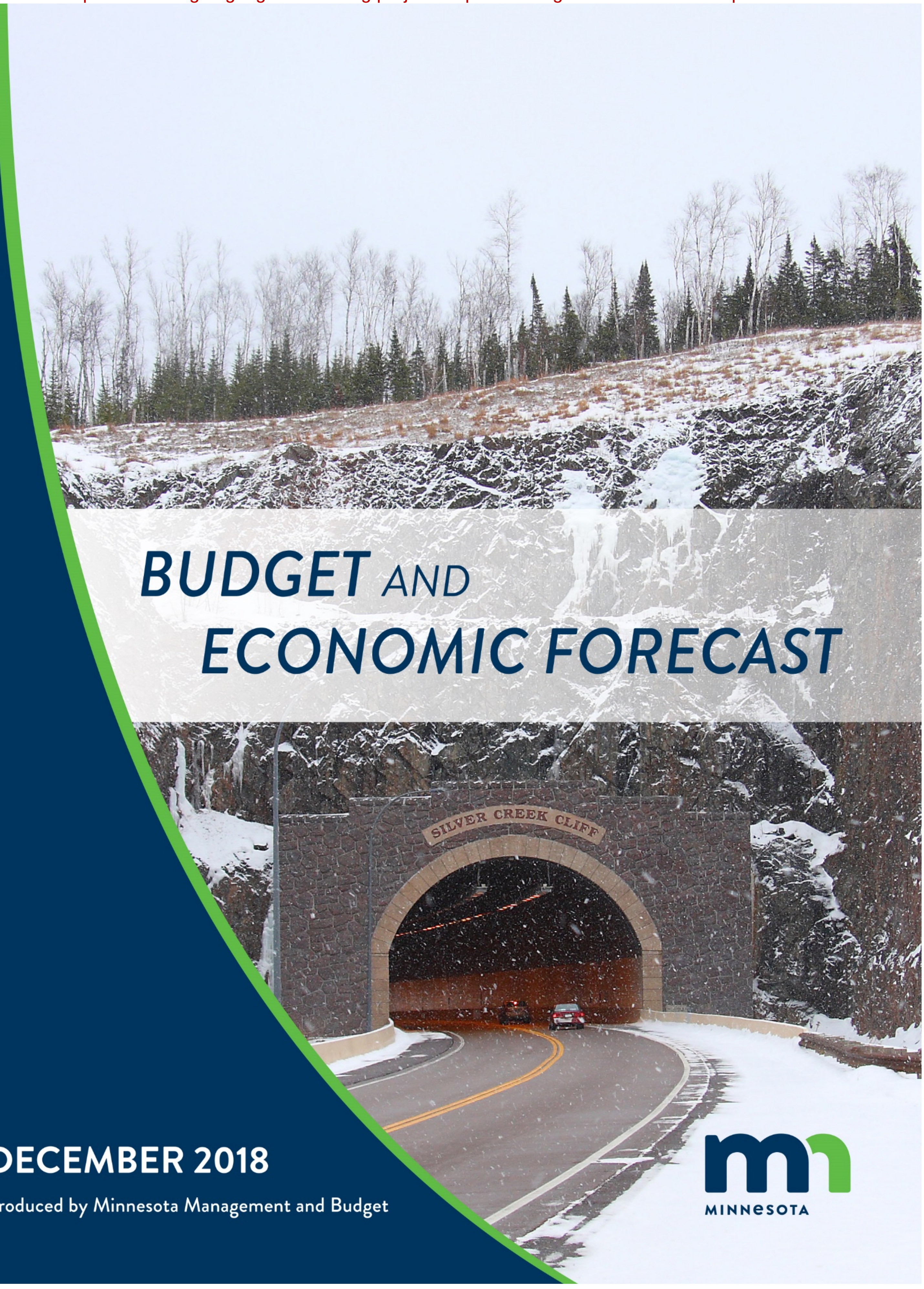

BUDGET AND ECONOMIC FORECAST

DECEMBER 2018

Produced by Minnesota Management and Budget

MINNESOTA

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Statutory Provisions

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

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

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

Notes

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

Where noted, the rate of biennial change in tables has been converted to an annual rate. Unless otherwise noted, rate of change in budget narrative text is biennial, or two years, growth.

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).

Wage and price inflation is included in revenue estimates.

Supplemental budget and economic forecast material is available on MMB’s website (mn.gov/mmb).

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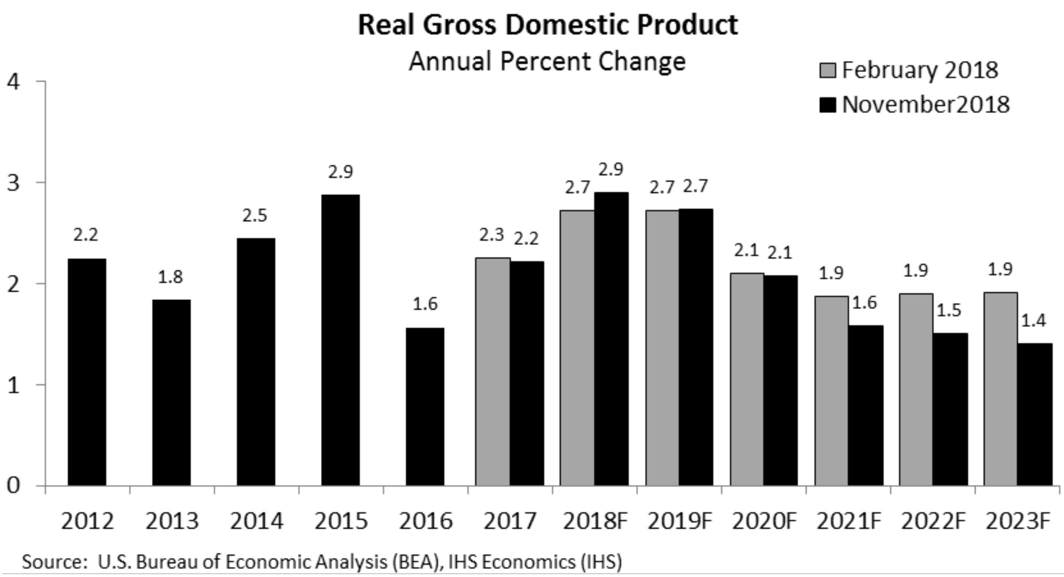
EXECUTIVE SUMMARY

Minnesota's budget and economic outlook remains sound, despite slower growth through the budget horizon. A revenue forecast increase and lower base expenditure estimates add to an improved outlook for the current biennium leaving an estimated $1.544 billion balance available for the FY 2020-21 budget. Statutory allocations, partially resulting from the improvement to the current biennium, add $491 million to the budget reserve which now totals $2.075 billion. Slower economic growth is projected to continue into FY 2022-23, resulting in a slowdown in forecast revenue growth. This leaves forecast revenues exceeding base expenditure estimates by only $456 million for that biennium.



Strong growth in the second and third quarters of 2018 has lead IHS to increase their expectations for this year's real GDP growth in the near-term. Their outlook for 2021 through 2023, however, is weaker than in February. Overall, IHS now expects real GDP to grow at a compound annual rate of 2.0 percent from 2017 to 2023, 0.2 percentage points lower than they forecast in February.

U.S. Economic Outlook. The outlook for U.S. economic growth has weakened since Minnesota's forecast was last prepared in February. While current conditions can support moderate growth in the near term, Minnesota's macroeconomic consultant, IHS Markit (IHS) expects the economy to begin slowing in late 2019. This occurs as the fiscal stimulus from the Tax Cuts and Jobs Act (TCJA) fades, monetary policy becomes more restrictive, global growth weakens, and a strong U.S. dollar relative to our trading partners' currencies pulls down net exports. After mid-2020, a demographically driven decline in the labor force participation rate is expected to further encumber growth. The downshift continues through our forecast horizon, with annual real GDP growth expected to decelerate from 2.9 percent annually in 2018 to less than half that rate in 2023.

Strong growth in the second and third quarters of 2018 has lead IHS to increase their expectations for this year's real GDP growth from 2.7 percent in February's outlook to 2.9 percent in November. They maintained their forecast for 2.7 percent growth in 2019, as well as their expectation of a slowdown to 2.1 percent growth in 2020. Their outlook for 2021 through 2023, however, is weaker than in February. They now expect annual real GDP to grow only 1.6 percent in 2021, 1.5 percent in 2022, and 1.4 percent in 2023, compared to rates of 1.9 percent in each of those years in the February outlook. Overall, IHS now expects real GDP to grow at a compound annual rate of 2.0 percent from 2017 to 2023, 0.2 percentage points lower than they forecast in February.

In the November forecast, consumer spending contributes more to 2020 and 2021 real GDP growth relative to February, but not enough to make up for a smaller contribution from business investment and an increased drag from net exports. The net export drag continues into 2022 and 2023, while consumer spending and business investment both contribute less to real GDP in those years compared to February.

In October, U.S. nonfarm payrolls added 250,000 jobs (on a seasonally adjusted basis), bringing the three-month average to 218,000, maintaining the pace of the first half of this year. The unemployment rate has reached 3.7 percent, and there are now 0.9 unemployed job-seekers for each job vacancy nationwide, the lowest value for this ratio since the series began in 2000. In this forecast, IHS expects annual employment growth to slow from 1.6 percent this year to 1.5 percent in 2019. In mid-2020, the impacts of an aging population leaving the workforce is expected to slow labor force growth below the growth rate of the population. Annual employment is forecast to grow 1.1 percent in 2020 and decelerate to 0.3 percent by 2023. This is slower growth than IHS had forecast in February, and they have similarly lowered their forecast for growth in total wage and salary income. They now expect 4.6 percent growth in 2019, down from 5.3 percent in February, and have cut an average of 0.5 percentage points from their wage income growth forecasts for each of 2020 through 2023.

Several factors are contributing to a larger forecast drag on real GDP growth from net exports. First, the global economy shows signs of weakening. The Japanese and German economies contracted in the third quarter of this year, with both declines driven by weaker exports. China's economic expansion has slowed to its lowest growth since 2009.

Second, trade tensions between the United States and China have been building over this year. On September 24, the United States imposed tariffs on $200 billion worth of Chinese imports, in addition to the $50 billion worth of tariffs enacted earlier this year. China retaliated by targeting an additional $60 billion in American exports. This forecast includes all tariffs imposed to date, including 10 percent on $200 billion of Chinese imports enacted September 24 and a rate increase to 25 percent that is scheduled for January 2019. In early December, however, the United States agreed to postpone the scheduled U.S. tariff rate increase, while the two countries resume trade negotiations.

Finally, escalating trade tensions this year have coincided with a steep appreciation of the U.S. dollar. The broad trade-weighted dollar index has increased nearly 11 percent since February. At the same time, rising U.S. interest rates and U.S. economic growth that exceeds growth abroad has boosted demand for and the value of U.S. currency. IHS expects the dollar's value to peak in the second quarter of 2020 before declining.

The IHS November outlook is similar to that of other macroeconomic forecasters. The November Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 2.9 percent in 2018, the same rate that IHS expects. For 2019, the IHS expects slightly higher growth than other forecasters: 2.7 percent compared to 2.6 percent for the Blue Chip Consensus.

Minnesota Economic Outlook. Minnesota's steady economic performance continues, even as the U.S. economy has now expanded for 112 consecutive months, the second-longest expansion on record. 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. However, as retiring baby boomers dampen growth in the state's workforce, forecast employment growth is increasingly constrained. This means that more of Minnesota's growth in total wage income is expected to arise from higher wages per worker, and less from increases in the number of people working.

Strong demand for workers, combined with low unemployment, continues to tighten Minnesota's labor market. Statewide, there have been fewer unemployed job-seekers than open positions for the past 18 months. Other indicators, such as initial claims for unemployment insurance and temporary help employment, are at levels consistent with a tight labor market. In October, Minnesota's seasonally adjusted unemployment rate was 2.8 percent, 0.9 percent below the national rate, 0.5 percentage points lower than a year ago, and the lowest unemployment rate the state has seen in more than 18 years.

Robust labor demand has allowed the state to continue to add jobs, even as available workers have become scarce. In the 12 months ending in October 2018, employers added more than 36,000 jobs, bringing Minnesota's annual job growth to 1.2 percent, half a percentage point below the U.S. rate over that period. Minnesota has experienced more than eight years (99 months) of employment expansion. In this forecast, we expect annual employment growth of 1.3 and 1.7 percent this year and next. In 2020 and 2021, growth slows to 1.1 percent and 0.5 percent, respectively. As slow labor force growth constrains job gains, we expect employment growth to decelerate to less than one-half percent in the years of our planning estimates.

In this forecast, Minnesota's continued—although slowing—employment growth combines with moderate acceleration in wage income per worker to allow total wage and salary income to grow at healthy rates of 4.5 to 5.5 percent per year in 2018 and 2019, followed by a deceleration to 4.9 percent in 2020 and 4.2 percent in 2021. For 2020 and 2021, these are weaker growth rates than we expected in February.

Minnesota's exports of goods and services to countries throughout the world is a significant source of Minnesota income and jobs. Minnesota exports grew to $23 billion (8.0 percent) in 2017, placing Minnesota 23rd among states ranked by export value. This growth has occurred despite headwinds from international trade tensions and the rising value of the U.S. dollar.

Budget Outlook: Current Biennium. November's forecast shows improvement in the state's financial position with seven months remaining in the FY 2018-19 biennium. Forecast revenues are now expected to be $45.410 billion, an increase of $609 million (1.4 percent) over end of session estimates. Biennial spending estimates now total $45.549 billion, a decline of $306 million (0.7 percent) from prior estimates.

Prior to any allocation to the budget reserve under M.S. 16A.152, this forecast includes two allocations to the budget reserve directed by Minnesota law totaling $137 million. The stadium reserve is reduced by $8 million due to a decision to redirect corporate revenue back to the general fund that had been allocated to the stadium reserve account. Aggregating spending, revenue and reserve changes results in a projected forecast balance in the current biennium of $1.074, an improvement of $786 million over end of session estimates. Statute automatically allocates 33 percent of any positive budgetary balance in the current biennium to the budget reserve account. After $354 million is allocated to the budget reserve, the available balance at the end of the current biennium is projected to be $720 million.

Current Biennium: FY 2018-19 General Fund Budget
Change From End-of-Session Estimates

($ in millions)	**End of Session**	**November 2018 Forecast**	**$ Change**
Beginning Balance	**$3,333**	**$3,333**	**$ -**
Forecast Revenues	44,801	45,410	609
Projected Spending	45,856	45,549	(306)
Budget Reserve	1,583	1,720	137
Cash Flow Account	350	350	-
Stadium Reserve	58	50	(8)
Forecast Balance	**$288**	**$1,074**	**$786**
33% to Budget Reserve	-	354	354
Budgetary Balance	**$288**	**$720**	**$432**

Revenues. Total general fund revenues for FY 2018-19 are now forecast to be $45.410 billion, $609 million (1.4 percent) more than the end-of session estimate (the February forecast adjusted for minor law changes). Total tax revenues for the current biennium are forecast to be $43.390 billion, $426 million (1.0 percent) above the end-of-session estimate. Higher expected individual income, corporate, and other tax revenue more than offsets a reduced forecast for sales tax revenue. This forecast reflects revised estimates of the revenue impact of individual taxpayer responses to the federal law changes in the Tax Cuts and Jobs Act (TCJA).

Net individual income tax receipts for the current biennium are now forecast to be $419 million (1.8 percent) more than the end-of-session estimate. A $332 million net income tax variance at the close of FY 2018, slightly higher forecast income growth in CY 2018, and an increase in assumed tax liability for 2017 - the base year of this forecast - all contribute to this change. These positive changes offset a $109 million net revenue forecast reduction due to expected taxpayer responses to the TCJA.

Current Biennium: FY 2018-19 General Fund Revenues
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change	% Change
Individual Income Tax	$23,715	$24,133	$419	1.8%
General Sales Tax	11,263	11,143	(120)	(1.1)
Corporate Franchise Tax	2,596	2,703	107	4.1
State General Property Tax	1,621	1,619	(2)	(0.1)
Other Tax Revenue	3,768	3,792	24	(0.6)
Total Tax Revenues	**$42,964**	**43,390**	**426**	**1.0%**
Non-Tax Revenues	1,475	1,603	128	8.7
Other Resources	362	417	55	15.4
Total Revenues	**$44,801**	**$45,410**	**$609**	**1.4%**

General sales tax revenue in FY 2018-19 is now forecast to be $120 million (1.1 percent) less than in the February forecast. Lower forecast gross tax receipts and higher expected refunds both contribute to the change.

Three main factors contribute to the reduced net sales tax revenue forecast. First, gross sales tax receipts ended FY 2018 $11 million behind our February forecast, and so far in FY 2019 gross receipts are $36 million below forecast. Second, the synthetic sales tax base, which we construct from forecasts for spending on a wide range of taxable goods and services, grows more slowly in this forecast than in February. Third, sales tax refunds in FY 2019 are now forecast to be $101 million greater than in February, largely due to an increase in refunds to qualified data centers (QDCs).

This forecast includes an off-model adjustment for the impact of the U.S. Supreme Court decision in South Dakota v. Wayfair, which allows states to require remote sellers with no physical presence in the state, such as online and mail-order companies, to collect and remit sales or use tax on sales to customers within the state. This change is expected to increase Minnesota's FY 2019 net sales tax revenue by $70 million. However, the lower starting base for the sales tax, slower assumed growth in the synthetic sales tax base, and higher expected refunds reduce the net sales tax revenue forecast enough to more than offset the positive adjustment for the Wayfair decision. In the absence of the Wayfair adjustment, the FY 2018-19 net sales forecast change would be negative $190 million.

The corporate franchise tax is forecast to generate $2.703 billion in FY 2018-19, $107 million (4.1 percent) more than the prior estimate. Increased forecast gross tax payments and lower forecast refunds both contribute to this change.

Expenditures. Spending estimates for FY 2018-19 are lower than prior estimates for the biennium. Expenditures in the current biennium are now expected to be $45.549 billion, a reduction of $306 million (0.7 percent) from end of session estimates.

Current Biennium: FY 2018-19 General Fund Expenditures
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change	% Change
E-12 Education	$18,846	$18,845	(1)	0.0%
Property Tax Aids & Credits	3,653	3,664	11	0.3
Health & Human Services	13,619	13,403	(216)	(1.6)
Debt Service	1,139	1,113	(26)	(2.2)
All Other	8,598	8,524	(74)	(0.9)
Total Expenditures	**$45,856**	**$45,549**	**$(306)**	**(0.7)%**

A $216 million reduction (1.6 percent) in estimated spending for health and human services is the primary factor in the overall reduction in spending in FY 2018-19. This reduction is driven by lower enrollment across human services programs and additional federal revenue for chemical dependency treatment services.

Changes for the current biennium for other spending areas were modest. E-12 expenditures are virtually unchanged. Debt service expenditures are $26 million (2.2 percent) lower than previous estimates due to slower spending on capital projects and reduce rates on bonds. Property tax aids and credits spending is $11 million (0.3 percent) higher than expected due largely to higher growth in property tax refunds.

Next Biennium: FY 2020-21 General Fund Budget
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change
Beginning Balance	**$2,279**	**$3,194**	**$915**
Forecast Revenues	48,136	48,327	190
Projected Spending	47,943	47,454	(489)
Balance Before Reserve	**$2,472**	**$4,067**	**$1,594**
Cash and Budget Reserves	1,933	2,425	491
Stadium Reserve	120	98	(22)
Budgetary Balance	**$419**	**$1,544**	**$1,125**

Budget Outlook: Next Biennium. A balance of $1.544 billion is projected for the FY 2020-21 biennium, $1.125 billion higher than end of session estimates. Revenues in the next biennium are projected to be $48.327 billion, $190 million (0.4 percent) higher than planning estimates for the biennium. Forecast spending in the next biennium is estimated to be $47.454 billion, down $489 million (1.0 percent) from end of session estimates.

When compared to revised forecast estimates for the current biennium, FY 2018-19 general fund revenues are projected to increase $2.917 billion (6.4 percent) over the two year biennium while spending is expected to grow $1.905 billion (4.2 percent) compared to the current biennium.

Revenue projections are based on current law and forecast economic growth while spending estimates for the next biennium assume that current funding levels and policies continue unchanged, adjusted only for caseload and enrollment changes as well as specific formula driven items. The expenditure forecast does not assume inflationary cost growth outside of a limited number of specific budget areas including a portion of health care spending, debt service, special education and property tax refunds.

Next Biennium: FY 2020-21 General Fund Budget
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2018-19	FY 2020-21	$ Change	Annual % Change
Beginning Balance	**$3,333**	**$3,194**		
Tax Revenues	43,390	46,487	3,097	3.5%
Non-Tax Revenues	1,603	1,471	(132)	(4.2)
Other Resources	417	369	(48)	(5.9)
Current Resources	**45,410**	**48,327**	**2,917**	**3.2%**
K-12 Education	18,845	19,601	756	2.0
Property Tax Aids and Credits	3,664	3,710	46	0.6
Health and Human Services	13,403	14,905	1,501	5.5
Debt Service	1,113	1,199	86	3.8
All Other	8,524	8,040	(484)	(2.9)
Total Expenditures	**45,549**	**47,454**	**1,905**	**2.1**%
Balance Before Reserves	**3,194**	**4,067**		
Cash and Budget Reserves	2,425	2,425		
Stadium Reserve	50	98		
Budgetary Balance	**$720**	**$1,544**		

Revenues. Total general fund revenues for 2020-21 are now forecast to be $48.327 billion, $2.917 billion (6.4 percent) more than the current FY 2018-19 forecast. Total tax revenues for the next biennium are forecast to be $46.487 billion, a $3.907 billion increase (7.1 percent) increase over FY 2018-19 forecast tax revenues. Growth in the individual income and sales taxes account for nearly all of the biennial tax revenue change. Of the major tax types, only the corporate income tax shows a decline in expected revenues from FY 2018-19 to FY 2020-21.

Next Biennium: FY 2020-2021 General Fund Revenues
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2018-19	FY 2020-21	$ Change	% Change
Individual Income Tax	$24,133	$26,276	$2,142	8.9%
General Sales Tax	11,143	12,022	879	7.9
Corporate Franchise Tax	2,703	2,650	(53)	(2.0)
State General Property Tax	1,619	1,638	19	1.2
Other Tax Revenue	3,792	3,901	110	2.9
Total Tax Revenues	**43,390**	**$46,487**	**$3,097**	**7.1%**
Non-Tax Revenues	1,603	1,471	(132)	(8.2)
Other Resources	417	369	(48)	(11.5)
Total Revenues	**$45,410**	**$48,327**	**$2,917**	**6.4%**

Regarding forecast change, the current forecast for FY 2020-21 total revenues is $190 million (0.4 percent) more than the end-of-session estimate. Total tax revenues for the next biennium are forecast to be $127 million (0.3 percent) above the prior estimate. The relatively small forecast change is primarily due to higher expected individual and corporate income tax and non-tax revenues. The sales tax revenue forecast is slightly lower than the end-of-session estimate.

Next Biennium: FY 2020-2021 General Fund Revenues
Change From End-of- Session

($ in millions)	**End of Session**	**November 2018 Forecast**	**$ Change**	**% Change**
Individual Income Tax	$26,195	$26,276	$81	0.3%
General Sales Tax	12,027	12,022	(5)	0.0
Corporate Franchise Tax	2,609	2,650	41	1.6
State General Property Tax	1,634	1,638	4	0.2
Other Tax Revenue	3,895	3,901	6	0.2
Total Tax Revenues	**43,360**	**$46,487**	**127**	**0.3%**
Non-Tax Revenues	1,404	1,471	67	4.8
Other Resources	372	369	(3)	(0.9)
Total Revenues	**$48,136**	**$48,327**	**$190**	**0.4%**

Note that growth in total revenues is declining over the three biennia included in this forecast. Between FY 2016-17 to FY 2018-19, total revenues grow 3.4 percent (per year, annualized). The rate falls to 3.2 percent between FY 2018-19 and FY 2020-2021, and falls again to 2.5 percent between FY 2020-21 and the planning estimates.

Expenditures. Base level expenditures in the next biennium are expected to reach to $47.454 billion, growth of $1.905 billion (4.2 percent) over the FY 2018-19 biennium. Growth in the second largest budget area, Health and Human Service (HHS), accounts for the majority of the overall growth. Total HHS spending is expected to reach $14.905 billion, $1.501 billion (11.2 percent) more than the current biennium. Growth in medical assistance spending accounts for 95 percent of the HHS growth.

The largest budget area, E-12 education, is expected to grow to $19.601 billion in FY 2020-21 an increase of $756 million (4.0 percent) over the current biennium. Outside of special education, the education funding formula does not include an adjustment for inflationary cost growth, the majority of growth into the next biennium is due to special education and increasing students.

Outside of the two largest budget areas, debt service is expected to be higher in the next biennium driven mostly by a higher bond rate forecast and a larger expected bond sale in 2019. Property tax aids and credits is higher due to growth in the property tax refund program. Overall spending growth is offset by lower projected spending in the combined All Other areas of the budget mostly due to sun-setting of one-time spending programs in the current biennium.

Next Biennium: FY 2020-21 General Fund Expenditures
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2018-19	FY 2020-21	$ Change	% Change
E-12 Education	$18,845	$19,601	$756	4.0%
Property Tax Aids & Credits	3,664	3,710	46	1.2
Health & Human Services	13,403	14,905	1,501	11.2
Debt Service	1,113	1,199	86	7.7
All Other	8,524	8,040	(484)	(5.7)
Total Expenditures	**$45,549**	**$47,454**	**$1,905**	**4.2%**

Compared to prior estimates for the biennium, overall spending in the next biennium is expected to be down $489 million (1.0 percent). Reduced projections for health and human services spending accounts for $517 million of this change due to lower than expected spending for health care. This savings is partially offset by higher than anticipated spending in property tax aids and credits ($64 million, 1.8 percent) primarily due to increases the property tax refund program and debt service ($18 million, 1.5 percent), which reflects higher interest rates and larger future bond issuances than previously assumed. Change in other areas of the state budget is small compared to prior estimates, down $40 million (0.5 percent) for FY 2020-21.

Next Biennium: FY 2020-21 General Fund Expenditures
Change From End-of- Session

($ in millions)	End of Session	November 2018 Forecast	$ Change	% Change
E-12 Education	$19,615	$19,601	$(14)	(0.1)%
Property Tax Aids & Credits	3,645	3,710	64	1.8
Health & Human Services	15,422	14,905	(517)	(3.4)
Debt Service	1,181	1,199	18	1.5
All Other	8,080	8,040	(40)	(0.5)
Total Expenditures	**$47,943**	**$47,454**	**$(489)**	**(1.0)%**

Budget Outlook: Planning Estimates. This report provides the first planning estimates for the FY 2022-23 biennium. While these estimates inherently carry a higher degree of uncertainty than estimates for FY 2019-21, they do present an outlook of longer run spending and revenue growth that will assist in budget planning when setting the FY 2020-21 budget.

Planning Horizon: General Fund Budget
By Biennium, FY2020-23, November 2018 Forecast

($ in millions)	FY 2020-21	FY 2022-23	$ Change	Annual % Change
Forecast Revenues	$48,327	$50,735	$2,408	2.5%
Projected Spending	47,454	50,279	2,825	2.9%
Difference	**$873**	**$456**	**$(417)**	
Estimated Inflation (CPI)[1]	*$1,162*	*$2,908*		

While base level spending continues to grow into the FY 2022-23 planning estimates at a higher rate than growth from the current biennium into FY 2020-21, revenue growth is lower into the planning horizon. The diverging growth rates between revenue and spending results in revenue exceeding spending by only $456 million in FY 2022-23 in this forecast. As with the projections for FY 2020-21, spending estimates are not adjusted for inflation in most areas of the budget.

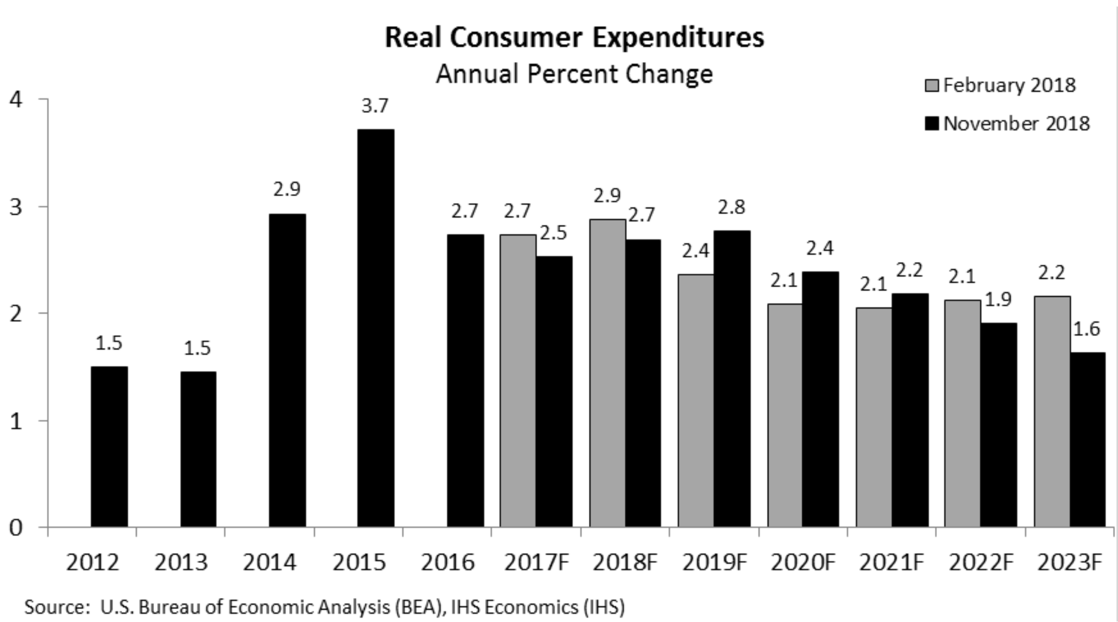
Projected inflation based on the Consumer Price Index (CPI) is now expected to be 2.3 percent and 1.9 percent in FY 2020 and FY 2021 followed by 2.3 percent each year in FY 2022 and FY 2023. After adjusting the spending base for programs with price increases included in the current law formula, applying the annual inflation rate, compounded over the two and four year periods, would add approximately $1.2 billion to the FY 2020-21 base and $2.9 billion to the FY 2022-23 base.

[1] Inflation calculation grows the estimated general fund spending base in each year by the projected CPI growth rate after removing special education, debt service, property tax refunds, and the state share for managed and long term care.

ECONOMIC OUTLOOK

U.S. Economic Outlook

The outlook for U.S. economic growth has weakened since Minnesota's forecast was last prepared in February. While current conditions can support moderate growth in the near term, Minnesota's macroeconomic consultant, IHS Markit (IHS) expects the economy to begin slowing in late 2019. This occurs as the fiscal stimulus from the Tax Cuts and Jobs Act (TCJA) fades, monetary policy becomes more restrictive, global growth weakens, and a strong U.S. dollar relative to our trading partners' currencies pulls down net exports. After mid-2020, a demographically driven decline in the labor force participation rate is expected to further encumber growth. The downshift continues through our forecast horizon, with annual real GDP growth expected to decelerate from 2.9 percent annually in 2018 to less than half that rate in 2023.



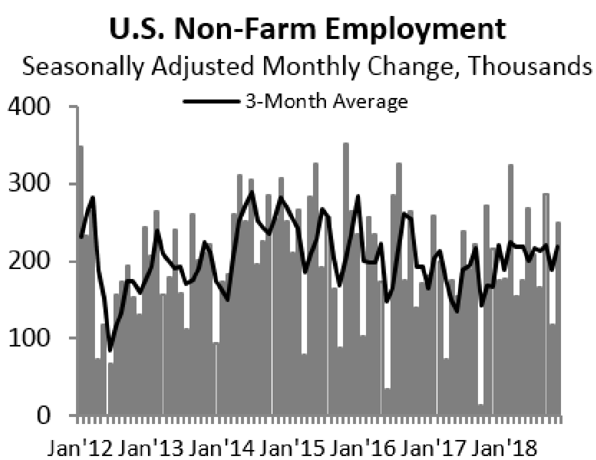
IHS expects consumer spending to remain the primary contributor to growth in the economy, even as the pace of spending eventually slows. In the near-term, consumer spending is well-supported by rising incomes, household wealth, lower personal tax rates, and a strong consumer mood. Rising interest rates and waning benefits from the TCJA slows consumer spending in 2020 and 2021.

Strong growth in the second and third quarters of 2018 has lead IHS to increase their expectations for this year's real GDP growth from 2.7 percent in February's outlook to 2.9 percent in November. They maintained their forecast for 2.7 percent growth in 2019, as well as their expectation of a slowdown to 2.1 percent growth in 2020. Their outlook for 2021 through 2023, however, is weaker than in February. They now expect annual real GDP to grow only 1.6 percent in 2021, 1.5 percent in 2022, and 1.4 percent in 2023, compared to rates of 1.9 percent in each of those years in the February outlook. Overall, IHS now expects real GDP to grow at a compound annual rate of 2.0 percent from 2017 to 2023, 0.2 percentage points lower than they forecast in February.

In the November forecast, consumer spending contributes more to 2020 and 2021 real GDP growth relative to February, but not enough to make up for a smaller contribution from business investment and an increased drag from net exports. The net export drag continues into 2022 and 2023, while consumer spending and business investment both contribute less to real GDP in those years compared to February.

