



# **BUDGET AND ECONOMIC FORECAST**



**DECEMBER 2019**

Produced by Minnesota Management and Budget



Photo courtesy of Twin Cities In Motion

This page left blank intentionally

---

## Statutory Provisions

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

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

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

## Notes

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

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

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

---

This page left blank intentionally.



## TABLE OF CONTENTS

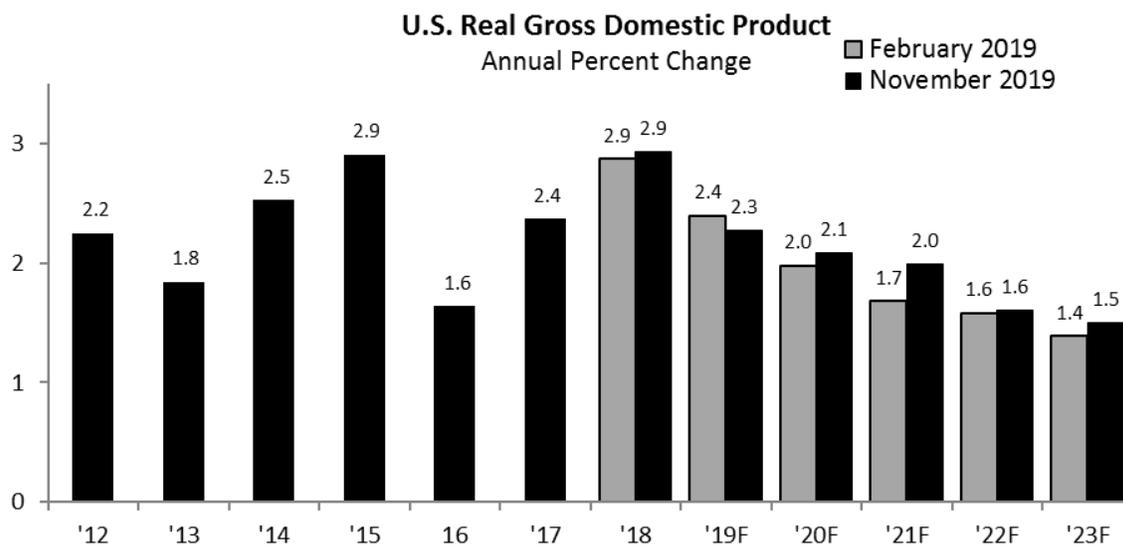
<b>TABLE OF CONTENTS</b>	<b>iii</b>
<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>ECONOMIC OUTLOOK</b>	<b>10</b>
U.S. Economic Outlook	10
Minnesota Economic Outlook	17
Council of Economic Advisors' Statement	32
<b>BUDGET OUTLOOK</b>	<b>35</b>
Closed Biennium	35
Current Biennium	36
Planning Estimates	41
<b>REVENUE OUTLOOK</b>	<b>43</b>
Current Biennium	43
Planning Estimates	48
<b>EXPENDITURE OUTLOOK</b>	<b>50</b>
Closed Biennium	50
Current Biennium	50
Planning Estimates	55
<b>APPENDIX</b>	<b>58</b>



## EXECUTIVE SUMMARY

Minnesota’s budget and economic outlook has improved since the end of the 2019 legislative special session. A better than expected close to the last biennium, an improved revenue forecast, and a small decrease to estimated spending create a forecast surplus of \$1.332 billion in the FY 2020-21 biennium. The stable budget outlook allows for an automatic allocation to the budget reserve account, bringing the reserve balance to its statutory target level of \$2.359 billion. While Minnesota’s economy and revenues continue to grow into the FY 2022-23 planning estimates, budget challenges remain for that biennium.

**U.S. Economic Outlook.** The outlook for U.S. economic growth has improved since Minnesota’s *Budget and Economic Forecast* was prepared in February 2019, while the pattern of slowing growth through our planning horizon carries over from the prior forecast.



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

*Annual real GDP growth rates decline each year from 2019 to 2023. This trend is consistent with the expectation of continued, but slowing, growth in employment and labor force. The annual growth rate decelerates from 2.3 percent in 2019 to 1.5 percent in 2023. The relatively high 2.9 percent growth rate in 2018 reflects fiscal stimulus from the Tax Cuts and Job Act (TCJA).*

Real consumer spending is supporting growth in the near term, as consumer confidence is buoyed by low interest rates and recent gains in wealth, employment, and compensation. But, IHS expects annual real GDP growth to slow from 2.3 percent in 2019 to 2.1 percent in 2020. The downshift continues, with annual real GDP growth expected to decelerate to 1.5 percent in 2023. This occurs

as the contribution to growth from federal fiscal stimulus declines, tariffs and trade policy uncertainty undermine business investment, interest rates rise, and growth in household wealth slows. After mid-2020, a demographically driven decline in the labor force participation rate is expected to be a drag on growth.

The November IHS outlook includes all U.S. and retaliatory tariffs imposed to date, including a 25 percent tariff on 44 percent of goods imported from China and a 15 percent tariff on most of the remaining imports from China. The U.S. tariffs are being implemented in two steps, the first on September 1, 2019 and the second effective December 15, 2019. Unlike the initial tariffs on \$250 billion of Chinese goods implemented in 2018 (approximately 50 percent of all goods imported from China), these tariffs target consumer goods and will likely result in higher prices for a range of products, including clothing, toys, and electronics. The possible implementation of a phase-one agreement between the U.S. and China provides upside risk to this forecast.

IHS expects consumer spending to remain the primary contributor to growth in the economy, even as the pace of spending eventually slows. Upward revisions in the underlying data on household wealth raise the IHS consumer spending forecast relative to February. Additionally, stronger projected spending growth is supported by rising incomes, rising household wealth, falling gas prices, and a lower interest rate path. Consumer mood, measured by consumer confidence and sentiment indices, can help sustain consumer spending if those indices remain at or above pre-recession levels.

The U.S. unemployment rate rose from 3.5 percent in September to 3.6 percent in October. The slight uptick in the unemployment rate reflects new workers being drawn into the labor force. Strong demand for workers has tightened the national labor market. Since September 2018, there have been 0.8 unemployed job-seekers for each job vacancy nationwide, the lowest value for this ratio since the series began in 2000.

The U.S. added an average of 167,000 new jobs per month in 2019. In October, U.S. employers added 128,000 jobs, a light number due to the temporary loss of 41,600 jobs due to the six-week-long GM strike. The forecast for 2019 employment growth has improved since February, from 1.5 percent to 1.6 percent. IHS expects annual employment growth to slow from 1.6 percent this year to 1.2 percent in 2020. 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 0.8 percent in 2021, 0.4 percent in 2022 and 0.1 percent in 2023.

IHS expects the contribution of net exports to real GDP to represent a 0.1 to 0.3 percent drag to annual GDP growth through the forecast horizon. However, IHS expects a surge in exports in the first quarter of 2020 when exports of the Boeing 737 MAX resume. After this point, the declining trend in net exports is expected to continue almost every quarter through 2024. Real exports of petroleum have increased, while real imports of petroleum decreased. These trends are expected to continue as net exports of petroleum turn positive by late 2022.

IHS expects a decline in manufacturing employment in years 2020 through 2023, which will restrain overall employment growth. Manufacturing output has declined since the fourth quarter of 2018 and is expected to continue to decline through the second quarter of 2020. This softness in manufacturing reflects slowing global trade, excessive inventory building, and a drag on exports from a strong U.S. dollar.

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 2.3 percent in 2019, consistent with the IHS forecast of 2.3 percent. For 2020, the IHS expects slightly higher growth than other forecasters: 2.1 percent compared to 1.8 percent for the Blue Chip Consensus.

**Minnesota Economic Outlook.** Minnesota's steady economic performance continues, as the U.S. expansion surpasses record length. Statewide, low unemployment and strong demand for workers support growth in total Minnesota wage income and wages per worker. However, the pace of job gains has slowed, reflecting the limit set by labor force growth that is forecast to decelerate amid ongoing baby boomer retirements. Across the state, job vacancies are at high levels, and employers and job-seekers are seeking creative ways to match people to jobs.

As a result of slowing employment growth, 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. We expect that slowing annual employment growth, combined with a moderate acceleration in wages per worker, will lead total wage and salary income to grow at rates of 4.1 and 4.2 percent per year in 2019 and 2020, followed by 4.1, 4.2 and 4.1 percent in years 2021, 2022, and 2023, respectively. 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.

Throughout the current U.S. expansion, Minnesota has continued to add jobs and sustain a state unemployment rate below the U.S. rate. However, the gap between the state and national unemployment rates has narrowed over the last year. While the U.S. rate fell to a 50-year low of 3.5 percent in September, Minnesota's has been drifting upward. Minnesota's rate reached an 18-year low of 2.8 percent in June 2018. It began gradually rising a year ago, reaching to the current rate of 3.2 percent. In addition, the rate of job growth is slowing. Between 2011 and 2017, Minnesota added an average of 42,000 jobs per year. In 2018, Minnesota added about half that many, and we expect a similar number in 2019.

Given the state's tight labor market, improvements in both migration to the state and household formations represent bright spots for Minnesota's economic outlook. Between 2010 and 2017, the state added an average of about 10,000 new households per year, much lower than the pre-recession ten-year average of 24,500. But 2018 marked a spike in Minnesota household formations, with an addition of 32,000 new households. This growth coincided with two years of positive net domestic migration to Minnesota, reversing a 15-year trend of Minnesota seeing a net annual loss of residents to other states. Positive domestic net migration combined with positive international net migration to make 2017 the largest year for net migration to Minnesota in nearly three decades.

Robust demand for workers and low unemployment define Minnesota's current, tight labor market. Statewide, there have been fewer unemployed job-seekers than open positions for the past 30 months. In the second quarter of 2019 there were 0.7 unemployed persons for each vacancy statewide. In contrast, at the peak of the 2007-09 recession, there were nearly seven unemployed persons for each job opening. One year ago, there were 0.6 unemployed persons for each vacancy, slightly lower than the current ratio. This occurs as the number of unemployed persons has increased over the year along with the number of job vacancies. Employers across the state reported 146,513 job vacancies, and the job vacancy rate is now 5.3 percent (5.3 openings per 100 jobs), the highest level for this series (which originates in 2001). The median hourly wage offer for these vacancies was \$15.00, up from \$14.54 one year ago. The tight labor market is being felt across the state, as both the Twin Cities and Greater Minnesota have a ratio of less than one unemployed persons to every job vacancy. The ratio is 0.6 in the Twin Cities and 0.8 in Greater Minnesota.

**Budget Update: Closed Biennium.** In August, the books were officially closed for the fiscal year and biennium that ended June 30, 2019. The FY 2018-19 biennium ended with a general fund balance of \$1.421 billion, \$815 million higher than estimated at the end of the 2019 legislative sessions. The closing balance at the end of the biennium represents "money in the bank" available as a resource for the FY 2020-21 biennium.

**Closed Biennium: FY 2018-19 General Fund Budget  
End-of-Session vs. Actual Comparison**

(\$ in millions)	End-of-Session	Actual	\$ Change	% Change
<b>Beginning Balance</b>	<b>\$3,333</b>	<b>\$3,333</b>	\$ -	0.0%
Revenues	45,328	46,039	801	1.8
Expenditures	45,491	45,401	(90)	(0.2)
Budget Reserve	2,075	2,075	-	
Cash Flow Account	350	350	-	
Stadium Reserve	50	55	5	
Appropriation Carryforward	0	71	71	
<b>Budgetary Balance</b>	<b>\$606</b>	<b>\$1,421</b>	<b>\$815</b>	

**Budget Outlook: Current Biennium.** The higher than expected incoming balance from the closed biennium, combined with an increased revenue forecast, slightly decreased spending estimates and an increased allocation to the stadium reserve results in a forecast balance of \$1.616 billion. Statute however allocates a portion of any November forecast balance to the budget reserve account until the statutorily defined target is met. With this forecast, \$284 million is allocated to the budget reserve, bringing it to the target level of \$2.359 billion. After this reserve allocation, the available general fund balance for the FY 2020-21 biennium is now \$1.332 billion.

**Current Biennium: FY 2020-21 General Fund Budget  
Change from End-of-Session Estimates**

(\$ in millions)	End of Session	November 2019 Forecast	\$ Change
<b>Beginning Balance</b>	<b>\$3,080</b>	<b>\$3,971</b>	<b>\$891</b>
Forecast Revenues	48,155	48,656	501
Projected Spending	48,470	48,463	(7)
Budget Reserve	2,075	2,075	-
Cash Flow Account	350	350	-
Stadium Reserve	98	124	25
<b>Forecast Balance</b>	<b>\$242</b>	<b>\$1,616</b>	<b>\$1,374</b>
33% to Budget Reserve or up to target	-	284	284
<b>Budgetary Balance</b>	<b>\$242</b>	<b>\$1,332</b>	<b>\$1,090</b>

*Revenues.* Total general fund revenues for FY 2020-21 are now forecast to be \$48.656 billion, \$501 million (1.0 percent) more than the end of session estimates. Total tax revenues for the biennium are forecast to be \$46.580 billion, \$457 million (1.0 percent) above the prior estimate. Higher expected individual, sales, and other tax revenue more than offset a lower forecast for corporate tax revenue.

**Current Biennium: FY 2020-21 General Fund Revenues  
End-of-Session vs. November 2019 Forecast Comparison**

(\$ in millions)	End-of-Session	November 2019 Forecast	\$ Change	% Change
Individual Income Tax	\$25,547	\$26,039	\$493	1.9%
General Sales Tax	11,873	12,125	252	2.1
Corporate Franchise Tax	3,190	2,897	(294)	(9.2)
State General Property Tax	1,561	1,561	1	0.0
Other Tax Revenue	3,952	3,958	6	0.2
<b>Total Tax Revenues</b>	<b>\$46,123</b>	<b>46,580</b>	<b>457</b>	<b>1.0%</b>
Non-Tax Revenues	1,500	1,557	57	3.8
Other Resources	532	520	(13)	(2.4)
<b>Total Revenues</b>	<b>\$48,156</b>	<b>\$48,656</b>	<b>\$501</b>	<b>1.0%</b>

Individual income tax receipts in the current biennium are now forecast to be \$493 million (1.9 percent) more than end of session estimates. The increase is due to a higher estimate of tax liability for TY 2018, the base year for this forecast, and higher forecast growth in non-wage income.

General sales tax revenue in FY 2020-21 is now forecast to be \$252 million (2.1 percent) more than the prior estimate. A higher forecast for gross sales tax receipts and a lower forecast of tax refunds both contributed to the change. The increased forecast for gross sales tax receipts reflects

higher than expected gross receipts so far in FY 2020 and a higher forecast for taxable sales compared to February. Sales tax payments associated with the U.S. Supreme Court decision in *South Dakota v. Wayfair* raise the starting point for this forecast and the assumed growth rate in gross sales tax receipts.

The corporate franchise tax is forecast to generate \$2.897 billion in FY 2020-21, \$294 million (9.2 percent) less than the prior estimate. So far in FY 2020, net receipts are below the law-change-adjusted prior forecast. The lower base combines with a reduced near-term forecast for corporate profits to bring down the current biennium net corporate tax receipts forecast.

Total revenues for FY 2022-23 are now estimated to be \$51.477 billion, an increase of \$2.821 billion (5.8 percent) over the current forecast for FY 2020-21 revenues. Total tax revenues for FY 2022-23 are estimated to be \$49.551 billion, a 6.4 percent increase over FY 2020-21 forecast revenues.

The revenue planning estimates are informed by the IHS baseline forecast, which assumes that U.S. real GDP will grow 2.0 percent in CY 2021, followed by slower growth of 1.6 percent in CY 2022 and 1.5 percent in CY 2023.

**Biennial Comparison: FY 2020-21 vs. FY 2022-23 General Fund Revenues**  
**November 2019 Forecast**

(\$ in millions)	FY 2020-21	FY 2022-23	\$ Change	% Change
Individual Income Tax	\$26,039	\$27,896	\$1,856	7.1%
General Sales Tax	12,125	12,920	795	6.6
Corporate Franchise Tax	2,897	3,076	179	6.2
State General Property Tax	1,561	1,536	(26)	(1.6)
Other Tax Revenue	3,958	4,123	165	4.2
<b>Total Tax Revenues</b>	<b>46,580</b>	<b>49,551</b>	<b>2,971</b>	<b>6.4%</b>
Non-Tax Revenues	1,557	1,546	(10)	(0.7)
Other Resources	520	380	(140)	(26.6)
<b>Total Revenues</b>	<b>\$48,656</b>	<b>\$51,477</b>	<b>\$2,821</b>	<b>5.8%</b>

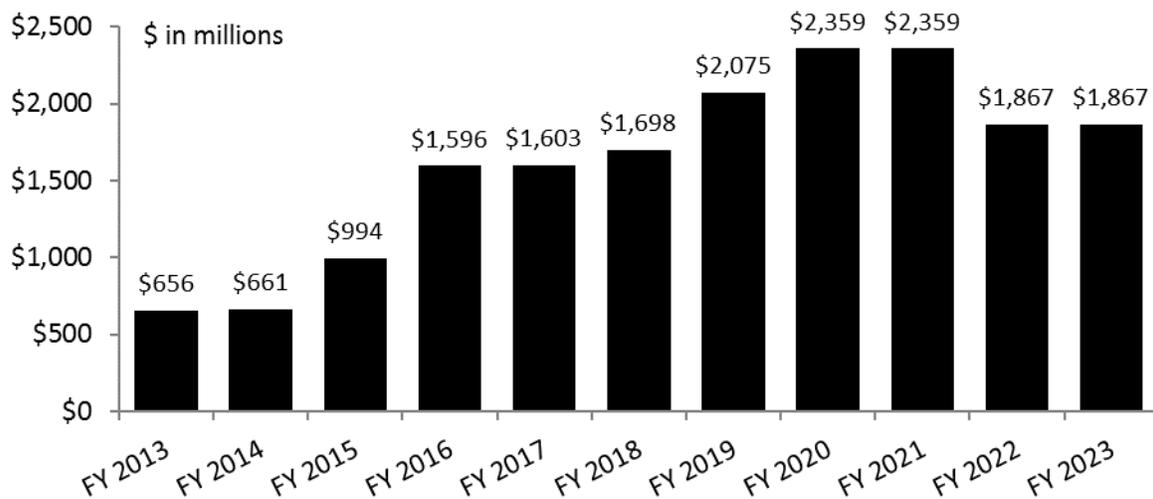
*Expenditures.* Overall projected spending in the FY 2020-21 biennium is materially unchanged from end of session estimates. This forecast now assumes spending for the current biennium to be \$48.463 billion, a reduction of \$7 million (0.0 percent) from estimates when the budget was enacted.

**Current Biennium: FY 2020-21 General Fund Expenditures  
End-of-Session vs. November 2019 Forecast Comparison**

(\$ in millions)	November 2019		\$ Change	% Change
	End-of-Session	Forecast		
E-12 Education	\$20,122	\$20,098	(24)	(0.1)%
Property Tax Aids & Credits	3,804	3,865	61	1.6
Health & Human Services	14,774	14,677	(97)	(0.7)
Debt Service	1,183	1,132	(51)	(4.3)
All Other	8,588	8,692	103	1.2
<b>Total Expenditures</b>	<b>\$48,470</b>	<b>\$48,463</b>	<b>\$(7)</b>	<b>0.0%</b>

Forecast expenditures for education aid programs are down \$54 million (0.3 percent) from previous estimates but are partially offset by an additional appropriation for safe schools supplemental aid of \$30 million that was activated when FY 2019 closed with a general fund balance that was higher than projected at the end of the legislative session. Total health and human services (HHS) spending is projected to be down \$97 million from end of session estimates largely due to lower enrollment in Medical Assistance. These savings, along with \$51 million (4.3 percent) lower projected debt service, are partially offset by increases in property tax aids and credits, the implementation of two additional contingency appropriations in FY 2020-21, and the carryforward of unspent appropriations.

**General Fund Budget Reserve  
Actual and Forecast Balances FY 2013-23; November 2019 Forecast**



*The budget reserve account balance in FY 2013 was \$656 million. Since then the reserve balance has largely increased due to a law change that sets a reserve target based on the volatility of the state’s revenue sources and allows for automatic allocation to the reserve when there is a projected balance at the time to the November Budget and Economic Forecast.*

**Budget Reserves.** Minnesota Statutes section 16A.152 directs the commissioner of Minnesota Management and Budget (MMB) to allocate funds to the budget reserve when there is a positive

forecast balance in the current biennium and the current budget reserve balance is below the statutory target. These conditions were met with this forecast and \$284 million is credited to the budget reserve account, increasing the reserve to its target amount of \$2.359 billion for the FY 2020-21 biennium.

While the budget reserve reaches its statutory target for the FY 2020-21 biennium with the release of this *Budget and Economic Forecast*, law passed during the 2019 special session in May reduces the budget reserve below that target in FY 2022. Chapter 6 from the special session reduces the budget reserve balance by \$491.369 million on the first day of FY 2022. At the time of passage, this action was taken in the 2019 legislative session to ensure a positive projected budgetary balance for the FY 2022-23 planning estimates.

*Stadium Reserve.* In FY 2021 the state will begin retaining Minneapolis sales tax receipts to cover the payments the state remits on behalf of the city for stadium obligations. Additionally, the forecast has been increased for lawful gambling revenue. Given that state spending related to US Bank Stadium is generally a fixed amount, the growth in these revenues will be deposited into the stadium reserve because they exceed stadium related spending. In FY 2019, \$11 million was added to the stadium reserve, and by FY 2023 the amount allocated to the reserve is expected to be \$66 million. Given the increasing allocation amounts, the stadium reserve balance is expected to reach \$248 million by FY 2023.

**Budget Outlook: Planning Estimates.** Out year planning estimates are based on current law revenues and expenditures. These estimates inherently carry a higher degree of uncertainty than estimates for FY 2020-21. Revenue projections for FY 2022-23 are based on IHS' November forecast for the planning years. Expenditure projections assume that current law funding levels and policies continue unchanged, adjusted only for caseload and enrollment changes authorized in law, as well as formula driven growth. The expenditure forecast does not assume cost growth outside of a few specific budget areas where assumptions for price increases or market conditions are specified by statute.

To highlight structural balance, the table below shows forecast revenues and projected spending and excludes the impact of balances from prior years and reserves. In the FY 2022-23 biennium forecast revenue is expected to exceed base level spending by \$220 million.

**Planning Estimates: FY 2022-23 General Fund Budget  
By Fiscal Year; November 2019 Forecast**

(\$ in millions)	FY 2022	FY 2023	FY 2022-23
Forecast Revenues	\$25,389	\$26,087	\$51,477
Projected Spending	25,399	25,858	51,257
<b>Difference</b>	<b>\$(10)</b>	<b>\$229</b>	<b>\$220</b>
<i>Estimated Inflation (CPI) Applied to Projected Spending<sup>1</sup></i>	<i>\$384</i>	<i>\$827</i>	<i>\$1,211</i>

<sup>1</sup> 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.

Projected inflationary growth based on the Consumer Price Index is now forecast to be 2.2 percent in FY 2022 and 2.5 percent in FY 2023. After adjusting for programs with price increases included in the current law formula, applying the annual inflation rate, compounded over 2 years, would add approximately \$1.211 billion in spending pressure to the FY 2022-23 biennium.

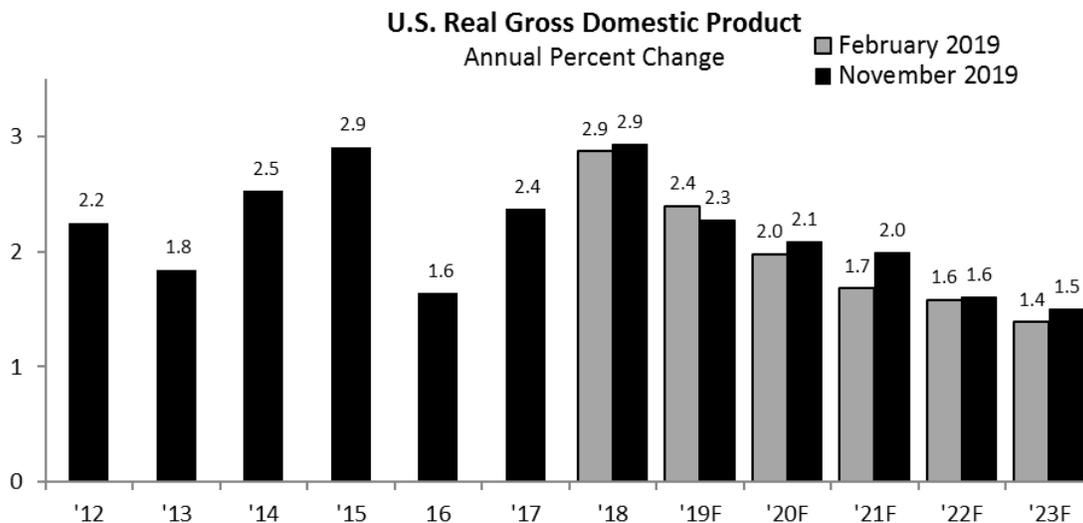


## ECONOMIC OUTLOOK

### U.S. Economic Outlook

The outlook for U.S. economic growth has improved since Minnesota’s *Budget and Economic Forecast* was prepared in February 2019, while the pattern of slowing growth through our planning horizon carries over from the prior forecast.

Real consumer spending is supporting growth in the near term, as consumer confidence is buoyed by low interest rates and recent gains in wealth, employment, and compensation. But, IHS expects annual real GDP growth to slow from 2.3 percent in 2019 to 2.1 percent in 2020. The downshift continues, with annual real GDP growth expected to decelerate to 1.5 percent in 2023. This occurs as the contribution to growth from federal fiscal stimulus declines, tariffs and trade policy uncertainty undermine business investment, interest rates rise, and growth in household wealth slows. After mid-2020, a demographically driven decline in the labor force participation rate is expected to be a drag on growth.



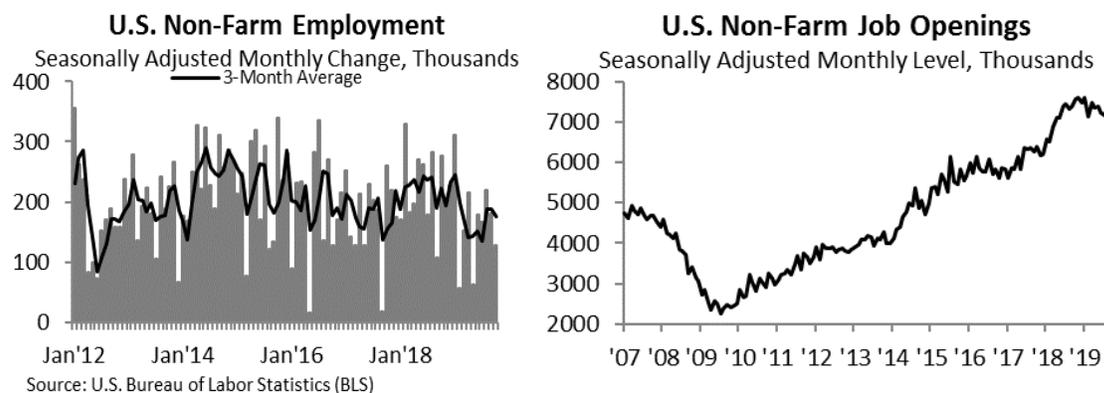
Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*Annual real GDP growth rates decline each year from 2019 to 2023. This trend is consistent with the expectation of continued, but slowing, growth in employment and labor force. The annual growth rate decelerates from 2.3 percent in 2019 to 1.5 percent in 2023. The relatively high 2.9 percent growth rate in 2018 reflects fiscal stimulus from the Tax Cuts and Job Act (TCJA).*

The November IHS outlook includes all U.S. and retaliatory tariffs imposed to date, including a 25 percent tariff on 44 percent of goods imported from China and a 15 percent tariff on most of the remaining imports from China. The U.S. tariffs are being implemented in two steps, the first on September 1, 2019 and the second effective December 15, 2019. Unlike the initial tariffs on \$250 billion of Chinese goods implemented in 2018 (approximately 50 percent of all goods imported from China), these tariffs target consumer goods and will likely result in higher prices for a range of products, including clothing, toys, and electronics. The possible implementation of a phase-one agreement between the U.S. and China provides upside risk to this forecast.

IHS expects consumer spending to remain the primary contributor to growth in the economy, even as the pace of spending eventually slows. Upward revisions in the underlying data on household wealth raise the IHS consumer spending forecast relative to February. Additionally, stronger projected spending growth is supported by rising incomes, rising household wealth, falling gas prices, and a lower interest rate path. Consumer mood, measured by consumer confidence and sentiment indices, can help sustain consumer spending if those indices remain at or above pre-recession levels.

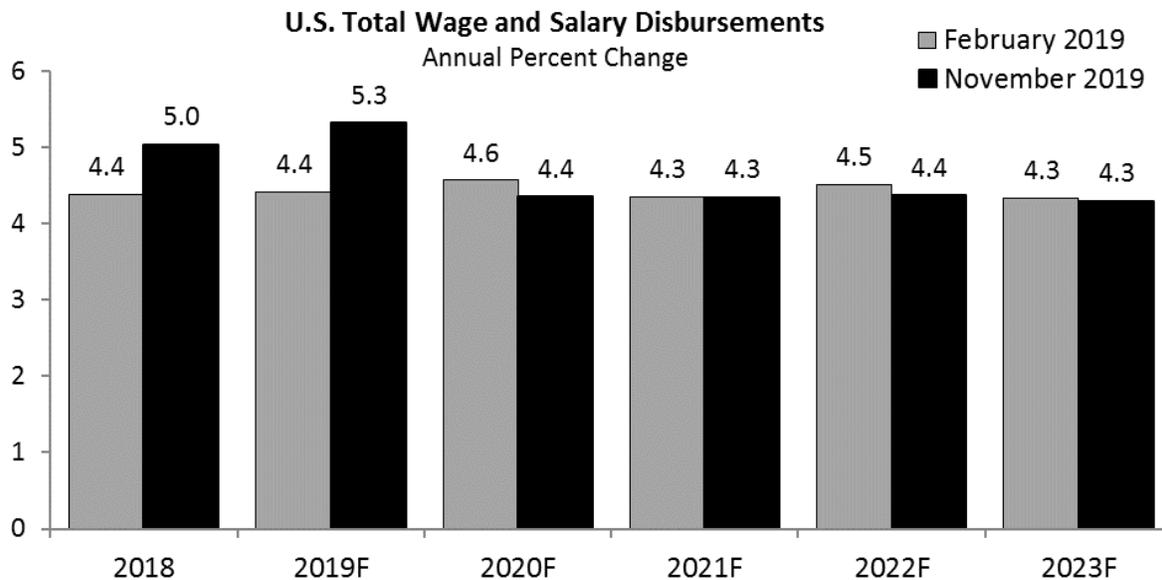
The S&P 500 share price index grew 17.0 percent in 2017 and 12.1 percent in 2018. The index has continued to grow in 2019, albeit at a slower rate; IHS expects an annual growth rate of 5.7 percent over the year. If the stock market declines, or if the market generally underperforms IHS' expectations, the resulting erosion of household wealth could cause consumer spending to grow more slowly than IHS has forecast.



*The U.S. has added an average of 167,000 new jobs per month in 2019. In October, U.S. employers added 128,000 jobs, a light number due to the temporary loss of 41,600 jobs due to the GM strike. Since September 2018, there have been 0.8 unemployed job-seekers for each job vacancy nationwide, the lowest value for this ratio since the series began in 2000.*

The U.S. unemployment rate rose from 3.5 percent in September to 3.6 percent in October. The slight uptick in the unemployment rate reflects new workers being drawn into the labor force. Strong demand for workers has tightened the national labor market. Since September 2018, there have been 0.8 unemployed job-seekers for each job vacancy nationwide, the lowest value for this ratio since the series began in 2000.

The U.S added an average of 167,000 new jobs per month in 2019. In October, U.S. employers added 128,000 jobs, a light number due to the temporary loss of 41,600 jobs due to the six-week-long GM strike. The forecast for 2019 employment growth has improved since February, from 1.5 percent to 1.6 percent. IHS expects annual employment growth to slow from 1.6 percent this year to 1.2 percent in 2020. 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 0.8 percent in 2021, 0.4 percent in 2022 and 0.1 percent in 2023.

