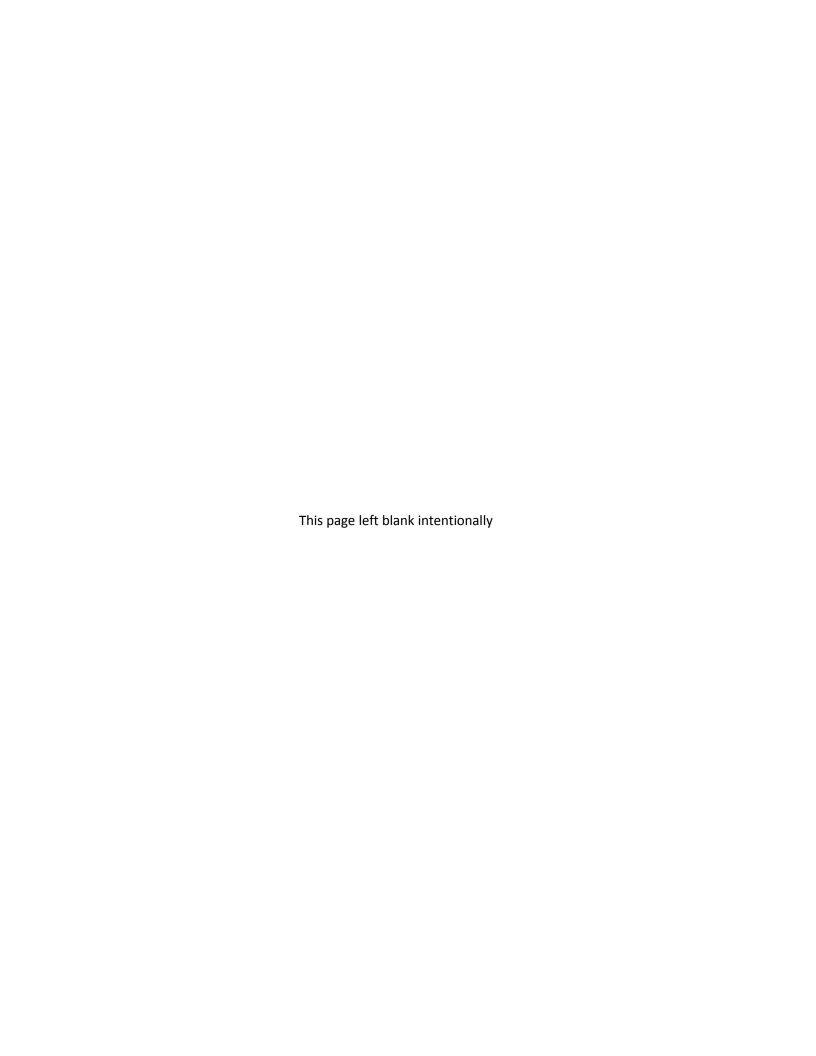


BUDGET AND ECONOMIC FORECAST

FEBRUARY 2018

Produced by Minnesota Management and Budget





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 bienniums.

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).





This page left blank intentionally.



TABLE OF CONTENTS

TABLE OF CONTENTS	v
EXECUTIVE SUMMARY	1
ECONOMIC OUTLOOK	7
U.S. Economic Outlook Minnesota Economic Outlook Council of Economic Advisors' Statement	7 12 22
BUDGET OUTLOOK	26
Current Biennium Planning Estimates	26 28
REVENUE OUTLOOK	30
Current Biennium Planning Estimates	30 35
EXPENDITURE OUTLOOK	37
Current Biennium Planning Estimates	37 40
APPENDIX	42

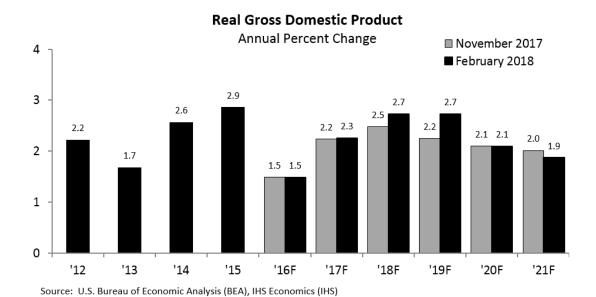


EXECUTIVE SUMMARY

Minnesota's budget and economic outlook has improved since November. A surplus of \$329 million is now projected for the FY 2018-19 biennium. The revenue forecast for the biennium is up \$353 million compared to November estimates. Higher forecasts for all the major tax types contribute to the change. This forecast reflects increased U.S economic growth arising in part from short term stimulus from federal tax law changes. After accounting for recently enacted legislative budget appropriations, spending for the biennium is projected to be \$167 million lower than November estimates. Federal reauthorization of appropriations for the Children's Health Insurance Program (CHIP) is the most significant driver of the lower overall expenditure forecast. The improved budget outlook continues into the FY 2020-21 planning estimates with modest structural balance projected for that biennium.

U.S. Economic Outlook. The short-term outlook for U.S. economic growth has improved since Minnesota's *Budget and Economic Forecast* was last prepared in November 2017. The economic data coming in since November has been solid, with strong consumer spending and business equipment investment, as well as rising employment and disposable income. In addition, Minnesota's macroeconomic consultant, IHS Markit (IHS), has incorporated into their February baseline outlook the impact of federal fiscal stimulus from the Tax Cuts and Jobs Act (TCJA). Relative to November, this change has modestly improved the U.S. economic outlook, sped up expected price and interest rate increases, and significantly raised the forecast for federal deficits.

In IHS's February outlook, consumer spending and business investment contribute more to 2018-2019 real GDP growth relative to November, offsetting an increased drag from net exports. IHS has increased their forecast for real GDP growth in 2018 to 2.7 percent from 2.5 percent in the November forecast. Real GDP is forecast to maintain the 2.7 percent growth rate in 2019 before dropping to 2.1 percent in 2020 and 1.9 percent in 2021. The deceleration in 2020 and 2021 is due to slower growth in both consumer spending and business investment, as the impacts of the TCJA are offset by more aggressive monetary policy.



IHS has increased their forecast for real GDP growth in 2018 to 2.7 percent from 2.5 percent in the November forecast. Real GDP is forecast to maintain the 2.7 percent growth rate in 2019 before dropping to 2.1 percent in 2020 and 1.9 percent in 2021.

While some questions about federal policy have been resolved since our last forecast—specifically, passage of the TCJA—important uncertainties remain. The IHS February forecast was released on February 5, prior to the passage of the federal Bipartisan Budget Act, which raised discretionary spending caps by about \$300 billion over the next two years. The passage of the bill avoided a government shutdown, but it added uncertainty for the period beyond FY 2019 when budget caps are scheduled to return. At this time it remains unclear whether a federal spending and infrastructure bill will emerge from Congress and how those changes will affect the federal deficit and economic activity. In their February outlook, IHS assumes that Congress will pass a law to extend the personal tax provisions of the TCJA before 2026, but failure to do so will create a "fiscal cliff." In addition, possible changes to trade and immigration policies add uncertainty to the economic outlook.

Looking ahead, IHS expects consumer spending to remain the primary contributor to growth in the economy, even as the pace of spending eventually slows. In the short term, consumer spending is well-supported by rising employment, disposable income, and household wealth, with an additional boost to income and spending from lower tax rates under the TCJA. In this forecast, real consumer spending is expected to grow 2.9 percent in 2018 compared to 2.5 percent projected in the November forecast. The improved forecast continues into 2019, with projected growth at 2.4 percent relative to the 2.2 percent projection in the November forecast. However, IHS expects a slowdown in real consumer spending in the years of our planning estimates. Spending growth is forecast to decelerate from 2.4 percent in 2019 to 2.1 percent in both 2020 and 2021. This occurs as consumers shift their focus from spending to saving. In IHS' outlook the personal saving rate rises from 3.6 percent in 2018 to 4.8 percent in 2018 and stays above 5.0 percent through our forecast horizon.

Beyond 2017, total U.S. wage and salary income grows faster in this outlook than IHS had assumed in November. Total wage and salary income is now estimated to have grown 3.1 percent in 2017, down from 3.4 percent in November. The slower growth does not continue into 2018, however, when total wage income grows 4.8 percent in this forecast compared to 4.4 percent in November. Forecast growth for 2019 is now 5.3 percent, up 0.3 percentage point from November, and the growth forecasts for 2020 and 2021 have been raised 0.4 and 0.3 percentage point, respectively, above the prior projection.

The IHS February outlook is similar to that of other macroeconomic forecasters. The February Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 2.8 percent in 2018 compared to IHS's 2.7 percent. For 2019, the Blue Chip Consensus expects growth of 2.4 percent, 0.3 percentage point slower than IHS.

Minnesota Economic Outlook. With the U.S. expansion in the second half of its ninth year, Minnesota's steady economic performance continues. The state is adding jobs at the same rate as the U.S., driving the unemployment rate well below the national rate. In December, Minnesota's seasonally adjusted unemployment rate fell to 3.1 percent, 1.0 percentage point below the national rate and 0.9 percentage points lower than a year ago. It is the lowest unemployment rate the state has seen in more than 17 years. Demand for workers is robust, and job vacancies statewide have grown to a very high level. The ratio of unemployed persons to job vacancies has hovered between 1.0 and 1.2 for the last three years, but it is now 0.9, indicating that there are slightly fewer unemployed job-seekers than open positions across the state.

Strong labor demand has allowed the state to continue to add jobs, even as available workers have become scarce. In the 12 months ending in December 2017 employers added more than 44,000 jobs, bringing Minnesota's annual employment growth to 1.5 percent, the same pace as the U.S. over that period. This employment growth coincides with a gradually increasing labor force participation rate (LFPR). Minnesota's LFPR reached 70.6 percent in December, which is 1.3 percentage points higher than a year ago, 8 percentage points above the national rate, and the second highest among U.S. states. In this forecast we expect employment to grow of 1.3 and 1.7 percent in 2018 and 2019. We expect this employment growth, combined with moderate acceleration in wages per worker, to lead total wage and salary income to grow 4.8 to 5.5 percent in 2018 and 2019, respectively.

Budget Outlook: Current Biennium. When the last *Budget and Economic Forecast* was released in November, a deficit of \$188 million was projected for the FY 2018-19 biennium. An improved revenue forecast and reduced spending estimates add \$518 million to the bottom line resulting in a projected budgetary balance of \$329 million in the current biennium.

Current Biennium: FY 2018-19 General Fund Budget

Forecast Comparison

(\$ in millions)	November 2017 Forecast	February 2018 Forecast	\$ Change	% Change
Beginning Balance	\$3,333	\$3,333	\$ -	0.0%
Revenues	44,447	44,801	353	0.8
Expenditures	45,955	45,789	(167)	(0.4)
Cash Flow & Budget Reserves	1,958	1,958	-	0.0
Stadium Reserve	55	58	2	4.3
Forecast Balance	\$(188)	\$329	\$518	

Revenues. Total general fund revenues for FY 2018-19 are now forecast to be \$44.801 billion, \$353 million (0.8 percent) more than the November 2017 forecast. Total tax revenues for the biennium are forecast to be \$42.964 billion, \$340 million (0.8 percent) above the prior estimate. Higher expected individual, sales, corporate, and other tax and non-tax revenue all contribute to the change. Forecast revenue from the state general property tax is slightly lower than in the November forecast. This forecast reflects increased state income and corporate tax revenues expected to arise from taxpayer responses to federal tax law changes in the Tax Cuts and Jobs Act (TCJA).

Current Biennium: FY 2018-19 General Fund Revenues

Forecast Comparison

	November 2017	February 2018	\$	%
(\$ in millions)	Forecast	Forecast	Change	Change
Individual Income Tax	\$23,690	\$23,715	\$25	0.1%
General Sales Tax	11,144	11,263	119	1.1
Corporate Franchise Tax	2,466	2,596	131	5.3
State General Property Tax	1,630	1,621	(9)	(0.5)
Other Tax Revenue	3,695	3,768	73	2.0
Total Tax Revenues	\$42,624	42,964	340	0.8%
Non-Tax Revenues	1,460	1,475	15	1.0
Other Resources	363	362	(1)	(0.4)
Total Revenues	\$44,447	\$44,801	\$353	0.8%

Individual income tax receipts are now forecast to be \$25 million (0.1 percent) more than the prior estimate. This change is due to higher forecast growth in wage income from 2017 to 2019, which offsets a lower estimate of tax liability for 2016, the base year for this forecast. In addition, this forecast reflects increased state income tax revenues expected to arise from taxpayer response to federal tax law changes in the TCJA. These changes are estimated to add about \$137 million to income tax revenues in FY 2018-19.

General sales tax revenue in FY2018-19 is now forecast to be \$119 million (1.1 percent) more than the November forecast. Higher expected gross sales tax receipts and a lower forecast of refunds both contribute to the change. Gross sales tax receipts so far in FY 2018 are lower than forecast in November. However, this shortfall is more than offset by a higher forecast for taxable sales. In this forecast, we expect our estimate of the taxable sales base to grow 1.1 percentage points faster in 2018 and 1.6 percentage points faster in 2019 than we had assumed in November.

The corporate franchise tax is forecast to generate \$131 million (5.3 percent) more than the prior estimate. Higher forecast gross corporate payments and lower forecast refunds both contribute to the change. In addition, this forecast reflects increased state corporate tax revenues expected to arise from taxpayer response to federal tax law changes in the TCJA. These changes are estimated to add \$19 million to corporate tax revenues in FY 2018-19.

Other tax revenue is now expected to be \$73 million (2.0 percent) more than the November forecast. Among other taxes, the estate tax shows the largest dollar amount change, \$45.6 million (16.1 percent) more than the November forecast. This change reflects higher than expected estate tax receipts so far in FY 2018. The forecast for cigarette and tobacco taxes is \$43.7 million (3.5 percent) lower than the November forecast. This change is due to sellers shifting their stamp purchases from FY 2018 into FY 2017.

Expenditures. Spending in the current biennium is now forecast to be \$45.789 billion, \$167 million (0.4 percent) lower than November estimates. E-12 education is expected to be \$54 million (0.3 percent) lower largely due to a lower forecast special education and compensatory aid spending. Health and Human Services (HHS) spending is expected to be \$254 million (1.8 percent) lower than November forecast estimates. November HHS spending estimates included increased state obligations due to a federal funding lapse for the Children Health Insurance Program (CHIP). In January 2018, the federal government appropriated funding for CHIP, which results in \$225 million in lower state general fund obligations in FY 2018-19.

Current Biennium: FY 2018-19 General Fund Expenditures Change From November 2017 Forecast

	February 2018	\$	%
(\$ in millions)	Forecast	Change	Change
E-12 Education	\$18,835	\$(54)	(0.3)%
Property Tax Aids & Credits	3,656	8	0.2
Health & Human Services	13,618	(254)	(1.8)
Debt Service	1,138	(5)	(0.4)
All Other	8,542	138	1.6
Total Expenditures	\$45,789	\$(167)	(0.4)%

Spending in all other areas of the general fund budget, including property tax aids and credits and debt service, is \$141 million (1.1 percent) higher than November estimates. The majority of this increase, \$136 million, is due to two funding changes incorporated in this forecast: a \$114 million net spending impact of legislative operating appropriations enacted in the first week of the 2018 legislative session and a \$22 million general fund transfer to the clean water fund triggered by the positive balance projected in this forecast.

Budget Outlook: Planning Estimates. The forecast for higher revenue and lower spending compared to November in the current biennium continues into the planning estimates. Revenue in FY 2020-21 is now projected to be \$48.136 billion, \$490 million (1.0 percent) higher than November estimates. Spending in the planning years is largely unchanged from November and is now projected to be \$47.823 billion, \$161 million (0.3 percent) lower than prior estimates.

Expenditure projections in the next biennium assume that current funding levels and policies continue unchanged, adjusted 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 current biennium nor other one-time impacts such as changes to reserve balances. In November, a structural imbalance of \$337 million was projected for the FY 2020-21 biennium. This forecast now projects a positive structural balance of \$313 million, an improvement of \$650 million.

General Fund Planning Estimates: FY 2020-21 Biennium Forecast Comparison

(\$ in millions)	November 2017	February 2018	\$	%
	Forecast	Forecast	Change	Change
Forecast Revenues Projected Spending	\$47,646	\$48,136	\$489	1.0%
	47,983	47,823	(160)	(0.3)
Structural Balance	\$(337)	\$313	\$650	
Estimated Inflation (CPI) Applied to projected Spending	\$1,311	\$1,224	\$(87)	

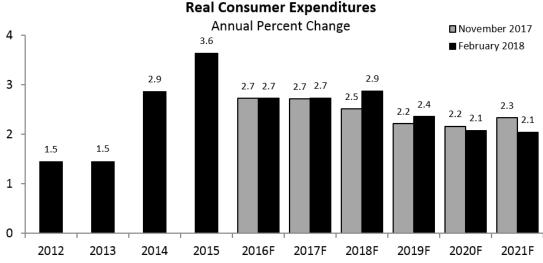
The planning estimates are not intended to predict surpluses or deficits two or more years into the future. Rather their purpose is to assist in determining how well ongoing expenditures are likely to match future revenues based on trends in the economy and the level of spending that is needed to maintain programs and services. The FY 2020-21 planning estimates provide an important baseline against which the longer-term impacts and affordability of budget decisions can be measured.



ECONOMIC OUTLOOK

U.S. Economic Outlook

The short-term outlook for U.S. economic growth has improved since Minnesota's *Budget and Economic Forecast* was last prepared in November 2017. The economic data coming in since November has been solid, with strong consumer spending and business equipment investment, as well as rising employment and disposable income. In addition, Minnesota's macroeconomic consultant, IHS Markit (IHS), has incorporated into their February baseline outlook the impact of federal fiscal stimulus from the Tax Cuts and Jobs Act (TCJA). Relative to November, this change has modestly improved the U.S. economic outlook, sped up expected price and interest rate increases, and significantly raised the forecast for federal deficits. IHS now expects the TCJA to bring the federal deficit to \$1 trillion by FY 2020.



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

IHS expects consumer spending to remain the primary contributor to growth in the economy, even as the pace of spending eventually slows. In the short term, consumer spending is well-supported by rising employment, disposable income, and household wealth, with an additional boost to income and spending from lower tax rates under the TCJA.

In IHS's February outlook, consumer spending and business investment contribute more to 2018-2019 real GDP growth relative to November, offsetting an increased drag from net exports. IHS has increased their forecast for real GDP growth in 2018 to 2.7 percent from 2.5 percent in the November forecast. Real GDP is forecast to maintain the 2.7 percent growth rate in 2019 before dropping to 2.1 percent in 2020 and 1.9 percent in 2021. The deceleration in 2020 and 2021 is

due to slower growth in both consumer spending and business investment, as the impacts of the TCJA are offset by more aggressive monetary policy.

While some questions about federal policy have been resolved since our last forecast—specifically, passage of the TCJA—important uncertainties remain. The IHS February forecast was released on February 5, prior to the passage of the federal Bipartisan Budget Act, which raised discretionary spending caps by about \$300 billion over the next two years. The passage of the bill avoided a government shutdown, but it added uncertainty for the period beyond FY 2019 when budget caps are scheduled to return. At this time it remains unclear whether a federal spending and infrastructure bill will emerge from Congress and how those changes will affect the federal deficit and economic activity. In their February outlook, IHS assumes that Congress will pass a law to extend the personal tax provisions of the TCJA before 2026; failure to do so will create a "fiscal cliff." In addition, possible changes to trade and immigration policies add uncertainty to the economic outlook.

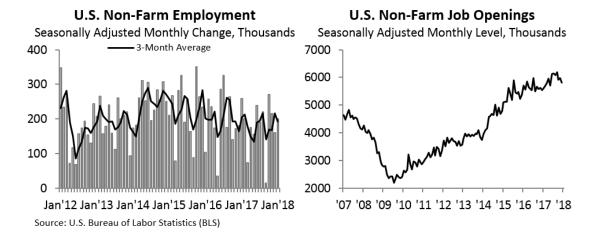
Looking ahead, IHS expects consumer spending to remain the primary contributor to growth in the economy, even as the pace of spending eventually slows. In the short term, consumer spending is well-supported by rising employment, disposable income, and household wealth, with an additional boost to income and spending from lower tax rates under the TCJA. In this forecast, real consumer spending is expected to grow 2.9 percent in 2018 compared to 2.5 percent projected in the November forecast. The improved forecast continues into 2019, with projected growth at 2.4 percent relative to the 2.2 percent projection in the November forecast. However, IHS expects a slowdown in real consumer spending in the years of our planning estimates. Spending growth is forecast to decelerate from 2.4 percent in 2019 to 2.1 percent in both 2020 and 2021. This occurs as consumers shift their focus from spending to saving. In IHS' outlook the personal saving rate rises from 3.6 percent in 2018 to 4.8 percent in 2018 and stays above 5.0 percent through our forecast horizon.

IHS produced their current forecast prior to the significant stock market decline of early February. Since then, IHS has warned of a negative wealth effect, which would slow consumer spending, if the market remains 10 percent below its peak. In their forecast, however, they expect the S&P500 to end the year only 3 percent below its peak.

