BUDGET AND ECONOMIC FORECAST

MINNESOTA

FEBRUARY 2020

Produced by Minnesota Management and Budget

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Statutory Provisions

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

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

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

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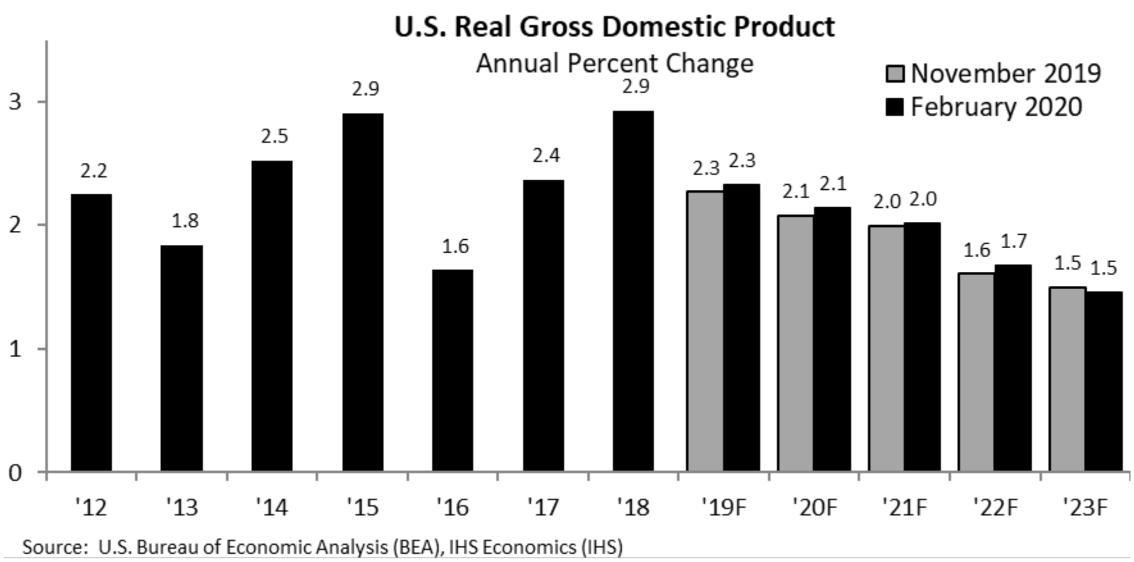
TABLE OF CONTENTS

EXECUTIVE SUMMARY

Minnesota's budget and economic outlook remain stable. A small increase to the general fund revenue forecast along with a similar-sized reduction in spending estimates result in a projected surplus of $1.513 billion for the FY 2020-21 biennium, $181 million larger than the November estimate. The general fund budget reserve remains at $2.359 billion in FY 2020-21 but current law reduces it by $491 million at the beginning of the next biennium. As in November, the economic outlook is stable but a slowdown remains in the forecast. The small budgetary improvement continues into the next biennium and the structural balance is improved, but budget challenges remain.

U.S. Economic Outlook. The outlook for U.S. economic growth is little changed since Minnesota's Budget and Economic Forecast was last prepared in November 2019, and the pattern of slowing growth through our planning horizon carries over from the prior forecast. While current conditions can support moderate growth of 2.1 percent this year, IHS expects a slowdown late next year, as annual real GDP growth slips below the long-term trend of two percent. The downshift continues, with real GDP growth expected to decelerate from 2.0 percent annually in 2021 to 1.5 percent in 2023.



While current conditions can support moderate growth of 2.1 percent this year, IHS expects a slowdown late next year, as annual real GDP growth slips below the long-term trend of two percent. The downshift continues, with annual real GDP growth expected to decelerate from 2.0 percent annually in 2021 to 1.5 percent in 2023.

IHS expects growth through early 2021 to be supported by low interest rates, higher federal spending, increases in U.S. oil production, partial relief from tariffs and policy uncertainty from the U.S.-China "phase one" deal, and a rebound in global economies. In addition, gains in employment, income, and household wealth—in part from a rising stock market—sustain real consumer spending and confidence. Starting in late 2021, however, growth is expected to slow below two percent as fiscal stimulus dissipates, lingering tariff and policy uncertainty effects dampen consumer sentiment and business investment, interest rates rise, a full employment labor market slows labor income growth, and household wealth decelerates.

The February IHS outlook reflects the tariffs put in place by the U.S. and China since 2017, including the "phase one" trade deal. The 15 percent tariffs on Chinese goods that were scheduled to go into effect on December 15 were suspended, and the tariffs on $112 billion of goods that went into effect on September 1 were reduced from 15 to 7.5 percent. IHS does not assume that the reduction of trade policy uncertainty will cause a boost to investment, nor that China's promise to purchase more U.S. products will substantially increase U.S. exports.

IHS expects temporary and modest impacts on the U.S. economy from COVID-19, the disease caused by the new coronavirus. Therefore, they do not include adjustments to the February outlook for disruptions caused by the disease. Investors' flight to safety in the wake of COVID-19 news in late January depressed equity values and Treasury yields. Consequently, IHS lowered their near-term projections of the 10-year Treasury note.

IHS expects consumer spending to remain the primary contributor to growth in the economy and consumer sentiment to remain elevated through our forecast period. However, the pace of spending is expected to eventually slow, as a reversal of monetary policy in mid-2021 gradually raises interest rates and household wealth growth slows. IHS expects real consumer spending to grow 2.6 percent in 2020, before slowing to 2.4 percent in 2021 and 2.1 percent in 2022. While downside risks to consumer spending have diminished with the rollback of planned tariffs, IHS notes a new downside risk from the potential spillover from a prolonged and widespread COVID-19 outbreak.

The S&P 500 share price index grew 17.0 percent in 2017, 12.1 percent in 2018, and 6.1 percent in 2019. IHS expects the index to grow at 12.3 percent in 2020. 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.

In December 2019, the U.S. unemployment rate reached 3.5 percent, its lowest rate since 1969, and is expected to reach a cycle low of 3.3 percent in late 2020 and early 2021. Strong demand for workers has tightened the national labor market. In 2019, the number of unemployed people in the labor force fell, as did the number of job openings, keeping the ratio of unemployed job-seekers to job vacancies nationwide at 0.9.

The U.S added an average of 175,000 new jobs per month in 2019. The year ended with an addition of 147,000 jobs in December, a stark decrease from 261,000 added in November 2019, a number that was in part inflated with workers re-entering employment after the six-week-long GM strike ended. January saw a recovery with a pickup of 225,000 jobs. IHS' forecast for 2019 employment growth has weakened since November, from 1.7 percent to 1.6 percent. IHS expects annual employment growth to slow throughout the forecast horizon, from 1.6 percent in 2019 to

1.3 percent in 2020. By the end of 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 slow to 0.8 percent in 2021, 0.4 percent in 2022, and 0.02 percent by 2023.

IHS has lowered their forecast for growth in total U.S. wage and salary disbursements since November. Wage and salary income growth for 2019 was revised from 5.3 percent to 4.9 percent in the February outlook and is expected to remain between 4.2 and 4.4 through the forecast horizon.

Business fixed investment grew at 4.4 percent in 2017 and continued to grow at a robust rate of 6.4 percent in 2018. Investment slowed to 2.1 percent in 2019 and is expected to continue to decelerate to 1.1 percent in 2020. There is upside potential to the forecast for nonresidential fixed investment due to partial relief of trade policy uncertainty with the "phase-one" deal between the U.S. and China. IHS estimated a nearly $100 billion reduction in investment due to the trade war, but in the February outlook they do not assume that the reduction of trade policy uncertainty will cause a comparable boost in coming years. On the other hand, a prolonged and widespread COVID-19 outbreak may disrupt supply chains and impose cost pressure on domestic producers, adding downside risk to this forecast.

The IHS February outlook is similar to that of other macroeconomic forecasters. The February Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 1.9 percent in 2020, lower than the IHS forecast of 2.1 percent. For 2021, the IHS and the Blue Chip Consensus both expect growth rates of 2.0 percent.

Minnesota Economic Outlook. Minnesota's steady economic performance continues, while the state's labor market is slowing. 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. In June 2018, Minnesota's official unemployment rate 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 3.3 percent, where it has held steady for two months. This increase, along with a decline in the U.S. rate, which is at a 50-year low of 3.5 percent, has narrowed the gap between the national and state unemployment rates.

Minnesota's pace of employment growth has slowed, as slower labor force growth appears to be limiting the state's ability to add jobs. Between 2011 and 2017, Minnesota added an average of 43,000 jobs per year. In the last two years, the annual additions averaged to about half that amount. Minnesota added 26,000 and 15,000 new jobs in 2018 and 2019, respectively.

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 3.5 and 3.9 percent per year in 2019 and 2020, followed by 4.1, 4.1 and 3.7 percent in years 2021, 2022, and 2023, respectively. This is lower growth than we forecast in November. Wage income per worker is forecast to grow an average of 3.5 percent per year throughout the forecast period. This exceeds forecasted rates of inflation over the same period, implying improvements in real wages.

Minnesota's labor market indicators remain consistent with a tight labor market. According to the Department of Employment and Economic Development's (DEED) 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—or seven people for each ten job openings. In contrast, at the peak of the 2007-2009 recession, there were nearly seven unemployed persons for each job opening.

Budget Outlook: Current Biennium. When the last Budget and Economic Forecast was released in November, a surplus of $1.332 billion was projected for the FY 2020-21 biennium. An improved revenue forecast and lower spending estimates result in a $181 million increase in the projected balance. The current biennium is now projected to conclude with a budgetary balance of $1.513 billion.

Current Biennium: FY 2020-21 General Fund Budget
Forecast Comparison

($ in millions)	November 2019 Forecast	February 2020 Forecast	$ Change	% Change
Beginning Balance	**$3,971**	**$3,971**	**$ -**	
Revenues	48,656	48,752	96	0.2
Expenditures	48,463	48,373	(91)	(0.2)
Cash Flow & Budget Reserves	2,709	2,709	-	
Stadium Reserve	124	130	6	
Forecast Balance	**$1,332**	**$1,513**	**$181**	

Revenues. Total general fund revenues for FY 2020-21 are now forecast to be $48.752 billion, $96 million (0.2 percent) more than the November 2019 forecast. Total tax revenues for the biennium are forecast to be $46.669 billion, $89 million (0.2 percent) above the prior estimate. A higher forecast for net corporate tax revenue more than offsets lower forecasts for the individual and general sales taxes.

Current Biennium: FY 2020-21 General Fund Revenues
November 2019 vs. February 2020 Forecast Comparison

($ in millions)	November 2019 Forecast	February 2020 Forecast	$ Change	% Change
Individual Income Tax	$26,039	$25,988	$(51)	(0.2)%
General Sales Tax	12,125	12,044	(81)	(0.7)
Corporate Franchise Tax	2,897	3,114	217	7.5
State General Property Tax	1,561	1,562	1	0.0
Other Tax Revenue	3,958	3,961	3	0.1
Total Tax Revenues	**$46,580**	**$46,669**	**$89**	**0.2%**
Non-Tax Revenues	1,557	1,563	7	0.4
Other Resources	520	520	0	0.0
Total Revenues	**$48,656**	**$48,752**	**$96**	**0.2%**

Individual income tax receipts are now forecast to be $51 million (0.2 percent) less than the November forecast. The decrease is primarily due to lower forecast growth in wage and non-wage income.