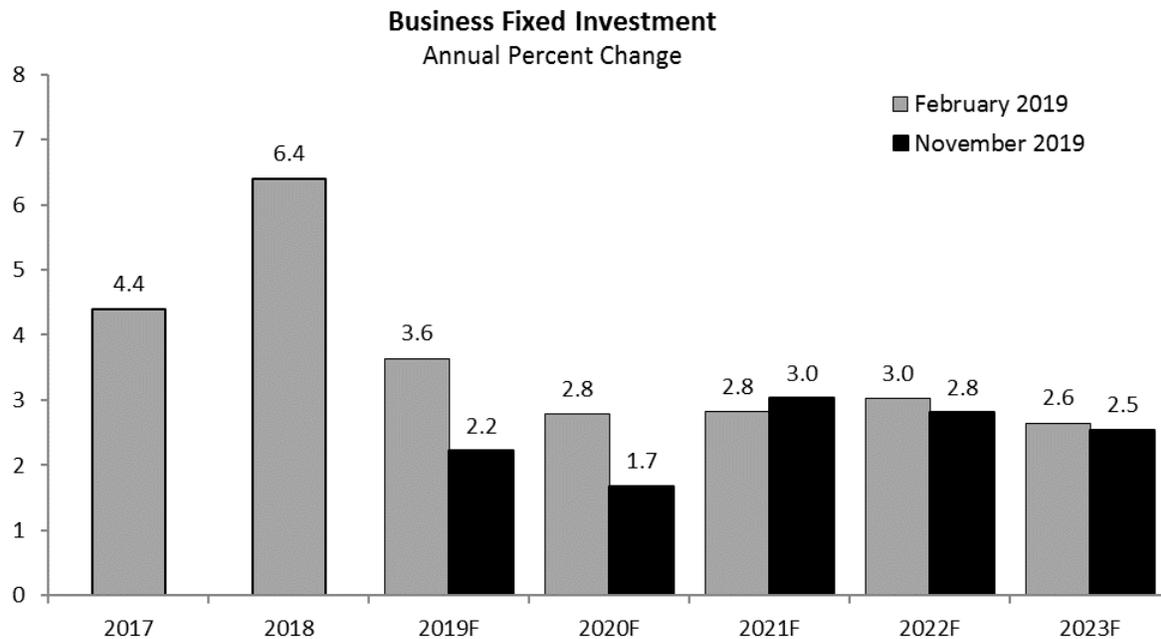


Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*As the labor market feels the impact of an aging workforce, the labor force participation rate is expected to fall. In this forecast, IHS increased their expectations for total wage and salary income growth. They now expect 5.3 percent growth in 2019 compared to 4.4 in February, and down from 4.6 percent in 2020 to 4.4 percent.*

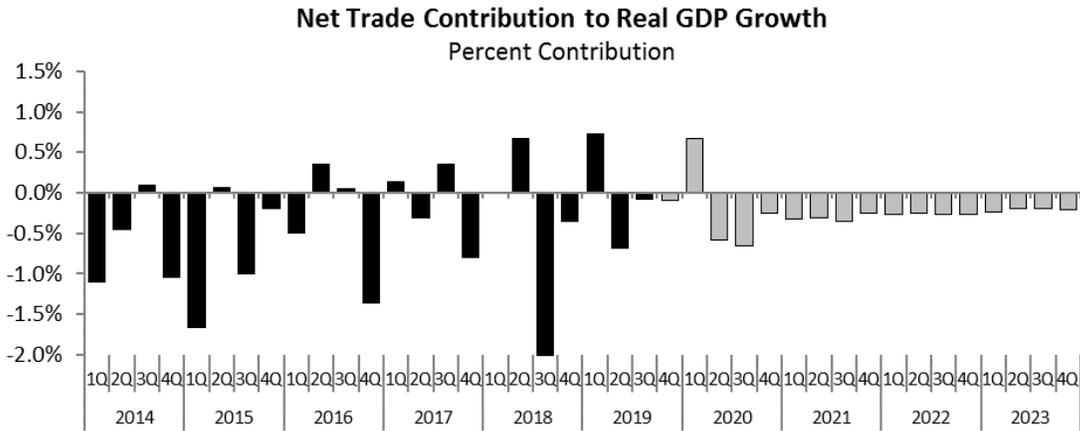
The forecast for growth in total U.S. wage and salary disbursements has increased since February. In July, the Bureau of Economic Analysis (BEA) released annual revisions of the National Income and Product Accounts (NIPA) back five years. While real GDP was little revised, notable revisions in the composition of nominal income resulted in a substantial upward revision in personal income, reflecting upward revisions in interest, dividends, and wages and salaries. Wages and salary income growth for 2018 was revised up to 5.0 percent from 4.4 percent in the February outlook. Similarly, IHS now expects 5.3 percent growth in wage income in 2019, up almost a full percentage point from the 4.4 reported in February. The 2020 forecast has been reduced from 4.6 to 4.4 percent. Wage and salary growth is then expected to remain between 4.4 and 4.3 through 2023.

Business fixed investment grew at 4.4 percent in 2017 and continued to grow at a robust rate of 6.4 percent in 2018. The rate decelerated to a sluggish 2.2 percent in 2019 and is expected to average 2.5 percent over 2020-2023. While a ramp-up of Boeing's production of the 737 MAX airliner will provide a temporary jump in business fixed investment early next year as deliveries are fulfilled, the overall trend in business fixed investment is one of slowing growth. 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. A lifting of this uncertainty could improve the outlook for capital spending.



*In their November outlook, IHS expects business fixed investment to peak at 6.4 percent in 2018 due to stronger nonfarm business sector output. Growth slows to 2.2 percent in 2019 and 1.7 percent in 2020 before rising again in 2021.*

IHS expects the contribution of net exports to real GDP to represent a 0.1 to 0.3 percent drag to annual GDP growth through the forecast horizon. However, IHS expects a surge in exports in the first quarter of 2020 when exports of the Boeing 737 MAX resume. After this point, the declining trend in net exports is expected to continue almost every quarter through 2024. Real exports of petroleum have increased, while real imports of petroleum decreased. These trends are expected to continue as net exports of petroleum turn positive by late 2022.



Source: U.S. Bureau of Economic Analysis (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 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.*

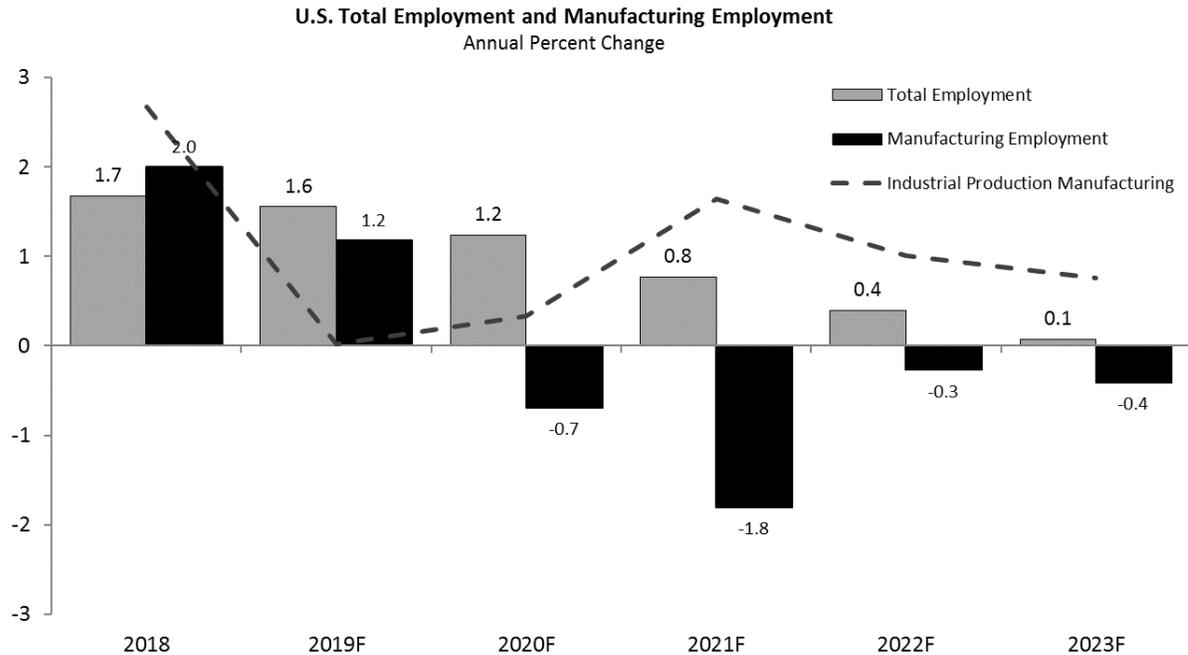
Escalating trade tensions last year coincided with a steep appreciation of the U.S. dollar. The potential for rising U.S. interest rates and U.S. economic growth that exceeds growth abroad has boosted demand for and the value of U.S. currency. The broad trade-weighted dollar index increased 0.7 percent over 2018. In this forecast, IHS expects the dollar’s value to grow 4.6 percent this year followed by 1.6 percent growth in 2021 and 3.2 percent in 2022. The strength of the dollar is a source of downward pressure on exports in this forecast.



Source: U.S. Federal Reserve

*A significant rise in the dollar against U.S trading partners since mid-2014 has strengthened imports and weakened exports. Escalating trade tensions over the past year and rising interest rates coincided with a steep appreciation of the U.S. dollar.*

IHS expects a decline in manufacturing employment in the years 2020 through 2023, which will restrain overall employment growth. Manufacturing output has declined since the fourth quarter of 2018 and is expected to continue to decline through the second quarter of 2020. This softness in manufacturing reflects slowing global trade, excessive inventory building, and a drag on exports from a strong U.S. dollar. A persistent decline in manufacturing employment, beyond what is already in the forecast would have negative feedback effects to the rest of the economy.



*IHS expects a decline in manufacturing employment in years 2020 through 2023, which will restrain overall employment. Manufacturing output has declined since the fourth quarter of 2018 and is expected to continue to decline through the second quarter of 2020. This softness in manufacturing reflects slowing global trade, excessive inventory building, and a drag on exports from a strong U.S. dollar.*

The Federal Open Market Committee (FOMC) cut rates in July, September, and again in October, bringing the federal funds rate to a range of 1.50 to 1.75 percent. Despite indications that the base outlook for the economy is solid, as evidenced by strong labor markets and firming inflation, the rate cuts provide additional insurance against downside risks from tariffs and slowing global growth. IHS expects the cut in October to be the last in this easing cycle. IHS expects a reversal beginning in late 2020 and continuing into 2021 to keep pace with expected rising inflation. In the November 2019 outlook, core PCE inflation is forecast to rise above the FOMC target of 2.0 percent in early 2020.

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 2.3 percent in 2019, consistent with the IHS forecast of 2.3 percent. For 2020, the IHS expects slightly higher growth than other forecasters: 2.1 percent compared to 1.8 percent for the Blue Chip Consensus.

**Forecast risks:** Annual real GDP growth of 1.5-2.3 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.

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 35 percent probability to a pessimistic scenario that includes a three-quarter recession starting in the fourth quarter of 2020 lasting through the second quarter of 2021. Over recent months, IHS has pushed back the pessimistic scenario recession. They also note that risk of a downturn increases as the U.S. transitions from above-trend growth in 2018-19 to below-trend growth in 2020, as they assume in this forecast. Among the 50 Blue Chip macro-economic forecasters, the most recent consensus probability of a recession beginning in 2020 is 35 percent and the probability in 2021 is 37 percent. In other words, even the slow growth that is now forecast for 2020-2023 is at risk.

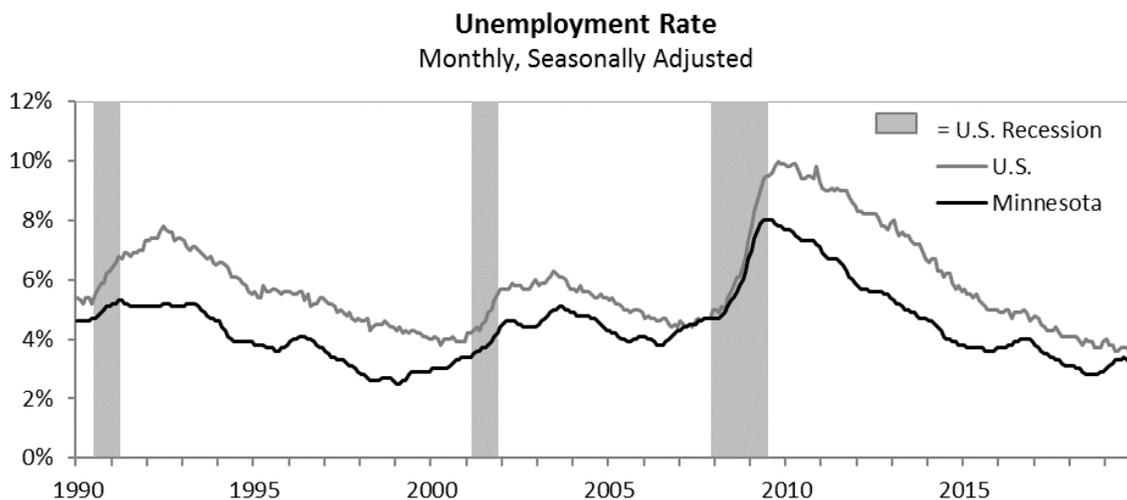
Finally, the IHS February outlook depends on several key forecast assumptions. If these assumptions do not materialize, the economic outcome will differ from IHS's baseline forecast. (1) IHS assumes that personal provisions of the 2017 Tax Act are eventually extended. (2) IHS expects the Federal Reserve to reverse course and hike the federal funds rate by 100 basis points as well as allow its balance sheet to start growing and maintain the 2 percent inflation objective. (3) This forecast assumes that the 25 percent tariff on 44 percent of goods imported from China and a 15 percent tariff on the rest of imports from China are implemented in two steps on September 1 and December 15. (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 1.6 percent in 2019, then to an average of 2.4 percent through 2023. (5) IHS expects the Brent crude oil price to fall from \$71 per barrel in 2018 to \$52 in 2021 before increasing to \$72 in 2025. (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 1.3 percentage points from the labor force participation rate by the end of that year. The annual rate of household formation falls from 1.40 million in 2018 to 1.22 million in 2022.

IHS assigns a probability of 55 percent to the November baseline outlook. As mentioned above, they assign a 35 percent probability to a more pessimistic scenario, in which a broad loss in confidence and growing aversion to risk lead to drops in a wide range of investment and consumer spending categories. IHS assigns a 10 percent probability to a more optimistic scenario, in which higher productivity boosts incomes and, consequently, consumer spending. This scenario assumes that unemployment can fall to a lower level before it exerts inflationary pressure, keeping consumer price inflation lower than in the baseline.

## Minnesota Economic Outlook

Minnesota's steady economic performance continues, as the U.S. expansion surpasses record length. Statewide, low unemployment and strong demand for workers support growth in total Minnesota wage income and wages per worker. However, the pace of job gains has slowed, reflecting the limit set by labor force growth that is forecast to decelerate amid ongoing baby boomer retirements. Across the state, job vacancies are at high levels, and employers and job-seekers are looking for creative ways to match people to jobs.

Throughout the current U.S. expansion, Minnesota has continued to add jobs and sustain a state unemployment rate below the U.S. rate. However, the gap between the state and national unemployment rates has narrowed over the last year. While the U.S. rate fell to a 50-year low of 3.5 percent in September, Minnesota's has been drifting upward. Minnesota's rate reached an 18-year low of 2.8 percent in June 2018. It began gradually rising a year ago, reaching the current rate of 3.2 percent. In addition, the rate of job growth is slowing. Between 2011 and 2017, Minnesota added an average of 42,000 jobs per year. In 2018, Minnesota added about half that many, and we expect a similar number in 2019.



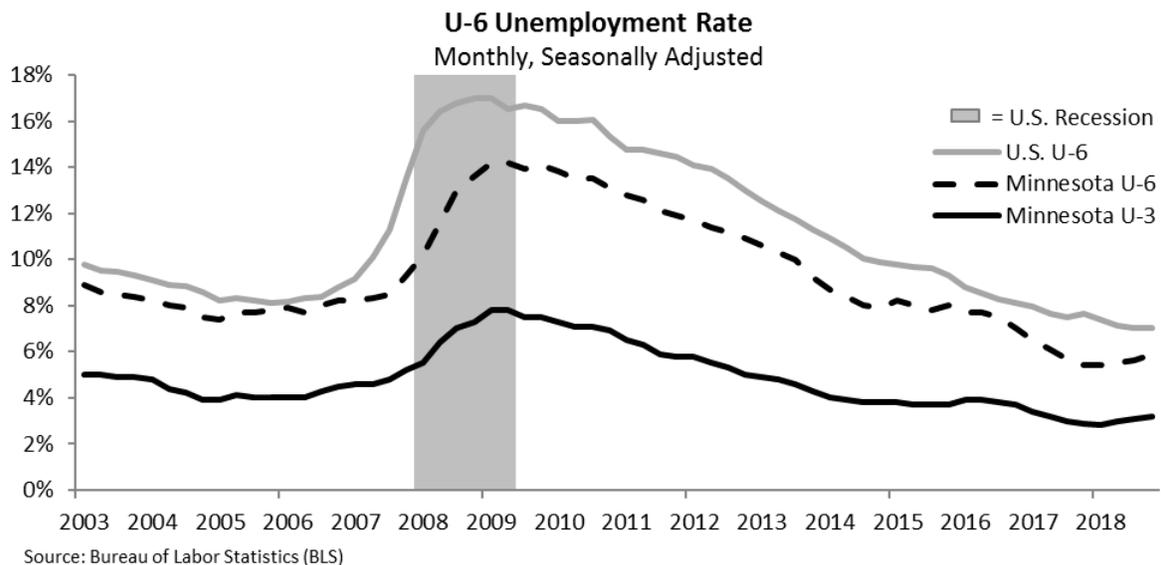
Source: Minnesota Department of Employment and Economic Development (DEED)

*Minnesota's seasonally adjusted unemployment rate was 3.2 percent in October 2019, placing Minnesota 18th among U.S. states. After reaching an 18-year low of 2.8 percent, the Minnesota unemployment rate has been drifting upward since October 2018. The current rate is 0.4 percentage points below the U.S. unemployment rate.*

Given the state's tight labor market, improvements in both migration to the state and household formations represent bright spots for Minnesota's economic outlook. Between 2010 and 2017, the state added an average of about 10,000 new households per year, much lower than the pre-recession ten-year average of 24,500. But 2018 marked a spike in Minnesota household formations, with an addition of 32,000 new households. This growth coincided with two years of positive net domestic migration to Minnesota, reversing a 15-year trend of Minnesota seeing a net annual loss of residents to other states. Positive domestic net migration combined with

positive international net migration make 2017 the largest year for net migration to Minnesota in nearly three decades.

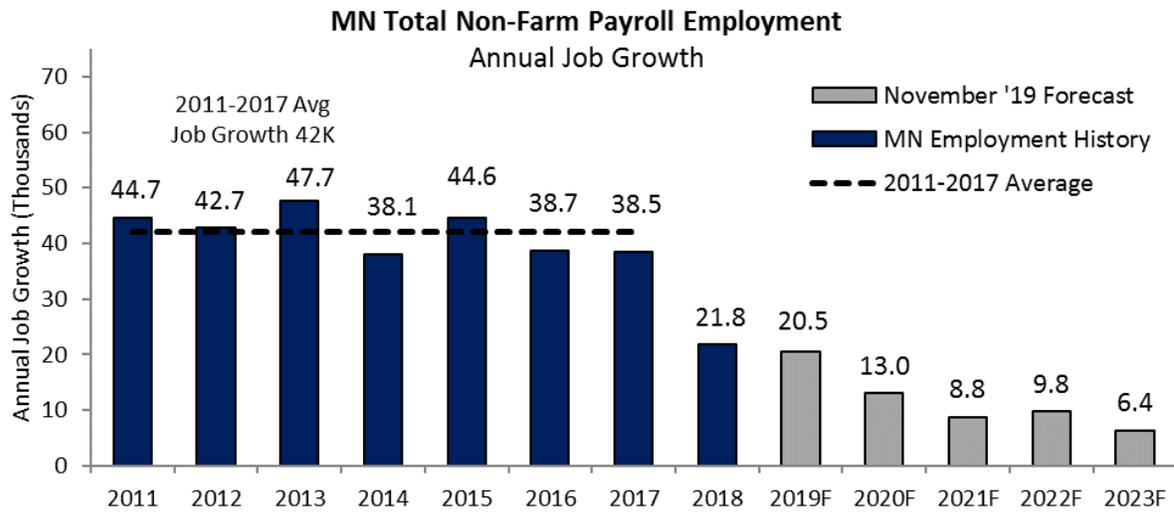
**Labor Market.** Minnesota employers continue to add jobs, keeping the state's unemployment rate below the U.S. rate. In June 2018, Minnesota's official unemployment rate (the rate the Bureau of Labor Statistics (BLS) labels U-3) reached an 18-year low of 2.8 percent, where it remained until October 2018. Since then, the unemployment rate has been drifting upward to its current level of 3.2 percent. This increase has narrowed the gap between the U.S. and Minnesota unemployment rates. Since 1978, Minnesota's unemployment rate has been an average of 1.4 percentage points lower than the U.S. rate. The gap between the national and state rates is currently 0.4 percentage points.



*Minnesota's seasonally adjusted U-6 unemployment rate, the combination of unemployed people (U-3), workers employed part time for economic reasons, and workers who are marginally attached to the labor force was 5.4 percent in 2018, significantly lower than the 7.7 percent national rate.*

Broader measures of unemployment can point to areas where the labor market is not fully using available workers. But in Minnesota, these measures indicate high rates of employment. The most comprehensive measure of unemployment, which BLS calls U-6, is defined as the number of unemployed people (U-3), plus workers who are marginally attached to the labor force (those not currently in the labor force who looked for work in the last year), plus part-time workers who would prefer full-time jobs. In 2018 Minnesota's U-6 reached a 15-year low of 5.4 percent. It has since drifted up to 5.9 percent but remains below pre-recession levels and is 1.1 percentage points below the national rate of 7.0 percent. In 2018, only 1,900 Minnesotans were counted as discouraged workers, those marginally attached workers who believe no jobs are available to them. This very low level of discouraged workers suggests high job availability in Minnesota. About three quarters of the difference between the state's U-3 and U-6 rates is due to workers who have part-time jobs but would prefer to work full time. In 2018, 68,100 workers fell into this category. While this number is still low by historical standards, converting these workers to full time could help employers fill some available positions.

Between 2011 and 2017, Minnesota employers added an average of 42,000 new jobs each year. In the 12 months ending in December 2018, employers added roughly half that (+21,800 jobs), bringing Minnesota’s annual job growth to 0.7 percent, a considerable slowdown from 1.3 percent in 2017. We expect another year of moderate employment growth in 2019. Our forecast expects Minnesota to add 20,500 jobs in 2019, slowing to 13,000 in 2020, and 9,000 jobs in 2021. 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. The MMB model of the Minnesota economy incorporates preliminary information on forthcoming revisions to Minnesota’s non-farm payroll employment, as well as personal income wages informed by new data from the Quarterly Census of Employment and Wages (QCEW) and income tax withholding collections since February.



*Between 2011 and 2017, Minnesota employers added an average of 42,000 new jobs each year. In the 12 months ending in December 2018, employers added roughly half that (+21,800 jobs), bringing Minnesota’s annual job growth to 0.7 percent, a considerable slowdown from 1.3 percent in 2017. We expect another year of moderate employment growth in 2019. Our forecast expects Minnesota to add 20,500 jobs in 2019, slowing to 13,000 in 2020, and 9,000 jobs in 2021.*

The sectors with strongest employment growth over the last year, or since October 2018, were leisure and hospitality, construction, and, trade, transportation and utilities. In addition to breadth across industry sectors, four of Minnesota’s five metropolitan statistical areas (MSAs) show a positive job growth over the 12 months ending with October 2019, with only the Minneapolis-St. Paul Metropolitan Statistical Area posting a very modest decline of 908 jobs. These numbers are subject to the annual revision to incorporate new data from the QCEW. Final numbers for 2018 will be available in the February forecast.

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

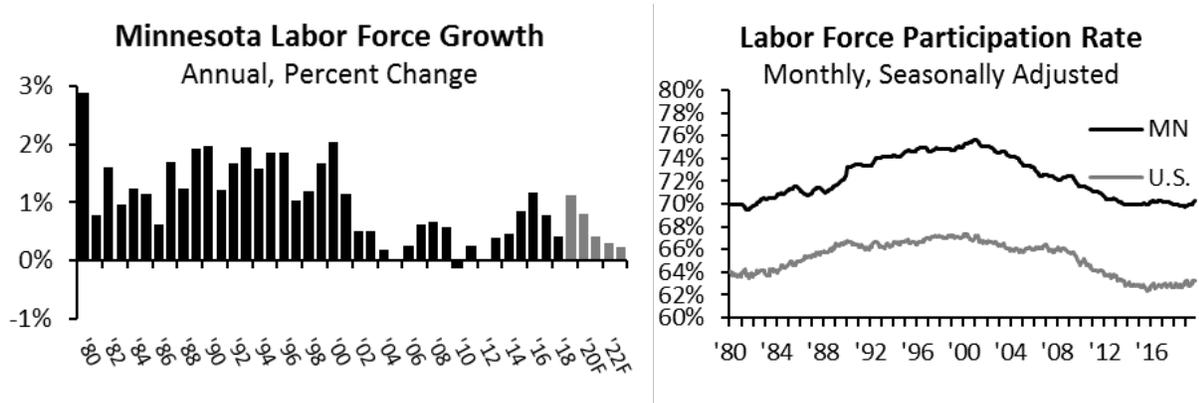
Forecast 2016 to 2023, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Total Non-Farm Payroll Employment (Thousands)</b>								
<b>Minnesota</b>								
November 2019	2,894	2,933	2,954	2,975	2,988	2,997	3,007	3,013
%Chg	1.4	1.3	0.7	0.7	0.4	0.3	0.3	0.2
February 2019	2,894	2,933	2,955	2,989	3,016	3,031	3,042	3,045
%Chg	1.4	1.3	0.7	1.2	0.9	0.5	0.4	0.1
<b>U.S.</b>								
November 2019	144,348	146,611	149,064	151,384	153,251	154,431	155,048	155,161
%Chg	1.8	1.6	1.7	1.6	1.2	0.8	0.4	0.1
February 2019	144,348	146,611	149,064	151,526	152,965	153,705	154,457	154,857
%Chg	1.8	1.6	1.7	1.7	0.9	0.5	0.5	0.3
<b>Wage and Salary Disbursements (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
November 2019	158.1	165.6	172.9	180.0	187.5	195.2	203.4	211.7
%Chg	2.8	4.8	4.4	4.1	4.2	4.1	4.2	4.1
February 2019	158.0	165.5	172.3	178.6	186.7	195.0	203.2	211.1
%Chg	2.8	4.7	4.1	3.7	4.5	4.4	4.2	3.9
<b>U.S.</b>								
November 2019	8,083	8,462	8,888	9,362	9,769	10,194	10,640	11,097
%Chg	2.9	4.7	5.0	5.3	4.4	4.3	4.4	4.3
February 2019	8,081	8,454	8,825	9,214	9,635	10,054	10,507	10,962
%Chg	2.9	4.6	4.4	4.4	4.6	4.3	4.5	4.3
<b>Non-Wage Personal Income (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
November 2019	135.8	140.2	149.8	158.1	163.1	169.9	178.4	186.0
%Chg	2.1	3.2	6.9	5.5	3.2	4.2	5.0	4.3
February 2019	133.3	137.6	144.0	150.6	157.1	164.0	170.3	176.6
%Chg	1.8	3.2	4.7	4.5	4.4	4.4	3.9	3.7
<b>U.S.</b>								
November 2019	8,038	8,417	8,931	9,307	9,620	9,992	10,403	10,835
%Chg	2.2	4.7	6.1	4.2	3.4	3.9	4.1	4.2
February 2019	8,044	8,377	8,739	9,100	9,463	9,842	10,228	10,618
%Chg	2.3	4.1	4.3	4.1	4.0	4.0	3.9	3.8
<b>Total Personal Income (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
November 2019	293.9	305.8	322.7	338.1	350.6	365.2	381.8	397.8
%Chg	2.5	4.0	5.5	4.8	3.7	4.1	4.6	4.2
February 2019	291.4	303.1	316.8	329.1	343.8	358.9	373.5	387.7
%Chg	2.3	4.0	4.5	3.9	4.5	4.4	4.1	3.8
<b>U.S.</b>								
November 2019	16,121	16,879	17,819	18,668	19,389	20,185	21,042	21,932
%Chg	2.6	4.7	5.6	4.8	3.9	4.1	4.2	4.2
February 2019	16,125	16,831	17,564	18,314	19,098	19,896	20,735	21,580
%Chg	2.6	4.4	4.4	4.3	4.3	4.2	4.2	4.1

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

Minnesota's labor force participation rate (the share of the over-16 population that is either working or looking for work) is consistently well above the U.S. rate and among the highest in the nation. Since December 2018, the state's labor force participation rate has inched upward. In October 2019, it reached 70.3 percent, which is seven percentage points above the U.S. rate and the second highest among U.S. states. Difficulty in matching new entrants in the labor force to jobs may explain Minnesota's increased unemployment rate mentioned earlier. For the

participation rate to hold steady and even rise as baby boomers are retiring is remarkable and may be the result of wage growth and ample open positions enticing workers to enter the labor force or push back planned retirement. Relatedly, Minnesota’s employment-to-population ratio (employed persons as a share of the over-16 population) rose to 68 percent in October, the highest since 2008 and seven percentage points above the U.S. rate.

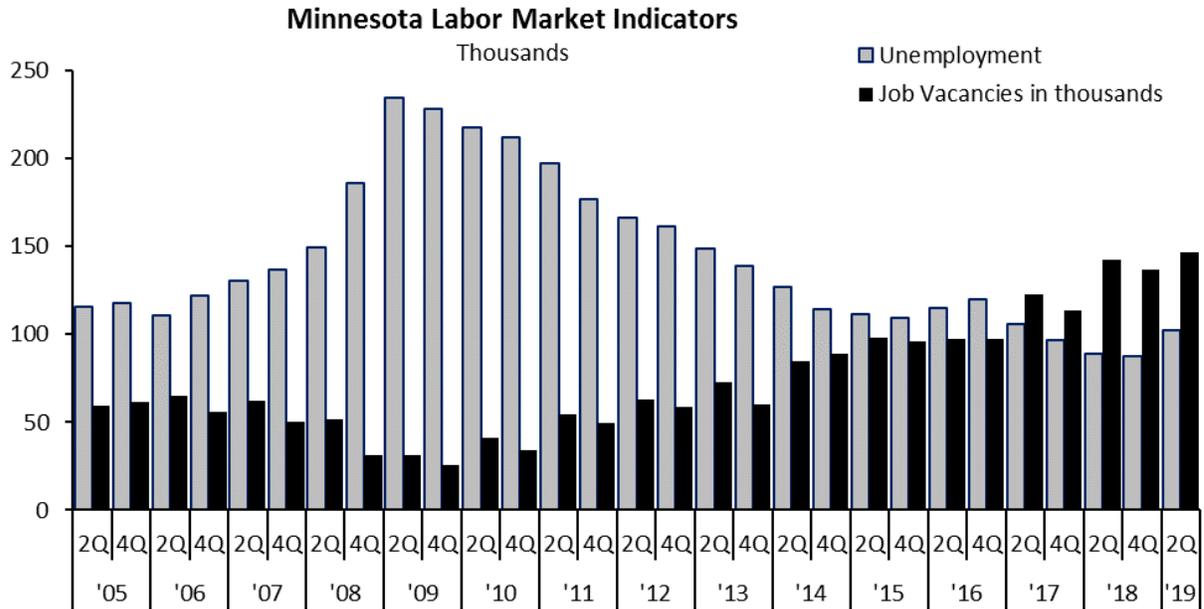


Source: Minnesota Department of Employment and Economic Development (DEED), Minnesota Management & Budget (MMB)

*In October 2019, Minnesota’s labor force participation rate was 70.3 percent, 7 percentage points higher than the national average and the second 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. But the demographic reality of baby boomer retirements suggests that high labor force participation is not sustainable. In our forecast, labor force growth temporarily increases to 1.1 percent in 2019 before gradually decelerating to 0.2 percent in 2023. The uptick in labor force growth in 2019 coincides with recent positive trends in net domestic migration to Minnesota. Should the migration trend continue, Minnesota’s labor force growth could outperform our forecast.

Minnesota’s labor market indicators remain consistent with a tight labor market. According to the Department of Employment and Economics Development’s (DEED’s) job vacancy report, there have been fewer unemployed job-seekers than open positions for the past 30 months. In the second quarter of 2019 there were 0.7 unemployed persons for each vacancy statewide. In contrast, at the peak of the 2007-09 recession, there were nearly seven unemployed persons for each job opening. One year ago, there were 0.6 unemployed persons for each vacancy, slightly lower than the current ratio. This occurs as the number of unemployed persons has increased over the year along with the number of job vacancies. Employers across the state reported 146,513 job vacancies, and the job vacancy rate is now 5.3 percent (5.3 openings per 100 jobs), the highest level for this series (which originated in 2001). The median hourly wage offer for these vacancies was \$15.00, up from \$14.54 one year ago. The tight labor market is being felt across the state, as both the Twin Cities and Greater Minnesota have a ratio of less than one unemployed persons to every job vacancy. The ratio is 0.6 in the Twin Cities and 0.8 in Greater Minnesota.