As steady employment growth continues to absorb the remaining labor market slack, earnings are improving. According to the Bureau of Labor Statistics (BLS), the establishment payroll survey showed that U.S. employers added a seasonally adjusted 200,000 jobs in January. The seasonally adjusted unemployment rate dropped to 4.1 at the end of 2017 and remained there through January. Tax cuts and stronger economic growth are expected to cut unemployment to 3.8 percent by the end of 2018 and to 3.5 percent by late 2019, both well below IHS's estimate of the non-accelerating inflation rate of unemployment (NAIRU, or full-employment level of unemployment). Average hourly earnings of private sector employees grew 2.9 percent over the 12 months ending in January, higher than the increases seen last year, with steady growth above the rate of inflation.

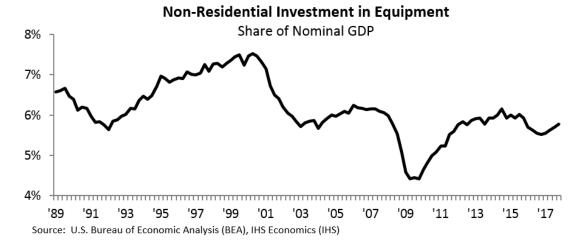
Beyond 2017, total U.S. wage and salary income grows faster in this outlook than IHS had assumed in November. Total wage and salary income is now estimated to have grown 3.1 percent in 2017, down from 3.4 percent in November. The slower growth does not continue into 2018, however, when total wage income grows 4.8 percent in this forecast compared to 4.4 percent in November.

Forecast growth for 2019 is now 5.3 percent, up 0.3 percentage points from November, and the growth forecasts for 2020 and 2021 have been raised 0.4 and 0.3 percentage points, respectively, above the prior projection.



As steady employment growth continues to absorb the remaining labor market slack, earnings are improving. U.S. employers added a seasonally adjusted 200,000 jobs in January. Average hourly earnings of private sector employees grew 2.9 percent over the 12 months ending in January, exhibiting steady growth above the rate of inflation.

Overall business investment finished strong in 2017, driven by surges in spending on transportation and "other" equipment, and bringing 2017 growth to 4.7 percent, 0.3 percentage points above IHS's November estimate. IHS expects lower growth in early 2018, but still revised its business investment growth for 2018 to 5.3 percent, up from 3.6 percent in the November forecast, due to favorable financing conditions and a firming economy. This is a positive factor for workers, as some types of equipment investment can boost worker productivity, which can put upward pressure on compensation.



Overall business investment finished strong in 2017, driven by surges in spending on equipment, and bringing 2017 growth to 4.7 percent. This is a positive factor for workers, as some types of equipment investment can boost worker productivity, which can put upward pressure on compensation.

The world economy is showing more strength than it has in years, with no major country currently in recession and the synchronization of growth rates across countries. Depreciation in the U.S. dollar boosted U.S. exports in 2017 to 3.4 percent real growth, while steady U.S. demand fueled import growth that averaged 3.9 percent in 2017. The balance of these two factors tipped towards imports, increasing the country's trade deficit to \$556.0 billion in 2017 and shaving 0.18 percentage points off 2017 GDP growth. IHS's forecasts that trade will cut 0.39 percentage points from 2018 growth, with smaller drags in later years.

Significant uncertainty remains about U.S trade policy. Negotiations of the North American Free Trade Agreement will continue into 2018 with some controversial topics still unresolved as of the latest round of negotiations in January. IHS expects the upcoming 7th round of negotiations beginning in late February to be unsuccessful. The lack of an agreement reduces clarity regarding the relationships with two of the country's largest trading partners. The possibility of protectionist trade policy also remains a concern for IHS, as well as the Trump administration's case-by-case approach to trade actions.

Net Trade Contribution to Real GDP Growth Percent Contribution 0.5% -0.5% -1.0% -1.5% -2.0% 1Q | 2Q | 3Q | 4Q | 2019 | 2020

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

The world economy is showing more strength than it has in years, with no major country currently in recession and the synchronization of growth rates across countries. Depreciation in the U.S. dollar boosted U.S. exports in 2017 to 3.4 percent real growth, while steady U.S. demand fueled import growth that averaged 3.9 percent in 2017. The possibility of protectionist trade policy remains a concern.

The Federal Reserve is expected to continue with gradual monetary policy normalization as the labor market tightens and inflation moves towards the Fed's target of 2 percent. Since November, IHS has raised their forecast for inflation as measured by the Consumer Price Index (CPI) and the CPI excluding food and energy. Also since November, IHS has raised their expectation for the pace of increases in the upper bound of the federal funds rate target and raised their assumed equilibrium level of rates. The November 2017 baseline outlook expected the federal funds rate to reach 2.50 percent by the end of 2019 and a steady level of 3.20 percent in 2021. IHS now

expects the federal funds rate to reach 3.0 percent by the end of 2019 and rise to a plateau of 3.45 percent by 2020.

IHS notes the risk in the current interaction between fiscal and monetary policy. Fiscal stimulus, whether as a result of the TCJA or the federal spending deal, at a time when the economy is essentially at full employment, could spark inflation. If prices rise faster than the Fed prefers, the Fed will likely act to raise interest rates faster than is assumed in this outlook, and the economy will grow more slowly than expected. IHS expects four rate hikes in 2018, up from three hikes in its November forecast, with additional hikes in 2019 and 2020.

The IHS February outlook is similar to that of other macroeconomic forecasters. The February Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 2.8 percent in 2018 compared to IHS's 2.7 percent. For 2019, the Blue Chip Consensus expects growth of 2.4 percent, 0.3 percentage points slower than IHS.

Forecast risks: Even aside from U.S. policy uncertainty, there are risks inherent in this forecast. First, annual real GDP growth of 1.9-2.7 percent as is expected in this forecast is below the 3.1 percent average annual growth that we saw during the 20 years prior to the Great Recession. Slow growth makes the economy more vulnerable to shocks, reducing its capacity to weather an unexpected event. Second, the current economic recovery and expansion period is now into its ninth year, well beyond the average length of post-World War II U.S. expansions. While simple old age is not thought to end an expansion, the longer the cycle gets, the lower the probability of continuing to avoid a downturn.

Finally, the IHS February economic outlook depends on several key forecast assumptions. If these assumptions do not materialize, the economic outcome will differ from IHS's baseline forecast. (1) IHS estimates the TCJA will boost annual real GDP growth 0.1 to 0.3 percentage points annually through 2021. (2) IHS expects the Federal Reserve to implement four federal funds rate hikes in 2018, followed by three more in 2019. (3) The February outlook assumes global growth will hold steady, with annual real GDP growth for major-currency U.S. trading partners averaging 1.8 percent over the next 10 years. (4) IHS expects oil prices to increase over the course of 2018, decrease in 2019, and increase again for the remainder of the forecast. (5) IHS assumes the dollar will reclaim some of its lost strength in exchange rate, peaking in 2021 before declining through the end of the forecast period.

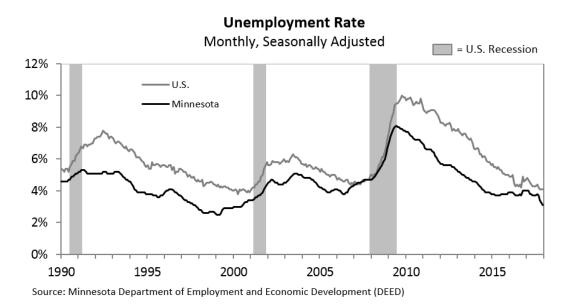
IHS assigns a probability of 65 percent to the February baseline outlook. They assign a 20 percent probability to a more pessimistic scenario, in which a correction to commercial real estate prices and declining consumer and business confidence trigger a two-quarter recession in 2018. They assign a 15 percent probability to a more optimistic scenario, in which a pick-up in home purchases by young adults fuels the housing market, and improvements in productivity boost incomes and, consequently, consumer spending.

Minnesota Economic Outlook

With the U.S. expansion in the second half of its ninth year, Minnesota's steady economic performance continues. The Bureau of Economic Analysis (BEA) reports the state's real GDP rose 2.1 percent in 2016, 0.6 percentage points higher than the nation, and that rate of growth continued into the third quarter of 2017. Economic indicators suggest Minnesota's labor market is tight. The state continues to add jobs at a steady pace, driving the unemployment rate well below the U.S. rate. Together, high demand for labor and low unemployment continue to support growth in total Minnesota wage income and wages per worker.

Labor Market. A robust demand for workers together with low unemployment continue to tighten Minnesota's labor market. Statewide, there are now more job vacancies than the number of unemployed job-seekers, and other indicators, such as initial claims for unemployment insurance and temporary help employment, are at levels consistent with a firm labor market. In December, Minnesota's seasonally adjusted unemployment rate fell to 3.1 percent, 1.0 percentage point below the national rate and 0.9 percentage points lower than a year ago. It is the lowest unemployment rate the state has seen in more than 17 years.

Strong labor demand has allowed the state to continue to add jobs, even as available workers have become scarce. In the 12 months ending in December 2017 employers added more than 44,000 jobs, bringing Minnesota's annual job growth to 1.5 percent, the same as the U.S. rate over that period. In this forecast we expect about 39,000 additional jobs in 2018 and 49,000 in 2019, for employment growth rates of 1.3 and 1.7 percent in those years. We expect this employment growth, combined with moderate acceleration in wages per worker, to lead total wage and salary income to grow 4.6 to 5.5 percent per year over the forecast period.



Minnesota continues to add jobs at a steady rate, driving the unemployment rate well below the U.S. rate. In December Minnesota's seasonally adjusted unemployment rate fell to 3.1 percent, 1.0 percentage point below the national rate and 0.9 percentage points lower than a year ago.

Forecast Comparison: Minnesota & U.S.

Forecast 2017 to 2021, Calendar Years

				2015		2010			
		2014	2015	2016	2017	2018	2019	2020	2021
		Total Non-I	-arm Payro	ii Employm	ent (Thous	anusj			
Minne									
F	ebruary 2018	2,813	2,856	2,896	2,944	2,983	3,032	3,070	3,092
_	%Chg	1.4	1.5	1.4	1.7	1.3	1.7	1.2	0.7
N	November 2017	2,813	2,856	2,896	2,949	2,990	3,023	3,051	3,075
	%Chg	1.4	1.5	1.4	1.8	1.4	1.1	0.9	0.8
U.S.									
F	ebruary 2018	138,937	141,819	144,349	146,623	148,956	151,573	153,518	154,420
_	%Chg	1.9	2.1	1.8	1.6	1.6	1.8	1.3	0.6
N	November 2017	138,937	141,813	144,306	146,440	148,293	149,805	150,984	151,791
	%Chg	1.9	2.1	1.8	1.5	1.3	1.0	0.8	0.5
		Wage and Salary	Disbursem	ents (Billio	ons of Curre	ent Dollars)			
Minne	esota								
F	ebruary 2018	145.9	153.9	158.3	164.6	172.5	181.9	191.1	199.9
	%Chg	4.5	5.5	2.8	4.0	4.8	5.5	5.0	4.6
N	November 2017	145.9	153.9	158.3	165.1	172.8	180.9	188.8	197.1
	%Chg	4.5	5.5	2.8	4.3	4.7	4.7	4.4	4.4
U.S.									
F	ebruary 2018	7,477	7,859	8,085	8,340	8,737	9,200	9,671	10,147
	%Chg	5.1	5.1	2.9	3.1	4.8	5.3	5.1	4.9
N	November 2017	7,477	7,859	8,085	8,364	8,732	9,173	9,603	10,045
	%Chg	5.1	5.1	2.9	3.4	4.4	5.0	4.7	4.6
	/ocrig	5.1	5.1	2.9	3.4	4.4	5.0	4.7	4.0
	70CHg	Non-Wage Pei	-	-	-		3.0	4.7	4.0
Minne			-	-	-		3.0	4.7	4.0
	esota	Non-Wage Pei	rsonal Incor	me (Billions	of Current	Dollars)			
	esota February 2018	Non-Wage Pei	rsonal Incor	me (Billions	of Current	Dollars)	144.7	152.5	159.1
F	esota February 2018 %Chg	Non-Wage Per 122.6 5.3	126.5 3.2	129.0 2.0	132.2 2.5	136.8 3.5	144.7 5.8	152.5 5.4	159.1 4.3
F	esota February 2018 %Chg November 2017	Non-Wage Per 122.6 5.3 122.6	126.5 3.2 126.5	129.0 2.0 129.0	132.2 2.5 132.3	136.8 3.5 136.9	144.7 5.8 142.9	152.5 5.4 149.7	159.1 4.3 157.1
F N	esota February 2018 %Chg	Non-Wage Per 122.6 5.3	126.5 3.2	129.0 2.0	132.2 2.5	136.8 3.5	144.7 5.8	152.5 5.4	159.1 4.3 157.1
F N U.S.	esota February 2018 %Chg November 2017 %Chg	122.6 5.3 122.6 5.3	126.5 3.2 126.5 3.2	129.0 2.0 129.0 2.0	132.2 2.5 132.3 2.5	136.8 3.5 136.9 3.5	144.7 5.8 142.9 4.4	152.5 5.4 149.7 4.7	159.1 4.3 157.1 5.0
F N U.S.	esota February 2018 %Chg November 2017 %Chg February 2018	122.6 5.3 122.6 5.3 7,341	126.5 3.2 126.5 3.2 7,694	129.0 2.0 129.0 2.0 7,843	132.2 2.5 132.3 2.5 8,077	136.8 3.5 136.9 3.5 8,372	144.7 5.8 142.9 4.4 8,822	152.5 5.4 149.7 4.7 9,262	159.1 4.3 157.1 5.0 9,686
N U.S.	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg	Non-Wage Per 122.6 5.3 122.6 5.3 7,341 5.5	126.5 3.2 126.5 3.2 7,694 4.8	129.0 2.0 129.0 2.0 7,843 1.9	132.2 2.5 132.3 2.5 8,077 3.0	136.8 3.5 136.9 3.5 8,372 3.7	144.7 5.8 142.9 4.4 8,822 5.4	152.5 5.4 149.7 4.7 9,262 5.0	159.1 4.3 157.1 5.0 9,686 4.6
N U.S.	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017	122.6 5.3 122.6 5.3 7,341 5.5 7,341	126.5 3.2 126.5 3.2 7,694 4.8 7,694	129.0 2.0 129.0 2.0 7,843 1.9 7,843	132.2 2.5 132.3 2.5 8,077 3.0 8,064	136.8 3.5 136.9 3.5 8,372 3.7 8,342	144.7 5.8 142.9 4.4 8,822 5.4 8,726	152.5 5.4 149.7 4.7 9,262 5.0 9,153	159.1 4.3 157.1 5.0 9,686 4.6 9,619
U.S.	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8	129.0 2.0 129.0 2.0 7,843 1.9 7,843	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4	144.7 5.8 142.9 4.4 8,822 5.4	152.5 5.4 149.7 4.7 9,262 5.0	159.1 4.3 157.1 5.0 9,686 4.6 9,619
U.S. F	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg	122.6 5.3 122.6 5.3 7,341 5.5 7,341	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8	129.0 2.0 129.0 2.0 7,843 1.9 7,843	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4	144.7 5.8 142.9 4.4 8,822 5.4 8,726	152.5 5.4 149.7 4.7 9,262 5.0 9,153	159.1 4.3 157.1 5.0 9,686 4.6 9,619
U.S. F	esota February 2018	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 billars)	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1
U.S. F	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8 nal Income	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 billars)	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1
U.S. F	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg February 2018 %Chg	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso 268.5 4.9	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8 nal Income	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 bllars) 309.3 4.2	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1 359.0 4.5
U.S. F	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso 268.5 4.9 268.5	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8 nal Income 280.4 4.4 280.4	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 biliars) 309.3 4.2 309.7	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6 326.6 5.6 323.8	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9 343.6 5.2 338.5	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1 359.0 4.5 354.2
U.S. N Minne	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg February 2018 %Chg	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso 268.5 4.9	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8 nal Income	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 bllars) 309.3 4.2	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1 359.0 4.5 354.2
V.S. Minne N U.S.	esota February 2018	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso 268.5 4.9 268.5	7,694 4.8 7,694 4.8 110come 280.4 4.4 280.4 4.4	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of 287.2 2.4 287.2 2.4	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do 296.8 3.3 297.4 3.5	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 billars) 309.3 4.2 309.7 4.2	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6 326.6 5.6 323.8 4.5	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9 343.6 5.2 338.5 4.5	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1 359.0 4.5 354.2 4.6
Minne N U.S.	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg February 2018 %Chg February 2018	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso 268.5 4.9 268.5 4.9	7,694 4.8 7,694 4.8 1100me 280.4 4.4 280.4 4.4	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of 287.2 2.4 287.2 2.4 15,929	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do 296.8 3.3 297.4 3.5	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 bilars) 309.3 4.2 309.7 4.2	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6 326.6 5.6 323.8 4.5	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9 343.6 5.2 338.5 4.5	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1 359.0 4.5 354.2 4.6
Minne F	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso 268.5 4.9 268.5 4.9 14,818 5.3	126.5 3.2 126.5 3.2 7,694 4.8 7,694 4.8 1100me 280.4 4.4 280.4 4.4 15,553 5.0	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of 287.2 2.4 287.2 2.4 15,929 2.4	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do 296.8 3.3 297.4 3.5	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 billars) 309.3 4.2 309.7 4.2 17,109 4.2	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6 326.6 5.6 323.8 4.5	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9 343.6 5.2 338.5 4.5	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1 359.0 4.5 354.2 4.6
Minne F	esota February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg November 2017 %Chg February 2018 %Chg February 2018 %Chg February 2018	122.6 5.3 122.6 5.3 7,341 5.5 7,341 5.5 Total Perso 268.5 4.9 268.5 4.9	7,694 4.8 7,694 4.8 1100me 280.4 4.4 280.4 4.4	129.0 2.0 129.0 2.0 7,843 1.9 7,843 1.9 (Billions of 287.2 2.4 287.2 2.4 15,929	132.2 2.5 132.3 2.5 8,077 3.0 8,064 2.8 Current Do 296.8 3.3 297.4 3.5	136.8 3.5 136.9 3.5 8,372 3.7 8,342 3.4 bilars) 309.3 4.2 309.7 4.2	144.7 5.8 142.9 4.4 8,822 5.4 8,726 4.6 326.6 5.6 323.8 4.5	152.5 5.4 149.7 4.7 9,262 5.0 9,153 4.9 343.6 5.2 338.5 4.5	159.1 4.3 157.1 5.0 9,686 4.6 9,619 5.1 359.0 4.5 354.2 4.6

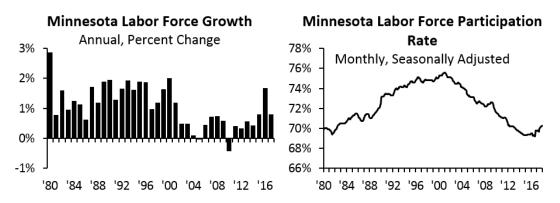
According to DEED, job vacancies statewide have grown to a very high level: about 123,000 in the second quarter of 2017, an increase of 26 percent over the second quarter of 2016. Minnesota's job vacancy rate is now 4.5 percent, or 4.5 openings per 100 jobs. The ratio of unemployed persons to job vacancies statewide has hovered between 1.0 and 1.2 for the last three years, but it is now less than one at 0.9. That means there are now fewer unemployed job-seekers than open positions across the state.

Minnesota Labor Market Indicators Thousands 250 ■Unemployment ■ Job Vacancies 200 150 100 50 0 2Q 4Q 2Q 4Q 2Q 4Q 2Q 4Q 2Q 4Q 2Q 4Q '11 '07 '08 '09 '10 '12 '13 '14

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

Job vacancies statewide have grown to a very high level: about 123,000 in the second quarter of 2017, an increase of 26 percent over the second quarter of 2016. The ratio of unemployed persons to job vacancies statewide has hovered between 1.0 and 1.2 for the last three years, but there are now fewer unemployed job-seekers than open positions across the state.

The industries with the largest numbers of vacancies are Health Care and Social Assistance, Accommodation and Food Service, Retail Trade, and Manufacturing. DEED also reports that about 60.1 percent of job vacancies were located in the Twin Cities seven-county area and the remaining 39.9 percent were in Greater Minnesota. The ratio of unemployed workers to vacancies is 0.8 in the Twin Cities and 1.1 in Greater Minnesota. Persistently high job vacancies suggest that the state's employers are finding it increasingly difficult to fill positions.



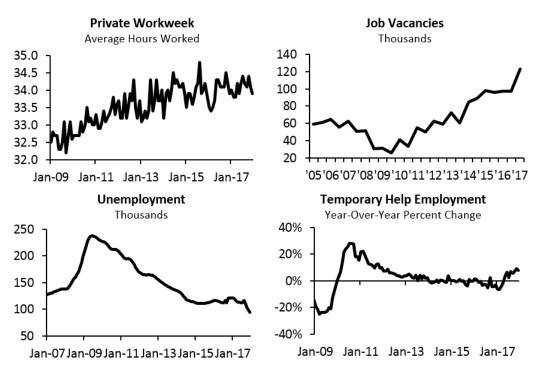
Source: Minnesota Department of Employment and Economic Development (DEED), Minnesota Management & Budget (MMB)

Improved job prospects and wage growth have contributed to high labor force participation. In December 2017, Minnesota's labor force participation rate was 70.6 percent, nearly 8 percentage points higher than the national average and second highest among U.S. states.

