Actual FYTD 2016	\$ Difference Actual-Fcst
<b>Individual Income Tax</b>			
Withholding	4,613,643	4,618,542	4,899
Declarations	1,230,100	1,334,771	104,671
Miscellaneous	329,421	326,672	(2,749)
Gross	6,173,165	6,279,986	106,821
Refunds	177,986	180,500	2,514
<b>Net</b>	5,995,179	6,099,486	104,307
<b>Corporate &amp; Bank Excise</b>			
Declarations	656,360	648,047	(8,314)
Miscellaneous	230,046	246,212	16,165
Gross	886,407	894,258	7,852
Refunds	84,865	83,807	(1,058)
<b>Net</b>	801,542	810,452	8,910
<b>Sales Tax</b>			
Gross	3,201,336	3,186,824	(14,512)
Refunds (including Indian Refunds)	114,541	129,991	15,450
<b>Net</b>	3,086,795	3,056,833	(29,962)
<b>Other Revenues:</b>			
Estate	104,749	117,141	12,392
Liquor/Wine/Beer	47,529	47,520	(9)
Cigarette/Tobacco/Cont Sub	378,268	425,126	46,858
Deed and Mortgage	126,900	127,045	144
Insurance Gross Earnings	169,037	170,439	1,403
Lawful Gambling	23,854	26,909	3,055
Health Care Surcharge	115,450	115,063	(386)
Other Taxes	569	560	(9)
Statewide Property Tax	389,263	392,454	3,191
DHS SOS Collections	25,936	28,177	2,242
Investment Income	7,454	7,604	150
Tobacco Settlement	162,370	162,330	(40)
Departmental Earnings	112,342	114,381	2,039
Fines and Surcharges	38,583	39,322	739
Lottery Revenues	25,531	24,476	(1,055)
Revenues yet to be allocated	1,297	602	(695)
Residual Revenues	95,354	90,873	(4,481)
County Nursing Home, Pub Hosp IGT	3,962	3,396	(566)
Other Subtotal	1,828,447	1,893,419	64,972
Other Refunds	2,873	2,396	(477)
<b>Other Net</b>	1,825,574	1,891,023	65,449
<b>Total Gross</b>	<b>12,089,354</b>	<b>12,254,487</b>	<b>165,133</b>
<b>Total Refunds</b>	<b>380,264</b>	<b>396,693</b>	<b>16,429</b>
<b>Total Net</b>	<b>11,709,090</b>	<b>11,857,794</b>	<b>148,704</b>

**Current Biennium: FY 2016-17 General Fund Budget**  
**November 2015 vs. February 2016 Forecast Comparison**  
(\$ in thousands)

	Nov'15 Fcst FY 2016-17	Feb'16 Fcst FY 2016-17	\$ Change
<b>Actual &amp; Estimated Resources</b>			
Balance Forward From Prior Year	2,103,017	2,103,017	0
Current Resources:			
Tax Revenues	40,904,793	40,439,203	(465,590)
Non-Tax Revenues	1,425,648	1,461,669	36,021
Subtotal - Non-Dedicated Revenue	42,330,441	41,900,872	(429,569)
Dedicated Revenue	1,000	1,000	0
Transfers In	316,942	316,942	0
Prior Year Adjustments	67,628	70,053	2,425
Subtotal - Other Revenue	385,570	387,995	2,425
Subtotal-Current Resources	42,716,011	42,288,867	(427,144)
<b>Total Resources Available</b>	<b>44,819,028</b>	<b>44,391,884</b>	<b>(427,144)</b>
<b>Actual &amp; Estimated Spending</b>			
Higher Education	3,066,924	3,066,924	0
E-12 Education	17,309,230	17,320,117	10,887
Property Tax Aids & Credits	3,355,856	3,351,415	(4,441)
Health & Human Services	12,064,178	11,933,778	(130,400)
Public Safety & Judiciary	2,145,944	2,145,944	0
Transportation	277,639	277,639	0
Environment & Agriculture	461,052	460,701	(351)
Jobs, Economic Development, Housing & Commerce	439,610	439,491	(119)
State Government & Veterans	1,026,629	1,023,683	(2,946)
Debt Service	1,240,853	1,239,580	(1,273)
Capital Projects & Grants	285,318	284,643	(675)
Estimated Cancellations	(20,000)	(20,000)	0
<b>Total Expenditures &amp; Transfers</b>	<b>41,653,232</b>	<b>41,523,914</b>	<b>(129,318)</b>
<b>Balance Before Reserves</b>	<b>3,165,795</b>	<b>2,867,970</b>	<b>(297,826)</b>
Cash Flow Account	350,000	350,000	0
Budget Reserve	1,596,522	1,596,522	0
Stadium Reserve	13,130	21,196	8,066
<b>Budgetary Balance</b>	<b>1,206,143</b>	<b>900,252</b>	<b>(305,892)</b>