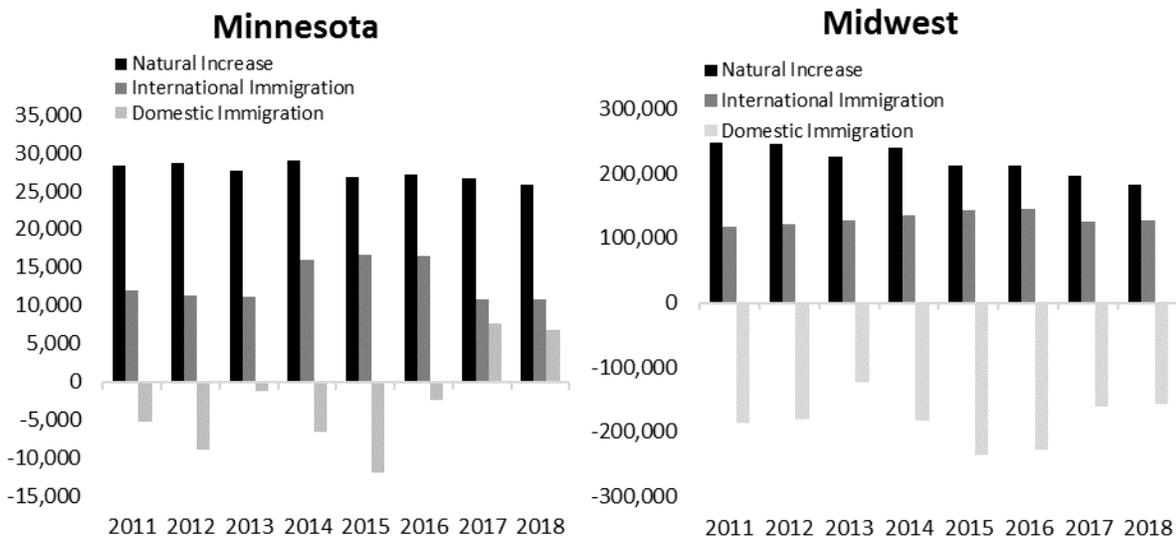
*Job vacancies remain high across the state. The ratio of unemployed persons to job vacancies statewide has been less than one since mid-2017, indicating fewer unemployed job-seekers than open positions across the state. Compared to one year ago, job vacancies increased 0.4 percent in Greater Minnesota and 4.8 percent in the Twin Cities.*

Job vacancies are widespread among occupations, with the largest numbers of openings in Health Care and Social Assistance (28,100 job vacancies), Accommodation and Food Services (24,701 job vacancies, and Retail Trade (22,347 job vacancies). These three industries alone account for over half (51.3 percent) of statewide vacancies. DEED reports that about 59 percent of job vacancies were located in the Twin Cities seven-county area and the remaining 41 percent were in Greater Minnesota. Compared to one year ago, job vacancies increased 0.4 percent in Greater Minnesota compared to an increase of 4.8 percent in the Twin Cities. Persistently high job vacancies suggest that the state’s employers are struggling to fill open positions.

Between 2017 and 2018, the number of Minnesotans increased by 0.8 percent (43,000 people), ahead of the U.S. rate of 0.6 percent. The primary driver of Minnesota’s population growth is natural increase, the difference between the state’s birth rate and death rate. Minnesota’s net natural population increase of 26,000 ranked 10th highest among U.S. states. While 10th highest, Minnesota’s net natural population growth is decelerating over time. Between 2011 and 2016, Minnesota’s net natural increase averaged 28,000; in 2017 that number declined to 26,612 and in 2018 to 25,770. This is consistent with the national trend. Between 2011 and 2016 the average natural increase for the U.S. was 1.36M, compared to 1.1M in 2017 and 1.0M in 2018. As the natural rate of population continues to grow at lower than historical rates, domestic and international immigration play an increasingly important role in growing both our population and labor force.

The contribution of international immigration to Minnesota’s population growth fell from 48 percent in 2015 to 25 percent in 2018. From 2017 to 2018, Minnesota ranked 18th among states in international immigration increase levels, with a net increase of 10,718 individuals, and 27th in percentage increase (1.9 percent). Over the same time period, U.S. international immigration increased 3.0 percent.

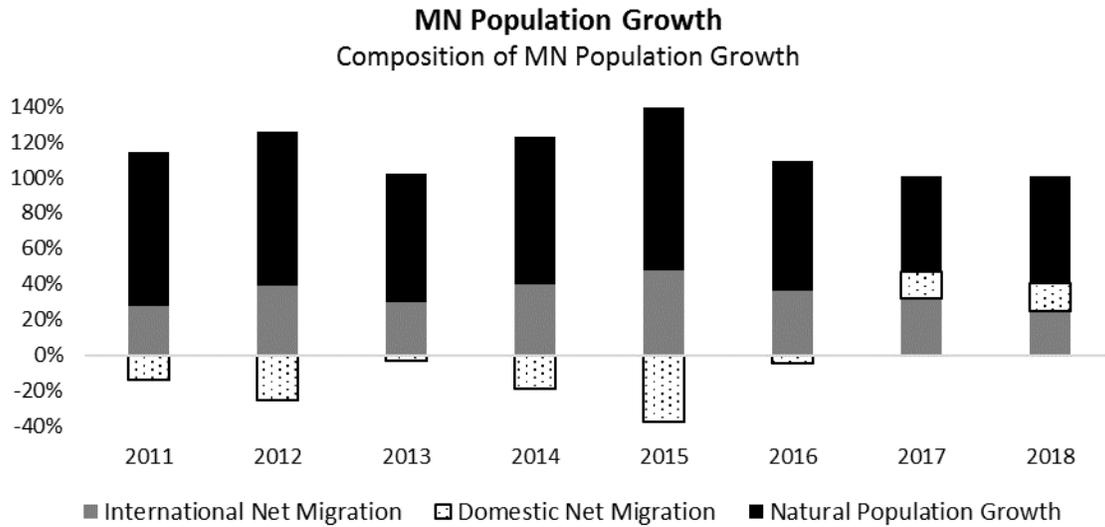
In each of the past two years, Minnesota gained more residents from other states than it lost. This is an exception in the region and reversed a 15-year trend for the state. Minnesota gained 7,941 more new residents from other states than it lost in 2017 and an additional 6,796 in 2018. In contrast, the Midwest Region lost 318,435 residents to other parts of the U.S. as a result of domestic migration over the same time period. Minnesota and Indiana were the only two Midwestern states to gain residents from domestic migration between 2017 and 2018, and Minnesota’s gains were nearly double those of Indiana.



Source: U.S. Census Bureau

*In each of the past two years, Minnesota gained more residents from other states than lost. This is an exception in the region and reversed a 15-year trend for the state. Minnesota gained nearly 8,000 more new residents from other states than it lost in 2017, and an additional 7,000 in 2018. In contrast, the Midwest Region lost 318,00 residents to other parts of the U.S. over the same time period as a result of domestic migration.*

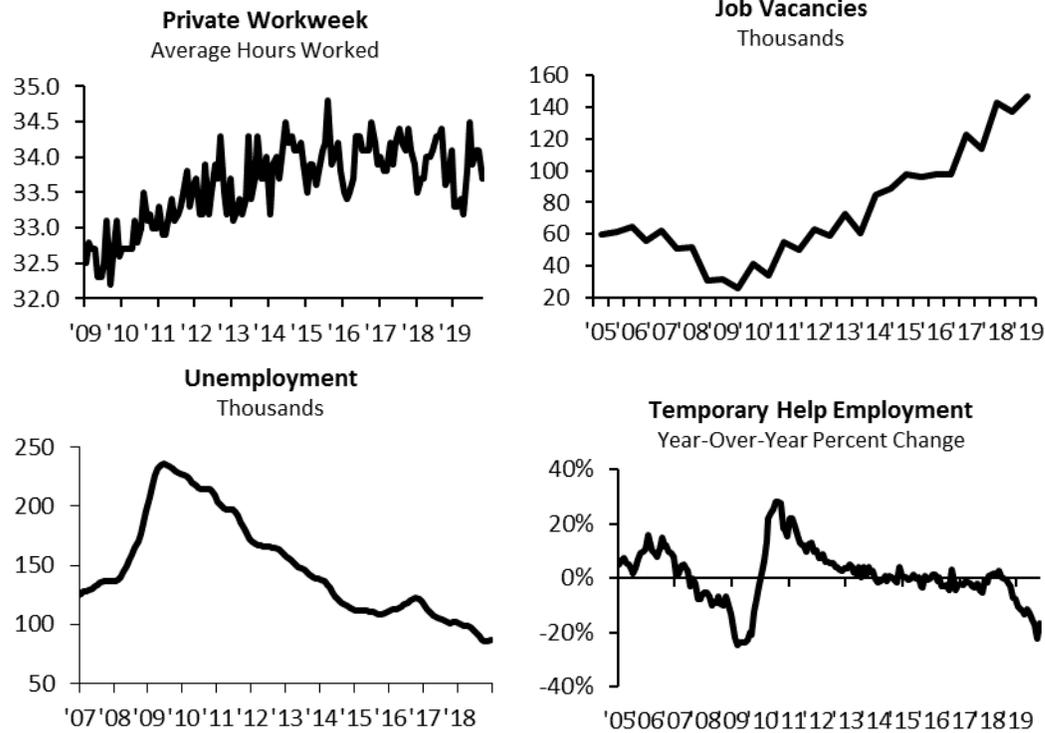
An improving population growth rate is a potential bright spot for Minnesota’s labor force. Of Midwestern States, only North Dakota reported stronger population growth than Minnesota (1.0 percent). As Minnesota’s labor force growth slows, and job opportunities remain plentiful, wages should rise and continue to make Minnesota an attractive state for job seekers. If the two-year trend toward positive domestic net in-migration continues, this could supplement the labor force as boomers exit.



*In total, the number of Minnesotans increased by 43,000 (0.8 percent) between 2017 and 2018. Minnesota’s population growth is comprised of three parts: the natural rate of population increase (number of births and deaths), net domestic migration, and net international immigration. With the natural rate of population growing more slowly than historical growth rates, domestic and international migration play a crucial role in Minnesota’s labor force growth.*

Other indicators show that Minnesota’s labor market is feeling the effects of constrained labor supply. According to DEED, Minnesotans filing new claims for unemployment benefits fell to the second lowest monthly level for the year in August, at 15,453 claims, down 8.7 percent from last year. The initial claims level remains extremely low relative to historical standards, suggesting that slow employment growth in Minnesota is indicative of limited labor availability, rather than a drop in demand for workers. In a tight labor market, adding hours is one way employers address the difficulty of hiring new workers. In August, the average workweek in the private sector was 34.1 hours, down 0.2 hours from a year prior, but consistent with the long-term positive trend in this indicator. The number of people employed in temporary help jobs, which historically has been an early indicator of overall employment, has been gradually decreasing since August 2018. The current slowdown in this sector could reflect the overall slower pace of job gains in Minnesota.

## Minnesota Leading Indicators



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

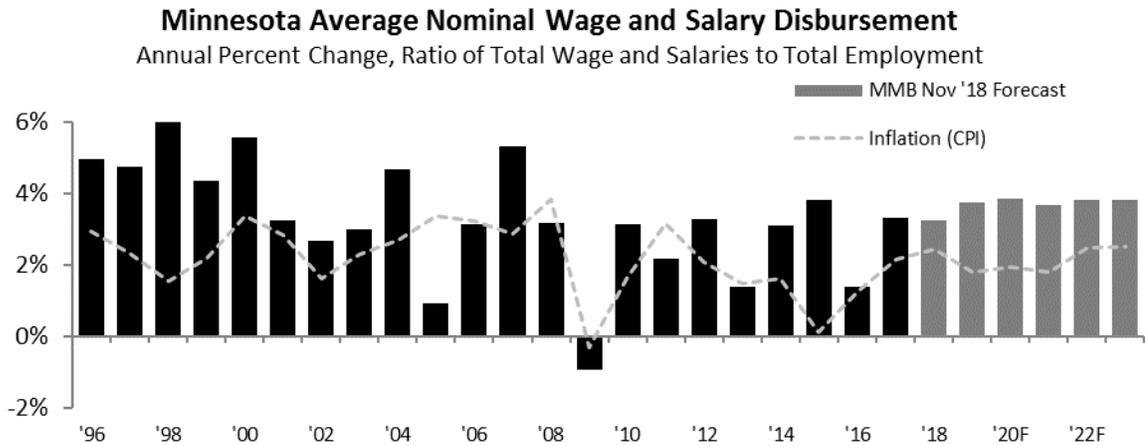
*Strong demand for workers and low unemployment characterize Minnesota's tight labor market. These are positive signs for job seekers and switchers in Minnesota.*

**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 2019. 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 continue to rise.

We expect that slowing annual employment growth, combined with a moderate acceleration in wages per worker, will lead total wage and salary income to grow at rates of 4.1 and 4.2 percent per year in 2019 and 2020, followed by 4.1, 4.2 and 4.1 percent in years 2021, 2022, and 2023, respectively. As with the U.S. wage forecast, those are higher rates for 2018 and 2019 than we forecast in February. As with the U.S. wage forecast, annual BEA revisions the National Income and Product Accounts (NIPA) made substantial upward revisions in personal income, reflecting upward revisions in interest, dividends, and wages and salaries. For the remainder of the forecast horizon, 2020-2023, we expect Minnesota wage and salary growth to be consistent with U.S. growth rates around 4.1 to 4.2 percent. The MMB model of the Minnesota economy incorporates preliminary information on forthcoming revisions to Minnesota's non-farm payroll employment, as well as new data from the Quarterly Census of Employment and Wages (QCEW) and income tax withholding collections since February.

Combined with our employment growth forecast, these rates result in a 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.

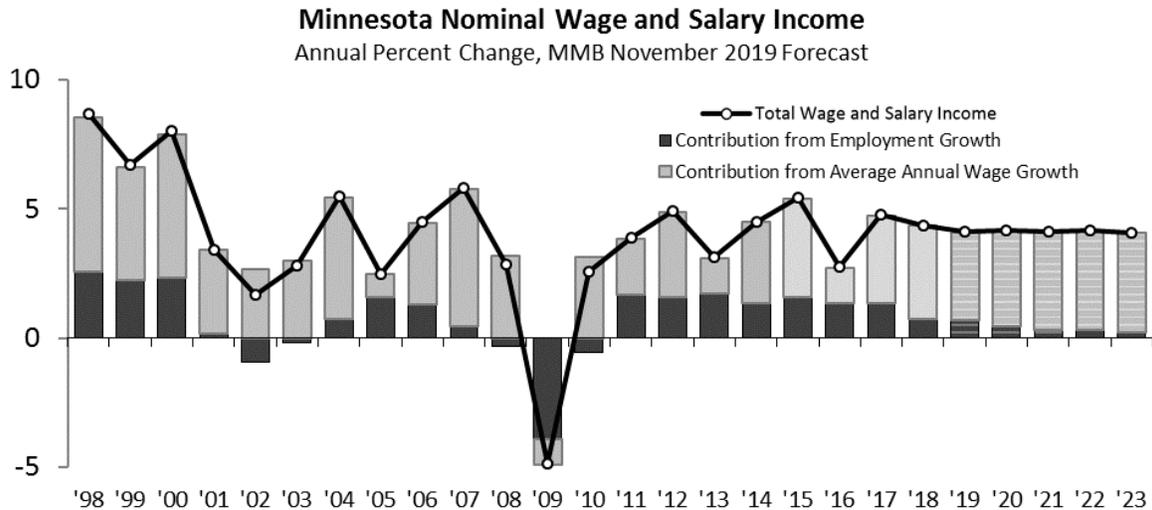
Minnesota personal income per capita has been higher than the U.S. since the late 1980s. Through the end of 2018, the state’s per capita income was 105 percent of the national level, ranking Minnesota second in the Midwest and fourteenth among states.



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

*We expect Minnesota wage growth of 4.1 and 4.2 percent for Minnesota in 2019 and 2020. Combined with our employment growth forecast, these rates result in a 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.



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.*

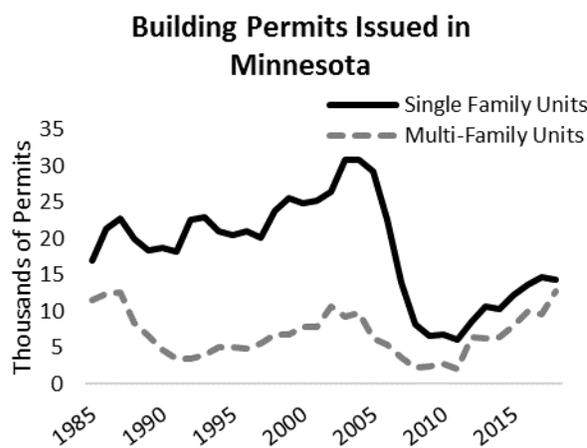
**Homebuilding Activity.** Despite several years of rising prices, the demand for homes continues to drive prices upward in Minnesota. According to the Minnesota Association of Realtors (MAR), there is a 3.2-month supply of homes for sale based on the current statewide sales pace, with most sellers receiving 97.3 percent of the original list price at sale. In the metro area, the inventory is even more limited. According to MAR, there are only 2.5 months’ availability in the 13-county Twin Cities region, with 6,920 active listings in September 2019, up 2.5 percent from last year. The long-term, persistently tight supply continues to push up median and mean sale prices, as well as rents. According to Marquette Advisors, rents increased nearly 8 percent over the last year in the seven-county metro area. In September, the statewide median sales price had increased 6.6 percent, reflecting a median sales price of \$250,000. Time on the market until a property is sold is about 45 days, a 6.3 percent decrease over the same period last year. Closed sales are down 0.7 percent through September 2019.

While rising home prices increase the net worth of the homeowner, they also 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 5.9 percent. In contrast, rates are now averaging around 3.8 percent. While higher median prices increase monthly payments, lower rates constrain them. Combining these effects, affordability reached a ten year low in 2018 based on the housing affordability index—the ratio of median household income to the income needed to purchase a house. The year-to-date affordability index is 167 through 2019, up from 157 over the same period in 2018. For the past two years, affordability has hovered near where it was in 2007, when the index was around 150.

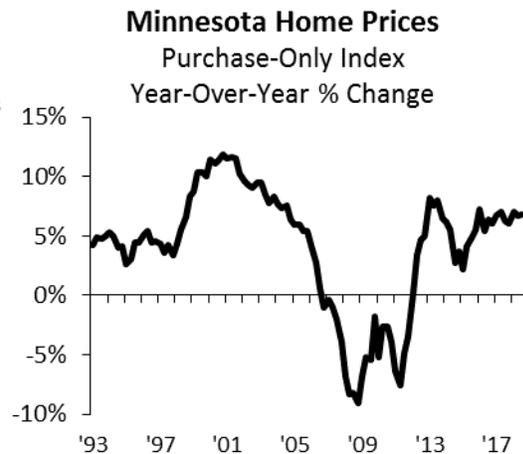
In this forecast, IHS expects the 30-Year fixed mortgage rate to finish 2019 at 3.9 percent, down from 4.5 percent in 2018. IHS then expects the rate to remain at 3.9 in 2020 before increasing back up to 4.3 in 2021, 4.5 in 2022, and 4.6 in 2023.

In 2018, homes between \$150,000 and \$300,000 were in greatest demand. The rising cost of labor and materials are limiting the supply of new houses in this price range. Rising demand for alternatives to a single-family home are reflected in the growth of multi-family housing permits, such as condos and townhouses, and 2018 saw the highest level of multi-family permits since 1987. Lack of affordable housing can pose problems for employers seeking to attract new employees.

Between 2010 and 2017, annual household formations 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. However, 2018 marked a dramatic change in household formation, with 32,000 new households. This spike in household formation coincides with the last two years of positive net-in migration. Positive domestic migration combined with sustained net positive international migration made 2017 the largest year for net in-migration (24,000 new net residents from migration) in nearly three decades. As Minnesota’s economy continues to grow, we forecast a continued recovery in household formations. We expect annual net new formations to be around 24,000 in 2019, followed by approximately 19,000 per year through 2023. The February forecast will include updated 2019 population data from the U.S. Census Bureau, which may indicate whether the two recent years of positive domestic in-migration will persist.



Source: US Census Bureau, Building Permit Survey

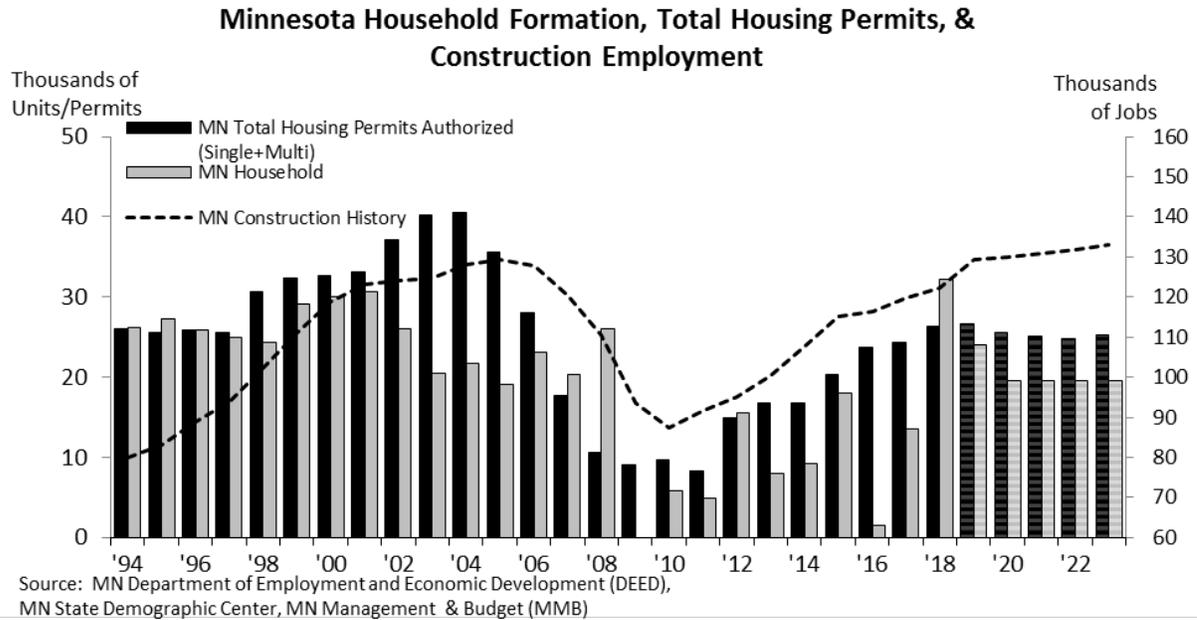


Source: Federal Housing Finance Agency (FHFA)

*Minnesota’s home prices are now higher than any time since 2005, posing a risk to affordability. Affordability reached a ten year low in 2018 according to the housing affordability index- the ratio of median household income to the income needed to purchase a house. The affordability index has improved slightly year-to-date in 2019 compared to the same period last year. 2018 saw most multi-unit permits since 1987, indicating a growing demand for alternatives to a single-unit home, such as condos and townhomes.*

According to the U.S. Census Bureau, the total year-to-date number of authorized residential building permits (not seasonally adjusted) in Minnesota was 20,672 through September 2019, down slightly from 20,952 over the same period last year. In this forecast, we expect total housing permits to rise to about 26,600 in 2019 and 25,510 in 2020 and to remain around an estimated 25,000 per year through 2023. Over the year, the construction employment has grown faster than any other sector in Minnesota, up 5.5 percent in August. With higher housing demand and higher

home prices, we expect higher homebuilding activity and construction employment to continue to increase through 2023.



*Following the 2008-09 recession, household formations averaged about 10,000 new households per year from 2010-17, much lower than the pre-recession ten-year average of 24,500. However, 2018 saw a spike in Minnesota household formation, with 32,000 new households, coinciding with two years of positive net-in migration. Positive domestic migration combined with sustained net positive international migration resulted in 2017 being the largest year for net in-migration (24,000 new net residents from migration) on record in nearly three decades.*

**Exports.** Minnesota’s exports of goods and services to countries throughout the world is a significant source of income and jobs in the state. In 2018, Minnesota exported nearly \$22.7 billion in goods worldwide, with Canada (\$4.8 billion), China (\$2.8 billion), and Mexico (\$2.4 billion) the largest markets. However, tariffs are impacting exports both nationally and in Minnesota. During the first nine months of 2019, Minnesota exports declined 1.8 percent, while U.S. exports declined 1.2 percent over the same period.

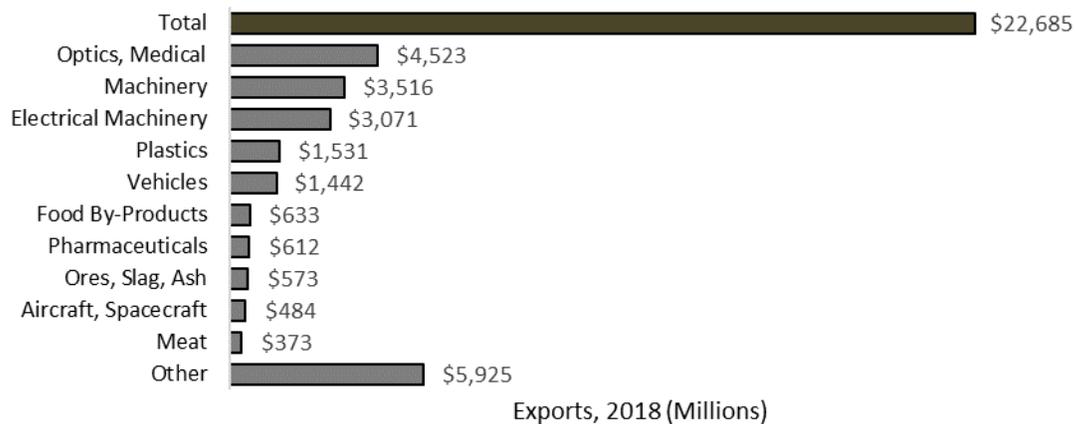
Trade tensions continued in 2019 as major U.S. trading partners announced trade-restrictive countermeasures in response to tariffs imposed by the U.S. on steel, aluminum and other products. Additionally, in August, the U.S. announced a 25 percent tariff on 44 percent of goods imported from China and a 15 percent tariff on most of the remaining imports from China. The U.S. tariffs are being implemented in two steps, the first on September 1, 2019, and the second effective December 15, 2019. Unlike the initial tariffs on \$250 billion of Chinese goods implemented in 2018 (approximately 50 percent of all goods imported from China), these tariffs target consumer goods and will likely result in higher prices for a range of products, including clothing, toys, and electronics. The implementation of a phase-one agreement between the U.S. and China would reduce trade tensions.

In the first quarter of 2019, Minnesota’s exports increased 1.5 percent, followed by a decline of 4.4 percent in the second quarter, and a decline of 2.2 percent in the third, compared to the same quarters last year. These numbers confirm the broad trend of slowing trade after a surge in soybean exports in advance of Chinese tariffs in summer 2018 drove both imports and exports to peak levels last year. Over the same time periods (the first, second, and third quarters of 2019), U.S. exports grew 2.8 percent, -4.6 percent, and -1.7 percent, respectively, compared to the same quarters last year.

Minnesota’s exports to China fell 13 percent in the first quarter of 2019, 3 percent in the second quarter, and 3 percent in the third quarter, compared to one year ago. China is the largest market for Minnesota soy, second largest for milk, and third largest for pork products, all of which have been affected by tariffs.

**Minnesota's Top 10 Exported Products, 2018**

Millions of USD



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



*Agricultural commodities continue to be impacted by tariffs. In May 2019, escalating trade tensions drove soybeans prices to their lowest levels since 2008. Minnesota’s Iron Range had another positive year as ore, slag, or ash exports increased, employment in the sector increased, and tariffs on imported steel raised demand for the domestic steel. In 2018, exports of ores, slag, or ash totaled \$573 million, a 56 percent increase from 2017.*

Minnesota's Iron Range had another positive year as ore, slag, or ash exports increased, employment in the sector increased, and tariffs on imported steel raised demand for domestic steel. In 2018, exports of ores, slag, or ash totaled \$573 million, a 56 percent increase from 2017. In addition, employment in the mining and logging sector grew by 1.1 percent. Prices of iron ore remained stable, and because most of the iron ore produced on Minnesota's Iron Range is used for domestic steel production, U.S. tariffs on imported steel are likely boosting U.S. production and increasing demand for Minnesota-sourced ore.

**Agriculture.** While agriculture represents a relatively small share of 2018 Minnesota GDP (1.4 percent), Minnesota is home to roughly 68,500 farms and is one of the country's top agricultural states. The agriculture industry and rural communities are feeling the impacts of multiple years of depressed commodity prices and a prolonged downturn in agriculture. In addition to low commodity prices, trade tensions have limited producers' access to valuable foreign markets. Heavy winter snowfall, an exceptionally wet spring and summer, and an early freeze have made farming difficult for farmers across the state.

In the Red River Valley, which extends across Northwestern Minnesota, farms have faced flooding, disease, and freezing temperatures. Delayed first by rain, then snow, sugar beet and potato farmers in the Red River Valley were unable to harvest significant portions of their crops. This is a change from recent years when Minnesota's sugar beet farmers had relatively good outcomes compared to the state's soy and corn producers, whose incomes were impacted by falling commodity prices.

According to the USDA farm income projections, national net farm income, a key indicator of U.S. well-being in farming households, is projected to be up 4.8 percent in 2019. This increase is largely the result of a 42.5 increase in government payments to the agricultural sector. While the agriculture sector is in a prolonged downturn, average farm household income has been higher than U.S. household incomes since the late 1990s. However, this advantage is driven by off-farm income. In 2014, the average farm household income including off-farm income, was about 77 percent higher than the average U.S. household income. That advantage has declined to 44 percent as of 2017, the most recent year data is available. Without off-farm income, over half of U.S. farm operations have had negative income from their agricultural operations since 2014.

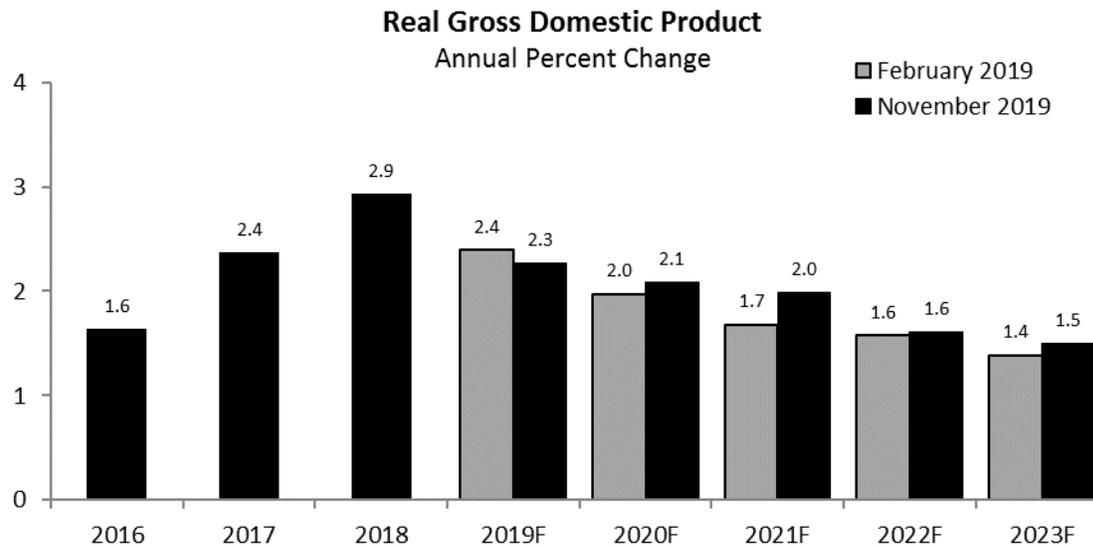
<b>Minnesota's Agricultural Economy 2017*</b>			
		<b>Market Value Sales (\$1000)</b>	<b>U.S. Rank</b>
<b>Total Agricultural Products Sold</b>			
<i>Total Value of agricultural products sold</i>	\$	18,395,390	6th
<b>Value of Crops</b>			
<i>Total Value of crops, including nursery and greenhouse products</i>	\$	10,191,518	4th
<b>Value of Livestock</b>			
<i>Total Value of livestock, poultry, and their products</i>	\$	8,203,872	7th
<b>Grains (including corn and soybeans)</b>	\$	8,843,440	4th
<b>Hogs and Pigs</b>	\$	3,165,075	3rd
<b>Milk from cows</b>	\$	1,737,886	8th
<b>Poultry and eggs</b>	\$	1,285,951	15th

Source: U.S. Department of Agriculture (USDA)

\*Report updated every 5 years

## Council of Economic Advisors' Statement

Minnesota's Council of Economic Advisors met on November 15, 2019, to review the IHS Markit (IHS) outlook for U.S. economic growth, which includes the assumptions underlying Minnesota's November 2019 *Budget and Economic Forecast*. Compared to their February 2019 forecast, IHS has lowered their growth expectations for 2019, while raising them for 2020 and 2021. IHS expects annual growth of 2.3 percent this year, down from 2.9 percent in 2018. They forecast the slowdown to continue, with annual real GDP growth gradually decelerating to 1.5 percent annually in 2023.