IHS expects consumer spending to remain the primary contributor to growth in the economy, even as the pace of spending eventually slows. In the near-term, consumer spending is well-supported by rising incomes, household wealth, lower personal tax rates, and a strong consumer mood. Rising interest rates and waning benefits from the TCJA slows consumer spending in 2020 and 2021.

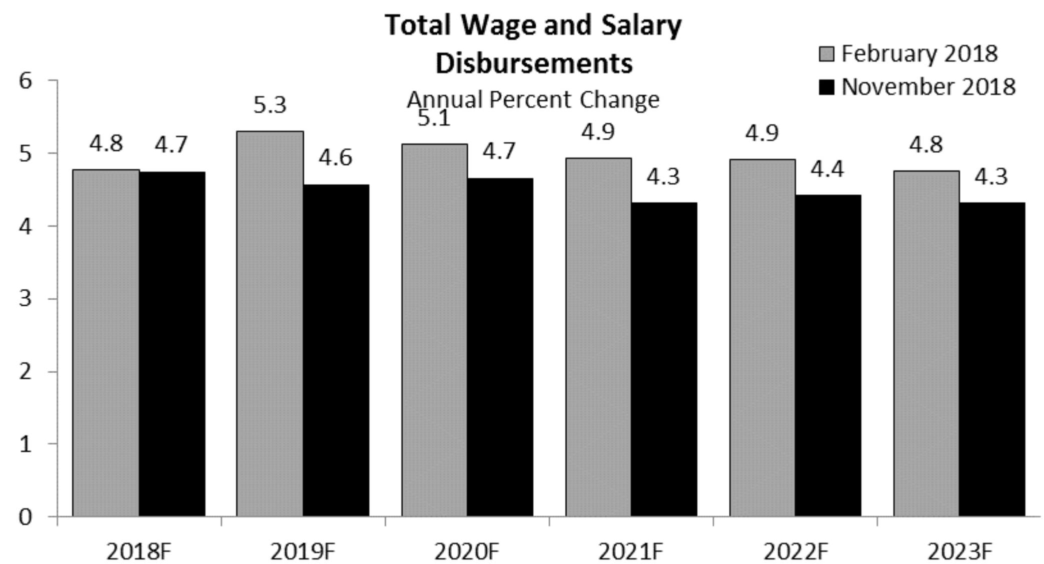
In 2017 the S&P 500 share price index grew 17 percent, followed by strong growth in the first three quarters of 2018. However, these solid gains were disrupted by volatility in October and November. During October, the S&P 500 index dropped 10 percent, before recovering nearly half of that loss by the end of November. IHS expects the stock market to remain volatile, with annual growth in the S&P 500 index slowing to 2.0 percent in 2019 and maintaining that rate on average through our forecast period. If the recent stock market decline worsens, or if the market generally underperforms IHS' expectations, the resulting erosion of household wealth could cause consumer spending to grow more slowly than IHS has forecast.



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

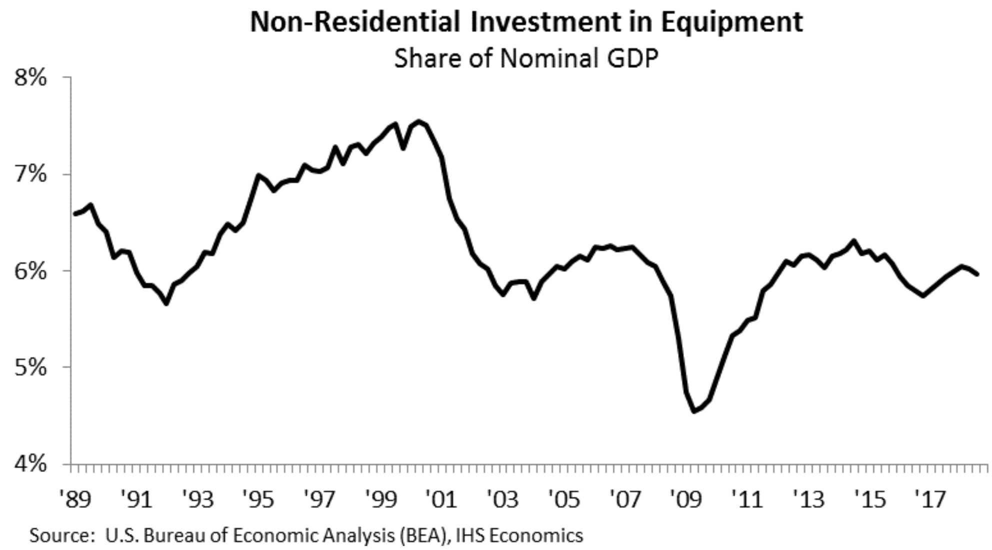
As steady employment growth continues to absorb the remaining labor market slack. In October, U.S. nonfarm payrolls added 250,000 jobs, maintaining the pace of the first half of this year. There are now 0.9 unemployed job-seekers for each job vacancy nationwide, the lowest value for this ratio since the series began in 2000.

In October, U.S. nonfarm payrolls added 250,000 jobs (on a seasonally adjusted basis), bringing the three-month average to 218,000, maintaining the pace of the first half of this year. The unemployment rate has reached 3.7 percent, and there are now 0.9 unemployed job-seekers for each job vacancy nationwide, the lowest value for this ratio since the series began in 2000. In this forecast, IHS expects annual employment growth to slow from 1.6 percent this year to 1.5 percent in 2019. In mid-2020, the impacts of an aging population leaving the workforce is expected to slow labor force growth below the growth rate of the population. Annual employment is forecast to grow 1.1 percent in 2020 and decelerate to 0.3 percent by 2023. This is slower growth than IHS had forecast in February, and they have similarly lowered their forecast for growth in total wage and salary income. They now expect 4.6 percent growth in 2019, down from 5.3 percent in February, and have cut an average of 0.5 percentage points from their wage income growth forecasts for each of 2020 through 2023.



As the labor market feels the impact of an aging workforce, employment growth is expected to slow. In this forecast, IHS has lowered their expectations for total wage and salary income growth. They now expect 4.6 percent growth in 2019, down from 5.3 percent in February, and have cut an average of 0.5 percentage points from their employment growth forecasts for each of 2020 through 2023.

Business fixed investment grew at 5.3 percent in 2017 and has continued to grow at a robust rate in 2018. IHS expects annual growth in business fixed investment to peak at 6.8 percent in 2018, decelerate to 4.6 percent in 2019, and then slow each year until investment grows 2.2 percent in 2023. U.S. tariffs on imported intermediate goods—the inputs to U.S. production—can disrupt supply chains and impose cost pressure on domestic producers. And other countries' retaliatory tariffs on U.S. goods can lower demand for U.S. exports. Uncertainty about U.S. trade policy—whether tariffs will be expanded further and how long they will persist—can make businesses put their investment and expansion plans on hold. The next few months of data will clarify whether trade tensions are affecting capital expenditures.



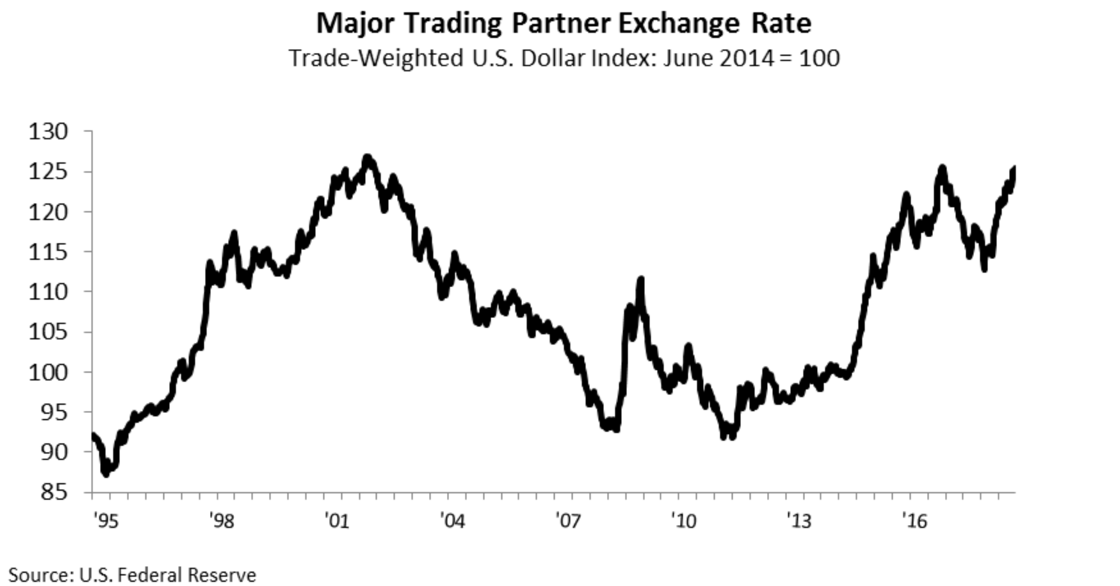
In their November outlook, IHS expects business investment in equipment to accelerate to 6.8 percent in 2018 due to stronger nonfarm business sector output. Growth slows to 4.6 percent in 2019 and decelerates further through the forecast period. The next few months of data will clarify whether trade tensions are affecting capital expenditures.

Several factors are contributing to a larger forecast drag on real GDP growth from net exports. First, the global economy shows signs of weakening. The Japanese and German economies contracted in the third quarter of this year, with both declines driven by weaker exports. China's economic expansion has slowed to its lowest growth since 2009.

Second, trade tensions between the United States and China have been building over this year. On September 24, the United States imposed tariffs on $200 billion worth of Chinese imports, in addition to the $50 billion worth of tariffs enacted earlier this year. As a result of the second wave of tariffs, nearly 50 percent of all Chinese imports into the United States will be subject to tariffs. China has retaliated by targeting an additional $60 billion in American exports. This forecast includes all tariffs imposed to date, including 10 percent on $200 billion of Chinese imports enacted September 24 and a rate increase to 25 percent that is scheduled for January 2019. In early December, however, the United States agreed to postpone the scheduled U.S. tariff rate increase, while the two countries resume trade negotiations.

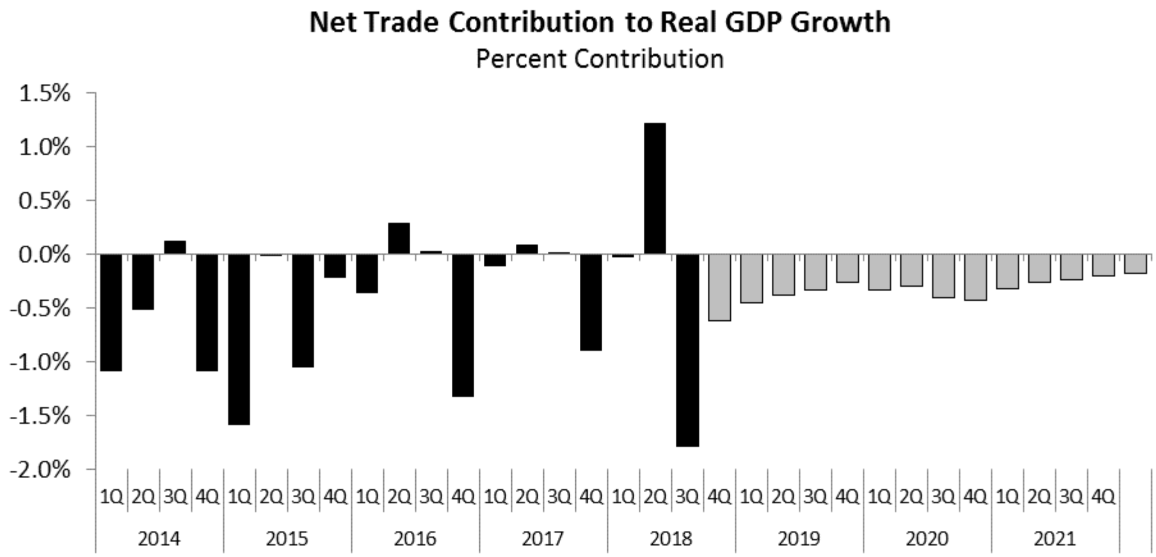
Finally, escalating trade tensions this year have coincided with a steep appreciation of the U.S. dollar. The broad trade-weighted dollar index has increased nearly 11 percent since February. At the same time, rising U.S. interest rates and U.S. economic growth that exceeds growth abroad has boosted demand for and the value of U.S. currency. IHS expects the dollar's value to peak in the second quarter of 2020 before declining.

A significant appreciation of the dollar against trading partner currencies since mid-2014 has strengthened imports and weakened exports in recent years. IHS expects the contribution of net exports to real GDP to be negative through the forecast period.



A significant rise in the dollar against U.S trading partners since mid-2014 has strengthened imports and weakened exports. Escalating trade tensions this year have coincided with a steep appreciation of the U.S. dollar. The broad trade-weighted dollar index has increased nearly 11 percent since February.

Years of tight inventory and rising home prices have created affordability problems for some potential buyers. A shortage of homes at price points in high demand are suppressing home sales. Simultaneously, a tight labor market and labor shortages among skilled construction workers, rising home mortgage rates, and higher input costs are elevating the cost of building a home. IHS expects both housing prices and mortgage rates to continue to rise. While these factors are expected to play a continued role in suppressing housing starts, IHS expects these to be offset by increases in household formation. Housing starts are expected rise from 1.263 million in 2018 to 1.424 million in 2020.



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

Weakening global growth, trade tensions between the U.S. and trading partners, and appreciation of the U.S. dollar all contribute to a larger forecast drag on real GDP growth from net exports. IHS expects the contribution of net exports to real GDP to be negative through the forecast period.

With core personal consumption expenditure (PCE) inflation at the Fed's two percent target, the Federal Reserve is expected to continue with gradual monetary policy normalization. In addition to a tight U.S. labor market pushing prices higher, IHS expects expanded tariffs on Chinese imports to contribute additional price pressure. In the November outlook, core PCE inflation is forecast to accelerate from 2.0 percent this year to 2.3 percent in 2019 and 2.4 percent in 2020. IHS expects the Federal Reserve to implement a 0.25 percentage point federal funds rate hike in December, followed by three in 2019, and one more 2020, bringing the upper end of the target range to 3.5 percent. This is a slightly faster interest rate path than was in the November forecast.

The IHS November outlook is similar to that of other macroeconomic forecasters. The November Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 2.9 percent in 2018, the same rate that IHS expects. For 2019, the IHS expects slightly higher growth than other forecasters: 2.7 percent compared to 2.6 percent for the Blue Chip Consensus.

Forecast risks: Even aside from the threats to economic growth mentioned throughout this section—including trade policy uncertainty, stock market volatility, and inflation—there are risks inherent in this forecast. First, annual real GDP growth of 1.4-2.7 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 tenth 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. IHS does not include a recession in their baseline scenario. However, they assign a 25 percent probability to a pessimistic scenario that includes a three-quarter recession in 2020. Over recent months, IHS has increased the probability of this scenario and both lengthened and deepened the projected recession. Among the 50 Blue Chip macro-economic forecasters, the most recent consensus probability of a 2020 recession is now 37 percent. In other words, even the slow growth that is now forecast for 2020-2023 is at risk.

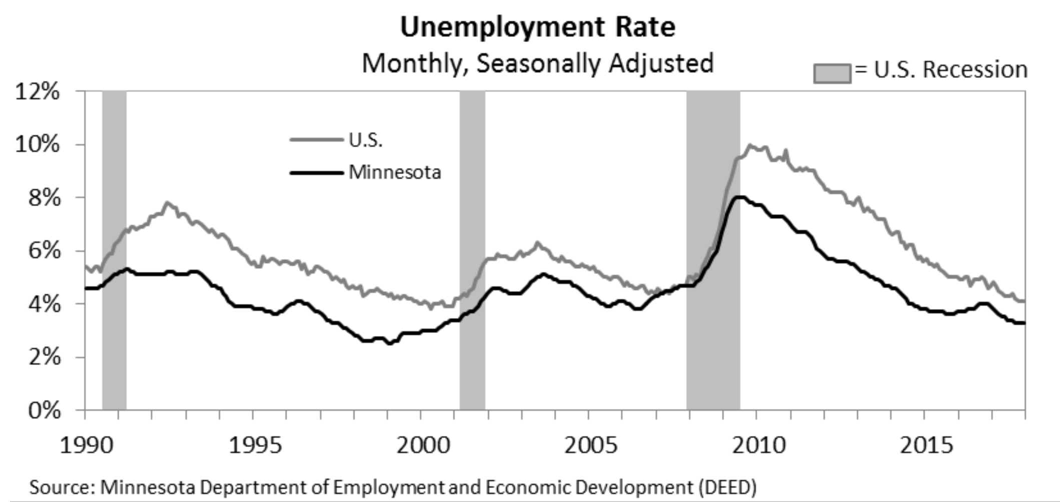
Finally, the IHS November outlook depends on several key forecast assumptions. If these assumptions do not materialize, the economic outcome will differ from IHS's baseline forecast. (1) IHS assumes that looming U.S. fiscal policy deadlines (addressing the continuing resolution for FY 2019, raising or suspending the debt ceiling, and extending discretionary spending caps) are met without disruption to federal spending. (2) IHS expects the Federal Reserve to implement a federal funds rate hike in December 2018, followed by three more in 2019, and one more 2020. (3) The November forecast assumes recently enacted U.S. tariffs are permanent, and that the current 10 percent tariff on $50 billion of Chinese goods rises to 25 percent and expands to include another $200 billion of Chinese goods in January 2019. (4) The November outlook assumes that global growth will decelerate, with annual real GDP growth from major-currency U.S. trading partners slowing from 3.1 percent in 2017 to an average of 2.6 percent in 2018 through 2022. (5) IHS expects the Brent crude oil price to average $74 per barrel in 2018, climb to $83 per barrel in 2019, and hold steady between $73 and $74 per barrel through the forecast horizon. (6) Following Census projections, IHS expects growth in the U.S. working-age population to slow from 0.9 percent in 2017 to 0.8 percent in 2022, as the aging of the population subtracts 1.1 percentage points from the labor force participation rate by the end of that year.

IHS assigns a probability of 60 percent to the November baseline outlook. As mentioned above, they assign a 25 percent probability to a more pessimistic scenario, in which a downward correction to real estate prices and declining consumer and business confidence trigger a three-quarter recession in 2020. 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.

Minnesota Economic Outlook

Minnesota's steady economic performance continues, even as the U.S. economy has now expanded for 112 consecutive months, the second-longest expansion on record. The Bureau of Economic Analysis (BEA) reports the state's real GDP rose 1.6 percent in 2017, 0.6 percentage points lower than the nation. 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. However, as retiring baby boomers dampen growth in the state's workforce, forecast employment growth is increasingly constrained. This means that more of Minnesota's growth in total wage income is expected to arise from higher wages per worker, and less from increases in the number of people working.

Labor Market. Strong demand for workers, combined with low unemployment, continues to tighten Minnesota's labor market. Statewide, there have been fewer unemployed job-seekers than open positions for the past 18 months. Other indicators, such as initial claims for unemployment insurance and temporary help employment, are at levels consistent with a tight labor market. In October, Minnesota's seasonally adjusted unemployment rate was 2.8 percent**,** 0.9 percent below the national rate and 0.5 percentage points lower than a year ago. It is the lowest unemployment rate the state has seen in more than 18 years. In October the number of unemployed Minnesotans was 86,118, also an 18-year low.



Minnesota continues to add jobs at a steady rate, driving the unemployment rate well below the U.S. rate. In October, Minnesota's seasonally adjusted unemployment rate was 2.8 percent, 0.9 percentage points below the national rate and 0.5 percentage points lower than a year ago.

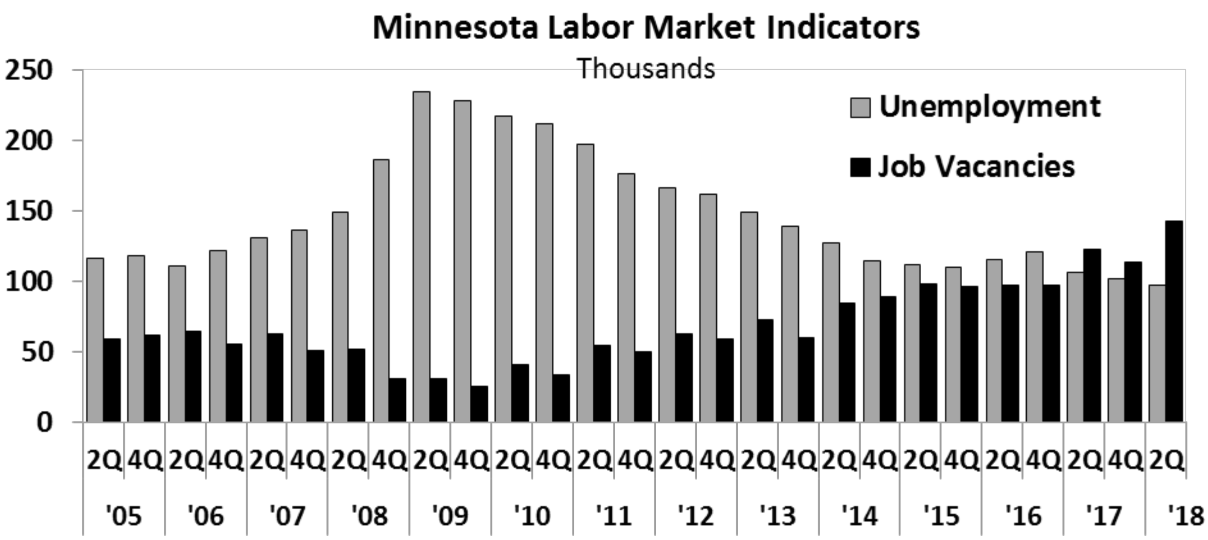
Robust labor demand has allowed the state to continue to add jobs, even as available workers have become scarce. In the 12 months ending in October 2018, employers added more than 36,000 jobs, bringing Minnesota's annual job growth to 1.2 percent, 0.5 percentage points lower than the U.S. rate over that period. Minnesota has experienced more than eight years (99 months) of over the year (not seasonally adjusted) employment expansion. In this forecast, we expect about 37,000 additional jobs in 2018 and 51,000 in 2019, for employment growth rates of 1.3 and 1.7 percent in those years. In 2020 and 2021, growth slows to 1.1 percent and 0.5 percent, respectively. As employment gains become increasingly constrained by slow labor force growth, we expect employment growth to decelerate to less than one-half percent in the years of our planning estimates.

Forecast Comparison: Minnesota & U.S.
Forecast 2016 to 2023, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Total Non-Farm Payroll Employment (Thousands)								
Minnesota								
November 2018	2,892	2,933	2,970	3,021	3,053	3,070	3,080	3,083
%Chg	1.3	1.4	1.3	1.7	1.1	0.5	0.3	0.1
February 2018	2,896	2,944	2,983	3,032	3,070	3,092		
%Chg	1.4	1.7	1.3	1.7	1.2	0.7		
U.S.								
November 2018	144,349	146,624	149,011	151,292	152,990	153,849	154,516	154,914
%Chg	1.8	1.6	1.6	1.5	1.1	0.6	0.4	0.3
February 2018	144,349	146,623	148,956	151,573	153,518	154,420	155,253	155,959
%Chg	1.8	1.6	1.6	1.8	1.3	0.6	0.5	0.5
Wage and Salary Disbursements (Billions of Current Dollars)								
Minnesota								
November 2018	158.0	165.5	173.1	182.5	191.6	199.6	207.9	216.1
%Chg	2.8	4.7	4.5	5.5	4.9	4.2	4.1	3.9
February 2018	158.3	164.6	172.5	181.9	191.1	199.9		
%Chg	2.8	4.0	4.8	5.5	5.0	4.6		
U.S.								
November 2018	8,081	8,454	8,855	9,259	9,690	10,107	10,553	11,008
%Chg	2.9	4.6	4.7	4.6	4.7	4.3	4.4	4.3
February 2018	8,085	8,340	8,737	9,200	9,671	10,147	10,644	11,150
%Chg	2.9	3.1	4.8	5.3	5.1	4.9	4.9	4.8
Non-Wage Personal Income (Billions of Current Dollars)								
Minnesota								
November 2018	133.3	137.6	143.4	150.6	160.0	167.9	174.1	180.4
%Chg	1.8	3.2	4.2	5.0	6.3	4.9	3.7	3.7
February 2018	129.0	132.2	136.8	144.7	152.5	159.1		
%Chg	2.0	2.5	3.5	5.8	5.4	4.3		
U.S.								
November 2018	8,044	8,377	8,730	9,119	9,594	10,024	10,420	10,826
%Chg	2.3	4.1	4.2	4.5	5.2	4.5	4.0	3.9
February 2018	7,843	8,077	8,372	8,822	9,262	9,686	10,103	10,539
%Chg	1.9	3.0	3.7	5.4	5.0	4.6	4.3	4.3
Total Personal Income (Billions of Current Dollars)								
Minnesota								
November 2018	291.4	303.1	315.6	333.1	351.6	367.6	382.0	396.6
%Chg	2.3	4.0	4.1	5.6	5.5	4.5	3.9	3.8
February 2018	287.2	296.8	309.3	326.6	343.6	359.0		
%Chg	2.4	3.3	4.2	5.6	5.2	4.5		
U.S.								
November 2018	16,125	16,831	17,585	18,378	19,284	20,131	20,974	21,834
%Chg	2.6	4.4	4.5	4.5	4.9	4.4	4.2	4.1
February 2018	15,929	16,417	17,109	18,022	18,933	19,833	20,747	21,689
%Chg	2.4	3.1	4.2	5.3	5.1	4.8	4.6	4.5

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

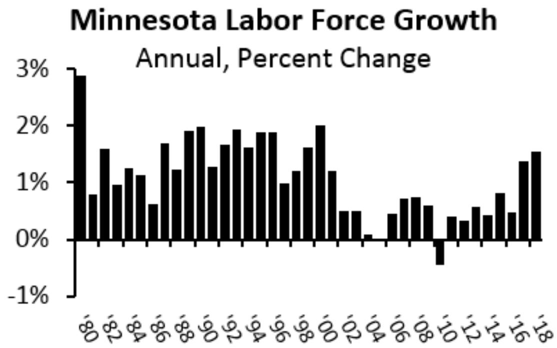
According to DEED, job vacancies statewide have grown to a very high level: about 142,000 in the second quarter of 2018, an increase of 16 percent over the second quarter of 2017. Minnesota's job vacancy rate is now 5.2 percent (5.2 openings per 100 jobs), the highest level for this series (which originates in 2001). The ratio of unemployed persons to job vacancies statewide has been less than one at 0.9 for the past year and is now down to about 0.7. A ratio of unemployed persons to job vacancies less than one indicates that there are fewer unemployed job-seekers than open positions across the state. But now, the tight labor market is being felt across Minnesota. For the first time in the data series, both the Twin Cities and Greater Minnesota have a ratio of less than one unemployed persons to every job vacancy. The ratio is 0.5 in the Twin Cities and 0.7 in Greater Minnesota.

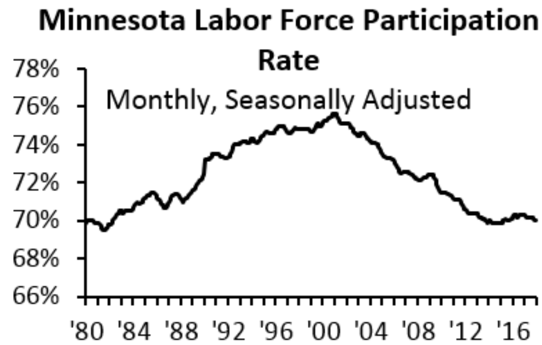


Source: Minnesota Department of Employment and Economic Development (DEED)

Job vacancies statewide have grown to a very high level: about 142,000 in the second quarter of 2018, an increase of 16 percent over the second quarter of 2017. The ratio of unemployed persons to job vacancies statewide has been less than one at 0.9 for the past year and is now down to about 0.7. A ratio of unemployed persons to job vacancies less than one indicates that there are fewer unemployed job-seekers than open positions across the state.

Vacancies are widespread among occupations, with the largest numbers of openings in health care, accommodation and food service, retail trade, and manufacturing. DEED reports that about 58 percent of job vacancies were located in the Twin Cities seven-county area and the remaining 42 percent were in Greater Minnesota. Persistently high job vacancies suggest that the state's employers are facing increasing difficulty filling positions.





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

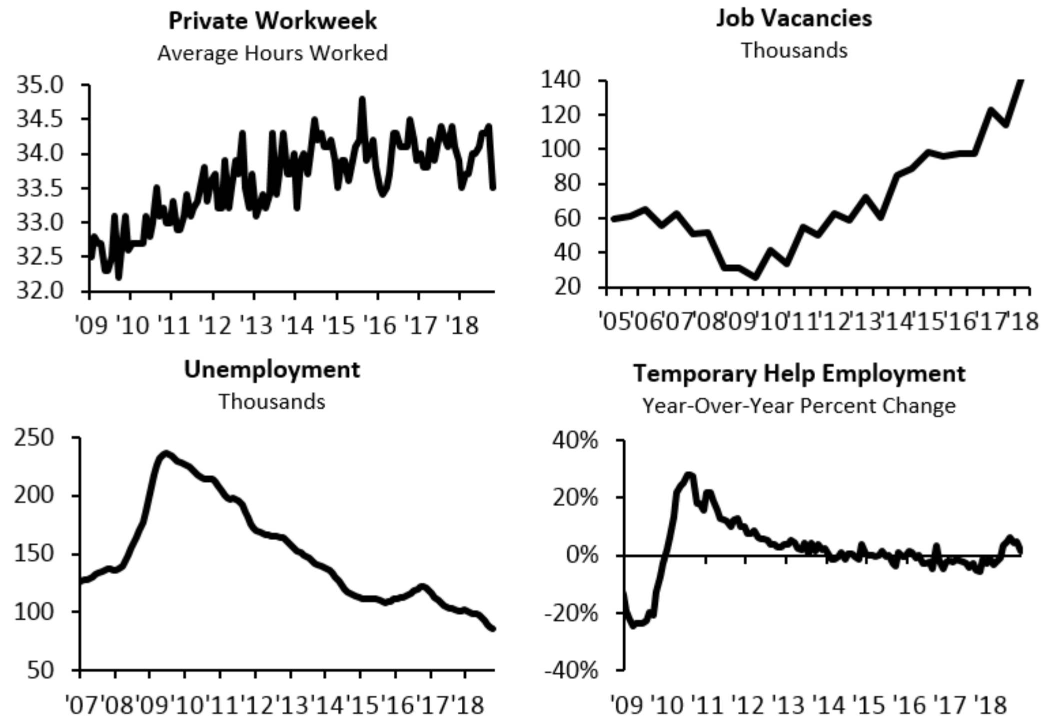
> *Improved job prospects and wage growth have contributed to high labor force participation. In October 2018, Minnesota's labor force participation rate was 70 percent, 7.1 percentage points higher than the national average and the highest among U.S. states.*

The large number of open positions improves the prospects for job-seekers. Strong economic conditions and improved job prospects may have helped halt a 15-year decline in Minnesota's labor force participation rate by enticing new entrants into the labor force and encouraging aging workers to remain in the labor force beyond the normal retirement age. As of October 2018 the proportion of the population age 16 and older that is employed was 68 percent, highest among U.S. states, and 7.4 percentage points above the national rate. Similarly, the overall labor force participation rate (the share of the over-16 population that is either working or looking for work) was 70 percent, 7.1 percentage points higher than the national average and also the highest among U.S. states.

Minnesota's high labor force participation means there are fewer people to draw into the labor force. In other words, there is little slack in Minnesota's labor market compared to other parts of the country. It is remarkable for labor force participation to hold steady as baby boomer retirements continue, but that demographic reality also suggests that the high labor force participation rate is likely not sustainable. Consequently, in our forecast Minnesota's labor force growth slows to below 1.0 percent per year throughout the forecast period.

There is a potential bright spot for the Minnesota's labor force growth in recent data about people moving into and out of the state. The U.S. Census Bureau estimates that Minnesota's net domestic migration—the number of people moving here from other states less those moving away—was positive from 2016-17. After fifteen years of negative domestic net in-migration, Minnesota added nearly 8,000 new residents from other states than it lost in 2017. While one year of data is insufficient to indicate a trend, a shift toward positive domestic net in-migration could supplement the labor force as boomer retirements continue.