General sales tax revenue in FY 2020-21 is now forecast to be $81 million (0.7 percent) less than the prior forecast. The forecast for gross sales tax receipts is $74 million lower than in November, and the refunds forecast is $6 million higher. The lower forecast for gross sales tax receipts reflects a lower forecast for taxable sales and a lower share of U.S. sales allocated to Minnesota compared to November.

The corporate franchise tax is forecast to generate $217 million (7.5 percent) more than the prior forecast. Higher forecast gross corporate payments and lower forecast refunds both contribute to the change. So far in FY 2020, gross corporate tax receipts have exceeded the November 2019 forecast by $59 million. The higher base drives the increased forecast for corporate gross receipts.

Expenditures. While expenditures in the current biennium are projected to be $2.972 billion (3.2 percent annualized growth) higher than the previous biennium, estimates are slightly lower than prior forecast. Total spending in the FY 2020-21 biennium is now expected to be $48.373 billion, $91 million (0.2 percent) lower than prior estimates.

Current Biennium: FY 2020-21 General Fund Expenditures
Change From November 2019 Forecast

($ in millions)	February 2020 Forecast	$ Change	% Change
E-12 Education	19,999	$(99)	(0.5)%
Property Tax Aids & Credits	3,872	7	0.2
Health & Human Services	14,682	5	0.0
Debt Service	1,130	(2)	(0.2)
All Other	8,689	(2)	(0.0)
Total Expenditures	**$48,373**	**$(91)**	**(0.2)%**

The largest general fund budget area, E-12 education, more than accounts for the total changes. E-12 education spending is expected to be $99 million (0.5 percent) lower than November estimates. The reduction in overall growth in E-12 spending is primarily due to a lower projection of pupil growth in the current biennium, largely driven by lower actual pupil counts for the 2018-19 school year than prior estimates. A minor aggregate increase across health and human services, property tax aids and credits, debt service and all other budget areas totaling $8 million (0.0 percent) partially offset the lower growth in E-12 education.

Reserves. The budget reserve and cash flow account balances are unchanged with this budget update. The cash flow account balance is $350 million in each year FY 2020-23. The budget reserve balance for the FY 2020-21 biennium is $2.359 billion, but current law reduces that balance by $491 million on the first day of FY 2022. The stadium reserve is expected to grow to $130 million by the end of FY 2021, $6 million more than prior projections. This increase is due to higher gambling tax receipts, which are expected to grow through FY 2023. By FY 2023, the general fund allocation to the stadium reserve is expected to be $71 million and the stadium reserve balance is expected to reach $263 million, $15 million higher than November estimates.

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 because they rely on economic and budget projections three or more years into the future. Revenue projections for FY 2022-23 are based on IHS' February baseline 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 forecast programs. The expenditure forecast does not assume cost growth outside of specific budget areas where assumptions for cost 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 $465 million.

Planning Estimates: FY 2022-23 General Fund Budget
By Fiscal Year; February 2020 Forecast

($ in millions)	**FY 2022**	**FY 2023**	**FY 2022-23**
Forecast Revenues	$25,370	$26,131	$51,501
Projected Spending	25,306	25,730	51,036
Difference	**$64**	**$401**	**$465**
Estimated Inflation (CPI) Applied to Projected Spending[1]	*$357*	*$762*	*$1,119*

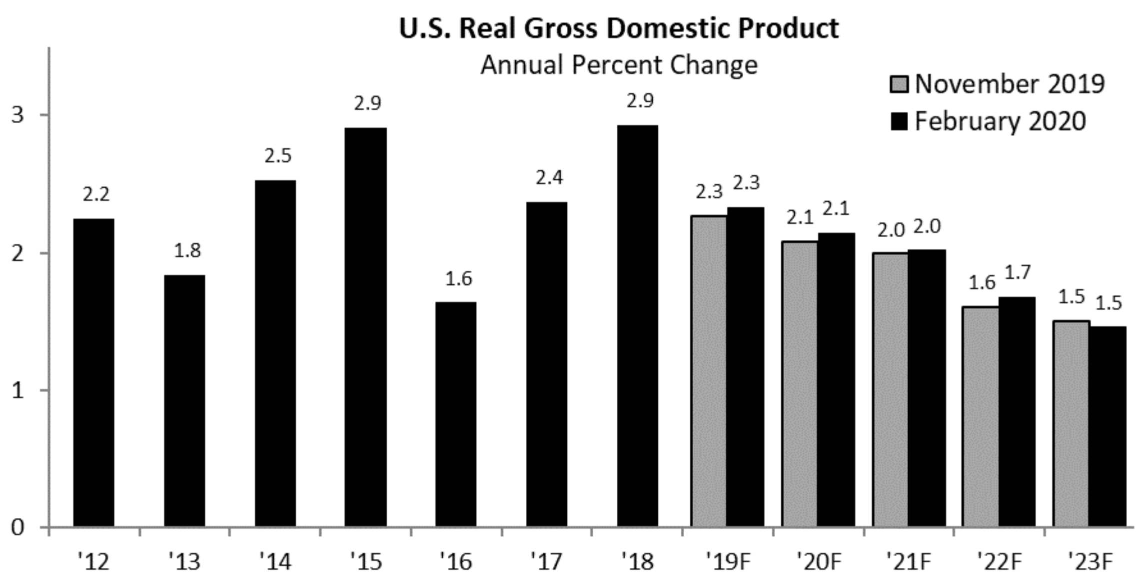
Projected inflationary growth based on the Consumer Price Index is now forecast to be 2.1 percent in FY 2022 and 2.3 percent in FY 2023. After adjusting for programs with cost increases included in the current law formula, applying the annual inflation rate, compounded over 2 years, would add approximately $1.119 billion in spending pressure to the FY 2022-23 biennium.

[1] Inflation calculation grows the estimated general fund spending base in each year by the projected CPI growth rate after removing special education, debt service, capital projects, property tax refunds, and the state share for managed and long term care. In this forecast, 33 percent of the estimated expenditure base for FY 2022-23 is removed from the inflation calculation.

ECONOMIC OUTLOOK

U.S. Economic Outlook

The outlook for U.S. economic growth is little changed since *Minnesota's Budget and Economic Forecast* was last prepared in November 2019, and the pattern of slowing growth through our planning horizon carries over from the prior forecast. While current conditions can support moderate growth of 2.1 percent this year, IHS expects a slowdown late next year, as annual real GDP growth slips below the long-term trend of two percent. The downshift continues, with real GDP growth expected to decelerate from 2.0 percent annually in 2021 to 1.5 percent in 2023.



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

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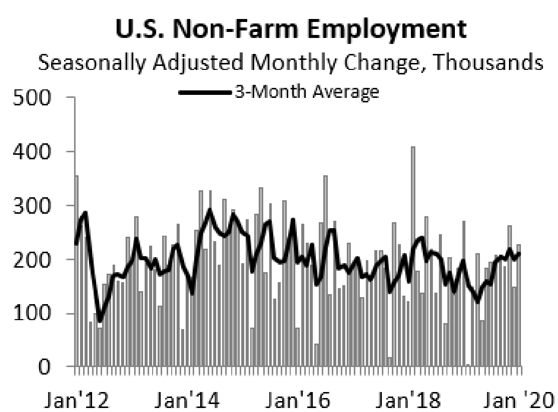
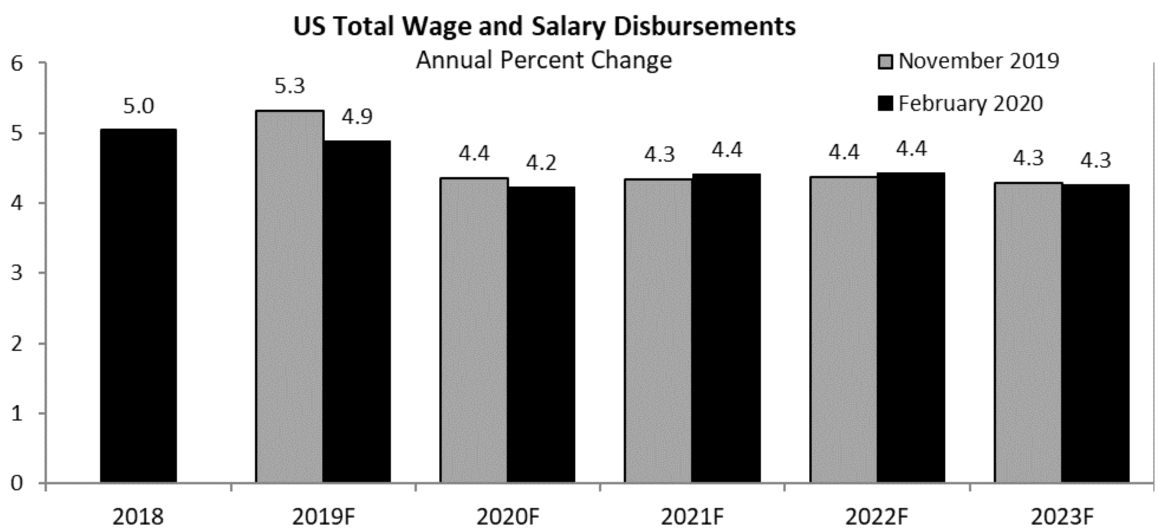


Source: U.S. Bureau of Labor Statistics (BLS)

The U.S added an average of 175,000 new jobs per month in 2019. The year ended with 147,000 jobs added in December, a stark decrease from 261,000 added in November 2019, a number that is in part inflated with workers re-entering the labor force after the GM strike was resolved. There are now 0.9 unemployed job-seekers for each job vacancy nationwide, a slight increase from 0.8, at which the ratio has hovered since September 2018. These values are some of the lowest since the series began in 2000.

In December 2019, the U.S. unemployment rate reached 3.5 percent, its lowest rate since 1969, and is expected to reach a cycle low of 3.3 percent in late 2020 and early 2021. Strong demand for workers has tightened the national labor market. In 2019, the number of unemployed people in the labor force fell, as did the number of job openings, keeping the ratio of unemployed job-seekers to job vacancies nationwide at 0.9.