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

*Since February, IHS has lowered their growth expectations for 2019, while raising them for 2020 and 2021. They forecast a gradual slowdown, with annual real GDP growth decelerating to 1.5 percent annually in 2023. Council members agree that IHS's expectations for U.S. growth are a good starting point for MMB's forecast, and they noted risks to the U.S. outlook.*

IHS now expects real GDP to grow 2.3 percent in 2019, down from 2.4 percent in their February outlook. For 2020, IHS slightly raised growth expectations to 2.1 percent from 2.0 percent in February, and they raised their 2021 growth forecast to 2.0 from 1.7 percent. In each year from 2020 through 2023, real consumer spending contributes more to real GDP growth than in the February outlook, boosted by a stronger trajectory for household wealth, including equities, and an upward revision to wage growth in 2018 and the first half of 2019. In contrast, slower output growth and trade policy uncertainty have weakened the outlook for business investment compared to February. The November forecast includes all U.S. and retaliatory tariffs imposed to date, including a 25 percent U.S. tariff on 44 percent of all goods imported from China and a 15 percent tariff on most of the rest of Chinese imports, implemented in two steps on September 1 and December 15. The current outlook also assumes that federal appropriation bills are signed into law to fully fund the government for FY 2020.

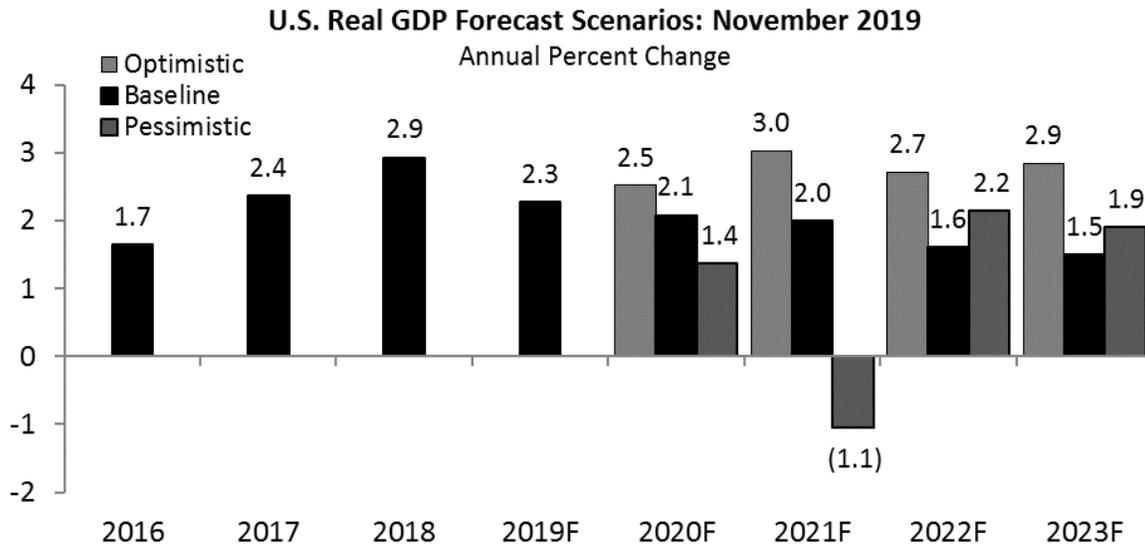
Regarding economic fundamentals, IHS expects stable household finances, low interest rates, fiscal stimulus from the Bipartisan Budget Act of 2019, increases in U.S. oil production, and a rebound in global economies next year to support growth through 2020. Three factors—a boost

in auto production following the GM strike, a ramp-up of Boeing's production of the 737 MAX airliner, and 2020 Census hiring—are expected to temporarily fuel growth in 2020. IHS expects a slowdown after 2020 as fiscal stimulus dissipates, tariffs and trade policy impose a drag on consumer sentiment and business investment, interest rates increase, and household wealth decelerates.

The IHS November 2019 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 2.3 percent in 2019, the same as the IHS forecast. For 2020, IHS expects higher growth than other forecasters: 2.1 percent compared to 1.8 percent for the Blue Chip Consensus.

Council members agree that IHS's expectations for U.S. growth are a good starting point for MMB's November 2019 economic forecast. They also agree that the risk that the economy underperforms IHS' expectations is greater than the potential for growth exceeding the forecast. For example, a worsening of the manufacturing slowdown could lower already weak business investment and trigger job losses that dampen consumer spending. Household wealth growth that does not meet IHS' expectations could also slow consumer spending. Additional downside risks include economic disruptions from geopolitical events and escalation of trade tensions. On the other hand, stronger than expected productivity and global growth in excess of the forecast would cause the economy to outperform the IHS outlook. MMB economists also note that considerable risks to the revenue forecast arise from uncertainty about the magnitude of state and federal tax law changes and corporate and individual taxpayers' responses to the new laws. And finally, Council members agree that the difficulty of projecting long range economic conditions warrants caution when using forecasts for 2022 and 2023.

IHS assigns a probability of 55 percent to the November baseline outlook. They assign a 35 percent probability to a more pessimistic scenario, in which declining consumer and business confidence and increased risk aversion trigger a three-quarter recession starting in 2020. IHS assigns a 10 percent probability to a more optimistic scenario, in which higher productivity boosts incomes and, consequently, consumer spending. This scenario assumes that unemployment can fall to a lower level before it exerts inflationary pressure, keeping consumer price inflation lower than in the baseline.



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

*IHS assigns a 55 percent probability to the November baseline outlook. They assign a 35 percent probability to a more pessimistic scenario, in which declining consumer and business confidence and increased risk aversion trigger a three-quarter recession starting 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 2019 *Budget and Economic Forecast* understates the cost of current services as provided by law in FY 2022-23 by roughly \$1.211 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 if inflation accelerates from current 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 4.9 percent of biennial (two-year) general fund revenues. At the end of the 2019 legislative session, Minnesota's projected FY 2020-21 budget reserve was \$2.075 billion, or 4.5 percent of biennial revenues, below the recommended level based on MMB's analysis.<sup>2</sup>

<sup>2</sup> With the release of the November 2019 Budget and Economic Forecast, the budget reserve is \$2.359 billion, or 4.9 percent of forecast FY 2020-21 general fund non-dedicated revenues.



## BUDGET OUTLOOK

### Closed Biennium

When the last *Budget and Economic Forecast* was released in February, a balance of \$563 million was projected for the FY 2018-19 biennium. Actions in the 2019 regular and special legislative sessions including \$17 million in spending reductions and \$26 million in higher revenue increased the projected ending balance to \$606 million.

**FY 2019 Close.** In August, the books were officially closed for the fiscal year and biennium that ended June 30, 2019. The FY 2018-19 biennium ended with a positive general fund balance of \$1.421 billion, \$815 million higher than estimated at the end of the 2019 legislative sessions. The closing balance at the end of the biennium represents “money in the bank” available as a resource for the FY 2020-21 biennium.

#### Closed Biennium: FY 2018-19 General Fund Budget End-of-Session vs. Actual Comparison

(\$ in millions)	End-of-Session	Actual	\$ Change	% Change
<b>Beginning Balance</b>	<b>\$3,333</b>	<b>\$3,333</b>	<b>\$ -</b>	
<b>Revenues</b>				
Taxes	43,159	43,847	688	1.6
Non-Tax Revenues	1,660	1,693	33	2.0
Transfers, Other Resources	419	499	80	19.1
<b>Total Revenues</b>	<b>\$45,238</b>	<b>\$46,039</b>	<b>\$801</b>	<b>1.8%</b>
<b>Expenditures</b>				
E-12 Education	18,832	18,821	(11)	(0.1)
Property Tax Aids	3,658	3,651	(7)	(0.2)
Health & Human Services	13,322	13,298	(24)	(0.2)
Debt Service	1,113	1,113	-	0.0
All Other	8,566	8,518	(48)	(0.2)
<b>Total Expenditures</b>	<b>\$45,491</b>	<b>\$45,401</b>	<b>\$(90)</b>	<b>(0.2)%</b>
Budget Reserve	2,075	2,075	-	
Cash Flow Account	350	350	-	
Stadium Reserve	50	55	5	
Appropriation Carryforward	0	71	71	
<b>Budgetary Balance</b>	<b>\$606</b>	<b>\$1,421</b>	<b>\$815</b>	

FY 2019 total resources – including tax and non-tax revenue, transfers-in and prior year adjustments – were \$801 million higher than prior estimates. Tax revenues were \$688 million (1.6 percent) higher than estimates while non-tax revenue was \$33 million higher (2.0 percent) than projected. Transfers from other funds were \$17 million higher than projected primarily due to a transfer from the Department of Human Services (DHS) State Operated Services (SOS) account occurring in FY 2019 instead of FY 2020. Adjustments to prior fiscal years including accounting corrections, encumbrance cancellations and revenues attributable to prior years, totaled \$91 million, which is \$62 million higher than forecast.

The general fund's three largest tax categories – individual income, sales, and corporate franchise – accounted for 97 percent of the FY 2019 increase over forecast for tax revenues. Individual income tax receipts were \$440 million (1.9 percent) higher than forecast, sales tax receipts were \$92 million (0.8 percent) higher than estimates and corporate franchise tax receipts were \$136 million (4.8 percent) higher. Most other tax types were also higher than forecast except for cigarette and tobacco products tax, which was \$25 million (2.2 percent) below forecast.

Actual spending for FY 2019 was \$90 million below end of session estimates; however, a large portion of that total, \$71 million, is attributed to unspent appropriations that carried forward into the current biennium and are available to be spent. In general, unused operating appropriations for state agencies cancel at the end of the biennium. Accounting for most of the appropriations carried forward are \$32 million in appropriations for business and community development programs at the Department of Employment and Economic Development (DEED) and \$23 million in operating appropriations for the legislative branch that are allowed to carryforward. Slightly lower spending in the three large forecast programs – E-12 education, health and human services (HHS) and property tax aids and credits – accounted for the remainder of the spending change from estimates.

FY 2019 concluded with the cash flow account balance at \$350 million, the budget reserve balance at \$2.075 billion and the stadium reserve balance at \$55 million.

## Current Biennium

A budgetary balance of \$1.052 billion was projected for the FY 2020-21 biennium in the February *Budget and Economic Forecast*. Actions during the 2019 regular and special legislative sessions reduced that projected balance to \$242 million. The higher than expected incoming balance from the closed biennium, combined with an increased revenue forecast, slightly decreased spending estimates and an increased allocation to the stadium reserve results in a forecast balance of \$1.616 billion. Statute however allocates a portion of any November forecast balance to the budget reserve account until the statutorily defined target is met. With this forecast, \$284 million is allocated to the budget reserve, bringing it to the target level of \$2.359 billion. After this reserve allocation, the available general fund balance for the FY 2020-21 biennium is now \$1.332 billion.

**Revenue.** Revenue in the current biennium is now projected to reach \$48.656 billion, an increase of \$501 million (1.0 percent) over end of session estimates. Forecast increases in the two largest taxes, individual income and sales tax, are partially offset by a reduced forecast to the corporate franchise tax forecast. Non-tax revenue is projected to be higher, while transfers and other resources are projected to be slightly lower.

**Current Biennium: FY 2020-21 General Fund Budget  
Change from End-of-Session Estimates**

(\$ in millions)	End of Session	November 2019 Forecast	\$ Change
<b>Beginning Balance</b>	<b>\$3,080</b>	<b>\$3,971</b>	<b>\$891</b>
Forecast Revenues	48,155	48,656	501
Projected Spending	48,470	48,463	(7)
Budget Reserve	2,075	2,075	-
Cash Flow Account	350	350	-
Stadium Reserve	98	124	25
<b>Forecast Balance</b>	<b>\$242</b>	<b>\$1,616</b>	<b>\$1,374</b>
33% to Budget Reserve or up to target	-	284	284
<b>Budgetary Balance</b>	<b>\$242</b>	<b>\$1,332</b>	<b>\$1,090</b>

**Spending.** Overall projected spending in the FY 2020-21 biennium is materially unchanged from end of session estimates. This forecast now assumes spending for the current biennium to be \$48.463 billion, a reduction of \$7 million (0.0 percent) from estimates when the budget was enacted.

Spending estimates for specific budget areas are more significantly changed from previous estimates. The largest budget area, E-12 education is expected to be \$24 million (0.1) percent below end of session estimates. This savings is due to lower projected student population growth and reduced growth in special education spending, which is partially offset \$30 million contingent appropriation for school safety that was activated when FY 2019 closed with a higher general fund balance than was projected at the end of session.

The forecast for next largest budget area, HHS, is also lower than estimates at the end of the legislative session. Spending for HHS is expected to be \$97 million (0.7 percent) lower in FY 2020-21 largely due to lower than projected enrollment of people with disabilities and families with children in Medical Assistance (MA). Debt service spending in the current biennium is also projected to be lower than end of session estimates. Substantially lower than projected interest rates and lower project cash flow needs reduced the size of the August 2019 bond sale and resulted a \$51 million lower (4.3 percent) projected debt service costs for the biennium.

The reduced spending estimates for E-12 education, HHS, and debt service are almost completely offset by higher projected spending other areas of the budget. Property tax aids and credits spending is expected to be \$61 million (1.6 percent) higher than prior estimates largely due to increased projections for the homestead credit refund program and higher payments for tax refund interest resulting from two recent court decisions. These decisions require the state to issue higher than anticipated tax refunds with accrued interest for tax payments made to the state in prior years. The “all other” category generally includes spending for agencies and programs with direct appropriations that don’t change with the forecast. Changes in this forecast are due to two factors:

1. There were two additional contingent appropriations that were activated when the closing balance for FY 2019 exceeded projections. The first is a \$20 million transfer to the disaster assistance contingency account at the Department of Public Safety. The second is a \$13 million increase to the Metro Mobility transit appropriation for Metropolitan Council.
2. Appropriations that went unspent in the last biennium but had special authority to carry forward increased projected spending in FY 2020-21. In FY 2020 there is \$71 million in appropriations that carried forward from FY 2019. The largest are \$32 million for business and community development programs at DEED and \$23 million in operating appropriations for the legislative branch that are allowed to carryforward.

**Current Biennium: FY 2020-21 General Fund Budget  
End-of-Session vs. November 2019 Forecast Comparison**

(\$ in millions)	End-of-Session	November 2019 Forecast	\$ Change	% Change
<b>Beginning Balance</b>	<b>\$3,080</b>	<b>\$3,971</b>	<b>\$891</b>	
<b>Revenues</b>				
Taxes	46,123	46,580	457	1.0
Non-Tax Revenues	1,500	1,557	57	3.8
Transfers, Other Resources	532	520	(12)	(2.3)
<b>Total Revenues</b>	<b>\$48,156</b>	<b>\$48,656</b>	<b>\$501</b>	<b>1.0%</b>
<b>Expenditures</b>				
E-12 Education	20,122	20,098	(24)	(0.1)
Property Tax Aids	3,804	3,865	61	1.6
Health & Human Services	14,774	14,677	(97)	(0.7)
Debt Service	1,183	1,132	(51)	(4.3)
All Other	9,999	9,999	104	1.2
<b>Total Expenditures</b>	<b>\$48,470</b>	<b>\$48,463</b>	<b>\$(7)</b>	<b>(0.0)%</b>
Budget Reserve	2,075	2,359	284	
Cash Flow Account	350	350	-	
Stadium Reserve	98	124	25	
<b>Budgetary Balance</b>	<b>\$242</b>	<b>\$1,332</b>	<b>\$1,090</b>	

**Budget Reserve.** Minnesota Statutes section 16A.152 directs the commissioner of Minnesota Management and Budget (MMB) to allocate funds to the budget reserve provided three conditions are met:

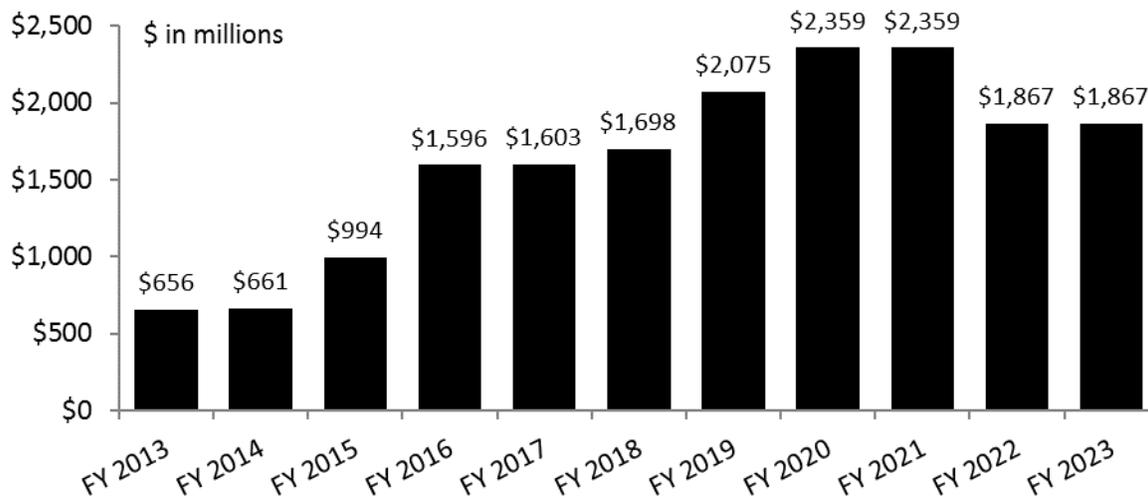
1. The state must have a positive forecast balance for the current biennium. With this forecast, the FY 2020-21 projected forecast balance, prior to any reserve allocation, is \$1.616 billion.
2. Existing statutory provisions that allocate forecast balances to restoring reserves, repaying accounting shifts and repaying borrowed funds must be satisfied before depositing additional resources into the reserve. As of this forecast, there are no

outstanding provisions requiring use of the budgetary balance in the current biennium prior to transferring funds to the budget reserve.

3. The state’s budget reserve level must be below the level recommended to adequately manage the volatility of the general fund tax structure. The current report, released in September 2019, recommends a budget reserve level of 4.9 percent of the current biennium’s general fund non-dedicated revenues, or \$2.359 billion. Prior to the automatic allocation, the budget reserve balance was \$2.075 billion, \$284 million below the recommended amount.

Since all three conditions are met with this forecast, current law triggers a deposit of up to 33 percent of the forecast balance to the budget reserve up to the target amount level. Of the total \$1.616 billion projected forecast balance for FY 2020-21, \$284 million is credited to the budget reserve account, increasing the reserve to its target amount of \$2.359 billion for the FY 2020-21 biennium. This deposit represents 17.6 percent of the forecast balance, less than the 33 percent because the target is reached.

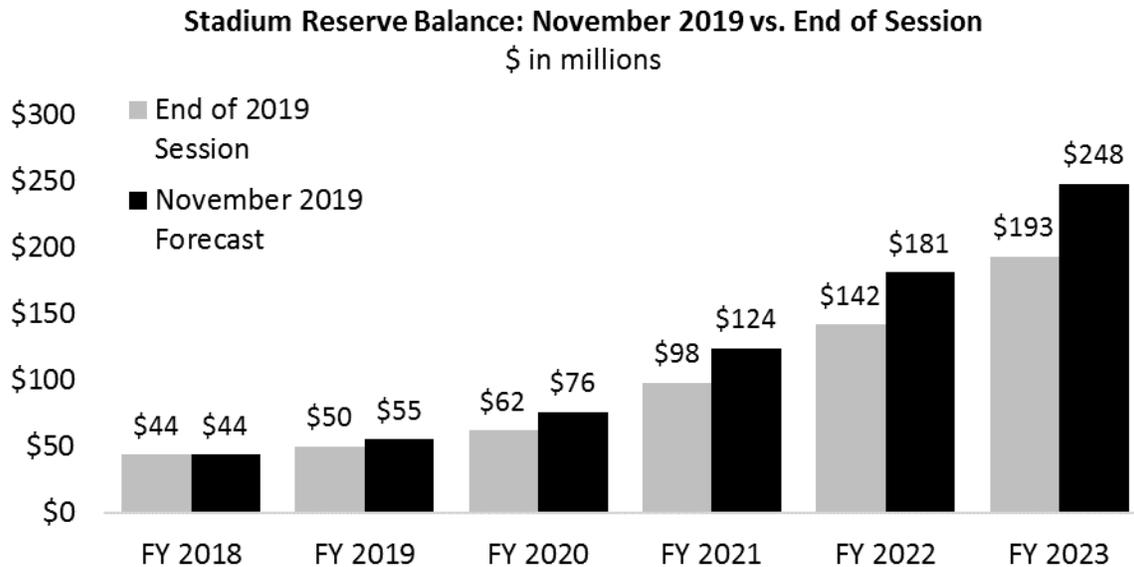
**General Fund Budget Reserve**  
**Actual and Forecast Balances FY 2013-23; November 2019 Forecast**



*The budget reserve account balance in FY 2013 was \$656 million. Since then the reserve balance has largely increased due to a law change that sets a reserve target based on the volatility of the state’s revenue sources and allows for automatic allocation to the reserve when there is a projected balance at the time to the November Budget and Economic Forecast.*

While the budget reserve reaches its statutory target for the FY 2020-21 biennium with the release of this *Budget and Economic Forecast*, law passed during the 2019 special session in May reduces the budget reserve below that target in FY 2022. Laws 2019, 1<sup>st</sup> Special Session Chapter 6, Article 11, Section 17 reduces the budget reserve balance by \$491.369 million on the first day of FY 2022. At the time of passage, this action was taken in the 2019 legislative session to ensure a positive projected budgetary balance for the FY 2022-23 planning estimates.

**Stadium Reserve.** The stadium reserve is a residual account within the general fund. Its balance can grow when certain general fund revenues that are identified in statute exceed general fund appropriations that are either directly for the stadium, like debt service on the bonds for its construction, or are identified in statute to be factored into the stadium reserve calculation. Uses of the stadium reserve are limited by statute. To date, the stadium reserve has been used twice. In FY 2015 and FY 2016 stadium related expenditures exceeded the revenues identified in statute and the commissioner of MMB used statutory authority to release funds from the stadium reserve so that the general fund would be held harmless from the revenue shortfall.



*The stadium reserve grew \$11 million in FY 2019, \$5 million more than prior projections. This increase is due to higher than projected gambling tax receipts, which are expected to grow through FY 2023. Any excess in the revenues supporting stadium related spending are deposited into the stadium reserve account in the general fund. By FY 2023, annual revenue is expected to exceed spending by \$66 million, and the stadium reserve balance is expected to reach \$248 million.*

Most of the revenues and expenditures identified in law for the stadium reserve formula are a fixed amount in law or show minimal variance from year to year. Lawful gambling revenue and Minneapolis sales tax receipts are the two revenues identified for the stadium reserve formula that are forecast and can grow year over year. In FY 2019, lawful gambling revenue available for stadium uses was \$53 million, \$6 million (12.8 percent) more than forecast; by FY 2023 lawful gambling revenue available for stadium uses is expected to grow to \$91 million. Over the FY 2019-23 budget horizon, a cumulative total of \$55 million more in lawful gambling receipts are projected to be available for stadium uses compared to end of session estimates. Additionally, beginning in FY 2021 the state will begin retaining Minneapolis sales tax receipts to cover the payments the state remits on behalf of the city for stadium obligations. In FY 2021 it’s projected the state will retain \$17 million in Minneapolis sales tax receipts, by FY 2023 that amount is expected to grow to \$19 million.

Total state expenditures for the stadium, including those the state makes on behalf of the City of Minneapolis, were \$42 million in FY 2019 and are expected to be \$43 million by FY 2023. All revenue in excess of spending amounts is allocated to the stadium reserve. In FY 2019, \$11 million was added to the stadium reserve, by FY 2023 the amount allocated to the reserve is expected to be \$66 million. Given the increasing allocation amounts, the stadium reserve balance is expected to reach \$248 million by FY 2023.

## Planning Estimates

Out year planning estimates are based on current law revenues and expenditures. These estimates inherently carry a higher degree of uncertainty than estimates for FY 2020-21. Revenue projections for FY 2022-23 are based on IHS' November forecast for the planning years. Expenditure projections assume that current law funding levels and policies continue unchanged, adjusted only for caseload and enrollment changes authorized in law, as well as formula driven growth. The expenditure forecast does not assume cost growth outside of a few specific budget areas where assumptions for price increases or market conditions are specified by statute.

To highlight structural balance, the table below shows forecast revenues and projected spending and excludes the impact of balances from prior years and reserves. In the FY 2022-23 biennium forecast revenue is expected to exceed base level spending by \$220 million.

### Planning Estimates: FY 2022-23 General Fund Budget By Fiscal Year; November 2019 Forecast

(\$ in millions)	FY 2022	FY 2023	FY 2022-23
Forecast Revenues	\$25,389	\$26,087	\$51,477
Projected Spending	25,399	25,858	51,257
<b>Difference</b>	<b>\$(10)</b>	<b>\$229</b>	<b>\$220</b>
<i>Estimated Inflation (CPI) Applied to Projected Spending<sup>3</sup></i>	<i>\$384</i>	<i>\$827</i>	<i>\$1,211</i>

Projected inflationary growth based on the Consumer Price Index is now forecast to be 2.2 percent in FY 2022 and 2.5 percent in FY 2023. After adjusting for programs with price increases included in the current law formula, applying the annual inflation rate, compounded over 2 years, would add approximately \$1.211 billion in spending pressure to the FY 2022-23 biennium.

### Biennial Comparison: FY 2020-21 vs. FY 2022-23 General Fund Budget November 2019 Forecast

(\$ in millions)	FY 2020-21	FY 2022-23	\$ Change	Annual % Change
Forecast Revenues	\$48,656	\$51,477	\$2,821	2.9%
Projected Spending	48,463	51,257	2,794	2.8

<sup>3</sup> 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.

The planning estimates are not intended to predict surpluses or deficits two or more years into the future. Rather their purpose is to assist in determining how well ongoing expenditures are likely to match future revenues based on trends in the economy and the level of spending that is needed to maintain programs and services. The FY 2022-23 planning estimates provide an important baseline against which the longer-term impacts and affordability of budget decisions can be measured.



## REVENUE OUTLOOK

### Current Biennium

Total general fund revenues for FY 2020-21 are now forecast to be \$48.656, \$501 million (1.0 percent) more than the February 2019 forecast adjusted for 2019 legislative changes. Total tax revenues for the biennium are forecast to be \$46.580 billion, \$457 million (1.0 percent) above the prior estimate. Higher expected individual, sales, and other tax revenue more than offset a lower forecast for corporate tax revenue.

#### Current Biennium: FY 2020-21 General Fund Revenues End-of-Session vs. November 2019 Forecast Comparison

(\$ in millions)	November 2019		\$ Change	% Change
	End-of-Session	Forecast		
Individual Income Tax	\$25,547	\$26,039	\$493	1.9%
General Sales Tax	11,873	12,125	252	2.1
Corporate Franchise Tax	3,190	2,897	(294)	(9.2)
State General Property Tax	1,561	1,561	1	0.0
Other Tax Revenue	3,952	3,958	6	0.2
<b>Total Tax Revenues</b>	<b>\$46,123</b>	<b>46,580</b>	<b>457</b>	<b>1.0%</b>
Non-Tax Revenues	1,500	1,557	57	3.8
Other Resources	532	520	(13)	(2.4)
<b>Total Revenues</b>	<b>\$48,156</b>	<b>\$48,656</b>	<b>\$501</b>	<b>1.0%</b>

Revenues for FY 2020-21 are now expected to exceed their FY 2018-19 levels by \$2.617 billion (5.7 percent). Total tax revenues are projected to be \$2.733 (6.2 percent) more than in FY 2018-19. Individual income tax revenues account for 68 percent of the biennial tax revenue growth. Net corporate and state general property tax receipts in FY 2020-21 are lower than in the previous biennium. Growth in forecast corporate refunds is the source of the biennial decline in net corporate revenues. The forecast biennial decline in general property tax revenues is due to legislative changes that lowered revenues from that tax.

This is the first forecast of FY 2020-21 since FY 2020 began on July 1. After four months of observed collections, fiscal year-to-date receipts are \$7.038 billion, 14 percent of the total expected over the biennium. With 20 months of FY 2020-21 collections left to observe, 86 percent of forecast receipts are outstanding.

**Biennial Comparison: FY 2018-19 vs. FY 2020-21 General Fund Revenues**  
**November 2019 Forecast**

(\$ in millions)			\$	%
	FY 2018-19	FY 2020-21	Change	Change
Individual Income Tax	\$24,189	\$26,039	\$1,850	7.6%
General Sales Tax	11,215	12,125	910	8.1
Corporate Franchise Tax	2,975	2,897	(78)	(2.6)
State General Property Tax	1,622	1,561	(61)	(3.8)
Other Tax Revenue	3,847	3,958	111	2.9
<b>Total Tax Revenues</b>	<b>\$43,847</b>	<b>46,580</b>	<b>2,733</b>	<b>6.2%</b>
Non-Tax Revenues	1,693	1,557	(136)	(8.1)
Other Resources	499	520	20	4.0)
<b>Total Revenues</b>	<b>\$46,039</b>	<b>\$48,656</b>	<b>\$2,617</b>	<b>5.7%</b>

**Individual Income Tax.** Individual income tax receipts are now forecast to be \$493 million (1.9 percent) more than the February forecast adjusted for law changes. The increase is due to a higher estimate of base year tax liability and higher forecast growth in non-wage income.

At the close of FY 2019, net income tax revenue was \$440 million more than forecast. About two thirds of the positive variance was due to higher than expected income tax payments and lower than expected refunds for tax year 2018. So far in FY 2020, net income tax receipts are \$274 million more than forecast. However, we believe that much of that variance is due to the timing of payments and refunds across the months of FY 2020. After reallocating the forecast across the remaining months of the fiscal year, we believe the true variance is around \$92 million.

This forecast builds from estimated final 2018 income tax liability. Using information from processed tax returns, revenue in the state accounting system, and projections of returns remaining to be received and/or processed, we estimate that final 2018 tax liability is \$11.381 billion, \$197 million more than estimated in February.

Calibrating the income tax model to produce our estimated base year liability generally requires making assumptions about base year growth rates for specific income types. Current information from the Bureau of Economic Analysis (BEA) indicates that Minnesota's wage income growth in 2018 was 4.2 percent, compared to the 4.1 percent growth that we assumed in the February forecast. In order to produce estimated tax year 2018 liability, capital gains realized by Minnesota residents were assumed to have grown 9.9 percent from 2017. In the February forecast, we had assumed an increase of 6.9. Both farm and non-farm business income are also assumed to have grown less in 2018 than we had assumed in February.

A higher forecast of income growth for CY 2019 and 2020 combine with the higher base year income tax liability to raise the forecast for FY 2020-21 income tax revenues. Information from the BEA, Quarterly Census of Employment and Wages (QCEW), income tax withholding collections, and our Minnesota economic forecasting model suggest that Minnesota's growth in wage and salary income has been stronger in 2019 than we forecast in February, but the forecast for subsequent years has been lowered. Annual growth in wage income included in adjusted gross income (AGI) in 2019 is now expected to be 3.9 percent, up from 3.7 percent in the February

forecast. Annual wage growth is now forecast to be 4.0 percent in 2020 and 3.9 percent in 2021, compared to 4.2 and 4.1 percent, respectively, in February. (Note that these percentages differ from the rates shown in our Minnesota Economic Forecast Summary table in this report, because that table reports growth rates in the components of personal income, which can differ from wages included in AGI.)

Inflation as measured by the Chain CPI-U is forecast to be lower than it had been in February. The 2019 legislative session tax bill replaced CPI-U with Chain CPI -U for indexing Minnesota tax brackets and other parameters of the state tax code. The lower forecast for Chain CPI-U has the effect of adding revenue in this forecast compared to what had been estimated when the law changes were passed and reported in the end of session Fund Balance Analysis.

Changes in expected growth rates in some non-wage income types in CY 2019 and 2020 also increase the FY 2020-21 income tax forecast. Capital gains realizations reported by Minnesota residents are now assumed to grow 5.9 percent in 2019 and 2.0 percent in 2020, compared to 2.7 and -0.9 percent, respectively, in the prior forecast. Growth in business income is cumulatively 3.2 percentage points higher through 2021, compared to February. Partially offsetting these effects is lower assumed growth in dividend and interest income throughout the forecast period.

The forecast for net income tax receipts from fiduciaries (estates and trusts) is \$92 million lower than in February. An off-model adjustment for the expected revenue loss resulting from the Minnesota Supreme Court ruling in *Fielding v. Commissioner* lowers the fiduciary forecast by \$124 million in this biennium. A higher forecast for growth in capital gains income—a source of income for many trusts—partly offsets this change.