The large number of open positions improves the prospects for job-seekers, and better prospects may have contributed to a gradual increase in Minnesota's labor force participation rate. In December 2017, the proportion of the population age 16 and older that is employed or actively looking for work was 70.6 percent, 1.3 percentage points higher than in December 2016, second highest among U.S. states, and nearly 8 percentage points above the national rate. It is remarkable for this increase to occur at the same time as baby boomer retirements continue, but that demographic reality also means that the high labor force participation rate is likely not sustainable.

Other indicators paint a positive picture for Minnesota job-seekers and -switchers. According to DEED, Minnesotans filing new claims for unemployment benefits declined in December to 27,880, 11.7 percent lower than one year prior. Lower initial claims indicate a low rate of layoffs. In the first quarter of 2017, temporary help jobs were gradually decreasing. In the subsequent three quarters, however, this indicator has been increasing, and in December the year-over-year growth rate was 8.0 percent. In December the average workweek in the private sector declined 0.2 hours, but maintained its level from a year ago, and the long-term trend in this indicator remains positive.

Minnesota Leading Indicators

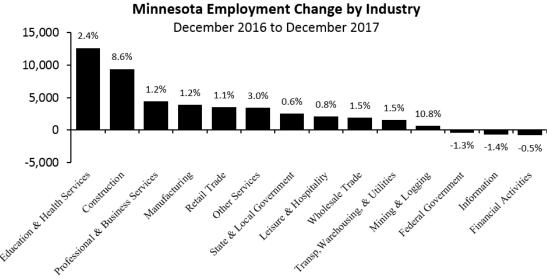


Source: Minnesota Department of Employment and Economic Development (DEED)

The state's tight labor market is characterized by strong demand for workers and low unemployment. Lower initial unemployment claims also indicate a low layoff rate and economic stability. These are positive signs for job seekers in Minnesota.

Minnesota's employment gains continue to be broad-based. Over the last year Minnesota added jobs in nine of the eleven major industry sectors, with the largest gains in education and health

services (up 12,626 jobs), construction (up 9,394), trade, transportation and utilities (up 7,027) and professional and business services (up 4,424). Additional industries that showed a moderate growth are: manufacturing (up 3,889), other services (up 3,452), government (up 2,120), leisure and hospitality (up 2,095), and logging and mining (up 677).



Source: Minnesota Dept. of Employment and Economic Development (DEED); Minnesota Management & Budget (MMB)

Minnesota's job growth continues to be broad-based. The state's employers added jobs in nine of the eleven major industry sectors over the 12 months ending in December 2017.

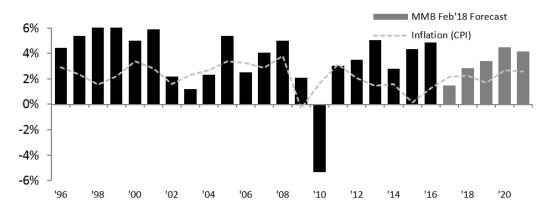
In addition to breadth across industry sectors, all five Minnesota's metropolitan statistical areas (MSAs) show a positive job growth over the 12 months ending with December 2017. Three of the regional centers outperformed the state's annual rate of job growth: Minneapolis-St. Paul MN-WI (2.4 percent), Duluth-Superior MN-WI (2.1 percent), and Mankato (1.7 percent).

Wage and Salary Income. A crucial variable influencing Minnesota's individual income tax liability is total wage and salary income, accounting for more than 70 percent of federal adjusted gross income for Minnesota residents in 2016. In this forecast, we expect Minnesota's total wage and salary income to continue to grow at moderate-to-strong rates of 4.6 to 5.5 percent per year over the forecast period. This is faster growth than we had expected in February. The largest change is for 2019. In November, we forecast Minnesota wages to grow 4.7 percent in 2019, and we now expect them to grow 5.5 percent. This is larger than the forecast change for U.S. wage growth in 2019: 5.3 percent in this forecast compared to 5.0 percent in November.

As employers work harder to fill open positions, and businesses invest in productivity-enhancing equipment, wage and salary income per worker—or average wage income—is expected to rise. Minnesota's average wage income is forecast to accelerate from 1.4 percent in 2016 to 2.3 percent in 2017, 3.4 percent in 2018, and 3.8 percent in 2019. These rates exceed forecasted rates of inflation over the same period, implying improvements in real wages.

Minnesota Average Nominal Wage and Salary Disbursement

Annual Percent Change, Ratio of Total Wage and Salaries to Total Employment



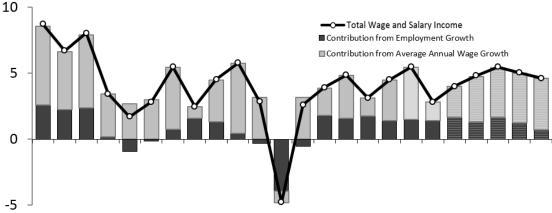
Source: Buearu of Economic Analysis (BEA); Minnesota Department of Employment and Economic Development (DEED); Minnesota Management & Budget (MMB)

Minnesota's annual growth in wage income per worker is forecast to accelerate from 1.4 percent in 2016 to 2.3 percent in 2017, 3.4 percent in 2018, and 3.8 percent in 2019. These rates exceed forecasted rates of inflation over the same period, implying improvements in real wages.

With only moderate growth in Minnesota employment in this forecast, averages wages (wage and salary income per worker) is going to be the main driver of growth in total nominal wage income through our forecast horizon. The contribution of employment growth increases to 1.7 percentage points in 2019 and then starts to decline under constraints from slow labor force growth. Therefore, nominal gains in total wage and salary income throughout the forecast period are expected to be driven by solid growth in average wage income.

Minnesota Nominal Wage and Salary Income

Annual Percent Change, MMB February 2018 Forecast



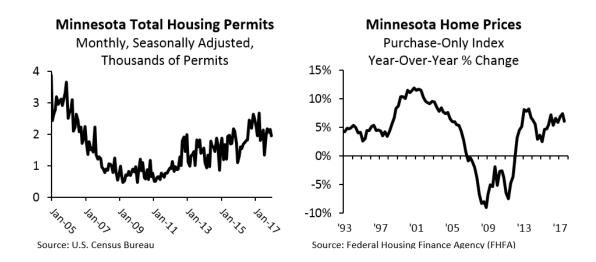
'98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17 '18 '19 '20 '21

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

Average wage growth is going to be the main driver of the nominal wage growth in the upcoming years. The contribution of employment growth is expected to decline over the forecast period.

Homebuilding Activity. Minnesota's housing market continues to show a persistent shortage of existing single family homes for sale. According to the Minnesota Association of Realtors, there were about 14,451 active listings at the end of 2017, down 21.8 percent from an already low level (18,490) a year earlier. In December, year-to-date closed sales of homes in Minnesota were 87,109, only 0.4 percent higher than one year prior. With persistently tight supply, median and mean sale prices continue to rise. At the end of 2017, the median sales price had risen 6.9 percent, while the average sales price increased 7.1 percent.

Annual household formations were puzzlingly low in 2016, reaching only 1,465 compared to a post-recession average of about 10,000 per year. This could be due to a change in living arrangement preferences among younger adults. It could also be a result of the increasing size of older age cohorts, who are less likely to form new households. As Minnesota's economy continues to grow, we forecast a recovery in household formations. In 2017 and 2018, we expect annual net new formations to be 13,812 and 21,239, respectively.

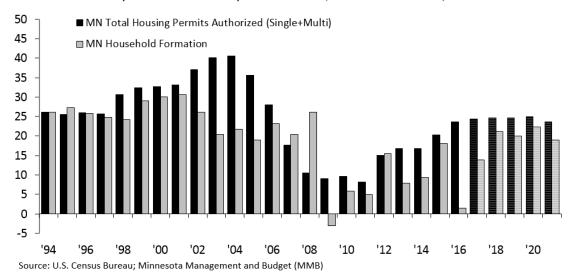


Minnesota's housing recovery continues to gain traction. The tight labor market conditions and the steady growth of wages, will boost the demand side of the housing market.

According to the U.S. Census Bureau, the total year-to-date number of authorized residential building permits (unadjusted) in Minnesota was 22,927 in December 2017, down from 24,263 in December of the previous year and below the long-term annual trend of 30,000 permits per year. In this forecast, we expect total housing permits to rise to about 24,639 in 2018 and 24,625 in 2019. After a weak start, the construction sector had a solid year in 2017, creating 9,394 jobs for 8.6 percent annual growth. With higher housing demand and higher home prices, we expect higher homebuilding activity and construction employment to increase in the upcoming year.

Minnesota Household Formation and Total Housing Permits

History and MMB February 2018 Forecast, Thousands of Units/Permits



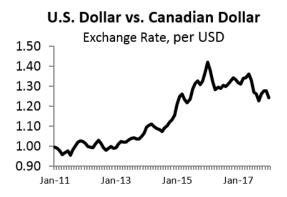
Annual household formations were puzzlingly low in 2016, reaching only 1,465 compared to a post-recession average of about 10,000 per year. According to the U.S. Census Bureau, in December, the total year-to-date number of authorized residential building permits (unadjusted) in Minnesota was lower than one year ago, and below the long-term annual trend of 30,000 permits per year.

Exports. Minnesota's exports of goods and services to countries throughout the world are an important source of economic strength and job creation, and the state's recent export performance is encouraging. According to DEED, Minnesota's exports in 2017 increased 5 percent in the first quarter, 7 percent in the second quarter, and 11 percent in the third quarter, compared to the same quarters in 2016. This continuous rise is in line with the national trends, but the growth of exports in Minnesota is more robust. Comparing the first nine months of 2017 with the same time period of 2016, Minnesota exports increased 8 percent, while U.S. exports grew 6 percent. Minnesota's manufacturing activity has also performed better than the U.S. Minnesota manufactured exports increased about 5 percent in the first quarter, 7 percent in the second quarter, and 10 percent in the third quarter of 2017. The nation's manufactured exports increased about 4 percent in each of those quarters.

In the third quarter of 2017, Minnesota increased exports to Canada—the state's largest trading partner—by 14 percent over the previous year. Similarly, Minnesota's exports to Mexico in the third quarter grew 7 percent over last year. Overall, in the third quarter, the state's exports to North America were up 11 percent to \$1.8 billion. Exports to Europe also performed very well in the third quarter of 2017, with growth of about 10 percent over the year, driven by increased exports to Germany (up 32 percent) and the U.K. (up 16 percent). The growth of exports to Asia rose 8 percent over the year, with the largest increases in exports to Japan (up 37 percent), China (up 2 percent), India (up 27 percent), and the Philippines (up 10 percent). The boost to Minnesota's exports in the third quarter was mainly driven by products such as iron ore, optics/medical, machinery, and plastics.

Over the last two years, a strong U.S. dollar has made U.S. goods more expensive for foreign customers, lowering demand for exports. While the dollar's value has been erratic, the effect of the strong dollar is starting to fade. At the end of December 2017, the broad-based dollar index had lost nearly 7 percent of its value compared to December 2016, and since the beginning of 2018 has continue to weaken. Similarly, the Canada-U.S. foreign exchange rate declined 4.27 percent last year, and the Mexico-U.S. foreign exchange rate dropped 10.35 percent over the same period. Meanwhile, the world economy is performing well, with none of the major economies currently in a recession. The combination of strengthening world demand and a weakening dollar have fueled export growth over the past year.

Volatility in the value of the dollar is expected to continue. IHS expects a moderate recovery with the dollar reaching its peak value in the second quarter of 2021, though still 0.2 percent below its 2017 average. IHS also expects exchange-rate implications from the TCJA, with the interaction of two opposite effects. Corporate tax rates will induce corporate repatriation and incoming foreign direct investment and will put upward pressure in the dollar relative to other major currencies. On the other hand, eventually the effect of current-account deficits will put some off-setting downward pressure on the dollar. Overall, IHS expects recent growth in both exports and imports in late 2017 will continue, fueled by healthy foreign and domestic demand. On balance, net exports are expected to be only a mild drag on the U.S. economy over our forecast horizon.





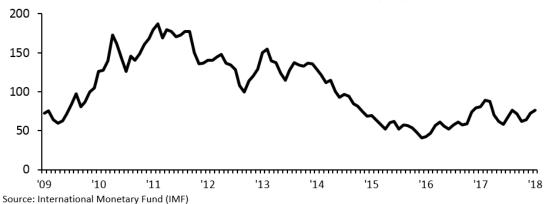
Source: Federal Reserve

Over the last two years, a strong U.S. dollar has made U.S. goods more expensive for foreign customers, lowering demand for exports. While the dollar's value has been erratic, the effect of the strong dollar is starting to fade.

Iron Ore Mining. After struggling the last few years, 2017 was positive for Minnesota's Iron Range, when employment in the mining and logging sector grew by 10.8 percent (677 jobs). In the third quarter of 2017, DEED reports that Minnesota's iron ore exports rose at a very strong pace. Minnesota exported \$135 million worth of ore, slag, or ash in the third quarter, a remarkable 769 percent increase over a year ago. Last year saw iron ore prices rise to a level not seen in more than two years, reaching about \$89 per ton in February 2017. Since then, prices have declined, approaching \$60 per ton in October 2017, a 32 percent drop from February. In December, the price rebounded to around \$75 per ton, but that increase may not indicate a trend. For 2018, we can expect a decline in iron ore prices, as global supply increases and China's demand—which accounts for nearly 70 percent of global iron ore demand—stabilizes. The international Monetary Fund expects iron ore prices to vary around an average of \$59 per ton in 2018.

Iron Ore Spot Price

US dollars Per Metric Ton, China 62% Fe (CFR)

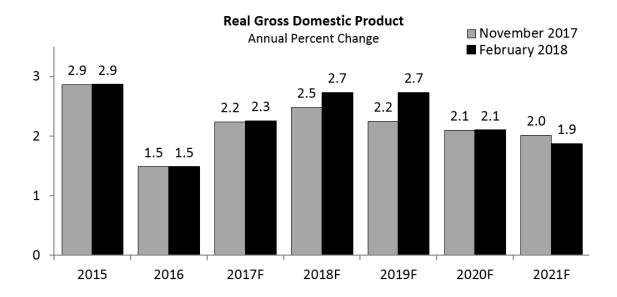


The recent improvement iron ore prices supported the recovery of mining operations on Minnesota's Iron Range in 2017. Last year saw iron ore prices rise to a level not seen in more than two years, reaching about \$89 per ton in February 2017.

Council of Economic Advisors' Statement

Minnesota's Council of Economic Advisors (CEA) met on February 13, 2018, to review the IHS Markit (IHS) outlook for U.S. economic growth, which includes the assumptions underlying Minnesota's February 2018 *Budget and Economic Forecast*. Since November, IHS has increased their growth expectations for 2018 and 2019. The largest change occurs in 2019, with projected real GDP growth in that year increasing from 2.2 percent in November's outlook to 2.7 percent in February. In the February outlook, consumer spending and business investment contribute more to 2018-2019 GDP growth relative to November, offsetting an increased drag from net exports. IHS maintained their forecast for 2020 real GDP growth at 2.1 percent and slightly decreased expected 2021 growth from 2.0 percent in the November outlook to 1.9 percent in February. IHS now expects real GDP to grow at a compound annual rate of 2.2 percent from 2017 to 2021, 0.10 percentage points faster than they had expected in November.

Regarding economic fundamentals, IHS expects continuing improvements in household finances and employment to support consumer spending. Following strong growth in business equipment purchases in 2017, IHS expects further gains in equipment investment to support real GDP growth through 2019. A stronger economic growth outlook and higher expected inflation have lead IHS to increase the pace of monetary policy tightening in this forecast. They now expect four interest rate hikes in 2018, compared to three in the November outlook.



Since November, IHS has increased their growth expectations for 2017 to 2021. IHS has included the impacts of federal income and corporate tax cuts from the TCJA that were not reflected in their November outlook. Council members agreed that IHS's expectations for U.S. growth are a good starting point for MMB's forecast.

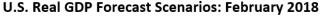
In addition to the positive fundamentals, IHS has added to their baseline the impacts of the federal Tax Cuts and Jobs Act (TJCA). The TCJA is expected to have a modest, positive effect on real GDP growth, primarily through the impact of individual income tax rate cuts on consumer spending.

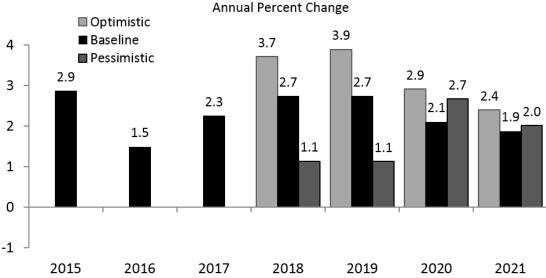
The IHS February outlook for 2018 is similar to that of other macroeconomic forecasters. The February Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 2.8 percent in 2018, compared to IHS' forecast of 2.7 percent. For 2019, the IHS expects higher growth than other forecasters: 2.7 percent compared to 2.4 percent for the Blue Chip Consensus.

Since releasing their February outlook, IHS notes two developments that add risk to their forecast. On the downside, if the recent stock market decline persists, the resulting negative wealth effects could cause consumer spending to grow more slowly than expected. On the upside, the new two-year federal budget agreement relaxes budget caps and substantially increases both defense and non-defense spending. This additional fiscal stimulus could cause the economy to grow faster than IHS assumes in this forecast.

Council members acknowledge these new risks. Nevertheless, they agree that IHS's expectations for U.S. growth are a good starting point for MMB's February 2018 economic forecast. Members also agree that the risks to the forecast for 2018-2021 are fairly balanced between downside risk and upside potential for growth. The downside risks include: economic disruptions from geopolitical events; U.S. trade policy missteps; further stock market declines that dampen business confidence and slow consumer spending; and a more aggressive interest rate path in response to the late-cycle fiscal stimulus or inflation. On the other hand, if consumers direct their tax cuts from the TCJA primarily into spending, rather than saving, or businesses purchase more productivity-enhancing equipment and technology, the economy could grow faster than IHS assumes. In addition to economic risks, MMB economists note that considerable risks to the revenue forecast arise from uncertainty about how corporate and individual taxpayers will respond to new federal fiscal policies. Finally, council members also agree that the difficulty of projecting long range economic conditions, particularly in the current environment of policy uncertainty, warrants caution when using forecasts for 2020 and 2021.

IHS assigns a probability of 65 percent to the February baseline outlook. They assign a 20 percent probability to a more pessimistic scenario, in which a correction to commercial real estate prices and declining consumer and business confidence trigger a two-quarter recession in 2018. Council members would apply a lower probability to a 2018 recession scenario. IHS assigns a 15 percent probability to a more optimistic scenario, in which a pick-up in home purchases by young adults fuels the housing market, and improvements in productivity boost incomes and, consequently, consumer spending.





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

IHS assigns a 65 percent probability to the February baseline outlook. They assign a 20 percent probability to a more pessimistic scenario, in which a correction to commercial real estate prices and declining consumer and business confidence trigger a two-quarter recession in 2018. Council members would apply a lower probability to a 2018 recession scenario.

As it has done every year since 2003, the CEA recommends that budget planning estimates for the next biennium include expected inflation in both 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 February 2018 *Budget and Economic Forecast* understates the cost of current services as provided by law in FY 2020-2021 by roughly \$1.2 billion, and thus made the amount of projected revenues above 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 4.9 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. Minnesota's current \$1.608 billion budget reserve is about 3.6 percent of forecast FY 2018-19 revenues.

Minnesota has made progress with its reserve policy, and the state's general obligation bonds are now rated Aaa by Fitch Ratings. Nevertheless, the state's currently funded budget reserve remains below the level two other agencies expect from Aaa-rated credits. State credit 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 for reserve levels. Under Moody's state ratings methodology, statutory reserves of at least 5 percent of biennial revenue is consistent with a Aaa rating.



BUDGET OUTLOOK

Current Biennium

When the last *Budget and Economic Forecast* was released in November, a deficit of \$188 million was projected for the FY 2018-19 biennium. An improved revenue forecast and reduced spending estimates add \$518 million to the bottom line resulting in a projected budgetary balance of \$329 million in the current biennium.