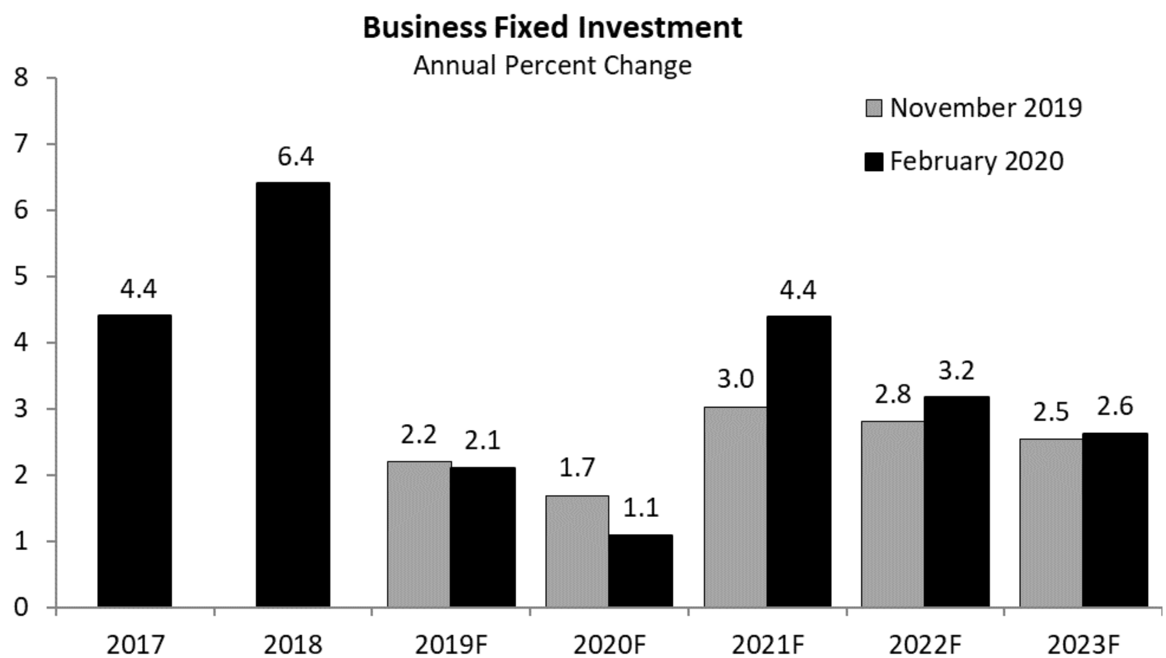
The U.S added an average of 175,000 new jobs per month in 2019. The year ended with an addition of 147,000 jobs in December, a stark decrease from 261,000 added in November 2019, a number that was in part inflated with workers re-entering employment after the six-week-long GM strike ended. January saw a recovery with a pickup of 225,000 jobs. IHS' forecast for 2019 employment growth has weakened since November, from 1.7 percent to 1.6 percent. IHS expects annual employment growth to slow throughout the forecast horizon, from 1.6 percent in 2019 to 1.3 percent in 2020. By the end of 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 slow to 0.8 percent in 2021, 0.4 percent in 2022, and 0.02 percent by 2023.



As the labor market feels the impact of an aging workforce, the labor force participation rate is expected to fall. In this forecast, IHS decreased their expectations for total wage and salary income growth. They now expect 4.9 percent growth in 2019 compared to 5.3 percent previously forecast, and they lowered their expectation for 2020 from 4.4 percent to 4.2 percent.

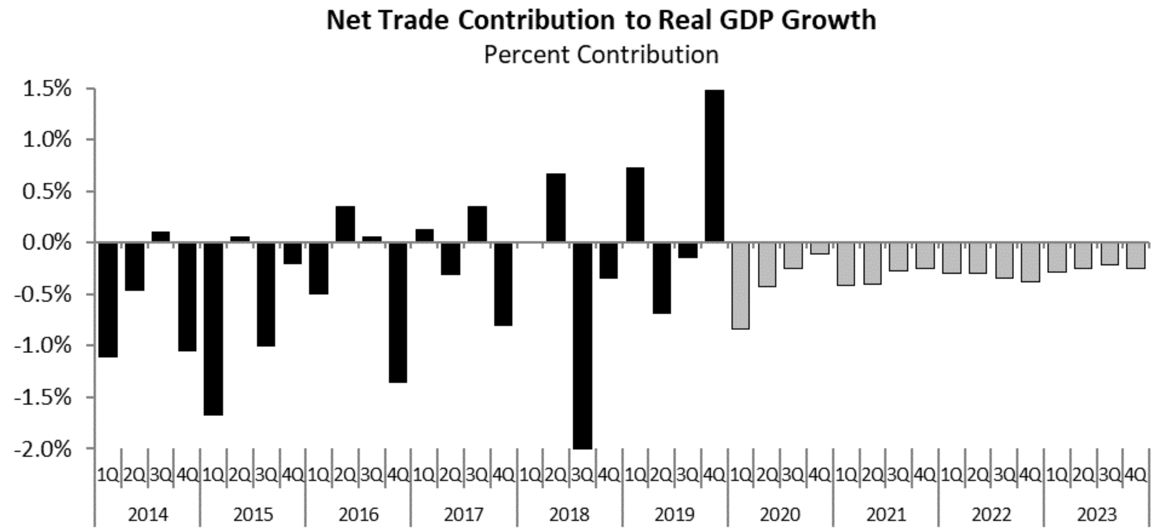
IHS has lowered their forecast for growth in total U.S. wage and salary disbursements since November. Wage and salary income growth for 2019 was revised from 5.3 percent to 4.9 percent in the February outlook and is expected to remain between 4.2 and 4.4 through the forecast horizon.

Business fixed investment grew at 4.4 percent in 2017 and continued to grow at a robust rate of 6.4 percent in 2018. Investment slowed to 2.1 percent in 2019 and is expected to continue to decelerate to 1.1 percent in 2020. In 2021 and 2022, IHS forecasts growth of 4.4 and 3.2 percent, respectively. While a ramp-up of Boeing's production of the 737 MAX airliner will provide a temporary jump in business fixed investment late this year and into 2021 as deliveries are fulfilled, the overall trend in business fixed investment is one of slowing growth. There is upside potential to the forecast for nonresidential fixed investment due to partial relief of trade policy uncertainty with the "phase-one" deal between the U.S. and China. IHS estimated a nearly $100 billion reduction in investment due to the trade war, but in the February outlook they do not assume that the reduction of trade policy uncertainty will cause a comparable boost in coming years. On the other hand, a prolonged and widespread COVID-19 outbreak may disrupt supply chains and impose cost pressure on domestic producers, adding downside risk to this forecast.



In their February outlook, IHS expects business fixed investment to peak at 6.4 percent in 2018 due to stronger nonfarm business sector output. Growth slows to 1.1 percent in 2020 before rising again in 2021 to 4.4 percent.

IHS expects the contribution of net exports to real GDP to represent an average of 0.3 percent drag to annual GDP growth through the forecast period. However, IHS expects the drag to lessen in the second half of this year when exports of the Boeing 737 MAX resume. Real exports of petroleum have continued to climb, while real imports of petroleum decreased since reaching a high in the mid-2000s. These trends are expected to continue as net exports of petroleum are forecast to turn positive in 2023.



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

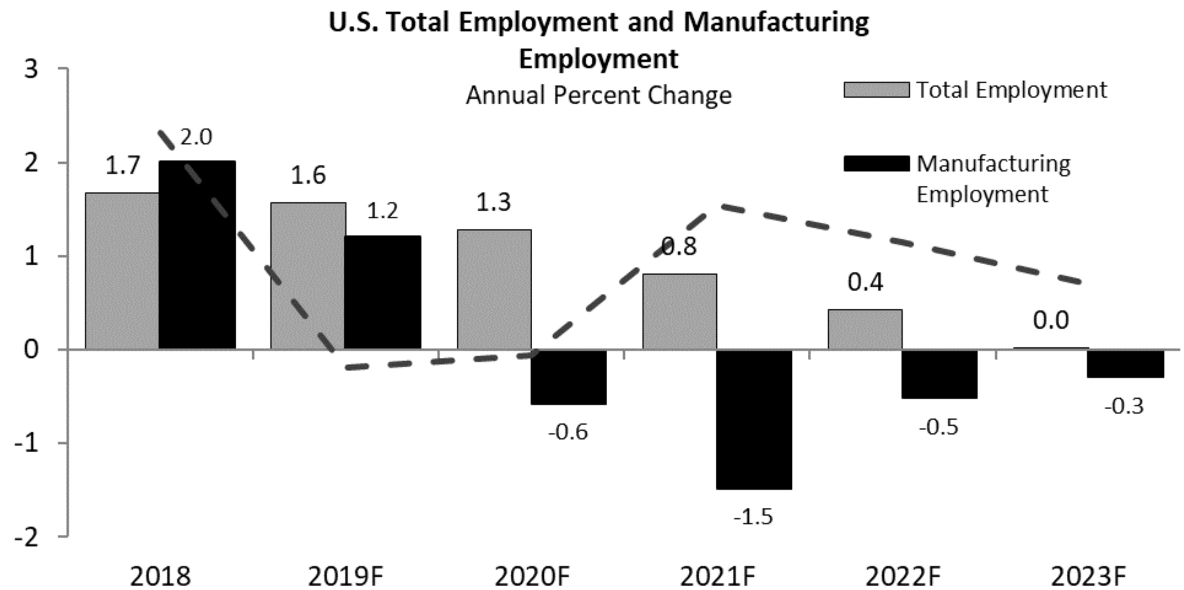
Weakening global growth, trade tensions between the U.S. and trading partners, and appreciation of the U.S. dollar all contribute to forecast drag on real GDP growth from net exports. IHS expects the contribution of net exports to real GDP to be negative through the forecast period.

Escalating trade tensions coincided with a steep appreciation of the U.S. dollar in 2018. 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 4.6 percent over 2019. In this forecast, IHS expects the dollar's value to grow 0.4 percent this year followed by 2.0 percent growth in 2021 and 2.5 percent in 2022. In this forecast, the strength of the dollar is a source of downward pressure on exports, helps to temper import price gains, and reinforces low inflation in the United States.

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.

Weakness in manufacturing production appears to be abating, and production is expected to slowly strengthen later this year. Nevertheless, IHS expects a decline in manufacturing employment in years 2020 through 2023, which will restrain overall employment. Manufacturing output has declined since the first quarter of 2019 and is expected to continue to decline through the first quarter of 2020. It is then expected to return to positive growth in each quarter through 2023.



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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. Amid 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 pause from the Fed in 2020 before beginning a 3-year tightening cycle of 100 basis points in mid-2021, in order to limit rise in inflation and to accommodate an uptick in trend GDP growth. In the February 2020 outlook, core PCE inflation is forecast to reach the FOMC target of 2.0 percent in 2021.

The IHS February outlook is similar to that of other macroeconomic forecasters. The February Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 1.9 percent in 2020, lower than the IHS forecast of 2.1 percent. For 2021, the IHS and the Blue Chip Consensus both expect growth rates of 2.0 percent.

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 eleventh 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 estimates U.S. trend real GDP growth at two percent per year. In this forecast they note that risk of a downturn increases as the U.S. transitions from above-trend growth in 2020 to below-trend growth in 2021 and beyond. Among the 50 Blue Chip macro-economic forecasters, the most recent consensus probability of a recession beginning in the next twelve months is 29 percent and the probability in 2021 is 37 percent.