A positive revenue adjustment was made to take into account the fact workers paid weekly on Friday will have a 53rd payday in 2020, and many of those paid biweekly will have 27 paydays rather than the usual 26.

Higher than expected payments to date from non-resident partnership and S-Corps, along with higher projected growth in business income and capital gains, raise the forecast for taxes paid by these entities by \$101 million in FY2020-21.

New information that is expected to become available between now and February 2020 may change the income tax forecast for FY 2020-21. Mid-January we expect to learn more about actual tax liability for 2018, the year on which this forecast is based. However, we will not know *final* tax liability until mid-year, upon completion of TY 2018 tax return recalculations incorporating retroactive provisions of the 2019 tax bill. A significant variance between actual and estimated 2018 liability will change the forecast.

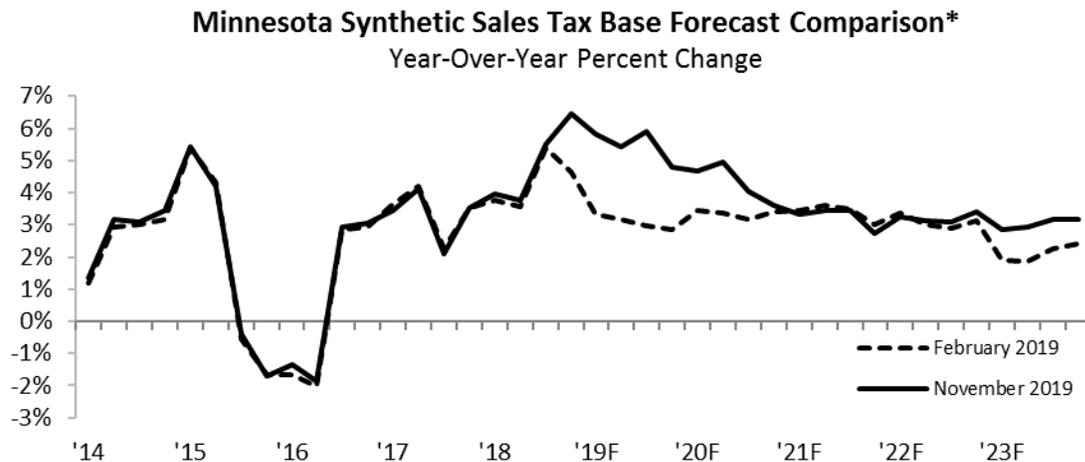
In late January we will also observe fourth quarter income tax withholding and estimated tax payments, which typically provide new information about the liability year that just ended. For two reasons, however, this year's observations will be less indicative of tax liability than they usually are. First, withholding receipts will be less directly correlated with wage growth, because the Minnesota withholding tables were significantly changed in September. Second, while fourth quarter estimated payments usually help us estimate growth in April 15 final and extension payments, taxpayer responses to the federal Tax Cuts and Jobs Act (TCJA) appear to have muddied this signal by altering the typical pattern of estimated tax payments. Following TCJA enactment in December 2017, the fourth quarter share of annual estimated tax payments rose to a record high,

followed by a record low share in the fourth quarter of TY 2018. It is unclear if that share will remain near the 2018 record low or will move back to a more historically normal level.

Finally, in February, we expect to have the first information about 2018 growth rates in various income types—including capital gains—from a preliminary sample of 2018 tax returns. This should help identify income growth arising from sources that are unlikely to carry over into subsequent years.

The income tax forecast for the current biennium is adjusted for 2019 Minnesota tax law changes. The adjustments include about \$401 million of positive changes and \$559 million of revenue reductions, lowering the forecast by about \$159 million on net. Large tax law changes such as these increase the level of uncertainty in the revenue forecast.

**General Sales Tax.** General sales tax revenue in FY 2020-21 is now forecast to be \$252 million (2.1 percent) more than the prior estimate. A higher forecast for gross sales tax receipts and a lower forecast of tax refunds both contributed to the change. The increased forecast for gross sales tax receipts reflects higher than expected gross receipts so far in FY 2020 and a higher forecast for taxable sales compared to February. Using forecasts for spending on a wide range of taxable goods and services, we construct the Minnesota synthetic sales tax base, a proxy for the actual sales tax base. In this forecast, the synthetic base is expected to grow 1.4 percentage points faster in CY 2020 and 0.1 percentage points faster in CY 2021 than we had assumed in February. We adjusted February sales (March collections) to take into account the extra day in February 2020.



Source: U.S. Bureau of Economic Analysis; IHS Economics; Minnesota Management & Budget (MMB)  
\*Differences between the February and November forecast for past dates reflect new estimates of the revenue loss from remote sales.

*In this forecast, the proxy for Minnesota’s sales tax base is expected to grow 1.4 percentage points faster in CY 2020 and 0.1 percentage points faster in CY 2021 than we had assumed in February.*

Sales tax payments associated with the U.S. Supreme Court decision in *South Dakota v. Wayfair* raise the starting point for this forecast and the assumed growth rate in gross sales tax receipts. The *Wayfair* decision 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. So far in FY 2020, gross sales tax receipts have exceeded the prior

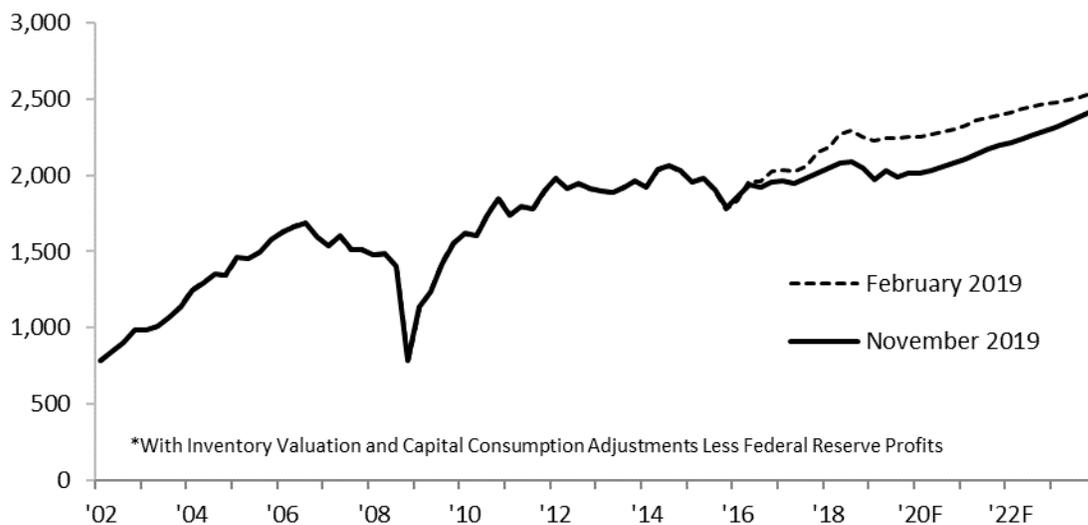
forecast by \$33 million. We believe that variance is partly due to payments by remote sellers that were newly required to remit sales taxes following the Wayfair decision. In addition, forecast growth in this portion of the sales tax base is contributing to growth in the overall base.

Sales tax refunds are \$49 million lower in this forecast than they were in February. This due to lower observed refunds at the close of FY 2019 and so far in FY 2020 and a slowdown in claims for qualified data center sales tax exemptions.

**Corporate Franchise Tax.** The corporate franchise tax is forecast to generate \$2.897 billion in FY 2020-21, \$294 million (9.2 percent) less than the prior estimate. Lower forecast gross corporate payments more than offset lower forecast refunds.

At the close of FY 2019, net corporate tax receipts exceeded the February forecast (adjusted for law changes) by \$136 million. We believe most of this variance is due to one-time payments that do not carry forward into our forecast. In contrast, year-to-date net receipts for FY 2020 are \$100 million below the law-change-adjusted prior forecast. The lower base combines with a lower near-term forecast for corporate profits to reduce the current biennium net corporate tax receipts forecast. In each quarter of FY 2020, profits are expected to grow more slowly than assumed in February. In each quarter of FY 2021, profits are expected to grow faster than in the February forecast, but not enough to make up for the slower growth in FY 2020. Starting in late CY 2020, and continuing for the rest of our forecast period, corporate profits are assumed to grow faster than in February.

**U.S. Corporate Profits Before Tax\***  
Billions of Dollars, Annual Rate



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

*The higher base of net corporate receipts is offset by a lower forecast for corporate profits, bringing down the forecast for FY 2020-21 net corporate tax receipts. In each quarter of FY 2020, profits are expected to grow more slowly than assumed in February. Starting late in CY 2020, and continuing for the rest of our forecast period, corporate profits are assumed to grow faster than in February.*

The corporate income tax forecast includes an off-model adjustment for the impact of the Historic Structure Rehabilitation Credit (HSRC). Our practice is to forecast the full revenue impact of the HSRC within corporate refunds, even though some credits accrue to non-corporate taxpayers, and some credits reduce tax payments rather than increase refunds. Total HRSCs are now forecast to be about \$41 million lower in FY 2020-21 than the February forecast.

**Other Tax Revenue, Non-Tax Revenue, Other Resources.** Other tax revenue is now expected to be \$6 million (0.1 percent) more than the prior estimate. Among other taxes, cigarette and tobacco taxes show the largest dollar amount change, \$87 million (6.9 percent) less than the prior estimate. This change reflects lower than expected receipts from this tax at the close of FY 2019 and so far in FY 2020. The estate tax forecast has been increased by \$43 million, and the forecast for gambling taxes is \$20 million higher than the prior estimate. The gambling tax forecast change is due to higher than expected receipts in FY 2019 and so far in FY 2020. Among non-tax revenues, investment income shows the largest dollar amount change, increasing \$15 million (4.2 percent) over the prior estimate due to larger than expected receipts in this category.

## Planning Estimates

Total revenues for FY 2022-23 are now estimated to be \$51.477 billion, an increase of \$2.821 billion (5.8 percent) over the current forecast for FY 2020-21 revenues. Total tax revenues for FY 2022-23 are estimated to be \$49.551 billion, a 6.4 percent increase over FY 2020-21 forecast revenues.

Together, the individual income and sales taxes account for about 89 percent of the projected biennial tax revenue growth. The individual income tax shows the largest increase, growing by \$1.856 billion (7.1 percent), and contributing 62 percent of the total tax revenue biennial change. The general sales tax is expected to exceed FY 2020-21 forecast levels by \$795 million (6.6 percent), accounting for 28 percent of the growth in tax revenues. The corporate franchise tax and other taxes together contribute \$344 to the biennial tax revenue change, and the state general property tax reduces biennial growth by \$24 million.

The revenue planning estimates are informed by the IHS baseline forecast, which assumes that U.S. real GDP will grow 2.0 percent in CY 2021, followed by slower growth of 1.6 percent in CY 2022 and 1.5 percent in CY 2023.

**Biennial Comparison: FY 2020-21 vs. FY 2022-23 General Fund Revenues  
November 2019 Forecast**

(\$ in millions)	FY 2020-21	FY 2022-23	\$ Change	% Change
Individual Income Tax	\$26,039	\$27,896	\$1,856	7.1%
General Sales Tax	12,125	12,920	795	6.6
Corporate Franchise Tax	2,897	3,076	179	6.2
State General Property Tax	1,561	1,536	(26)	(1.6)
Other Tax Revenue	3,958	4,123	165	4.2
<b>Total Tax Revenues</b>	<b>46,580</b>	<b>49,551</b>	<b>2,971</b>	<b>6.4%</b>
Non-Tax Revenues	1,557	1,546	(10)	(0.7)
Other Resources	520	380	(140)	(26.6)
<b>Total Revenues</b>	<b>\$48,656</b>	<b>\$51,477</b>	<b>\$2,821</b>	<b>5.8%</b>

The planning estimates for 2022-23 should be used with caution. First, the projections will be affected by any revenue changes in a supplemental budget for the 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 2020 and 2021, 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, particularly in the current environment of policy uncertainty, warrants caution when using economic forecasts of 2022 and 2023.



## EXPENDITURE OUTLOOK

### Closed Biennium

The FY 2018-19 biennium ended with a positive general fund balance of \$1.421 billion, \$815 million more than estimated at the end of the 2019 special legislative session. Final FY 2019 spending totaled \$45.401 billion, down \$90 million (0.2 percent) from end-of-session estimates.

\$71 million of the FY 2019 savings is the result of unspent appropriations. The largest unspent appropriations are for business and community development programs at DEED (\$32 million) and operating appropriations for the legislative branch (\$24 million). These funds carried forward into the current biennium.

In FY 2019, health and human services (HHS) expenditures were \$24 million (0.2 percent) lower than end-of-session estimates. This savings is the result of lower enrollment in Medical Assistance, the state's Medicaid program. E-12 education spending was \$11 million (0.0 percent) below end of session estimates. Property tax aids and credits expenditures were \$7 million (0.2 percent) lower than end of session estimates.

### Current Biennium

Total state general fund expenditures for the FY 2020-21 biennium are projected to be \$48.463 billion, which is \$7 million (0.0 percent) lower than previously expected. This very small overall change masks some offsetting movement across bill areas.

#### Current Biennium: FY 2020-21 General Fund Expenditures End-of-Session vs. November 2019 Forecast Comparison

(\$ in millions)	November 2019		\$ Change	% Change
	End-of-Session	Forecast		
E-12 Education	\$20,122	\$20,098	(24)	(0.1)%
Property Tax Aids & Credits	3,804	3,865	61	1.6
Health & Human Services	14,774	14,677	(97)	(0.7)
Debt Service	1,183	1,132	(51)	(4.3)
All Other	8,588	8,692	103	1.2
<b>Total Expenditures</b>	<b>\$48,470</b>	<b>\$48,463</b>	<b>\$(7)</b>	<b>0.0%</b>

**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.

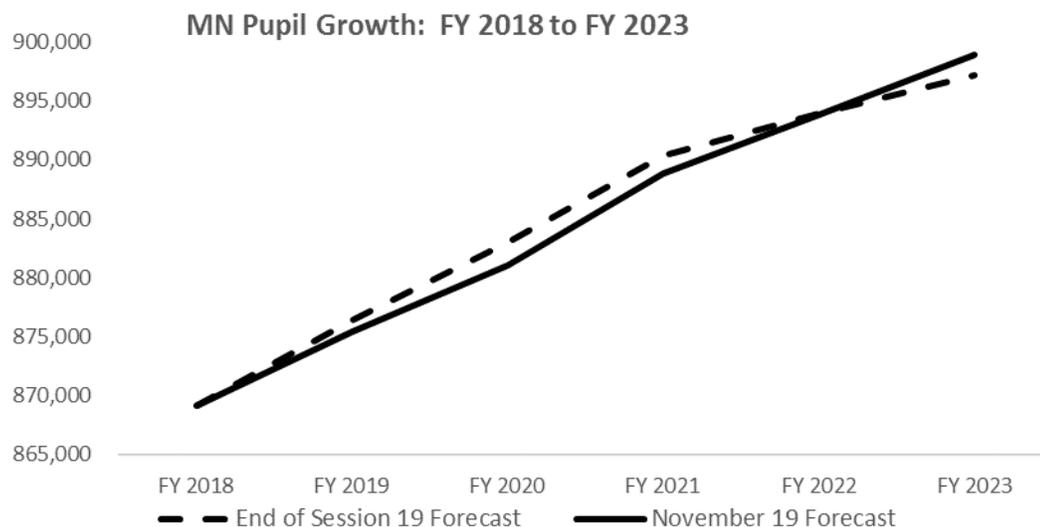
E-12 expenditures are forecast to reach \$20.098 billion in FY 2020-21, a \$24 million (0.1 percent) reduction from end of session estimates. Forecast expenditures for education aid programs are down \$54 million (0.3 percent) from previous estimates but are partially offset by an appropriation for safe schools supplemental aid of \$30 million. This was a contingent appropriation activated when FY 2019 closed with a higher than projected general fund balance.

**General Fund Education Expenditures**

Change from End-of-Session Estimates

(\$ in millions)	FY 2020-2021		FY 2022-2023	
	\$ Change	% Change	\$ Change	% Change
General Education	\$(30)	(0.2)%	\$0	0.0%
Special Education Aid	(16)	(0.5)	(10)	(0.3)
Safe Schools Contingent Appropriation	30	n/a	0	0.0
All Other E-12 Changes	(8)	(0.5)	(3)	(0.2)
<b>Total E-12 General Fund Forecast Change</b>	<b>\$(24)</b>	<b>(0.1)%</b>	<b>\$(13)</b>	<b>(0.1)%</b>

The decrease in education aids is primarily driven by slower than expected pupil growth. The largest impact of this is seen in general education spending, which is down \$30 million (0.2 percent) from end-of-session estimates. Projected pupil growth is slower than previous forecasts due to FY 2019 actual and FY 2020 estimated pupil counts coming in lower than expected (0.1 and 0.2 percent, respectively).



*Pupil projection are lower in the current biennium but growth exceeds the prior forecast in the planning estimates for the FY 2022-23 biennium.*

Special education also contributes to the decrease with forecast aid \$16 million (0.5 percent) below end-of-session estimates. This change is due to school special education spending growing more slowly than expected. The amount of special education aid schools receive is driven by their spending on services—predominantly salaries and benefits for teachers, paraprofessionals and other staff. Preliminary data showed that schools spent \$7 million less on special education services in FY 2019, driving down estimates for FY 2020 and forward in this forecast.

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

General fund forecast changes are generally driven by changes to the MA forecast, since it accounts for the largest portion of forecasted program expenditures. MA is a state-federal, means-tested entitlement program for low-income individuals and families, persons with physical or developmental disabilities, and the low-income elderly. 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.

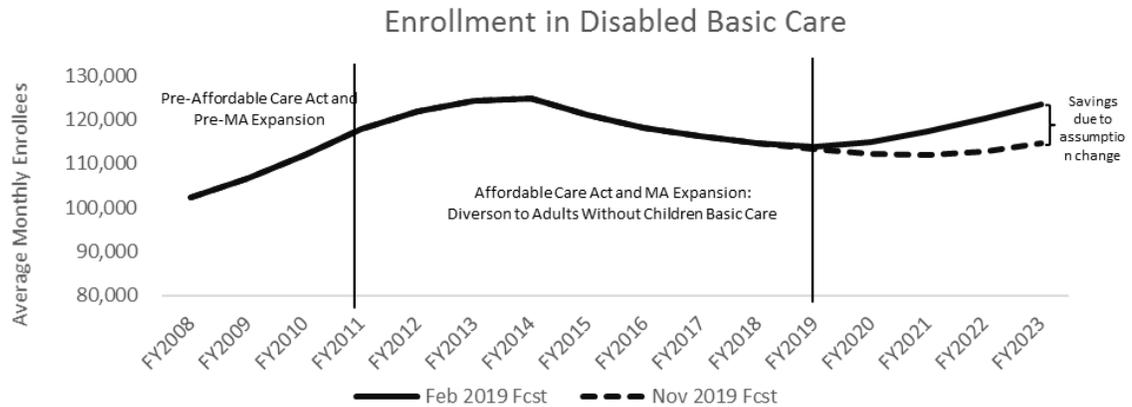
**General Fund HHS Expenditures**  
Change from End-of-Session Estimates

(\$ in millions)	FY 2020-2021		FY 2022-2023	
	\$ Change	% Change	\$ Change	% Change
Lower enrollment in MA disabled	\$(60)	(1.6)%	\$(132)	(3.1)%
Lower enrollment in MA families with children	(44)	(1.5)	(9)	(0.3)
Changes in Children's Health Insurance Program	(19)	(0.4)	26	0.4
Lower payments in MA basic care	(38)	(1.3)	(27)	(0.8)
Higher spending in MA long-term care	59	1.1	76	0.6
All other MA	(16)	(0.1)	29	0.2
<b>Total MA Change</b>	<b>\$(118)</b>	<b>(1.1)%</b>	<b>\$(37)</b>	<b>(0.3)%</b>
All Other HHS Changes	21	0.6	20	0.5
<b>Total HHS General Fund Forecast Change</b>	<b>\$(97)</b>	<b>(0.7)%</b>	<b>\$(17)</b>	<b>(0.1)%</b>

In the FY 2020-21 biennium, anticipated HHS general fund spending is \$14.677 billion, down \$97 million (0.7 percent) relative to end-of-session estimates. Lower MA spending accounts for \$118 million of the reduction and is a 1.1 percent change from end of session. The following table identifies major forecast expenditure changes from end-of-session estimates.

*Medical Assistance Program*

The lower forecast is primarily the result of reduced enrollment in the MA disabled basic care and families with children basic care programs. Disabled basic care enrollment is 5.2 percent lower than previous forecast due to continued diversion of enrollees to the adults without children basic care program. For individuals who do not require home and community-based waiver services, MA adults without children basic care provides a simplified way to obtain MA health care coverage relative to pursuing a disability certification.



*Enrollment in disabled basic care is 5.2 percent lower than previous forecast due to continued diversion of enrollees to the adults without children basic program.*

This forecast also recognizes a lower rate of enrollment growth for MA disabled than previously expected. Prior forecasts assumed enrollment growth would return to pre-MA expansion trend in part because a subset of diverted enrollees would eventually become Medicare eligible making them ineligible for the MA adults without children category. Experience has shown that given the lower barriers to accessing MA through adults without children eligibility, individuals are not obtaining disability designations at the same rate in order to obtain health insurance coverage. Therefore, this forecast reflects a lower rate of growth going forward in the disabled basic care program. In addition, enrollment in Institutes for Mental Disease (IMD) is lower in this forecast due to more accurate accounting of residents in those facilities which contributes to the overall change.

Lower enrollment in MA families with children basic care accounts for \$44 million (1.5 percent) anticipated spending in the current biennium. Enrollment in this basic care category is expected to be on average 1.0 percent per year lower than previously forecast. In addition, higher than expected federal funding allotments in the Children’s Health Insurance Program (CHIP) in the current biennium allows the state to claim more eligible children in this federal program, which lowers anticipated state spending by \$19 million in FY 2020-21.

Overall, lower average payments in MA basic care, both in fee-for-service and managed care, decrease forecast spending by \$38 million in FY 2020-21. Increases in managed care contract rates for CY 2020 are lower than expected for people with disabilities, adults without children, and families children, higher than expected for the elderly population. This forecast also lowers the assumed baseline trend for families with children basic care rates by 1.0 percentage point, resulting from more granular data being used in the contracting process with managed care organizations. The FY 2020-21 biennial budget assumed the Department of Human Services (DHS) would limit the growth in managed care rates by 0.8 percentage point from previous assumptions and counted \$145 million in savings across the forecast horizon. The 2019 legislature also required the Department of Human Services, in consultation with Minnesota Management and Budget, to determine if associated savings were realized in the November forecast. If not, a required transfer from the Premium Security Plan Account (PSPA) would fund the budgetary shortfall. The total managed care rate reduction in this forecast amounted to \$177 million from FY 2020 to FY 2023,

\$32 million higher than the savings assumed in end of session estimates; therefore, the transfer from the PSPA did not occur.<sup>4</sup>

Savings in the MA basic care program are offset by \$59 million in forecast increases in MA long-term care in the current biennium. This change is driven by a 3.0 percent increase in caseload for the developmental disabilities (\$51 million) and 2.5 percent increase in caseload for community access for disability inclusion (\$30 million) MA waiver programs. Both waiver programs provide necessary supports to remain in homes and community-based settings instead of placement in institutional care. Higher spending in waiver programs is partially offset by \$32 million (2.9 percent) due to a reduction in anticipated payments for long-term care facilities. Previous forecasts assumed operating costs for nursing facilities would increase 6.0 percent to 7.0 percent. With the 2018 reporting process now mostly complete, actual facility-reported operating costs are estimated to have increased by an average of 4.5 percent in CY 2018. This directly reduces rates in CY 2020 relative to the prior forecast, and lowers projected rate increases to the 5.0 percent and 6.0 percent range beginning in CY 2022.

DHS is currently in negotiations with the Centers for Medicare and Medicaid Services (CMS) for a five-year extension of the federal funding that supports the Alternative Care program. This long-term care program provides home and community-based services to people who need nursing home level of care but choose to live in the community and are not immediately eligible for Medical Assistance based on their income and/or assets. The forecast continues to assume an agreement will be reached with CMS by January 31, 2020, and federal funding continues at 50 percent of program costs. Without a new agreement, there is a potential for discontinuation of federal funding for Alternative Care, which would increase MA costs by approximately \$20 million per year.

#### *Other Health and Human Services Expenditures*

Spending across all non-health care programs increased \$21 million in FY 2020-21. This is primarily due to a \$20 million increase in the Northstar Care for Children program. This program was enacted in 2013 and incorporates foster care, adoption assistance and kinship assistance under one new program. The expected increase in this program is the result of a \$21 million reduction in local share due to a statutorily required reconciliation process to ensure local expenditures be the same as they would if Northstar Care for Children had not been implemented<sup>5</sup>. This forecast recognizes the final two years of reconciliation. State spending increases when local contributions decrease.

Spending for chemical dependency treatment remains relatively unchanged in this forecast. This forecast assumes a repayment to CMS of \$29 million in FY 2021 related to overpayments for opioid treatment addiction treatment programs operated by White Earth Nation and Leech Lake Band of Ojibwe. This forecast also assumes DHS will recover \$29 million from the tribal nations in the same fiscal year, resulting in no net fiscal impact in this forecast. Current law requires DHS to recover an overpayment when it is determined the state has overpaid a medical assistance vendor<sup>6</sup>.

---

<sup>4</sup> Laws 2019, Special Session 1, Chapter 9, Article 7, Sec. 35

<sup>5</sup> M.S. 256N.27

<sup>6</sup> M.S. 256B.0641

**Property Tax, Aids, and Credits.** FY 2020-21 spending for property tax aids and credits is forecast to be \$3.865 billion, \$61 million (1.6 percent) higher than end of session estimates. Homestead and renter's property tax refunds account for a significant amount of this growth. These property tax refunds are forecast to increase by \$43 million (2.8 percent) due to growth in property tax collections and slower income growth. Tax refund interest spending is also forecast to increase by \$15 million (71.0 percent) from end of session estimates as a result of two recent court decisions. These decisions require the state to issue higher than anticipated tax refunds with accrued interest for tax payments made to the state in prior years. Additionally, school building bond agricultural credit spending is forecast to be \$94 million in FY 2020-21, which is an increase of \$4 million (4.5 percent) over previous estimates. Although actual FY 2019 spending came in lower than previously forecast, this is more than offset by an increase in school building bond referenda which passed in November 2019.

**Debt Service and All Other.** Debt service expenditures for the current biennium are forecast to be \$1.132 billion in the current biennium, which is a \$51 million (4.3 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 2019 bond sale, and lower bond interest rates. Lower bond interest rates result in higher bond premiums, which together decrease the estimated size of the bond sales and forecast debt service payments. The estimates also reflect savings realized from the August 2019 bond refunding.

With each forecast MMB makes assumptions about the size of future capital budgets. The assumptions are based on the average size of the capital budget bill over the past ten years, differentiating between the larger even year capital budgets and smaller odd year capital budgets. This forecast updates the assumptions for future capital budgets based on the following new 10-year averages: \$755 million in even year legislative sessions and \$240 million in odd year sessions.

All other bill area spending is forecast to total \$8.692 billion, \$103 million (1.2 percent) higher than end of session estimates. This change is largely the result of unspent FY 2019 appropriations from the DEED and the legislative branch that are available to be spent in FY 2020 and the implementation of \$33 million in contingent appropriations for the Metropolitan Council and the Department of Public Safety.

## Planning Estimates

General fund spending in FY 2022-23 is expected to be \$51.257 billion, \$5 million (0.0 percent) higher than end-of-session estimates. Higher spending in property tax aids and credits is mostly offset by lower spending in debt service, HHS, and E-12 education.

**Planning Estimates: FY 2022-23 General Fund Expenditures  
End-of-Session vs. November 2019 Forecast Comparison**

(\$ in millions)	November 2019		\$ Change	% Change
	End-of-Session	Forecast		
E-12 Education	\$20,992	\$20,979	\$(13)	(0.1)%
Property Tax Aids & Credits	4,108	4,158	51	1.2
Health & Human Services	16,399	16,382	(17)	(0.1)
Debt Service	1,233	1,206	(27)	(2.2)
All Other	8,521	8,531	11	0.1
<b>Total Expenditures</b>	<b>\$51,252</b>	<b>\$51,257</b>	<b>\$5</b>	<b>0.0%</b>

**E-12 Education.** Spending on E-12 education in FY 2022-23 is expected to reach \$20.979 billion, a \$13 million (0.1 percent) decrease from end-of-session estimates. A projected \$10 million (0.3 percent) decrease in special education drives the decrease, as spending on special education at school districts is projected to slow compared to the previous forecast. Spending on general education in FY 2022-23 remains relatively unchanged compared to end-of-session as the decrease in pupils seen in the current biennium is offset by a new methodology for forecasting pupils which accounts for pupil growth as students' progress from grade to grade.

**Health & Human Services.** Health and human services expenditures are projected to total \$16.382 billion in the next biennium, a decrease of \$17 million (0.1 percent) from end of session estimates. Changes to MA drive the reduction (\$37 million, 0.3 percent) but are partially offset by increased spending in non-health care programs (\$20 million, 0.5 percent).

As identified in the FY 2020-21 biennium, lower enrollment in MA disabled basic care and families with children basic care continues to impact spending estimates in the FY 2022-23 biennium. Anticipated spending is reduced \$141 million (1.9 percent) in FY 2022-23 from previous estimates as a result of lower enrollment in these basic care programs. This savings is partially offset by anticipated increases in MA long-term care driven by higher caseload in MA waiver programs and a 13-month delay in implementing the Community First Services and Supports (CFSS) program. This forecast recognizes a \$67 million increase across the forecast horizon as a result of the delay.

This savings from lower enrollment in MA is further offset by reduced spending from annual federal Children's Health Insurance Program (CHIP) allotment, resulting in increased state spending. CHIP provides an enhanced federal match for children above 133 percent of the federal poverty guidelines. The portion of MA children who are eligible for CHIP enhanced federal match is lower in this forecast, likely due to favorable economic conditions, which results in lower overall federal CHIP claims and increased state spending. This impact results in a \$26 million (0.4 percent) increase in expenditures relative for prior estimates for the FY 2022-23 biennium.

**Property Tax, Aids, and Credits.** Property tax aids and credits expenditures are projected to total \$4.158 billion in FY 2022-23, an increase of \$51 million (1.2 percent) compared to end-of-session estimates. This is largely due to increased property tax refund spending. Compared to the previous forecast, homestead credit refund spending is projected to grow by \$40 million (3.5 percent) as a result of larger average refund amounts processed since the previous forecast. School building bond agricultural credit is also projected to increase by \$15 million (11.5 percent) as the credit on the taxes paid on farmland for school bonds increases each year.

**Debt Service and All Other Spending.** Debt service expenditures are forecast to be \$1.206 billion in the next biennium, which is \$27 million (2.2 percent) less than previous estimates. The estimates reflect lower interest rate assumptions on future bond sales. Lower bond interest rates result in higher bond premiums, which together decrease the estimated size of future bond sales and forecast debt service payments. The decline in debt service expenditures is partially offset by a decrease in short-term investment earnings on cash balances in the bond proceeds and debt service funds.

All other areas of the state budget are projected to total \$8.531 billion in the FY 2022-23 biennium. This is an increase of \$11 million (0.1 percent) over end-of-session estimates. The largest driver of this change is higher anticipated spending in the Destination Medical Center is forecast (\$16 million, 28.9 percent) due to an increase in projected private expenditures in the Destination Medical Center development district.