Current Biennium: FY 2018-19 General Fund Budget Forecast Comparison

	November 2017	February 2018	\$	%
(\$ in millions)	Forecast	Forecast	Change	Change
Beginning Balance	\$3,333	\$3,333	\$ -	0.0%
Revenues				
Taxes	42,624	42,964	340	0.8
Non-Tax Revenues	1,460	1,475	15	1.0
Transfers, Other Resources	363	362	(1)	(0.4)
Total Revenues	\$44,447	\$44,801	\$353	0.8%
Expenditures				
E-12 Education	18,889	18,835	(54)	(0.3)
Property Tax Aids	3,648	3,656	8	0.2
Health & Human Services	13,871	13,618	(254)	(1.8)
Debt Service	1,143	1,138	(5)	(0.4)
All Other	8,404	8,842	138	1.6
Total Expenditures	\$45,955	\$45,789	\$(167)	(0.4)%
Reserves	1,958	1,958	-	
Stadium Reserve	55	58	2	
Budgetary Balance	\$(188)	\$329	\$518	

Revenue. Total general fund revenues for FY 2018-19 are now forecast to be \$44.801 billion, \$353 million (0.8 percent) more than the November 2017 forecast. All major revenue sources are forecast to be higher than November estimates. This forecast reflects increased state income and corporate tax revenues expected to arise from taxpayer responses to federal tax law changes in the Tax Cuts and Jobs Act (TCJA).

Individual income tax receipts are now forecast to be \$25 million (0.1 percent) more than the prior estimate. This change is due to higher forecast growth in wage income from 2017 to 2019, which offsets a lower estimate of tax liability for 2016, the base year for this forecast. In addition, this forecast reflects increased state income tax revenues expected to arise from taxpayer response to federal tax law changes in the TCJA. These changes are estimated to add about \$137 million to income tax revenues in FY 2018-19.

General sales tax revenue in FY 2018-19 is now forecast to be \$119 million (1.1 percent) more than the November forecast. Higher expected gross sales tax receipts and a lower forecast of refunds both contribute to the change. Gross sales tax receipts so far in FY 2018 are lower than forecast in November. However, this shortfall is more than offset by a higher forecast for taxable sales. In this forecast, we expect our estimate of the taxable sales base to grow 1.1 percentage points faster in 2018 and 1.6 percentage points faster in 2019 than we had assumed in November.

The corporate franchise tax is forecast \$131 million (5.3 percent) more than the prior estimate. Higher forecast gross corporate payments and lower forecast refunds both contribute to the change. In addition, this forecast reflects increased state corporate tax revenues expected to arise from federal tax law changes in the TCJA. These changes are estimated to add \$19 million to corporate tax revenues in FY 2018-19.

Expenditures. Spending in the current biennium is now forecast to be \$45.789 billion, \$167 million (0.4 percent) lower than November estimates. The two largest budget areas, accounting for 71 percent of the total general fund budget, both show lower projected spending in this forecast compared to prior estimates. E-12 education is expected to be \$54 million (0.3 percent) lower largely due to actual special education spending coming in lower than prior estimates and thus reducing the forecast in future years; the forecast for growth in compensatory aid is also lower. Health and Human Services (HHS) spending is expected to be \$254 million (1.8 percent) lower than November forecast estimates. November HHS spending estimates included increased state obligations due to a federal funding lapse for the Children Health Insurance Program (CHIP). In January 2018, the federal government appropriated funding for CHIP, which results in \$225 million in lower state general fund obligations in FY 2018-19.

Spending in all other areas of the general fund budget, including property tax aids and credits and debt service, is \$141 million (1.1 percent) higher than November estimates. The majority of this increase, \$136 million, is due to two funding changes incorporated in this forecast:

First, in the first week of the 2018 legislative session Ch. 100 was enacted. The bill appropriated \$129 million in operating funds for the House of Representative and the Senate. The November forecast included \$15 million in funding for the House and Senate, as ordered in June 2017 by a Ramsey County court. Ch. 100 is retroactive back to July 1, 2017 and the appropriations supersede and replace the court ordered funding. The net fiscal impact of Ch. 100 compared to the November forecast is \$114 million in higher spending.

Second, M.S. 16A.152 directs MMB to transfer up to \$22 million from the general fund to the clean water fund if a forecast determines that there will be a positive unrestricted balance at the end of the current biennium. This law was included in Ch. 1 from the 2017 special session. The November 2017 forecast projected a deficit so the transfer did not occur. Before this transfer was triggered, this forecast projected a positive unrestricted balance of \$330 million

in the current biennium; after the transfer the projected balance falls to \$308 million. The full \$22 million is transferred with this forecast; absent a law change no further transfers to the clean water fund will occur with future budget forecasts.

Expenditures for property tax aids and credits are expected to be \$8 million (0.2 percent) higher than November estimates due to higher than expected property tax refund spending. The debt service forecast in the biennium is \$5 million (0.4 percent) lower than November estimates. Higher forecast bond premiums and a higher than projected sale price for the Crosswinds school building reduce the expected general fund debt service transfer in FY 2018-19.

Current Biennium: FY 2018-19 General Fund Budget

Biennial Comparison; February 2018 Forecast

			\$	%
(\$ in millions)	FY 2016-17	FY 2018-19	Change	Change
Beginning Balance	\$2,103	\$3,333	\$1,230	58.5%
Revenues				
Taxes	40,343	42,964	2,621	6.5
Non-Tax Revenues	1,598	1,475	(123)	(7.7)
Transfers, Other Resources	544	362	(182)	(33.4)
Total Revenues	\$42,485	\$44,801	\$2,316	5.5%
Expenditures				
E-12 Education	17,409	18,835	1,427	8.2
Property Tax Aids	3,321	3,656	334	10.1
Health & Human Services	11,545	13,618	2,072	18.0
Debt Service	1,139	1,138	(1)	0.0
All Other	7,841	8,842	1,001	12.8
Total Expenditures	\$41,255	\$45,789	\$4,534	11.0%
Reserves	1,953	1,958	5	
Appropriation Carryforward	358	n/a	n/a	
Stadium Reserve	27	58	31	
Budgetary Balance	\$995	\$329		

Reserves and Cash Flow Account. The Budget reserve balance of \$1.608 billion and cash flow account balance of \$350 million are unchanged from the November forecast. The stadium reserve account balance is now projected to be \$58 million by the end of FY 2019, \$2 million higher than November estimates due to a higher than projected gambling tax forecast.

Planning Estimates

Planning estimates for the FY 2020-21 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. Budget changes made during the 2018 legislative session could impact the FY 2020-21 biennium.

The forecast for higher revenue and lower spending compared to November in the current biennium continues into the planning estimates. Revenue in FY 2020-21 is now projected to be \$48.136 billion, \$490 million (1.0 percent) higher than November estimates. Spending in the planning years is largely unchanged from November and is now projected to be \$47.823 billion, \$161 million (0.3 percent) lower than prior estimates.

General Fund Planning Estimates: FY 2020-21 Biennium Forecast Comparison

(\$ in millions)	November 2017	February 2018	\$	%
	Forecast	Forecast	Change	Change
Forecast Revenues Projected Spending	\$47,646	\$48,136	\$489	1.0%
	47,983	47,823	(161)	(0.3)
Structural Balance	\$(337)	\$313	\$650	
Estimated Inflation (CPI) Applied to projected Spending	\$1,311	\$1,224	\$(87)	

Expenditure projections in the next biennium assume that current funding levels and policies continue unchanged, adjusted 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 current biennium nor other one-time impacts such as changes to reserve balances. In November, a structural imbalance of \$337 million was projected for the FY 2020-21 biennium. This forecast now projects a positive structural balance of \$313 million, an improvement of \$650 million.

Projected inflationary growth based on the Consumer Price Index is now forecast to be 2.1 percent in FY 2020 and 2.8 percent in FY 2021. After adjusting for programs with price increases included in the current law formula, applying the annual inflation rate, compounded over 2 years, would add approximately \$1.224 billion in spending pressure to the FY 2020-21 biennium.

The planning estimates are not intended to predict surpluses or deficits two or more years into the future. Rather their purpose is to assist in determining how well ongoing expenditures are likely to match future revenues based on trends in the economy and the level of spending that is needed to maintain programs and services. The FY 2020-21 planning estimates provide an important baseline against which the longer-term impacts and affordability of budget decisions can be measured.



REVENUE OUTLOOK

Current Biennium

Total general fund revenues for FY 2018-19 are now forecast to be \$44.801 billion, \$353 million (0.8 percent) more than the November 2017 forecast. Total tax revenues for the biennium are forecast to be \$42.964 billion, \$340 million (0.8 percent) above the prior estimate. Higher expected individual, sales, corporate, and other tax and non-tax revenue all contribute to the change. Forecast revenue from the state general property tax is slightly lower than in the November forecast. This forecast reflects increased state income and corporate tax revenues expected to arise from taxpayer responses to federal tax law changes in the Tax Cuts and Jobs Act (TCJA).

Current Biennium: FY 2018-19 General Fund Revenues

Forecast Comparison

	November 2017	February 2018	\$	%
(\$ in millions)	Forecast	Forecast	Change	Change
Individual Income Tax	\$23,690	\$23,715	\$25	0.1%
General Sales Tax	11,144	11,263	119	1.1
Corporate Franchise Tax	2,466	2,596	131	5.3
State General Property Tax	1,630	1,621	(9)	(0.5)
Other Tax Revenue	3,695	3,768	73	2.0
Total Tax Revenues	\$42,624	42,964	340	0.8%
Non-Tax Revenues	1,460	1,475	15	1.0
Other Resources	363	362	(1)	(0.4)
Total Revenues	\$44,447	\$44,801	\$353	0.8%

Revenues for FY 2018-19 are now expected to exceed their FY 2016-17 levels by \$2.316 billion (5.5 percent). Total tax revenues are projected to be \$2.621 (6.5 percent) more than in FY 2016-17. Individual income tax revenues account for 78 percent of the biennial tax revenue growth. Net corporate receipts in FY 2018-19 are lower than in the previous biennium. This is primarily due to larger projected refunds in FY 2018-19 compared to actual refunds in FY 2016-17. Forecast state general property tax revenues in FY 2018-19 are also lower than in FY 2016-17.

This is the second forecast of FY 2018-19 since FY 2018 began on July 1, 2017. After seven months of observed collections, fiscal year-to-date receipts are \$12.757 billion, 29 percent of the total expected over the biennium. With 17 months of FY 2018-19 collections left to observe, 71 percent of forecast receipts are outstanding.

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

			\$	%
(\$ in millions)	FY 2016-17	FY 2018-19	Change	Change
Individual Income Tax	\$21,670	\$23,715	\$2,045	9.4%
General Sales Tax	10,638	11,263	626	5.9
Corporate Franchise Tax	2,678	2,596	(82)	(3.1)
State General Property Tax	1,712	1,621	(91)	(5.3)
Other Tax Revenue	3,644	3,768	123	3.4
Total Tax Revenues	\$40,343	42,964	2,621	6.5%
Non-Tax Revenues	1,598	1,475	(123)	(7.7)
Other Resources	544	362	(182)	(33.4)
Total Revenues	\$42,485	\$44,801	\$2,316	5.5%

Individual Income Tax. Individual income tax receipts are now forecast to be \$25 million (0.1 percent) more than the prior estimate. That change is due to higher forecast growth in wage income from 2017 to 2019, which offsets a lower estimate of tax liability for 2016, the base year for this forecast. In addition, this forecast reflects increased state income tax revenues expected to arise from taxpayer responses to federal tax law changes in the TCJA. These changes are estimated to add about \$137 million to income tax revenues in FY 2018-19.

This forecast builds from estimated final 2016 income tax liability. Using information from processed tax returns and revenue in the state accounting system, we estimate that final 2016 tax liability is \$9.949 billion, \$68 million less than we estimated in November.

Calibrating the income tax model to produce our estimated base year liability generally requires making assumptions about base year growth rates for particular income types. According to the Quarterly Census of Employment and Wages (QCEW), Minnesota's wage income grew 2.9 percent in 2016. However, information from a sample of Minnesota income tax returns indicates that wage income included in adjusted gross income (AGI) grew more slowly. In this forecast, we assume reported wage income in AGI grew 2.5 percent in 2016. Also based on information from the 2016 income tax sample, we changed our assumption about taxable dividend income from a 0.6 percent increase in November to a 5.5 percent decline in this forecast.

Information from the QCEW and income tax withholding collections suggest that Minnesota's wage and salary income grew 0.3 percentage points faster in CY 2017 than we forecast in November. Annual growth in wage income included in AGI in 2017 is now expected to be 4.9 percent, up from 4.6 percent in the November forecast. Higher wage growth is forecast to continue. Annual wage growth is now forecast to be 4.8 percent in 2018 and 5.2 percent 2019, compared to 4.7 in both of those years in the November forecast. Note that these wage growth rates differ from the rates shown in our Minnesota Economic Forecast Summary table in this

report, because that table reports growth rates in the components of personal income, which can differ from wages included in AGI.

Estimated income tax payments are pre-payments on current year tax liability generally made by taxpayers with non-wage income. So far in FY 2018, estimated tax payments by individuals are \$332 million above our November forecast. In addition, estimated payments by fiduciaries exceed the forecast by about \$24 million fiscal year to date. Many of the additional payments were made at the end of 2017 and in early January 2018. Even though estimated tax payments are not due until January 15, many taxpayers make early payments on or before December 31 so they can deduct them from their federal tax returns for the tax year that just ended. This year, the anticipated limit on state and local tax deductions and the increased standard deduction under the federal TCJA gave taxpayers a greater incentive than usual to make sure they had fully paid their 2017 state income tax liability before the end of the year. We believe the larger than expected receipts are largely due to the incentive to accelerate payments, rather than to higher calendar year 2017 tax liability, and consequently foreshadow lower final payments on April 15. We have, therefore, lowered our forecast for final TY 2017 payments and increased our forecast for refunds.

For the first three quarters of CY 2017—prior to the appearance of what we assume are accelerated estimated payments, as described above—cash estimated payments were lower than we observed in the same period in CY 2016. Low growth in estimated payments generally signals low growth in non-wage income. As a result, we have lowered our forecast of some forms of TY 2017 non-wage income. We now assume capital gains reported by Minnesota residents grew 8.6 percent in TY 2017, compared to 11.3 percent in the November forecast. We also lowered our forecast of taxable dividend growth from 8.3 percent in November to 6.5 percent in this forecast.

The limitation of federal deductibility of state and local taxes under the TCJA gave taxpayers an incentive to prepay local property taxes for TY 2018 in CY 2017. While it is unclear whether these prepayments will ultimately be allowed as deductions, we assume that taxpayers who made these early payments will report them on the federal Schedule A, reducing their Minnesota taxable income and tax liability in TY 2017. Taxpayers who pre-paid property tax and continue to itemize post-TCJA will have fewer local tax payments to deduct in TY 2018, raising their TY 2018 liability. As a result, we have made off-model adjustments that lower TY 2017 liability by about \$30 million and raise TY 2018 liability by about \$10 million.

A similar incentive affects the timing of charitable contributions. Some taxpayers who expected to move from an itemizing to non-itemizing status due to TCJA may have shifted charitable contributions that they normally would have made in CY 2018 into CY 2017. Our off-model adjustment for this behavioral effect lowers TY 2017 liability by \$10 million.

This forecast also reflects an off-model adjustment of about \$59 million of additional revenue for the impact of TCJA provisions on taxpayers' choice to itemize or use the standard deduction on their Minnesota tax returns. We also reduced income tax revenue by about \$33 million for additional charitable subtractions by Minnesota non-itemizers. Finally, we added about \$141 million for individual income taxes on additional dividend payouts and share-repurchases that corporations are expected to make in response to corporate tax provisions in the TCJA.

-12%

CY '07 '08

'09

'10

faster in 2019 than we had assumed in November.

'11

'12

'13

'21

'20

General Sales Tax. General sales tax revenue in FY 2018-19 is now forecast to be \$119 million (1.1 percent) more than the November forecast. Higher expected gross sales tax receipts and a lower forecast of refunds both contribute to the change. Gross sales tax receipts so far in FY 2018 are lower than forecast in November. However, this shortfall is more than offset by a higher forecast for taxable sales. Using forecasts for spending on a wide range of taxable goods and services, we construct the Minnesota synthetic sales tax base, a proxy for the actual sales tax base. In this forecast, the synthetic base is expected to grow 1.1 percentage points faster in 2018 and 1.6 percentage points faster in 2019 than we had assumed in November.

Spending on almost all of the components of the sales tax base are forecast to grow faster than anticipated in November. In particular, growth in business equipment spending is higher in this forecast. Equipment spending is more volatile than most components of consumer spending, so growth in equipment spending adds risk to our sales tax forecast.

MN Synthetic Sales Tax Base Forecast Comparison

Year-Over-Year Percent Change 8% 6% -4% -6% -8% -10%

Using forecasts for spending on a wide range of taxable goods and services, we construct the Minnesota synthetic sales tax base, a proxy for the actual sales tax base. In this forecast, the

synthetic base is expected to grow 1.1 percentage points faster in 2018 and 1.6 percentage points

'14

'15

'16

'17

'18

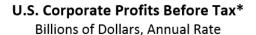
'19

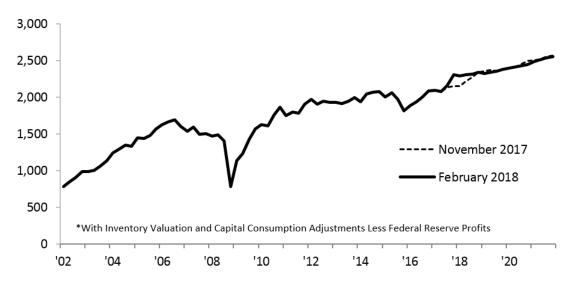
Corporate Franchise Tax. The corporate franchise tax is forecast to generate \$2.596 billion in FY 2018-19, \$131 million (5.3 percent) more than the prior estimate. Higher forecast gross corporate payments and lower forecast refunds both contribute to the change. In addition, this forecast reflects increased state corporate tax revenues expected to arise from taxpayer responses to federal tax law changes in the TCJA. These changes are estimated to add \$19 million to corporate tax revenues in FY 2018-19.

This forecast builds on our estimate of implied CY 2017 corporate franchise tax liability. We estimate total corporate tax liability attributable to CY 2017 to be \$1.201 billion, about \$6 million more than the February estimate.

Higher estimated implied CY 2017 liability combines with a slightly higher forecast of corporate profits growth in CY 2018, resulting in a higher estimate of implied CY 2018 corporate tax liability. We estimate corporate liability attributable to CY 2018 to be \$1.275 billion, \$24 million more than the November forecast. Corporate profits grow more slowly in this forecast in CY 2019, 1.6 percent compared to 5.5 percent in November. The lower forecast profits growth in CY 2019 is not enough to offset the higher base, and we have increased our estimate of implied CY 2019 corporate liability \$11 million above the November estimate. Higher estimated implied liability for CY 2017-2019 raise the forecast for FY 2018-19 net corporate tax receipts.

The corporate income tax forecast reflects revenue changes arising from corporations' reactions to new federal tax provisions in the TCJA. Specifically, we added an off-model adjustment of about \$19 million of additional revenue in FY 2018-19 for estimated foreign source income that we expect corporations to repatriate in response to that income being deemed repatriated—and therefore taxable at a new, low rate—under federal law.





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

Higher estimated implied CY 2017 liability combines with a slightly higher forecast of corporate profits growth in CY 2018, resulting in a higher estimate of implied CY 2018 corporate tax liability. Corporate profits grow more slowly in this forecast in CY 2019, 1.6 percent compared to 5.5 percent in November.

The corporate income tax forecast includes an off-model adjustment for the impact of the Historic Structure Rehabilitation Credit (HSRC). Our 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 HRSCs in FY 2018-19 are now forecast to be about the same as the November estimate.

Other Tax Revenue, Non-Tax Revenue, Other Resources. Other tax revenue is now expected to be \$73 million (2.0 percent) more than the November forecast. Among other taxes, the estate tax

shows the largest dollar amount change, \$45.6 million (16.1 percent) more than the November forecast. This change reflects higher than expected estate tax receipts so far in FY 2018. The forecast for cigarette and tobacco taxes is \$43.7 million (3.5 percent) lower than the November forecast. This change is due to sellers shifting their stamp purchases from FY 2018 into FY 2017. Consequently, FY 2017 net cigarette and tobacco tax receipts were higher than forecast, and the forecast for FY 2018 receipts has been reduced. Growth in new and existing home sales raised the forecasts for the deed and mortgage taxes, and higher expected profits for mining companies have raised the forecast for the taconite occupation tax. Among non-tax revenues, investment income is forecast to be \$20 million higher over the biennium due to higher actual returns in the current fiscal year.

Planning Estimates

Total revenues for FY 2020-21 are now estimated to be \$48.136 billion, an increase of \$3.335 billion (7.4 percent) over the current forecast for FY 2018-19 revenues. Total tax revenues for FY 2020-21 are estimated to be \$46.360 billion, a 7.9 percent increase over FY 2018-19 forecast revenues.

Together, the individual income and sales taxes account for about 95 percent of the projected biennial tax revenue growth. The individual income tax shows the largest increase, growing by \$2.480 billion (10.5 percent), and contributing 73 percent of the total tax revenue biennial change. The general sales tax is expected to exceed FY 2018-19 forecast levels by \$764 million (6.8 percent), accounting for 22 percent of the growth in tax revenues. The corporate franchise tax, statewide property tax, and other taxes together contribute \$152 to the biennial tax revenue change.