In their February outlook, released February 6, IHS expects temporary and modest impacts on the U.S. economy from COVID-19, the disease caused by the new coronavirus. On February 21, they noted that despite a flight to safety in financial markets that appeared to be driven by concerns about the disease, U.S. economic fundamentals remain healthy, and the economic impacts in the U.S. from COVID-19 are still expected to be modest in the context of the large U.S. economy. IHS also notes that to date, Federal Reserve policymakers have said that a policy response to the disease outbreak is unlikely, unless the economic outlook materially worsens. However, if the nature of the epidemic changes, or the impact of the disease becomes more prolonged or widespread than it appeared at the time IHS constructed their forecast, U.S. economic growth could be slower than forecast.

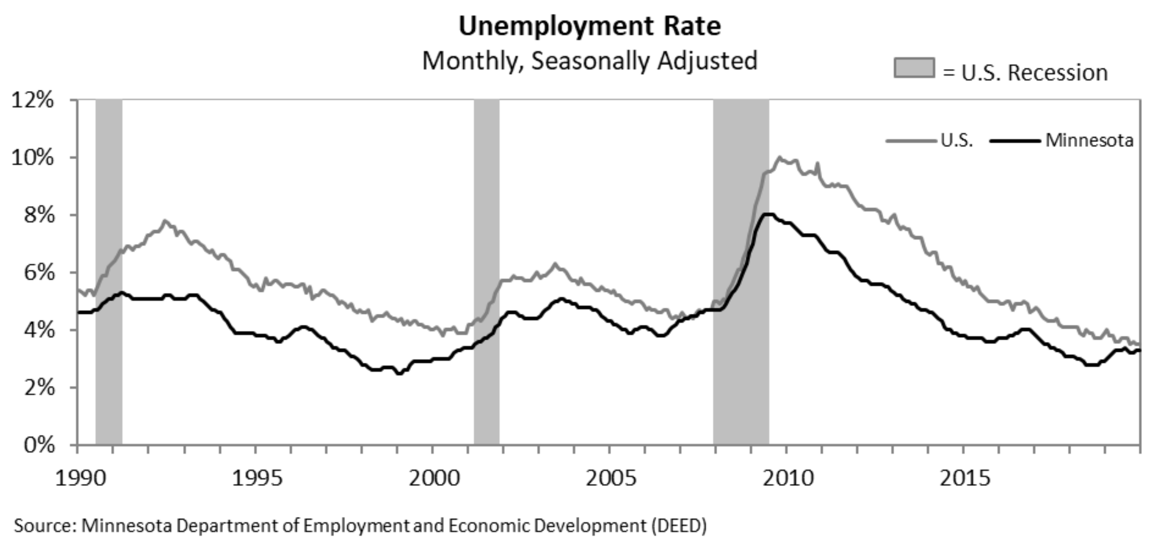
The IHS February outlook depends on several additional forecast assumptions. If these assumptions do not materialize, the economic outcome will differ from IHS's baseline forecast. (1) IHS assumes that the new coronavirus has a modest and temporary impact on the U.S. economy. (2) IHS assumes that personal provisions of the 2017 Tax Act are eventually extended. (3) IHS expects the Federal Reserve to reverse course in mid-2021 and raise the federal funds rate by 100 basis points over three years. (4) IHS includes all tariffs enacted by the U.S. and China since 2017 that are still in effect. It does not include an increase in U.S. exports reflecting China's promise to purchase more U.S. products under the "phase-one" trade agreement. (5) The February outlook assumes that global GDP growth will stay below trend growth of 3.0 percent through 2022. (6) IHS expects the Brent crude oil price to fall from $71 per barrel in 2018 to $56 in 2021 before increasing to $72 in 2025. (7) 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. (8) IHS assumes growth of full-employment labor productivity to rise from 1.5 percent in 2019 to 1.8 percent by 2024.

IHS assigns a probability of 65 percent to the February baseline outlook. They assign a 25 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

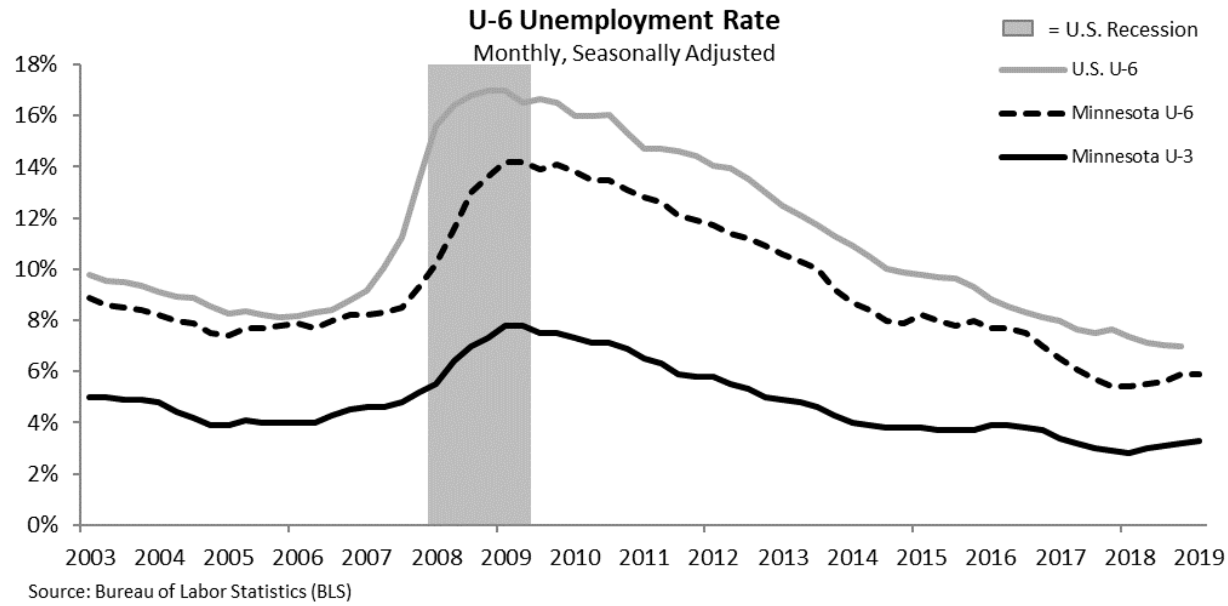
Minnesota's steady economic performance continues, while the state's labor market is slowing. Statewide, low unemployment and strong demand for workers support growth in total Minnesota wage income and wages per worker. However, the pace of job gains has slowed, reflecting the limit set by labor force 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, Minnesota's pace of employment growth has slowed, and the gap between the state and national unemployment rates has narrowed. The U.S. unemployment rate is at a 50-year low of 3.5 percent, while Minnesota's rate has gradually risen over the past year to 3.3 percent. In addition, slower labor force growth appears to be limiting the state's ability to add jobs. Between 2011 and 2017, Minnesota added an average of 43,000 jobs per year. In the last two years, the annual additions averaged to about half that amount. Minnesota added 26,000 and 15,000 new jobs in 2018 and 2019, respectively.



Minnesota's seasonally adjusted unemployment rate was 3.3 percent in December 2019, placing Minnesota 20th 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 0.2 percentage points below the U.S. unemployment rate.

Labor Market. 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 3.3 percent, where it has held steady for two months. This increase, along with a decline in the U.S. rate, has narrowed the gap between the national and state 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 0.2 percentage points.

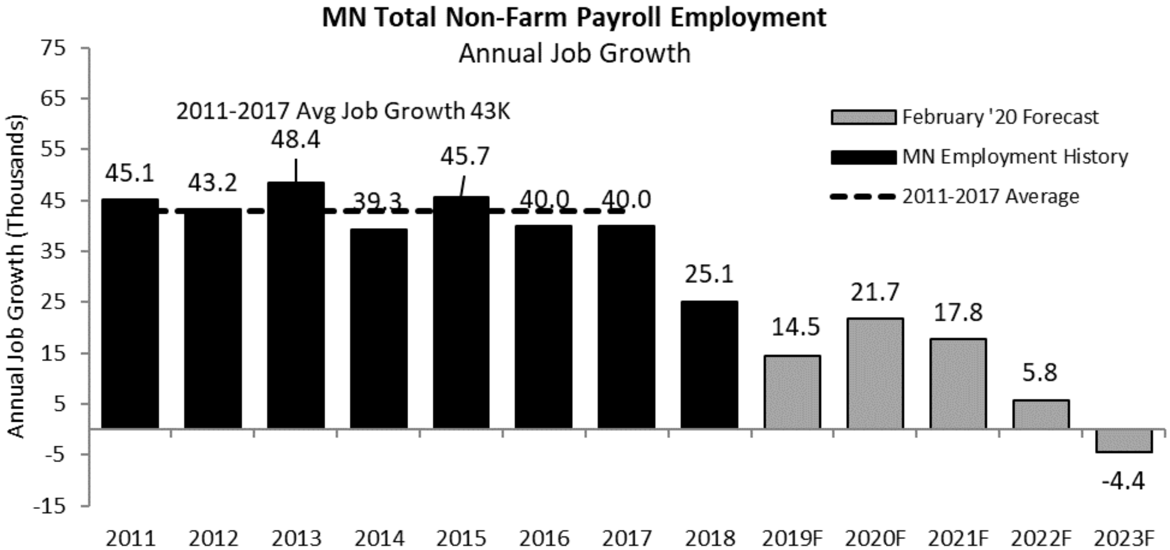


Minnesota's seasonally adjusted U-6 unemployment rate, the combination of unemployed people (U-3), workers employed part time for economic reasons, and workers who are marginally attached to the labor force was 5.9 percent in 2019 compared to 5.4 percent in 2018. The national rate was 7.2 percent in 2019 and 7.7 percent in 2018.

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 rate 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 1.3 percentage points below the national rate of 7.2 percent. In 2019, only 2,700 Minnesotans were counted as discouraged workers--those marginally attached workers who believe no jobs are available to them. This number was up from 1,900 in 2018. This 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 2019, 66,600 workers fell into this category, down from 69,100 in 2018. While this number is 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 43,000 new jobs each year. In the 12 months ending in December 2018, employers added 25,700 jobs, bringing Minnesota's annual job growth to 0.9 percent, a considerable slowdown from 1.4 percent in 2017. This trend of slowing growth continued in 2019, with Minnesota employers adding 14,500 jobs (0.5 percent growth). Our forecast expects Minnesota to add 21,700 jobs in 2020, slowing to 17,800 in 2021, and 5,800 jobs in 2022. As employment gains become increasingly constrained by slow labor force growth, we expect employment growth to decline in 2023. 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 November.



Between 2011 and 2017, Minnesota employers added an average of 43,000 new jobs each year. In the 12 months ending in December 2018, employers added less than two thirds of that (+25,700 jobs), bringing Minnesota's annual job growth to 0.9 percent, a considerable slowdown from 1.4 percent in 2017. We expect another year of moderate employment growth in 2019. Our forecast expects Minnesota to add 14,500 jobs in 2019, increasing to 21,700 in 2020 and 17,800 in 2021.