**Current Biennium: FY 2016-17 General Fund Budget**  
**February 2016 Forecast By Fiscal Year**  
(\$ in thousands)

	FY 2016	FY 2017	Biennial Total FY 2016-17
<b>Actual &amp; Estimated Resources</b>			
Balance Forward From Prior Year	2,103,017	2,592,234	2,103,017
Current Resources:			
Tax Revenues	19,917,133	20,522,070	40,439,203
Non-Tax Revenues	750,745	710,924	1,461,669
Subtotal - Non-Dedicated Revenue	20,667,878	21,232,994	41,900,872
Dedicated Revenue	500	500	1,000
Transfers In	186,417	130,525	316,942
Prior Year Adjustments	35,132	34,921	70,053
Subtotal - Other Revenue	222,049	165,946	387,995
Subtotal-Current Resources	20,889,927	21,398,940	42,288,867
<b>Total Resources Available</b>	<b>22,992,944</b>	<b>23,991,174</b>	<b>44,391,884</b>
<b>Actual &amp; Estimated Spending</b>			
Higher Education	1,530,668	1,536,256	3,066,924
E-12 Education	8,522,339	8,797,778	17,320,117
Property Tax Aids & Credits	1,662,222	1,689,193	3,351,415
Health & Human Services	5,666,019	6,267,759	11,933,778
Public Safety & Judiciary	1,073,779	1,072,165	2,145,944
Transportation	141,847	135,792	277,639
Environment & Agriculture	275,411	185,290	460,701
Jobs, Economic Development, Housing & Commerce	251,444	188,047	439,491
State Government & Veterans	524,979	498,704	1,023,683
Debt Service	609,285	630,295	1,239,580
Capital Projects & Grants	147,717	136,962	284,643
Estimated Cancellations	(5,000)	(15,000)	(20,000)
<b>Total Expenditures &amp; Transfers</b>	<b>20,400,709</b>	<b>21,123,205</b>	<b>41,523,914</b>
<b>Balance Before Reserves</b>	<b>2,592,234</b>	<b>2,867,970</b>	<b>2,867,970</b>
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,596,522	1,596,522	1,596,522
Stadium Reserve	21,196	21,196	21,196
<b>Budgetary Balance</b>	<b>624,516</b>	<b>900,252</b>	<b>900,252</b>



**Biennial Comparison: FY 2014-15 vs. FY 2016-17 General Fund Budget  
February 2016 Forecast**

(\$ in thousands)