The revenue planning estimates are informed by the IHS baseline forecast, which assumes that U.S. real GDP will grow 2.7 percent in CY 2019, followed by slower growth of 2.1 percent in CY 2020 and 1.9 percent in CY 2021.

Biennial Comparison: FY 2018-19 vs. FY 2020-21 General Fund Revenues February 2018 Forecast

			\$	%
(\$ in millions)	FY 2018-19	FY 2020-21	Change	Change
Individual Income Tax	\$23,715	\$26,195	\$2,480	10.5%
General Sales Tax	11,263	12,027	764	6.8
Corporate Franchise Tax	2,596	2,609	12	0.5
State General Property Tax	1,621	1,634	13	0.8
Other Tax Revenue	3,768	3,895	127	3.4
Total Tax Revenues	42,964	46,360	3,397	7.9%
Non-Tax Revenues	1,454	1,403	(72)	(4.9)
Other Resources	362	372	10	2.8
Total Revenues	\$44,780	\$48,136	\$3,335	7.4%

The planning estimates for FY 2020-21 reflect revenue changes arising from taxpayers' responses to federal tax law changes in the TCJA. We added about \$122 million of additional individual

income tax revenue for the impact of the new federal provisions on taxpayers' choice to itemize or use the standard deduction on their Minnesota tax returns. We also reduced income tax revenue by about \$67 million for additional charitable subtractions by Minnesota non-itemizers. We added about \$173 million for individual income taxes on additional dividend payouts and share-repurchases that corporations are expected to make in response to corporate tax provisions in the TCJA. Finally, we added about \$23 million of additional corporate tax revenue in FY 2020-21 for estimated foreign source income that we expect corporations to repatriate in response to that income being deemed repatriated—and therefore taxable at a new, low rate—under federal law.

The planning estimates for FY 2020-21 should be used with caution. First, the projections will be affected by any revenue changes in a supplemental budget for the 2018-19 biennium. Second, in subsequent forecasts changes to our estimates of individual and corporate income tax liability for 2019 and 2020, as well as changes to the base levels of other revenue types for FY 2017 through 2019, will change the FY 2020-2021 planning estimates. Third, even small deviations from assumed growth rates for factors affecting revenues will compound and produce sizable changes in revenues. Should the economy grow more slowly than forecast, or should some volatile income source such as capital gains or corporate profits fall well below forecast, the revenue outlook for FY 2020-2021 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 2020 and 2021.



EXPENDITURE OUTLOOK

Current Biennium

Spending estimates for FY 2018-19 are slightly lower than prior estimates for the biennium. Expenditures in the current biennium are now expected to be \$45.789 billion, a reduction of \$167 million (0.4 percent) from November forecast estimates.

Current Biennium: FY 2018-19 General Fund Expenditures

Forecast Comparison

	November 2017	February 2018	\$	%
(\$ in millions)	Forecast	Forecast	Change	Change
E-12 Education	\$18,889	\$18,835	\$(54)	(0.3)%
Property Tax Aids & Credits	3,648	3,656	8	0.2
Health & Human Services	13,871	13,618	(254)	(1.8)
Debt Service	1,143	1,138	(5)	(0.4)
All Other	8,404	8,542	138	1.6
Total Expenditures	\$45,955	\$45,789	\$(167)	(0.4)%

Additional federal funding for children's health care and slower than expected growth in special education expenditures lower forecast spending in health and human services and E-12 education, respectively. These changes are offset by higher expenditures in the state government area due to the February 2018 appropriation for the state legislature.

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, nonpublic pupil programs, and integration programs. 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.

In the current biennium the state is projected to spend \$18.835 billion in the E-12 bill area. E-12 spending is forecast to decrease by \$54 million (0.3 percent) in FY 2018-19 compared to the November forecast. This decrease is largely attributable to two factors, a \$19 million decrease (1.7 percent) in compensatory aid and a \$28 million decrease (1.0 percent) in special education expenditures.

General Fund E-12 Education Expenditures

Change From November 2017 Estimates

(\$ in millions)	FY 20	18-19	FY 2020-21		
	\$	%	\$	%	
	Change	Change	Change	Change	
Basic Formula	\$7	0.1%	\$19	0.3%	
Compensatory Aid	(19)	(1.7)	(65)	(11.8)	
All Other General Education	(7)	(0.0)	(4)	(0.0)	
Total General Education Change	(19)	(0.1)	(50)	(0.7)	
Special Education Aid	(28)	(1.0)	(26)	(8.0)	
Long Term Facilities Maintenance	(1)	(0.3)	(5)	(2.1)	
Other Categoricals	(6)	(0.5)	(13)	(1.0)	
Total E-12 General Fund Forecast Change	\$(54)	(0.3)%	\$(94)	(0.5)%	

Compensatory aid is a component of the general education formula and is based on poverty concentration. Final FY 2017 data revealed that the actual poverty concentration decreased slightly from FY 2016 to FY 2017. This drove a reduction in the projected poverty concentration over the entire forecast period. Overall, general education is down \$19 million (0.1 percent) from previous estimates. In addition to the changes in compensatory aid, slightly higher than projected final pupil data for FY 2017 drives a small upward adjustment in the basic formula over the forecast period (\$7 million, 0.1 percent).

The reduction in special education is due to changes in actual expenditures on the program. Special education is an expenditure driven formula, rather than a pupil based formula like general education. The amount of special education aid districts receive is driven by their spending on special education services, which includes the number of students and the number and cost of teachers and paraprofessionals. The February forecast incorporates updated expenditure data from FY 2017, which came in below previous estimates. The updated data decreased the projected annual growth rate from FY 2017 to FY 2021 to 4.9 percent from the 5.2 percent assumed in the November forecast.

Health and Human Services. Health and human services is approximately one-third of total state general fund spending. The majority of these expenditures are forecast programs including Medical Assistance (MA), Chemical Dependency (CD), the Minnesota Family Investment Program (MFIP), MFIP Child Care, Alternative Care (AC), General Assistance, Housing Supports, 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 forecast 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 \$13.618 billion in FY 2018-19. This is a reduction of \$254 million (1.8 percent) from November 2017 estimates. The table below identifies major forecast expenditure changes from November estimates.

General Fund Health and Human Services Expenditures

Change From November 2017 Estimates

(\$ in millions)	FY 2			20-21
	\$	%	\$	%
	Change	Change	Change	Change
Federal Appropriation for Children's Health Insurance Program	\$(225)	(7.6)%	\$(138)	(4.2)%
Centers for Medicare and Medicaid Services	(10)	(0.3)	(55)	(1.4)
Denial of Duplicative Inflationary Increases				
All other MA	(19)	(0.2)	6	(0.1)
Total MA Change	(254)	(2.5)	(187)	(1.6)
Total Non-MA Change	0	(0.0)	25	0.7
Total HHS General Fund Forecast Change	\$(254)	(1.8)%	\$(162)	(1.0)%

Medical Assistance Program. Medical Assistance (MA) spending is forecast to be \$254 million lower than November estimates, a 2.5 percent reduction. In January 2018, the federal government appropriated funding for the Children's Health Insurance Program (CHIP), which had lapsed in October 2017. CHIP is a program that provides enhanced federal funding to encourage states to expand coverage to children. In Minnesota, it provides eligibility and federal funding for noncitizen pregnant women and reduces state MA expenditures for children above 133 percent of the poverty level. This appropriation results in \$225 million of lower state expenditures for families with children.

Property Tax, Aids, and Credits. Property tax aids and credits spending is expected to be \$3.656 billion in the FY 2018-19 biennium, an increase of \$8 million (0.2 percent) compared to the November 2017 forecast. Homestead and renter's property tax refunds account for a significant amount of this change. Anticipated homestead property tax refund expenditures are \$20 million higher than previous estimates (2.2 percent) primarily due more filings than previously expected. Renter's property tax refund expenditures, on the other hand, are \$12 million lower than previously estimated (2.6 percent), largely driven by a downward adjustment in the number of filings.

Debt Service and All Other. Debt service expenditures for the current biennium are forecast to be \$1.138 billion in the current biennium, which is a \$5 million (0.4 percent) reduction from prior estimates. This reflects lower interest rate assumptions on future bond sales, which results in higher bond premiums than previously estimated. This lowers the estimated size of the bond issue and forecast debt service payments. Additional savings result from a higher than projected sale price for the Crosswinds school building, which reduces the expected general fund debt service transfer in FY 2018-19. The forecast also assumes a bond authorization of \$800 million in each even-numbered legislative session and \$230 million in each odd-numbered session. This is unchanged from the November forecast.

All other bill area spending is forecast to total \$8.542 billion, a \$138 million (1.6 percent) increase from the November forecast. \$114 million of this change is due to the FY 2018-19 appropriation for the House of Representatives and Senate. The November 2017 forecast reflected only the court-ordered temporary appropriations to the legislature. However, in February 2018 the legislature passed full appropriations for the House and Senate, which supersede the funding

authorized by the district court. In addition, this forecast reflects a \$22 million transfer to the clean water fund as directed by M.S. 16A.152.

Planning Estimates

Expenditures in the FY 2020-21 biennium are forecast to reach \$47.823 billion, a reduction of \$161 million (0.3 percent) from November forecast estimates. As in the current biennium, lower spending for health care and education is offset by new appropriations to the legislature.

Planning Estimates: FY 2020-21 General Fund Expenditures Forecast Comparison

(\$ in millions)	November 2017 Forecast	February 2018 Forecast	\$ Change	% Change
E-12 Education	\$19,649	\$19,555	\$(94)	(0.5)%
Property Tax Aids & Credits	3,662	3,652	(10)	(0.3)
Health & Human Services	15,576	15,414	(162)	(1.0)
Debt Service	1,204	1,178	(26)	(2.2)
All Other	7,892	8,023	131	1.7
Total Expenditures	\$47,983	\$47,823	\$(161)	(0.3)%

E-12 Education. E-12 expenditures in FY 2020-21 are forecast to be \$19.555 million, \$94 million (0.5 percent) below November forecast estimates. The reduction in general education spending is the result of a downward adjustment in compensatory aid calculations in the FY 2018-19 biennium that continues into the planning years. Compensatory aid estimates are \$65 million (11.8 percent) lower than November forecast due to declining poverty concentration estimates. Total general education spending is reduced \$50 million (0.7 percent) compared to previous 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.

Special education aid is \$26 million (0.8 percent) lower than previously estimated. This change is a continuation of lower than expected costs in the current biennium. Forecast spending on long term facilities maintenance aid is \$5 million (2.1 percent) lower in FY 2020-21 than previous estimates. This change is due to an increase in adjusted net tax capacity. Long term facilities maintenance aid costs are shared by state aid and local levy. Increased adjusted net tax capacity results in a higher proportion of the aid being paid through local levy, rather than through state aid.

Health & Human Services. Health and human services spending is forecast to reach \$15.414 billion in FY 2020-21. This represents a \$162 million reduction (1.0 percent) from November estimates. As in the current biennium, changes to MA drive the reduction with a decrease of \$187 million (1.6 percent) from November.

Reinstated federal funding for the Children's Health Insurance Program lowers forecast Medical Assistance spending by \$138 million. Forecast spending is further reduced by \$55 million due to a February 2018 decision from the Centers for Medicare and Medicaid Services to deny duplicative inflationary increases within the disability waiver rate system. This forecast assumes the Department of Human Services will remove the duplication from payments starting in FY 2019.

Property Tax, Aids, and Credits. Property tax aids and credits expenditures are projected to total \$3.652 billion in FY 2020-21, \$10 million (0.3 percent) less than the November 2017 forecast. The number of renter's property tax refund filings is again lower than previous estimates, resulting in an estimated \$11 million (2.4 percent) in lower expenditures. The trend of additional homestead property tax refund filings is also expected to continue, but is tempered by higher projected income growth, resulting in an estimated increase of \$3 million (0.4 percent) over November estimates.

Debt Service and All Other. Debt service expenditures are forecast to be \$1.178 billion in the next biennium, which is \$26 million (2.2 percent) less than the previous estimates. This reflects lower interest rate assumptions on future bond sales, which results in higher bond premiums than previously estimated. This lowers the estimated size of the bond issue and forecast debt service payments. The estimates also reflect higher than expected investment income and higher than projected sale price for the Crosswinds school building, both of which reduces the expected general fund debt service transfer in FY 2020-21.

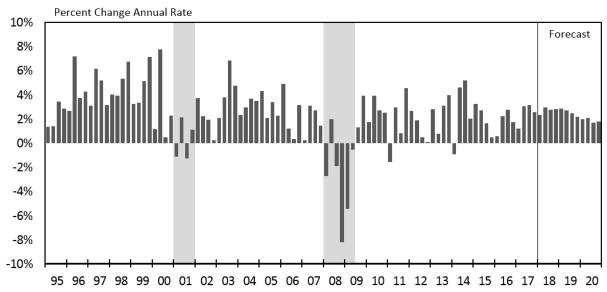
All other bill area spending is forecast to total \$8.023 billion, a \$131 million (1.7 percent) increase from the November forecast. \$129 million of this change is due to the appropriation of legislative funding in February 2018.



APPENDIX

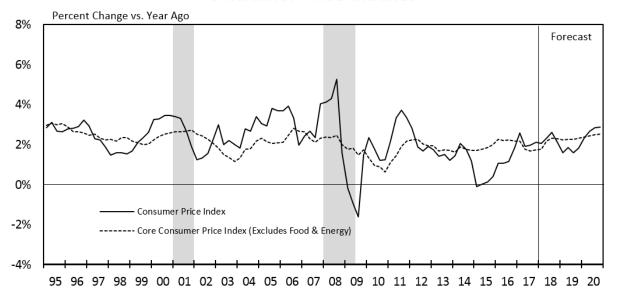
ECONOMIC DATA	
Selective Economic Charts	43
U.S. Economic Forecast Summary	51
Minnesota Economic Forecast Summary	52
Economic Forecasts Comparison: Minnesota and U.S.	53
Alternative Economic Forecasts Comparison	54
IHS Economics Baseline Comparison: U.S. Economic Forecast	54
Economic Factors Affecting Tax Revenue	55
REVENUE EXPERIENCE	
Current Fiscal Year-to-Date: End-of-Session vs. Actual Comparison	58
GENERAL FUND BALANCE SHEETS	
Current Biennium: Forecast Comparison	59
Current Biennium: By Fiscal Year	60
Biennial Comparison: Previous vs. Current	61
Planning Estimates: Forecast Comparison	62
Planning Estimates: By Fiscal Year	63
Biennial Comparison: Current vs. Planning Estimates	64
Biennial Comparison: Planning Horizon	65
OTHER DATA	
Historical and Projected Revenue Growth	66
Historical and Projected Expenditure Growth	67

Real Gross Domestic Product



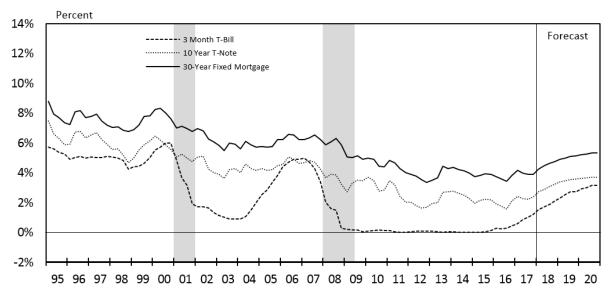
From 2018 through 2021, real GDP grows initially between 2.2 and 3.0 percent before dipping below 2 percent in 2020, consistent with modest productivity growth. This is slower than the 3.1 percent average annual growth during the 20 years preceding the '08-'09 recession.

Consumer Price Indexes



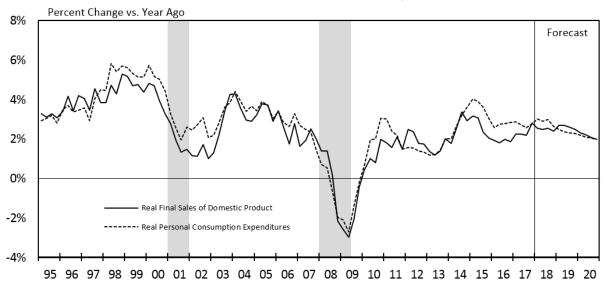
Year-over-year growth in the Core Consumer Price Index (Core CPI) increases fairly steadily from 1.75 percent in 2017Q4 to 2.51 percent in 2020Q4. The Fed's target for inflation measured by growth in the Core Personal Consumption Expenditure index (Core PCE) (not shown) is about 2.0 percent. The Core PCE is forecast to rise above 2.0 percent in 2019Q2.

Interest Rates



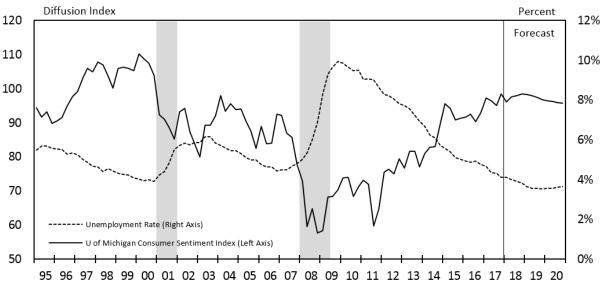
In the IHS forecast, the Fed steadily tightens monetary policy, pushing up interest rates across the board. The Federal Funds rate (not shown) tops out at 3.45 percent in 2021, when the 10 year T-note reaches 3.71 percent.

Real Final Sales & Consumption



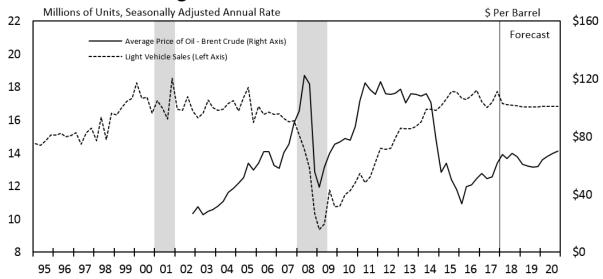
Real personal consumption expenditure growth slows and averages about 2.2 percent per year for 2019 and 2020, consistent with modest real GDP growth.

Consumer Sentiment and Unemployment Rate



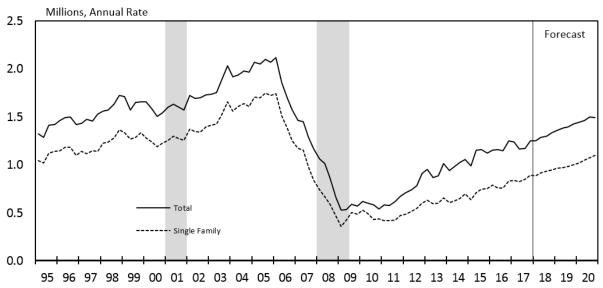
The IHS forecast calls for the unemployment rate to gradually drift down to 3.5 percent and then rise slightly. Consumer sentiment stabilizes less than 5 points short of 100, a healthy reading for this indicator.

Light Vehicle Sales and Oil Prices



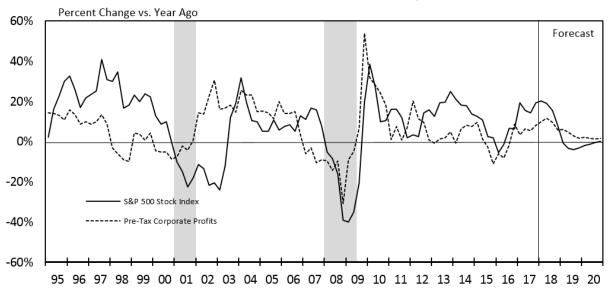
In the IHS forecast, oil prices gradually dip to \$59 per barrel in 2019 before rising again to an average of \$67 per barrel in 2020. Light vehicle sales reached a post-recession peak in 2016Q4 at 17.8 million units. In this forecast, they gradually decline over 2018 and early 2019 before stabilizing at around 16.8 million units through 2020.

Housing Starts



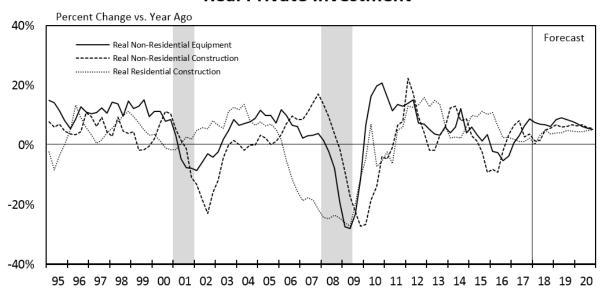
In this forecast, housing starts rise steadily, reaching a high of 1.5 million units in 2020Q3. That level was last seen prior to the '08-'09 recession.

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



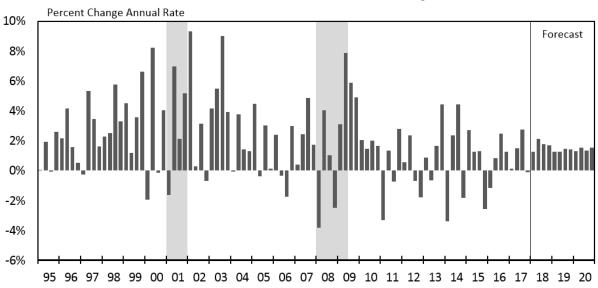
In this forecast, growth in the S&P500 stock index slows until 2019Q1, at which point it declines until ticking upward again in 2020Q4. Corporate profits steadily increase, but generally at a decreasing rate.