Minnesota Leading Indicators

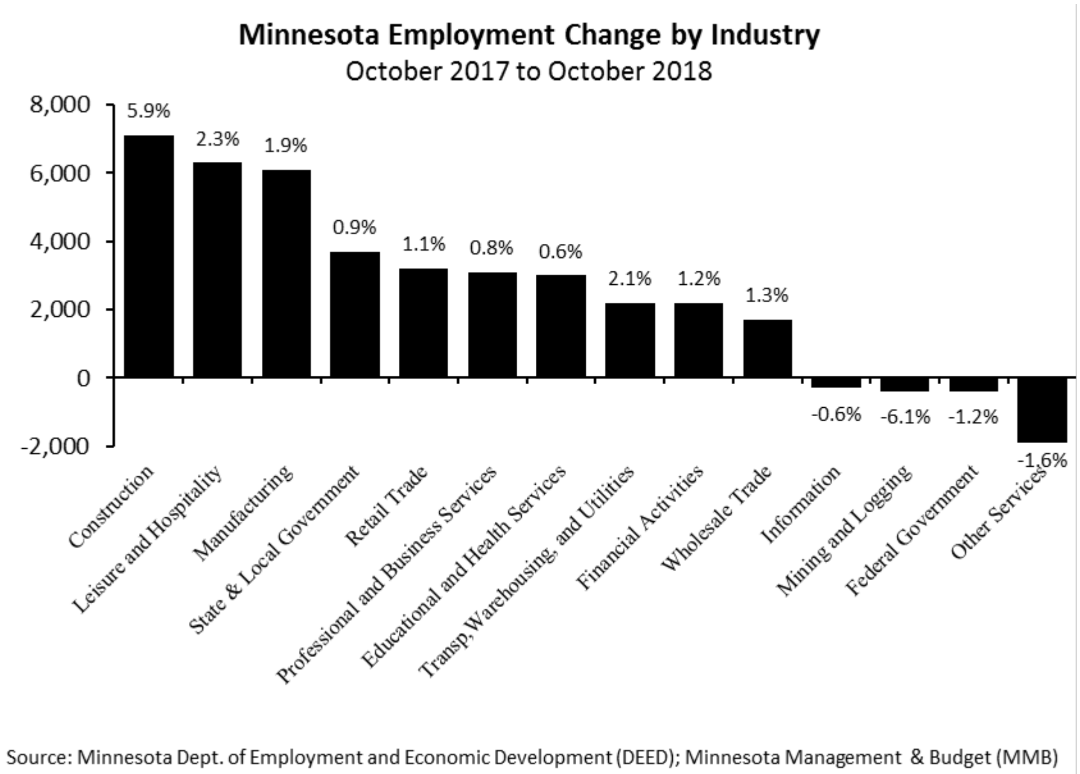


Source: Minnesota Department of Employment and Economic Development (DEED)

Strong demand for workers and low unemployment characterize Minnesota's tight labor market. Lower initial unemployment claims also indicate a low layoff rate and economic stability. These are positive signs for job seekers and switchers in Minnesota.

Other indicators paint a positive picture for those seeking employment in Minnesota. According to DEED, Minnesotans filing new claims for unemployment benefits declined in September to 15,152, 2.4 percent lower than one year prior. September's level was the second-lowest level of the year, yet another data point illustrating how tight Minnesota's labor market has become. Lower initial claims indicate a low rate of layoffs. Temporary help jobs have been gradually increasing since May 2018. In October, the average workweek in the private sector declined 0.9 hours, but the long-term trend in this indicator remains positive.

Minnesota's employment gains continue to be broad-based. Over the last year, Minnesota added jobs in eight of the eleven major industry sectors, with the most substantial increases in construction (up 7,100 jobs), leisure and hospitality (up 6,300), manufacturing (up 6,100) and state and local government (up 3,700). Additional industries that showed a moderate growth are retail trade (up 3,200), professional and business services (up 3,100), education and health (up 3,000), transportation, warehousing, and utilities (up 2,200), and state and wholesale trade (up 1,700).



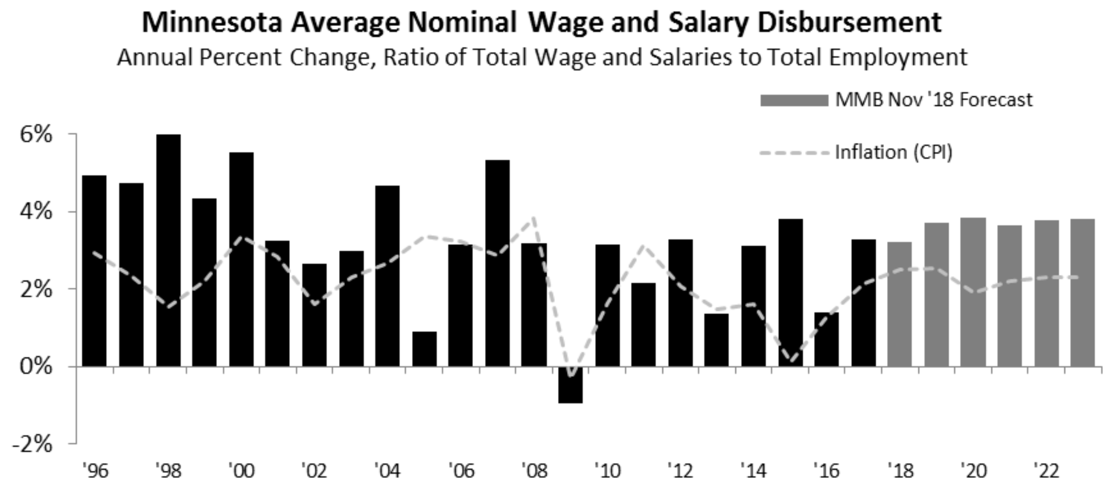
Minnesota's job growth continues to be broad-based. The state's employers added jobs in eight of the eleven major industry sectors over the 12 months ending in October 2018.

In addition to breadth across industry sectors, all five of Minnesota's metropolitan statistical areas (MSAs) show a positive job growth over the 12 months ending with October 2018. Four of the regional centers outperformed the state's annual rate of job growth: Mankato (2.9 percent), Minneapolis-St. Paul MN-WI (1.7 percent), St. Cloud (1.6 percent), and Duluth-Superior MN-WI (1.5 percent).

Wage and Salary Income. A crucial variable influencing Minnesota's individual income tax liability is total wage and salary income, estimated to account for more than 70 percent of federal adjusted gross income for Minnesota residents in 2017. 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.

We expect employment growth, combined with a moderate acceleration in wages per worker, to lead total wage and salary income to grow at healthy rates of 4.5 to 5.5 percent per year in 2018 and 2019, followed by a deceleration to 4.9 and 4.2 percent in years 2020 and 2021. For 2020-2021, these are weaker growth rates than we expected in February. We expect Minnesota wage growth to outperform U.S. wage growth in 2019 and 2020: 4.6 and 4.7 percent in those years for the U.S. compared to 5.5 and 4.9 percent for Minnesota. Minnesota wage growth is then forecast to grow more slowly than U.S. wage income through 2023. Combined with our employment growth forecast, these rates result in growth of wage income per worker of around 3.8 percent per year. This exceeds forecasted rates of inflation over the same period, implying improvements in real wages.

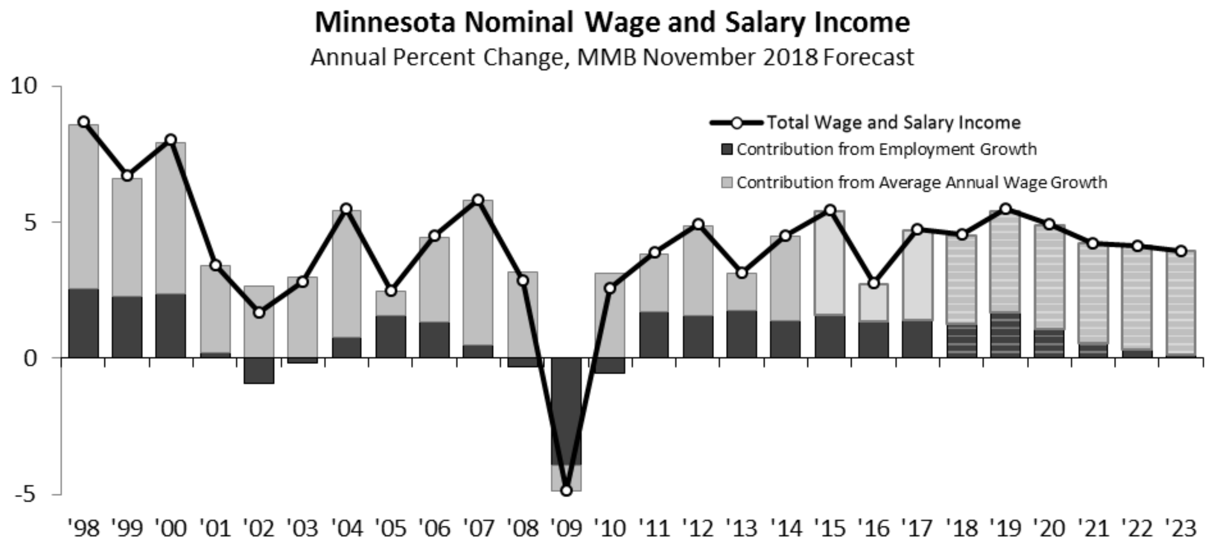
Minnesota personal income per capita has been higher than the U.S. since the late 1980s and through the end of 2017, Minnesota was 105 percent of the national level, ranking Minnesota fourteenth among states.



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

We expect Minnesota wage growth of 5.5 and 4.9 percent for Minnesota in 2018 and 2019, after which Minnesota wage growth is then forecast to grow more slowly than U.S. wage income through 2023. Combined with our employment growth forecast, these rates result in growth of wage income per worker of around 3.8 percent per year. This exceeds forecasted rates of inflation over the same period, implying improvements in real wages.

With only moderate growth in Minnesota employment in this forecast, average wages (wage and salary income per worker) is going to be the primary 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.



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

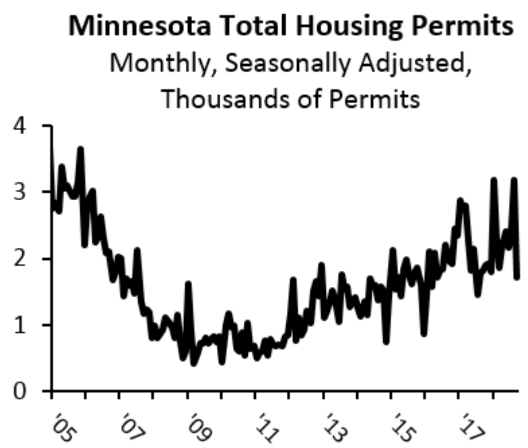
Average wage growth is going to be the main driver of the nominal wage growth in the upcoming years. The contribution of employment growth is expected to decline over the forecast period.

Homebuilding Activity. A low inventory of homes for sale has helped drive up prices for existing homes, fueled demand for new construction, and pushed up residential rents. Rising median and average sale prices and a three month of supply inventory as of October 2018 all reflect Minnesota's ongoing shortage of single family homes for sale. According to the Minnesota Association of Realtors, there were 21,136 active listings in October 2018, down 4.3 percent from last year (22,082). The long-term, persistently tight supply, continues to drive rising median and mean sale prices. In October, the year-to-date median sales price had increased 7.2 percent, reflecting a statewide median sales price of $242,000. Time on the market until a property is sold is about 50 days, which is 7.4 percent decrease over the same period last year. In many communities across Minnesota, buyers are experiencing a shortage of housing which induces them to made quick decisions in order to secure a purchase.

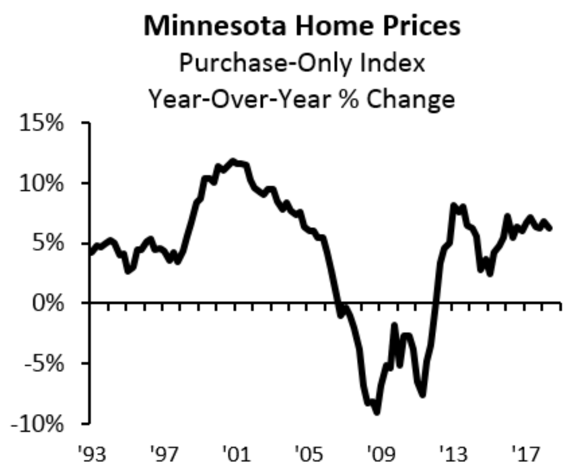
While rising home prices increase the net worth of the homeowner, rising home prices pose a risk to home affordability. Minnesota home prices are now higher than any time since 2005, when the 30-year fixed mortgage rate was about 6.2 percent. In contrast, rates are now averaging around 4.6 percent. While higher median prices increase monthly payments, lower rates constrain them. Combining these effects, affordability has declined since 2012, when Minnesota housing affordability index—the ratio of median household income to the income needed to purchase a house—was around 300. However, affordability is now near where it was in 2007, when the index was around 150. The housing affordability index in October 2018 was 148, 21 percent lower than a year earlier.

After years of weak seller activity and strong buyer activity, five of the past six months have seen more active listings than the same month in the previous year, indicating a moderate increase in supply. In October, year-to-date closed sales of homes in Minnesota were 72,145, down 2.6 percent from last year. While the median and average sales price continue to rise and supply remains limited, more active listings and a drop in closed sales indicate a modest trend toward a restoration of balance in the housing market. The market is decelerating, but not yet contracting.

Annual household formations have exhibited a post-recession average of about 10,000 new households per year, much lower than the pre-recession ten year average of 24,500. The lower household formation may reflect changes in living preferences among younger adults, as well as the increasing share of older Minnesota residents. As Minnesota's economy continues to grow, we forecast a continued recovery in household formations. In 2017, household formations were up, with 13,484 new households. We expect annual net new formations to be 21,165 and 20,853 in 2018 and 2019 respectively, followed by a gradual decline, falling to 17,000 in 2023.



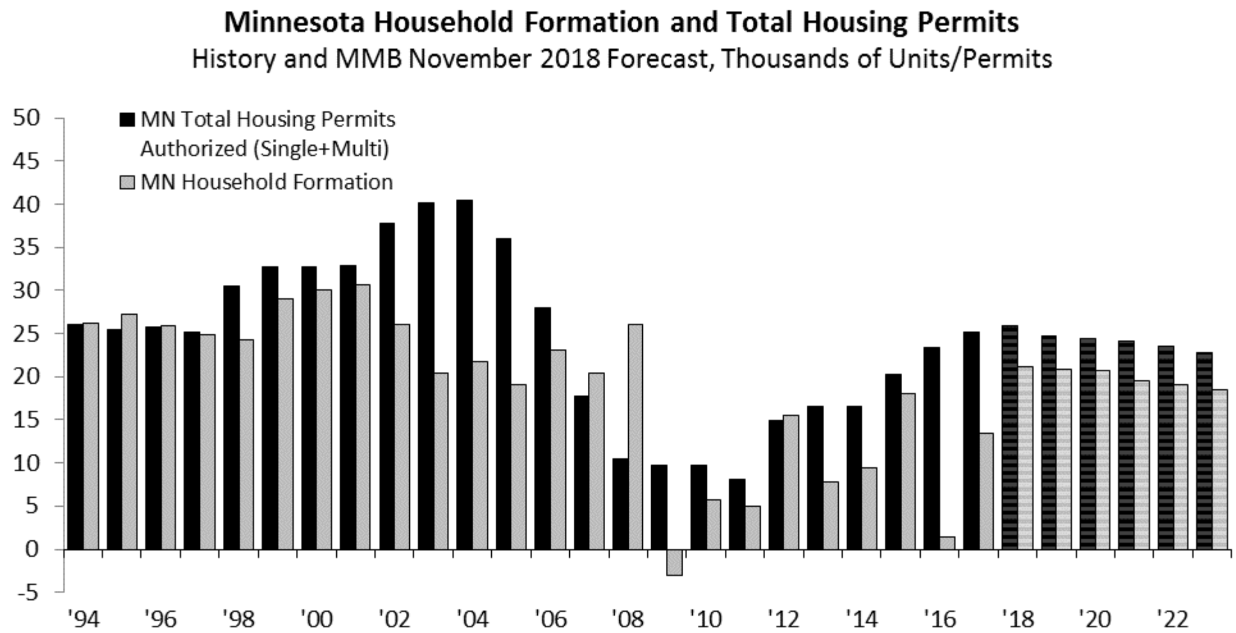
Source: U.S. Census Bureau



Source: Federal Housing Finance Agency (FHFA)

Minnesota's housing market remains strong. While the median and average sales prices continue to rise and supply remains limited, more active listings and a drop in closed sales indicate a market cool-down.

According to the U.S. Census Bureau, the total year-to-date number of authorized residential building permits (not seasonally adjusted) in Minnesota was 20,952 through September 2018, up from 18,417 over the same period last year. In this forecast, we expect total housing permits to rise to about 25,889 in 2018 and 24,689 in 2019 and to remain around an estimated 24,000 in 2020 and 2021. Through October, the construction sector added more jobs (7,100) than any other major sector. With higher housing demand and higher home prices, we expect higher homebuilding activity and construction employment to continue to increase through 2023.



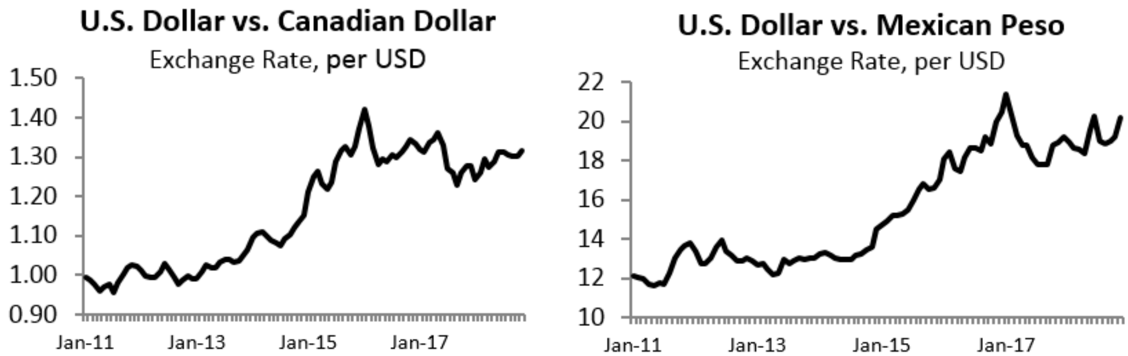
Source: U.S. Census Bureau, MN Management & Budget (MMB)

Following the 2008-09 recession, household formations have averaged about 10,000 new households per year, much lower than the pre-recession ten year average of 24,500.

Exports. Minnesota's exports of goods and services to countries throughout the world is a significant source of Minnesota income and jobs. Minnesota exports grew to $23 billion (8.0 percent) in 2017, placing Minnesota 23rd among states ranked by export value. This growth has occurred despite headwinds from international trade tensions and the rising value of the U.S. dollar.

In the first quarter of 2018, Minnesota's exports increased 9.0 percent, followed by a record 15.0 percent in the second quarter, and 6.5 percent in third, compared to the same quarters last year. The largest factor contributing to the boost in second-quarter growth was increased exports in May, including a surge in soybean exports prior to Chinese tariffs enacted July 6, 2018. Minnesota's third quarter exports (including agricultural, mining and manufactured products) were valued at $5.7 billion. This quarter saw the flipside of the second quarter soybean surge, as Minnesota's miscellaneous grain and seed exports fell 30 percent, driven by a $21 million drop in soybean sales to China. Over the same time periods (the first, second, and third quarters of this year), U.S. exports grew 8.0 percent, 11.0 percent, and 8.1 percent, respectively, compared to the same quarters last year.

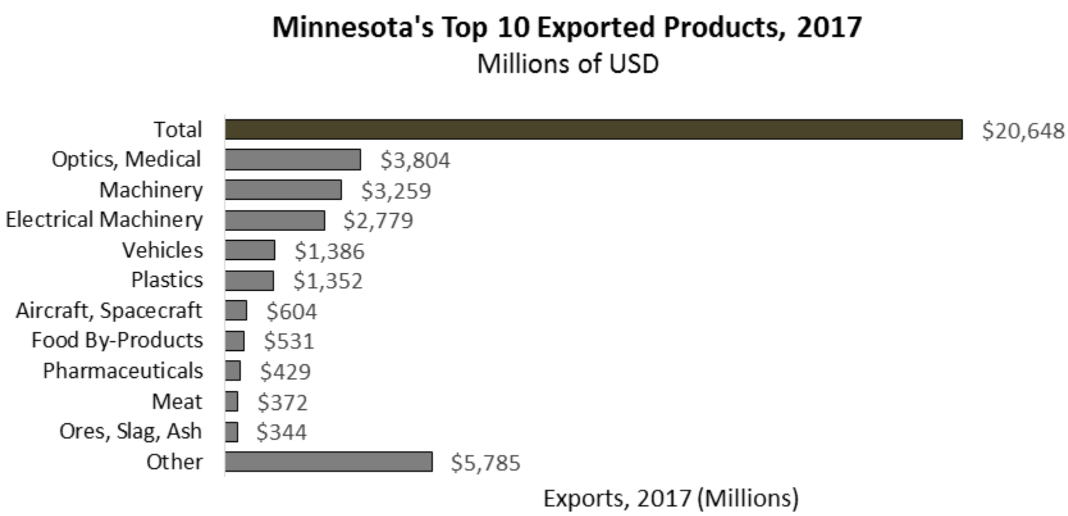
As trade tensions between the U.S. and China have intensified, and U.S. interest rates have risen relative to foreign rates, the dollar has appreciated sharply. A stronger U.S. dollar relative to major trading partners makes Minnesota-produced goods and commodities more expensive elsewhere in the world, reducing foreign demand for the state's products relative to what it would have been without the higher cost. Despite this headwind, Minnesota's exports have increased for seven consecutive quarters.



Source: Federal Reserve

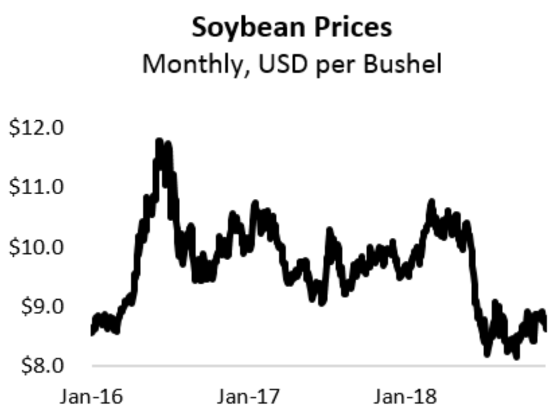
A substantial rise in the dollar against the currencies of our trading partners since July 2014 has advantaged imports and disadvantaged exports.

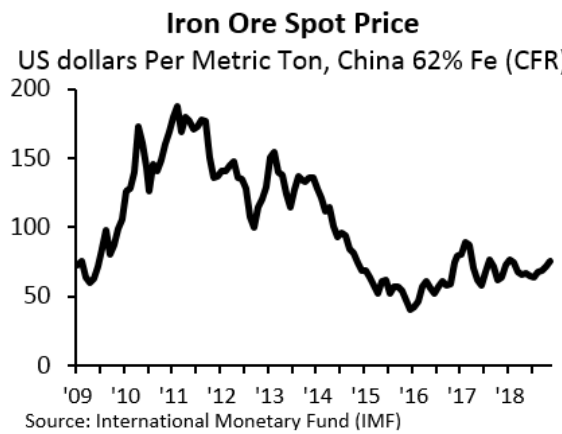
According to DEED, Minnesota industries likely to be impacted by other countries' retaliatory tariffs on U.S. exports include pork by-products; motorcycle manufacturing; whey and modified whey products; kidney beans and white pea beans; outboard motorboats, row boats, and canoes; fresh or chilled pork; bread and other baked items (including pizza); uncoated paper; ceramic articles; and soybeans. In the third quarter of this year, exports of cereals fell 23 percent, and miscellaneous grain and seed exports fell 30 percent, driven by a drop in soybean sales to China in the amount of $21 million. After U.S. and Chinese tariff rhetoric escalated in late May, soybean prices fell more than 20 percent. On September 18, 2018 the price was $8.14/bushel, the lowest in a decade.



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

In addition to the direct effect of trading partner tariffs on U.S. exports produced in Minnesota, U.S. tariffs on imports may affect Minnesota manufacturing, transportation, and logistics firms in three significant ways. First, U.S. tariffs on imported steel, aluminum, and intermediate goods from China increase input costs for Minnesota companies that use those inputs to manufacture consumer products. Second, policy uncertainty and supply chain disruption impose costs on manufacturers. Manufacturers must incur costs to diversify input sources, and they may forego investments until policies stabilize. Third, a slowdown in trade affects Minnesota transportation and logistics firms. Much of the trade into and out of the Upper Midwest flows through the Twin Cities, so a slowdown of our neighboring states' trade sectors may negatively affect Minnesota firms.





After U.S. and Chinese tariff rhetoric escalated in late May, soybean prices fell more than 20 percent. On September 18, 2018 the price was $8.14/bushel, the lowest in a decade. The recent improvement in 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.

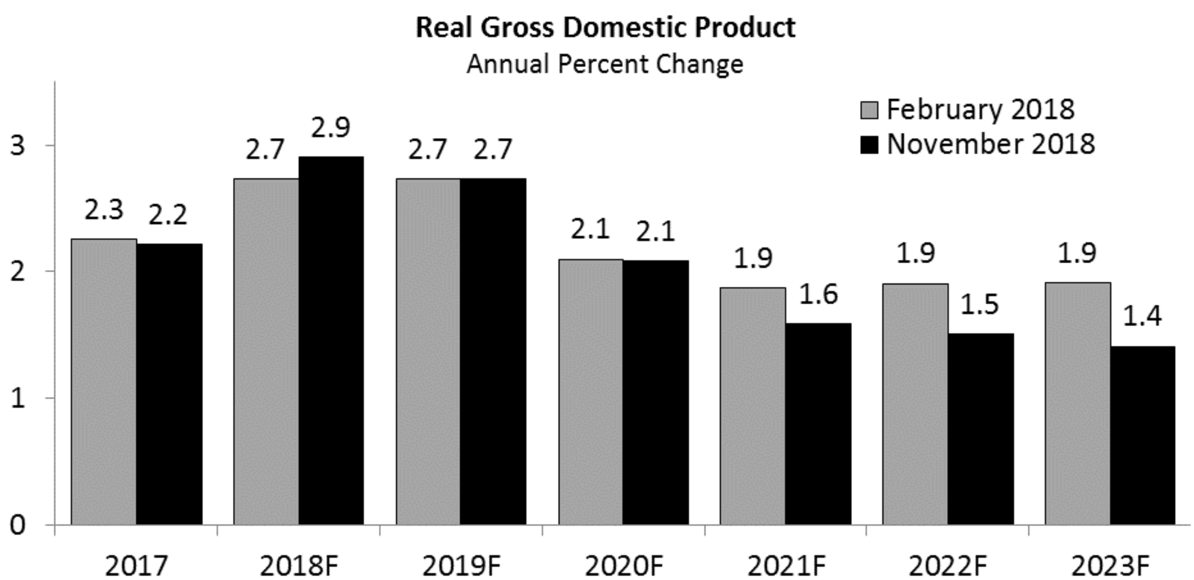
After struggling the last few years, 2017 was positive for Minnesota's Iron Range, when employment in the mining and logging sector grew by 5.1 percent (319 jobs). In the third quarter of 2018, DEED reports that Minnesota's iron ore exports rose at a very strong pace. Minnesota exported $205 million worth of ore, slag, or ash in the third quarter, a 42 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 $71 per ton in October 2018.

Most of the iron ore produced on Minnesota's Iron Range is used for domestic steel production. New U.S. tariffs on imported steel could boost U.S. production and increase demand for Minnesota-produced ore.

Council of Economic Advisors' Statement

Minnesota's Council of Economic Advisors met on November 13, 2018, to review the IHS Markit (IHS) outlook for U.S. economic growth, which includes the assumptions underlying Minnesota's November 2018 *Budget and Economic Forecast.* Since Minnesota's forecast was last prepared in February, IHS has lowered their expectations for overall real GDP growth between 2017 and 2023. IHS now expects real GDP to grow at a compound annual rate of 2.0 percent from 2017 to 2023, 0.2 percentage points slower than they forecast in February. While current conditions can support moderate growth in the near term, IHS expects a slowdown in late 2019, with annual real GDP growth decelerating to only 1.4 percent annually in 2023.

Strong growth in the second and third quarters of 2018 has lead IHS to increase their expectations for this year's real GDP growth from 2.7 percent in February's outlook to 2.9 percent in November. They held steady their forecasts for 2019 and 2020, but their outlook for 2021 through 2023 is weaker than in February. In the November forecast, consumer spending contributes more to 2020 and 2021 real GDP growth relative to February, but not enough to make up for a smaller contribution from business investment and an increased drag from net exports. The net export drag continues into 2022 and 2023, while consumer spending and business investment both contribute less to real GDP in those years compared to February. The November outlook includes the impacts of new U.S. tariffs on imports and trading partner counter-measures that have been enacted this year.



Since February, IHS has slightly lowered their growth expectations for 2017 to 2021. IHS has included the impacts of new U.S. tariffs on imports and trading partner counter-measures that have been enacted this year. Council members agreed that IHS's expectations for U.S. growth are a good starting point for MMB's forecast.

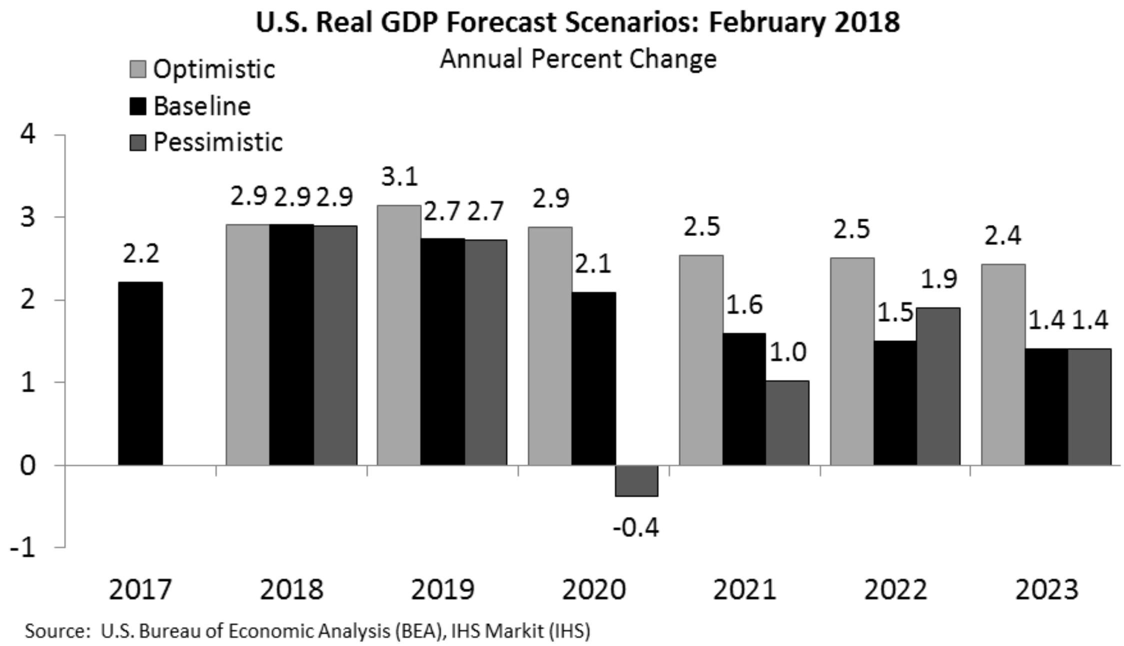
Regarding economic fundamentals, IHS expects buoyant consumer and business confidence, stable household finances, and rising employment and income to support growth through most of 2019. But they expect the economy to slow late next year, as the fiscal stimulus from the Tax Cuts and Jobs Act fades, monetary policy becomes more restrictive, global growth weakens, and a strong U.S. dollar relative to our trading partners' currencies pulls down net exports. After mid-2020, a demographically driven decline in the labor force participation rate is expected to further weigh down growth.

The IHS November outlook is similar to that of other macroeconomic forecasters. The November Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 2.9 percent in 2018, the same rate that IHS expects. For 2019, the IHS expects slightly higher growth than other forecasters: 2.7 percent compared to 2.6 percent for the Blue Chip Consensus.

IHS identifies several downside risks to the forecast. If the recent stock market decline worsens, the resulting erosion of household wealth could cause consumer spending to grow more slowly than expected. In addition, the November outlook assumes that looming U.S. fiscal policy deadlines are met without disruption to federal spending. These deadlines include addressing the continuing budget resolution for FY 2019 by early December, raising or suspending the debt ceiling before March 2019, and enacting legislation to prevent automatic FY 2020 spending cuts. Failure to resolve these issues is a source of risk to the forecast.

Council members agree that IHS's expectations for U.S. growth are a good starting point for MMB's November 2018 economic forecast, but they acknowledge forecast risks. Moreover, they agree that there is more downside risk to the 2018-2021 forecast than potential for faster growth than IHS expects. In addition to the risks identified above, Council members warn of the following threats to the forecast: economic disruptions from geopolitical events; escalation of retaliatory tariffs between the U.S. and trading partners; and higher-than-anticipated inflation that triggers tighter U.S. monetary policy. On the other hand, if the housing market rebounds from its current slump with stronger than expected momentum, 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 are responding to new federal tax laws. Finally, Council members also agree that the difficulty of projecting long range economic conditions warrants caution when using forecasts for 2022 and 2023.

IHS assigns a probability of 60 percent to the November baseline outlook. They assign a 25 percent probability to a more pessimistic scenario, in which a downward correction to real estate prices and declining consumer and business confidence trigger a three-quarter recession in 2020. While the basis of IHS' pessimistic scenario has stayed roughly the same since February, over recent months IHS has assigned a higher probability to this scenario and increased both the length and depth of the projected recession. 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.



IHS assigns a 60 percent probability to the November baseline outlook. They assign a 25 percent probability to a more pessimistic scenario, in which a correction to commercial real estate prices and declining consumer and business confidence trigger a three-quarter recession in 2020.