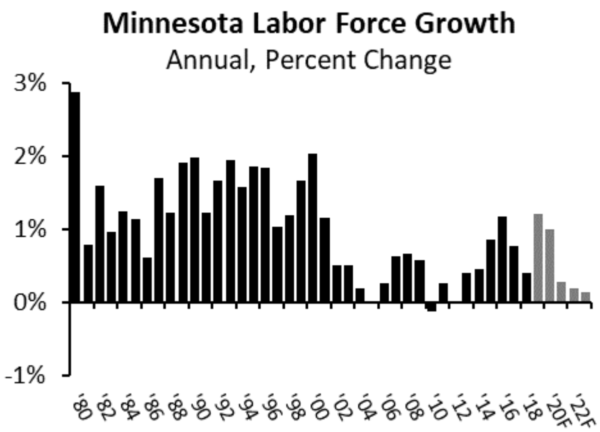
Forecast Comparison: Minnesota & U.S.

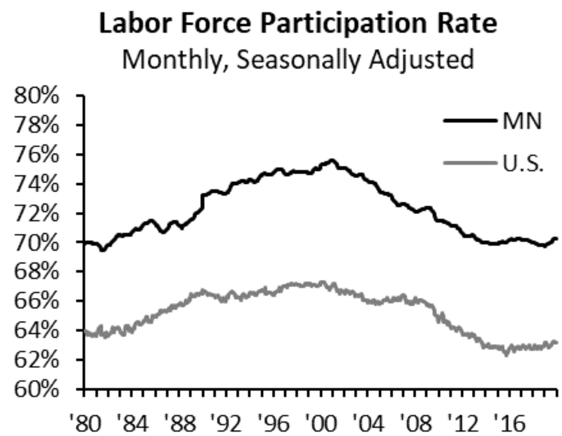
Forecast 2016 to 2023, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Total Non-Farm Payroll Employment (Thousands)								
Minnesota								
February 2020	2,905	2,945	2,970	2,985	3,006	3,024	3,030	3,026
%Chg	1.4	1.4	0.9	0.5	0.7	0.6	0.2	-0.1
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
U.S.								
February 2020	144,348	146,611	149,064	151,404	153,334	154,570	155,224	155,252
%Chg	1.8	1.6	1.7	1.6	1.3	0.8	0.4	0.0
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
Wage and Salary Disbursements (Billions of Current Dollars)								
Minnesota								
February 2020	158.1	165.6	172.9	178.9	185.9	193.6	201.6	209.0
%Chg	2.8	4.8	4.4	3.5	3.9	4.1	4.1	3.7
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
U.S.								
February 2020	8,083	8,462	8,888	9,323	9,717	10,145	10,594	11,046
%Chg	2.9	4.7	5.0	4.9	4.2	4.4	4.4	4.3
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
Non-Wage Personal Income (Billions of Current Dollars)								
Minnesota								
February 2020	135.8	140.2	149.8	157.8	163.3	170.2	177.2	183.8
%Chg	2.1	3.2	6.9	5.3	3.5	4.2	4.1	3.7
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
U.S.								
February 2020	8,038	8,417	8,931	9,301	9,659	10,020	10,391	10,799
%Chg	2.2	4.7	6.1	4.1	3.8	3.7	3.7	3.9
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
Total Personal Income (Billions of Current Dollars)								
Minnesota								
February 2020	293.9	305.8	322.7	336.7	349.3	363.8	378.8	392.8
%Chg	2.5	4.0	5.5	4.3	3.7	4.2	4.1	3.7
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
U.S.								
February 2020	16,121	16,879	17,819	18,624	19,376	20,165	20,985	21,845
%Chg	2.6	4.7	5.6	4.5	4.0	4.1	4.1	4.1
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

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 from 69.8 to 70.3 in December 2019. The current rate is 7.1 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) reached a record high in November 2019, and remained high in December, at 68. This ratio is at its highest since 2008 and is currently seven percentage points above the U.S. rate.

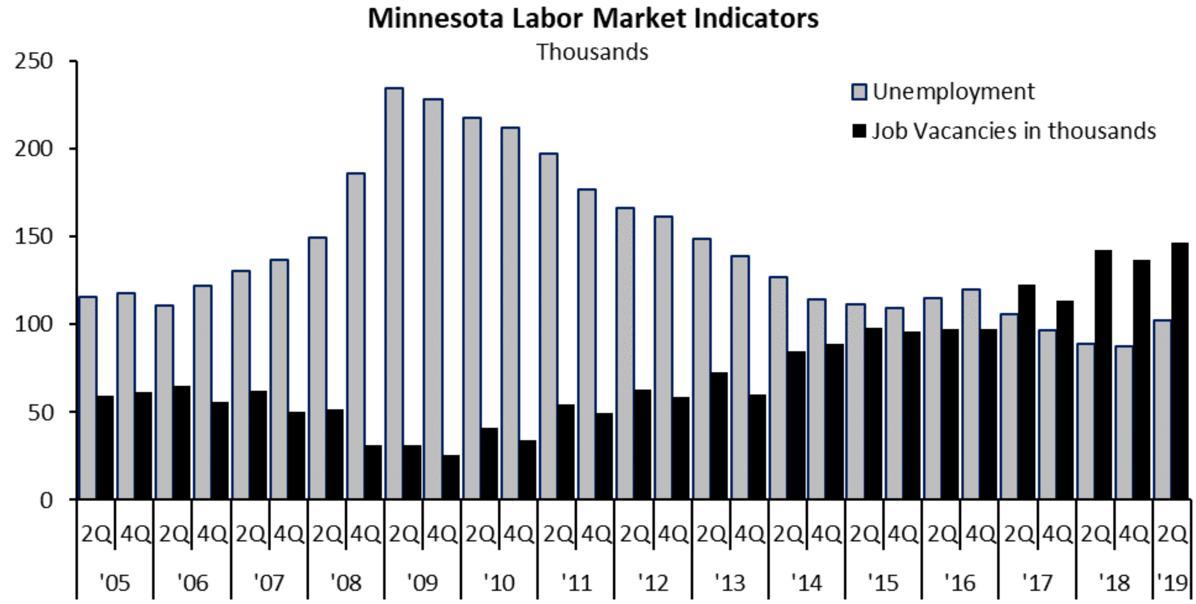




In December 2019, Minnesota's labor force participation rate was 70.3 percent, 7.1 percentage points higher than the national average and the second highest among U.S. states. In our forecast, labor force growth temporarily increases to 1.2 percent in 2019, and remains at 1.0 in 2020 before gradually decelerating to 0.1 percent in 2023.

Minnesota's high labor force participation means there are fewer people to draw into the labor force. The demographic reality of baby boomer retirements suggests that high labor force participation is not sustainable. In our forecast, labor force growth temporarily increases 1.2 percent in 2019, and remains at 1.0 in 2020 before gradually decelerating to 0.1 percent in 2023. The uptick in labor force growth in 2019 coincides with recent positive net domestic migration into Minnesota.

Minnesota's labor market indicators remain consistent with a tight labor market. According to the Department of Employment and Economic 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—or seven people for each ten job openings. In contrast, at the peak of the 2007-2009 recession, there were nearly seven unemployed persons for each job opening. A year ago, in the second quarter of 2018, 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). Of these vacancies, 35 percent are for part-time work and 13 percent are for temporary or seasonal work. The median hourly wage offer for these vacancies was $15.00, up from $14.54 one year ago. Median wage offers are rising for both vacancies with no education requirement and for all vacancies. From 2014-2019, vacancies with no education requirement rose 38.1 percent while median wage offers for all other vacancies rose 24.5 percent. 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.



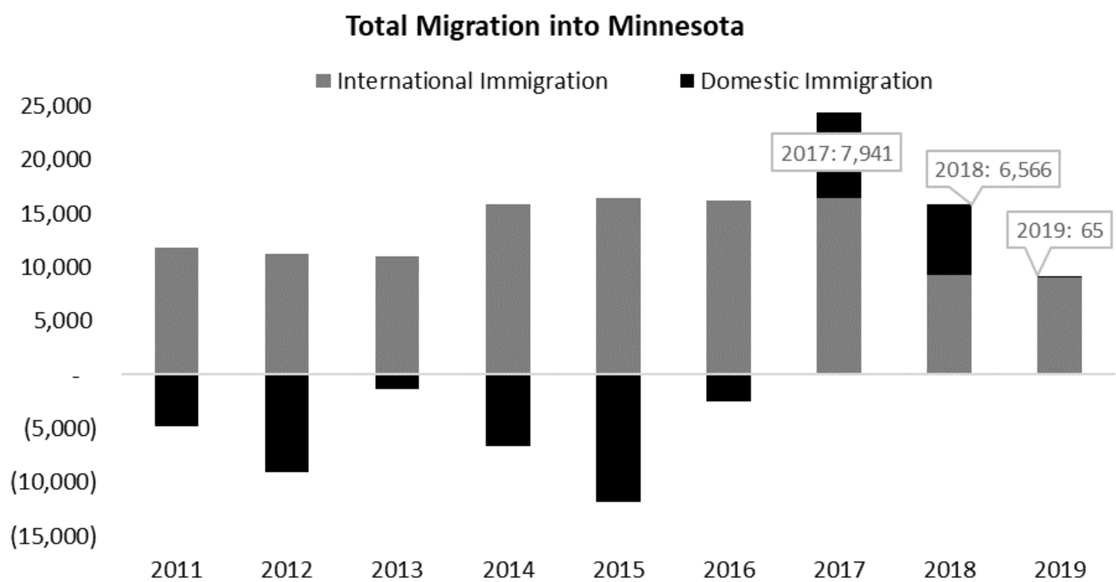
Job vacancies remain high across the state. The ratio of unemployed persons to job vacancies statewide has been less than one since mid-2017, indicating fewer unemployed job-seekers than open positions. Compared to one year ago, job vacancies increased 0.4 percent in Greater Minnesota and 4.8 percent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

Job vacancies are widespread among industries, with the largest numbers of openings in Health Care and Social Assistance (28,100 vacancies), Accommodation and Food Services (24,701 vacancies), and Retail Trade (22,347 vacancies). These three industries alone account for over half (51.3 percent) of statewide vacancies. However, job vacancy counts alone do not provide a complete picture of labor market demand. Large sectors and positions with higher rates of turnover tend to have higher numbers of vacancies. The industries with the largest number of openings in quarter two of 2019 are the industries that consistently have had the highest turnover rates since such data was first published in 1995. Manufacturing and construction currently have the fourth and sixth most job vacancies but historically have much lower turnover rates. High job vacancies suggest that the state's employers are struggling to fill open positions. DEED reports that about 59 percent of job vacancies were located in the Twin Cities seven-county metro 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.