Real Private Investment



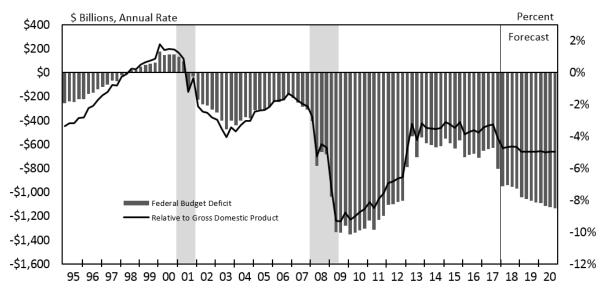
Real non-residential equipment investment grows steadily through 2020 at rates always above 5.0 percent, exceeding the expected rate of real GDP growth in each quarter. Real non-residential construction growth reaches a high of 6.8 in late 2019 and early 2020 before declining slightly.

Total Non-Farm Productivity



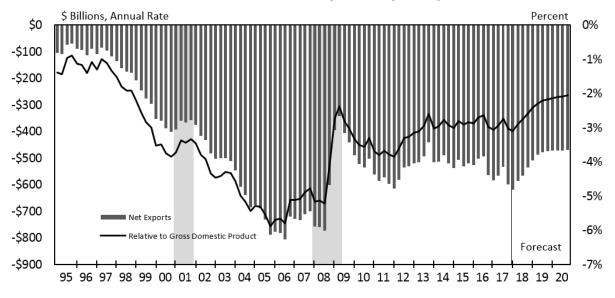
Following a slight uptick in 2018, non-farm productivity growth settles down to an average of 1.4 percent through 2020. This is consistent with a GDP growth rate of less than 3.0 percent.

Federal Budget Deficit (NIPA Basis)



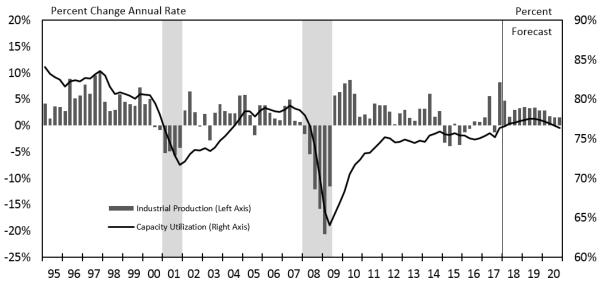
From 2017Q4 to 2020Q4, the federal budget deficit as a percent of GDP increases about 0.9 percentage points from 4.1 percent to 5.0 percent. This forecast incorporates the increase in the deficit from the Tax Cuts and Jobs Act (TCJA).

Balance of Trade (Net Exports)



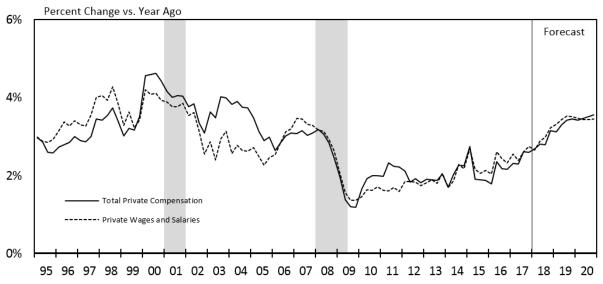
The trade deficit steadily decreases over time, both in dollar terms and as a share of GDP. It drops nearly a full percentage point from 3.0 percent in 2017Q4 to 2.1 percent in 2020Q4. The drop is attributed to a stronger world economy, with no major country in recession. After 2018, the real, trade-weighted value of the U.S. dollar (not shown) stabilizes around 1.08.

Industrial Production and Factory Operating Rate



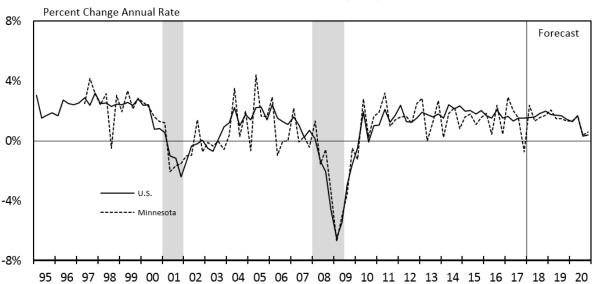
In this forecast, industrial production continues a post-hurricane rebuilding boom through 2018Q1. Thereafter, industrial production grows in a range between, 1.7 and 3.5 percent, averaging about 2.8 percent from 2018Q1 to 2020Q4. Capacity utilization remains steady above 76 percent.

Employment Cost Index



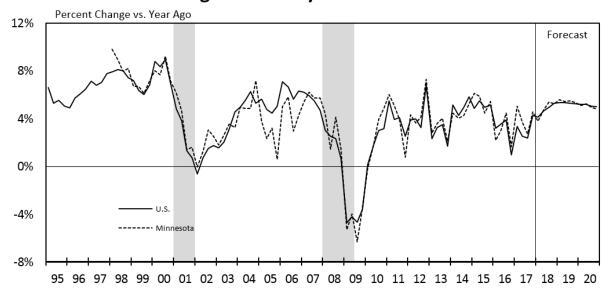
In this forecast, the Employment Cost Index, which has been around 2 percent since the '08-'09 recession, grows to 3.5 percent in 2020. Given the IHS forecast for inflation, this would represent an increase in real compensation.

Total Non-Farm Employment



The U.S. annual employment growth rate holds steady at an average of 1.7 percent from 2018Q1 through 2019Q4 before dipping down to 0.4 percent by the end of 2020. After a high of 2.4 percent in 2018Q1, Minnesota's annual employment growth rate drops below 1.0 percent in the second half of 2020.

Wage and Salary Disbursements



Over the 2018Q1 to 2020Q4 period, total U.S. wage and salary income is forecast to grow in roughly the 4.1 to 5.3 percent rage. Minnesota's total wage and salary income grows between 3.8 and 5.6 percent range over the same period.

U.S. Economic Forecast Summary

Forecast 2016 to 2021, Calendar Years

	2014	2015	2016	2017	2018	2019	2020	2021
Re	al National I		-	ns of 2009 [-			
Real Gross Domestic Product (GDP)	16,013.3	16,471.5	16,716.2	17,092.7	17,558.9	18,037.9	18,416.5	18,760.9
%Chg	2.6	2.9	1.5	2.3	2.7	2.7	2.1	1.9
Real Consumption	10,868.4	11,264.3	11,572.1	11,888.9	12,231.5	12,520.4	12,781.6	13,043.8
%Chg	2.9	3.6	2.7	2.7	2.9	2.4	2.1	2.1
Real Nonresidential Fixed Investment	2,172.7	2,223.5	2,210.4	2,314.2	2,436.6	2,593.5	2,723.0	2,814.6
%Chg	6.9	2.3	-0.6	4.7	5.3	6.4	5.0	3.4
Real Residential Investment	505.2	556.9	587.4	597.5	616.2	643.4	673.3	693.5
%Chg	3.5	10.2	5.5	1.7	3.1	4.4	4.6	3.0
Real Personal Income	13,574.6	14,205.7	14,377.4	14,571.9	14,914.2	15,437.1	15,860.4	16,244.8
%Chg	3.7	4.6	1.2	1.4	2.3	3.5	2.7	2.4
Curre	ent Dollar Na	ational Inco	me Account	s (Billions o	f Dollars)			
Gross Domestic Product (GDP)	17,427.6	18,120.7	18,624.5	19,386.8	20,381.8	21,449.0	22,466.9	23,475.1
%Chg	4.4	4.0	2.8	4.1	5.1	5.2	4.7	4.5
Personal Income	14,818.2	15,553.0	15,928.7	16,416.9	17,109.4	18,022.3	18,932.5	19,833.2
%Chg	5.3	5.0	2.4	3.1	4.2	5.3	5.1	4.8
Wage & Salary Disbursements	7,476.8	7,858.9	8,085.2	8,339.6	8,736.9	9,200.2	9,670.8	10,146.7
%Chg	5.1	5.1	2.9	3.1	4.8	5.3	5.1	4.9
Non-Wage Personal Income	7,341.4	7,694.1	7,843.5	8,077.3	8,372.5	8,822.1	9,261.7	9,686.4
%Chg	5.5	4.8	1.9	3.0	3.7	5.4	5.0	4.6
-		Price and	Wage Index	es				
U.S. GDP Deflator (2005=1.0)	108.839	110.012	111.419	113.427	116.071	118.905	121.989	125.123
%Chg	1.8	1.1	1.3	1.8	2.3	2.4	2.6	2.6
U.S. Consumer Price Index (1982-								
84=1.0)	2.367	2.370	2.400	2.452	2.507	2.550	2.619	2.686
, %Chg	1.6	0.1	1.3	2.1	2.3	1.7	2.7	2.6
Employment Cost Index (Dec 2005=1.0)	1.212	1.238	1.264	1.295	1.332	1.376	1.424	1.477
%Chg	2.1	2.1	2.1	2.5	2.9	3.3	3.5	3.7
			nt (Thousan					
Employment - Total Non-Farm Payrolls	138.9	141.8	144.3	146.6	149.0	151.6	153.5	154.4
%Chg	1.9	2.1	1.8	1.6	1.6	1.8	1.3	0.6
Construction	6.1	6.5	6.7	7.0	7.2	7.4	7.8	8.1
%Chg	5.0	5.0	4.1	3.4	3.0	3.7	5.2	3.8
Manufacturing	12.2	12.3	12.4	12.4	12.7	12.8	12.9	12.9
%Chg	1.4	1.2	0.1	0.7	1.7	1.2	0.6	0.1
Private Service-Providing	97.8	100.2	102.4	104.2	106.0	108.0	109.2	109.7
%Chg	2.1	2.4	2.2	1.8	1.7	1.9	1.1	0.5
Government	21.9	22.0	22.2	22.3	22.4	22.6	22.9	22.9
%Chg	0.1	0.7	0.9	0.4	0.3	0.8	1.4	0.2
U.S. Civilian Labor Force	155.9	157.1	159.2	160.3	162.0	164.0	166.0	167.1
Employment - Household Survey	146.3	148.8	151.4	153.3	155.6	158.1	160.0	160.9
Unemployment Rate (%)	6.2	5.3	4.9	4.4	4.0	3.6	3.6	3.7
onemployment rate (70)	0.2		ey Measure:		4.0	5.0	5.0	5.7
Non-Farm Productivity (index,		Other Re	., iricasure	•				
2005=1.0)	1.057	1.070	1.070	1.083	1.099	1.116	1.131	1.149
%Chg	1.037	1.070	0.0	1.003	1.099	1.116	1.151	1.149
Total Ind. Production (index, 2007=100)	105.129	104.384	103.106	105.118	109.076	112.575	115.371	117.574
%Chg	3.1	-0.7	-1.2	2.0	3.8	3.2	2.5	1.9
Manhours in Private Non-Farm	5.1	-0.7	-1.2	2.0	5.8	5.2	2.3	1.9
Estab.Billions of Hours	196.9	201.2	201 E	208.3	212 1	216 /	218.9	220.1
		201.3	204.6		212.1	216.4		
%Chg	2.3	2.2	1.6	1.8	1.8	2.0	1.2	0.5
Average Weekly Hours	32.5	32.5	32.4	32.5	32.4	32.5	32.4	32.4
Manufacturing Workweek	42.0	41.8	41.8	41.9	41.7	41.6	41.4	41.3

Source: IHS Economics; February 2016 Baseline

Minnesota Economic Forecast Summary

Forecast 2016 to 2021 - Calendar Years

	2014	2015	2016	2017	2018	2019	2020	2021
	Current	Dollar Incor	ne (Billions	of Dollars)				
Personal Income	268.530	280.406	287.250	296.775	309.275	326.618	343.620	358.978
%Chg	4.9	4.4	2.4	3.3	4.2	5.6	5.2	4.5
Wage & Salary Disbursements	145.930	153.918	158.271	164.612	172.513	181.948	191.083	199.903
%Chg	4.5	5.5	2.8	4.0	4.8	5.5	5.0	4.6
Non-Wage Personal Income	122.600	126.489	128.979	132.161	136.765	144.675	152.535	159.075
%Chg	5.3	3.2	2.0	2.5	3.5	5.8	5.4	4.3
Supplements to Wages & Salaries	32.546	32.974	35.441	37.313	38.612	40.416	42.271	44.016
%Chg	5.7	1.3	7.5	5.3	3.5	4.7	4.6	4.1
Dividends, Interest, & Rent Income	49.786	52.852	53.309	54.829	57.437	60.563	64.080	67.663
%Chg	9.3	6.2	0.9	2.9	4.8	5.4	5.8	5.6
Farm Proprietors Income	3.359	2.773	1.390	0.982	0.604	1.424	2.364	2.172
%Chg	-38.5	-17.4	-49.9	-29.4	-38.5	135.8	66.1	-8.1
Non-Farm Proprietors Income	18.330	18.957	19.511	20.427	21.362	22.386	22.880	23.136
%Chg	5.7	3.4	2.9	4.7	4.6	4.8	2.2	1.1
Personal Current Transfer Receipts	42.969	44.320	45.579	46.292	47.545	49.988	52.455	55.074
%Chg	5.1	3.1	2.8	1.6	2.7	5.1	4.9	5.0
Less: Contrib. for Gov. Social Ins.	23.130	24.077	24.812	26.140	27.261	28.572	29.982	31.454
%Chg	3.3	4.1	3.1	5.4	4.3	4.8	4.9	4.9
	Real Ir	ncome (Billi	ons of 2009	Dollars)				
Real Personal Income	245.993	256.119	259.269	263.424	269.595	279.765	287.863	294.030
%Chg	3.3	4.1	1.2	1.6	2.3	3.8	2.9	2.1
Real Wage & Salary Disbursements	133.683	140.585	142.853	146.114	150.378	155.850	160.075	163.733
%Chg	3.0	5.2	1.6	2.3	2.9	3.6	2.7	2.3
	1	Employmen	it (Thousan	ds)				
Employment - Total Non-Farm Payrolls	2,813.4	2,856.0	2,895.7	2,943.7	2,982.7	3,032.1	3,069.9	3,092.2
%Chg	1.4	1.5	1.4	1.7	1.3	1.7	1.2	0.7
Construction	107.6	115.2	116.3	122.1	124.6	126.7	128.8	130.5
%Chg	7.1	7.0	1.0	5.0	2.1	1.7	1.6	1.3
Manufacturing	312.3	317.5	317.9	319.9	323.6	326.1	327.1	326.9
%Chg	1.6	1.7	0.1	0.6	1.1	0.8	0.3	-0.1
Private Service-Providing	1,965.8	1,997.3	2,031.3	2,066.9	2,098.2	2,139.0	2,167.8	2,185.5
%Chg	1.0	1.6	1.7	1.8	1.5	1.9	1.3	0.8
Government	420.6	419.1	424.0	427.7	429.1	432.7	438.0	440.1
%Chg	1.5	-0.4	1.2	0.9	0.3	0.8	1.2	0.5
Minnesota Civilian Labor Force	2,954.5	2,970.9	3,009.9	3,043.8	3,085.3	3,114.0	3,140.0	3,148.5
Unemployment Rate (%)	4.1	3.8	3.5	3.7	3.0	2.4	2.4	2.4
	Dem	ographic In	dicators (N	lillions)				
Total Population	5.453	5.483	5.525	5.577	5.614	5.648	5.685	5.718
%Chg	0.7	0.6	0.8	0.9	0.7	0.6	0.7	0.6
Total Population Age 16 & Over	4.313	4.341	4.379	4.425	4.458	4.490	4.527	4.560
%Chg	0.8	0.7	0.9	1.0	0.8	0.7	0.8	0.7
Total Population Age 65 & Over	0.780	0.805	0.833	0.862	0.893	0.924	0.959	0.990
%Chg	3.3	3.3	3.4	3.5	3.6	3.5	3.8	3.2
Total Households	2.129	2.147	2.149	2.163	2.184	2.204	2.226	2.245
%Chg	0.4	0.8	0.1	0.6	1.0	0.9	1.0	0.9
	Ho	using Indica	tors (Thous	sands)				
Total Housing Permits (Authorized)	16.789	20.337	23.632	24.609	24.942	24.801	24.473	24.049
%Chg	-0.2	21.1	16.2	4.1	1.4	-0.6	-1.3	-1.7
Single-Family	10.276	12.338	13.707	15.063	15.111	15.025	14.826	14.570
%Chg	-3.0	20.1	11.1	9.9	0.3	-0.6	-1.3	-1.7
					/	- \		

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

Forecast Comparison: Minnesota & U.S.

Forecast 2016 to 20121, Calendar Years

	2014	2015	2016	2017	2018	2019	2020	2021			
	Personal	Income (B	illions of Cu	ırrent Dolla	ırs)						
Minnesota											
February 2018	268.5	280.4	287.2	296.8	309.3	326.6	343.6	359			
%Chg	4.9	4.4	2.4	3.3	4.2	5.6	5.2	4			
November 2017	268.5	280.4	287.2	297.4	309.7	323.8	338.5	354			
%Chg	4.9	4.4	2.4	3.5	4.2	4.5	4.5	4			
U.S.											
February 2018	14,818	15,553	15,929	16,417	17,109	18,022	18,933	19,83			
%Chg	5.3	5.0	2.4	3.1	4.2	5.3	5.1	4			
November 2017	14,818	15,553	15,929	16,428	17,074	17,899	18,756	19,66			
%Chg	5.3	5.0	2.4	3.1	3.9	4.8	4.8	4			
Wage and Salary Disbursements (Billions of Current Dollars)											
Minnesota											
February 2018	145.9	153.9	158.3	164.6	172.5	181.9	191.1	199			
%Chg	4.5	5.5	2.8	4.0	4.8	5.5	5.0	4			
November 2017	145.9	153.9	158.3	165.1	172.8	180.9	188.8	197			
%Chg	4.5	5.5	2.8	4.3	4.7	4.7	4.4	4			
U.S.											
February 2018	7,477	7,859	8,085	8,340	8,737	9,200	9,671	10,14			
%Chg	5.1	5.1	2.9	3.1	4.8	5.3	5.1	4			
November 2017	7,477	7,859	8,085	8,364	8,732	9,173	9,603	10,04			
%Chg	5.1	5.1	2.9	3.4	4.4	5.0	4.7	4			
	Total Non-Farm Payroll Employment (Thousands)										
			p.o,	iciic (iiious	unusj						
Minnesota				ient (mous	unus,						
Minnesota February 2018		-				3.032	3.070	3.09			
Minnesota February 2018 %Chg	2,813 1.4	2,856 1.5	2,896 1.4	2,944 1.7	2,983 1.3	3,032 1.7	3,070 1.2				
February 2018	2,813 1.4	2,856 1.5	2,896 1.4	2,944 1.7	2,983 1.3	1.7	1.2	0			
February 2018 %Chg	2,813	2,856	2,896	2,944	2,983			3,0 ⁻			
February 2018 %Chg November 2017	2,813 1.4 2,813	2,856 1.5 2,856	2,896 1.4 2,896	2,944 1.7 2,949	2,983 1.3 2,990	1.7 3,023	1.2 3,051	3,0 ⁻			
February 2018 %Chg November 2017 %Chg	2,813 1.4 2,813	2,856 1.5 2,856	2,896 1.4 2,896	2,944 1.7 2,949	2,983 1.3 2,990	1.7 3,023	1.2 3,051	3,0°			
February 2018 %Chg November 2017 %Chg U.S.	2,813 1.4 2,813 1.4	2,856 1.5 2,856 1.5	2,896 1.4 2,896 1.4	2,944 1.7 2,949 1.8	2,983 1.3 2,990 1.4	1.7 3,023 1.1	1.2 3,051 0.9	0 3,0 0 154,42			
February 2018 %Chg November 2017 %Chg U.S. February 2018	2,813 1.4 2,813 1.4 138,937	2,856 1.5 2,856 1.5	2,896 1.4 2,896 1.4 144,349	2,944 1.7 2,949 1.8 146,623	2,983 1.3 2,990 1.4 148,956	1.7 3,023 1.1 151,573	1.2 3,051 0.9 153,518	0 3,0 0 154,42			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg	2,813 1.4 2,813 1.4 138,937 1.9	2,856 1.5 2,856 1.5 141,819 2.1	2,896 1.4 2,896 1.4 144,349 1.8	2,944 1.7 2,949 1.8 146,623 1.6	2,983 1.3 2,990 1.4 148,956 1.6	1.7 3,023 1.1 151,573 1.8	1.2 3,051 0.9 153,518 1.3	154,4: 0 151,79			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017	2,813 1.4 2,813 1.4 138,937 1.9 138,937	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3	1.7 3,023 1.1 151,573 1.8 149,805	1.2 3,051 0.9 153,518 1.3 150,984	154,42 0 151,79			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3	1.7 3,023 1.1 151,573 1.8 149,805	1.2 3,051 0.9 153,518 1.3 150,984	154,42 0 151,79			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current December 1)	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3	1.7 3,023 1.1 151,573 1.8 149,805 1.0	1.2 3,051 0.9 153,518 1.3 150,984 0.8	0 3,0 0 154,44 0 151,79			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8 arm Wage	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current December 1)	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3 biliars)	1.7 3,023 1.1 151,573 1.8 149,805 1.0	1.2 3,051 0.9 153,518 1.3 150,984 0.8	00 3,07 00 154,44 00 151,75 00			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg Minnesota February 2018	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An 51,869 3.1	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8 arm Wage 54,657 1.4	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current December 1)	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3 biliars) 57,839 3.4	1.7 3,023 1.1 151,573 1.8 149,805 1.0 60,008 3.8	1.2 3,051 0.9 153,518 1.3 150,984 0.8	0 3,07 0 154,42 0 151,75 0			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg Minnesota February 2018 %Chg November 2017	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An 51,869 3.1 51,869	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F 53,893 3.9 53,894	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8 arm Wage 54,657 1.4 54,658	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current December 2.3 55,921 2.3	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3 biliars) 57,839 3.4 57,779	1.7 3,023 1.1 151,573 1.8 149,805 1.0 60,008 3.8 59,842	1.2 3,051 0.9 153,518 1.3 150,984 0.8 62,244 3.7 61,900	0 3,07 0 154,42 0 151,79 0 64,64 3 64,10			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg Minnesota February 2018 %Chg	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An 51,869 3.1	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8 arm Wage 54,657 1.4	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current December 1)	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3 biliars) 57,839 3.4	1.7 3,023 1.1 151,573 1.8 149,805 1.0 60,008 3.8	1.2 3,051 0.9 153,518 1.3 150,984 0.8	0 3,0° 0 154,42 0 151,7° 0 64,64 3 64,10			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg Minnesota February 2018 %Chg November 2017 %Chg	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An 51,869 3.1 51,869	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F 53,893 3.9 53,894 3.9	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8 arm Wage 54,657 1.4 54,658	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current December 2.3 55,921 2.3	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3 biliars) 57,839 3.4 57,779 3.2	1.7 3,023 1.1 151,573 1.8 149,805 1.0 60,008 3.8 59,842 3.6	1.2 3,051 0.9 153,518 1.3 150,984 0.8 62,244 3.7 61,900 3.4	0 3,0° 0 154,4° 0 151,7° 0 64,6° 3 64,1° 3			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg Minnesota February 2018 %Chg November 2017 %Chg U.S.	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An 51,869 3.1 51,869 3.1	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F 53,893 3.9 53,894	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8 3arm Wage 54,657 1.4 54,658 1.4	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current Do 55,921 2.3 55,994 2.4	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3 biliars) 57,839 3.4 57,779	1.7 3,023 1.1 151,573 1.8 149,805 1.0 60,008 3.8 59,842	1.2 3,051 0.9 153,518 1.3 150,984 0.8 62,244 3.7 61,900	0 3,03 0 154,42 0 151,79 0 64,64 3 64,10 3			
February 2018 %Chg November 2017 %Chg U.S. February 2018 %Chg November 2017 %Chg Minnesota February 2018 %Chg November 2017 %Chg U.S. February 2018	2,813 1.4 2,813 1.4 138,937 1.9 138,937 1.9 Average An 51,869 3.1 51,869 3.1	2,856 1.5 2,856 1.5 141,819 2.1 141,813 2.1 nual Non-F 53,893 3.9 53,894 3.9	2,896 1.4 2,896 1.4 144,349 1.8 144,306 1.8 3arm Wage 54,657 1.4 54,658 1.4	2,944 1.7 2,949 1.8 146,623 1.6 146,440 1.5 (Current Do 55,921 2.3 55,994 2.4	2,983 1.3 2,990 1.4 148,956 1.6 148,293 1.3 biliars) 57,839 3.4 57,779 3.2	1.7 3,023 1.1 151,573 1.8 149,805 1.0 60,008 3.8 59,842 3.6	1.2 3,051 0.9 153,518 1.3 150,984 0.8 62,244 3.7 61,900 3.4	3,05 0 3,07 0 154,42 0 151,75 0 64,64 3 64,10 4 66,17			