As it has done every year since 2003, the Council recommends that budget planning estimates for the next biennium include expected inflation in both spending and revenue projections. Council members noted that Minnesota's current practice of excluding projected changes in the prices of goods and services from a majority of the spending estimate is fundamentally misleading. It is inconsistent with both sound business practices and CBO methods and potentially encourages legislators and the public to regard the state's financial position more optimistically than the facts warrant. The omission of inflation in the spending estimates in the November 2018 *Budget and Economic Forecast* understates the cost of current services as provided by law in FY 2020-2021 by roughly $1.162 billion, and thus makes the amount of projected revenues above the cost of providing services to appear to be larger than it actually is. This distortion will increase as 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. The target is a percentage of forecast revenues, allowing reserves to adjust with revenue changes over time. In addition, the policy automatically transfers 33 percent of a positive forecast balance each November into the reserves until the target is reached. Based on MMB's most recent analysis, the target level is 5.0 percent of biennial (two-year) general fund revenues. Minnesota's current $1.583 billion budget reserve is about 3.6

percent of forecast FY 2018-19 revenues,[2] below the recommended level based on MMB's analysis.

[2] This reflects the levels of reserves and projected revenues at the time of the November 13, 2018, Council meeting. With the release of the November 2018 Budget and Economic Forecast, the budget reserve is $2.075 billion, or 4.6 percent of forecast FY 2018-19 general fund non-dedicated revenues.

BUDGET OUTLOOK

Current Biennium

When the last *Budget and Economic Forecast* was released in February 2018, a balance of $329 million was projected for the current biennium. Actions in the 2018 legislative session including $66 million in spending increases, a minor revenue adjustment and a $25 million withdrawal from the budget reserve left a projected $288 million balance in FY 2018-19 with $1.991 billion in the budget reserve, cash flow account and stadium reserve.

Current Biennium: FY 2018-19 General Fund Budget
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change	% Change
Beginning Balance	**$3,333**	**$3,333**	**$ -**	**0.0%**
Revenues				
Taxes	42,964	43,390	426	1.0
Non-Tax Revenues	1,475	1,603	128	8.7
Transfers, Other Resources	362	417	55	15.1
Total Revenues	**$44,801**	**$45,410**	**$609**	**1.4%**
Expenditures				
E-12 Education	18,846	18,845	(1)	(0.0)
Property Tax Aids	3,653	3,664	11	0.3
Health & Human Services	13,619	13,403	(216)	(1.6)
Debt Service	1,139	1,113	(26)	(2.2)
All Other	8,598	8,524	(74)	(0.9)
Total Expenditures	**$45,856**	**$45,549**	**$(306)**	**0.7%**
Reserves and Cash Flow	1,933	2,425	491	
Stadium Reserve	58	50	(8)	
Budgetary Balance	**$288**	**$720**		

November's forecast shows improvement in the state's financial position with seven months remaining in the FY 2018-19 biennium. Forecast revenues are now expected to be $45.410 billion, an increase of $609 million (1.4 percent) over end of session estimates. Biennial spending estimates now total $45.549 billion, a decline of $306 million (0.7 percent) from prior estimates. Prior to any allocation to the budget reserve under M.S. 16A.152, this forecast includes two allocations to the budget reserve directed by Minnesota law totaling $137 million. The stadium reserve is reduced by $8 million due to a decision to redirect corporate revenue back to the general fund that had been allocated to the stadium reserve account. Aggregating spending, revenue and reserve changes in the forecast results in a projected forecast balance in the current biennium of $1.074, an improvement of $786 million over end of session estimates. Statute automatically allocates 33 percent of any positive budgetary balance in the current biennium to the budget reserve account. After $354 million is allocated to the budget reserve, the available balance at the end of the current biennium is projected to be $720 million.

FY 2018 Close. In August, the books were officially closed for the fiscal year that ended June 30, 2018. Fiscal year 2018 ended with a general fund balance of $979 million, $472 million above prior estimates. This gain, representing "money in the bank", accounts for the majority of the projected increased forecast balance for the current biennium.

Current Biennium: FY 2018 General Fund Close
Change From End-of-Session Estimates

($ in millions)	End of Session	FY 2018 Close	$ Change
Beginning Balance	**$3,333**	**$3,333**	**$ -**
Forecast Revenues	21,867	22,297	430
Projected Spending	22,695	22,347	(348)
Appropriation Carryfwd	-	212	212
Budget Reserve and Cash	1,958	2,048	90
Stadium Reserve	40	44	4
Budgetary Balance	**$507**	**$979**	**$472**

Total revenues, transfers-in and other resources in FY 2018 were $430 million higher than previously forecast, with tax revenue accounting for $320 million of the variance. Individual income tax receipts were $332 million higher with corporate income tax ($13 million), estate tax ($14 million), statewide property tax ($6 million), and lawful gambling tax ($4 million) also showing material gain over prior estimates. Partially offsetting the overall gain in tax revenue were lower sales tax receipts ($36 million) and lower cigarette and tobacco tax receipts ($21 million).

Collections from other sources, including non-tax revenue, transfers from other funds, dedicated revenue and prior year adjustments added $110 million to the bottom line compared to prior estimates for the fiscal year. Non-tax revenue was $56 million higher than estimates due to higher investment income ($23 million) driven by higher rates and cash balances; departmental earnings and fines and surcharge revenues were also higher. Transfers from other funds were $7 million higher than projections. Prior year adjustments and other financial transactions totaled $73 million, $46 million higher than estimates. Prior year adjustments reflect savings occurring from cancellations of encumbrances (contracts, grants or purchase orders), revenues deposited during the year but attributable to *prior fiscal years*, or other financial activity related to loans and cash advances. These are reflected as adjustments in the most recent fiscal year – in this case, FY 2018.

FY 2018 spending was $348 million below prior estimates. Of that amount $212 million is unspent appropriations that have spending authority that carries forward to FY 2019 and is reflected as increased spending in that year. Another $36 million of the change is due to the absence of an enacted forecast adjustment bill that would have set E-12 education appropriations in FY 2018 at the February 2018 forecast amount. In this forecast, the FY 2018 unfunded education obligation is shifted into FY 2019 and adds to spending in that year. A majority of the remainder of the change is $90 million lower than projected spending for the health insurance premium subsidy program operated by Minnesota Management and Budget (MMB). By law, any unspent funds allocated to the premium subsidy program were cancelled back to the budget reserve at the close of FY 2018.

FY 2019. Year to date revenue collections and lower forecast spending on health and human services (HHS) and debt service are partially offset by additional allocations to the budget reserve in FY 2019, resulting in an overall gain to the bottom line in this forecast for the current year. In November MMB released the monthly revenue review that showed year-to-date revenue $322 million higher than prior forecast. This forecast includes that actual activity but has also made adjustments to revenue projections for the remainder of the fiscal year that reduce the estimated FY 2019 final revenue gain to only $179 million higher than the prior forecast. When combined with actual FY 2018 revenues, this forecast estimates revenues to exceed prior forecast for FY 2018-19 by $609 million.

Current Biennium: FY 2018-19 General Fund Budget
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change
Beginning Balance	**$3,333**	**$3,333**	**$ -**
Forecast Revenues	44,801	45,410	609
Projected Spending	45,856	45,549	(306)
Budget Reserve	1,583	1,720	137
Cash Flow Account	350	350	-
Stadium Reserve	58	50	(8)
Forecast Balance	**$288**	**$1,074**	**$786**
33% to Budget Reserve	-	354	354
Budgetary Balance	**$288**	**$720**	**$432**

Expenditures, after adjusting for appropriation carryforward from FY 2018 and the shift of FY 2018 E-12 obligations to FY 2019, are expected to be $206 million lower in FY 2019. This is primarily a result of lower enrollment across human service programs. Additional federal revenue for chemical dependency treatment services, and lower debt service estimates resulting from a smaller than expected bond issuance in August 2018 at better than expected rates.

Budget Reserve. There are three deposits to the budget reserve in FY 2018-19 that are reflected in this forecast for the first time. First, state law directs the $90 million in cancelled funds appropriated for the premium subsidy program to be deposited to the budget reserve account. Second, statute allocates a portion of a surplus in the Minnesota Workers' Compensation

Assigned Risk Plan fund to the budget reserve based on an actuarial calculation of balances in that fund. In FY 2019, $47 million is allocated to the budget reserve from this surplus. Third, M.S. 16A.152 directs MMB to allocate additional funds to the budget reserve account, provided three conditions are met:

1. The state must have a positive forecast balance for the current biennium. With this forecast, the FY 2018-19 projected forecast balance is $1.074 billion.

2. Existing statutory provisions that allocate forecast balances to restoring reserves, repaying accounting shifts and repaying borrowed funds must be satisfied before depositing additional resources into the reserve. As of this forecast, there are no outstanding provision requiring use of the budgetary balance in the current biennium prior to transferring funds to the budget reserve account.

3. The state's budget reserve account level must be below the level recommended to adequately manage the volatility of the general fund tax structure. The current report, released in September 2018, recommends a budget reserve level of 5.0 percent of the current biennium's general fund non-dedicated revenues, or $2.250 billion. Prior to the automatic allocation, the budget reserve account balance is $1.720 billion, below the amount recommended.

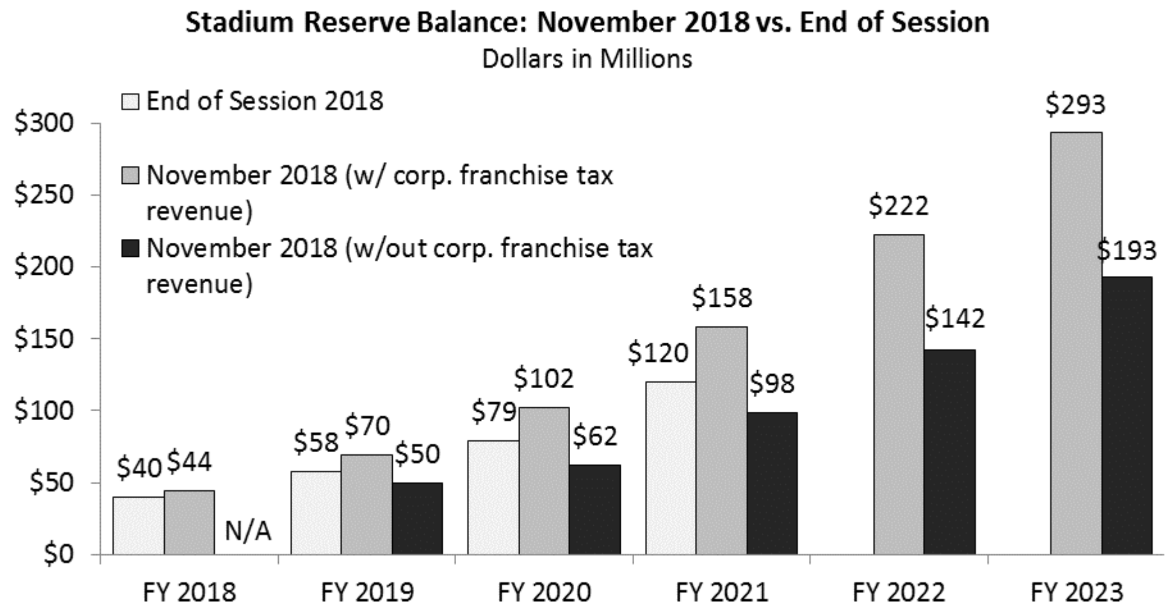
Since all three conditions are met with this forecast, current law triggers a deposit of 33 percent of the forecast balance to the budget reserve account. Of the total $1.074 billion projected forecast balance for FY 2018-19, $354 million is credited to the budget reserve account, increasing the reserve to $2.074 billion in FY 2019, $176 million short of the target.

Stadium Reserve. The FY 2018-19 projected balance of the stadium reserve account is $50 million, $8 million lower than estimates at the end of session. There are two offsetting changes in this forecast that impact the balance of the stadium reserve account.

1. M.S. 297E.021 provides the commissioner of MMB the authority to add "up to $20 million each fiscal year" from corporate franchise tax receipts to the stadium reserve allocation formula. Prior to this forecast, estimates in all years assumed the maximum amount, $20 million, in each year would be applied to the allocation formula. With this forecast, it is now assumed that $0 from corporate franchise taxes will be added to the allocation formula in FY 2019-23. This assumption is based on the determination of the Commissioner of Revenue, in consultation with the Commissioner of Management and Budget, that reserve balances in FY 2019 and in the future will be sufficient to sustain an unforeseen reduction in revenues or increase in expenditures.

2. The primary source of revenue for the stadium reserve allocation formula, lawful gambling tax receipts, is $12 million higher in the current biennium when compared to end of session estimates.

These offsetting changes result in a lower reserve balance compared to prior estimates, however the stadium reserve balance is still forecast to grow to $193 million by the end of FY 2023.



The stadium general reserve account was expected to grow year over year when end of session estimates were released. Under the same assumptions as end of session, in this forecast the reserve would now be projected to grow to $293 million by the end of FY 2023. However, this forecast now shows the implementation of a decision to forego $20 million in revenue for the reserve allocation formula. After adjusting for the decision, the reserve balance is expected to grow to $193 million by the end of FY 2023.

Next Biennium

A balance of $1.544 billion is projected for the FY 2020-21 biennium, $1.125 billion higher than end of session estimates. Revenues in the next biennium are projected to be $48.327 billion, $190 million (0.4 percent) higher than planning estimates for the biennium. Forecast spending in the next biennium is estimated to be $47.454 billion, down $489 million (1.0 percent) from end of session estimates.

Next Biennium: FY 2020-21 General Fund Budget
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change
Beginning Balance	**$2,279**	**$3,194**	**$915**
Forecast Revenues	48,136	48,327	190
Projected Spending	47,943	47,454	(489)
Balance Before Reserve	**$2,472**	**$4,067**	**$1,594**
Cash and Budget Reserves	1,933	2,425	491
Stadium Reserve	120	98	(22)
Budgetary Balance	**$419**	**$1,544**	**$1,125**

When compared to revised forecast estimates for the current biennium, FY 2018-19 general fund revenues are projected to increase $2.917 billion (6.4 percent) over the two year biennium while spending is expected to grow $1.905 billion (4.2 percent) compared to the current biennium.

Revenue projections are based on current law and forecast economic growth while spending estimates for the next biennium assume that current funding levels and policies continue unchanged, adjusted only for caseload and enrollment changes as well as specific formula driven items. The expenditure forecast does not assume inflationary cost growth outside of a limited number of specific budget areas including a portion of health care spending, debt service, special education and property tax refunds.

Next Biennium: FY 2020-21 General Fund Budget
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2018-19	FY 2020-21	$ Change	Annual % Change
Beginning Balance	**$3,333**	**$3,194**		
Tax Revenues	43,390	46,487	3,097	3.5%
Non-Tax Revenues	1,603	1,471	(132)	(4.2)
Other Resources	417	369	(48)	(5.9)
Current Resources	**45,410**	**48,327**	**2,917**	**3.2%**
K-12 Education	18,845	19,601	756	2.0
Property Tax Aids and Credits	3,664	3,710	46	0.6
Health and Human Services	13,403	14,905	1,501	5.5
Debt Service	1,113	1,199	86	3.8
All Other	8,524	8,040	(484)	(2.9)
Total Expenditures	**45,549**	**47,454**	**1,905**	**2.1**%
Balance Before Reserves	**3,194**	**4,067**		
Cash and Budget Reserves	2,425	2,425		
Stadium Reserve	50	98		
Budgetary Balance	**$720**	**$1,544**		

Revenue. Growth in the general fund's largest revenue source, individual income tax receipts, accounts for nearly 75 percent of the overall biennial revenue growth. Individual income tax receipts are now expected to total $26.276 billion in the FY 2020-21 biennium, and increase of $2.148 billion (8.9 percent) over projections for the current biennium. The second largest source of general fund revenue, general sales tax receipts, is expected to grow to $12.022 billion in the next biennium, an increase of $879 million (7.9 percent). Biennial growth in other major revenue sources include statewide investment income ($74 million, 195 percent) cigarette and tobacco products tax ($64 million, 5 percent), deed transfer tax ($43 million, 13 percent), medical assistance surcharges ($36 million, 6 percent), lawful gambling taxes ($31 million, 19 percent), and insurance gross earnings tax ($30 million, 4 percent). Reductions in estate tax receipts ($107 million, 43 percent) and corporate franchise tax receipts ($53 million, 2 percent) partially offset the overall biennial increase.

Spending. Base level expenditures in the next biennium are expected to reach to $47.454 billion, growth of $1.905 billion (4.2 percent) over the FY 2018-19 biennium. Growth in the second largest budget area, Health and Human Service (HHS), accounts for the majority of the overall growth. Total HHS spending is expected to reach $14.905 billion, $1.501 billion (11.2 percent) more than the current biennium. Growth in medical assistance spending accounts for 95 percent of the HHS growth.

The largest budget area, E-12 education, is expected to grow to $19.601 billion in FY 2020-21 an increase of $756 million (4.0 percent) over the current biennium. Outside of special education, the education funding formula does not include an adjustment for inflationary cost growth, the majority of growth into the next biennium is due to special education and increasing students.

Outside of the two largest budget areas, debt service is expected to be higher in the next biennium driven mostly by a higher bond rate forecast and a larger expected bond sale in 2019. Property tax aids and credits is higher due to growth in the property tax refund program. Overall spending growth is offset by lower projected spending in the combined all other areas of the budget mostly due to sun-setting of one-time spending programs in the current biennium.

Reserves. The budget reserve and cash flow account balances are projected to be unchanged from the current biennium with $350 million in the cash flow account and $2.075 billion in the budget reserve. The stadium reserve is expected to grow to $98 million by the end of FY 2021 due to increasing lawful gambling tax receipts and the start of City of Minneapolis' repayment and contributions to the project beginning in FY 2021.

Planning Estimates

This forecast provides the first planning estimates for the FY 2022-23 biennium. While these estimates inherently carry a higher degree of uncertainty than estimates for FY 2019-21, they do present an outlook of longer run spending and revenue growth that will assist in budget planning when setting the FY 2020-21 budget.

Planning Horizon: General Fund Budget
By Biennium, FY2020-23, November 2018 Forecast

($ in millions)	FY 2020-21	FY 2022-23	$ Change	Annual % Change
Forecast Revenues	$48,327	$50,735	$2,408	2.5%
Projected Spending	47,454	50,279	2,825	2.9%
Difference	**$873**	**$456**	**$(417)**	
Estimated Inflation (CPI)[3]	*$1,162*	*$2,908*		

While base level spending continues to grow into the FY 2022-23 planning estimates at a higher rate than growth from the current biennium into FY 2020-21, revenue growth is lower into the planning horizon. The diverging growth rates between revenue and spending results in revenue

[3] Inflation calculation grows the estimated general fund spending base in each year by the projected CPI growth rate after removing special education, debt service, property tax refunds, and the state share for managed and long term care.

exceeding spending by only $456 million in FY 2022-23 in this forecast. As with the projections for FY 2020-21, spending estimates are not adjusted for inflation in most areas of the budget.

Projected inflation based on the Consumer Price Index (CPI) is now expected to be 2.3 percent and 1.9 percent in FY 2020 and FY 2021 followed by 2.3 percent each year in FY 2022 and FY 2023. After adjusting the spending base for programs with price increases included in the current law formula, applying the annual inflation rate, compounded over the two and four year periods, would add approximately $1.2 billion to the FY 2020-21 base and $2.9 billion to the FY 2022-23 base.

REVENUE OUTLOOK

Current Biennium

Total general fund revenues for FY 2018-19 are now forecast to be $45.410 billion, $609 million (1.4 percent) more than the end-of session estimate (the February forecast adjusted for minor law changes). Total tax revenues for the current biennium are forecast to be $43.390 billion, $426 million (1.0 percent) above the end-of-session estimate. Higher expected individual income, corporate, and other tax revenue more than offsets a reduced forecast for sales tax revenue.

Current Biennium: FY 2018-19 General Fund Revenues
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change	% Change
Individual Income Tax	$23,715	$24,133	$419	1.8%
General Sales Tax	11,263	11,143	(120)	(1.1)
Corporate Franchise Tax	2,596	2,703	107	4.1
State General Property Tax	1,621	1,619	(2)	(0.1)
Other Tax Revenue	3,768	3,792	24	(0.6)
Total Tax Revenues	**$42,964**	**43,390**	**426**	**1.0%**
Non-Tax Revenues	1,475	1,603	128	8.7
Other Resources	362	417	55	15.4
Total Revenues	**$44,801**	**$45,410**	**$609**	**1.4%**

The $609 million forecast change for FY 2018-19 total revenues reflects a $376 million positive variance at the close of FY 2018.

This is the third forecast of FY 2018-19 revenues since FY 2018 began on July 1, 2017. After 16 months of observed collections, fiscal year-to-date receipts are $28.866 billion, 64 percent of the total expected over the biennium. With 8 months of collections left to observe, 36 percent of forecast receipts are outstanding.

Individual Income Tax. Net individual income tax receipts for the current biennium are now forecast to be $419 million (1.8 percent) more than the end-of-session estimate. A $332 million net income tax variance at the close of FY 2018, slightly higher forecast income growth in CY 2018, and an increase in assumed tax liability for 2017, the base year of this forecast, all contribute to this change. These positive changes offset a $109 million net revenue forecast reduction due to expected taxpayer responses to the federal Tax Cuts and Jobs Act (TCJA) (explained below).

This forecast builds from estimated final 2017 income tax liability. Using information from processed tax returns and revenue in the state accounting system, we estimate that final 2017 tax liability is $10.746 billion, $200 million more than we estimated in February. We expect to learn actual tax year (TY) 2017 liability in early 2019, when all individual income tax returns have been processed.

Calibrating the individual 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 Bureau of Economic Analysis (BEA), Minnesota total wage and salary income grew 4.7 percent in CY 2017, 0.2 percentage points more slowly than we assumed in the February forecast. Although growth rates in the components of personal income—such as wage income reported by BEA—can grow at different rates than wage income included in adjusted gross income (AGI) on tax returns, in this forecast, we assume wage income in AGI grew at the same rate in 2017 as personal income wages, 4.7 percent. Our higher estimate of TY 2017 income tax liability, together with a lower assumed wage income growth, implies that non-wage income grew faster in TY 2017 than we had previously assumed. We now assume capital gains income reported by Minnesota residents grew 31 percent in TY 2017, compared to about 9 percent in the February forecast. The TY 2017 capital gains growth reflects some very large one-time merger and acquisition activity that is not assumed to carry forward to subsequent years. We also raised our estimate of dividend income growth by about 5 percentage points. Overall, TY 2017 non-wage income included in AGI grows about 4 percentage points faster in this forecast than in February.

Changes to assumed growth rates for TY 2018 also affected the FY 2018-19 income tax forecast. We lowered assumed TY 2018 wage income growth by about 0.3 percentage points to 4.5 percent, and raised expected growth in non-wage income about one percentage point.

Income taxes paid by fiduciaries—estates and trusts—accounted for $60 million of the income tax variance at the close of FY 2018, an increase of 34 percent over FY 2017 levels. While in this forecast, we assumed only modest growth in fiduciary income, the larger base level of revenue results in an increase of $63 million in the forecast for FY 2019 fiduciary income. Consequently, fiduciaries account for $123 million of the income tax forecast change for the current biennium.

This forecast reflects an off-model adjustment for the impact of TCJA provisions on taxpayers' choice to itemize or use the standard deduction on their Minnesota returns, as well as their eligibility for Minnesota's charitable subtraction. In the February forecast, this adjustment added nearly $27 million of revenue in FY 2019. Since then, a Minnesota Department of Revenue notice established that taxpayers may elect to itemize or take the standard deduction on their Minnesota tax returns regardless of their choice on their federal returns. Following that notice, the adjustment becomes a revenue reduction of $42 million.

The TCJA also relaxed the requirements for business taxpayers to use cash accounting or other simplified accounting methods for federal tax purposes. Following guidance from the Department of Revenue, this forecast reflects a new off-model revenue reduction of about $67 million in FY 2019 due to the expectation that taxpayers who changed accounting methods based on the federal law will do the same for their Minnesota taxes. Combined with the itemizing decision adjustment, TCJA provisions are estimated to reduce forecast income tax revenues (relative to February) by $109 million in FY 2019.

Finally, note that we continue to assume—as we did in the February forecast—that income taxes on additional dividend payouts and share-repurchases that corporations are expected to make (or already have made) in response to the corporate provisions of the TCJA add about $132 million to FY 2019 individual income tax revenues. This is not a change in the forecast compared to February, but it does represent risk to the current income tax forecast.

General Sales Tax. General sales tax revenue in FY 2018-19 is now forecast to be $120 million (1.1 percent) less than in the February forecast. Lower forecast gross tax receipts and higher expected refunds both contribute to the change.

Three main factors contribute to the reduced net sales tax revenue forecast. First, gross sales tax receipts ended FY 2018 $11 million behind our February forecast, and so far in FY 2019 gross receipts are $36 million below forecast. Second, the synthetic sales tax base, which we construct from forecasts for spending on a wide range of taxable goods and services, grows more slowly in this forecast than in February. The synthetic sales tax base is now forecast to grow 3.4 percent (4.2 percent after adjusting for a change in how the tax base is defined) in FY 2018 and 4.4 percent in FY 2019, down from assumed rates of 4.7 and 5.3 percent, respectively, in the February forecast. Third, sales tax refunds in FY 2019 are now forecast to be $101 million greater than in February. This is largely due to an increase in refunds to qualified data centers (QDCs). Following a recent review of a substantial amount of QDC refund claims, Minnesota Department of Revenue expects the amount of these refunds to remain significant though the forecast window, but moderate slightly in the years of our planning estimates.

This forecast includes an off-model adjustment for the impact of the U.S. Supreme Court decision in *South Dakota v. Wayfair,* which allows states to require remote sellers with no physical presence in the state, such as online and mail-order companies, to collect and remit sales or use tax on sales to customers within the state. This change is expected to increase Minnesota's FY 2019 net sales tax revenue by $70 million.

The lower starting base for the sales tax, slower assumed growth in the synthetic sales tax base, and higher expected refunds reduce the net sales tax revenue forecast enough to more than offset the positive adjustment for the *Wayfair* decision. In the absence of the *Wayfair* adjustment, the FY 2018-19 net sales forecast change would be negative $190 million.

Corporate Franchise Tax. The corporate franchise tax is forecast to generate $2.703 billion in FY 2018-19, $107 million (4.1 percent) more than the prior estimate. Increased forecast gross tax payments and lower forecast refunds both contribute to this change.

This forecast builds from our estimate of implied CY 2017 corporate franchise tax liability. We estimate total liability attributable to CY 2017 to be $1.198 billion, about $4 million less than the February estimate. This lower base year liability was offset, however, by factors that increased the forecast for FY 2019 corporate receipts. First, FY 2019 year-to-date net receipts are $109 million ahead of the February forecast, with $74 million of that variance generated in September. Second, forecast growth in corporate profits in CY 2018 is higher in this forecast than in February—10.4 percent now compared to 7.2 percent in the prior forecast. Beyond CY 2018, corporate profits grow only slightly faster through 2021 than we had assumed in February.

In this forecast, we do not assume that all of the positive variance in corporate payments so far in FY 2019 implies higher corporate tax liability. Some of those payments may have been due to corporations' uncertainty about how actions they took following the federal law changes in the TCJA will affect their Minnesota tax liability. We assume that, when the picture is clearer for corporations, some will reduce their payments or file for larger refunds next year. Similarly, we assume that not all of the higher-than-expected receipts so far in FY 2019 carry forward as a higher base for our forecasts of subsequent years.

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 HSRCs in FY 2018-19 are now forecast to be about $13 million less than in the prior forecast.

Other Tax Revenue, Non-Tax Revenue, Other Resources. Other tax revenue is now expected to be $24 million (0.6 percent) more than the February forecast. Among other taxes, the estate tax shows the largest dollar amount change, $53 million (16.0 percent) more than in February. So far in FY 2019, net estate tax receipts are $46 million ahead of our February forecast. The cigarette and tobacco products tax forecast is $20 million lower than in February, and the lawful gambling taxes forecast has been raised $11 million.

Among non-tax revenues, the forecast for investment income (interest earned on the state's daily cash balance) has been raised $53 million, primarily based on a positive variance at the end of FY 2018 and experience so far in FY 2019. The forecast for departmental earnings (fees collected by state agencies) has been raised $18 million, also due to experience to date. The forecast for tobacco settlement revenue has been raised $19 million due to an adjustment in forecast methodology to include an estimate of the current year payment based on prior year tobacco company profits that adds to the final tobacco settlement payment to the state each year.

Next Biennium

Total general fund revenues for 2020-21 are now forecast to be $48.327 billion, $2.917 billion (6.4 percent) more than the current FY 2018-19 forecast. Total tax revenues for the next biennium are forecast to be $46.487 billion, a $3.907 billion increase (7.1 percent) increase over FY 2018-19 forecast tax revenues. Growth in the individual income and sales taxes account for nearly all of the biennial tax revenue change. Of the major tax types, only the corporate income tax shows a decline in expected revenues from FY 2018-19 to FY 2020-21.

Next Biennium: FY 2020-2021 General Fund Revenues
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2018-19	FY 2020-21	$ Change	% Change
Individual Income Tax	$24,133	$26,276	$2,142	8.9%
General Sales Tax	11,143	12,022	879	7.9
Corporate Franchise Tax	2,703	2,650	(53)	(2.0)
State General Property Tax	1,619	1,638	19	1.2
Other Tax Revenue	3,792	3,901	110	2.9
Total Tax Revenues	**43,390**	**$46,487**	**$3,097**	**7.1%**
Non-Tax Revenues	1,603	1,471	(132)	(8.2)
Other Resources	417	369	(48)	(11.5)
Total Revenues	**$45,410**	**$48,327**	**$2,917**	**6.4%**

The current forecast for FY 2020-21 total revenues is $190 million (0.4 percent) more than the end-of-session estimate. Total tax revenues for the next biennium are forecast to be $127 million (0.3 percent) above the prior estimate. The relatively small forecast change is primarily due to higher expected individual and corporate income tax and non-tax revenues. The sales tax revenue forecast is slightly lower than the end-of-session estimate.

Next Biennium: FY 2020-2021 General Fund Revenues
Change From End-of- Session

($ in millions)	**End of Session**	**November 2018 Forecast**	**$ Change**	**% Change**
Individual Income Tax	$26,195	$26,276	$81	0.3%
General Sales Tax	12,027	12,022	(5)	0.0
Corporate Franchise Tax	2,609	2,650	41	1.6
State General Property Tax	1,634	1,638	4	0.2
Other Tax Revenue	3,895	3,901	6	0.2
Total Tax Revenues	**43,360**	**$46,487**	**127**	**0.3%**
Non-Tax Revenues	1,404	1,471	67	4.8
Other Resources	372	369	(3)	(0.9)
Total Revenues	**$48,136**	**$48,327**	**$190**	**0.4%**

Individual Income Tax. The individual income tax shows the largest biennial growth, accounting for 69 percent of the total tax revenue biennial change. Income tax revenues for FY 2020-21 are forecast to be $26.276 billion, $2.142 (8.9 percent) more than the current forecast for FY 2018-19.

Growth in income tax revenues for FY 2020-21 over FY 2018-19 is primarily the result of income growth in tax years 2019 and 2020. Minnesota wage and salary income in AGI is now forecast to grow 5.1 percent in CY 2019 and 4.7 percent in CY 2020. Non-wage income is forecast to grow 5.2 percent in CY 2019 and 2.7 percent in CY 2020.

Regarding forecast change, higher forecast gross income tax receipts—driven by faster growing non-wage income—more than offset higher expected refunds. We now assume that non-wage income will grow 5.2 percent in TY 2019, compared to 4.9 percent in the February forecast. Higher expected receipts from income taxes paid by estates and trusts also contribute to the forecast change.

Similar to the current biennium forecast, this forecast reflects an off-model adjustment for the impact of TCJA provisions on taxpayers' choice to itemize or use the standard deduction on their Minnesota returns, as well as their eligibility for Minnesota's charitable subtraction. In the February forecast, this adjustment added about $55 million of revenue in FY 2020-21. Since the Revenue notice (described in the current biennium section of this report) the adjustment becomes a revenue reduction of $88 million.

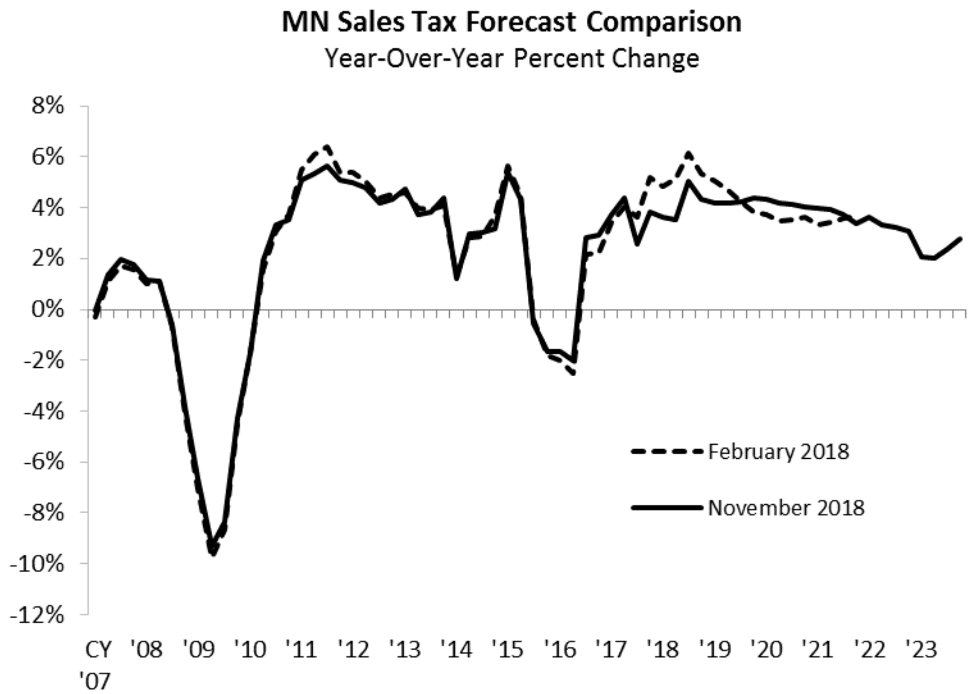
This forecast reflects a new off-model revenue reduction of about $34 million in FY 2020-21 due to the expectation that taxpayers who responded to the TCJA by changing federal tax accounting methods will do the same for their Minnesota taxes. Combined with the itemizing decision adjustment, TCJA provisions are estimated to reduce forecast income tax revenues (relative to February) by $122 million in FY 2020-21.