## APPENDIX

### ECONOMIC DATA

Selective Economic Charts .....	59
U.S. Economic Forecast Summary .....	67
Minnesota Economic Forecast Summary .....	68
Alternative Economic Forecasts Comparison .....	69
IHS Economics Baseline Comparison: U.S. Economic Forecast .....	69
Economic Forecasts Comparison: Minnesota and U.S. ....	70
Economic Factors Affecting Tax Revenue .....	71

### REVENUE EXPERIENCE

Current Fiscal Year-to-Date: End-of-Session vs. Actual Comparison.....	74
--	----

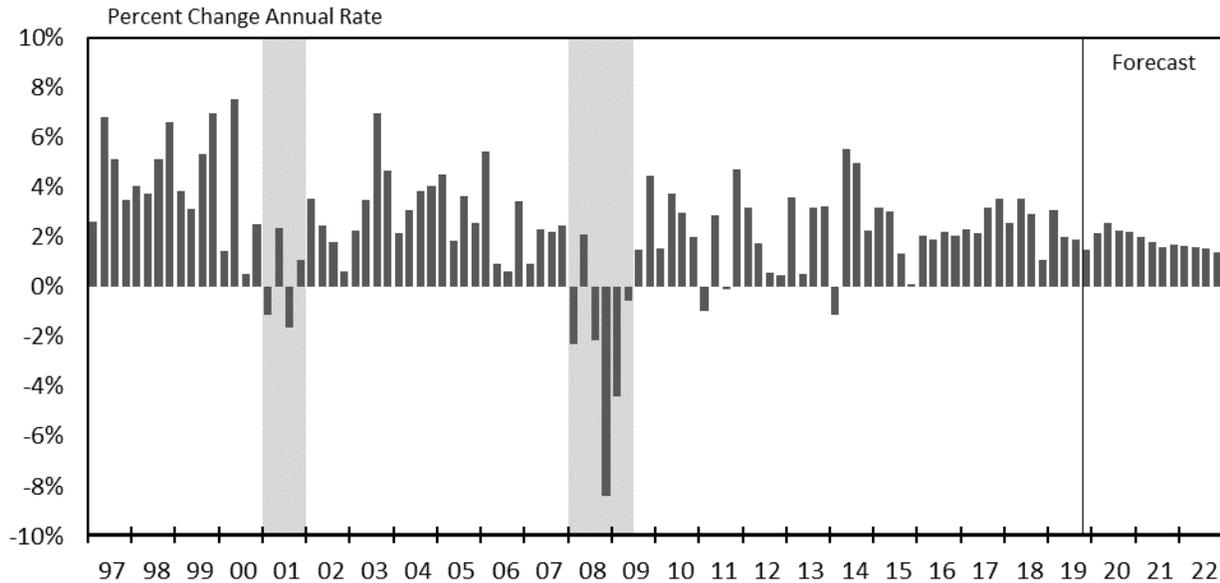
### GENERAL FUND BALANCE SHEETS

Closed Biennium by Fiscal Year.....	75
Closed Biennium Forecast Comparison .....	76
Current Biennium: By Fiscal Year .....	77
Current Biennium: Forecast Comparison.....	78
Biennial Comparison: Current vx. Closed Biennium .....	79
Planning Estimates: By Fiscal Year .....	80
Planning Estimates: Forecast Comparison.....	81
Biennial Comparison: Current vs. Next Biennium.....	82
Planning Horizon: By Biennium.....	83

### OTHER DATA

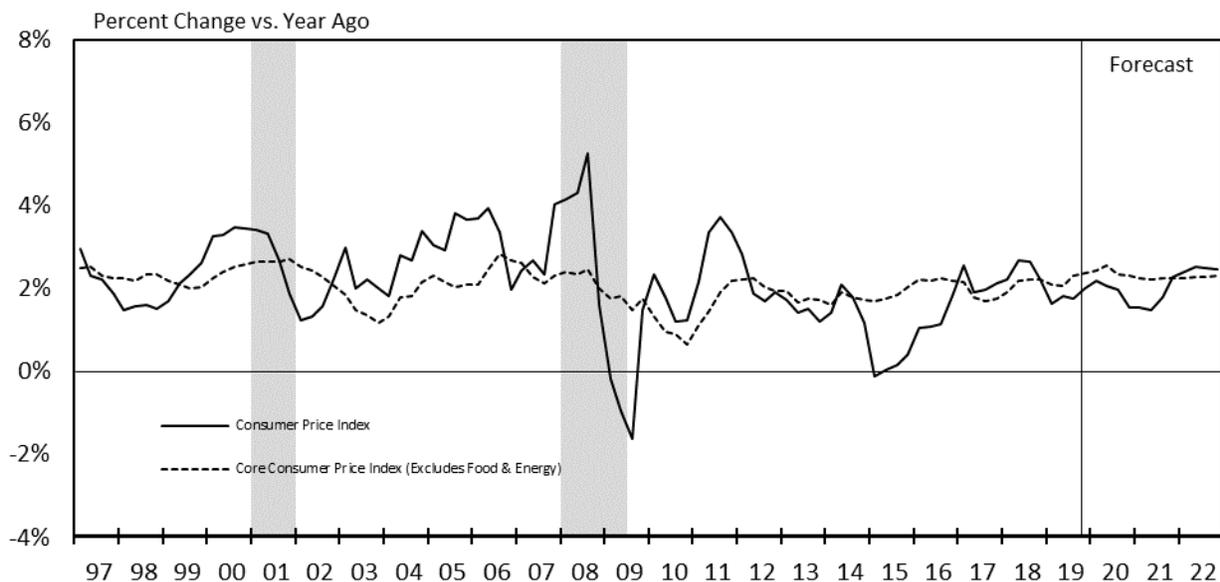
Historical and Projected Revenue Growth .....	84
Historical and Projected Expenditure Growth .....	85
Stadium Reserve .....	86

### Real Gross Domestic Product



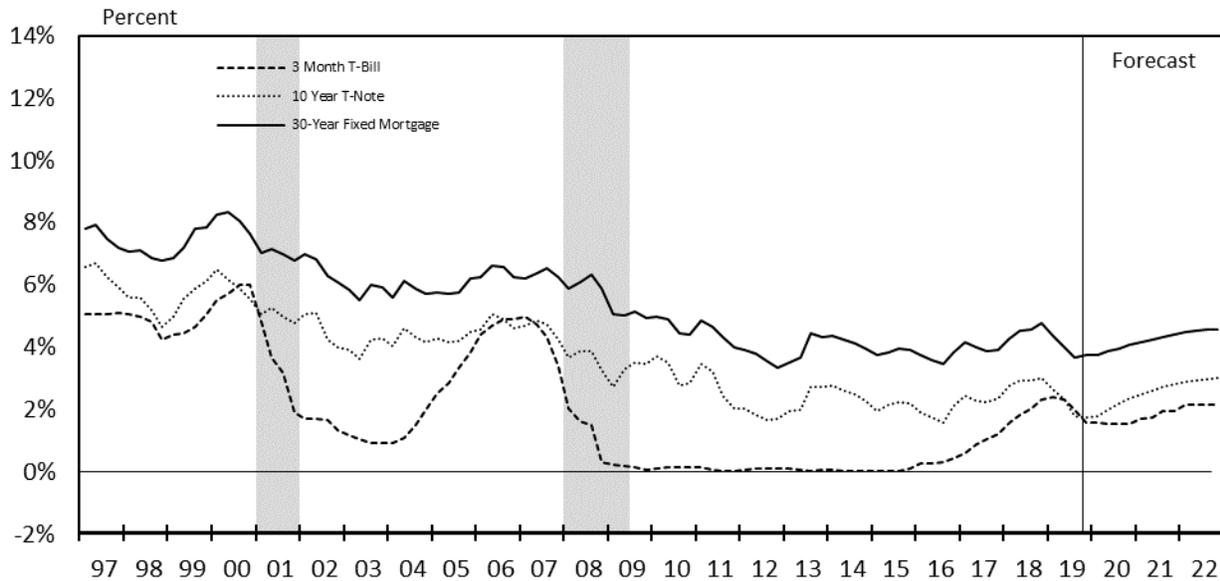
Annual real GDP growth rates decline each year from 2019 to 2023. This trend is consistent with the expectation of continued, but slowing, growth in employment and labor force. The annual growth rate decelerates from 2.3 percent in 2019 to 1.5 percent in 2023. The relatively high 2.9 percent growth rate in 2018 reflects fiscal stimulus from the Tax Cuts and Job Act (TCJA).

### Consumer Price Indexes



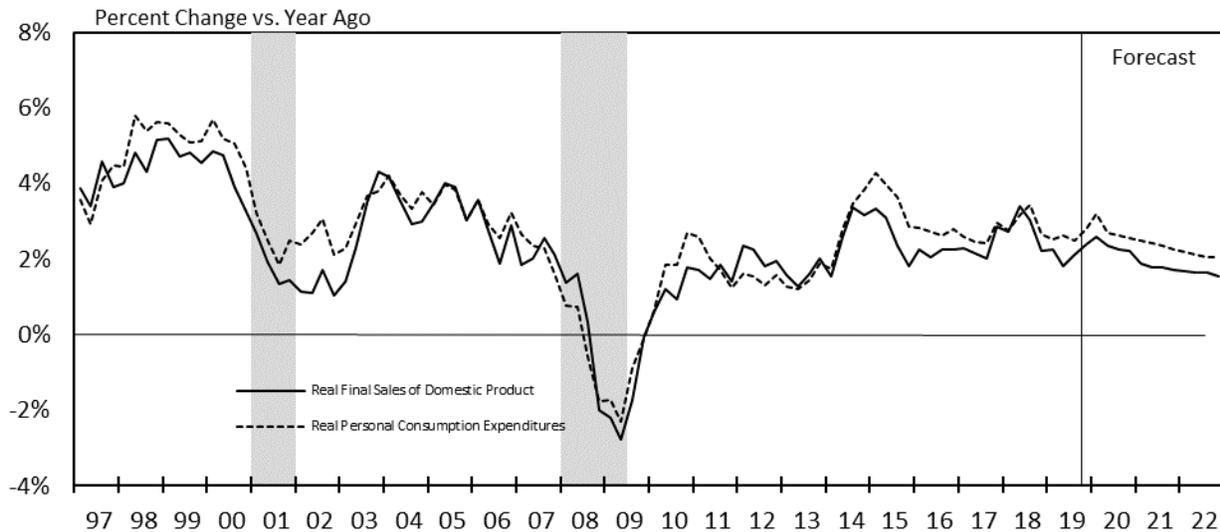
Year-over-year growth in the Core Consumer Price Index (Core CPI) rises from about 2.2 percent in 2019 to 2.3 percent in 2023, consistent with a tight labor market and steady demand for goods and services. Tariffs are expected to contribute to a brief bump in inflation in early 2020.

### Interest Rates



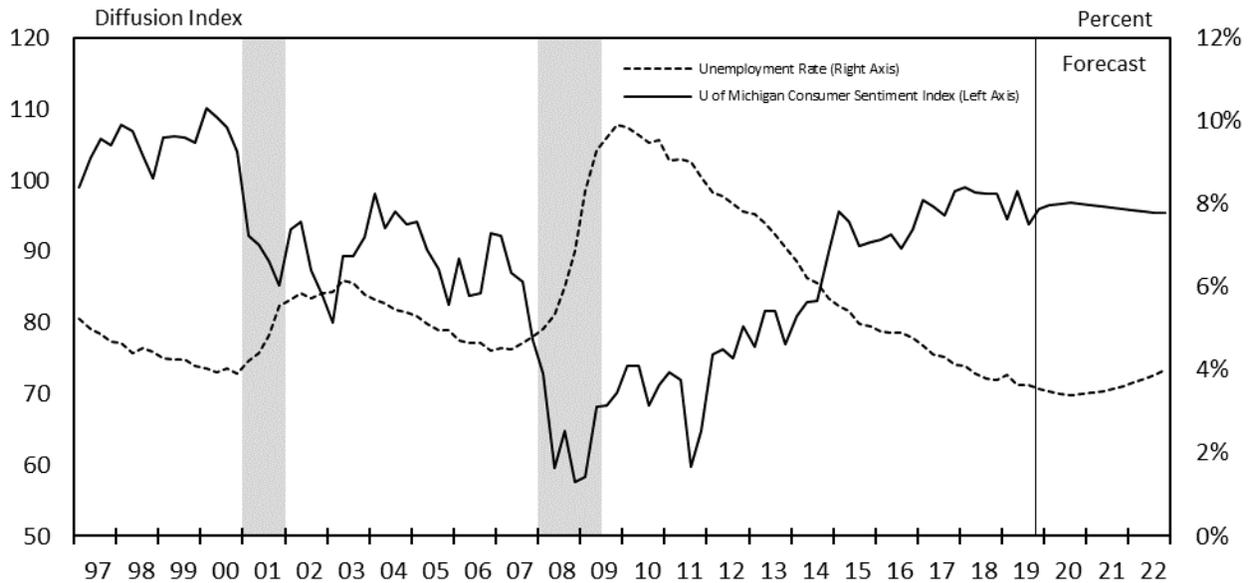
Since the February forecast, the FOMC has cut the federal funds rate three times--in July, September, and October--bringing the rate to a range of 1.50 to 1.75 percent. While the base outlook for the economy is solid, as evidenced by strong labor markets and firming inflation, the rate cuts provide additional insurance against downside risks from tariffs and slowing global growth. IHS expects the October rate cut to be the last cut in the current easing cycle before starting a reversal of 2019 rate cuts beginning in late 2020.

### Real Final Sales & Consumption



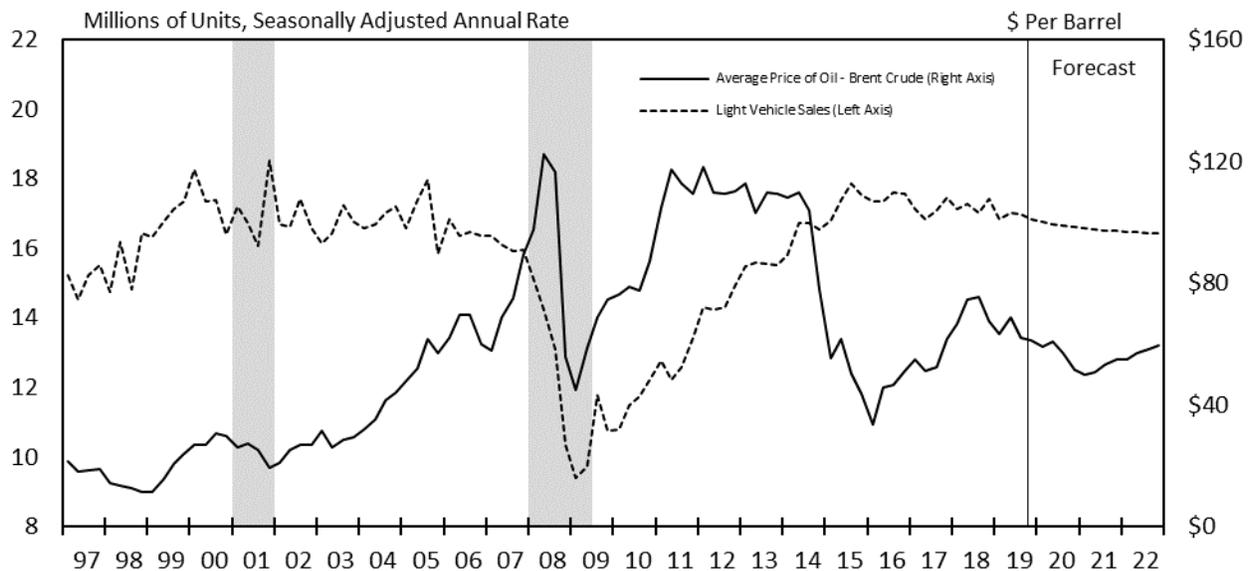
Real final sales of domestic product are expected to increase slightly before leveling off again below 2 percent in 2020. The IHS forecast expects real personal consumption expenditures (PCE) to grow 2.6 percent this year, accelerate to 2.8 percent in 2020, and soften to 2.4 percent in 2021 due to slowing growth of personal income. Hiring for the 2020 census boosts PCE temporarily next year.

### Consumer Sentiment and Unemployment Rate



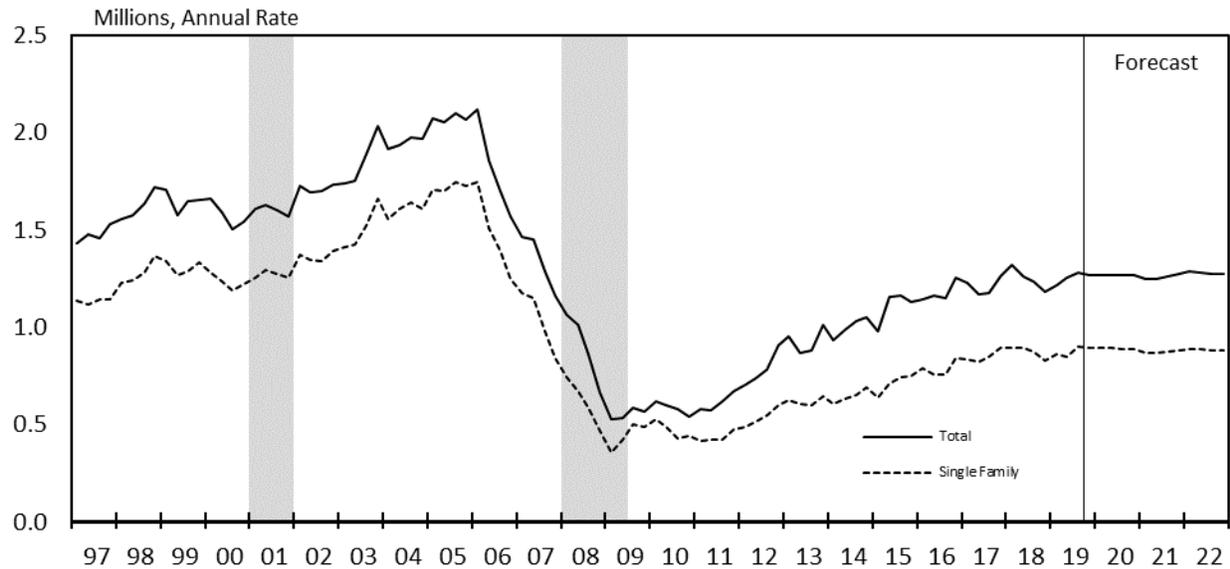
Although consumers remain optimistic, the University of Michigan Consumer Sentiment Index (left axis) dipped after the most recent round of tariffs were announced in August. Consumer sentiment stabilizes at less than 5 points short of 100, a healthy reading for this indicator. IHS expects we are very near the cyclical low for unemployment, with the trough of 3.4 percent realized in mid-2020.

### Light Vehicle Sales and Oil Prices



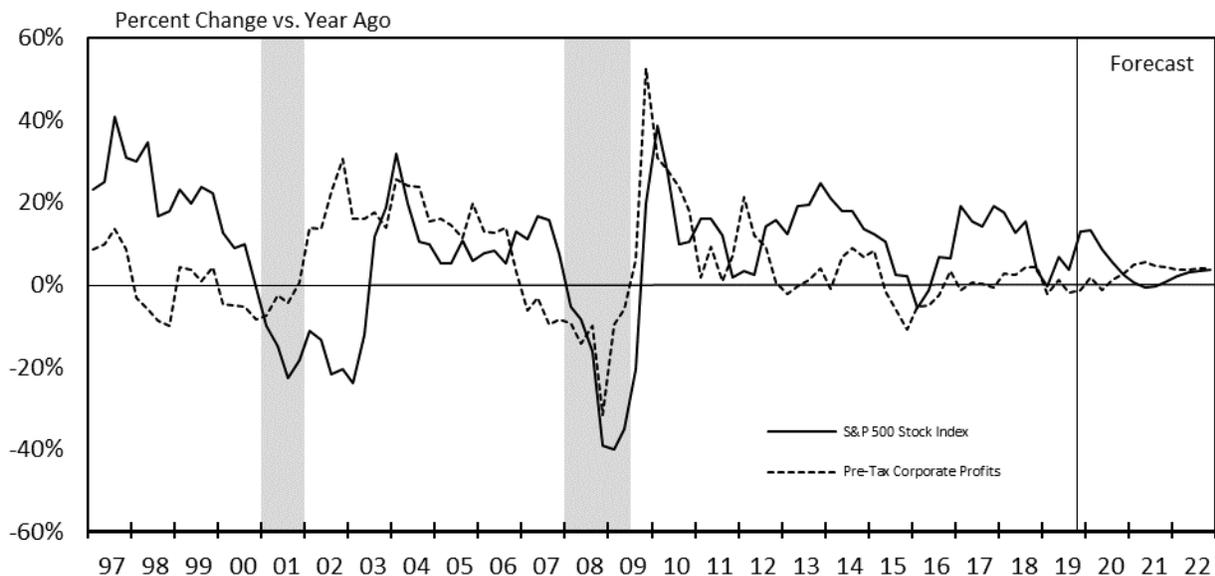
In this outlook, light vehicle sales trend down from an annual average of 17 million units in 2019 to 16.4 million units in 2023, consistent with a decelerating economy. The price of Brent crude oil is expected to average \$57/barrel in 2020, down from \$64/barrel in 2019. The IHS forecast predicts a further decline to \$52 per barrel in 2021 followed by a rise to just below \$60 at the end of 2022.

### Housing Starts



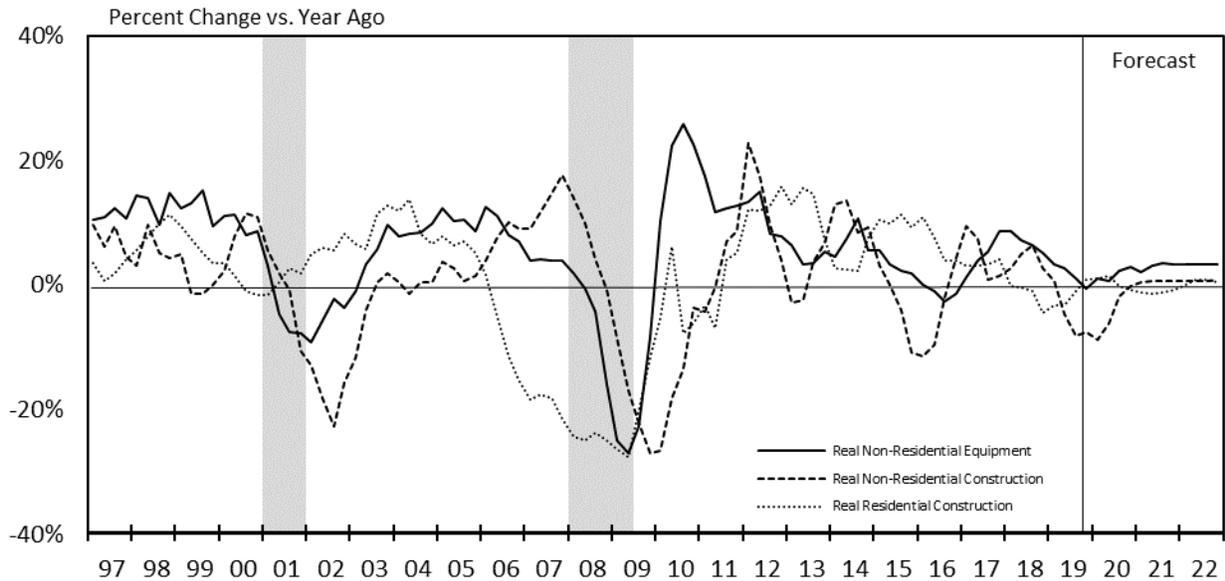
The housing market had a solid third quarter of 2019 with total housing starts climbing to the second-highest level in 12 years. Total housing starts are expected to remain plateaued at 1.26 million units per year between 2019 and 2022. While housing starts have been strong in the South and West, activity in the Midwest and Northeast has declined since April.

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



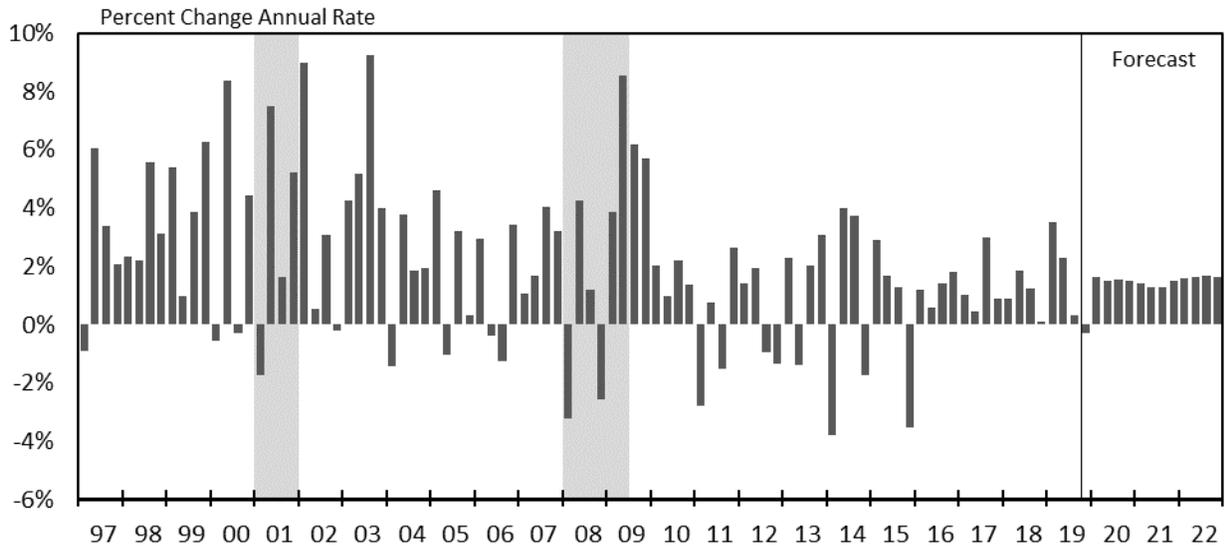
The S&P 500 and other key stock indices moved to new record highs in October 2019. IHS reports that despite trade policy weighing on equity values, lower interest rates and solid economic growth are expected to support an average year over year gain of 5.7 percent in the S&P 500 over 2019. Corporate profits growth gradually accelerates through 2020 before levelling off at below 4.0 percent in 2022.

### Real Private Investment



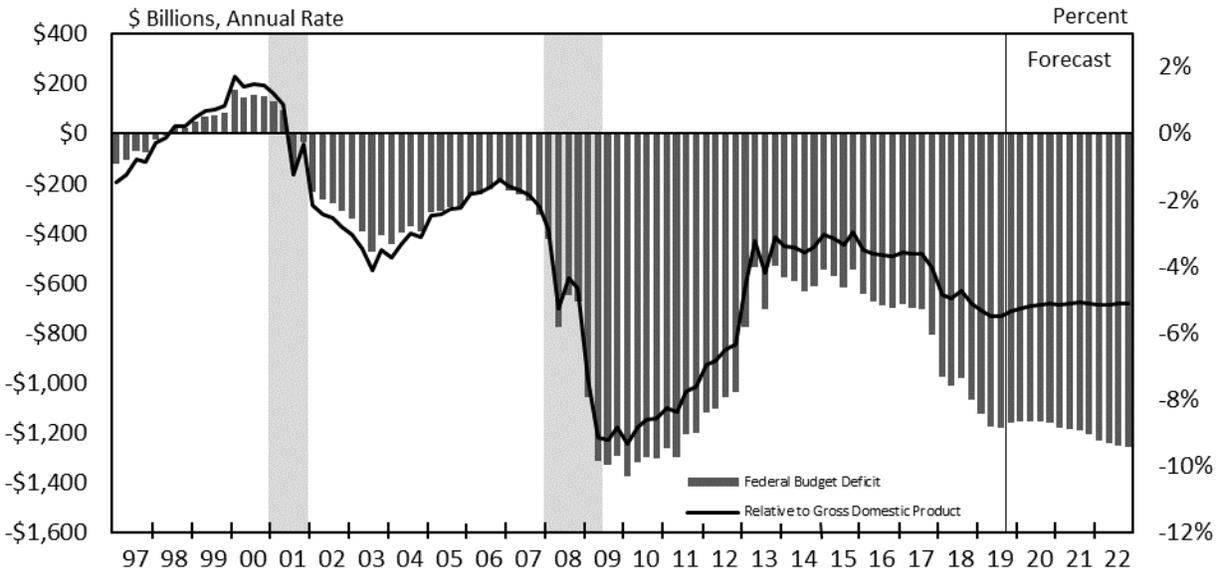
*In the IHS outlook, growth rates for nonresidential equipment fall from 6.8 percent in 2018 to 1.6 percent in 2019 and 1.7 in 2020 before recovering to annual growth rates of 3.0 percent per year. Real Annual growth in nonresidential construction declines from 4.1 percent in 2018 to -4.9 and -4.3 in 2019 and 2020 respectively. Real residential construction is expected to hover around 0 percent annual growth throughout the forecast horizon.*

### Total Non-Farm Productivity



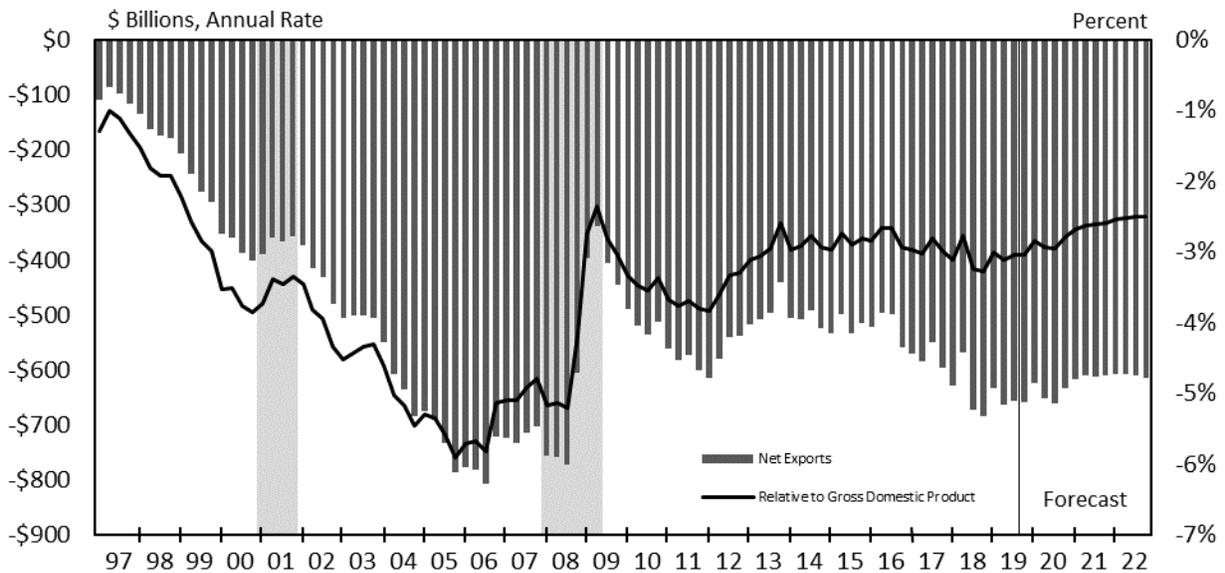
*Annual non-Farm private sector productivity growth is expected to average 1.6 percent in 2019, the highest annual growth rate since 2010. Growth is expected to decelerate through 2020-2022, before accelerating to 1.8 in 2023. Non-farm productivity growth of less than 2 percent is consistent with a GDP growth rate of less than 3.0 percent.*

### Federal Budget Deficit (NIPA Basis)



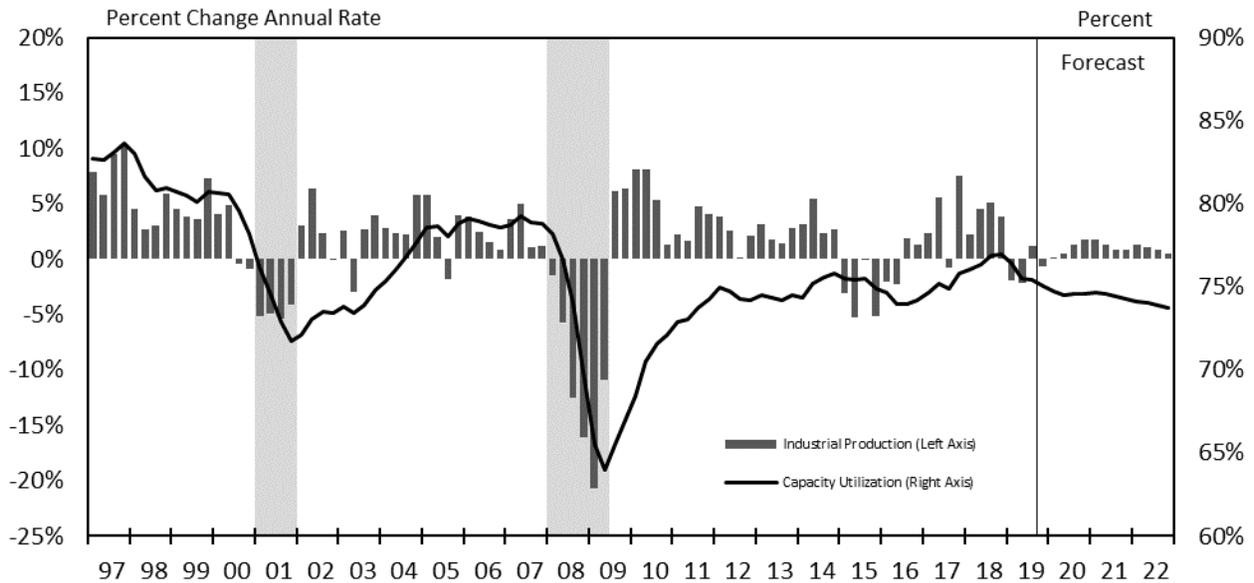
The federal budget deficit as a percent of GDP has moved from the 3.4 to 3.6 percent range during 2016 and 2017 to the current share of 5.0 percent. This change is largely due to the revenue loss from the Tax Cut and Jobs Act passed at the end of 2017.