Alternative Forecast Comparison

Calendar Years

	17Q3	17Q4	18Q1	18Q2	18Q2	18Q4	2016	2017	2018	2019	
Real Gross Domestic Product (GDP), Percent Change, Seasonally Adjusted at Annual Rate											
Blue Chip Consensus (02-18)	3.2	2.6	2.8	2.9	2.7	2.6	1.5	2.3	2.7	2.7	
IHS Economics Baseline (02-18)	3.2	2.6	2.4	2.9	2.8	2.8	1.5	2.3	2.2	2.5	
Moody's Analytics (02-18)	3.2	2.6	2.6	3.1	3.5	3.2	1.5	2.3	2.9	2.6	
S&P Economic Forecast (01-18)	-	-	-	-	-	-	1.5	2.3	2.8	2.2	
Wells Fargo (02-18)	3.2	2.6	3.1	2.8	2.9	2.7	1.5	2.3	2.9	2.8	
CBO Outlook (06-17)	0.7	3.2	2.5	2.3	2.0	2.0	1.5	2.3	2.1	2.2	
Consumer Price Index (CPI), Per	rcent Chang	e, Seaso	nally Ad	justed at	t Annual	Rate (ex	cept w	nere not	ted)		
Blue Chip Consensus (02-18)	2.0	3.7	2.7	1.9	2.3	2.1	1.3	2.1	2.3	2.2	
IHS Economics Baseline (02-18)	3.1	-0.3	2.0	2.5	2.1	1.4	1.3	2.1	2.3	1.7	
Moody's Analytics (02-18)	2.0	3.7	2.7	2.2	2.4	2.4	1.3	2.1	2.5	2.5	
S&P Economic Forecast (01-18)	-	-	-	-	-	-	1.3	2.1	2.2	1.9	
Wells Fargo (02-18)*	2.0	2.1	2.3	2.0	2.6	1.9	1.3	2.1	2.4	1.9	
CBO Outlook (06-17)	3.1	0.4	2.5	2.3	2.3	2.3	1.3	2.3	2.3	2.2	

^{*} Year-over-Year Percent Change

IHS Economics Baseline Forecast Comparison

Calendar Years

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Real Gross Dome	stic Prod	luct (GDF), Annua	l Percen	t Change	:			
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	-	-
November 2016	2.2	1.7	2.4	2.6	1.5	2.2	2.2	2.2	2.0	2.2
February 2017	2.2	1.7	2.4	2.6	1.6	2.3	2.7	2.3	2.1	2.2
November 2017	2.2	1.7	2.6	2.9	1.5	2.2	2.5	2.2	2.1	2.0
February 2018	2.2	1.7	2.6	2.9	1.5	2.3	2.7	2.7	2.1	1.9
	Consumer Pr	ice Index	(CPI), A	nnual Pe	rcent Cha	ange				
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	-	-
November 2016	2.1	1.5	1.6	0.1	1.3	2.5	2.5	2.4	2.5	2.5
February 2017	2.1	1.5	1.6	0.1	1.3	2.4	1.9	2.4	2.7	2.6
November 2017	2.1	1.5	1.6	0.1	1.3	2.1	1.9	2.1	2.6	2.4
February 2018	2.1	1.5	1.6	0.1	1.3	2.1	2.3	1.7	2.7	2.6
								Source:	IHS Ecor	nomics

Source: IHS Economics

Factors Affecting Tax Revenue

Billions of Current Dollars

	2014	2015	2016	2017	2018	2019	2020	2021
		dividual Inc		alendar Yea				
Minnesota Non-Farm Tax Base			•		•			
November 2015	212.873	222.897	232.633	244.093	256.625	269.365	-	-
%Chg	4.5	4.7	4.4	4.9	5.1	5.0		
February 2016	212.873	222.646	229.615	240.335	252.558	264.448	-	-
%Chg	4.5	4.6	3.1	4.7	5.1	4.7		
November 2016	214.016	224.737	232.035	242.225	253.658	265.518	277.610	290.023
%Chg	5.7	5.0	3.2	4.4	4.7	4.7	4.6	4.5
February 2017	214.016	224.737	232.309	243.150	255.823	269.200	282.015	294.700
%Chg	5.7	5.0	3.4	4.7	5.2	5.2	4.8	4.5
November 2017	214.045	225.726	231.091	240.262	250.730	262.238	273.810	286.483
%Chg	5.7	5.5	2.4	4.0	4.4	4.6	4.4	4.6
February 2018	214.045	225.726	231.091	239.871	251.308	264.895	278.045	290.703
%Chg	5.7	5.5	2.4	3.8	4.8	5.4	5.0	4.6
Minnesota Wage and Salary D	Disbursements							
November 2015	145.926	153.019	159.958	167.580	175.413	183.918	-	-
%Chg	4.6	4.9	4.5	4.8	4.7	4.8		
February 2016	145.926	152.842	158.588	166.015	173.658	181.303	-	-
%Chg	4.6	4.7	3.8	4.7	4.6	4.4		
November 2016	145.948	153.846	159.410	166.923	174.843	182.918	191.040	199.655
%Chg	4.5	5.4	3.6	4.7	4.7	4.6	4.4	4.5
February 2017	145.948	153.846	159.708	167.220	175.853	184.783	193.485	202.568
%Chg	4.5	5.4	3.8	4.7	5.2	5.1	4.7	4.7
November 2017	145.930	153.918	158.271	165.098	172.785	180.883	188.835	197.095
%Chg	4.5	5.5	2.8	4.3	4.7	4.7	4.4	4.4
February 2018	145.930	153.918	158.271	164.612	172.513	181.948	191.083	199.903
%Chg	4.5	5.5	2.8	4.0	4.8	5.5	5.0	4.6
Minnesota Dividends, Interes	t, & Rental Inco	me						
November 2015	47.508	49.369	50.773	53.305	56.838	59.868	-	-
%Chg	3.9	3.9	2.8	5.0	6.6	5.3		
February 2016	47.508	49.405	49.921	52.211	56.026	59.535	-	-
%Chg	3.9	4.0	1.0	4.6	7.3	6.3		
November 2016	49.442	50.923	51.865	53.597	56.173	59.217	62.458	65.313
%Chg	8.5	3.0	1.8	3.3	4.8	5.4	5.5	4.6
February 2017	49.442	50.923	51.865	54.240	57.355	61.071	64.541	67.383
%Chg	8.5	3.0	1.9	4.6	5.7	6.5	5.7	4.4
November 2017	49.786	52.852	53.309	54.730	56.670	59.403	62.395	66.027
%Chg	9.3	6.2	0.9	2.7	3.5	4.8	5.0	5.8
February 2018	49.786	52.852	53.309	54.829	57.437	60.563	64.080	67.663
%Chg	9.3	6.2	0.9	2.9	4.8	5.4	5.8	5.6
Minnesota Non-Farm Propriet	tors' Income							
November 2015	19.440	20.510	21.901	23.204	24.374	25.578	-	-
%Chg	5.9	5.5	6.8	6.0	5.0	4.9		
February 2016	19.440	20.397	21.107	22.109	22.877	23.607	-	
%Chg	5.9	4.9	3.5	4.7	3.5	3.2		
November 2016	18.626	19.968	20.761	21.705	22.645	23.381	24.112	25.056
%Chg	7.4	7.2	4.0	4.5	4.3	3.2	3.1	3.9
February 2017	18.626	19.968	20.735	21.688	22.616	23.345	23.991	24.748
%Chg	7.4	7.2	3.8	4.6	4.3	3.2	2.8	3.2
November 2017	18.330	18.957	19.511	20.437	21.275	21.955	22.582	23.362
%Chg	5.7	3.4	2.9	4.7	4.1	3.2	2.9	3.5
February 2018	18.330	18.957	19.511	20.427	21.362	22.386	22.880	23.136
%Chg	5.7	3.4	2.9	4.7	4.6	4.8	2.2	1.1

Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2014	2015	2016	2017	2018	2019	2020	2021
Minnesota Synthetic Sales 1	Tay Paca	General Sa	ales Tax (Fis	cal Year)				
November 2015	78.560	81.685	85.626	90.097	94.537	98.470	_	_
%Chg	2.8	4.0	4.8	5.2	4.9	4.2		
February 2016	78.587	81.588	84.158	87.161	91.571	95.695	_	_
%Chg	2.8	3.8	3.1	3.6	5.1	4.5		
November 2016	79.007	82.162	80.945	82.860	85.645	88.705	91.581	94.852
%Chg	2.9	4.0	-1.5	2.4	3.4	3.6	3.2	3.6
February 2017	78.880	82.025	80.694	82.573	85.752	89.610	93.010	96.503
%Chg	2.9	4.0	-1.6	2.3	3.8	4.5	3.8	3.8
November 2017	79.116	82.398	80.998	83.454	86.420	89.633	92.701	95.663
%Chg	3.0	4.1	-1.7	3.0	3.6	3.7	3.4	3.2
February 2018	79.116	82.395	80.997	83.393	87.307	91.913	95.419	98.733
%Chg	3.0	4.1	-1.7	3.0	4.7	5.3	3.8	3.5
Minnesota's Proxy Share of					***	0.0	3.0	3.3
November 2015	14.605	15.163	15.803	16.555	17.184	17.870	_	_
%Chg	2.1	3.8	4.2	4.8	3.8	4.0		
February 2016	14.605	15.155	15.805	16.376	17.055	17.678	_	_
%Chg	2.1	3.8	4.3	3.6	4.1	3.7		
November 2016	14.690	15.363	16.030	16.429	16.632	16.998	17.528	18.163
%Chg	3.1	4.6	4.3	2.5	1.2	2.2	3.1	3.6
February 2017	14.690	15.363	16.029	16.592	16.978	17.700	18.373	19.076
%Chg	3.1	4.6	4.3	3.5	2.3	4.3	3.8	3.8
November 2017	14.703	15.430	16.122	16.747	17.534	17.822	18.238	18.877
%Chg	3.2	4.9	4.5	3.9	4.7	1.6	2.3	3.5
February 2018	14.703	15.430	16.122	16.748	17.887	18.580	18.767	19.199
%Chg	3.2	4.9	4.5	3.9	6.8	3.9	1.0	2.3
Minnesota's Proxy Share of	U.S. Capital Equip	ment Spend	ding					
November 2015	13.835	14.697	15.382	16.677	18.007	19.165	-	-
%Chg	2.1	6.2	4.7	8.4	8.0	6.4		
February 2016	13.835	14.686	15.102	15.725	17.017	18.326	-	-
%Chg	2.1	6.2	2.8	4.1	8.2	7.7		
November 2016	13.786	14.451	10.931	10.942	11.436	12.041	12.648	13.308
%Chg	1.5	4.8	-24.4	0.1	4.5	5.3	5.0	5.2
February 2017	13.786	14.451	10.929	10.817	11.320	11.919	12.537	13.157
%Chg	1.5	4.8	-24.4	-1.0	4.7	5.3	5.2	4.9
November 2017	13.779	14.406	10.620	10.672	11.526	12.021	12.525	12.918
%Chg	1.4	4.6	-26.3	0.5	8.0	4.3	4.2	3.1
February 2018	13.779	14.406	10.620	10.672	11.646	12.853	13.946	14.919
%Chg	1.4	4.6	-26.3	0.5	9.1	10.4	8.5	7.0
Minnesota's Proxy Share of								
November 2015	6.598	7.187	7.675	8.214	8.764	9.142	-	-
%Chg	11.8	8.9	6.8	7.0	6.7	4.3		
February 2016	6.596	7.122	7.465	7.793	8.315	8.707	-	-
%Chg	11.8	8.0	4.8	4.4	6.7	4.7		
November 2016	6.738	7.429	7.814	8.189	8.947	9.361	9.759	10.201
%Chg	13.8	10.3	5.2	4.8	9.3	4.6	4.2	4.5
February 2017	6.741	7.428	7.766	8.163	8.836	9.241	9.611	10.083
%Chg	13.8	10.2	4.6	5.1	8.2	4.6	4.0	4.9
November 2017	6.739	7.520	7.679	7.951	8.298	8.884	9.263	9.631
%Chg	13.8	11.6	2.1	3.5	4.4	7.1	4.3	4.0
February 2018	6.740	7.522	7.679	7.902	8.314	8.888	9.278	9.625
%Chg	13.8	11.6	2.1	2.9	5.2	6.9	4.4	3.7

Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2014	2015	2016	2017	2018	2019	2020	2021
		•	chise Tax (C		-			
U.S. Corporate Profits (w/ IVA	•		•	•		-		
February 2015	2,116.7	2,209.6	2,303.6	2,259.0	2,276.9	2,383.0	-	-
%Chg	4.6	4.4	4.3	-1.9	0.8	4.7		
November 2015	1,972.5	1,918.5	1,993.1	2,045.1	2,062.6	2,099.7	-	-
%Chg	0.9	-2.7	3.9	2.6	0.9	1.8		
February 2016	1,972.5	1,862.5	1,857.1	1,970.2	2,020.1	2,036.4	-	-
%Chg	0.9	-5.6	-0.3	6.1	2.5	0.8		
November 2016	2,045.6	1,932.5	1,791.7	1,903.6	2,024.9	2,048.5	2,063.0	2,124.3
%Chg	4.9	-5.5	-7.3	6.2	6.4	1.2	0.7	3.0
February 2017	2,045.6	1,932.5	1,978.9	2,098.0	2,256.0	2,281.3	2,292.1	2,362.7
%Chg	4.9	-5.5	2.4	6.0	7.5	1.1	0.5	3.1
November 2017*	2,033.0	1,964.3	1,978.7	2,114.5	2,218.1	2,316.0	2,402.7	2,496.6
%Chg	4.3	-3.4	0.7	6.9	4.9	4.4	3.7	3.9
February 2018	2,033.0	1,964.3	1,978.8	2,159.9	2,314.4	2,352.5	2,425.1	2,525.0
%Chg	4.3	-3.4	0.7	9.2	7.2	1.6	3.1	4.1
	I	Deed & Moi	rtgage Tax (I	Fiscal Year)				
U.S. New and Existing Home S	Sales (Current \$	Value)						
February 2015	1,221.3	1,362.5	1,547.8	1,642.4	1,701.4	1,807.2	-	-
%Chg	7.0	11.6	13.6	6.1	3.6	6.2		
November 2015	1,221.3	1,341.3	1,481.1	1,634.6	1,748.7	1,796.7	-	-
%Chg	6.9	9.8	10.4	10.4	7.0	2.7		
February 2016	1,221.3	1,341.3	1,458.2	1,611.1	1,712.1	1,747.0	-	-
%Chg	6.9	9.8	8.7	10.5	6.3	2.0		
November 2016	1,223.1	1,342.3	1,467.9	1,594.5	1,676.9	1,735.6	1,791.9	1,858.7
%Chg	6.9	9.8	9.4	8.6	5.2	3.5	3.2	3.7
February 2017	1,223.1	1,342.3	1,467.9	1,578.4	1,667.0	1,727.5	1,772.3	1,848.5
%Chg	6.9	9.8	9.4	7.5	5.6	3.6	2.6	4.3
November 2017	1,223.4	1,339.9	1,464.4	1,601.7	1,672.2	1,829.1	1,919.1	1,986.1
%Chg	7.0	9.5	9.3	9.4	4.4	9.4	4.9	3.5
February 2018	1,223.4	1,339.9	1,464.4	1,601.7	1,695.3	1,852.9	2,005.1	2,163.4
%Chg	7.0	9.5	9.3	9.4	5.8	9.3	8.2	7.9

 $[\]ensuremath{^{*}}$ We used October 2017 U.S. Corporate Profits due to a data inconsistency from IHS.