Finally, note that we continue to assume—as we did in the February forecast—that income taxes on additional dividend payouts and share-repurchases that corporations are expected to make in response to the corporate provisions of the TCJA add about $173 million to FY 2020-21 income tax revenues. This is not a change in the forecast compared to February, but it does represent risk to the current income tax forecast.

General Sales Tax. General sales tax receipts for FY 2020-21 are expected to exceed FY 2018-19 levels by $879 million (7.9 percent), accounting for 28 percent of the biennial growth in tax revenues. Growth in forecast gross sales tax receipts and a decline in refunds between FY 2020-21 and FY 2018-19 both contribute to the biennial change.

Gross sales tax receipts in FY 2020-21 are forecast to exceed FY 2018-19 levels by $846 million (7.9 percent). Annual growth in the Minnesota synthetic sales tax base, a proxy for the actual tax base, is expected to slow from 4.4 percent in FY 2019 to 4.3 percent in FY 2020 and 4.0 percent in FY 2021. As in the past, the percentage changes in the synthetic base have been reduced by 5 percent to correct for a tendency of the base to grow faster than observed revenue growth. For example, a one percent change in the synthetic tax base implies a 0.95 percent change in sales tax revenue.

Regarding forecast change, higher expected refunds offset higher expected gross sales tax receipts to bring the net sales tax forecast $5 million lower than the end-of-session estimate. The synthetic sales tax base is expected to grow 4.3 percent in FY 2020 and 4.0 percent in FY 2021, up from 3.8 and 3.5 percent in the February forecast. This higher growth is offset by a lower base of gross sales tax receipts so far in FY 2018-19. As explained in the current biennium section, the higher refund forecast is largely due to an increase in refunds to QDCs.



In this forecast, the synthetic sales tax base—a proxy for Minnesota's sales tax base—is expected to grow more slowly in CY 2018 and CY 2019 and faster in CY 2020 and 2021 than we had assumed in February. Overall, growth is cumulatively 0.2 percentage points lower by the end of 2021 than in February in the February forecast.

This forecast includes an off-model adjustment for the impact of the U.S. Supreme Court decision in *South Dakota v. Wayfair,* which allows states to require remote sellers with no physical presence in the state, such as online and mail-order companies, to collect and remit sales or use tax on sales to customers within the state. This change is expected to increase Minnesota's FY 2020-21 net sales tax revenue by $225 million.

Corporate Franchise Tax. The corporate franchise tax is forecast to generate $2.650 billion in FY 2020-21, $53 million (2.0 percent) less than the current FY 2018-19 forecast.

Gross corporate receipts are forecast to grow by $102 million from FY 2018-19 to FY 2020-21. This is primarily due to growth in corporate profits, which are forecast to increase 1.6 percent, 3.2 percent, and 4.1 percent, in CY 2019, CY 2020, and CY 2021, respectively. The biennial growth in corporate refunds ($155 million), however, exceeds growth in gross receipts, producing a negative net biennial change. HSRC refunds—which are forecast to be $22 million higher in FY 2020-21 than in FY 2018-19—contribute to the biennial refund growth. Also related to the biennial decline in net corporate receipts, note that we did not assume that all of the higher-than-expected corporate receipts so far in FY 2019 carry forward as a higher base for our forecasts of FY 2020 and FY 2021.

Regarding forecast change, a higher forecast for FY 2020-21 gross corporate tax receipts more than offsets a higher refund forecast to generate a $41 million (1.6 percent) increase in net expected corporate receipts. Slightly higher forecast corporate profits growth (about 0.1 percentage points) between CY 2019 and CY 2021 is primarily responsible for that change.

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

Net corporate tax receipts for FY 2019 that are ahead of the prior forecast combine with a slightly higher expected corporate profits growth from CY 2019 to CY 2021 to increase the forecasts for net corporate tax receipts in the current and next biennium.

Other Tax Revenue, Non-Tax Revenue, Other Resources. Other tax revenue is now forecast to grow by $110 million (2.9 percent) in FY 2020-21 over FY 2018-19. The largest dollar amount biennial change is in receipts from lawful gambling taxes, which are forecast to grow $31 million between the current biennium and the next.

Regarding forecast change, other tax revenue in FY 2020-21 is now expected to be $6 million (0.2 percent) higher than the end-of-session estimate, and the forecast for non-tax revenues has increased by $67 million (4.8 percent). Among non-tax revenues, the forecast for investment income (interest earned on the state's daily cash balance) has been raised $74 million, primarily due to a larger base from FY 2018-19 and a higher interest rate forecast.

Planning Estimates

This is the first reporting of revenue planning estimates for FY 2022-23. Total revenues for the biennium are estimated to be $50.735 billion, an increase of $2.408 billion (5.0 percent) over the current forecast for FY 2020-21 revenues. Total tax revenues for FY 2022-23 are estimated to be $49.162 billion, a 5.8 percent increase over FY 2020-21 forecast tax revenues.

Planning Estimates: FY 2022-2023 General Fund Revenues
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2020-21	FY 2022-23	$ Change	% Change
Individual Income Tax	$26,276	$27,758	$1,482	5.6%
General Sales Tax	12,022	12,988	966	8.0
Corporate Franchise Tax	2,650	2,730	80	3.0
State General Property Tax	1,638	1,634	(4)	(0.2)
Other Tax Revenue	3,901	4,053	151	3.9
Total Tax Revenues	**$46,487**	**$49,162**	**2,675**	**5.8%**
Non-Tax Revenues	1,471	1,437	(34)	(2.3)
Other Resources	369	136	(233)	(63.1)
Total Revenues	**$48,327**	**$50,735**	**$2,408**	**5.0%**

Together, individual income and general sales taxes account for about 92 percent of the projected biennial tax revenue growth. The individual income tax shows the largest increase, growing by $1.482 billion (5.6 percent), and contributing 55 percent of the total tax revenue biennial change. The general sales tax is expected to exceed FY 2020-21 forecast levels by $966 million (8.0 percent), accounting for 36 percent of the increase in tax revenues. The corporate franchise tax, statewide property tax, and other taxes together contribute $227 million to the biennial tax revenue change.

This forecast includes an off-model adjustment for the impact of the U.S. Supreme Court decision in *South Dakota v. Wayfair,* which allows states to require remote sellers with no physical presence in the state, such as online and mail-order companies, to collect and remit sales or use tax on sales to customers within the state. This change is expected to increase Minnesota's FY 2022-23 net sales tax revenue by $259 million.

The revenue planning estimates are based on the IHS baseline forecast, which assumes U.S. real GDP will grow 1.6 percent in calendar year 2021, followed by somewhat slower growth of 1.5 percent in 2022 and 1.4 percent in 2023. By continuing growth through 2023, the IHS baseline outlook is assuming that the current U.S. expansion continues for at least four years beyond the record length of a U.S. expansion.

Similar to the current and next biennium forecasts, the planning estimate forecast reflects an off-model adjustment for the impact of TCJA provisions on taxpayers' choice to itemize or use the standard deduction on their Minnesota returns, as well as their eligibility for Minnesota's charitable subtraction. This adjustment reduces revenue in FY 2022-23 by about $35 million. The expectation that taxpayers who responded to the TCJA by changing federal tax accounting methods will do the same for their Minnesota taxes reduces FY 2022-23 revenues by $17 million, for a net effect from TCJA provisions of negative $52 million.

The planning estimates for FY 2022-23 should be used with caution. First, the projections will be affected by any revenue changes in the enacted budget for the FY 2020-21 biennium. Second, in subsequent forecasts changes to our estimates of individual and corporate income tax liability for 2021 and 2022, as well as changes to the base levels of other revenue types for FY 2018 through

2020, will change the FY 2022-23 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 2022-23 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 2022 and 2023.

Note that growth in total revenue is declining over the three biennia included in this forecast. Between FY 2016-17 to FY 2018-19, total revenues grow 6.9 percent (per year, annualized). The rate falls to 6.4 percent between FY 2018-19 and FY 2020-2021, and falls again to 5.0 percent between FY 2020-21 and the planning estimates. The annualized growth rates across those three periods are 3.4 percent, 3.2 percent, and 2.5 percent, respectively.

EXPENDITURE OUTLOOK

Current Biennium

Spending estimates for FY 2018-19 are lower than prior estimates for the biennium. Expenditures in the current biennium are now expected to be $45.549 billion, a reduction of $306 million (0.7 percent) from end of session estimates.

Current Biennium: FY 2018-19 General Fund Expenditures
Change From End-of-Session Estimates

($ in millions)	End of Session	November 2018 Forecast	$ Change	% Change
E-12 Education	$18,846	$18,845	(1)	0.0%
Property Tax Aids & Credits	3,653	3,664	11	0.3
Health & Human Services	13,619	13,403	(216)	(1.6)
Debt Service	1,139	1,113	(26)	(2.2)
All Other	8,598	8,524	(74)	(0.9)
Total Expenditures	**$45,856**	**$45,549**	**$(306)**	**(0.7)%**

A $216 million reduction (1.6 percent) in estimated spending for Health and Human Services (HHS) is the primary factor in the overall reduction in spending in FY 2018-19. This reduction is driven by lower enrollment across human services programs and additional federal revenue for chemical dependency treatment services.

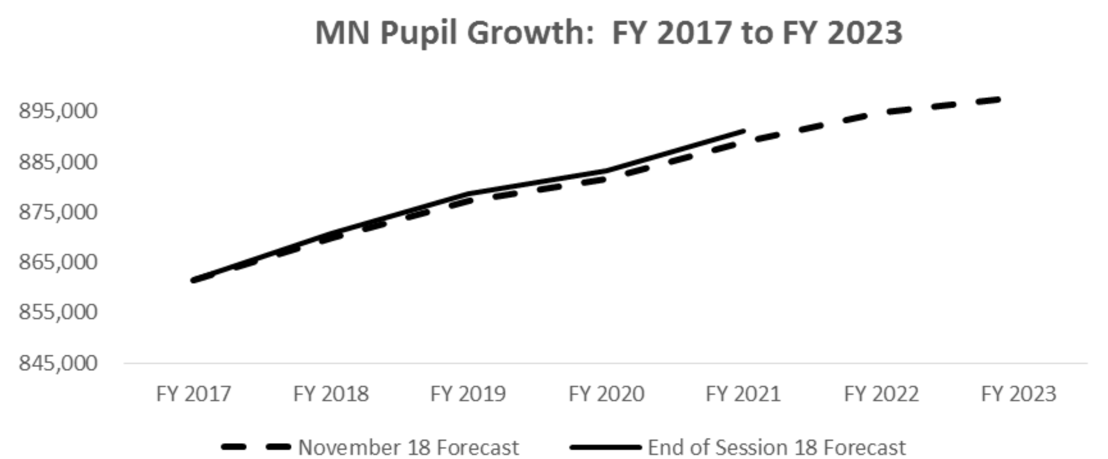
Spending changes in the current biennium for other areas were modest. E-12 expenditures are virtually unchanged. Debt service expenditures are $26 million (2.2 percent) lower than previous estimates due to slower spending on capital projects and reduced rates on bonds. Property tax aids and credits spending is $11 million (0.3 percent) higher than expected due largely to growth in property tax refunds compared to the previous forecast.

E-12 Education. Education finance is the largest category of state general fund spending. It consists of aid programs for general education, special education, early childhood and family 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 $18.845 billion on education aid.

General Fund Education Expenditures
Change From End-of-Session Estimates

($ in millions)	FY 2018-19 $ Change	FY 2018-19 % Change	FY 2020-21 $ Change	FY 2020-21 % Change
General Education	$4	0.0%	($28)	(0.2)%
Categorical Spending	(5)	(0.1)	14	0.3
Total E-12 General Fund Forecast Change	**$(1)**	**(0.0)%**	**$(14)**	**(0.0)%**

E-12 education spending in the current biennium is anticipated to be $1 million (0.0 percent) lower than end of session estimates. The largest driver of change is lower than expected pupil growth, which accounts for decreased general education spending ($20 million). Pupil counts are now forecast to be 2,148 (0.1 percent) lower than end of session estimates for 2019. The graph below shows the recent history of estimated pupil growth.



The overall savings in general education is offset by a $24 million upward correction due to a drafting error from the 2017 legislative session. The omnibus education appropriations bill reflected incorrect general education aid allocations between fiscal years, resulting in increased spending in FY 2018 for the 2017 academic year.

The reduction in categorical programs ($5 million) is driven by lower than anticipated spending in Achievement and Integration Aid ($4 million, 2.8 percent) due to slower growth in protected students and fewer school districts participating in this program. This reduction is offset by a $5 million (0.2 percent) increase in special education aid because more students are shifting away from district schools to charter and cooperative schools than previously expected. This creates an overall increase in aid due to the higher enrollment at charter and cooperative schools, but does not create an equal savings in the district schools that are losing those special education students. Many school districts' aid does not decline for one of two reasons: (1) their aid is reduced but still remains above the formula's growth cap, or (2) their aid dips below the "hold harmless" calculation in the formula but is held steady relative to their adjusted FY 2016 aid level. All other categorical program areas are down $6 million from previous estimates.

Lack of Forecast Article and Impact on November Forecast

Background. In every legislative session, a forecast bill is prepared to adjust biennial budget appropriations to match changes in forecast programs in the February forecast. The forecast bill adjusts spending authority for forecast programs in E-12 Education and Health and Human Services to the level of anticipated expenditures as determined by the most recent forecast.

Impacts of 2018 Session. At the conclusion of the 2018 legislative session a forecast bill adjusting appropriations in FY 2018 and FY 2019 to conform to the February 2018 forecast was not signed into law. The lack of a forecast bill means legal spending authority for forecast programs is based on the 2017 legislative session omnibus bills. Any subsequent forecast and change in anticipated spending has not been updated for FY 2018 and FY 2019 appropriations.

Impact on E-12 Education. Payments owed to schools based on the November forecast are higher than appropriation levels for several E-12 education forecast programs in FY 2018. Appropriations for these forecast programs are made on a 90/10 shift: 90 percent of the current year's entitlement is appropriated in that year, and typically 10 percent is appropriated in the following year as a final payment. However, the final payment is based on the remaining amount of the entitlement owed.

Since anticipated aid payments for FY 2018 in certain programs, primarily special education, are above the spending authority set during the 2017 session, the Department of Education (MDE) paid approximately 88 percent of the entitlement for 2018 academic year in FY 2018, and the remaining entitlement (12 percent) for FY 2018 is now reflected in the FY 2019 final payment in this forecast. This shifted $35 million in school district entitlements for FY 2018 into the FY 2019 final payment. The table below illustrates how MMB and MDE will manage school aid payments to fully fund schools, while remaining within FY 2018 budget authority. Because the payments were moved between fiscal years within the same biennium, there is no impact to the FY 2018-19 ending balance. The forecast bill that will be proposed for the 2019 session will include the necessary funding for the FY 2019 payments to fully fund 2018 entitlements to schools.

FY 2018 Underfunded Forecasted Programs at MDE*

$ in millions

	FY 2018
November 2018 Forecast	1,378
Current Spending Authority	1,343
Payments Moved to FY 2019	35

*Programs impacted are Abatement Aid, Achievement and Integration Aid, American Indian Education Aid, Career and Technical Aid, Health and Development Screening Aid, Long Term Facilities Maintenance Aid, and Special Education.

Impact on HHS. Unlike education programs, the 2018 forecast bill would have reduced appropriations for state human services programs by $210 million in FY 2018. Actual spending in FY 2018 was even lower than the appropriations in the 2018 forecast bill. Therefore the Department of Human Services had sufficient spending authority to cover payments in those programs. The 2018 forecast bill also included a rider to set the FY 2020-21 base for medical assistance (MA) in the health care access fund (HCAF). Due to the failure of this base rider to become law, the November 2018 forecast reflects $119 million in HCAF spending for MA in FY 2020-21.

Health and Human Services. Health and Human Services (HHS) is approximately 30 percent of total state general fund spending. The majority of these expenditures (84 percent) are in forecast programs, which provide payments to individuals for health care, housing, cash assistance, food support, adoption assistance, and support for individuals to help them stay in their own homes. These programs include Medical Assistance (MA), Chemical Dependency (CD), Minnesota Family Investment Program (MFIP), MFIP Child Care, Alternative Care (AC), General Assistance (GA), Housing Support (formerly known as Group Residential Housing), Minnesota Supplemental Aid (MSA), 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 a state-federal, means-tested entitlement program that provides health care and related support for low-income individuals and families, persons with disabilities, and elderly individuals. 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.

In FY 2018-19, HHS general fund spending is down $216 million (1.6 percent) relative to 2018 end of session estimates. MA accounts for $94 million of the reduction (0.9 percent change from end of session).

General Fund Health and Human Services Expenditures
Change From End-of-Session Estimates

	FY 2018-19		FY 2020-21	
($in millions)	**$ Change**	**% Change**	**$ Change**	**% Change**
Additional federal revenue for IHS	(33)	(0.5)%	(35)	(0.5)%
Lower managed care rates for CY 2019	(31)	(0.5)	(245)	(3.3)
Lower basic care enrollment	(21)	(0.3)	(75)	(1.0)
Higher participation in waiver programs	(4)	(0.1)	51	1.3
Higher payments for long-term care facilities	(2)	(0.1)	39	3.3
Higher HCAF Share	-	-	(119)	(1.0)
All other MA	(3)	(0.0)	1	(0.0)
Total MA General Fund Change	**(94)**	**(0.9)**	**(383)**	**(3.3)**
CD Entitlement Grants	(55)	(18.4)	(8)	(2.4)
Economic Assistance Programs	(44)	(4.9)	(98)	(9.6)
All other HHS changes	(24)	(0.2)	(28)	(0.2)
Total HHS General Fund Change	**$(216)**	**(1.6)%**	**$(517)**	**(3.4)%**

The largest driver of the change ($33 million) in MA is additional federal share for chemical dependency treatment services. In recent years, tribal governments have opened more treatment facilities. Chemical dependency treatment delivered through Indian Health Services (IHS) is fully covered by the federal government. Approximately 50 percent of MA-covered chemical dependency treatment is provided through IHS facilities.

Lower managed care rates ($31 million) and enrollment ($21 million) in basic care programs also drive change from end of session estimates. Calendar year 2019 rates for managed care organizations (MCO) grew less than expected for all population groups except adults without children. These savings are likely the result of continued MCO efforts to lower costs in the wake of competitive bidding for calendar year 2016 rates. Lower enrollment in basic care may be attributable to favorable economic conditions and a tight labor market.

Spending across all non-health care programs decreased $123 million (3.4 percent) in FY 2018-19 relative to end of session estimates. Lower state spending for CD treatment ($55 million, 18.4 percent) is the result of higher federal share. As seen in MA, this change is due to the trend of more treatment being provided through Indian Health Services. Spending on economic assistance programs, including MFIP cash grants and child care, GA, MSA and Housing Support, is also lower than end of session estimates ($44 million, 4.9 percent). This is driven by reduced participation in MFIP due to favorable economic conditions and low unemployment.

Property Tax, Aids, and Credits. Property tax aids and credits are 8 percent of general fund spending. They are paid to local governments, including cities, counties, towns, public schools, and special taxing districts. These aids and credits help offset costs of service delivery and defray costs of state mandates. They are designed to reduce the reliance on local property taxes by substituting state funds for revenues that would otherwise be raised locally. Direct payments to individuals, like property tax refunds for homeowners and renters, are also included in this category because they reduce property tax burdens.

In the current biennium, property tax aids and credits spending is expected to be $3.664 billion, an increase of $11 million (0.3 percent) from end of session estimates. This change is driven by a rise in the number and value of homestead credit refunds and special property tax refunds processed to date.

Debt Services and All Other Spending. Debt service expenditures for the current biennium are forecast to be $1.113 billion in the current biennium, which is a $26 million (2.2 percent) reduction from prior estimates. The reduction is primarily due to slower than expected spending on capital projects which reduced the size of the August 2018 bond sale, higher than expected investment income, and improved bond rates.

All other spending is forecast to be $8.524 billion, which is $74 million below end of session estimates. This change is driven by $90 million in underspending in the Premium Subsidy Program administered by Minnesota Management and Budget. This money was transferred back to the budget reserve as directed by 2017 session law.

Next Biennium

Forecast expenditures in the FY 2020-21 biennium are expected to reach $47.454 billion, an increase of $1.905 billion over current estimates for the FY 2018-19 biennium. Driving the overall increase is growth of $1.501 billion (11.2 percent) in health and human services, where Medical Assistance accounts for the majority of the biennial change. Spending for E-12 education is expected to be $756 million (4.0 percent) higher due primarily to growth in special education and projected pupil growth. Spending for property tax aids are credits is expected to be $46 million (1.2 percent) higher than the current biennium. Debt service is expected to grow $86 million (7.8

percent) compared to FY 2018-19. Offsetting the overall growth is $484 million (5.7 percent) lower spending in the other areas of state government, due in large part to one-time spending in the FY 2018-19 biennium.

Next Biennium: FY 2020-21 General Fund Expenditures
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2018-19	FY 2020-21	$ Change	% Change
E-12 Education	$18,845	$19,601	$756	4.0%
Property Tax Aids & Credits	3,664	3,710	46	1.2
Health & Human Services	13,403	14,905	1,501	11.2
Debt Service	1,113	1,199	86	7.8
All Other	8,524	8,040	(484)	(5.7)
Total Expenditures	**$45,549**	**$47,454**	**$1,905**	**4.2%**

Compared to prior estimates for the biennium, overall spending in the next biennium is expected to be down $489 million (1.0 percent). Reduced projections for health and human services spending accounts for $517 million of this change due to lower than expected spending for health care. This savings is partially offset by higher than anticipated spending in property tax aids and credits ($64 million, 1.8 percent) primarily due to increases the property tax refund program and debt service ($18 million, 1.5 percent), which reflects higher interest rates and larger future bond issuances than previously assumed. Change in other areas of the state budget is small compared to prior estimates, down $40 million (0.5 percent) for FY 2020-21.

Next Biennium: FY 2020-21 General Fund Expenditures
Change From End-of- Session

($ in millions)	End of Session	November 2018 Forecast	$ Change	% Change
E-12 Education	$19,615	$19,601	$(14)	(0.1)%
Property Tax Aids & Credits	3,645	3,710	64	1.8
Health & Human Services	15,422	14,905	(517)	(3.4)
Debt Service	1,181	1,199	18	1.5
All Other	8,080	8,040	(40)	(0.5)
Total Expenditures	**$47,943**	**$47,454**	**$(489)**	**(1.0)%**

E-12 Education. E-12 expenditures in FY 2020-21 are projected to reach $19.601 billion, $756 million (4.0 percent) higher than the current biennium. The largest share of growth, nearly $430 million (15.2 percent), comes from special education. While most E-12 education spending does not include inflation, increases in special education are primarily due to instructional cost inflation and year to year pupil growth. Special education funding is projected to be $3.280 billion in FY 2020-21.

General education spending is expected to increase $275 million (1.9 percent) in the next biennium due to higher total pupil counts and changes made in the 2017 legislative session, which added two percent to the basic formula in general education in each year of the FY 2018-19 biennium thus increasing the base for FY 2020-21.

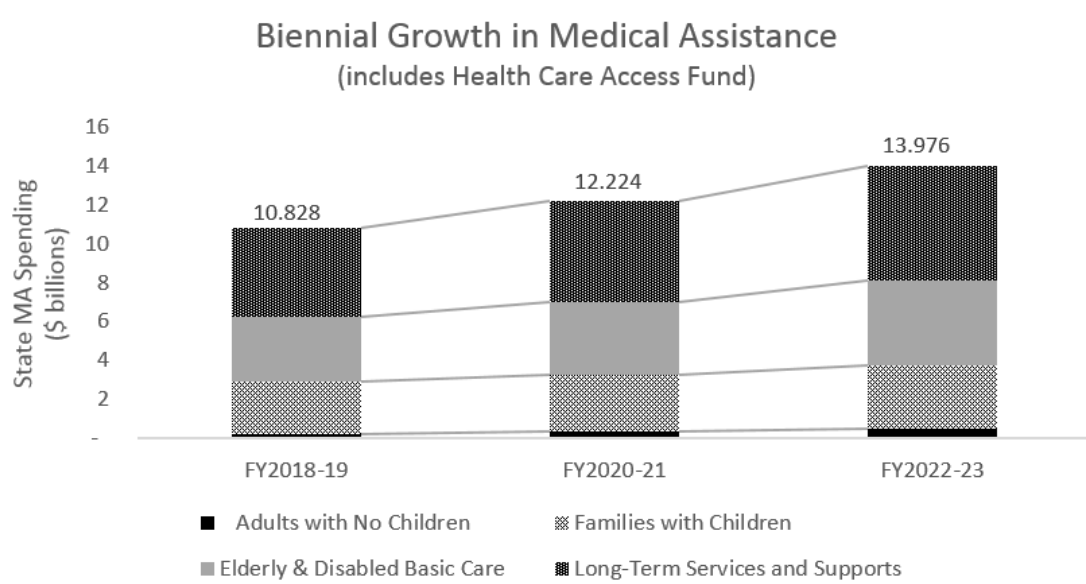
Of the remaining biennial growth in E-12 education, $29 million (15.9 percent from the current biennium) of the increase is due to the long term facilities maintenance aid program, which was created by the 2015 legislature, reaching full capacity by FY 2019.

Although spending grows year over year, overall E-12 education spending is expected to be $14 million (0.1 percent) lower in FY 2020-21 than end of session estimates. The offsetting changes in general education and categorical spending seen in the current biennium continue in the next biennium. General education spending is expected to be $28 million (0.2 percent) lower than end of session estimates primarily due to slower growth in pupil counts than previously forecast.

The savings in general education are offset by higher than expected spending in categorical programs ($14 million, 0.3 percent increase from end of session). Special education aids are up $33 million (1.0 percent) compared to previous estimates, primarily driven by increased pupil counts and the changing enrollment patterns between charter and district schools as mentioned in the previous biennium. The increases in special education are reduced by $19 million in lower spending in other categorical programs.

Health & Human Services. General fund spending for health and human services is expected to reach $14.905 billion in the FY 2020-21 biennium, an increase of $1.501 billion (11.2 percent) from the current biennium. Medical Assistance (MA) accounts for 91.8 percent of the biennial change, which is expected to grow $1.378 billion (13.9 percent).

Growth in MA spending is generally driven by two factors, the cost of care and enrollment. The figure below illustrates the change in total state spending on MA across enrollment categories.



Medical Assistance expenditures are forecast to grow from $10.828 billion in FY 2018-19 to $12.224 billion in FY 2020-21 and $13.976 billion in FY 2022-23. Much of this growth will occur in services for the elderly and individuals with disabilities.

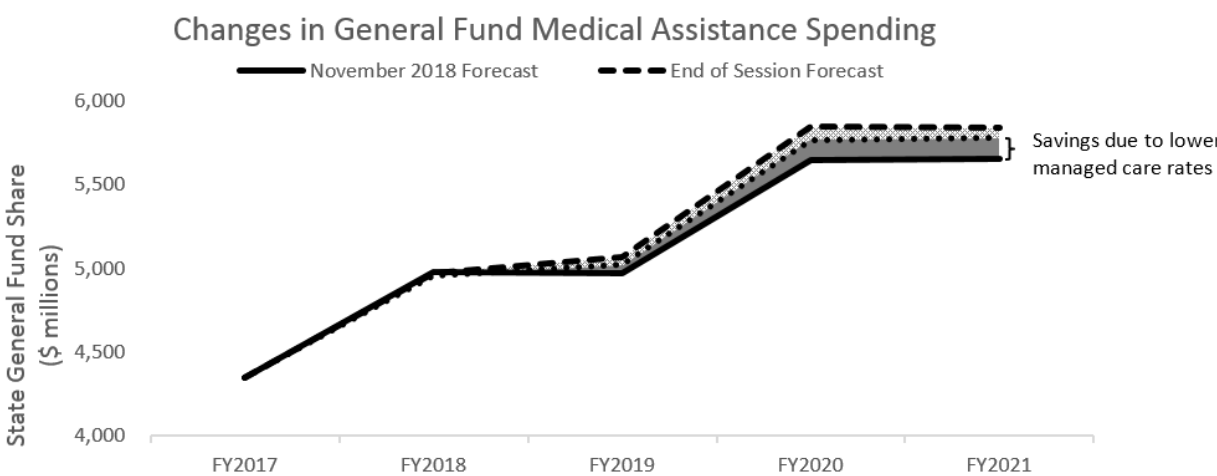
More than 70 percent ($996 million) of biennial growth in MA occurs in services that support the elderly and people with disabilities. This includes elderly & disabled (E&D) basic care and long-term services and supports (LTSS), which are home and community-based services (HCBS) and institutional care. LTSS spending is forecast to grow $644 million between biennia due to increases in enrollment for HCBS (6.3 percent on average annually) and growth in average monthly payments for long-term care (LTC) facilities (7.6 percent on average annually). The enactment of a value-based reimbursement model for nursing facility payments during the 2015 legislative session contributes to the biennial growth in this area. Nursing facilities reported an increase of 7.0 percent on average for operating costs, which drives growth estimates in forecast years. E&D basic care spending is expected to grow $351 million (10.4 percent) with approximately 40 percent of this increase due to enrollment growth and 60 percent due to increased costs of care.

Spending on families with kids is expected to grow $254 million (9.5 percent). Approximately two-thirds of this increase is due to changes in the cost of care. The remainder is due to the step down of an enhanced federal match for the Children's Health Insurance Program (CHIP), which pays for a portion of the costs of certain MA children. Spending for adults without children is forecast to increase by $146 million (65.7 percent) from the current biennium to the next. This is the largely result of a decreasing federal contribution, which will fall from 94 percent in calendar year 2018 to 93 percent in 2019, and will stabilize at 90 percent in calendar year 2020.

Non-MA spending is expected to grow $124 million (3.5 percent) from FY 2018-19 to FY 2020-21. The biggest driver of this change is treatment services for chemical dependency, which is forecast to increase by $84 million (34.4 percent) in the next biennium. This increase is due to higher average costs.

Although spending grows from year to year, overall general fund HHS spending is down $517 million (3.4 percent) in FY 2020-21 compared to end of session estimates. Changes to MA drive the majority of the reduction ($383 million, a 3.3 percent change from end of session).

Many of the trends impacting FY 2018-19 spending in HHS continue to impact spending estimates in FY 2020-21. Lower managed care rates ($245 million) and enrollment ($75 million) in basic care are the largest drivers of change compared to previous estimates.



Forecast changes in FY 2020-21 in Medical Assistance are driven by lower managed care rates ($245 million) for calendar year 2019.

This forecast also reflects a higher health care access fund share for MA. The 2017 omnibus health and human services appropriations bill did not include language to reduce the health care access fund share of MA from 2019 to 2020 and 2021 to conform to tracked impacts. As a result, the general fund share of MA is forecast to be $119 million lower than end of session estimates.

These reductions are partially offset by increases in enrollment within waiver programs and higher average payments in long-term care facilities. Previous estimates assumed annual growth of approximately 5 percent in nursing facility payments; however recent reported operating costs were 2 percent higher than anticipated, and forecast assumptions were adjusted accordingly.

Spending across non-health care programs decreased $134 million (3.6 percent) in FY 2020-21 compared to end of session estimates. Lower than expected spending ($98 million, 9.6 percent change from end of session estimates) in economic assistance programs accounts for 72.6 percent of the change in this area.

Property Tax, Aids, and Credits. Property tax aids and credits spending is expected to total $3.710 billion in FY 2020-21, an increase of $46 million (1.2 percent) over estimated spending in the current biennium. Homestead credit refunds increased by $92 million (9.8 percent) as projected growth in property taxes outpaces increases in individuals' income. Additional biennial growth is attributable to provisions contained in 2017 legislation, including school building bond agricultural credits, which increased by $49 million (151.6 percent). These increases are offset to a degree by a one-time payment shift of local government aid (LGA) from FY 2020 to FY 2019 as required in 2017 legislation. This decreased LGA spending by $141 million (12.5 percent) in FY 2020-21.

In FY 2020-21, property tax aids and credits are forecast to be $64 million (1.8 percent) more than end of session estimates. Additional homestead credit refund program expenditures account for most of this increase, an increase of $54 million (5.6 percent).

Debt Service and All Other Spending. Debt service expenditures are forecast to be $1.199 billion in the next biennium, which is $86 million (7.8 percent) higher than the current biennium. This is $18 million (1.5 percent) more than previous forecast. The estimates reflect higher interest rate assumptions on future bond sales resulting in lower bond premiums than previously estimated, thereby increasing the estimated size of the bond issue and forecast debt service payments. The higher debt service cost estimate also reflects a larger assumed bond authorization in 2019 compared to previous estimates. In this forecast it is assumed that the size of the bonding authorization in the 2019 session will be $265 million and $755 million for 2020.