	Actual FY 2014-15	Feb'16 Fcst FY 2016-17	\$ Change	% Change
<b>Actual &amp; Estimated Resources</b>				
Balance Forward From Prior Year	1,711,915	2,103,017	391,102	22.8%
Current Resources:				
Tax Revenues	38,140,503	40,439,203	2,298,700	6.0%
Non-Tax Revenues	1,473,937	1,461,669	(12,268)	-0.8%
Subtotal - Non-Dedicated Revenue	39,614,439	42,900,872	2,286,433	5.8%
Dedicated Revenue	1,291	1,000	(291)	-22.5%
Transfers In	270,354	316,942	46,588	17.2%
Prior Year Adjustments	146,167	70,053	(76,114)	-52.1%
Subtotal - Other Revenue	417,812	387,995	(29,817)	-7.1%
Subtotal-Current Resources	40,032,252	42,888,867	2,256,615	5.6%
<b>Total Resources Available</b>	<b>41,744,167</b>	<b>44,391,884</b>	2,647,717	6.3%
<b>Actual &amp; Estimated Spending</b>				
E-12 Education	15,805,683	17,320,117	1,514,434	9.6%
E-12 Ptx Rec Shift/Aid Payment Shift	812,574	0	(812,574)	-100.0%
E-12 Education	16,618,257	17,320,924	701,860	4.2%
Higher Education	2,833,660	3,066,924	233,264	8.2%
Property Tax Aids & Credits	2,933,178	3,351,415	418,237	14.3%
Health & Human Services	11,620,932	11,933,778	312,846	2.7%
Public Safety & Judiciary	1,978,618	2,145,944	167,326	8.5%
Transportation	270,390	277,639	7,249	2.7%
Environment & Agriculture	394,932	460,701	65,769	16.7%
Jobs, Economic Development, Housing & Commerce	395,916	439,491	43,575	11.0%
State Government & Veterans	930,045	1,023,683	93,638	10.1%
Debt Service	1,243,532	1,239,580	(3,952)	-0.3%
Capital Projects & Grants	410,674	284,643	(126,031)	-30.7%
Other	11,016	0	(11,016)	-100.0%
Estimated Cancellations	0	(20,000)	(20,000)	
<b>Total Expenditures &amp; Transfers</b>	<b>39,641,150</b>	<b>41,523,914</b>	1,882,764	4.7%
<b>Balance Before Reserves</b>	<b>2,103,017</b>	<b>2,867,970</b>	764,953	36.4%
Cash Flow Account	350,000	350,000	-	
Budget Reserve	994,339	1,596,522	602,183	
Stadium Reserve	32,634	21,196	(11,438)	
<b>Budgetary Balance</b>	<b>631,907</b>	<b>900,252</b>	268,345	

**Planning Estimates: FY 2018-19 General Fund Budget  
November 2015 vs. February 2016 Forecast Comparison**  
(\$ in thousands)

	Nov'15 Fcst FY 2018-19	Feb'16 Fcst FY 2018-19	\$ Change
<b>Actual &amp; Estimated Resources</b>			
Balance Forward From Prior Year	3,165,795	2,867,970	(297,826)
Current Resources:			
Tax Revenues	44,975,721	44,058,837	(916,884)
Non-Tax Revenues	1,391,710	1,408,707	16,997
Subtotal - Non-Dedicated Revenue	46,367,431	45,467,544	(899,887)
Dedicated Revenue	1,000	1,000	0
Transfers In	164,095	164,092	(3)
Prior Year Adjustments	67,859	69,963	2,104
Subtotal - Other Revenue	232,954	235,055	2,101
Subtotal-Current Resources	46,600,385	45,702,599	(897,786)
<b>Total Resources Available</b>	<b>49,766,180</b>	<b>48,570,569</b>	<b>(1,195,612)</b>
<b>Actual &amp; Estimated Spending</b>			
Higher Education	3,065,693	3,065,693	0
E-12 Education	18,113,926	18,095,723	(18,203)
Property Tax Aids & Credits	3,443,412	3,453,827	10,415
Health & Human Services	14,286,468	14,255,313	(31,155)
Public Safety & Judiciary	2,152,801	2,152,441	(360)
Transportation	243,072	243,072	0
Environment & Agriculture	391,553	391,375	(178)
Jobs, Economic Development, Housing & Commerce	385,738	386,603	865
State Government & Veterans	1,010,901	1,014,403	3,502
Debt Service	1,206,527	1,206,667	140
Capital Projects & Grants	274,777	273,630	(1,147)
Estimated Cancellations	(20,000)	(20,000)	0
<b>Total Expenditures &amp; Transfers</b>	<b>44,554,868</b>	<b>44,518,747</b>	<b>(36,120)</b>
<b>Balance Before Reserves</b>	<b>5,211,313</b>	<b>4,051,821</b>	<b>(1,159,491)</b>
Cash Flow Account	350,000	350,000	0
Budget Reserve	1,596,522	1,596,522	0
Stadium Reserve	11,710	24,300	12,590
<b>Budgetary Balance</b>	<b>3,253,081</b>	<b>2,080,999</b>	<b>(1,172,081)</b>