Since we released our November 2019 forecast, the U.S. Census Bureau published 2019 population estimates. Minnesota's population growth is comprised of three parts: natural population increase (number of births less deaths), net domestic migration, and net international immigration. Between 2018 and 2019, the number of Minnesotans increased by 0.6 percent (33,000 people), ahead of the U.S. rate of 0.5 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 24,000 ranked 11th highest among U.S.

states, but Minnesota's net natural population growth is slowing. Between 2011 and 2016, the state's net natural increase averaged 28,000; in 2017 that number declined to 26,612, to 25,770 in 2018, and further to 24,442 in 2019. This is consistent with the national trend. Between 2011 and 2016 the average annual natural increase for the U.S. was 1.4 million, compared to 1.1 million in 2017 and 1.0 million in 2018. In 2019, the annual net natural population increase for the U.S. dropped below 1.0 million (956,674) for the first time since 1937.

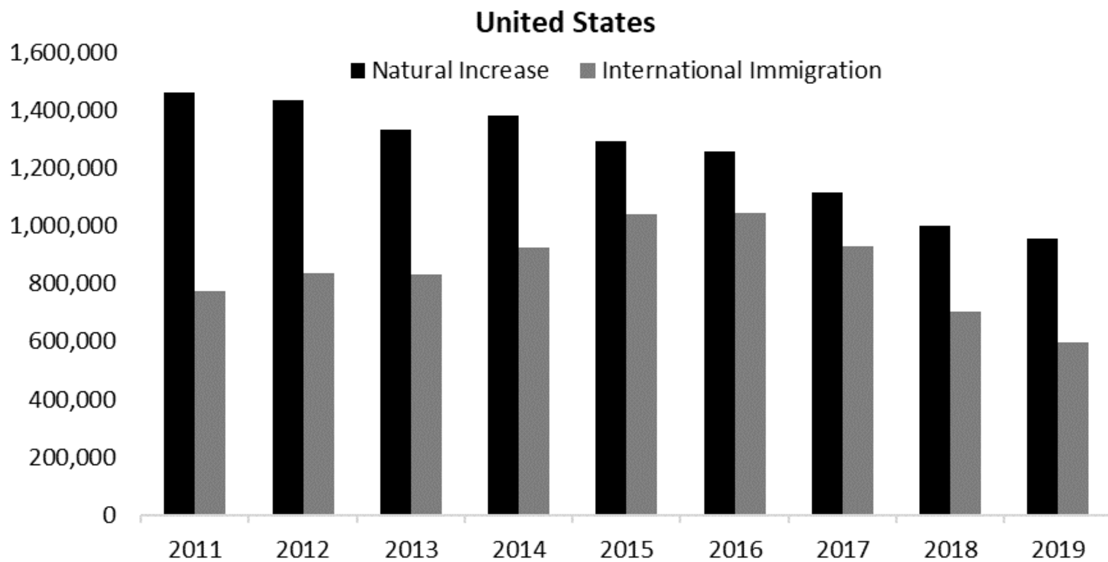
As the natural rate of population change continues to grow at lower than historical rates, domestic and international immigration play an increasingly important role in growing Minnesota's population and labor force. In the prior forecast, we reported that positive net domestic migration--the number of people moving to Minnesota from other states less those moving away--was positive in 2017 and 2018 for the first time in fifteen years. According to the new information from the Census Bureau, 2019 marks a third year of consecutive positive domestic net-in-migration. However, the level of domestic net in-migration in 2019 was very small compared to the two prior positive years, adding 65 individuals last year compared to nearly 8,000 in 2017 and 6,500 in 2018.



Source: U.S. Census Bureau

For the first time in 15 years Minnesota had a positive net domestic migration between 2016 and 2018. 2019 brought the third year of consecutive net-in-migration, however it was very small compared to the two prior positive years, with 65 individuals compared to nearly 8,000 in 2017 and 6,500 in 2018.

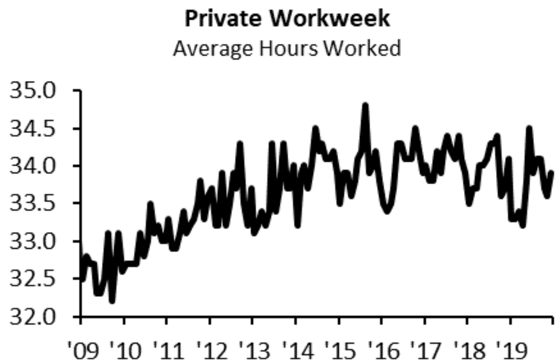
The rate of international immigration into Minnesota has also slowed significantly. Between 2012 and 2017, Minnesota averaged a net 14,000 new residents from international immigration. That number fell to 11,000 in 2018 and 9,000 in 2019. Nationally, net international migration has also been decreasing. Between 2010 and 2016, the year with the highest net international immigration was 2016, with an increase of 1,046,709 individuals. Net international migration has been gradually decreasing each year since 2016.

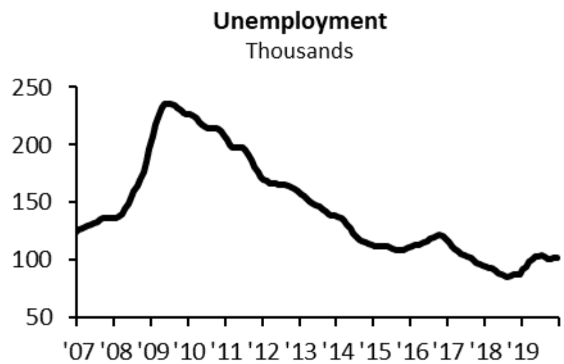


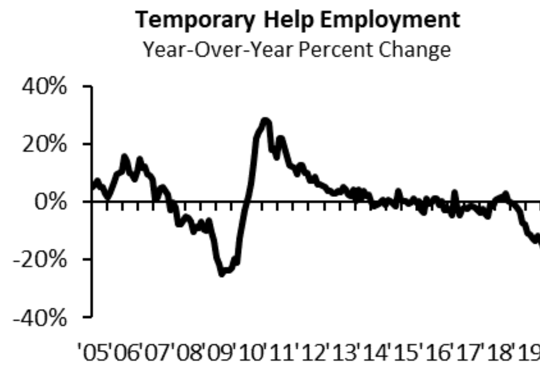
Source: U.S. Census Bureau

International immigration rose to over 1 million in 2015 and 2016 before falling steadily to the 2019 rate of about 600,000 annual immigrants. Between 2011 and 2016 the average annual natural increase for the U.S. was 1.4 million, compared to 1.1 million in 2017 and 1.0 million in 2018. In 2019, the annual net natural population increase for the U.S. dropped below 1.0 million for the first time since 1937.

According to DEED, the number of Minnesotans filing new claims for unemployment benefits reached 17,669 seasonally adjusted claims in December 2019, 9.0 percent higher than a year prior. The uptick at the end of 2019 pushed annual claims to 0.1 percent higher than 2018, breaking a nine-year streak of falling annual claims. However, the initial claims level remains 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 December, the average workweek in the private sector was 33.9 hours, down 0.2 hours from a year prior, but consistent with the long-term positive trend in this indicator. Temporary help jobs have been used by employers for a variety of reasons, including to cut costs, gain flexibility, to screen employees prior to full time offers, and, to adapt the size of the workforce to the business cycle. 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 rigidity in the labor market, as many workers who desire full time employment are able to find it without temporary help positions.





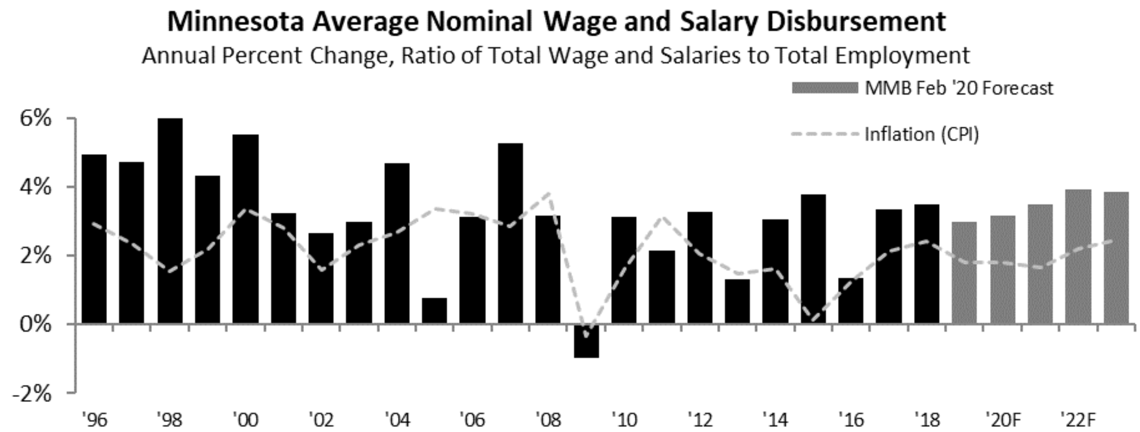


Source: Minnesota Department of Employment and Economic Development (DEED)

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 technologies, wage and salary income per worker—or average wage income—is expected to continue to rise.

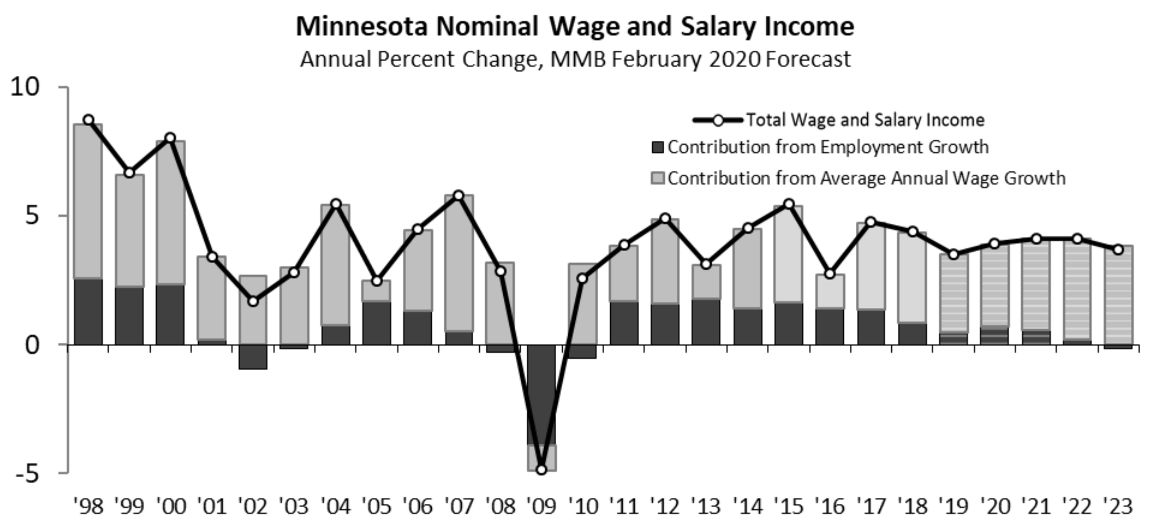
We expect that slowing annual employment growth, combined with a moderate acceleration in wages per worker, will lead total wage and salary income to grow at rates of 3.5 and 3.9 percent per year in 2019 and 2020, followed by 4.1, 4.1 and 3.7 percent in years 2021, 2022, and 2023, respectively. This is lower growth than we forecast in November. Wage income per worker is forecast to grow an average of 3.5 percent per year throughout the forecast period. This exceeds forecasted rates of inflation over the same period, implying improvements in real wages. The February MMB model of the Minnesota economy incorporates revised Minnesota's non-farm payroll employment data, as well as new data from the Quarterly Census of Employment and Wages (QCEW) and income tax withholding collections since November.