Expenditures in all other areas of the state budget are expected to be $8.040 billion, $484 million (5.7 percent) lower in FY 2020-21 compared to the current biennium. This is a $40 million (0.5 percent) reduction from end of session estimates. A main driver of this change is lower prison population projections from the Department of Corrections. The number of adult prisoners is down 687 (6.2 percent) in this biennium compared to previous estimates, which lowers expected spending $28 million (2.4 percent). Prison population projections have significantly flattened over the last year, primarily due to a drop in admissions for probation or supervised release violations. Spending for the Destination Medical Center is down $17 million (31.8 percent) from end of session estimates. This reduction in forecast spending comes from private investment projects reporting lower than expected costs and adjustments made to the local match.

Planning Estimates

The growth in state expenditures shown from the current biennium into FY 2020-21 is expected to be larger into the FY 2022-23 biennium. Total projected spending in the planning years is expected to reach $50.279 billion, an increase of $2.825 billion (6.0 percent). The growth trends in the major forecast programs remain the same as described for FY 2020-21 with growth in health and human services spending accounting for a majority of the increase ($1.872 billion, a 12.6 percent increase from the previous biennium) due to continued MA growth. E-12 education spending is expected to increase $680 million (3.5 percent), largely due to pupil growth and program cost growth primarily in special education. Property tax aids and credits is expected to grow $172 million (4.6 percent), primarily due to higher property tax refunds. Debt service spending is forecast to increase $59 million (4.9 percent).

Planning Estimates: FY 2022-23 General Fund Expenditures
Biennial Comparison; November 2018 Forecast

($ in millions)	FY 2020-21	FY 2022-23	$ Change	% Change
E-12 Education	$19,601	$20,281	$680	3.5%
Property Tax Aids & Credits	3,710	3,882	172	4.6
Health & Human Services	14,905	16,776	1,872	12.6
Debt Service	1,199	1,258	59	4.9
All Other	8,040	8,082	42	0.5
Total Expenditures	**$47,454**	**$50,279**	**$2,825**	**6.0%**

E-12 Education. Expenditures in FY 2022-23 are projected to be $680 million (3.5 percent) higher than FY 2020-21. Pupil growth and inflationary increases in special education costs are the largest drivers of this increase. General education spending grows by $140 million (1.0 percent) in FY 2022-23 compared to FY 2020-21 due to statewide pupil growth. Growth between the biennia is slower than the previous two because there is no inflationary increases in the basic education formula beyond FY 2019. Special education expenditures are estimated to be $3.882 billion in FY 2022-23, an increase of $486 million (14.8 percent) over the FY 2020-21 due to more students and increased payments to school districts for special education services.

Health & Human Services. General fund HHS spending is forecast to reach $16.776 billion in FY 2022-23, an increase of $1.872 billion (12.6 percent) from FY 2020-21. Of the growth between biennia, $347 million is due to the delay of payments to managed care organizations from FY 2021 to FY 2022. When adjusting for this shift, biennial growth in HHS falls to 10.0 percent.

Growth in services for the elderly and people with disabilities accounts for $1.259 billion of the increase in general fund spending. This is due to enrollment growth in home and community-based services and both enrollment growth and higher average payments in elderly and disabled basic care. Spending for families with children is expected to grow $402 million (13.8 percent). More than half of this growth ($216 million) is driven by the previously mentioned delay of some payments to managed care companies from FY 2021 to FY 2022.

The health care access fund, which is forecast to have a deficit of almost one billion dollars in FY 2023, pays for 6.3 percent of medical assistance. This forecast reflects those expenditures remaining in the health care access fund in the planning years. This is consistent with statutory guidance to establish planning estimates at the same level as the second year of the budget years. In intervening legislative sessions, policy makers will need to determine an ongoing funding source for these state obligations or adjust the obligations in the health care access fund.

Property Tax, Aids, and Credits. In FY 2022-23, property tax aids and credits spending is forecast to total $3.882 billion, an increase of $172 million (4.6 percent) from FY 2020-21 estimates. Local government aid is expected to grow by $78 million (7.9 percent) due a requirement in 2017 legislation that a portion of FY 2020 aid payments shift to FY 2019, which artificially deflated the comparison numbers in FY 2020-21. Additionally, property tax refunds continue to increase, with $79 million (5.2 percent) in anticipated growth, which occurs principally in the homestead credit refund program.

Debt Service. The forecast debt service costs for FY 2022-23 are $1.258 billion, an increase of $59 million (4.9 percent) compared to FY 2020-21. The estimates reflect higher interest rate assumptions in the future, which lowers the amount of premium available to reduce the overall size of the bonds.

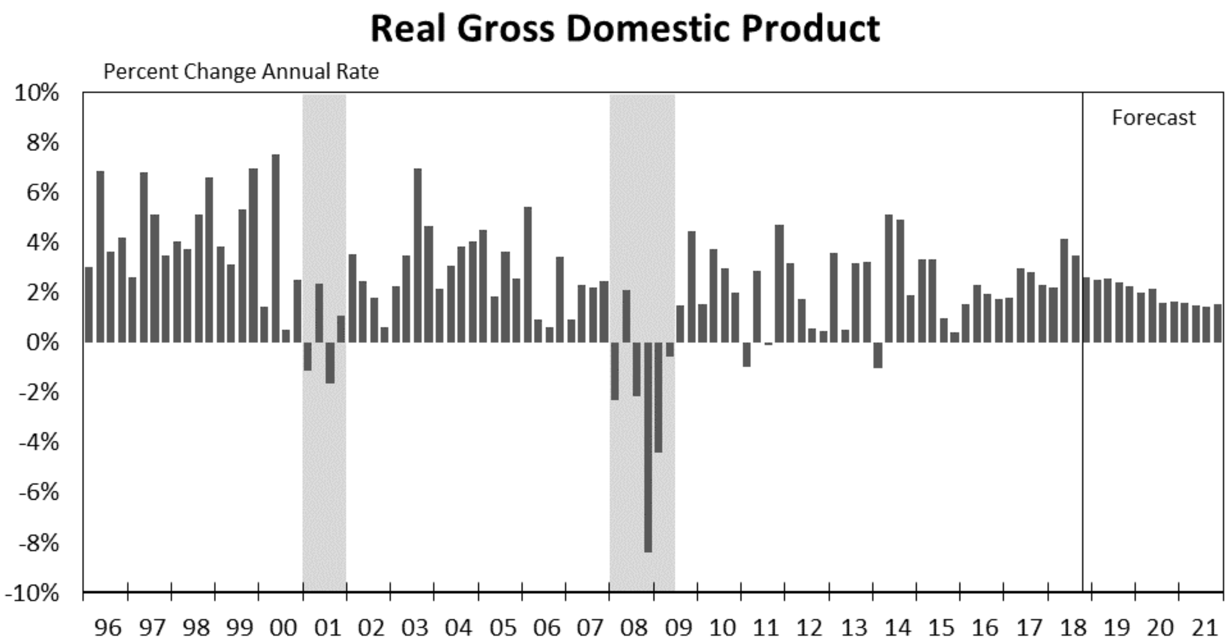
APPENDIX

ECONOMIC DATA

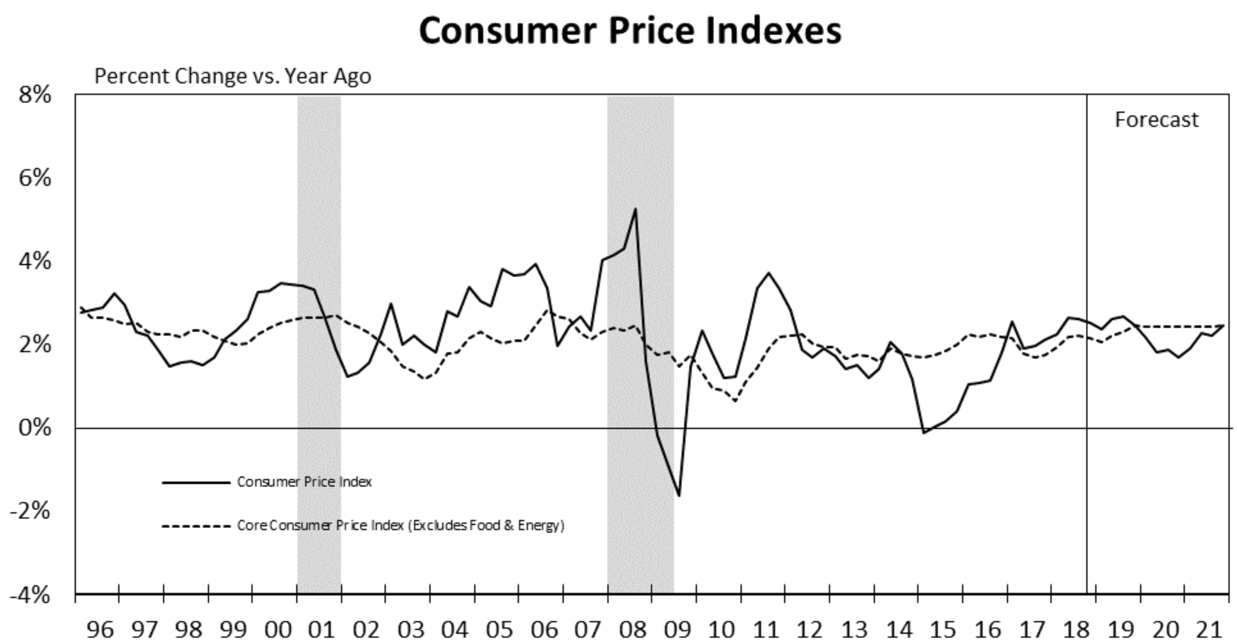
REVENUE EXPERIENCE

GENERAL FUND BALANCE SHEETS

OTHER DATA

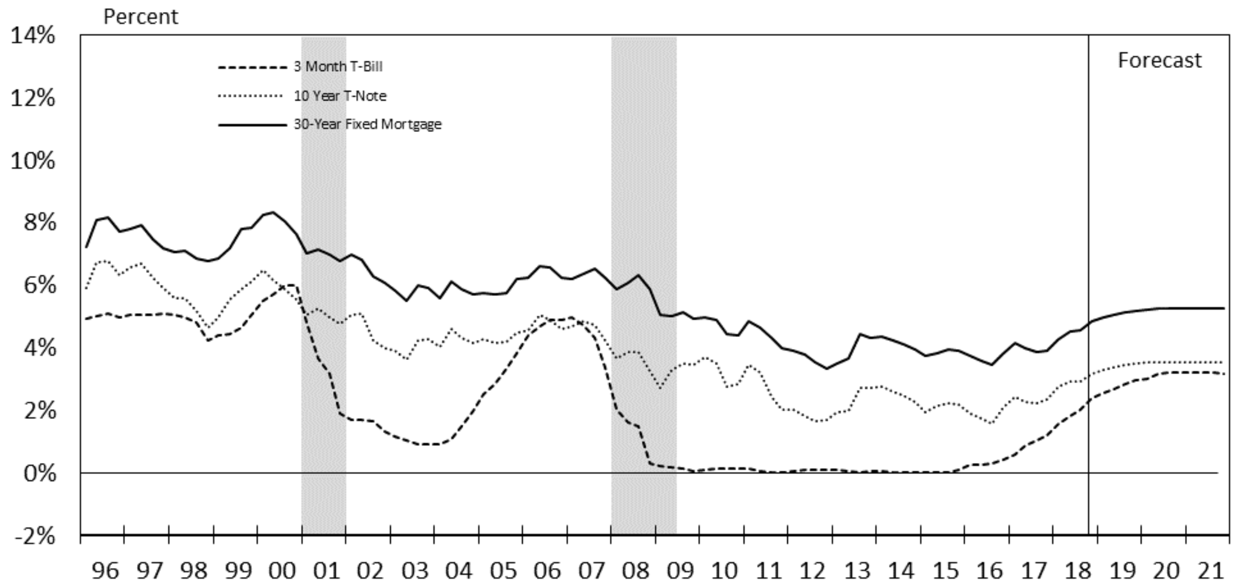


Annual Real GDP growth rates decline each year from 2018 to 2021. This trend is consistent with expected growth in employment and the labor force. The annual growth rate declines from 2.9 percent in 2018 to 1.6 percent in 2021. The relatively high 2.9 percent growth rate in 2018 may reflect stimulus from the lower tax rates in the Tax Cut and Jobs Act.



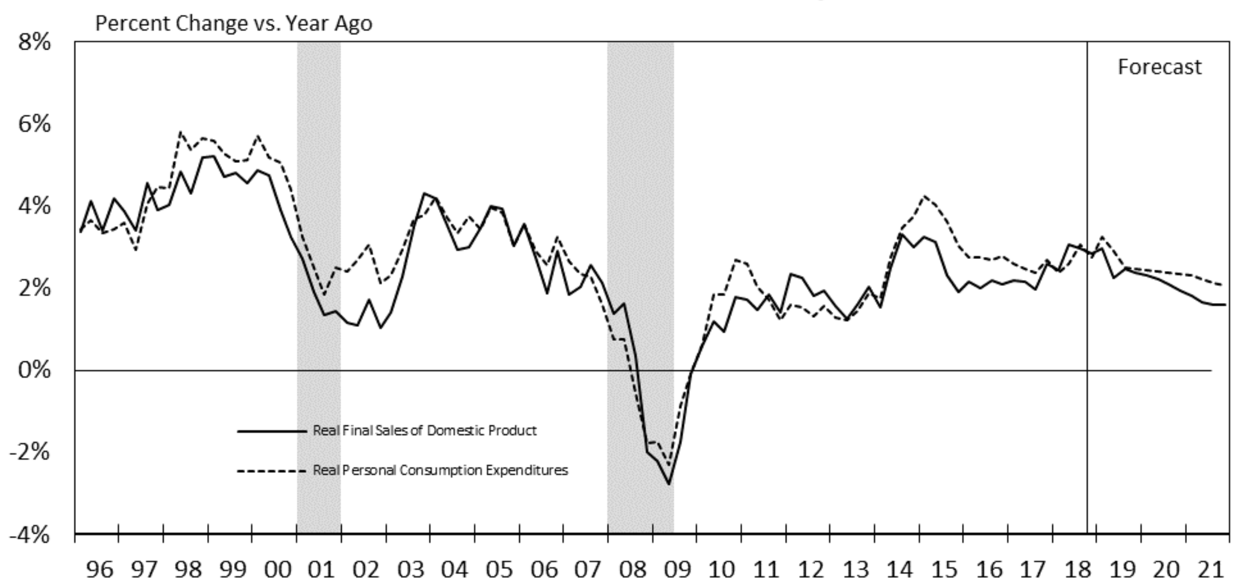
Year-over-year growth in the Core Consumer Price Index (Core CPI) rises from about 1.8 percent in 2017 to about 2.4 percent in 2021, consistent with a tight labor market. Expanded tariffs on Chinese imported goods are also expected to generate upward price pressure over the same period.

Interest Rates

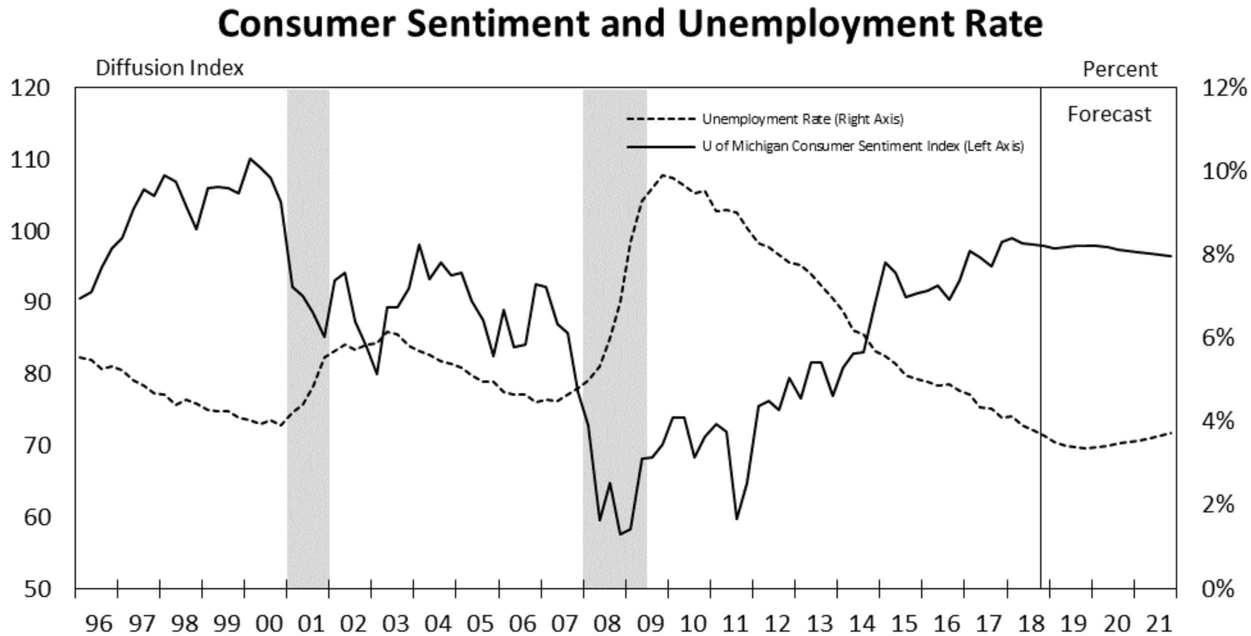


In the IHS forecast, the Fed steadily tightens monetary polish, pushing up interest rates across the board. The federal fund rate (not shown) reaches its peak for the cycle in 2021 at about 3.4 percent. The 3-month, the 10-Year and the 30-Year mortgage also peak in 2021.

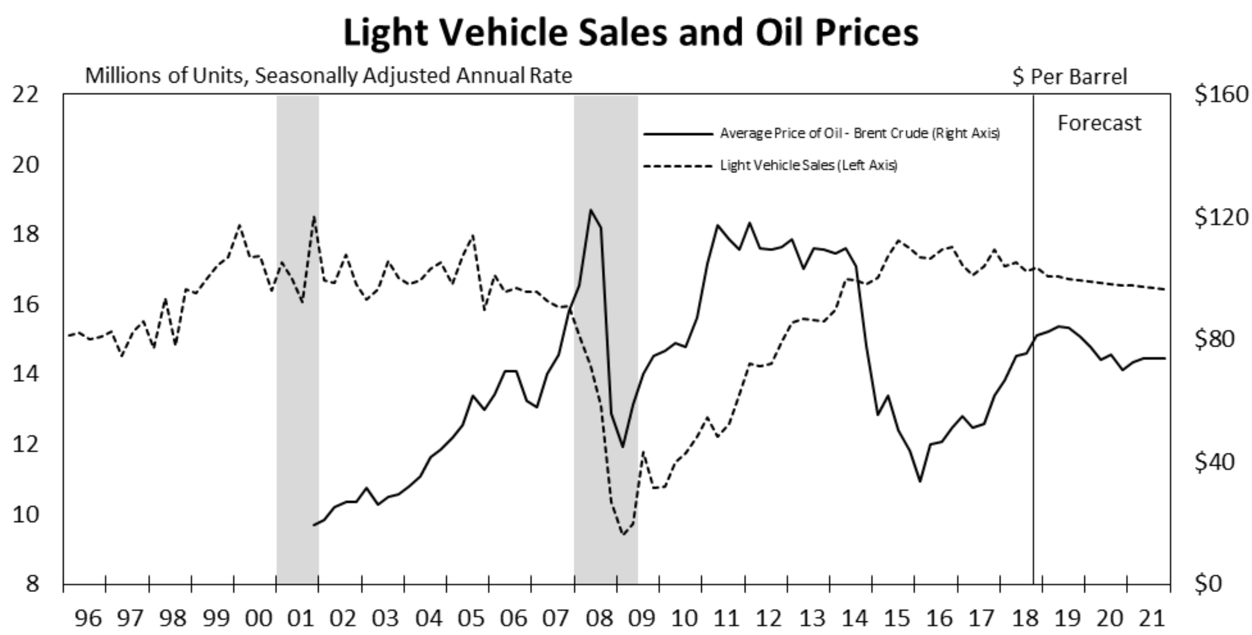
Real Final Sales & Consumption



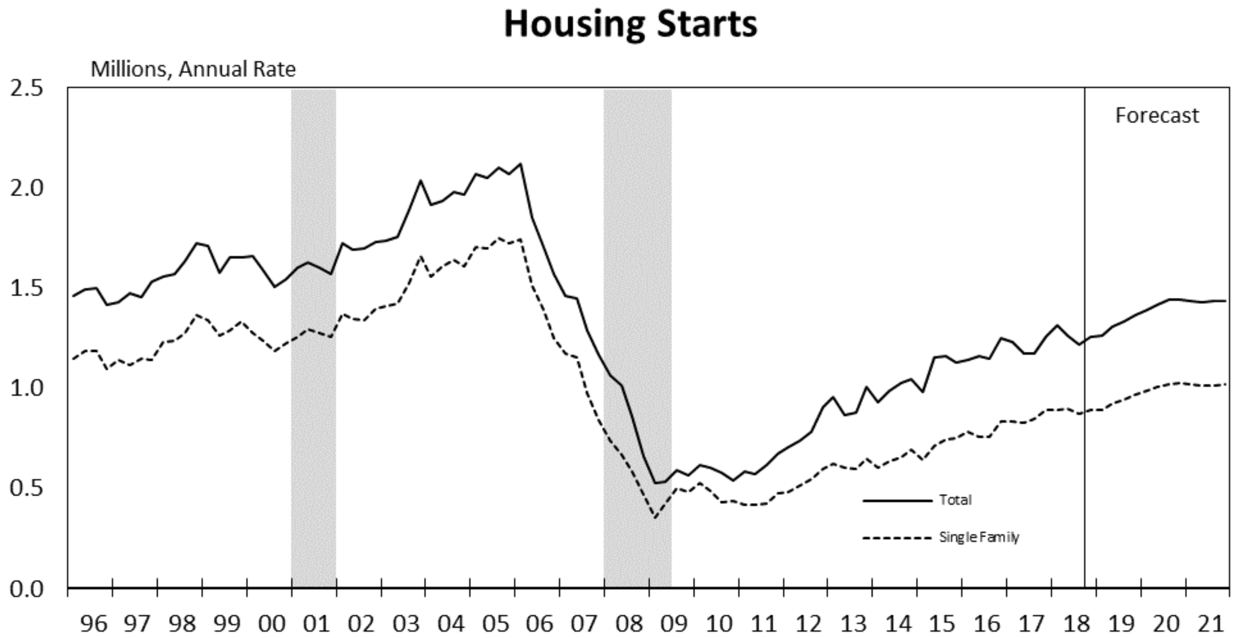
Real personal consumption expenditure growth rates during the 2018 to 2021 period peak at 2.8 percent in 2019 and then decline to 2.2 percent in 2021, consistent with the pattern of real GDP growth rates.



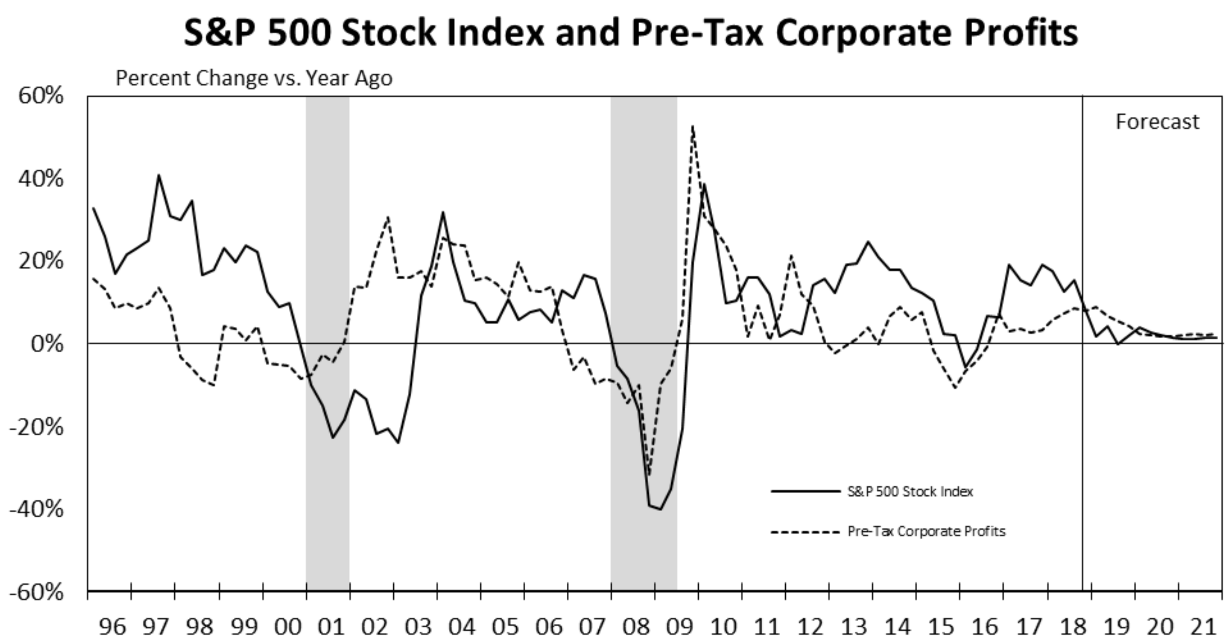
The IHS forecast expects the consumer sentiment index to reach an annual post-recession peak in 2018, consistent with a post-recession low unemployment rate forecast (at 3.4 percent) in 2019. Both change very little after that. Consumer sentiment stabilizes less than 5 points short of 100, a healthy reading for this indicator.



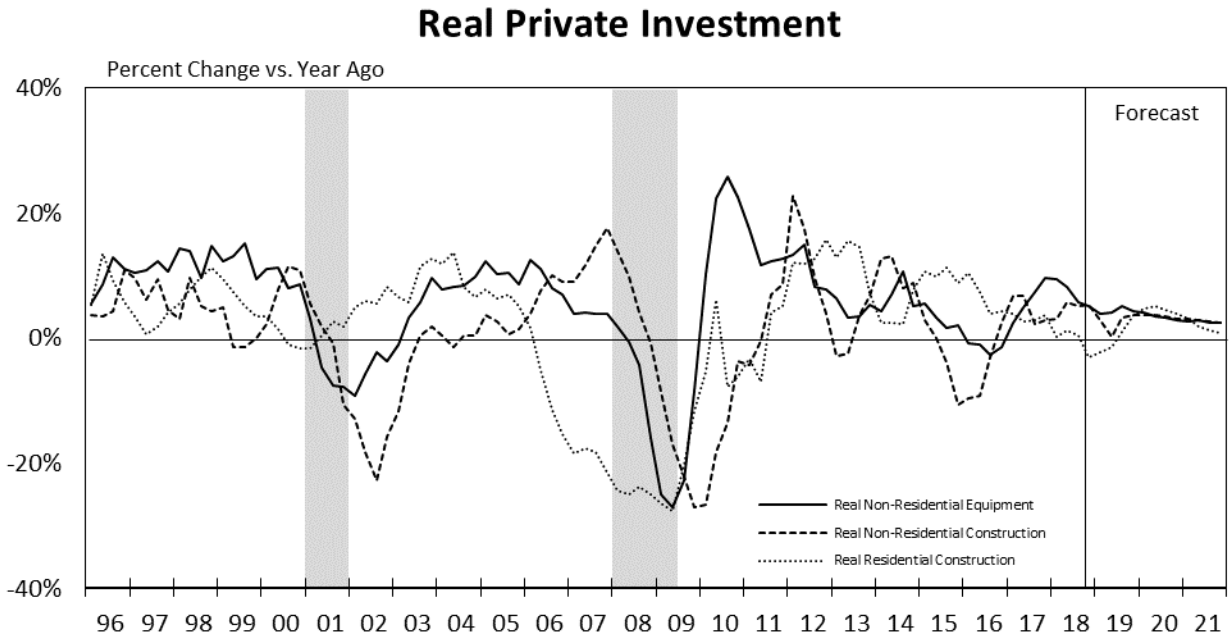
Light vehicle sales trend down from an annual average of 17 million units in 2018 to 16.5 million units in 2021. IHS expects the Brent crude oil price to average $74 per barrel in 2018, climb to $83 per barrel in 2019, and hold steady between $73 and $74 per barrel through the forecast horizon.



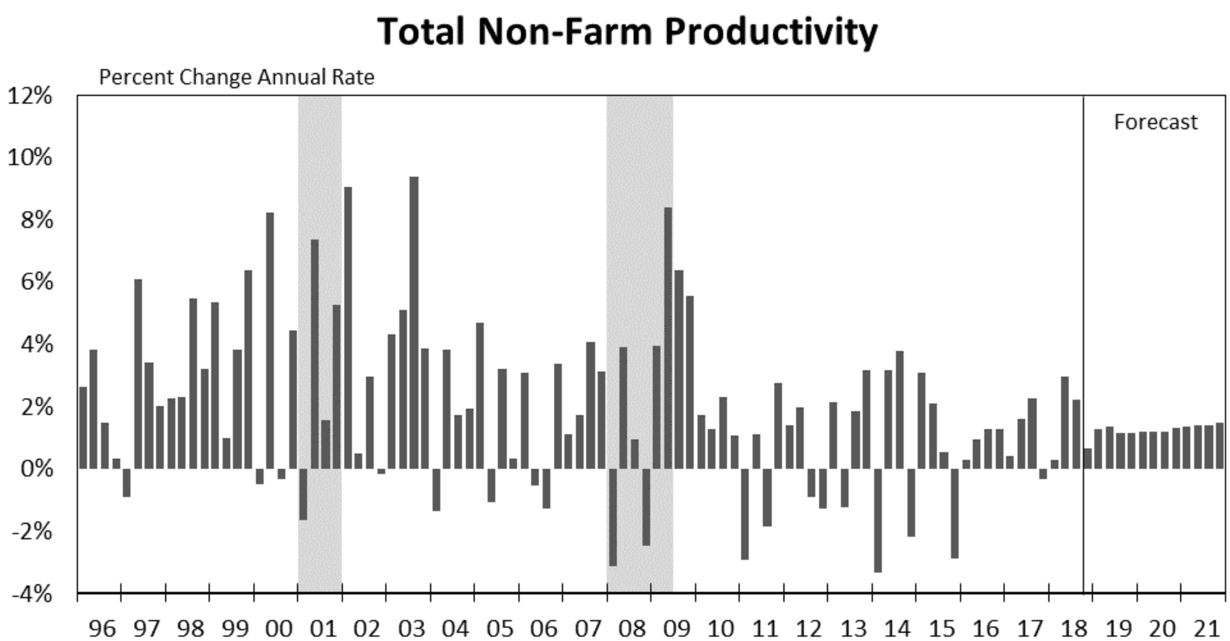
Housing starts gradually rise and plateau at about 1.4 million units per year in 2021. That level was last seen prior to the '08-'09 recession.



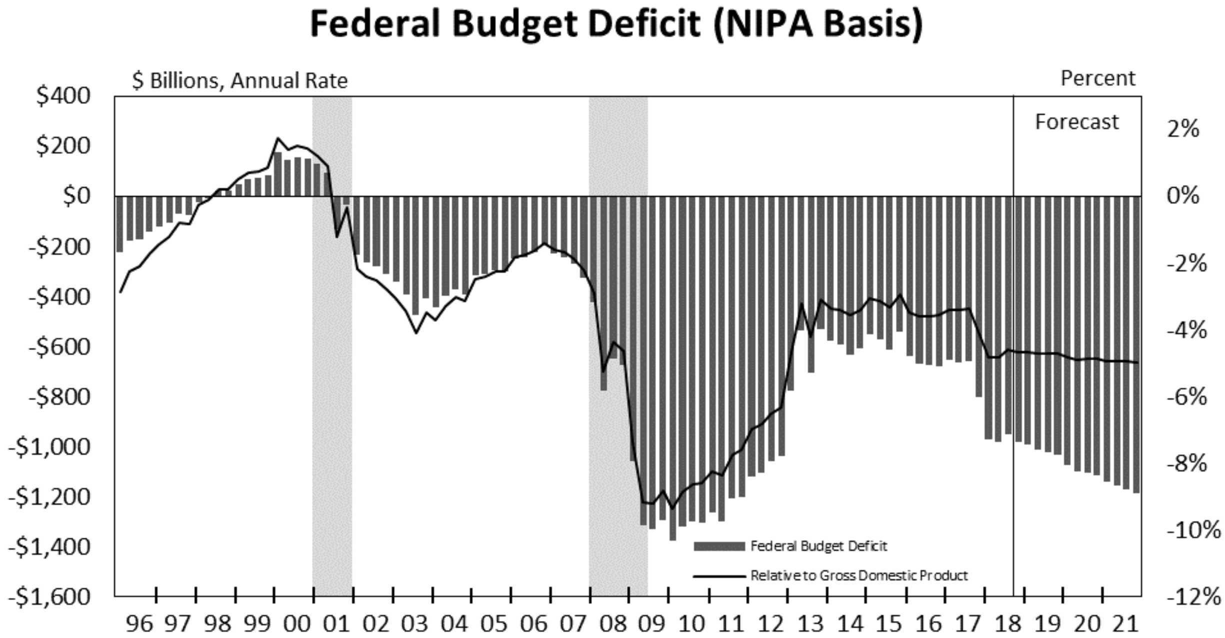
In this forecast, both the S&P 500 stock index and pre-tax corporate profits decline to roughly a 2 percent growth rate in 2020 and 2021. Corporate profits steadily increase, but generally at a decreasing rate.