### Balance of Trade (Net Exports)



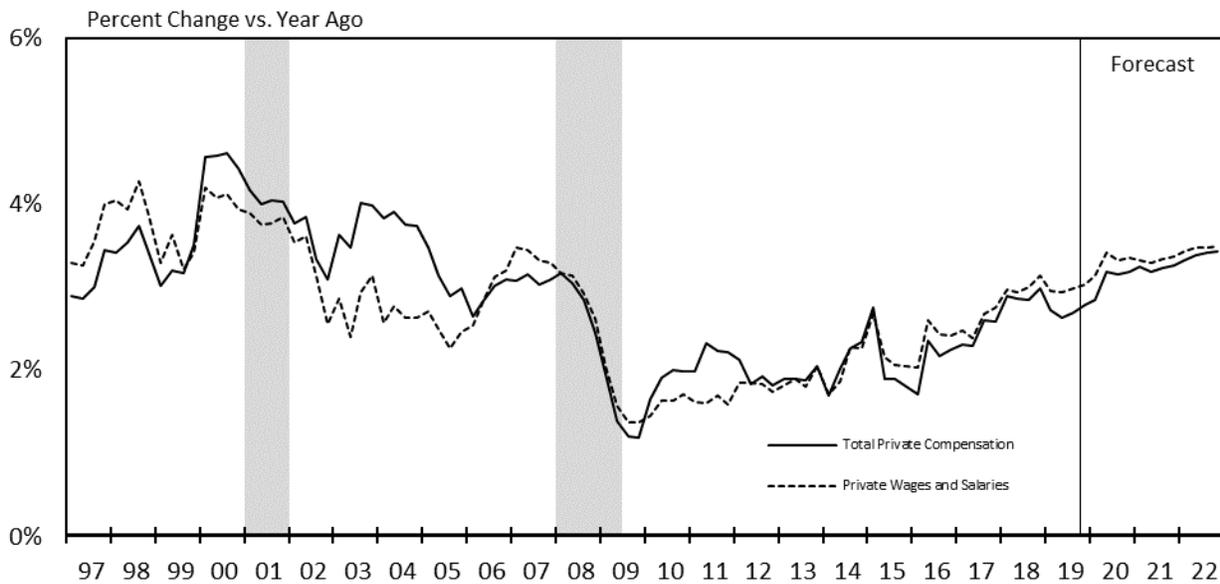
Net exports have been on a declining trend since early 2014. IHS expects exports to jump in Q1 of 2020 as exports of the Boeing 737 MAX resume. After Q1 IHS expects net exports to resume the declining trend that began in 2014, and net exports will return as a source of moderate drag on GDP growth. Notably, in this forecast the U.S. is on track to become a net exporter of petroleum products in 2022.

### Industrial Production and Factory Operating Rate



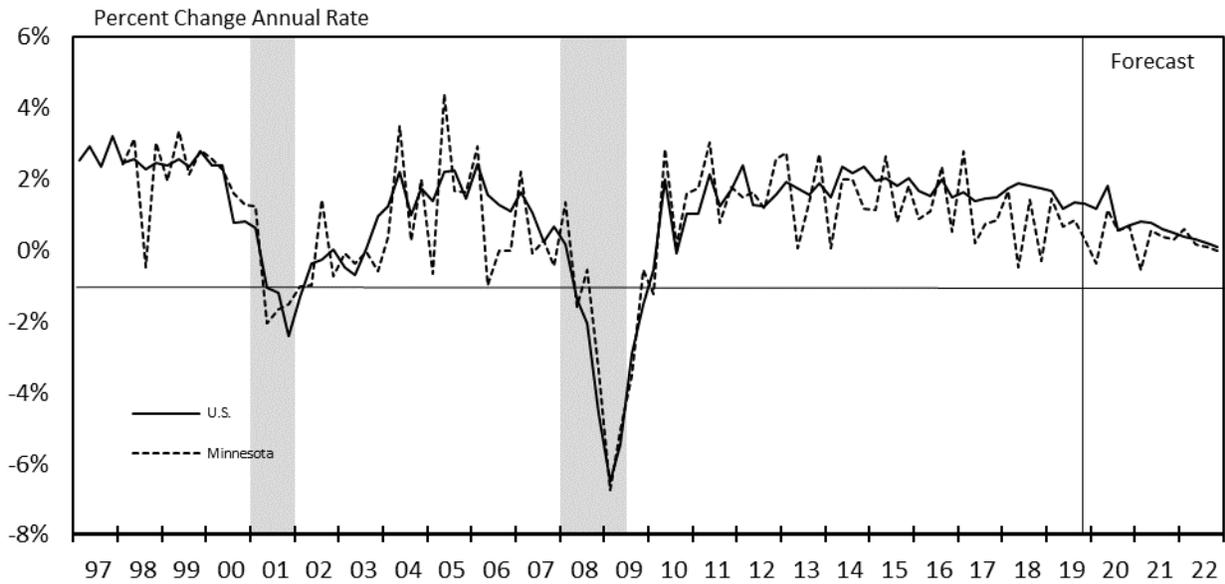
*In this forecast, industrial production grows at an annual rate of 0.8 percent in 2019 and falls to 0.3 in 2020 before climbing to 1.4 and 1.0 in 2021 and 2022, respectively. Capacity utilization ranges between 74 and 75 percent over the forecast horizon.*

### Employment Cost Index



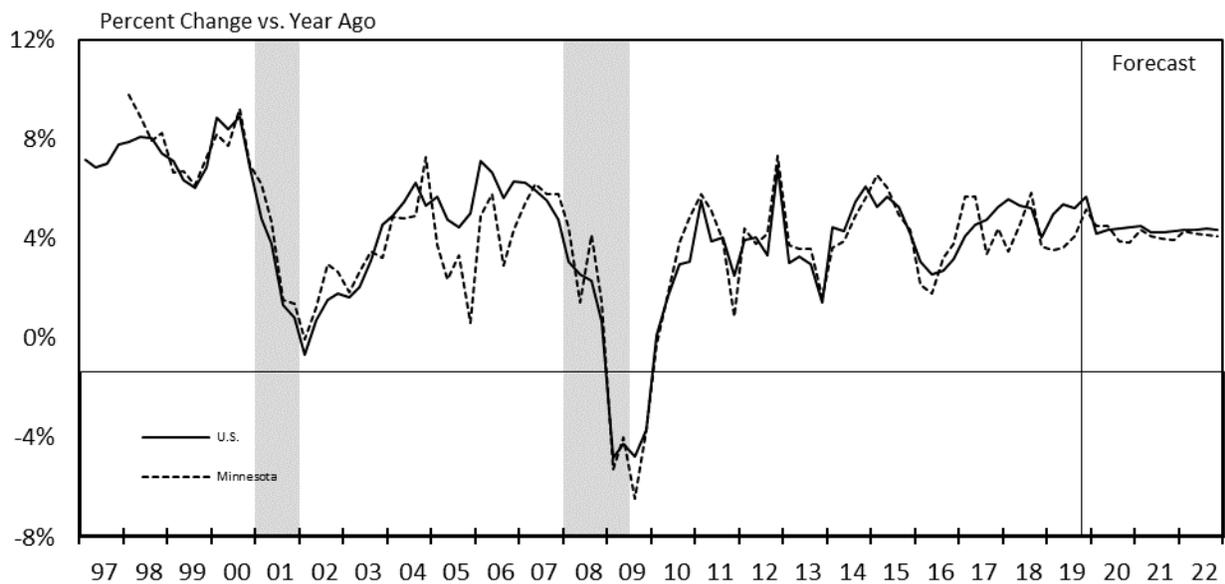
*Annual growth in the Employment Cost Index (ECI) for wages rises from 3.0 percent in 2019 to 3.3 in 2020 and 2021, followed by 3.5 in 2022 and 2023. In each year of the forecast, growth in the wage portion of the ECI exceeds the total private compensation growth rate.*

### Total Non-Farm Employment



*Minnesota employment growth lagged national employment growth a full percentage point in 2018. MMB expects Minnesota will lag U.S. employment growth by 0.9 percentage points in 2019. Both U.S. and MN employment is expected to decelerate through 2023. The noticeable spike up and down in 2020 reflects forecast hiring and layoffs for the 2020 U.S. Census.*

### Wage and Salary Disbursements



*MMB expects that Minnesota wage growth will lag U.S. wage growth in 2019 and grow at a comparable rate to U.S. wages through the remainder of the forecast horizon.*

## U.S. Economic Forecast Summary

Forecast 2016 to 2023, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Real National Income Accounts (Billions of 2009 Dollars)</b>								
Real Gross Domestic Product (GDP)	17,688.9	18,108.1	18,638.2	19,061.4	19,458.0	19,845.6	20,164.5	20,467.2
%Chg	1.6	2.4	2.9	2.3	2.1	2.0	1.6	1.5
Real Consumption	12,247.5	12,566.9	12,944.5	13,282.4	13,649.4	13,975.1	14,268.6	14,577.7
%Chg	2.7	2.6	3.0	2.6	2.8	2.4	2.1	2.2
Real Nonresidential Fixed Investment	2,425.3	2,531.2	2,692.3	2,752.1	2,798.4	2,883.1	2,964.1	3,039.2
%Chg	0.7	4.4	6.4	2.2	1.7	3.0	2.8	2.5
Real Residential Investment	591.2	611.9	602.9	592.8	595.8	589.4	592.6	590.0
%Chg	6.5	3.5	-1.5	-1.7	0.5	-1.1	0.5	-0.4
Real Personal Income	15,487.3	15,933.3	16,476.8	17,015.8	17,350.8	17,740.6	18,108.8	18,473.1
%Chg	1.5	2.9	3.4	3.3	2.0	2.2	2.1	2.0
<b>Current Dollar National Income Accounts (Billions of Dollars)</b>								
Gross Domestic Product (GDP)	18,715.0	19,519.4	20,580.2	21,424.0	22,333.2	23,298.4	24,252.9	25,217.4
%Chg	2.7	4.3	5.4	4.1	4.2	4.3	4.1	4.0
Personal Income	16,121.2	16,878.8	17,819.2	18,668.5	19,389.0	20,185.4	21,042.2	21,931.7
%Chg	2.6	4.7	5.6	4.8	3.9	4.1	4.2	4.2
Wage & Salary Disbursements	8,083.5	8,462.1	8,888.5	9,361.6	9,769.2	10,193.8	10,639.6	11,096.6
%Chg	2.9	4.7	5.0	5.3	4.4	4.3	4.4	4.3
Non-Wage Personal Income	8,037.7	8,416.7	8,930.7	9,306.9	9,619.8	9,991.6	10,402.6	10,835.1
%Chg	2.2	4.7	6.1	4.2	3.4	3.9	4.1	4.2
<b>Price and Wage Indexes</b>								
U.S. GDP Deflator (2005=1.0)	105.770	107.795	110.382	112.397	114.772	117.395	120.272	123.205
%Chg	1.0	1.9	2.4	1.8	2.1	2.3	2.5	2.4
U.S. Consumer Price Index (1982-84=1.0)	2.400	2.451	2.511	2.556	2.606	2.652	2.718	2.786
%Chg	1.3	2.1	2.4	1.8	1.9	1.8	2.5	2.5
Employment Cost Index (Dec 2005=1.0)	1.264	1.295	1.332	1.368	1.411	1.456	1.506	1.557
%Chg	2.1	2.5	2.9	2.7	3.1	3.2	3.4	3.4
<b>Employment (Thousands)</b>								
Employment - Total Non-Farm Payrolls	144.3	146.6	149.1	151.4	153.3	154.4	155.0	155.2
%Chg	1.8	1.6	1.7	1.6	1.2	0.8	0.4	0.1
Construction	6.7	7.0	7.3	7.5	7.5	7.6	7.7	7.8
%Chg	4.1	3.6	4.6	2.8	0.7	0.8	1.4	0.9
Manufacturing	12.4	12.4	12.7	12.8	12.7	12.5	12.5	12.4
%Chg	0.1	0.7	2.0	1.2	-0.7	-1.8	-0.3	-0.4
Private Service-Providing	102.4	104.2	105.9	107.7	109.3	110.6	111.0	110.9
%Chg	2.2	1.8	1.7	1.7	1.5	1.2	0.3	-0.1
Government	22.2	22.4	22.4	22.6	22.9	23.0	23.1	23.3
%Chg	0.9	0.5	0.4	0.5	1.4	0.3	0.7	0.7
U.S. Civilian Labor Force	159.2	160.3	162.1	163.5	165.3	166.6	167.8	168.6
Employment - Household Survey	151.4	153.3	155.8	157.5	159.6	160.7	161.3	161.4
Unemployment Rate (%)	4.9	4.4	3.9	3.7	3.4	3.5	3.8	4.3
<b>Other Key Measures</b>								
Non-Farm Productivity (index, 2005=1.0)	1.030	1.044	1.057	1.074	1.086	1.101	1.118	1.138
%Chg	0.3	1.3	1.3	1.6	1.1	1.4	1.5	1.8
Total Ind. Production (index, 2007=100)	102.072	104.441	108.562	109.463	109.800	111.308	112.421	113.345
%Chg	-2.0	2.3	3.9	0.8	0.3	1.4	1.0	0.8
Manhours in Private Non-Farm Estab.								
Billions of Hours	204.3	207.8	212.0	215.1	217.7	219.4	219.9	219.6
%Chg	1.6	1.7	2.0	1.5	1.2	0.8	0.2	-0.2
Average Weekly Hours	32.4	32.4	32.4	32.3	32.3	32.3	32.3	32.2
Manufacturing Workweek	41.9	41.9	42.1	41.6	41.3	41.3	41.2	41.1

Source: IHS Economics; November 2019 Baseline

## Minnesota Economic Forecast Summary

Forecast 2016 to 2023 - Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	293.894	305.795	322.728	338.073	350.645	365.153	381.783	397.763
%Chg	2.5	4.0	5.5	4.8	3.7	4.1	4.6	4.2
Wage & Salary Disbursements	158.072	165.634	172.887	179.999	187.543	195.240	203.418	211.718
%Chg	2.8	4.8	4.4	4.1	4.2	4.1	4.2	4.1
Non-Wage Personal Income	135.822	140.161	149.840	158.074	163.103	169.915	178.365	186.043
%Chg	2.1	3.2	6.9	5.5	3.2	4.2	5.0	4.3
Supplements to Wages & Salaries	35.583	35.347	37.158	38.654	40.204	41.810	43.536	45.297
%Chg	6.9	-0.7	5.1	4.0	4.0	4.0	4.1	4.0
Dividends, Interest, & Rent Income	58.299	61.651	66.926	68.815	70.994	73.865	77.458	81.473
%Chg	3.9	5.7	8.6	2.8	3.2	4.0	4.9	5.2
Farm Proprietors Income	0.592	1.176	1.139	2.170	1.605	2.211	3.867	3.897
%Chg	-76.4	N/A	N/A	N/A	-26.0	37.7	74.9	0.8
Non-Farm Proprietors Income	20.952	21.088	21.933	22.747	23.035	23.039	22.661	22.415
%Chg	-1.9	0.6	4.0	3.7	1.3	0.0	-1.6	-1.1
Personal Current Transfer Receipts	46.249	47.825	50.817	54.994	57.664	60.458	63.482	66.804
%Chg	3.5	3.4	6.3	8.2	4.9	4.8	5.0	5.2
Less: Contrib. for Gov. Social Ins.	24.640	25.671	26.830	28.011	29.098	30.166	31.336	32.537
%Chg	2.9	4.2	4.5	4.4	3.9	3.7	3.9	3.8
<b>Real Income (Billions of 2009 Dollars)</b>								
Real Personal Income	282.335	288.673	298.412	308.138	313.783	320.925	328.563	335.040
%Chg	1.4	2.2	3.4	3.3	1.8	2.3	2.4	2.0
Real Wage & Salary Disbursements	151.853	156.360	159.864	164.061	167.825	171.593	175.063	178.330
%Chg	1.7	3.0	2.2	2.6	2.3	2.2	2.0	1.9
<b>Employment (Thousands)</b>								
Employment - Total Non-Farm Payrolls	2,894.2	2,932.7	2,954.5	2,975.0	2,988.0	2,996.8	3,006.7	3,013.1
%Chg	1.4	1.3	0.7	0.7	0.4	0.3	0.3	0.2
Construction	116.2	119.8	122.4	127.2	128.1	129.6	131.0	132.4
%Chg	0.9	3.1	2.1	4.0	0.6	1.2	1.1	1.1
Manufacturing	317.8	318.4	321.4	320.7	318.5	316.4	316.2	316.6
%Chg	0.1	0.2	1.0	-0.2	-0.7	-0.7	0.0	0.1
Private Service-Providing	2,034.6	2,064.3	2,078.5	2,093.8	2,103.1	2,110.5	2,115.7	2,116.9
%Chg	1.9	1.5	0.7	0.7	0.4	0.4	0.2	0.1
Government	419.3	423.6	425.5	426.4	431.5	433.6	436.9	440.3
%Chg	0.1	1.0	0.5	0.2	1.2	0.5	0.8	0.8
Minnesota Civilian Labor Force	3,033.5	3,056.9	3,069.4	3,103.7	3,128.8	3,142.0	3,151.6	3,158.9
Unemployment Rate (%)	3.9	3.4	2.9	3.3	3.1	3.0	3.1	3.3
<b>Demographic Indicators (Millions)</b>								
Total Population	5.523	5.568	5.611	5.649	5.686	5.724	5.761	5.799
%Chg	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7
Total Population Age 16 & Over	4.377	4.417	4.452	4.486	4.519	4.552	4.585	4.619
%Chg	0.8	0.9	0.8	0.7	0.7	0.7	0.7	0.7
Total Population Age 65 & Over	0.830	0.859	0.890	0.921	0.952	0.983	1.014	1.045
%Chg	3.5	3.5	3.6	3.5	3.4	3.3	3.2	3.1
Total Households	2.149	2.162	2.194	2.218	2.238	2.257	2.277	2.296
%Chg	0.1	0.6	1.5	1.1	0.9	0.9	0.9	0.9
<b>Housing Indicators (Thousands)</b>								
Total Housing Permits (Authorized)	23.646	24.343	26.276	26.632	25.510	25.118	24.847	25.296
%Chg	16.3	2.9	7.9	1.4	-4.2	-1.5	-1.1	1.8
Single-Family	13.721	14.794	14.136	15.826	15.159	14.926	14.765	15.032
%Chg	11.3	7.8	-4.5	12.0	-4.2	-1.5	-1.1	1.8

Source: Minnesota Management &amp; Budget (MMB) November 2019 Forecast

## Alternative Forecast Comparison

Calendar Years

	19Q1	19Q2	19Q3	19Q4	20Q1	20Q2	2017	2018	2019	2020
<b>Real Gross Domestic Product (GDP), Percent Change, Seasonally Adjusted at Annual Rate</b>										
Blue Chip Consensus (11-19)	3.1	2.0	1.9	1.7	1.7	1.8	2.4	2.9	2.3	1.8
IHS Economics Baseline (11-19)	3.1	2.0	1.9	1.5	2.2	2.5	2.4	2.9	2.3	2.1
Moody's Analytics (10-19)	3.1	2.0	1.9	2.0	1.9	1.7	2.4	2.9	2.3	1.7
S&P Economic Forecast (10-19)	3.1	2.0	2.1	1.8	1.9	2.3	2.4	2.9	2.3	1.7
Wells Fargo (11-19)	3.1	2.0	1.9	1.2	1.7	1.9	2.4	2.9	2.3	1.8
CBO Outlook (8-19)	3.1	1.7	2.0	2.2	2.4	2.1	2.2	2.9	2.6	2.1
<b>Consumer Price Index (CPI), Percent Change, Seasonally Adjusted at Annual Rate (except where noted)</b>										
Blue Chip Consensus (11-19)	0.9	2.9	1.8	2.0	2.1	2.1	2.1	2.4	1.8	2.1
IHS Economics Baseline (11-19)	0.9	2.9	1.8	2.4	1.8	2.4	2.1	2.4	1.8	1.9
Moody's Analytics (10-19)	0.9	2.9	2.0	1.5	1.8	1.8	2.1	2.4	1.8	2.0
S&P Economic Forecast (10-19)	0.9	1.8	2.1	2.2	2.5	2.3	2.1	2.4	1.9	2.2
Wells Fargo (11-19)*	1.6	1.8	1.8	1.8	2.2	2.0	2.1	2.4	1.7	2.2
CBO Outlook (8-19)	0.9	2.9	2.5	2.4	2.4	1.8	2.1	2.4	1.9	2.4

\* Year-over-Year Percent Change

## IHS Economics Baseline Forecast Comparison

Calendar Years

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Real Gross Domestic Product (GDP), Annual Percent Change</b>										
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
February 2019	2.5	2.9	1.6	2.2	2.9	2.4	2.0	1.7	1.6	1.4
November 2019	2.5	2.9	1.6	2.4	2.9	2.3	2.1	2.0	1.6	1.5
<b>Consumer Price Index (CPI), Annual Percent Change</b>										
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
February 2019	1.6	0.1	1.3	2.1	2.4	2.0	2.1	2.3	2.4	2.4
November 2019	1.6	0.1	1.3	2.1	2.4	1.8	1.9	1.8	2.5	2.5

Source: IHS Economics

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

Forecast 2016 to 2021, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Personal Income (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
November 2019	293.9	305.8	322.7	338.1	350.6	365.2	381.8	397.8
%Chg	2.5	4.0	5.5	4.8	3.7	4.1	4.6	4.2
February 2019	291.4	303.1	316.8	329.1	343.8	358.9	373.5	387.7
%Chg	2.3	4.0	4.5	3.9	4.5	4.4	4.1	3.8
<b>U.S.</b>								
November 2019	16,121	16,879	17,819	18,668	19,389	20,185	21,042	21,932
%Chg	2.6	4.7	5.6	4.8	3.9	4.1	4.2	4.2
February 2019	16,125	16,831	17,564	18,314	19,098	19,896	20,735	21,580
%Chg	2.6	4.4	4.4	4.3	4.3	4.2	4.2	4.1
<b>Wage and Salary Disbursements (Billions of Current Dollars)</b>								
<b>Minnesota</b>								
November 2019	158.1	165.6	172.9	180.0	187.5	195.2	203.4	211.7
%Chg	2.8	4.8	4.4	4.1	4.2	4.1	4.2	4.1
February 2019	158.0	165.5	172.3	178.6	186.7	195.0	203.2	211.1
%Chg	2.8	4.7	4.1	3.7	4.5	4.4	4.2	3.9
<b>U.S.</b>								
November 2019	8,083	8,462	8,888	9,362	9,769	10,194	10,640	11,097
%Chg	2.9	4.7	5.0	5.3	4.4	4.3	4.4	4.3
February 2019	8,081	8,454	8,825	9,214	9,635	10,054	10,507	10,962
%Chg	2.9	4.6	4.4	4.4	4.6	4.3	4.5	4.3
<b>Total Non-Farm Payroll Employment (Thousands)</b>								
<b>Minnesota</b>								
November 2019	2,894	2,933	2,954	2,975	2,988	2,997	3,007	3,013
%Chg	1.4	1.3	0.7	0.7	0.4	0.3	0.3	0.2
February 2019	2,894	2,933	2,955	2,989	3,016	3,031	3,042	3,045
%Chg	1.4	1.3	0.7	1.2	0.9	0.5	0.4	0.1
<b>U.S.</b>								
November 2019	144,348	146,611	149,064	151,384	153,251	154,431	155,048	155,161
%Chg	1.8	1.6	1.7	1.6	1.2	0.8	0.4	0.1
February 2019	144,348	146,611	149,064	151,526	152,965	153,705	154,457	154,857
%Chg	1.8	1.6	1.7	1.7	0.9	0.5	0.5	0.3
<b>Average Annual Non-Farm Wage (Current Dollars)</b>								
<b>Minnesota</b>								
November 2019	54,618	56,478	58,517	60,504	62,766	65,149	67,656	70,267
%Chg	1.4	3.4	3.6	3.4	3.7	3.8	3.8	3.9
February 2019	54,608	56,447	58,307	59,745	61,902	64,324	66,782	69,333
%Chg	1.4	3.4	3.3	2.5	3.6	3.9	3.8	3.8
<b>U.S.</b>								
November 2019	56,000	57,718	59,629	61,840	63,746	66,009	68,621	71,517
%Chg	1.1	3.1	3.3	3.7	3.1	3.5	4.0	4.2
February 2019	55,981	57,662	59,201	60,810	62,988	65,409	68,025	70,789
%Chg	1.1	3.0	2.7	2.7	3.6	3.8	4.0	4.1

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

## Factors Affecting Tax Revenue

Billions of Current Dollars

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Individual Income Tax (Calendar Year)</b>								
<b>Minnesota Non-Farm Tax Base</b>								
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
February 2019	234.998	245.757	256.473	265.223	276.050	287.260	298.308	308.860
%Chg	2.4	4.6	4.4	3.4	4.1	4.1	3.8	3.5
November 2019	237.324	248.372	261.746	271.561	281.573	292.143	303.54	315.605
%Chg	2.6	4.7	5.4	3.7	3.7	3.8	3.9	4.0
<b>Minnesota Wage and Salary Disbursements</b>								
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
February 2019	158.043	165.543	172.268	178.590	186.688	194.950	203.150	211.135
%Chg	2.8	4.7	4.1	3.7	4.5	4.4	4.2	3.9
November 2019	158.072	165.634	172.887	179.999	187.543	195.240	203.418	211.718
%Chg	2.8	4.8	4.4	4.1	4.2	4.1	4.2	4.1
<b>Minnesota Dividends, Interest, &amp; Rental Income</b>								
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
February 2019	56.012	58.508	61.018	63.426	66.346	69.397	72.464	75.269
%Chg	3.1	4.5	4.3	3.9	4.6	4.6	4.4	3.9
November 2019	58.299	61.651	66.926	68.815	70.994	73.865	77.458	81.473
%Chg	3.9	5.7	8.6	2.8	3.2	4.0	4.9	5.2
<b>Minnesota Non-Farm Proprietors' Income</b>								
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
February 2019	20.944	21.707	22.701	23.206	23.016	22.912	22.691	22.454
%Chg	-2.2	3.6	4.6	2.2	-0.8	-0.5	-1.0	-1.0
November 2019	20.952	21.088	21.933	22.747	23.035	23.039	22.661	22.415
%Chg	-1.9	0.6	4.0	3.7	1.3	0.0	-1.6	-1.1

## Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2016	2017	2018	2019	2020	2021	2022	2023
<b>General Sales Tax (Fiscal Year)</b>								
<b>Minnesota Synthetic Sales Tax Base</b>								
February 2017	80.694	82.573	85.752	89.610	93.010	96.503	-	-
%Chg	-1.6	2.3	3.8	4.5	3.8	3.8		
November 2017	80.998	83.454	86.420	89.633	92.701	95.663	-	-
%Chg	-1.7	3.0	3.6	3.7	3.4	3.2		
February 2018	80.997	83.393	87.307	91.913	95.419	98.733	-	-
%Chg	-1.7	3.0	4.7	5.3	3.8	3.5		
November 2018	81.778	84.611	87.475	91.342	95.257	99.085	102.551	105.200
%Chg	-1.5	3.5	3.4	4.4	4.3	4.0	3.5	2.6
February 2019	81.771	84.564	87.338	90.935	93.813	97.008	100.131	102.589
%Chg	-1.5	3.4	3.3	4.1	3.2	3.4	3.2	2.5
November 2019	83.761	86.425	90.049	95.366	99.764	103.208	106.362	109.656
%Chg	-0.5	3.2	4.2	5.9	4.6	3.5	3.1	3.1
<i>*Historical data revised as a result of comprehensive GDP account revisions</i>								
<b>Minnesota's Proxy Share of U.S. Consumer Durable Spending (Excluding Autos)</b>								
February 2017	16.029	16.592	16.978	17.700	18.373	19.076	-	-
%Chg	4.3	3.5	2.3	4.3	3.8	3.8		
November 2017	16.122	16.747	17.534	17.822	18.238	18.877	-	-
%Chg	4.5	3.9	4.7	1.6	2.3	3.5		
February 2018	16.122	16.748	17.887	18.580	18.767	19.199	-	-
%Chg	4.5	3.9	6.8	3.9	1.0	2.3		
November 2018	15.117	15.687	16.588	17.591	18.284	18.835	19.293	19.660
%Chg	4.1	3.8	5.7	6.0	3.9	3.0	2.4	1.9
February 2019	15.117	15.687	16.604	17.407	17.914	18.343	18.756	19.090
%Chg	4.1	3.8	5.8	4.8	2.9	2.4	2.2	1.8
November 2019	15.454	16.122	16.985	17.531	18.733	19.175	19.546	19.947
%Chg	4.8	4.3	5.4	3.2	6.9	2.4	1.9	2.0
<b>Minnesota's Proxy Share of U.S. Capital Equipment Spending</b>								
February 2017	10.929	10.817	11.320	11.919	12.537	13.157	-	-
%Chg	-24.4	-1.0	4.7	5.3	5.2	4.9		
November 2017	10.620	10.672	11.526	12.021	12.525	12.918	-	-
%Chg	-26.3	0.5	8.0	4.3	4.2	3.1		
February 2018	10.620	10.672	11.646	12.853	13.946	14.919	-	-
%Chg	-26.3	0.5	9.1	10.4	8.5	7.0		
November 2018	11.627	11.994	13.095	13.644	14.260	15.022	15.672	16.008
%Chg	-24.3	3.2	9.2	4.2	4.5	5.3	4.3	2.1
February 2019	11.627	11.994	13.097	13.504	13.811	14.530	15.060	15.323
%Chg	-24.3	3.2	9.2	3.1	2.3	5.2	3.6	1.8
November 2019	11.618	12.176	13.147	13.408	13.528	13.904	14.116	14.342
%Chg	-19.6	4.8	8.0	2.0	0.9	2.8	1.5	1.6
<b>Minnesota's Proxy Share of U.S. Construction Spending</b>								
February 2017	7.766	8.163	8.836	9.241	9.611	10.083	-	-
%Chg	4.6	5.1	8.2	4.6	4.0	4.9		
November 2017	7.679	7.951	8.298	8.884	9.263	9.631	-	-
%Chg	2.1	3.5	4.4	7.1	4.3	4.0		
February 2018	7.679	7.902	8.314	8.888	9.278	9.625	-	-
%Chg	2.1	2.9	5.2	6.9	4.4	3.7		
November 2018	7.875	8.176	8.697	9.097	9.591	9.932	10.234	10.659
%Chg	1.9	3.8	6.4	4.6	5.4	3.6	3.0	4.2
February 2019	7.870	8.127	8.422	8.887	9.268	9.641	9.981	10.443
%Chg	1.9	3.3	3.6	5.5	4.3	4.0	3.5	4.6
November 2019	7.824	8.284	8.559	8.850	8.955	9.218	9.535	9.902
%Chg	-0.5	5.9	3.3	3.4	1.2	2.9	3.4	3.8

## Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2016	2017	2018	2019	2020	2021	2022	2023
<b>Corporate Franchise Tax (Calendar Year)</b>								
<b>U.S. Corporate Profits (w/ IVA and capital consumption adjustment, less profits from Federal Reserve)</b>								
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	1,944.0	2,066.5	2,247.8	2,371.7	2,413.4	2,483.2	2,551.063	2,622.417
%Chg	2.1	6.3	8.8	5.5	1.8	2.9	2.7	2.8
February 2019	1,944.0	2,066.5	2,246.6	2,239.9	2,276.0	2,363.2	2,438.172	2,503.259
%Chg	2.1	6.3	8.7	-0.3	1.6	3.8	3.2	2.7
November 2019	1,920.4	1,976.5	2,062.6	1,999.6	2,043.7	2,153.8	2,252.687	2,362.241
%Chg	0.7	2.9	4.4	-3.1	2.2	5.4	4.6	4.9
<b>Deed &amp; Mortgage Tax (Fiscal Year)</b>								
<b>U.S. New and Existing Home Sales (Current \$ Value)</b>								
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
February 2019	1,463.5	1,599.6	1,668.4	1,644.5	1,837.6	1,971.3	2,069.3	2,120.4
%Chg	9.3	9.3	4.3	-1.4	11.7	7.3	5.0	2.5
November 2019	1,462.5	1,598.8	1,667.5	1,644.1	1,803.3	1,815.6	1,827.4	1,850.2
%Chg	9.2	9.3	4.3	-1.4	9.7	0.7	0.6	1.2

**Comparison of Actual and Estimated  
Non-Restricted Revenues**

October YTD, 2018-FY2020  
(\$ IN THOUSANDS)