**Biennial Comparison: FY 2016-17 vs. FY 2018-19 General Fund Budget  
February 2016 Forecast**

(\$ in thousands)

	Feb'16 Fcst FY 2016-17	Feb'16 Fcst FY 2018-19	\$ Change	% Change
<b>Actual &amp; Estimated Resources</b>				
Balance Forward From Prior Year	2,103,017	2,867,970	764,953	36.4%
Current Resources:				
Tax Revenues	40,439,203	44,058,837	3,619,634	9.0%
Non-Tax Revenues	1,461,669	1,408,707	(52,962)	-3.6%
Subtotal - Non-Dedicated Revenue	41,900,872	45,467,544	3,566,672	8.5%
Dedicated Revenue	1,000	1,000	0	0.0%
Transfers In	316,942	164,092	(152,850)	-48.2%
Prior Year Adjustments	70,000	69,963	(90)	-0.1%
Subtotal - Other Revenue	387,995	235,055	(152,940)	-39.4%
Subtotal-Current Resources	42,288,867	45,702,599	3,413,732	8.1%
<b>Total Resources Available</b>	<b>44,391,884</b>	<b>48,570,569</b>	<b>4,178,685</b>	<b>9.4%</b>
<b>Actual &amp; Estimated Spending</b>				
E-12 Education	17,320,117	18,095,723	775,606	4.5%
Higher Education	3,066,924	3,065,693	(1,231)	0.0%
Property Tax Aids & Credits	3,351,415	3,453,827	102,412	3.1%
Health & Human Services	11,933,778	14,255,313	2,321,535	19.5%
Public Safety & Judiciary	2,145,944	2,152,441	6,497	0.3%
Transportation	277,639	243,072	(34,567)	-12.5%
Environment & Agriculture	460,701	391,375	(69,326)	-15.0%
Jobs, Economic Development, Housing & Commerce	439,491	386,603	(52,888)	-12.0%
State Government & Veterans	1,023,683	1,014,403	(9,279)	-0.9%
Debt Service	1,239,580	1,206,667	(32,913)	-2.7%
Capital Projects & Grants	284,643	273,630	(11,013)	-3.9%
Estimated Cancellations	(20,000)	(20,000)	0	0.0%
<b>Total Expenditures &amp; Transfers</b>	<b>41,523,914</b>	<b>44,518,747</b>	<b>2,994,833</b>	<b>7.2%</b>
<b>Balance Before Reserves</b>	<b>2,867,970</b>	<b>4,051,821</b>	<b>1,183,852</b>	<b>41.3%</b>
Cash Flow Account	350,000	350,000	0	
Budget Reserve	1,596,522	1,596,522	0	
Stadium Reserve	21,196	24,300	3,104	
<b>Budgetary Balance</b>	<b>900,252</b>	<b>2,080,999</b>	<b>1,180,748</b>	

**Biennial Comparison: FY2014-19 General Fund Planning Horizon  
February 2016 Forecast**

(\$ in thousands)