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

We expect Minnesota wage growth of 3.5 and 3.9 percent for Minnesota in 2019 and 2020. Combined with our employment growth forecast, these rates result in growth of wage income per worker of around 3.7 percent per year. This exceeds forecasted rates of inflation over the same period, implying improvements in real wages.

Growth in total nominal wage and salary income arises from the change in employment and growth in average wages (wage and salary income per worker). With only moderate growth in Minnesota employment in this forecast, average wage growth is projected to be the primary driver of growth in total nominal wage income through our forecast horizon. The contribution of employment growth is expected to decline over the forecast period.



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

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

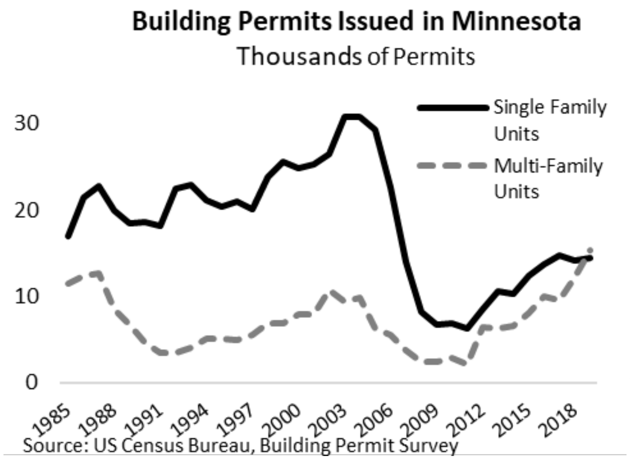
Homebuilding Activity. The housing market continued to thrive in 2019. Low unemployment rates, increasing wages, a decline in mortgage rates, and improved asset bases from a strong stock market created many new home buyers. According to the Minnesota Association of Realtors (MAR), there is a 2.0-month supply of homes for sale based on the current statewide sales pace, with most sellers receiving 96.2 percent of the original list price at sale. In the metro area, the inventory is even more limited. According to MAR, there are only 1.3 months' availability in the seven-county Twin Cities region, with 2,075 active listings in December 2019, up 4.6 percent from last year. The long-term, persistently tight supply continues to push up median and mean sale prices and rents. According to Marquette Advisors, rents increased nearly 8.0 percent over the last year in the seven-county metro area. In December, the statewide median sales price had increased 7.3 percent from a year prior, reflecting a median sales price of $252,000. Time on the market until a property is sold is about 54 days, a 5.3 percent decrease over the same period last year. Closed sales are up 0.8 percent through December 2019.

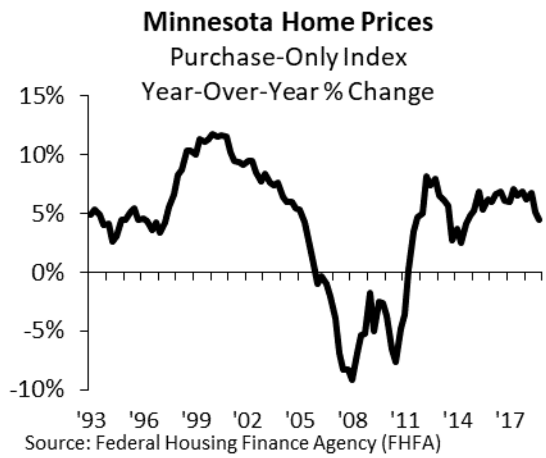
With continued low supply from sellers and high buyer demand, there is a risk to home affordability. Minnesota home prices are now higher than any time since 2005, when the 30-year fixed mortgage rate was about 5.9 percent. In contrast, mortgage rates are now averaging around 3.7 percent. While higher median prices increase monthly payments, lower rates constrain them. Combining these effects, affordability in the Twin Cities reached a ten-year low in June 2019, when the housing affordability index—the ratio of median household income to the income needed to purchase a the median-priced house—reached 139. According to the Minneapolis Area Realtors, the index has since risen—implying homes became more affordable—reaching 160 in January 2020. Lack of affordable housing can pose problems for employers seeking to attract new employees.

In this forecast, IHS expects the 30-Year fixed mortgage rate to decrease to 3.8 percent in 2020 from 3.9 percent in 2019. IHS then expects the rate to increase to 4.2 in 2021, 4.5 in 2022, and 4.6 in 2023.

Rising demand for alternatives to a single-family home are reflected in the growth of multi-family housing permits. In 2019 multi-unit permits surpassed single-family unit permits for the first time since 1985, the beginning of the time series. This indicates a growing demand for alternatives to single-unit homes, such as condos and townhomes.

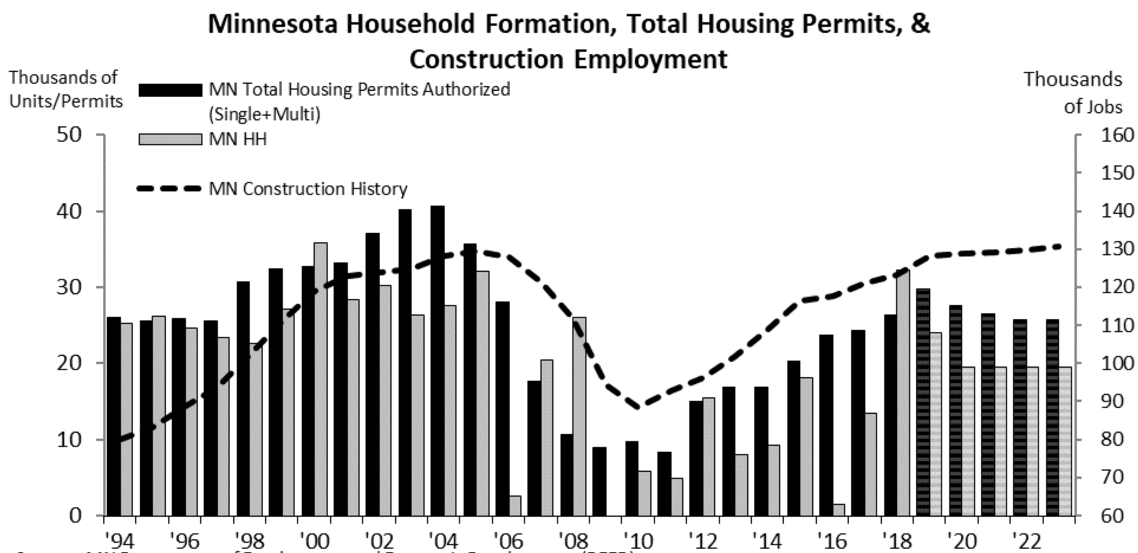
Between 2010 and 2017, Minnesota annual household formations exhibited a post-recession average of about 10,000 new households per year, much lower than the pre-recession ten-year average of 24,500. The lower household formation may reflect changes in living preferences among younger adults, as well 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 domestic in-migration to the state. 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.





Minnesota's home prices are now higher than any time since 2005. In December, the statewide median sales price had increased 7.3 percent from a year prior, reflecting a median sales price of $252,000. In 2019, the number of multi-unit building permits issued surpassed single-family unit permits, a first since the beginning of the series. This indicates 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 30,403 through December 2019, up from 26,318 the same period last year. In this forecast, we expect total housing permits to remain at an average of 26,300 permits per year through the forecast period. Construction employment grew faster than any other sector in Minnesota on a percentage basis, growing 4.7 percent over last year, and in 2019 employment in the industry surpassed 128,000 jobs for the first time since 2005. With higher housing demand and higher home prices, we expect higher homebuilding activity and construction employment to continue to increase through 2023.

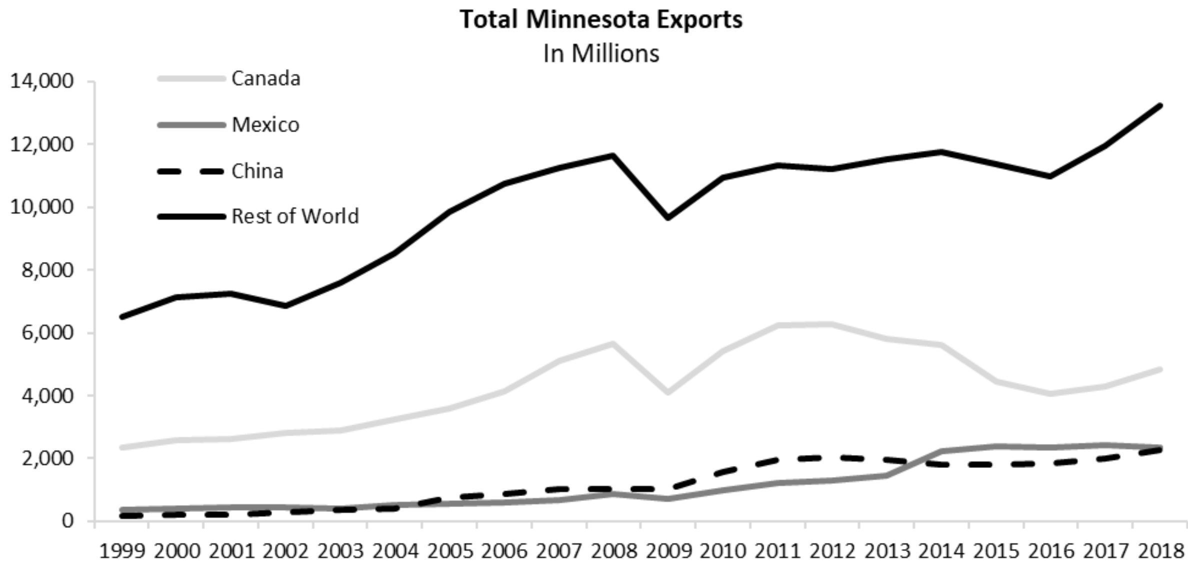


Source: MN Department of Employment and Economic Development (DEED), MN State Demographic Center, MN Management & Budget (MMB)

Following the 2008-09 recession, household formations averaged about 10,000 new households per year from 2010-2017, much lower than the pre-recession ten-year average of 24,500. However, 2018 was saw a spike in Minnesota household formation, with 32,000 new households, coinciding with three years of positive net-in migration.