	FORECAST REVENUES	ACTUAL REVENUES	VARIANCE ACT-FCST
<b>Individual Income Tax</b>			
Withholding	3,057,658	3,122,760	65,102
Declarations	376,378	551,135	174,756
Miscellaneous	253,920	295,316	41,396
Gross	3,687,957	3,969,211	281,254
Refund	99,234	106,234	7,000
Net	3,588,723	3,862,978	274,255
<b>Corporate Franchise Tax</b>			
Declarations	525,528	474,380	(51,149)
Miscellaneous	94,443	75,098	(19,345)
Gross	619,971	549,478	(70,494)
Refund	48,567	78,484	29,917
Net	571,404	470,994	(100,410)
<b>General Sales and Use Tax</b>			
Gross	1,859,176	1,892,054	32,878
Mpls. sales tax transferred to MSFA	818	846	28
Sales Tax Gross	1,859,994	1,892,900	32,907
Refunds (including Indian refunds)	58,089	30,945	(27,144)
Net	1,801,905	1,861,956	60,050
<b>Other Revenues:</b>			
Net Estate	47,568	53,413	5,845
Net Liquor/Wine/Beer	25,085	25,703	618
Net Cigarette/Tobacco	150,507	148,444	(2,063)
Deed and Mortgage	79,175	87,796	8,621
Net Insurance Premiums Taxes	99,010	99,778	768
Net Lawful Gambling	20,729	25,666	4,937
Health Care Surcharge	60,721	41,466	(19,255)
Other Taxes	-	0	0
Statewide Property Tax	189,714	178,196	(11,518)
DHS SOS Collections	25,742	29,574	3,832
Investment Income	25,000	27,952	2,952
Tobacco Settlement	100	100	-
Dept. Earnings & MSOP Recov.	54,456	58,794	4,338
Fines and Surcharges	19,109	19,264	155
Lottery Revenues	12,612	12,217	(395)
Revenues yet to be allocated	-	6,600	6,600
Residual Revenues	31,809	27,583	(4,226)
Other Subtotal	841,337	842,545	1,208
Other Refunds	1,801	677	(1,125)
Other Net	839,536	841,868	2,332
<b>Total Gross</b>	<b>7,009,259</b>	<b>7,254,134</b>	<b>244,875</b>
<b>Total Refunds</b>	<b>207,691</b>	<b>216,339</b>	<b>8,648</b>
<b>Total Net</b>	<b>6,801,568</b>	<b>7,037,795</b>	<b>236,227</b>

**FY 2018-19 General Fund Budget**  
**November 2019 Forecast**  
(\$ in thousands)

	Actual FY 2018	Actual FY 2019	Biennial Total FY 2018-19
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	3,333,262	3,282,980	3,333,262
Current Resources:			
Tax Revenues	21,247,679	22,599,637	43,847,316
Non-Tax Revenues	814,026	878,765	1,692,791
Subtotal - Non-Dedicated Revenue	22,061,705	23,478,402	45,540,107
Dedicated Revenue	1,099	897	1,996
Transfers In	161,151	171,928	333,079
Prior Year Adjustments	72,968	91,325	164,293
Subtotal - Other Revenue	235,218	264,150	499,368
Subtotal-Current Resources	22,296,923	23,742,552	46,039,475
<b>Total Resources Available</b>	<b>25,630,185</b>	<b>27,025,532</b>	<b>49,372,737</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	9,233,048	9,587,811	18,820,859
Higher Education	1,651,198	1,642,451	3,293,649
Property Tax Aids & Credits	1,723,701	1,926,787	3,650,488
Health & Human Services	6,621,621	6,676,597	13,298,218
Public Safety & Judiciary	1,130,183	1,226,396	2,356,579
Transportation	158,052	204,508	362,560
Environment	185,851	167,607	353,458
Agriculture & Housing	115,044	121,698	236,742
Jobs, Economic Development & Commerce	220,596	204,761	425,357
State Government & Veterans	618,524	577,871	1,196,395
Debt Service	563,123	549,785	1,112,908
Capital Projects & Grants	126,217	167,901	294,118
Other	47	0	47
Estimated Cancellations	0	0	0
<b>Total Expenditures &amp; Transfers</b>	<b>22,347,205</b>	<b>23,054,173</b>	<b>45,401,378</b>
<b>Balance Before Reserves</b>	<b>3,282,980</b>	<b>3,971,359</b>	<b>3,971,359</b>
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,698,247	2,074,733	2,074,733
Stadium Reserve	44,171	55,075	55,075
Appropriations Carried Forward	211,578	70,978	70,978
<b>Budgetary Balance</b>	<b>978,984</b>	<b>1,420,573</b>	<b>1,420,573</b>

**FY 2018-19 General Fund Budget**  
**November 2019 Forecast vs Enacted Budget**  
(\$ in thousands)

	Enacted FY 2018-19	Nov Fcst FY 2018-19	\$ Change
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	3,333,262	3,333,262	0
Current Resources:			
Tax Revenues	43,158,613	43,847,316	688,703
Non-Tax Revenues	1,659,836	1,692,791	32,955
Subtotal - Non-Dedicated Revenue	44,818,449	45,540,107	721,658
Dedicated Revenue	1,099	1,996	897
Transfers In	316,255	333,079	16,824
Prior Year Adjustments	102,120	164,293	62,173
Subtotal - Other Revenue	419,474	499,368	79,894
Subtotal-Current Resources	45,237,923	46,039,475	801,552
<b>Total Resources Available</b>	<b>48,571,185</b>	<b>49,372,737</b>	<b>801,552</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	18,831,943	18,820,859	-11,084
Higher Education	3,290,092	3,293,649	3,557
Property Tax Aids & Credits	3,657,822	3,650,488	-7,334
Health & Human Services	13,322,418	13,298,218	-24,200
Public Safety & Judiciary	2,357,372	2,356,579	-793
Transportation	367,880	362,560	-5,320
Environment	355,838	353,458	-2,380
Agriculture & Housing	234,135	236,742	2,607
Jobs, Economic Development & Commerce	454,193	425,357	-28,836
State Government & Veterans	1,226,956	1,196,395	-30,561
Debt Service	1,112,908	1,112,908	0
Capital Projects & Grants	294,649	294,118	-531
Other	47	47	0
Estimated Cancellations	-15,000	0	15,000
<b>Total Expenditures &amp; Transfers</b>	<b>45,491,253</b>	<b>45,401,378</b>	<b>-89,875</b>
<b>Balance Before Reserves</b>	<b>3,079,932</b>	<b>3,971,359</b>	<b>891,427</b>
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,074,733	2,074,733	0
Stadium Reserve	49,595	55,075	5,480
<b>Budgetary Balance</b>	<b>605,604</b>	<b>1,420,573</b>	<b>814,969</b>

**FY 2020-21 General Fund Budget**  
**November 2019 Forecast**  
(\$ in thousands)

	Nov Fcst FY 2020	Nov Fcst FY 2021	Biennial Total FY 2020-21
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	3,971,359	3,682,592	3,971,359
Current Resources:			
Tax Revenues	22,713,545	23,866,646	46,580,191
Non-Tax Revenues	780,603	775,899	1,556,502
Subtotal - Non-Dedicated Revenue	23,494,148	24,642,545	48,136,693
Transfers In	155,936	300,050	455,986
Prior Year Adjustments	26,594	36,985	63,579
Subtotal - Other Revenue	182,530	337,035	519,565
Subtotal-Current Resources	23,676,678	24,979,580	48,656,258
<b>Total Resources Available</b>	<b>27,648,037</b>	<b>28,662,172</b>	<b>52,627,617</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	9,890,788	10,207,585	20,098,373
Higher Education	1,698,853	1,707,299	3,406,152
Property Tax Aids & Credits	1,856,618	2,008,087	3,864,705
Health & Human Services	7,263,677	7,413,125	14,676,802
Public Safety & Judiciary	1,254,418	1,259,524	2,513,942
Transportation	210,447	138,190	348,637
Environment	175,161	167,359	342,520
Agriculture & Housing	127,583	120,126	247,709
Jobs, Economic Development & Commerce	201,862	170,306	372,168
State Government & Veterans	620,789	587,376	1,208,165
Debt Service	540,081	591,759	1,131,840
Capital Projects & Grants	130,168	142,151	272,319
Estimated Cancellations	-5,000	-15,000	-20,000
<b>Total Expenditures &amp; Transfers</b>	<b>23,965,445</b>	<b>24,497,887</b>	<b>48,463,332</b>
<b>Balance Before Reserves</b>	<b>3,682,592</b>	<b>4,164,285</b>	<b>4,164,285</b>
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	2,358,698	2,358,698	2,358,698
Stadium Reserve	76,381	123,808	123,808
<b>Budgetary Balance</b>	<b>897,513</b>	<b>1,331,779</b>	<b>1,331,779</b>

**FY 2020-21 General Fund Budget**  
**November 2019 Forecast vs Enacted Budget**  
(\$ in thousands)

	Enacted FY 2020-21	Nov Fcst FY 2020-21	\$ Change
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	3,079,932	3,971,359	891,427
Current Resources:			
Tax Revenues	46,123,170	46,580,191	457,021
Non-Tax Revenues	1,499,965	1,556,502	56,537
Subtotal - Non-Dedicated Revenue	47,623,135	48,136,693	513,558
Transfers In	468,986	455,986	-13,000
Prior Year Adjustments	63,482	63,579	97
Subtotal - Other Revenue	532,468	519,565	-12,903
Subtotal-Current Resources	48,155,603	48,656,258	500,655
<b>Total Resources Available</b>	<b>51,235,535</b>	<b>52,627,617</b>	<b>1,392,082</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	20,122,262	20,098,373	-23,889
Higher Education	3,406,128	3,406,152	24
Property Tax Aids & Credits	3,803,613	3,864,705	61,092
Health & Human Services	14,773,566	14,676,802	-96,764
Public Safety & Judiciary	2,491,870	2,513,942	22,072
Transportation	331,225	348,637	17,412
Environment	338,693	342,520	3,827
Agriculture & Housing	247,673	247,709	36
Jobs, Economic Development & Commerce	340,963	372,168	31,205
State Government & Veterans	1,178,681	1,208,165	29,484
Debt Service	1,182,796	1,131,840	-50,956
Capital Projects & Grants	272,970	272,319	-651
Estimated Cancellations	-20,000	-20,000	0
<b>Total Expenditures &amp; Transfers</b>	<b>48,470,440</b>	<b>48,463,332</b>	<b>-7,108</b>
<b>Balance Before Reserves</b>	<b>2,765,095</b>	<b>4,164,285</b>	<b>1,399,190</b>
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,074,733	2,358,698	283,965
Stadium Reserve	98,389	123,808	25,419
<b>Budgetary Balance</b>	<b>241,973</b>	<b>1,331,779</b>	<b>1,089,806</b>

**Biennial Comparison**  
**November 2019 Forecast**  
(\$ in thousands)

	<b>Actual FY 2018-19</b>	<b>Nov Fcst FY 2020-21</b>	<b>\$ Change</b>
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	3,333,262	3,971,359	638,097
Current Resources:			
Tax Revenues	43,847,316	46,580,191	2,732,875
Non-Tax Revenues	1,692,791	1,556,502	-136,289
Subtotal - Non-Dedicated Revenue	45,540,107	48,136,693	2,596,586
Dedicated Revenue	1,996	0	-1,996
Transfers In	333,079	455,986	122,907
Prior Year Adjustments	164,293	63,579	-100,714
Subtotal - Other Revenue	499,368	519,565	20,197
Subtotal-Current Resources	46,039,475	48,656,258	2,616,783
<b>Total Resources Available</b>	<b>49,372,737</b>	<b>52,627,617</b>	<b>3,254,880</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	18,820,859	20,098,373	1,277,514
Higher Education	3,293,649	3,406,152	112,503
Property Tax Aids & Credits	3,650,488	3,864,705	214,217
Health & Human Services	13,298,218	14,676,802	1,378,584
Public Safety & Judiciary	2,356,579	2,513,942	157,363
Transportation	362,560	348,637	-13,923
Environment	353,458	342,520	-10,938
Agriculture & Housing	236,742	247,709	10,967
Jobs, Economic Development & Commerce	425,357	372,168	-53,189
State Government & Veterans	1,196,395	1,208,165	11,770
Debt Service	1,112,908	1,131,840	18,932
Capital Projects & Grants	294,118	272,319	-21,799
Other	47	0	-47
Estimated Cancellations	0	-20,000	-20,000
<b>Total Expenditures &amp; Transfers</b>	<b>45,401,378</b>	<b>48,463,332</b>	<b>3,061,954</b>
<b>Balance Before Reserves</b>	<b>3,971,359</b>	<b>4,164,285</b>	<b>192,926</b>
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,074,733	2,358,698	283,965
Stadium Reserve	55,075	123,808	68,733
Appropriations Carried Forward	70,978	0	-70,978
<b>Budgetary Balance</b>	<b>1,420,573</b>	<b>1,331,779</b>	<b>-88,794</b>

**FY 2022-23 General Fund Budget**  
**November 2019 Forecast**  
(\$ in thousands)

	Nov Fcst FY 2022	Nov Fcst FY 2023	Biennial Total FY 2022-23
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	4,164,285	4,154,474	4,164,285
Current Resources:			
Tax Revenues	24,421,786	25,128,944	49,550,730
Non-Tax Revenues	777,433	768,765	1,546,198
Subtotal - Non-Dedicated Revenue	25,199,219	25,897,709	51,096,928
Transfers In	152,689	152,771	305,460
Prior Year Adjustments	37,243	37,243	74,486
Subtotal - Other Revenue	189,932	190,014	379,946
Subtotal-Current Resources	25,389,151	26,087,723	51,476,874
<b>Total Resources Available</b>	<b>29,553,436</b>	<b>30,242,197</b>	<b>55,641,159</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	10,399,764	10,579,258	20,979,022
Higher Education	1,703,064	1,703,064	3,406,128
Property Tax Aids & Credits	2,062,827	2,095,560	4,158,387
Health & Human Services	8,062,778	8,319,551	16,382,329
Public Safety & Judiciary	1,256,962	1,259,472	2,516,434
Transportation	123,718	123,278	246,996
Environment	166,248	166,206	332,454
Agriculture & Housing	121,421	121,421	242,842
Jobs, Economic Development & Commerce	162,638	166,117	328,755
State Government & Veterans	585,233	587,498	1,172,731
Debt Service	610,534	595,798	1,206,332
Capital Projects & Grants	148,775	156,011	304,786
Estimated Cancellations	-5,000	-15,000	-20,000
<b>Total Expenditures &amp; Transfers</b>	<b>25,398,962</b>	<b>25,858,234</b>	<b>51,257,196</b>
<b>Balance Before Reserves</b>	<b>4,154,474</b>	<b>4,383,963</b>	<b>4,383,963</b>
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,867,329	1,867,329	1,867,329
Stadium Reserve	181,149	247,596	247,596
<b>Budgetary Balance</b>	<b>1,755,996</b>	<b>1,919,038</b>	<b>1,919,038</b>

**FY 2022-23 General Fund Budget**  
**November 2019 Forecast vs Enacted Budget**  
(\$ in thousands)

	Enacted FY 2022-23	Nov Fcst FY 2022-23	\$ Change
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	2,765,095	4,164,285	1,399,190
Current Resources:			
Tax Revenues	48,822,124	49,550,730	728,606
Non-Tax Revenues	1,473,944	1,546,198	72,254
Subtotal - Non-Dedicated Revenue	50,296,068	51,096,928	800,860
Transfers In	305,460	305,460	0
Prior Year Adjustments	74,486	74,486	0
Subtotal - Other Revenue	379,946	379,946	0
Subtotal-Current Resources	50,676,014	51,476,874	800,860
<b>Total Resources Available</b>	<b>53,441,109</b>	<b>55,641,159</b>	<b>2,200,050</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	20,991,765	20,979,022	-12,743
Higher Education	3,406,128	3,406,128	0
Property Tax Aids & Credits	4,107,714	4,158,387	50,673
Health & Human Services	16,398,935	16,382,329	-16,606
Public Safety & Judiciary	2,518,052	2,516,434	-1,618
Transportation	246,996	246,996	0
Environment	332,124	332,454	330
Agriculture & Housing	242,792	242,842	50
Jobs, Economic Development & Commerce	312,886	328,755	15,869
State Government & Veterans	1,175,388	1,172,731	-2,657
Debt Service	1,233,003	1,206,332	-26,671
Capital Projects & Grants	306,197	304,786	-1,411
Estimated Cancellations	-20,000	-20,000	0
<b>Total Expenditures &amp; Transfers</b>	<b>51,251,980</b>	<b>51,257,196</b>	<b>5,216</b>
<b>Balance Before Reserves</b>	<b>2,189,129</b>	<b>4,383,963</b>	<b>2,194,834</b>
Cash Flow Account	350,000	350,000	0
Budget Reserve	1,583,364	1,867,329	283,965
Stadium Reserve	193,170	247,596	54,426
<b>Budgetary Balance</b>	<b>62,595</b>	<b>1,919,038</b>	<b>1,856,443</b>

**Biennial Comparison**  
**November 2019 Forecast**  
(\$ in thousands)

	Nov Fcst FY 2020-21	Nov Fcst FY 2022-23	\$ Change
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	3,971,359	4,164,285	192,926
Current Resources:			
Tax Revenues	46,580,191	49,550,730	2,970,539
Non-Tax Revenues	1,556,502	1,546,198	-10,304
Subtotal - Non-Dedicated Revenue	48,136,693	51,096,928	2,960,235
Transfers In	455,986	305,460	-150,526
Prior Year Adjustments	63,579	74,486	10,907
Subtotal - Other Revenue	519,565	379,946	-139,619
Subtotal-Current Resources	48,656,258	51,476,874	2,820,616
<b>Total Resources Available</b>	<b>52,627,617</b>	<b>55,641,159</b>	<b>3,013,542</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	20,098,373	20,979,022	880,649
Higher Education	3,406,152	3,406,128	-24
Property Tax Aids & Credits	3,864,705	4,158,387	293,682
Health & Human Services	14,676,802	16,382,329	1,705,527
Public Safety & Judiciary	2,513,942	2,516,434	2,492
Transportation	348,637	246,996	-101,641
Environment	342,520	332,454	-10,066
Agriculture & Housing	247,709	242,842	-4,867
Jobs, Economic Development & Commerce	372,168	328,755	-43,413
State Government & Veterans	1,208,165	1,172,731	-35,434
Debt Service	1,131,840	1,206,332	74,492
Capital Projects & Grants	272,319	304,786	32,467
Estimated Cancellations	-20,000	-20,000	0
<b>Total Expenditures &amp; Transfers</b>	<b>48,463,332</b>	<b>51,257,196</b>	<b>2,793,864</b>
<b>Balance Before Reserves</b>	<b>4,164,285</b>	<b>4,383,963</b>	<b>219,678</b>
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,358,698	1,867,329	-491,369
Stadium Reserve	123,808	247,596	123,788
<b>Budgetary Balance</b>	<b>1,331,779</b>	<b>1,919,038</b>	<b>587,259</b>

**FY 2018-23 Planning Horizon**  
**November 2019 Forecast**  
(\$ in thousands)

	Actual FY 2018-19	Nov Fcst FY 2020-21	Nov Fcst FY 2022-23
<b><u>Actual &amp; Estimated Resources</u></b>			
Balance Forward from Prior Year	3,333,262	3,971,359	4,164,285
Current Resources:			
Tax Revenues	43,847,316	46,580,191	49,550,730
Non-Tax Revenues	1,692,791	1,556,502	1,546,198
Subtotal - Non-Dedicated Revenue	45,540,107	48,136,693	51,096,928
Dedicated Revenue	1,996	0	0
Transfers In	333,079	455,986	305,460
Prior Year Adjustments	164,293	63,579	74,486
Subtotal - Other Revenue	499,368	519,565	379,946
Subtotal-Current Resources	46,039,475	48,656,258	51,476,874
<b>Total Resources Available</b>	<b>49,372,737</b>	<b>52,627,617</b>	<b>55,641,159</b>
<b><u>Actual &amp; Estimated Spending</u></b>			
E-12 Education	18,820,859	20,098,373	20,979,022
Higher Education	3,293,649	3,406,152	3,406,128
Property Tax Aids & Credits	3,650,488	3,864,705	4,158,387
Health & Human Services	13,298,218	14,676,802	16,382,329
Public Safety & Judiciary	2,356,579	2,513,942	2,516,434
Transportation	362,560	348,637	246,996
Environment	353,458	342,520	332,454
Agriculture & Housing	236,742	247,709	242,842
Jobs, Economic Development & Commerce	425,357	372,168	328,755
State Government & Veterans	1,196,395	1,208,165	1,172,731
Debt Service	1,112,908	1,131,840	1,206,332
Capital Projects & Grants	294,118	272,319	304,786
Other	47	0	0
Estimated Cancellations	0	-20,000	-20,000
<b>Total Expenditures &amp; Transfers</b>	<b>45,401,378</b>	<b>48,463,332</b>	<b>51,257,196</b>
<b>Balance Before Reserves</b>	<b>3,971,359</b>	<b>4,164,285</b>	<b>4,383,963</b>
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	2,074,733	2,358,698	1,867,329
Stadium Reserve	55,075	123,808	247,596
<b>Budgetary Balance</b>	<b>1,420,573</b>	<b>1,331,779</b>	<b>1,919,038</b>

**Historical and Projected Revenue Growth**  
**November 2019 Forecast - General Fund**  
(\$ in millions)

	Actual FY 2016	Actual FY 2017	Actual FY 2018	Actual FY 2019	Forecast FY 2020	Forecast FY 2021	Pling FY 2022	Pling FY 2023	Average Annual
<b>Individual Income Tax</b>	\$10,739	\$10,931	\$11,784	\$12,405	\$12,512	\$13,528	\$13,733	\$14,163	
\$ change	335	192	852	622	106	1,016	205	430	
% change	<b>3.2%</b>	<b>1.8%</b>	<b>7.8%</b>	<b>5.3%</b>	<b>0.9%</b>	<b>8.1%</b>	<b>1.5%</b>	<b>3.1%</b>	<b>4.0%</b>
<b>Sales Tax</b>	\$5,233	\$5,405	\$5,453	\$5,762	\$5,960	\$6,165	\$6,364	\$6,556	
\$ change	101	172	48	309	197	206	198	192	
% change	<b>2.0%</b>	<b>3.3%</b>	<b>0.9%</b>	<b>5.7%</b>	<b>3.4%</b>	<b>3.5%</b>	<b>3.2%</b>	<b>3.0%</b>	<b>3.3%</b>
<b>Corporate Tax</b>	\$1,473	\$1,205	\$1,315	\$1,660	\$1,484	\$1,413	\$1,524	\$1,552	
\$ change	18	(268)	109	345	(176)	(71)	111	28	
% change	<b>1.2%</b>	<b>-18.2%</b>	<b>9.1%</b>	<b>26.3%</b>	<b>-10.6%</b>	<b>-4.8%</b>	<b>7.9%</b>	<b>1.8%</b>	<b>0.7%</b>
<b>Statewide Property Tax</b>	\$854	\$858	\$811	\$811	\$787	\$774	\$768	\$768	
\$ change	16	4	(47)	(1)	(24)	(12)	(7)	0	
% change	<b>1.9%</b>	<b>0.5%</b>	<b>-5.5%</b>	<b>-0.1%</b>	<b>-2.9%</b>	<b>-1.6%</b>	<b>-0.8%</b>	<b>0.0%</b>	<b>-1.5%</b>
<b>Other Tax Revenue</b>	\$1,812	\$1,833	\$1,885	\$1,961	\$1,972	\$1,986	\$2,033	\$2,090	
\$ change	53	21	53	76	10	14	47	57	
% change	<b>3.0%</b>	<b>1.1%</b>	<b>2.9%</b>	<b>4.0%</b>	<b>0.5%</b>	<b>0.7%</b>	<b>2.4%</b>	<b>2.8%</b>	<b>2.1%</b>
<b>Total Tax Revenue</b>	\$20,110	\$20,233	\$21,248	\$22,600	\$22,714	\$23,867	\$24,422	\$25,129	
\$ change	524	122	1,015	1,352	114	1,153	555	707	
% change	<b>2.7%</b>	<b>0.6%</b>	<b>5.0%</b>	<b>6.4%</b>	<b>0.5%</b>	<b>5.1%</b>	<b>2.3%</b>	<b>2.9%</b>	<b>3.2%</b>
<b>Non-Tax Revenues</b>	\$779	\$819	\$814	\$879	\$781	\$776	\$777	\$769	
\$ change	27	40	(5)	65	(98)	(5)	2	(9)	
% change	<b>3.5%</b>	<b>5.1%</b>	<b>-0.6%</b>	<b>8.0%</b>	<b>-11.2%</b>	<b>-0.6%</b>	<b>0.2%</b>	<b>-1.1%</b>	<b>-0.2%</b>
<b>Transfers, All Other</b>	\$262	\$282	\$235	\$264	\$183	\$337	\$190	\$190	
\$ change	91	20	(47)	29	(82)	155	(147)	0	
% change	<b>53.6%</b>	<b>7.8%</b>	<b>-16.6%</b>	<b>12.3%</b>	<b>-30.9%</b>	<b>84.6%</b>	<b>-43.6%</b>	<b>0.0%</b>	<b>-4.5%</b>
<b>Total Revenue</b>	\$21,151	\$21,334	\$22,297	\$23,743	\$23,677	\$24,980	\$25,389	\$26,088	
\$ change	642	182	963	1,446	(66)	1,303	410	699	
% change	<b>3.1%</b>	<b>0.9%</b>	<b>4.5%</b>	<b>6.5%</b>	<b>-0.3%</b>	<b>5.5%</b>	<b>1.6%</b>	<b>2.8%</b>	<b>3.0%</b>

**Historical and Projected Spending Growth**  
**November 2019 Forecast - General Fund**  
(\$ in millions)

	Actual FY 2016	Actual FY 2017	Actual FY 2018	Actual FY 2019	Fcst FY 2020	Fcst FY 2021	Pling FY 2022	Pling FY 2023	Average Annual
<b>E-12 Education</b>	\$8,507	\$8,901	\$9,233	\$9,588	\$9,891	\$10,208	\$10,400	\$10,579	
\$ change	319	394	332	355	303	317	192	179	
% change	<b>3.9%</b>	<b>4.6%</b>	<b>3.7%</b>	<b>3.8%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>1.9%</b>	<b>1.7%</b>	<b>3.2%</b>
<b>Higher Education</b>	\$1,529	\$1,556	\$1,651	\$1,642	\$1,699	\$1,707	\$1,703	\$1,703	
\$ change	77	27	95	(9)	56	8	(4)	-	
% change	<b>5.3%</b>	<b>1.7%</b>	<b>6.1%</b>	<b>-0.5%</b>	<b>3.4%</b>	<b>0.5%</b>	<b>-0.2%</b>	<b>0.0%</b>	<b>1.6%</b>
<b>Prop. Tax Aids &amp; Credits</b>	\$1,646	\$1,675	\$1,724	\$1,927	\$1,857	\$2,008	\$2,063	\$2,096	
\$ change	33	29	49	203	(70)	151	55	33	
% change	<b>2.1%</b>	<b>1.8%</b>	<b>2.9%</b>	<b>11.8%</b>	<b>-3.6%</b>	<b>8.2%</b>	<b>2.7%</b>	<b>1.6%</b>	<b>3.5%</b>
<b>Health &amp; Human Services</b>	\$5,601	\$5,944	\$6,622	\$6,677	\$7,264	\$7,413	\$8,063	\$8,320	
\$ change	(590)	343	678	55	587	149	650	257	
% change	<b>-9.5%</b>	<b>6.1%</b>	<b>11.4%</b>	<b>0.8%</b>	<b>8.8%</b>	<b>2.1%</b>	<b>8.8%</b>	<b>3.2%</b>	<b>5.8%</b>
<b>Public Safety &amp; Judiciary</b>	\$1,041	\$1,133	\$1,130	\$1,226	\$1,254	\$1,260	\$1,257	\$1,259	
\$ change	6	92	(3)	96	28	5	(3)	3	
% change	<b>0.6%</b>	<b>8.9%</b>	<b>-0.3%</b>	<b>8.5%</b>	<b>2.3%</b>	<b>0.4%</b>	<b>-0.2%</b>	<b>0.2%</b>	<b>2.8%</b>
<b>Debt Service</b>	\$609	\$529	\$563	\$550	\$540	\$592	\$611	\$596	
\$ change	(14)	(80)	34	(13)	(10)	52	19	(15)	
% change	<b>-2.3%</b>	<b>-13.1%</b>	<b>6.4%</b>	<b>-2.4%</b>	<b>-1.8%</b>	<b>9.6%</b>	<b>3.2%</b>	<b>-2.4%</b>	<b>-0.3%</b>
<b>All Other</b>	\$1,218	\$1,300	\$1,424.	\$1,444.	\$1,461.	\$1,310.	\$1,303.	\$1,305.	
\$ change	28	82	124	20	17	(151)	(7)	2	
% change	<b>2.4%</b>	<b>6.8%</b>	<b>9.5%</b>	<b>1.4%</b>	<b>1.2%</b>	<b>-10.3%</b>	<b>-0.6%</b>	<b>0.2%</b>	<b>1.0%</b>
<b>Total Spending</b>	\$20,152	\$21,039	\$22,347	\$23,054	\$23,965	\$24,498	\$25,399	\$25,858	
\$ change	(141)	887	1,308	707	911	532	901	459	
% change	<b>-0.7%</b>	<b>4.4%</b>	<b>6.2%</b>	<b>3.2%</b>	<b>4.0%</b>	<b>2.2%</b>	<b>3.7%</b>	<b>1.8%</b>	<b>3.6%</b>

**FY 2013-2023 Stadium Reserve Balance**  
**November 2019 Forecast**  
(\$ in thousands)

	Actual FY 2013	Actual FY 2014	Actual FY 2015	Actual FY 2016	Actual FY 2017	Actual FY 2018	Actual FY 2019	Forecast FY 2020	Forecast FY 2021	Forecast FY 2022	Forecast FY 2023
<b><u>Actual &amp; Estimated Resources</u></b>											
Beginning Balance	0	0	39,780	32,634	22,535	26,821	44,172	55,075	76,381	123,808	181,149
Prior Year Adjustments	0	0	0	0	0	0	0	118	0	0	0
Current Resources:											
Gambling Revenue	89	6,360	12,107	19,389	26,989	38,675	52,835	63,374	72,750	81,950	91,150
Sales Tax Exemption for Construction Equipment	-4	-2,600	-9,100	-11,834	-1,583	0	0	0	0	0	0
Retained City of Minneapolis Revenue	0	0	0	0	0	0	0	0	17,275	18,340	18,618
Corporate Franchise Tax Revenue	0	20,000	20,000	20,000	20,000	20,000	0	0	0	0	0
Cigarette Floor Stocks Tax Reserve Deposit	0	26,500	0	0	0	0	0	0	0	0	0
<b>Current Resources</b>	<b>85</b>	<b>50,260</b>	<b>23,007</b>	<b>27,555</b>	<b>45,406</b>	<b>58,675</b>	<b>52,835</b>	<b>63,374</b>	<b>90,025</b>	<b>100,290</b>	<b>109,768</b>
<b><u>Actual &amp; Estimated Spending</u></b>											
Debt Service	0	7,347	30,152	30,154	30,158	29,923	30,158	30,156	30,157	30,154	30,155
Total Payments for City Stadium Obligations	0	0	0	7,500	7,623	7,947	8,177	8,327	8,645	8,907	9,185
St. Paul Sports Facilities Grants	0	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700
Problem Gambling Appropriations	370	433	490	563	639	756	897	1003	1097	1189	1,281
<b>Total Uses</b>	<b>370</b>	<b>10,480</b>	<b>33,342</b>	<b>40,917</b>	<b>41,120</b>	<b>41,325</b>	<b>41,932</b>	<b>42,186</b>	<b>42,598</b>	<b>42,950</b>	<b>43,321</b>
<b>Sources Minus Uses</b>	<b>-285</b>	<b>39,780</b>	<b>-10,336</b>	<b>-13,362</b>	<b>4,286</b>	<b>17,350</b>	<b>10,903</b>	<b>21,188</b>	<b>47,427</b>	<b>57,340</b>	<b>66,447</b>
Expenses Not Covered by Reserve <sup>1</sup>	-370	0	-3,955	-6,836	0	0	0	0	0	0	0
Use of the Reserve	0	0	7,145	10,099	0	0	0	0	0	0	0
<b>Stadium Reserve Balance</b>	<b>0</b>	<b>39,780</b>	<b>32,634</b>	<b>22,535</b>	<b>26,821</b>	<b>44,172</b>	<b>55,075</b>	<b>76,381</b>	<b>123,808</b>	<b>181,149</b>	<b>247,596</b>

<sup>1</sup> Per M.S. 297E.021, Subd. 4, the Commissioner of Minnesota Management and Budget, after consultation with the Legislative Commission on Planning and Fiscal Policy, has authority to use funds in the stadium reserve for uses related to the stadium. In FY 2015 and FY 2016 reserve funds were used to reimburse the general fund to the extent that current year revenues were not sufficient to cover stadium related expenses. St. Paul Sports Facilities Grants and problem gambling appropriations are not stadium related so reserve funds were not used to cover those expenses.