	Actual FY 2014-15	Feb'16 Fcst FY 2016-17	Feb'16 Fcst FY 2018-19
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward From Prior Year	1,711,915	2,103,017	2,867,970
Current Resources:			
Tax Revenues	38,140,503	40,439,203	44,058,837
Non-Tax Revenues	1,473,937	1,461,669	1,408,707
Subtotal - Non-Dedicated Revenue	39,614,439	41,900,872	45,467,544
Dedicated Revenue	1,291	1,000	1,000
Transfers In	270,354	316,942	164,092
Prior Year Adjustments	146,167	70,053	69,963
Subtotal - Other Revenue	417,812	387,995	235,055
Subtotal-Current Resources	40,032,252	42,288,867	45,702,599
<b>Total Resources Available</b>	<b>41,744,167</b>	<b>44,391,884</b>	<b>48,570,569</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	15,805,683	17,320,117	18,095,723
E-12 Ptx Rec Shift/Aid Payment Shift	812,574	0	0
E-12 Education	16,618,257	17,320,117	18,095,723
Higher Education	2,833,660	3,066,924	3,065,693
Property Tax Aids & Credits	2,933,178	3,351,415	3,453,827
Health & Human Services	11,620,932	11,933,778	14,255,313
Public Safety & Judiciary	1,978,618	2,145,944	2,152,441
Transportation	270,390	277,639	243,072
Environment & Agriculture	394,932	460,701	391,375
Jobs, Economic Development, Housing & Commerce	395,916	439,491	386,603
State Government & Veterans	930,045	1,023,683	1,014,403
Debt Service	1,243,532	1,239,580	1,206,667
Capital Projects & Grants	410,674	284,643	273,630
Deficiencies/Other	11,016	0	0
Estimated Cancellations	0	(20,000)	(20,000)
<b>Total Expenditures &amp; Transfers</b>	<b>39,641,150</b>	<b>41,523,914</b>	<b>44,518,747</b>
<b>Balance Before Reserves</b>	<b>2,103,017</b>	<b>2,867,970</b>	<b>4,051,821</b>
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	994,339	1,596,522	1,596,522
Stadium Reserve	32,634	21,196	24,300
Appropriations Carried Forward	94,137	0	0
<b>Budgetary Balance</b>	<b>631,907</b>	<b>900,252</b>	<b>2,080,999</b>

**Historical and Projected Revenue Growth**  
**February 2016 Forecast**  
(\$ in millions)

	Actual FY 2012	Actual FY 2013	Actual FY 2014	Actual FY 2015	Fcst FY 2016	Fcst FY 2017	Fcst FY 2018	Fcst FY 2019	8-Year Average
<b>Individual Income Tax</b>	\$7,972	\$9,013	\$9,660	\$10,403	\$10,716	\$11,146	\$11,815	\$12,401	
\$ change	443	1,040	647	744	312	430	669	586	
% change	5.9%	13.0%	7.2%	7.7%	3.0%	4.0%	6.0%	5.0%	6.8%
<b>Sales Tax</b>	\$4,669	\$4,760	\$5,043	\$5,131	\$5,234	\$5,485	\$5,792	\$6,056	
\$ change	266	91	282	89	102	251	307	264	
% change	6.0%	2.0%	5.9%	1.8%	2.0%	4.8%	5.6%	4.6%	3.7%
<b>Corporate Tax</b>	\$1,044	\$1,281	\$1,278	\$1,455	\$1,324	\$1,227	\$1,241	\$1,303	
\$ change	119	237	(3)	177	(131)	(98)	15	62	
% change	12.9%	22.7%	-0.2%	13.9%	-9.0%	-7.4%	1.2%	5.0%	5.5%
<b>Statewide Property Tax</b>	\$799	\$811	\$836	\$838	\$841	\$847	\$857	\$877	
\$ change	32	12	24	3	3	6	10	20	
% change	4.2%	1.5%	3.0%	0.3%	0.4%	0.8%	1.1%	2.3%	1.7%
<b>Other Tax Revenue</b>	\$1,167	\$1,282	\$1,738	\$1,758	\$1,802	\$1,817	\$1,847	\$1,870	
\$ change	(64)	115	456	20	44	15	30	23	
% change	-5.2%	9.9%	35.6%	1.2%	2.5%	0.8%	1.7%	1.2%	7.4%
<b>Total Tax Revenue</b>	\$15,651	\$17,147	\$18,554	\$19,587	\$19,917	\$20,522	\$21,552	\$22,507	
\$ change	796	1,496	1,407	1,033	330	605	1,030	955	
% change	5.4%	9.6%	8.2%	5.6%	1.7%	3.0%	5.0%	4.4%	5.6%
<b>Non-Tax Revenues</b>	\$774	\$798	\$1,288	\$753	\$751	\$711	\$707	\$702	
\$ change	(34)	24	489	(535)	(2)	(40)	(4)	(5)	
% change	-4.2%	3.1%	61.3%	-41.6%	-0.3%	-5.3%	-0.6%	-0.6%	2.2%
<b>Transfers, All Other</b>	\$486	\$602	\$188	\$82	\$186	\$131	\$82	\$82	
\$ change	(35)	116	(414)	(105)	104	(56)	(48)	0	
% change	-6.8%	23.9%	-68.8%	-56.1%	126.1%	-30.0%	-37.1%	0.0%	-1.9%
<b>Total Revenue</b>	\$16,912	\$18,547	\$20,030	\$20,422	\$20,854	\$21,364	\$22,341	\$23,291	
\$ change	728	1,636	1,483	392	433	509	977	950	
% change	4.5%	9.7%	8.0%	2.0%	2.1%	2.4%	4.6%	4.3%	4.8%