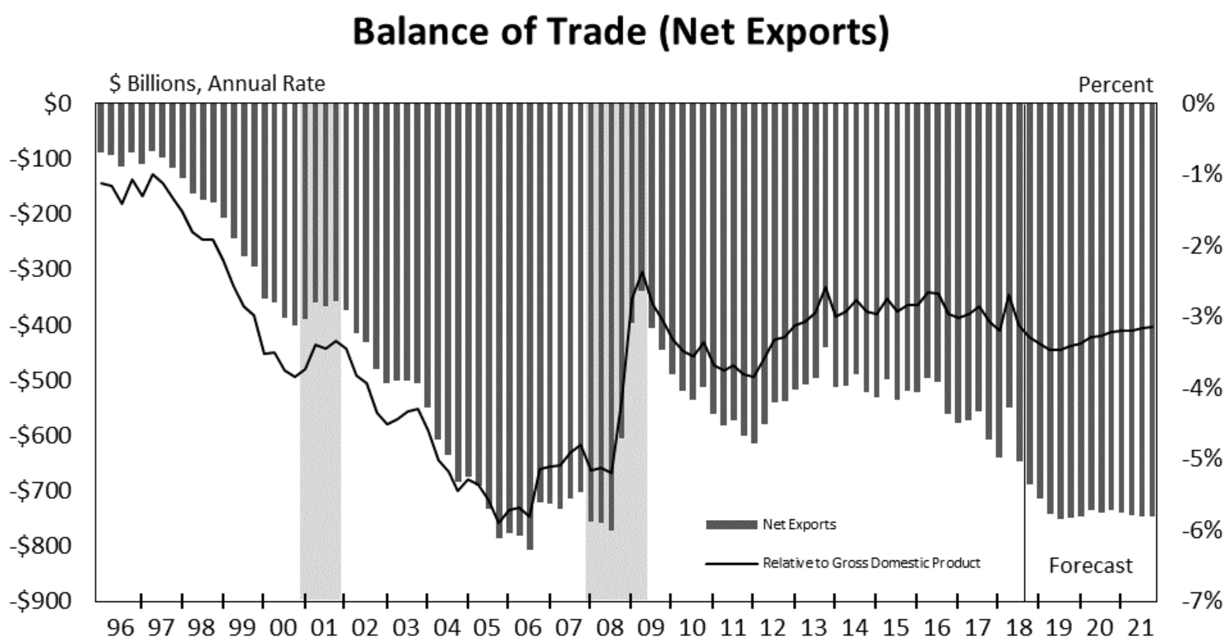
Real private investment growth rates for non-residential equipment, non-residential structures, and residential structures all converge to growth rates in 2020 and 2021 that average about 3 percent.



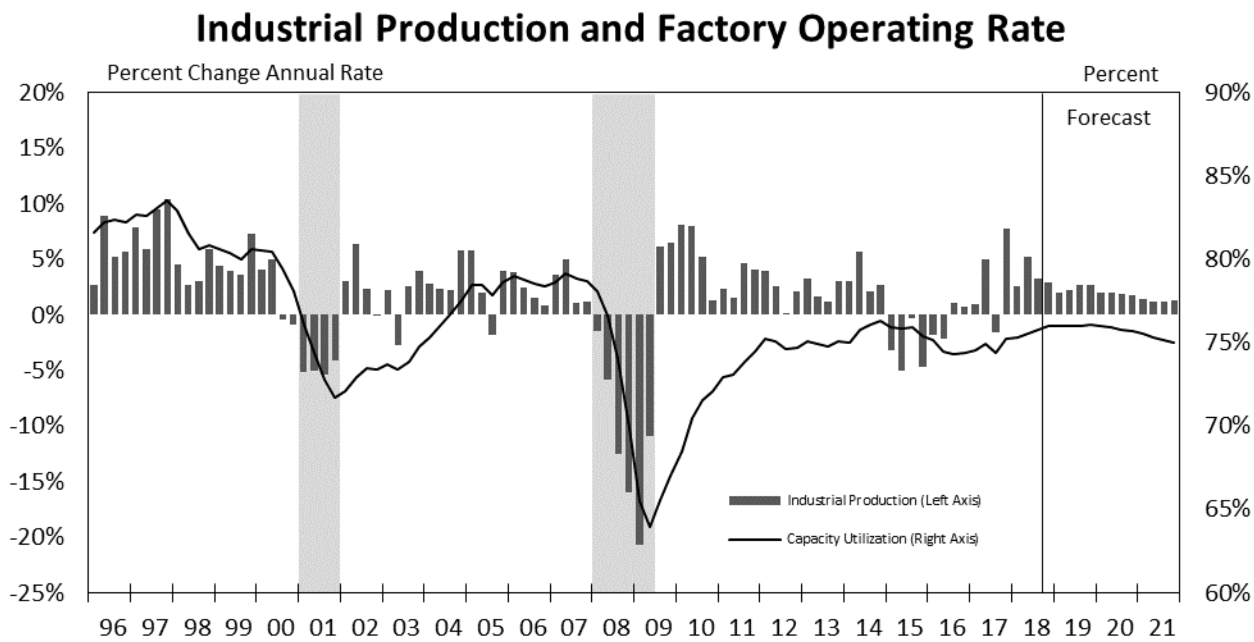
Non-Farm private sector productivity steadily grows at rates between 1.2 percent and 1.4 percent over the forecast horizon. This is consistent with a GDP growth rate of less than 3.0 percent.



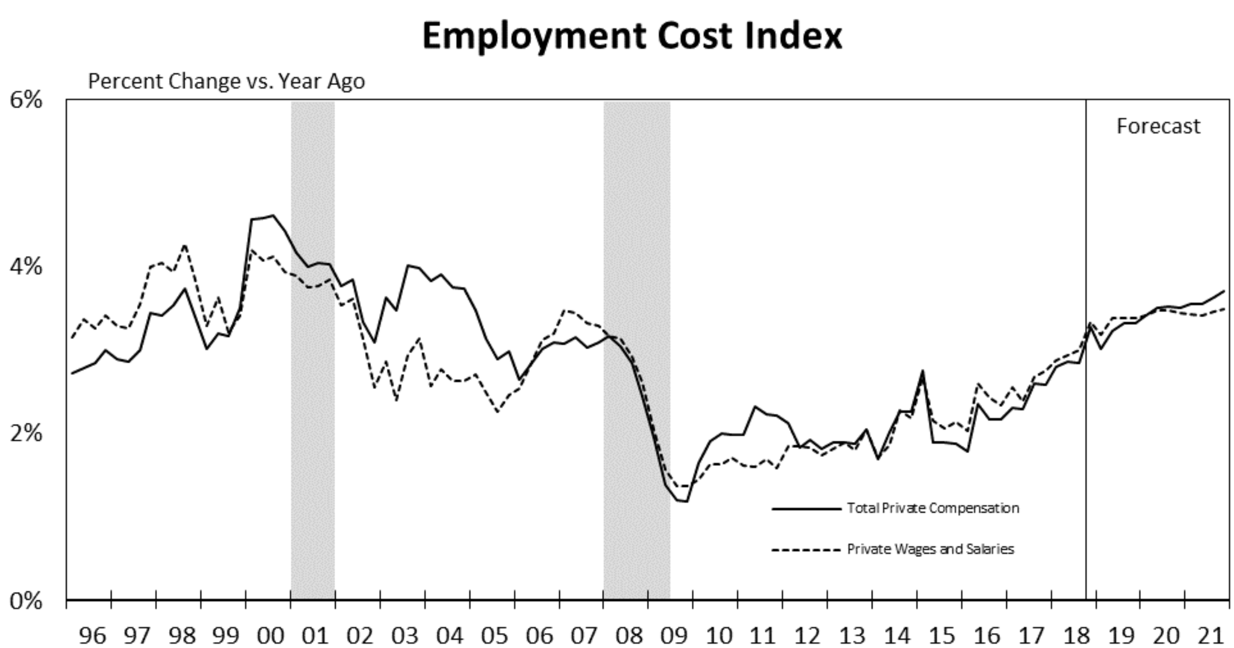
The federal budget deficit as a percent of GDP moves from the 3.4 percent to 3.6 percent range during 2016 and 2017 to around 5.0 percent by 2021. This change is largely due to the revenue loss from the Tax Cut and jobs Act passed at the end of 2017.



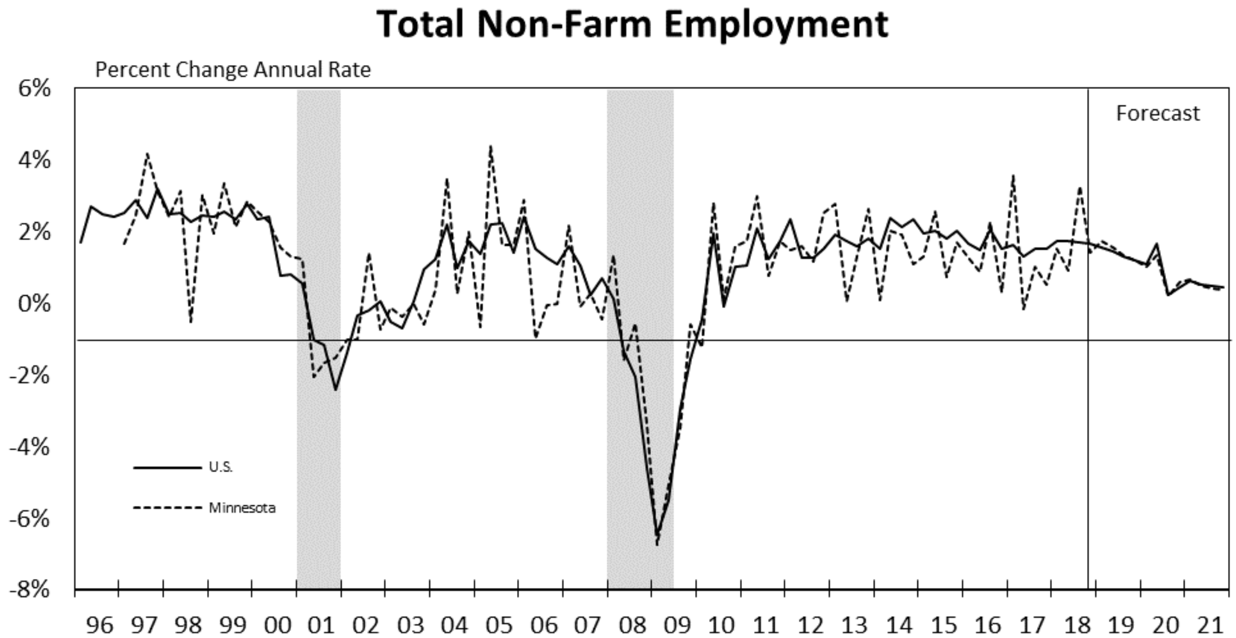
Net exports as share of GDP on an annual basis range between 3.1 and 3.4 percent. The share starts at 3.1 percent in 2018, dips to 3.4 percent in 2019, and ends up at 3.2 percent in 2021. Notably, in this forecast the U.S. is on track to become a net exporter of petroleum products by 2021.



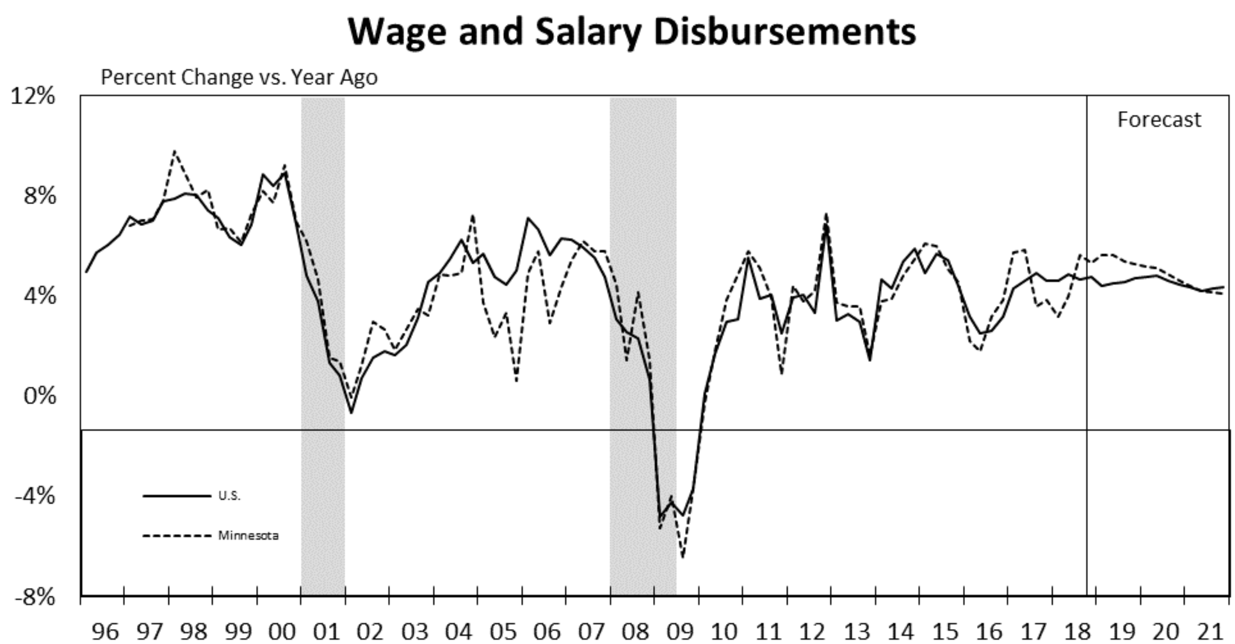
In this forecast, industrial production grows at a strong annual rate of 3.7 percent in 2018, boosted by gas and oil extraction, which is expected to grow more than 13 percent in 2018. After 2018, growth rates trend down, reaching 1.5 percent in 2021. Capacity utilization ranges between 75 percent and 76 percent over the forecast horizon.



Annual growth in the Employment Cost Index (ECI) for wages exceeds 3.0 percent for each year from 2018 to 2021. The last time the ECI for wages exceeded 3 percent for a full year was 2007, and prior to that, 2002. In each year of the forecast, growth in wage ECI exceeds the CPI growth rate.



U.S. and Minnesota non-farm employment track quite closely on a quarterly Y/Y basis over the forecast horizon. Both trend down as labor force growth declines. The noticeable spike up and down in 2020 reflects forecast hiring and layoffs for the 2020 U.S. Census.



Minnesota and U.S. wage and salaries grow at similar annual rates in all years of the forecast horizon except for 2019, where MN grows about 0.9 percentage points faster.

U.S. Economic Forecast Summary

Forecast 2016 to 2023, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Real National Income Accounts (Billions of 2009 Dollars)								
Real Gross Domestic Product (GDP)	17,659.2	18,050.7	18,574.7	19,082.3	19,479.7	19,788.9	20,086.4	20,369.1
%Chg	1.6	2.2	2.9	2.7	2.1	1.6	1.5	1.4
Real Consumption	12,248.2	12,558.7	12,896.8	13,254.5	13,571.2	13,867.2	14,131.1	14,361.9
%Chg	2.7	2.5	2.7	2.8	2.4	2.2	1.9	1.6
Real Nonresidential Fixed Investment	2,411.2	2,538.1	2,709.9	2,835.7	2,932.7	3,009.7	3,083.0	3,152.4
%Chg	0.5	5.3	6.8	4.6	3.4	2.6	2.4	2.3
Real Residential Investment	591.3	611.1	609.3	611.2	638.8	650.1	656.5	659.4
%Chg	6.5	3.3	-0.3	0.3	4.5	1.8	1.0	0.4
Real Personal Income	15,469.7	15,866.8	16,237.2	16,592.4	17,076.0	17,456.0	17,800.3	18,134.2
%Chg	1.5	2.6	2.3	2.2	2.9	2.2	2.0	1.9
Current Dollar National Income Accounts (Billions of Dollars)								
Gross Domestic Product (GDP)	18,707.2	19,485.4	20,504.1	21,555.0	22,537.4	23,472.3	24,420.0	25,366.8
%Chg	2.7	4.2	5.2	5.1	4.6	4.1	4.0	3.9
Personal Income	16,125.1	16,830.9	17,584.9	18,378.0	19,284.0	20,130.9	20,973.9	21,834.1
%Chg	2.6	4.4	4.5	4.5	4.9	4.4	4.2	4.1
Wage & Salary Disbursements	8,080.7	8,453.8	8,854.7	9,258.9	9,689.7	10,107.0	10,553.4	11,008.0
%Chg	2.9	4.6	4.7	4.6	4.7	4.3	4.4	4.3
Non-Wage Personal Income	8,044.5	8,377.1	8,730.2	9,119.0	9,594.2	10,023.9	10,420.5	10,826.1
%Chg	2.3	4.1	4.2	4.5	5.2	4.5	4.0	3.9
Price and Wage Indexes								
U.S. GDP Deflator (2005=1.0)	105.899	107.932	110.348	112.953	115.693	118.610	121.571	124.533
%Chg	1.1	1.9	2.2	2.4	2.4	2.5	2.5	2.4
U.S. Consumer Price Index (1982-84=1.0)	2.400	2.451	2.513	2.576	2.625	2.683	2.745	2.809
%Chg	1.3	2.1	2.5	2.5	1.9	2.2	2.3	2.3
Employment Cost Index (Dec 2005=1.0)	1.264	1.295	1.333	1.376	1.424	1.475	1.532	1.590
%Chg	2.1	2.5	2.9	3.2	3.5	3.6	3.8	3.8
Employment (Thousands)								
Employment - Total Non-Farm Payrolls	144.3	146.6	149.0	151.3	153.0	153.8	154.5	154.9
%Chg	1.8	1.6	1.6	1.5	1.1	0.6	0.4	0.3
Construction	6.7	7.0	7.2	7.5	7.7	8.0	8.2	8.4
%Chg	4.1	3.4	4.1	3.4	3.5	3.8	2.6	2.1
Manufacturing	12.4	12.4	12.7	12.9	12.9	12.7	12.6	12.6
%Chg	0.1	0.7	2.1	1.7	-0.4	-1.2	-0.7	-0.2
Private Service-Providing	102.4	104.2	106.0	107.7	108.9	109.5	109.9	110.0
%Chg	2.2	1.8	1.7	1.6	1.1	0.6	0.3	0.1
Government	22.2	22.3	22.4	22.5	22.7	22.8	22.9	23.1
%Chg	0.9	0.4	0.2	0.4	1.3	0.2	0.7	0.7
U.S. Civilian Labor Force	159.2	160.3	162.0	163.5	165.3	166.4	167.5	168.4
Employment - Household Survey	151.4	153.3	155.7	157.9	159.6	160.4	161.0	161.4
Unemployment Rate (%)	4.9	4.4	3.9	3.4	3.4	3.6	3.8	4.1
Other Key Measures								
Non-Farm Productivity (index, 2005=1.0)	1.028	1.039	1.052	1.067	1.080	1.094	1.110	1.127
%Chg	0.1	1.1	1.3	1.4	1.2	1.3	1.5	1.5
Total Ind. Production (index, 2007=100)	102.085	103.703	107.590	110.491	112.907	114.617	116.259	118.090
%Chg	-1.9	1.6	3.7	2.7	2.2	1.5	1.4	1.6
Manhours in Private Non-Farm Estab. Billions of Hours	204.6	208.2	212.8	216.6	219.0	219.9	220.3	220.3
%Chg	1.7	1.8	2.2	1.8	1.1	0.4	0.2	0.0
Average Weekly Hours	32.4	32.4	32.5	32.5	32.5	32.5	32.4	32.4
Manufacturing Workweek	41.8	41.9	42.1	41.8	41.6	41.4	41.3	41.2

Source: IHS Economics; November 2018 Baseline

Minnesota Economic Forecast Summary

Forecast 2016 to 2023 - Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Current Dollar Income (Billions of Dollars)								
Personal Income	291.362	303.141	315.609	333.143	351.580	367.558	381.968	396.550
%Chg	2.3	4.0	4.1	5.6	5.5	4.5	3.9	3.8
Wage & Salary Disbursements	158.043	165.543	173.057	182.545	191.553	199.645	207.913	216.103
%Chg	2.8	4.7	4.5	5.5	4.9	4.2	4.1	3.9
Non-Wage Personal Income	133.319	137.598	143.402	150.598	160.028	167.913	174.055	180.448
%Chg	1.8	3.2	4.2	5.0	6.3	4.9	3.7	3.7
Supplements to Wages & Salaries	35.637	37.184	38.020	39.692	41.589	43.331	45.127	46.913
%Chg	7.0	4.3	2.2	4.4	4.8	4.2	4.1	4.0
Dividends, Interest, & Rent Income	56.012	58.508	61.006	64.055	68.144	71.850	75.269	78.446
%Chg	3.1	4.5	4.3	5.0	6.4	5.4	4.8	4.2
Farm Proprietors Income	0.600	-0.196	-0.306	-0.231	1.347	2.245	1.817	1.601
%Chg	-76.1	N/A	56.1	-24.6	N/A	66.6	-19.1	-11.9
Non-Farm Proprietors Income	20.944	21.707	22.666	23.528	23.537	23.358	23.148	22.894
%Chg	-2.2	3.6	4.4	3.8	0.0	-0.8	-0.9	-1.1
Personal Current Transfer Receipts	45.918	47.380	49.908	52.764	55.847	58.701	61.440	64.512
%Chg	3.5	3.2	5.3	5.7	5.8	5.1	4.7	5.0
Less: Contrib. for Gov. Social Ins.	24.577	25.628	26.546	27.860	29.087	30.223	31.397	32.569
%Chg	2.6	4.3	3.6	4.9	4.4	3.9	3.9	3.7
Real Income (Billions of 2009 Dollars)								
Real Personal Income	279.514	285.781	291.412	300.775	311.320	318.720	324.173	329.355
%Chg	1.2	2.2	2.0	3.2	3.5	2.4	1.7	1.6
Real Wage & Salary Disbursements	151.614	156.063	159.002	164.810	169.618	173.118	176.453	179.485
%Chg	1.7	2.9	1.9	3.7	2.9	2.1	1.9	1.7
Employment (Thousands)								
Employment - Total Non-Farm Payrolls	2,892.4	2,933.0	2,970.3	3,020.8	3,052.8	3,069.6	3,080.0	3,083.4
%Chg	1.3	1.4	1.3	1.7	1.1	0.5	0.3	0.1
Construction	116.3	122.2	124.8	127.9	130.5	132.8	134.8	137.2
%Chg	1.0	5.1	2.1	2.5	2.1	1.7	1.5	1.8
Manufacturing	317.8	318.3	324.2	329.2	329.5	327.4	326.4	327.1
%Chg	0.1	0.2	1.8	1.5	0.1	-0.6	-0.3	0.2
Private Service-Providing	2,032.9	2,061.8	2,084.9	2,124.2	2,148.5	2,163.2	2,169.2	2,166.1
%Chg	1.9	1.4	1.1	1.9	1.1	0.7	0.3	-0.1
Government	419.3	424.2	430.0	433.0	437.8	439.7	443.1	446.6
%Chg	0.1	1.2	1.4	0.7	1.1	0.4	0.8	0.8
Minnesota Civilian Labor Force	3,012.9	3,054.5	3,101.3	3,120.5	3,138.3	3,151.5	3,159.5	3,165.2
Unemployment Rate (%)	3.1	3.2	3.0	2.5	2.4	2.5	2.6	2.9
Demographic Indicators (Millions)								
Total Population	5.525	5.577	5.613	5.649	5.683	5.717	5.749	5.780
%Chg	0.8	0.9	0.7	0.6	0.6	0.6	0.6	0.5
Total Population Age 16 & Over	4.378	4.423	4.456	4.490	4.524	4.557	4.589	4.621
%Chg	0.9	1.0	0.7	0.8	0.8	0.7	0.7	0.7
Total Population Age 65 & Over	0.830	0.860	0.891	0.922	0.954	0.986	1.019	1.052
%Chg	3.5	3.6	3.5	3.5	3.5	3.3	3.4	3.3
Total Households	2.149	2.162	2.183	2.204	2.225	2.244	2.264	2.282
%Chg	0.1	0.6	1.0	1.0	0.9	0.9	0.8	0.8
Housing Indicators (Thousands)								
Total Housing Permits (Authorized)	23.362	25.116	25.889	24.689	24.433	24.060	23.521	22.757
%Chg	15.2	7.5	3.1	-4.6	-1.0	-1.5	-2.2	-3.2
Single-Family	13.695	14.761	14.621	14.798	14.645	14.422	14.098	13.640
%Chg	11.1	7.8	-0.9	1.2	-1.0	-1.5	-2.2	-3.2

Source: Minnesota Management & Budget (MMB) November 2018 Forecast

Forecast Comparison: Minnesota & U.S.

Forecast 2016 to 2021, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Personal Income (Billions of Current Dollars)								
Minnesota								
November 2018	291.4	303.1	315.6	333.1	351.6	367.6	382.0	396.6
%Chg	2.3	4.0	4.1	5.6	5.5	4.5	3.9	3.8
February 2018	287.2	296.8	309.3	326.6	343.6	359.0		
%Chg	2.4	3.3	4.2	5.6	5.2	4.5		
U.S.								
November 2018	16,125	16,831	17,585	18,378	19,284	20,131	20,974	21,834
%Chg	2.6	4.4	4.5	4.5	4.9	4.4	4.2	4.1
February 2018	15,929	16,417	17,109	18,022	18,933	19,833	20,747	21,689
%Chg	2.4	3.1	4.2	5.3	5.1	4.8	4.6	4.5
Wage and Salary Disbursements (Billions of Current Dollars)								
Minnesota								
November 2018	158.0	165.5	173.1	182.5	191.6	199.6	207.9	216.1
%Chg	2.8	4.7	4.5	5.5	4.9	4.2	4.1	3.9
February 2018	158.3	164.6	172.5	181.9	191.1	199.9		
%Chg	2.8	4.0	4.8	5.5	5.0	4.6		
U.S.								
November 2018	8,081	8,454	8,855	9,259	9,690	10,107	10,553	11,008
%Chg	2.9	4.6	4.7	4.6	4.7	4.3	4.4	4.3
February 2018	8,085	8,340	8,737	9,200	9,671	10,147	10,644	11,150
%Chg	2.9	3.1	4.8	5.3	5.1	4.9	4.9	4.8
Total Non-Farm Payroll Employment (Thousands)								
Minnesota								
November 2018	2,892	2,933	2,970	3,021	3,053	3,070	3,080	3,083
%Chg	1.3	1.4	1.3	1.7	1.1	0.5	0.3	0.1
February 2018	2,896	2,944	2,983	3,032	3,070	3,092		
%Chg	1.4	1.7	1.3	1.7	1.2	0.7		
U.S.								
November 2018	144,349	146,624	149,011	151,292	152,990	153,849	154,516	154,914
%Chg	1.8	1.6	1.6	1.5	1.1	0.6	0.4	0.3
February 2018	144,349	146,623	148,956	151,573	153,518	154,420	155,253	155,959
%Chg	1.8	1.6	1.6	1.8	1.3	0.6	0.5	0.5
Average Annual Non-Farm Wage (Current Dollars)								
Minnesota								
November 2018	54,641	56,441	58,263	60,430	62,746	65,040	67,505	70,086
%Chg	1.4	3.3	3.2	3.7	3.8	3.7	3.8	3.8
February 2018	54,657	55,921	57,839	60,008	62,244	64,647		
%Chg	1.4	2.3	3.4	3.8	3.7	3.9		
U.S.								
November 2018	55,980	57,657	59,423	61,199	63,336	65,695	68,300	71,059
%Chg	1.1	3.0	3.1	3.0	3.5	3.7	4.0	4.0
February 2018	56,012	56,878	58,654	60,698	62,994	65,709	68,561	71,495
%Chg	1.1	1.5	3.1	3.5	3.8	4.3	4.3	4.3

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

Alternative Forecast Comparison

Calendar Years

	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	2016	2017	2018	2019
Real Gross Domestic Product (GDP), Percent Change, Seasonally Adjusted at Annual Rate										
Blue Chip Consensus (11-18)	2.2	4.2	3.5	2.7	2.4	2.5	1.5	2.2	2.9	2.6
IHS Economics Baseline (11-18)	2.2	4.2	3.5	2.6	2.5	2.5	1.5	2.2	2.9	2.7
Moody's Analytics (11-18)	2.2	4.2	3.5	2.6	3.0	3.2	1.5	2.2	2.9	0.9
S&P Economic Forecast (11-18)							1.5	2.2		
Wells Fargo (11-18)	2.2	4.2	3.5	2.5	2.3	2.6	1.5	2.2	2.8	2.7
CBO Outlook (06-18)	2.5	3.5	3.8	3.4	2.7	2.5	1.5	2.3	3.0	2.9
Consumer Price Index (CPI), Percent Change, Seasonally Adjusted at Annual Rate (except where noted)										
Blue Chip Consensus (11-18)	3.5	1.7	2.0	2.4	2.5	2.2	1.3	2.1	2.5	2.2
IHS Economics Baseline (11-18)	3.5	1.7	2.0	2.9	2.9	2.6	1.3	2.1	2.5	2.5
Moody's Analytics (11-18)	3.5	1.7	2.0	2.3	2.4	2.4	1.3	2.1	2.3	2.0
S&P Economic Forecast (11-18)							1.3	2.1		
Wells Fargo (11-18)*	2.3	2.6	2.6	2.4	2.4	2.6	1.3	2.1	2.5	2.7
CBO Outlook (06-18)	3.2	0.3	2.0	2.7	2.3	2.3	1.3	2.1	2.2	2.2

* Year-over-Year Percent Change

IHS Economics Baseline Forecast Comparison

Calendar Years

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Real Gross Domestic Product (GDP), Annual Percent Change										
February 2012	3.3	3.2	-	-	-	-	-	-	-	-
November 2012	2.8	3.3	2.9	2.1	-	-	-	-	-	-
February 2013	2.8	3.3	2.9	2.8	-	-	-	-	-	-
November 2013	2.5	3.1	3.3	3.1	-	-	-	-	-	-
February 2014	2.7	3.3	3.4	3.1	-	-	-	-	-	-
November 2014	2.2	2.6	2.8	3.0	2.6	2.6	-	-	-	-
February 2015	2.4	3.0	2.7	2.8	2.6	2.8	-	-	-	-
November 2015	2.4	2.4	2.9	2.8	2.7	2.6	-	-	-	-
February 2016	2.4	2.4	2.4	2.8	2.6	2.4	-	-	-	-
November 2016	2.4	2.6	1.5	2.2	2.2	2.2	2.0	-	-	-
February 2017	2.4	2.6	1.6	2.3	2.7	2.3	2.1	-	-	-
November 2017	2.6	2.9	1.5	2.2	2.5	2.2	2.1	-	-	-
February 2018	2.6	2.9	1.5	2.3	2.7	2.7	2.1	2.1	1.9	1.9
November 2018	2.5	2.9	1.6	2.2	2.9	2.7	2.1	1.6	1.5	1.4
Consumer Price Index (CPI), Annual Percent Change										
February 2012	1.9	1.9	-	-	-	-	-	-	-	-
November 2012	1.8	1.7	1.9	1.9	-	-	-	-	-	-
February 2013	1.7	1.6	1.7	1.8	-	-	-	-	-	-
November 2013	1.4	1.7	1.9	1.9	-	-	-	-	-	-
February 2014	1.3	1.7	1.8	1.8	-	-	-	-	-	-
November 2014	1.7	1.0	1.6	2.2	2.2	2.3	-	-	-	-
February 2015	1.6	-0.7	2.3	2.7	2.7	2.5	-	-	-	-
November 2015	1.6	0.0	1.4	2.7	2.4	2.4	-	-	-	-
February 2016	1.6	0.1	0.6	2.3	2.7	2.7	-	-	-	-
November 2016	1.6	0.1	1.3	2.5	2.5	2.4	2.5	-	-	-
February 2017	1.6	0.1	1.3	2.4	1.9	2.4	2.7	-	-	-
November 2017	1.6	0.1	1.3	2.1	1.9	2.1	2.6	-	-	-
February 2018	1.6	0.1	1.3	2.1	2.3	1.7	2.7	1.7	2.6	2.6
November 2018	1.6	0.1	1.3	2.1	2.5	2.5	1.9	2.2	2.3	2.3