Current Fiscal Year-to-Date

November 2017 Forecast vs. Actual Revenue Comparison Fiscal Year-to-Date 2018; July 2017 – January 2018 (\$ IN THOUSANDS)

	FORECAST REVENUES	ACTUAL REVENUES	VARIANCE ACT-FCST
Individual Income Tax	REVENUES	REVENUES	ACI-FC31
Withholding	5,034,381	5,093,832	59,451
Declarations	1,358,700	1,691,172	332,472
Miscellaneous	361,007	394,044	33,037
Gross	6,754,087	7,179,048	424,961
Refund	177,470	182,919	5,449
Net	6,576,618	6,996,129	419,512
Corporate Franchise Tax			
Declarations	591,236	599,585	8,350
Miscellaneous	167,647	199,354	31,707
Gross	758,883	798,940	40,057
Refund	91,101	65,482	(25,619)
Net	667,782	733,458	65,675
General Sales and Use Tax			
Gross	3,249,424	3,236,455	(12,969)
Mpls. sales tax transferred to MSFA	1,180	1,180	(0)
Sales Tax Gross	3,250,605	3,237,635	(12,969)
Refunds (including Indian refunds)	93,379	95,124	1,745
Net	3,157,225	3,142,511	(14,714)
Other Revenues:			
Net Estate	77,599	144,904	67,305
Net Liquor/Wine/Beer	48,327	48,899	572
Net Cigarette/Tobacco	336,541	345,187	8,646
Deed and Mortgage	132,552	143,496	10,943
Net Insurance Premiums Taxes	180,471	186,076	5,605
Net Lawful Gambling	32,978	36,596	3,618
Health Care Surcharge	118,410	112,326	(6,085)
Other Taxes	1	15	15
Statewide Property Tax	379,647	372,402	(7,245)
DHS SOS Collections	42,221	47,531	5,310
Investment Income	14,501	22,816	8,315
Tobacco Settlement	154,296	157,260	2,964
Dept. Earnings & MSOP Recov.	115,308	115,356	48
Fines and Surcharges	38,163	37,945	(217)
Lottery Revenues	27,671	29,518	1,847
Revenues yet to be allocated	946	2,584	1,638
Residual Revenues	90,388	84,289	(6,099)
County Nursing Home, Pub Hosp IGT	4 700 040	-	07.470
Other Subtotal	1,790,018	1,887,197	97,179
Other Refunds	2,868	2,646	(222)
Other Net	1,787,151	1,884,552	97,401
Total Gross	12,553,594	13,102,821	549,227
Total Refunds	364,817	346,170	(18,647)
Total Net	12,188,776	12,756,650	567,874

FY 2018-19 General Fund Budget

February 2018 Forecast vs November 2017 Forecast

	11-17 Forecast FY 2018-19	2-18 Forecast FY 2018-19	\$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,333,262	-
Current Resources:			
Tax Revenues	42,624,265	42,963,853	339,588
Non-Tax Revenues	1,459,915	1,475,068	15,153
Subtotal - Non-Dedicated Revenue	44,084,180	44,438,921	354,741
Dedicated Revenue	1,205	1,205	-
Transfers In	308,585	307,396	(1,189)
Prior Year Adjustments	53,443	53,335	(108)
Subtotal - Other Revenue	363,233	361,936	(1,297)
Subtotal-Current Resources	44,447,413	44,800,857	353,444
Total Resources Available	47,780,675	48,134,119	353,444
Actual & Estimated Spending			
E-12 Education	18,888,970	18,835,239	(53,731)
Higher Education	3,282,318	3,282,318	-
Property Tax Aids & Credits	3,648,028	3,655,702	7,674
Health & Human Services	13,871,389	13,617,643	(253,746)
Public Safety & Judiciary	2,335,516	2,335,516	-
Transportation	340,791	340,791	-
Environment	333,321	355,291	21,970
Agriculture	125,575	125,575	
Jobs, Economic Development, Housing & Commerce	552,627	552,504	(123)
State Government & Veterans	1,194,294	1,310,369	116,075
Debt Service	1,142,756	1,138,131	(4,625)
Capital Projects & Grants	259,758	259,758	-
Estimated Cancellations	(20,000)	(20,000)	
Total Expenditures & Transfers	45,955,343	45,788,837	(166,506)
Balance Before Reserves	1,825,332	2,345,282	519,950
Cash Flow Account	350,000	350,000	-
Budget Reserve	1,608,364	1,608,364	-
Stadium Reserve	55,271	57,638	2,367
Budgetary Balance	(188,303)	329,280	517,583

FY 2018-19 General Fund Budget

	2-18 Forecast FY 2018	2-18 Forecast FY 2019	Biennial Total FY 2018-19
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	2,504,824	3,333,262
Current Resources:			
Tax Revenues	20,927,502	22,036,351	42,963,853
Non-Tax Revenues	758,193	716,875	1,475,068
Subtotal - Non-Dedicated Revenue	21,685,695	22,753,226	44,438,921
Dedicated Revenue	594	611	1,205
Transfers In	153,716	153,680	307,396
Prior Year Adjustments	26,816	26,519	53,335
Subtotal - Other Revenue	181,126	180,810	361,936
Subtotal-Current Resources	21,866,821	22,934,036	44,800,857
Total Resources Available	25,200,083	25,438,860	48,134,119
Actual & Estimated Spending			
E-12 Education	9,274,878	9,560,361	18,835,239
Higher Education	1,653,917	1,628,401	3,282,318
Property Tax Aids & Credits	1,733,795	1,921,907	3,655,702
Health & Human Services	6,697,113	6,920,530	13,617,643
Public Safety & Judiciary	1,168,904	1,166,612	2,335,516
Transportation	162,082	178,709	340,791
Environment	194,511	160,780	355,291
Agriculture	63,575	62,000	125,575
Jobs, Economic Development, Housing & Commerce	299,932	252,572	552,504
State Government & Veterans	759,555	550,814	1,310,369
Debt Service	563,123	575,008	1,138,131
Capital Projects & Grants	128,874	130,884	259,758
Estimated Cancellations	(5,000)	(15,000)	(20,000)
Total Expenditures & Transfers	22,695,259	23,093,578	45,788,837
Balance Before Reserves	2,504,824	2,345,282	2,345,282
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,608,364	1,608,364	1,608,364
Stadium Reserve	39,608	57,638	57,638
Budgetary Balance	506,852	329,280	329,280

Biennial Comparison: FY 2016-17 vs. FY 2018-19

	Actual FY 2016-17	2-18 Forecast FY 2018-19	\$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	2,103,017	3,333,262	1,230,245
Current Resources:			
Tax Revenues	40,343,036	42,963,853	2,620,817
Non-Tax Revenues	1,598,370	1,475,068	(123,302)
Subtotal - Non-Dedicated Revenue	41,941,406	44,438,921	2,497,515
Dedicated Revenue	1,296	1,205	(91)
Transfers In	397,910	307,396	(90,514)
Prior Year Adjustments	144,370	53,335	(91,035)
Subtotal - Other Revenue	543,576	361,936	(181,640)
Subtotal-Current Resources	42,484,982	44,800,857	2,315,875
Total Resources Available	44,587,999	48,134,119	3,546,120
Actual & Estimated Spending			
E-12 Education	17,408,718	18,835,239	1,426,521
Higher Education	3,084,888	3,282,318	197,430
Property Tax Aids & Credits	3,321,205	3,655,702	334,497
Health & Human Services	11,545,166	13,617,643	2,072,477
Public Safety & Judiciary	2,171,225	2,335,516	164,291
Transportation	274,742	340,791	66,049
Environment	385,936	355,291	(30,645)
Agriculture	115,370	125,575	10,205
Jobs, Economic Development, Housing & Commerce	459,040	552,504	93,464
State Government & Veterans	1,061,803	1,310,369	248,566
Debt Service	1,138,500	1,138,131	(369)
Capital Projects & Grants	278,156	259,758	(18,398)
Deficiencies/Other	9,988	-	(9,988)
Estimated Cancellations	-	(20,000)	(20,000)
Total Expenditures & Transfers	41,254,737	45,788,837	4,534,100
Balance Before Reserves	3,333,262	2,345,282	(987,980)
Cash Flow Account	350,000	350,000	-
Budget Reserve	1,603,443	1,608,364	4,921
Stadium Reserve	26,821	57,638	30,817
Appropriations Carried Forward	357,983	-	(357,983)
Budgetary Balance	995,015	329,280	(665,735)

Planning Estimates: FY 2020-21 General Fund Budget

February 2018 Forecast vs November 2017 Forecast

	11-17 Forecast FY 2020-21	2-18 Forecast FY 2020-21	\$ Change
Actual & Estimated Resources			_
Balance Forward From Prior Year	1,825,332	2,345,282	519,950
Current Resources:			
Tax Revenues	45,837,174	46,360,377	523,203
Non-Tax Revenues	1,435,211	1,403,231	(31,980)
Subtotal - Non-Dedicated Revenue	47,272,385	47,763,608	491,223
Dedicated Revenue	1,222	1,222	-
Transfers In	308,904	307,674	(1,230)
Prior Year Adjustments	63,214	63,107	(107)
Subtotal - Other Revenue	373,340	372,003	(1,337)
Subtotal-Current Resources	47,645,725	48,135,611	489,886
Total Resources Available	49,471,057	50,480,893	1,009,836
Actual & Estimated Spending			
E-12 Education	19,649,179	19,555,176	(94,003)
Higher Education	3,255,802	3,255,802	-
Property Tax Aids & Credits	3,662,106	3,652,469	(9,637)
Health & Human Services	15,575,972	15,413,621	(162,351)
Public Safety & Judiciary	2,361,015	2,361,015	-
Transportation	247,118	247,118	-
Environment	322,320	322,341	21
Agriculture	122,022	122,022	-
Jobs, Economic Development, Housing & Commerce	400,561	402,929	2,368
State Government & Veterans	931,736	1,060,604	128,868
Debt Service	1,204,338	1,177,965	(26,373)
Capital Projects & Grants	271,314	271,446	132
Estimated Cancellations	(20,000)	(20,000)	
Total Expenditures & Transfers	47,983,483	47,822,508	(160,975)
Balance Before Reserves	1,487,574	2,658,385	1,170,811
Cash Flow Account	350,000	350,000	-
Budget Reserve	1,608,364	1,608,364	-
Stadium Reserve	115,343	120,177	4,834
Budgetary Balance	(586,133)	579,844	1,165,977

Planning Estimates: FY 2020-21 General Fund Budget

	2-18 Forecast FY 2020	2-18 Forecast FY 2021	Biennial Total FY 2020-21
Actual & Estimated Resources			
Balance Forward From Prior Year	2,345,282	2,211,239	2,345,282
Current Resources:			
Tax Revenues	22,724,055	23,636,322	46,360,377
Non-Tax Revenues	705,916	697,315	1,403,231
Subtotal - Non-Dedicated Revenue	23,429,971	24,333,637	47,763,608
Dedicated Revenue	611	611	1,222
Transfers In	153,783	153,891	307,674
Prior Year Adjustments	26,220	36,887	63,107
Subtotal - Other Revenue	180,614	191,389	372,003
Subtotal-Current Resources	23,610,585	24,525,026	48,135,611
Total Resources Available	25,955,867	26,736,265	50,480,893
Actual & Estimated Spending			
E-12 Education	9,699,680	9,855,496	19,555,176
Higher Education	1,627,901	1,627,901	3,255,802
Property Tax Aids & Credits	1,791,710	1,860,759	3,652,469
Health & Human Services	7,676,365	7,737,256	15,413,621
Public Safety & Judiciary	1,179,263	1,181,752	2,361,015
Transportation	123,559	123,559	247,118
Environment	161,231	161,110	322,341
Agriculture	61,011	61,011	122,022
Jobs, Economic Development, Housing & Commerce	194,599	208,330	402,929
State Government & Veterans	531,201	529,403	1,060,604
Debt Service	571,988	605,977	1,177,965
Capital Projects & Grants	131,120	140,326	271,446
Estimated Cancellations	(5,000)	(15,000)	(20,000)
Total Expenditures & Transfers	23,744,628	24,077,880	47,822,508
Balance Before Reserves	2,211,239	2,658,385	2,658,385
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,608,364	1,608,364	1,608,364
Stadium Reserve	79,133	120,177	120,177
Budgetary Balance	173,742	579,844	579,844

Biennial Comparison: FY 2018-19 vs. FY 2020-21

	2-18 Forecast FY 2018-19	2-18 Forecast FY 2020-21	\$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	2,345,282	(987,980)
Current Resources:			
Tax Revenues	42,963,853	46,360,377	3,396,524
Non-Tax Revenues	1,475,068	1,403,321	(71,837)
Subtotal - Non-Dedicated Revenue	44,438,921	47,763,608	3,324,687
Dedicated Revenue	1,205	1,222	17
Transfers In	307,396	307,674	278
Prior Year Adjustments	53,335	63,107	9,772
Subtotal - Other Revenue	361,936	372,003	10,067
Subtotal-Current Resources	44,800,857	48,135,611	3,334,754
Total Resources Available	48,134,119	50,480,893	2,346,774
Actual & Estimated Spending			
E-12 Education	18,835,239	19,555,176	719,937
Higher Education	3,282,318	3,255,802	(26,516)
Property Tax Aids & Credits	3,655,702	3,652,469	(3,233)
Health & Human Services	13,617,643	15,413,621	1,795,978
Public Safety & Judiciary	2,335,516	2,361,015	25,499
Transportation	340,791	247,118	(93,673)
Environment	355,291	322,341	(32,950)
Agriculture	125,575	122,022	(3,553)
Jobs, Economic Development, Housing & Commerce	552,504	402,929	(149,575)
State Government & Veterans	1,310,369	1,060,604	(249,765)
Debt Service	1,138,131	1,177,965	39,834
Capital Projects & Grants	259,758	271,446	11,688
Estimated Cancellations	(20,000)	(20,000)	<u> </u>
Total Expenditures & Transfers	45,788,837	47,822,508	2,033,671
Balance Before Reserves	2,345,282	2,658,385	313,103
Cash Flow Account	350,000	350,000	-
Budget Reserve	1,608,364	1,608,364	-
Stadium Reserve	57,638	120,177	62,539
Budgetary Balance	329,280	579,844	250,564

FY 2016 - 21 Planning Horizon

	Actual FY 2016-17	2-18 Forecast FY 2018-19	2-18 Forecast FY 2020-21
Actual & Estimated Resources			
Balance Forward From Prior Year	2,103,017	3,333,262	2,345,282
Current Resources:			
Tax Revenues	40,343,036	42,963,853	46,360,377
Non-Tax Revenues	1,598,370	1,475,068	1,403,231
Subtotal - Non-Dedicated Revenue	41,941,406	44,438,921	47,763,608
Dedicated Revenue	1,296	1,205	1,222
Transfers In	397,910	307,396	307,674
Prior Year Adjustments	144,370	53,335	63,107
Subtotal - Other Revenue	543,576	361,936	372,003
Subtotal-Current Resources	42,484,982	44,800,857	48,135,611
Total Resources Available	44,587,999	48,134,119	50,480,893
Actual & Estimated Spending			
E-12 Education	17,408,718	18,835,239	19,555,176
Higher Education	3,084,888	3,282,318	3,255,802
Property Tax Aids & Credits	3,321,205	3,655,702	3,652,469
Health & Human Services	11,545,166	13,617,643	15,413,621
Public Safety & Judiciary	2,171,225	2,335,516	2,361,015
Transportation	274,742	340,791	247,118
Environment	385,936	355,291	322,341
Agriculture	115,370	125,575	122,022
Jobs, Economic Development, Housing & Commerce	459,040	552,504	402,929
State Government & Veterans	1,061,803	1,310,369	1,060,604
Debt Service	1,138,500	1,138,131	1,177,965
Capital Projects & Grants	278,156	259,758	271,446
Deficiencies/Other	9,988	-	-
Estimated Cancellations	-	(20,000)	(20,000)
Total Expenditures & Transfers	41,254,737	45,788,837	47,822,508
Balance Before Reserves	3,333,262	2,345,282	2,658,385
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,603,443	1,608,364	1,608,364
Stadium Reserve	26,821	57,638	120,177
Appropriations Carried Forward	357,983	-	-
Budgetary Balance	995,015	329,280	579,844

Historical and Projected Revenue Growth

February 2018 Forecast - General Fund

	Actual FY 2014	Actual FY 2015	Actual FY 2016	Actual FY 2017	Forecast FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Average Annual
									7
Individual Income Tax	\$9,660	\$10,403	\$10,739	\$10,931	\$11,451	\$12,263	\$12,796	\$13,399	
\$ change	647	744	335	192	520	812	533	603	4.00/
% change	7.2%	7.7%	3.2%	1.8%	4.8%	7.1%	4.3%	4.7%	4.8%
Sales Tax	\$5,043	\$5,131	\$5,233	\$5,405	\$5,489	\$5,775	\$5,890	\$6,137	
\$ change	282	89	101	172	83	286	116	247	
% change	5.9%	1.8%	2.0%	3.3%	1.5%	5.2%	2.0%	4.2%	2.8%
Compando Toy	\$1.278	\$1.455	\$1.473	\$1,205	\$1,301	\$1.295	\$1.293	\$1,316	
Corporate Tax \$ change	(3)	31,433 177	31,473 18	(268)	31,301 96	\$1,295 (6)	\$1,295 (2)	23	
% change	- 0.2%	13.9%	1.2%	- 18.2%	7.9%	- 0.4%	- 0.2 %	1.8%	0.4%
70 Cilalige	-0.2/0	13.5/0	1.2/0	-10.2/0	7.5/0	-0.4/0	-0.2/0	1.0/0	0.470
Statewide Property Tax	\$836	\$838	\$854	\$858	\$805	\$816	\$817	\$817	
\$ change	24	3	16	4	(53)	12	1	(0)	
% change	3.0%	0.3%	1.9%	0.5%	-6.2%	1.4%	0.1%	0.0%	-0.3%
Other Tax Revenue	\$1,738	\$1,758	\$1,812	\$1,833	\$1,881	\$1,886	\$1,927	\$1,968	
\$ change	456	20	53	21	49	5	41	41	1
% change	35.6%	1.2%	3.0%	1.1%	2.7%	0.3%	2.2%	2.1%	1.8%
9									
Total Tax Revenue	\$18,554	\$19,587	\$20,110	\$20,233	\$20,928	\$22,036	\$22,724	\$23,636	
\$ change	1,407	1,033	524	122	695	1,109	688	912	
% change	8.2%	5.6%	2.7%	0.6%	3.4%	5.3%	3.1%	4.0%	3.5%
Non-Tax Revenues	\$721	\$753	\$779	\$819	\$758	\$711	\$706	\$697	
\$ change	(77)	31	27	40	(75)	(35)	(4)	(9)	
% change	-9.7%	4.3%	3.5%	5.1%	-7.4%	-5.4%	-1.5%	-1.2%	-0.5%
Transfers, All Other	\$188	\$82	\$193	\$205	\$154	\$154	\$154	\$154	
\$ change	(414)	(105)	110	12	(51)	(0)	0	0	l .
% change	-68.8%	-56.1%	133.8%	6.5%	- 25.1 %	0.0%	0.1%	0.1%	-2.8%
Total Revenue	\$19,463	\$20,422	\$21,082	\$21,257	\$21,839	\$22,907	\$23,584	\$24,488	!
\$ change	916	959	661	174	569	1,074	684	904	l .
% change	4.9%	4.9%	3.2%	0.8%	2.7%	4.9%	3.0%	3.8%	3.3%
70 change	7.5/0	7.5/0	J.2/0	0.070	2.7/0	7.570	3.070	3.070	3.3/0

Historical and Projected Spending Growth

February 2018 Forecast - General Fund

	Actual FY 2014	Actual FY 2015	Actual FY 2016	Actual FY 2017	Forecast FY 2018	Forecast FY 2019	Forecast FY 2020	Forecast FY 2021	Average Annual
K-12 Education	\$8,430	\$8,188	\$8,507	\$8,901	\$9,275	\$9,560	\$9,700	\$9,855	
\$ change % change	(435) -4.9%	(242) -2.9 %	319 3.9%	394 4.6%	374 4.2%	285 3.1%	139 1.5%	156 1.6%	2.3%
Higher Education	\$1,381	\$1,452	\$1,529	\$1,556	\$1,654	\$1,628	\$1,628	\$1,628	
\$ change % change	86 6.7%	71 5.1%	77 5.3 %	27 1.7%	98 6.3%	(26) -1.5%	(1) 0.0 %	0.0%	2.4%
Prop. Tax Aids & Credits	\$1,321	\$1,613	\$1,646	\$1,675	\$1,734	\$1,922	\$1,792	\$1,861	
\$ change % change	0.0%	292 22.1%	33 2.1%	29 1.8%	59 3.5%	188 10.8%	(130) - 6.8%	69 3.9%	5.0%
Health & Human Services	\$5,430	\$6,191	\$5,601	\$5,944	\$6,697	\$6,921	\$7,676	\$7,737	
\$ change % change	222 4.3 %	761 14.0%	(590) -9.5%	343 6.1%	753 12.7%	223 3.3%	756 10.9%	61 0.8%	5.2%
Public Safety	\$944	\$1,035	\$1,041	\$1,133	\$1,169	\$1,167	\$1,179	\$1,182	
\$ change % change	(14) - 1.5%	91 9.6%	6 0.6%	92 8.9%	36 3.1%	(2) -0.2%	13 1.1%	2 0.2 %	3.3%
Debt Service	\$620	\$624	\$609	\$529	\$563	\$575	\$572	\$606	
\$ change % change	397 178.0%	4 0.6%	(14) -2.3%	(80) - 13.1%	34 6.4%	12 2.1%	(3) -0.5%	34 5.9%	-0.3%
All Other	\$1,223	\$1,190	\$1,218	\$1,300	\$1,604	\$1,321	\$1,198	\$1,209	
\$ change	352	(33)	28	82	303	(283)	(123)	11	
% change	40.4%	-2.7%	2.4%	6.8%	23.3%	-17.6%	-9.3%	0.9%	-0.2%
Total Spending	\$19,349	\$20,293	\$20,152	\$21,039	\$22,695	\$23,094	\$23,745	\$24,078	
\$ change	609	944	(141)	887	1,656	398	651	333	2 22/
% change	3.2%	4.9%	-0.7%	4.4%	7.9%	1.8%	2.8%	1.4%	3.2%