**Historical and Projected Expenditure Growth**  
**February 2016 Forecast**  
(\$ in millions)

	Actual FY 2012	Actual FY 2013	Actual FY 2014	Actual FY 2015	Fcst FY 2016	Fcst FY 2017	Fcst FY 2018	Fcst FY 2019	8-Year Average
<b>E-12 Education</b>	\$6,616	\$8,865	\$8,430	\$8,188	\$8,522	\$8,798	\$8,965	\$9,131	
\$ change	538	2,249	(435)	(242)	334	275	167	166	
% change	8.9%	34.0%	-4.9%	-2.9%	4.1%	3.2%	1.9%	1.9%	7.1%
<b>Higher Education</b>	\$1,275	\$1,295	\$1,381	\$1,452	\$1,531	\$1,536	\$1,535	\$1,531	
\$ change	(82)	20	86	71	78	6	(2)	(3)	
% change	-6.0%	1.5%	6.7%	5.1%	5.4%	0.4%	-0.1%	-0.2%	2.2%
<b>Prop. Tax Aids &amp; Credits</b>	\$1,457	\$1,320	\$1,321	\$1,613	\$1,662	\$1,689	\$1,718	\$1,735	
\$ change	56	(137)	0	292	50	27	29	17	
% change	4.0%	-9.4%	0.0%	22.1%	3.1%	1.6%	1.7%	1.0%	3.6%
<b>Health &amp; Human Services</b>	\$5,385	\$5,208	\$5,430	\$6,191	\$5,666	\$6,268	\$6,997	\$7,259	
\$ change	1,062	(178)	222	761	(525)	602	729	262	
% change	24.6%	-3.3%	4.3%	14.0%	-8.5%	10.6%	11.6%	3.7%	6.9%
<b>Public Safety</b>	\$883	\$958	\$944	\$1,035	\$1,074	\$1,072	\$1,075	\$1,077	
\$ change	(63)	75	(14)	91	39	(2)	3	2	
% change	-6.7%	8.5%	-1.4%	9.6%	3.8%	-0.2%	0.3%	0.2%	2.3%
<b>Debt Service</b>	\$192	\$223	\$620	\$624	\$609	\$630	\$589	\$617	
\$ change	(209)	31	397	4	(14)	21	(41)	28	
% change	-52.1%	16.1%	178.0%	0.6%	-2.3%	3.4%	-6.5%	4.8%	24.0%
<b>All Other</b>	\$772	\$871	\$1,223	\$1,190	\$1,336	\$1,130	\$1,143	\$1,146	
\$ change	(57)	99	352	(32)	146	(207)	13	3	
% change	-6.9%	12.8%	40.4%	-2.6%	12.3%	-15.5%	1.2%	0.2%	6.8%
<b>Total Spending</b>	\$16,580	\$18,739	\$19,348	\$20,293	\$20,401	\$21,123	\$22,022	\$22,497	
\$ change	1,245	2,160	609	945	108	722	899	475	
% change	8.1%	13.0%	3.3%	4.9%	0.5%	3.5%	4.3%	2.2%	5.6%