Source: IHS Economics

Factors Affecting Tax Revenue

Billions of Current Dollars

	2016	2017	2018	2019	2020	2021	2022	2023
			Individual Income Tax (Calendar Year)					
Minnesota Non-Farm Tax Base								
February 2016	229.615	240.335	252.558	264.448	-	-	-	-
%Chg	3.1	4.7	5.1	4.7				
November 2016	232.035	242.225	253.658	265.518	277.610	290.023	-	-
%Chg	3.2	4.4	4.7	4.7	4.6	4.5		
February 2016	232.309	243.150	255.823	269.200	282.015	294.700	-	-
%Chg	3.4	4.7	5.2	5.2	4.8	4.5		
November 2017	231.091	240.262	250.730	262.238	273.810	286.483	-	-
%Chg	2.4	4.0	4.4	4.6	4.4	4.6		
February 2018	231.091	239.871	251.308	264.895	278.045	290.703	-	-
%Chg	2.4	3.8	4.8	5.4	5.0	4.6		
November 2018	234.998	245.757	255.879	270.128	283.230	294.853	306.328	317.443
%Chg	2.4	4.6	4.1	5.6	4.9	4.1	3.9	3.6
Minnesota Wage and Salary Disbursements								
February 2016	158.588	166.015	173.658	181.303	-	-	-	-
%Chg	3.8	4.7	4.6	4.4				
November 2016	159.410	166.923	174.843	182.918	191.040	199.655	-	-
%Chg	3.6	4.7	4.7	4.6	4.4	4.5		
February 2017	159.708	167.220	175.853	184.783	193.485	202.568	-	-
%Chg	3.8	4.7	5.2	5.1	4.7	4.7		
November 2017	158.271	165.098	172.785	180.883	188.835	197.095	-	-
%Chg	2.8	4.3	4.7	4.7	4.4	4.4		
February 2018	158.271	164.612	172.513	181.948	191.083	199.903	-	-
%Chg	2.8	4.0	4.8	5.5	5.0	4.6		
November 2018	158.043	165.543	173.057	182.545	191.553	199.645	207.913	216.103
%Chg	2.8	4.7	4.5	5.5	4.9	4.2	4.1	3.9
Minnesota Dividends, Interest, & Rental Income								
February 2016	49.921	52.211	56.026	59.535	-	-	-	-
%Chg	1.0	4.6	7.3	6.3				
November 2016	51.865	53.597	56.173	59.217	62.458	65.313	-	-
%Chg	1.8	3.3	4.8	5.4	5.5	4.6		
February 2017	51.865	54.240	57.355	61.071	64.541	67.383	-	-
%Chg	1.9	4.6	5.7	6.5	5.7	4.4		
November 2017	53.309	54.730	56.670	59.403	62.395	66.027	-	-
%Chg	0.9	2.7	3.5	4.8	5.0	5.8		
February 2018	53.309	54.829	57.437	60.563	64.080	67.663	-	-
%Chg	0.9	2.9	4.8	5.4	5.8	5.6		
November 2018	56.012	58.508	61.006	64.055	68.144	71.850	75.269	78.446
%Chg	3.1	4.5	4.3	5.0	6.4	5.4	4.8	4.2
Minnesota Non-Farm Proprietors' Income								
February 2016	21.107	22.109	22.877	23.607	-	-	-	-
%Chg	3.5	4.7	3.5	3.2				
November 2016	20.761	21.705	22.645	23.381	24.112	25.056	-	-
%Chg	4.0	4.5	4.3	3.2	3.1	3.9		
February 2017	20.735	21.688	22.616	23.345	23.991	24.748	-	-
%Chg	3.8	4.6	4.3	3.2	2.8	3.2		
November 2017	19.511	20.437	21.275	21.955	22.582	23.362	-	-
%Chg	2.9	4.7	4.1	3.2	2.9	3.5		
February 2018	19.511	20.427	21.362	22.386	22.880	23.136	-	-
%Chg	2.9	4.7	4.6	4.8	2.2	1.1		
November 2018	20.944	21.707	22.666	23.528	23.537	23.358	23.148	22.894
%Chg	-2.2	3.6	4.4	3.8	0.0	-0.8	-0.9	-1.1

Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
General Sales Tax (Fiscal Year)										
Minnesota Synthetic Sales Tax Base										
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		
November 2018*	79.835	83.009	81.778	84.611	87.475	91.342	95.257	99.085	102.551	105.200
%Chg	3.1	4.0	-1.5	3.5	3.4**	4.4	4.3	4.0	3.5	2.6
Minnesota's Proxy Share of U.S. Consumer Durable Spending (Excluding Autos)										
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		
November 2018*	13.872	14.526	15.117	15.687	16.588	17.591	18.284	18.835	19.293	19.660
%Chg	2.9	4.7	4.1	3.8	5.7	6.0	3.9	3.0	2.4	1.9
Minnesota's Proxy Share of U.S. Capital Equipment Spending										
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		
November 2018*	14.837	15.354	11.627	11.994	13.095	13.644	14.260	15.022	15.672	16.008
%Chg	2.2	3.5	-24.3	3.2	9.2	4.2	4.5	5.3	4.3	2.1
Minnesota's Proxy Share of U.S. Construction Spending										
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		
November 2018*	6.899	7.727	7.875	8.176	8.697	9.097	9.591	9.932	10.234	10.659
%Chg	14.3	12.0	1.9	3.8	6.4	4.6	5.4	3.6	3.0	4.2

**Historical data revised as a result of comprehensive GDP account revisions*

***4.2 after adjusting for definitional change.*

Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2016	2017	2018	2019	2020	2021	2022	2023
Corporate Franchise Tax (Calendar Year)								
U.S. Corporate Profits (w/ IVA and capital consumption adjustment, less profits from Federal Reserve)								
February 2016	1,857.1	1,970.2	2,020.1	2,036.4	-	-	-	-
%Chg	-0.3	6.1	2.5	0.8				
November 2016	1,791.7	1,903.6	2,024.9	2,048.5	2,063.0	2,124.3	-	-
%Chg	-7.3	6.2	6.4	1.2	0.7	3.0		
February 2017	1,978.9	2,098.0	2,256.0	2,281.3	2,292.1	2,362.7	-	-
%Chg	2.4	6.0	7.5	1.1	0.5	3.1		
November 2017*	1,978.7	2,114.5	2,218.1	2,316.0	2,402.7	2,496.6	-	-
%Chg	0.7	6.9	4.9	4.4	3.7	3.9		
February 2018	1,978.8	2,159.9	2,314.4	2,352.5	2,425.1	2,525.0	-	-
%Chg	0.7	9.2	7.2	1.6	3.1	4.1		
November 2018	1,978.8	2,159.9	2,384.6	2,423.5	2,501.3	2,603.8	2,698.6	2,810.1
%Chg	0.7	9.2	10.4	1.6	3.2	4.1	3.6	4.1
Deed & Mortgage Tax (Fiscal Year)								
U.S. New and Existing Home Sales (Current $ Value)								
February 2016	1,458.2	1,611.1	1,712.1	1,747.0	-	-	-	-
%Chg	8.7	10.5	6.3	2.0				
November 2016	1,467.9	1,594.5	1,676.9	1,735.6	1,791.9	1,858.7	-	-
%Chg	9.4	8.6	5.2	3.5	3.2	3.7		
February 2017	1,467.9	1,578.4	1,667.0	1,727.5	1,772.3	1,848.5	-	-
%Chg	9.4	7.5	5.6	3.6	2.6	4.3		
November 2017	1,464.4	1,601.7	1,672.2	1,829.1	1,919.1	1,986.1	-	-
%Chg	9.3	9.4	4.4	9.4	4.9	3.5		
February 2018	1,464.4	1,601.7	1,695.3	1,852.9	2,005.1	2,163.4	-	-
%Chg	9.3	9.4	5.8	9.3	8.2	7.9		
November 2018	1,463.5	1,601.2	1,668.4	1,613.9	1,817.3	1,941.5	2,014.8	2,089.7
%Chg	9.3	9.4	4.2	-3.3	12.6	6.8	3.8	3.7

Comparison of Actual and Estimated Non-Restricted Revenues

Fiscal Year-to-Date 2019 (July, 2019 to October, 2019)
($ in thousands)

	FORECAST REVENUES	ACTUAL REVENUES	VARIANCE ACT-FCST
Individual Income Tax			
Withholding	2,898,100	2,922,340	24,240
Declarations	471,643	513,601	41,958
Miscellaneous	240,322	253,476	13,154
Gross	3,610,065	3,689,417	79,352
Refund	100,194	68,784	(31,410)
Net	3,509,870	3,620,633	110,763
Corporate Franchise Tax			
Declarations	341,462	455,055	113,593
Miscellaneous	106,726	78,417	(28,309)
Gross	448,188	533,472	85,284
Refund	43,911	20,648	(23,263)
Net	404,277	512,824	108,547
General Sales and Use Tax			
Gross	1,848,291	1,811,913	(36,378)
Mpls. sales tax transferred to MSFA	807	807	1
Sales Tax Gross	1,849,098	1,812,721	(36,377)
Refunds (including Indian refunds)	43,028	29,094	(13,934)
Net	1,806,070	1,783,627	(22,443)
Other Revenues:	-		
Net Estate	43,100	88,750	45,650
Net Liquor/Wine/Beer	24,790	25,027	237
Net Cigarette/Tobacco	150,378	160,579	10,201
Deed and Mortgage	80,140	73,136	(7,004)
Net Insurance Premiums Taxes	96,626	95,543	(1,083)
Net Lawful Gambling	17,359	21,528	4,169
Health Care Surcharge	44,770	44,909	138
Other Taxes	-	2,238	2,238
Statewide Property Tax	187,589	170,965	(16,624)
DHS SOS Collections	23,833	26,964	3,130
Investment Income	8,667	21,592	12,926
Tobacco Settlement	100	100	-
Dept. Earnings & MSOP Recov.	51,806	54,393	2,587
Fines and Surcharges	9,642	17,666	8,024
Lottery Revenues	13,173	12,666	(507)
Revenues yet to be allocated	-	(5,866)	(5,866)
Residual Revenues	12,491	78,393	65,902
County Nursing Home, Pub Hosp IGT	-	-	-
Other Subtotal	764,465	888,582	124,117
Other Refunds	1,826	967	(859)
Other Net	762,639	887,614	124,976
Total Gross	**6,671,816**	**6,924,192**	**252,376**
Total Refunds	**188,960**	**119,493**	**(69,466)**
Total Net	**6,482,856**	**6,804,699**	**321,843**

FY 2018 Close
November 2018 General Fund Forecast

($ in thousands)

	End of 2018 Session FY 2018	Actuals FY 2018	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,333,262	0
Current Resources:			
Tax Revenues	20,927,502	21,247,679	320,177
Non-Tax Revenues	758,193	814,026	55,833
Subtotal - Non-Dedicated Revenue	21,685,695	22,061,705	376,010
Dedicated Revenue	594	1,099	505
Transfers In	153,716	161,151	7,435
Prior Year Adjustments	26,816	72,968	46,152
Subtotal - Other Revenue	181,126	235,218	54,092
Subtotal-Current Resources	21,866,821	22,296,923	430,102
Total Resources Available	**25,200,083**	**25,630,185**	**430,102**
Actual & Estimated Spending			
E-12 Education	9,274,878	9,233,048	-41,830
Higher Education	1,653,917	1,651,198	-2,719
Property Tax Aids & Credits	1,733,795	1,723,701	-10,094
Health & Human Services	6,697,113	6,621,621	-75,492
Public Safety & Judiciary	1,168,904	1,126,081	-42,823
Transportation	162,082	158,052	-4,030
Environment	194,511	185,851	-8,660
Agriculture	63,575	60,246	-3,329
Jobs, Economic Development, Housing & Commerce	299,932	275,394	-24,538
State Government & Veterans	759,555	622,626	-136,929
Debt Service	563,123	563,123	0
Capital Projects & Grants	128,874	126,217	-2,657
Other	0	47	47
Estimated Cancellations	-5,000	0	5,000
Total Expenditures & Transfers	**22,695,259**	**22,347,205**	**-348,054**
Balance Before Reserves	**2,504,824**	**3,282,980**	**778,156**
Cash Flow Account	350,000	350,000	0
Budget Reserve	1,608,364	1,698,247	89,883
Stadium Reserve	39,608	44,171	4,563
Appropriations Carried Forward	0	211,578	211,578
Budgetary Balance	**506,852**	**978,984**	**472,132**

FY 2018-19 Annual General Fund Budget
November 2018 Forecast by Fiscal Year

($ in thousands)

	November FY 2018	November FY 2019	Biennial Total FY 2018-19
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,282,980	3,333,262
Current Resources:			
Tax Revenues	21,247,679	22,142,559	43,390,238
Non-Tax Revenues	814,026	788,992	1,603,018
Subtotal - Non-Dedicated Revenue	22,061,705	22,931,551	44,993,256
Dedicated Revenue	1,099	0	1,099
Transfers In	161,151	154,884	316,035
Prior Year Adjustments	72,968	26,612	99,580
Subtotal - Other Revenue	235,218	181,496	416,714
Subtotal-Current Resources	22,296,923	23,113,047	45,409,970
Total Resources Available	**25,630,185**	**26,396,027**	**48,743,232**
Actual & Estimated Spending			
E-12 Education	9,233,048	9,611,663	18,844,711
Higher Education	1,651,198	1,638,894	3,290,092
Property Tax Aids & Credits	1,723,701	1,940,318	3,664,019
Health & Human Services	6,621,621	6,781,699	13,403,320
Public Safety & Judiciary	1,126,081	1,211,911	2,337,992
Transportation	158,052	183,414	341,466
Environment	185,851	170,987	356,838
Agriculture	60,246	66,293	126,539
Jobs, Economic Development, Housing & Commerce	275,394	286,385	561,779
State Government & Veterans	622,626	607,280	1,229,906
Debt Service	563,123	549,785	1,112,908
Capital Projects & Grants	126,217	168,298	294,515
Other	47	0	47
Estimated Cancellations	0	-15,000	-15,000
Total Expenditures & Transfers	**22,347,205**	**23,201,927**	**45,549,132**
Balance Before Reserves	**3,282,980**	**3,194,100**	**3,194,100**
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,698,247	2,074,733	2,074,733
Stadium Reserve	44,171	49,660	49,660
Appropriations Carried Forward	211,578	0	0
Budgetary Balance	**978,984**	**719,707**	**719,707**

FY 2018-19 General Fund Budget
November 2018 Forecast vs. Enacted Budget
($ in thousands)

	End of 2018 Session FY 2018-19	November FY 2018-19	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,333,262	0
Current Resources:			
Tax Revenues	42,963,853	43,390,238	426,385
Non-Tax Revenues	1,475,227	1,603,018	127,791
Subtotal - Non-Dedicated Revenue	44,439,080	44,993,256	554,176
Dedicated Revenue	1,205	1,099	-106
Transfers In	307,396	316,035	8,639
Prior Year Adjustments	53,335	99,580	46,245
Subtotal - Other Revenue	361,936	416,714	54,778
Subtotal-Current Resources	44,801,016	45,409,970	608,954
Total Resources Available	**48,134,278**	**48,743,232**	**608,954**
Actual & Estimated Spending			
E-12 Education	18,846,201	18,844,711	-1,490
Higher Education	3,282,324	3,290,092	7,768
Property Tax Aids & Credits	3,652,926	3,664,019	11,093
Health & Human Services	13,619,413	13,403,320	-216,093
Public Safety & Judiciary	2,339,800	2,337,992	-1,808
Transportation	340,801	341,466	665
Environment	355,522	356,838	1,316
Agriculture	125,633	126,539	906
Jobs, Economic Development, Housing & Commerce	552,621	561,779	9,158
State Government & Veterans	1,323,583	1,229,906	-93,677
Debt Service	1,138,524	1,112,908	-25,616
Capital Projects & Grants	298,208	294,515	-3,693
Other	0	47	47
Estimated Cancellations	-20,000	-15,000	5,000
Total Expenditures & Transfers	**45,855,556**	**45,549,132**	**-306,424**
Balance Before Reserves	**2,278,722**	**3,194,100**	**915,378**
Cash Flow Account	350,000	350,000	0
Budget Reserve	1,583,364	2,074,733	491,369
Stadium Reserve	57,638	49,660	-7,978
Appropriations Carried Forward	0	0	0
Budgetary Balance	**287,720**	**719,707**	**431,987**

FY 2020-21 Annual General Fund Budget
November 2018 Forecast
($ in thousands)

	November FY 2020	November FY 2021	Biennial Total FY 2020-21
Actual & Estimated Resources			
Balance Forward From Prior Year	3,194,100	3,329,713	3,194,100
Current Resources:			
Tax Revenues	22,787,666	23,699,566	46,487,232
Non-Tax Revenues	738,940	731,864	1,470,804
Subtotal - Non-Dedicated Revenue	23,526,606	24,431,430	47,958,036
Dedicated Revenue	0	0	0
Transfers In	152,614	152,611	305,225
Prior Year Adjustments	26,405	37,045	63,450
Subtotal - Other Revenue	179,019	189,656	368,675
Subtotal-Current Resources	23,705,625	24,621,086	48,326,711
Total Resources Available	**26,899,725**	**27,950,799**	**51,520,811**
Actual & Estimated Spending			
E-12 Education	9,718,393	9,882,266	19,600,659
Higher Education	1,627,914	1,627,914	3,255,828
Property Tax Aids & Credits	1,809,339	1,900,348	3,709,687
Health & Human Services	7,445,445	7,459,151	14,904,596
Public Safety & Judiciary	1,173,881	1,176,821	2,350,702
Transportation	123,706	123,749	247,455
Environment	162,152	162,070	324,222
Agriculture	61,126	61,126	122,252
Jobs, Economic Development, Housing & Commerce	185,937	200,427	386,364
State Government & Veterans	551,787	547,588	1,099,375
Debt Service	584,773	614,437	1,199,210
Capital Projects & Grants	130,559	142,952	273,511
Estimated Cancellations	-5,000	-15,000	-20,000
Total Expenditures & Transfers	**23,570,012**	**23,883,849**	**47,453,861**
Balance Before Reserves	**3,329,713**	**4,066,950**	**4,066,950**
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	2,074,733	2,074,733	2,074,733
Stadium Reserve	62,270	98,362	98,362
Appropriations Carried Forward	0	0	0
Budgetary Balance	**842,710**	**1,543,855**	**1,543,855**

Biennial Comparison
Current vs. Next Biennium, November 2018 Forecast
($ in thousands)

	November FY 2018-19	November FY 2020-21	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,194,100	-139,162
Current Resources:			
Tax Revenues	43,390,238	46,487,232	3,096,994
Non-Tax Revenues	1,603,018	1,470,804	-132,214
Subtotal - Non-Dedicated Revenue	44,993,256	47,958,036	2,964,780
Dedicated Revenue	1,099	0	-1,099
Transfers In	316,035	305,225	-10,810
Prior Year Adjustments	99,580	63,450	-36,130
Subtotal - Other Revenue	416,714	368,675	-48,039
Subtotal-Current Resources	45,409,970	48,326,711	2,916,741
Total Resources Available	**48,743,232**	**51,520,811**	**2,777,579**
Actual & Estimated Spending			
E-12 Education	18,844,711	19,600,659	755,948
Higher Education	3,290,092	3,255,828	-34,264
Property Tax Aids & Credits	3,664,019	3,709,687	45,668
Health & Human Services	13,403,320	14,904,596	1,501,276
Public Safety & Judiciary	2,337,992	2,350,702	12,710
Transportation	341,466	247,455	-94,011
Environment	356,838	324,222	-32,616
Agriculture	126,539	122,252	-4,287
Jobs, Economic Development, Housing & Commerce	561,779	386,364	-175,415
State Government & Veterans	1,229,906	1,099,375	-130,531
Debt Service	1,112,908	1,199,210	86,302
Capital Projects & Grants	294,515	273,511	-21,004
Other	47	0	-47
Estimated Cancellations	-15,000	-20,000	-5,000
Total Expenditures & Transfers	**45,549,132**	**47,453,861**	**1,904,729**
Balance Before Reserves	**3,194,100**	**4,066,950**	**872,850**
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,074,733	2,074,733	0
Stadium Reserve	49,660	98,362	48,702
Appropriations Carried Forward	0	0	0
Budgetary Balance	**719,707**	**1,543,855**	**824,148**

FY 2020-21 General Fund Budget
November 2018 Forecast vs. Enacted Budget
($ in thousands)

	End of 2018 Session FY 2020-21	November FY 2020-21	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	2,278,722	3,194,100	915,378
Current Resources:			
Tax Revenues	46,360,377	46,487,232	126,855
Non-Tax Revenues	1,403,941	1,470,804	66,863
Subtotal - Non-Dedicated Revenue	47,764,318	47,958,036	193,718
Dedicated Revenue	1,222	0	-1,222
Transfers In	307,674	305,225	-2,449
Prior Year Adjustments	63,107	63,450	343
Subtotal - Other Revenue	372,003	368,675	-3,328
Subtotal-Current Resources	48,136,321	48,326,711	190,390
Total Resources Available	**50,415,043**	**51,520,811**	**1,105,768**
Actual & Estimated Spending			
E-12 Education	19,614,795	19,600,659	-14,136
Higher Education	3,255,828	3,255,828	0
Property Tax Aids & Credits	3,645,269	3,709,687	64,418
Health & Human Services	15,421,573	14,904,596	-516,977
Public Safety & Judiciary	2,379,297	2,350,702	-28,595
Transportation	247,160	247,455	295
Environment	323,296	324,222	926
Agriculture	122,252	122,252	0
Jobs, Economic Development, Housing & Commerce	403,409	386,364	-17,045
State Government & Veterans	1,094,130	1,099,375	5,245
Debt Service	1,180,917	1,199,210	18,293
Capital Projects & Grants	274,646	273,511	-1,135
Estimated Cancellations	-20,000	-20,000	0
Total Expenditures & Transfers	**47,942,572**	**47,453,861**	**-488,711**
Balance Before Reserves	**2,472,471**	**4,066,950**	**1,594,479**
Cash Flow Account	350,000	350,000	0
Budget Reserve	1,583,364	2,074,733	491,369
Stadium Reserve	120,177	98,362	-21,815
Appropriations Carried Forward	0	0	0
Budgetary Balance	**418,930**	**1,543,855**	**1,124,925**

FY 2022-23 General Fund Budget
November 2018 Forecast
($ in thousands)

	November FY 2022	November FY 2023	Biennial Total FY 2022-23
Actual & Estimated Resources			
Balance Forward From Prior Year	4,066,950	4,259,363	4,066,950
Current Resources:			
Tax Revenues	24,281,553	24,880,795	49,162,348
Non-Tax Revenues	720,808	715,968	1,436,776
Subtotal - Non-Dedicated Revenue	25,002,361	25,596,763	50,599,124
Dedicated Revenue	0	0	0
Transfers In	30,689	30,771	61,460
Prior Year Adjustments	37,243	37,243	74,486
Subtotal - Other Revenue	67,932	68,014	135,946
Subtotal-Current Resources	25,070,293	25,664,777	50,735,070
Total Resources Available	**29,137,243**	**29,924,140**	**54,802,020**
Actual & Estimated Spending			
E-12 Education	10,059,003	10,221,644	20,280,647
Higher Education	1,627,914	1,627,914	3,255,828
Property Tax Aids & Credits	1,925,773	1,956,030	3,881,803
Health & Human Services	8,212,617	8,563,564	16,776,181
Public Safety & Judiciary	1,174,453	1,176,184	2,350,637
Transportation	123,792	123,792	247,584
Environment	162,118	162,118	324,236
Agriculture	61,126	61,126	122,252
Jobs, Economic Development, Housing & Commerce	203,755	209,197	412,952
State Government & Veterans	546,265	548,197	1,094,462
Debt Service	639,147	619,201	1,258,348
Capital Projects & Grants	146,917	146,777	293,694
Estimated Cancellations	-5,000	-15,000	-20,000
Total Expenditures & Transfers	**24,877,880**	**25,400,744**	**50,278,624**
Balance Before Reserves	**4,259,363**	**4,523,396**	**4,523,396**
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	2,074,733	2,074,733	2,074,733
Stadium Reserve	142,090	193,142	193,142
Appropriations Carried Forward	0	0	0
Budgetary Balance	**1,692,540**	**1,905,521**	**1,905,521**

Biennial Comparison
FY 2020-21 vs. FY 2022-23 November 2018 Forecast
($ in thousands)

	November FY 2020-21	November FY 2022-23	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,194,100	4,066,950	872,850
Current Resources:			
Tax Revenues	46,487,232	49,162,348	2,675,116
Non-Tax Revenues	1,470,804	1,436,776	-34,028
Subtotal - Non-Dedicated Revenue	47,958,036	50,599,124	2,641,088
Dedicated Revenue	0	0	0
Transfers In	305,225	61,460	-243,765
Prior Year Adjustments	63,450	74,486	11,036
Subtotal - Other Revenue	368,675	135,946	-232,729
Subtotal-Current Resources	48,326,711	50,735,070	2,408,359
Total Resources Available	**51,520,811**	**54,802,020**	**3,281,209**
Actual & Estimated Spending			
E-12 Education	19,600,659	20,280,647	679,988
Higher Education	3,255,828	3,255,828	0
Property Tax Aids & Credits	3,709,687	3,881,803	172,116
Health & Human Services	14,904,596	16,776,181	1,871,585
Public Safety & Judiciary	2,350,702	2,350,637	-65
Transportation	247,455	247,584	129
Environment	324,222	324,236	14
Agriculture	122,252	122,252	0
Jobs, Economic Development, Housing & Commerce	386,364	412,952	26,588
State Government & Veterans	1,099,375	1,094,462	-4,913
Debt Service	1,199,210	1,258,348	59,138
Capital Projects & Grants	273,511	293,694	20,183
Estimated Cancellations	-20,000	-20,000	0
Total Expenditures & Transfers	**47,453,861**	**50,278,624**	**2,824,763**
Balance Before Reserves	**4,066,950**	**4,523,396**	**456,446**
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,074,733	2,074,733	0
Stadium Reserve	98,362	193,142	94,780
Appropriations Carried Forward	0	0	0
Budgetary Balance	**1,543,855**	**1,905,521**	**361,666**

FY 2018-23 Planning Horizon
November 2018 Forecast

($ in thousands)

	November FY 2018-19	November FY 2020-21	November FY 2022-23
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,194,100	4,066,950
Current Resources:			
Tax Revenues	43,390,238	46,487,232	49,162,348
Non-Tax Revenues	1,603,018	1,470,804	1,436,776
Subtotal - Non-Dedicated Revenue	44,993,256	47,958,036	50,599,124
Dedicated Revenue	1,099	0	0
Transfers In	316,035	305,225	61,460
Prior Year Adjustments	99,580	63,450	74,486
Subtotal - Other Revenue	416,714	368,675	135,946
Subtotal-Current Resources	45,409,970	48,326,711	50,735,070
Total Resources Available	**48,743,232**	**51,520,811**	**54,802,020**
Actual & Estimated Spending			
E-12 Education	18,844,711	19,600,659	20,280,647
Higher Education	3,290,092	3,255,828	3,255,828
Property Tax Aids & Credits	3,664,019	3,709,687	3,881,803
Health & Human Services	13,403,320	14,904,596	16,776,181
Public Safety & Judiciary	2,337,992	2,350,702	2,350,637
Transportation	341,466	247,455	247,584
Environment	356,838	324,222	324,236
Agriculture	126,539	122,252	122,252
Jobs, Economic Development, Housing & Commerce	561,779	386,364	412,952
State Government & Veterans	1,229,906	1,099,375	1,094,462
Debt Service	1,112,908	1,199,210	1,258,348
Capital Projects & Grants	294,515	273,511	293,694
Other	47	0	0
Estimated Cancellations	-15,000	-20,000	-20,000
Total Expenditures & Transfers	**45,549,132**	**47,453,861**	**50,278,624**
Balance Before Reserves	**3,194,100**	**4,066,950**	**4,523,396**
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	2,074,733	2,074,733	2,074,733
Stadium Reserve	49,660	98,362	193,142
Appropriations Carried Forward	0	0	0
Budgetary Balance	**719,707**	**1,543,855**	**1,905,521**

Historical and Projected Revenue Growth
November 2018 Forecast - General Fund
($ in millions)

	Actual FY 2016	Actual FY 2017	Actual FY 2018	Fcst FY 2019	Fcst FY 2020	Fcst FY 2021	Plng FY 2022	Plng FY 2023	Average Annual
Individual Income Tax	$10,739	$10,931	$11,784	$12,350	$12,834	$13,442	$13,708	$14,050	
$ change	335	192	852	566	484	608	266	342	
% change	**3.2%**	**1.8%**	**7.8%**	**4.8%**	**3.9%**	**4.7%**	**2.0%**	**2.5%**	**3.9%**
Sales Tax	$5,233	$5,405	$5,453	$5,690	$5,870	$6,152	$6,403	$6,585	
$ change	101	172	48	237	181	281	251	182	
% change	**2.0%**	**3.3%**	**0.9%**	**4.3%**	**3.2%**	**4.8%**	**4.1%**	**2.8%**	**3.3%**
Corporate Tax	$1,473	$1,205	$1,315	$1,389	$1,330	$1,320	$1,347	$1,383	
$ change	18	(268)	109	74	(58)	(10)	27	36	
% change	**1.2%**	**-18.2%**	**9.1%**	**5.6%**	**-4.2%**	**-0.8%**	**2.0%**	**2.7%**	**-0.9%**
Statewide Property Tax	$854	$858	$811	$808	$821	$817	$817	$817	
$ change	16	4	(47)	(4)	13	(4)	(0)	0	
% change	**1.9%**	**0.5%**	**-5.5%**	**-0.5%**	**1.6%**	**-0.4%**	**0.0%**	**0.0%**	**-0.6%**
Other Tax Revenue	$1,812	$1,833	$1,885	$1,906	$1,932	$1,969	$2,006	$2,046	
$ change	53	21	53	21	26	37	37	40	
% change	**3.0%**	**1.1%**	**2.9%**	**1.1%**	**1.3%**	**1.9%**	**1.9%**	**2.0%**	**1.8%**
Total Tax Revenue	$20,110	$20,233	$21,248	$22,143	$22,788	$23,700	$24,282	$24,881	
$ change	524	122	1,015	895	645	912	582	599	
% change	**2.7%**	**0.6%**	**5.0%**	**4.2%**	**2.9%**	**4.0%**	**2.5%**	**2.5%**	**3.1%**
Non-Tax Revenues	$779	$819	$814	$789	$739	$732	$721	$716	
$ change	27	40	(5)	(25)	(50)	(7)	(11)	(5)	
% change	**3.5%**	**5.1%**	**-0.6%**	**-3.1%**	**-6.3%**	**-1.0%**	**-1.5%**	**-0.7%**	**-1.2%**
Transfers, All Other	$262	$282	$235	$181	$179	$190	$68	$68	
$ change	91	20	(47)	(54)	(2)	11	(122)	0	
% change	**53.6%**	**7.8%**	**-16.6%**	**-22.8%**	**-1.4%**	**5.9%**	**-64.2%**	**0.1%**	**-17.5%**
Total Revenue	$21,151	$21,334	$22,297	$23,113	$23,706	$24,621	$25,070	$25,665	
$ change	642	182	963	816	593	915	449	594	
% change	**3.1%**	**0.9%**	**4.5%**	**3.7%**	**2.6%**	**3.9%**	**1.8%**	**2.4%**	**2.8%**

Historical and Projected Spending Growth
November 2018 Forecast - General Fund
($ in millions)

	Actual FY 2016	Actual FY 2017	Actual FY 2018	Fcst FY 2019	Fcst FY 2020	Fcst FY 2021	Plng FY 2022	Plng FY 2023	Average Annual
E-12 Education	$8,507	$8,901	$9,233	$9,612	$9,718	$9,882	$10,059	$10,222	
$ change	319	394	332	379	107	164	177	163	
% change	**3.9%**	**4.6%**	**3.7%**	**4.1%**	**1.1%**	**1.7%**	**1.8%**	**1.6%**	**2.7%**
Higher Education	$1,529	$1,556	$1,651	$1,639	$1,628	$1,628	$1,628	$1,628	
$ change	77	27	95	(12)	(11)	-	-	-	
% change	**5.3%**	**1.7%**	**6.1%**	**-0.7%**	**-0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.9%**
Prop. Tax Aids & Credits	$1,646	$1,675	$1,724	$1,940	$1,809	$1,900	$1,926	$1,956	
$ change	33	29	49	217	(131)	91	25	30	
% change	**2.1%**	**1.8%**	**2.9%**	**12.6%**	**-6.8%**	**5.0%**	**1.3%**	**1.6%**	**2.5%**
Health & Human Services	$5,601	$5,944	$6,622	$6,782	$7,445	$7,459	$8,213	$8,564	
$ change	(590)	343	678	160	664	14	753	351	
% change	**-9.5%**	**6.1%**	**11.4%**	**2.4%**	**9.8%**	**0.2%**	**10.1%**	**4.3%**	**6.3%**
Public Safety & Judiciary	$1,041	$1,133	$1,126	$1,212	$1,174	$1,177	$1,174	$1,176	
$ change	6	92	(7)	86	(38)	3	(2)	2	
% change	**0.6%**	**8.9%**	**-0.6%**	**7.6%**	**-3.1%**	**0.3%**	**-0.2%**	**0.1%**	**1.8%**
Debt Service	$609	$529	$563	$550	$585	$614	$639	$619	
$ change	(14)	(80)	34	(13)	35	30	25	(20)	
% change	**-2.3%**	**-13.1%**	**6.4%**	**-2.4%**	**6.4%**	**5.1%**	**4.0%**	**-3.1%**	**0.2%**
All Other	$1,218	$1,300	$1,428	$1,468	$1,210	$1,223	$1,239	$1,236	
$ change	28	82	128	39	(257)	13	16	(3)	
% change	**2.4%**	**6.8%**	**9.9%**	**2.7%**	**-17.5%**	**1.0%**	**1.3%**	**-0.2%**	**0.2%**
Total Spending	$20,152	$21,039	$22,347	$23,202	$23,570	$23,884	$24,878	$25,401	
$ change	(141)	887	1,308	855	368	314	994	523	
% change	**-0.7%**	**4.4%**	**6.2%**	**3.8%**	**1.6%**	**1.3%**	**4.2%**	**2.1%**	**3.4%**