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, placing Minnesota 20th among states ranked by export value. The state's largest markets are Canada ($4.8 billion), China ($2.8 billion), and Mexico ($2.4 billion). However, tariffs and slow global growth are impacting exports both nationally and in Minnesota.

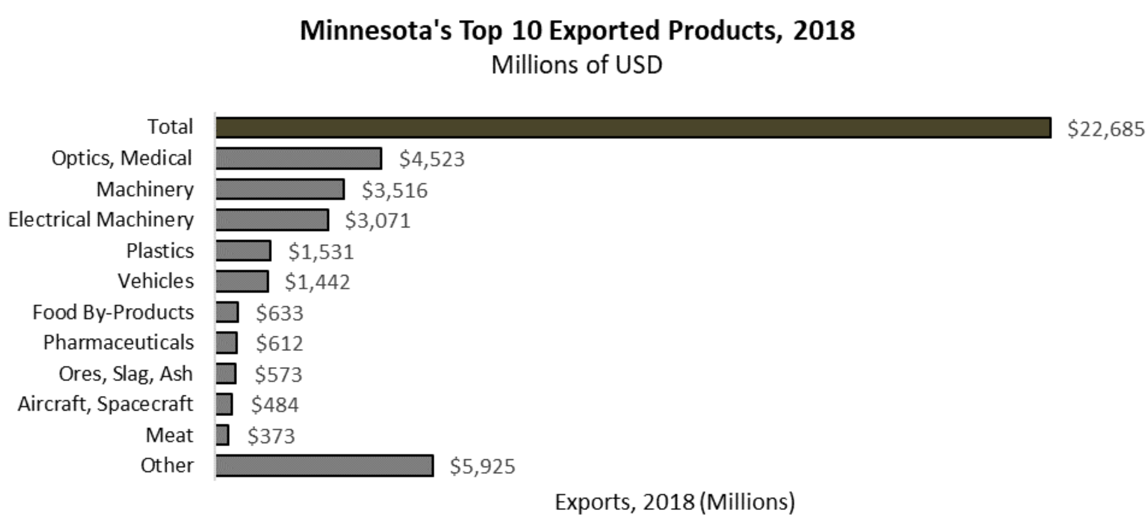
Trade uncertainty was high in 2019, but tensions were reduced at year end when the U.S. and China came to a "phase one" agreement in mid-December. The previously feared tariffs targeting consumer goods were eliminated and the rates of others, implemented earlier in September, were halved from 15 to 7.5 percent. The agreement preserves most of the tariffs the U.S. placed on $360 billion worth of Chinese goods, and these tariffs will continue to impact American businesses that rely on Chinese imports. 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.



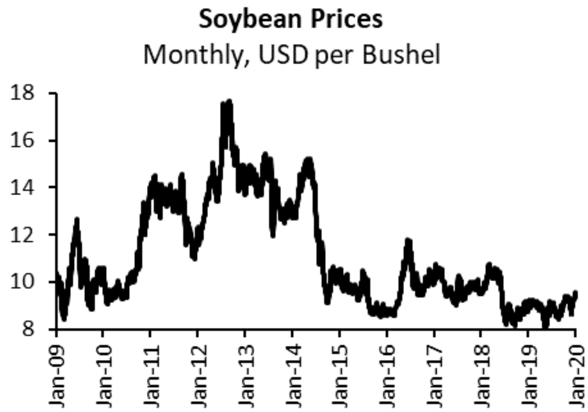
Source: MN Department of Employment and Economic Development (DEED)

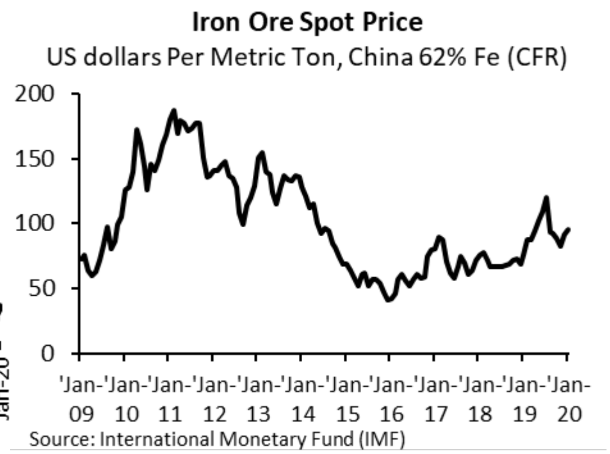
In 2018, Minnesota exported nearly $22.7 billion in goods worldwide, placing Minnesota 20th among states ranked by export value. The state's largest markets are Canada ($4.8 billion), China ($2.8 billion), and Mexico ($2.4 billion).

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 third, compared to the same quarters the prior 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 1.4 percent, -3.1 percent, and -1.7 percent, respectively, compared to the same quarters last year.



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





Agricultural commodities continue to be impacted by tariffs. In May 2019, escalating trade tensions drove soybean 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.

In 2018, Minnesota's exports of ores, slag, or ash totaled $573 million, a 56 percent increase from 2017. Exports of these commodities also increased in the second and third quarters of 2019 compared to the same quarters of 2018. Stable iron ore prices of 2018 continued through 2019 and ended the year slightly above the January 2019 price. Most of the iron ore produced on Minnesota's Iron Range is used for domestic steel production, so U.S. tariffs on imported steel may be boosting U.S. production and increasing demand for Minnesota-sourced ore.

In their February outlook, released February 6, IHS expects temporary and modest impacts on the U.S. economy from COVID-19, the disease caused by the new coronavirus. Nevertheless, China is a large buyer of Minnesota exports, including agricultural commodities. If the nature of the epidemic changes, or the impact of the disease becomes more prolonged or widespread than it appeared at the time IHS constructed their forecast, Chinese demand for U.S. exports could underperform IHS' expectations. Minnesota exporters could feel the impact of that change.

Agriculture. According to the most recent data available from the 2017 Census of Agriculture, Minnesota ranks sixth in the total value of agricultural products sold nationwide. Minnesota is home to 68,822 farms and more than 25.5 million acres of land in agricultural production. While agriculture represents a relatively small share of Minnesota GDP--in 2018 it was 1.4 percent--it remains an important sector in Minnesota's economy.

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. In 2019, a heavy winter snowfall, an exceptionally wet spring and summer, and an early freeze challenged 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.

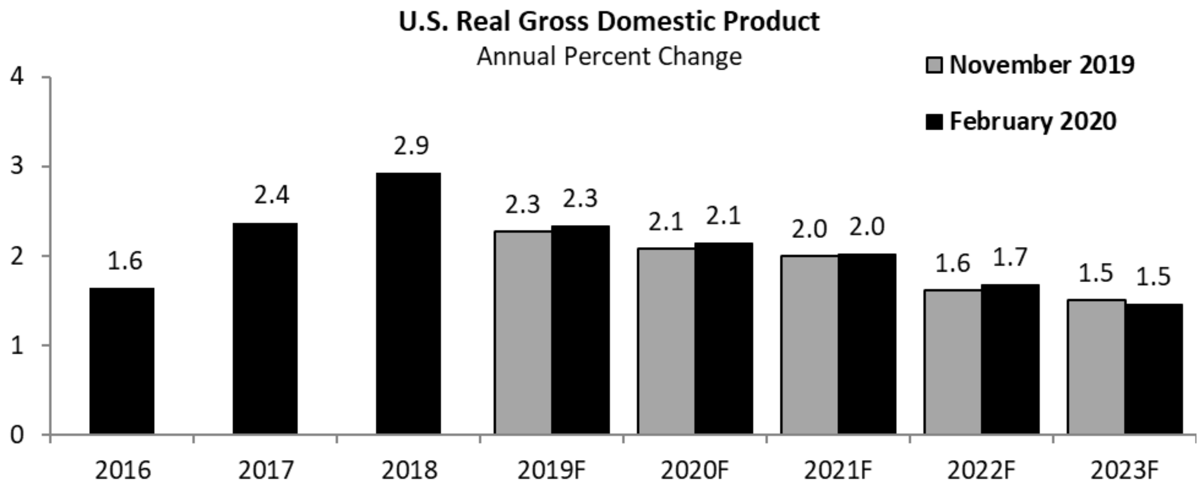
According to the most recent USDA farm income projections, released in early February 2020, national net farm income, a key indicator of U.S. well-being in farming households, is forecast to be up $9.8 billion (11.7 percent) in 2019. This increase is largely the result of a 73 percent increase in government payments to the agricultural sector. While the sector is in a prolonged downturn, average farm household income has been higher than U.S. household incomes since the late 1990s, an advantage 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. Over half of U.S. farm operations have had negative income from their agricultural operations since 2014.

Minnesota's Agricultural Economy 2017		
	Sales ($1000)	**U.S. Rank**
Total Agricultural Products Sold		6th
Total Value of agricultural products sold	18,395,390	
Value of Crops		4th
Total Value of crops, including nursery and greenhouse products	10,191,518	
Value of Livestock		7th
Total Value of livestock, poultry, and their products	8,203,872	
Agricultural Sectors	**Sales ($1000)**	**Percent of MN Sales**
Grains (including oilseeds, dry beans, dry peas)	8,843,440	48.1
Hogs and Pigs	3,165,075	17.2
Milk from cows	1,737,886	9.4
Poultry and eggs	1,285,951	7.0

Source: United States Department of Agriculture (USDA), Report updated every 5 years

Council of Economic Advisors' Statement

Minnesota's Council of Economic Advisors met on February 13, 2020 to review the IHS Markit (IHS) outlook for U.S. economic growth, which includes the assumptions underlying Minnesota's February 2020 *Budget and Economic Forecast*. Compared to their November 2019 forecast, IHS has slightly raised their growth expectations for 2022, but there is otherwise little change in the forecast. IHS expects annual growth of 2.1 percent this year, down from 2.3 percent in 2019. They forecast the slowdown to continue, with annual real GDP growth gradually decelerating to 1.5 percent annually in 2023.



Source: Bureau of Economic Analysis and IHS Markit.

Compared to their November 2019 forecast, IHS has slightly raised their growth expectations for 2022, but there is otherwise little change in the forecast. IHS expects annual growth of 2.1 percent this year, down from 2.3 percent in 2019. They forecast the slowdown to continue, with annual real GDP growth gradually 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.

For 2020, IHS now expects slightly slower growth in real consumer spending and real business investment than they forecast in November. But, higher expected growth in residential investment and net exports offsets those changes to leave 2020 real GDP growth unchanged from the prior forecast. The February IHS outlook reflects the tariffs enacted by the U.S. and China since 2017. It also incorporates the impact of a "phase one" trade deal between the two countries, under which the U.S. suspended 15 percent tariffs on Chinese goods scheduled to go into effect on December 15 and reduced, from 15 percent to 7.5 percent, the tariffs that went into effect on September 1. IHS has not adjusted their forecast for potential economic disruptions from the COVID-19 outbreak in China, the disease caused by the new coronavirus, except insofar as recent stock market volatility has lowered their expectations for bond yields and household wealth.

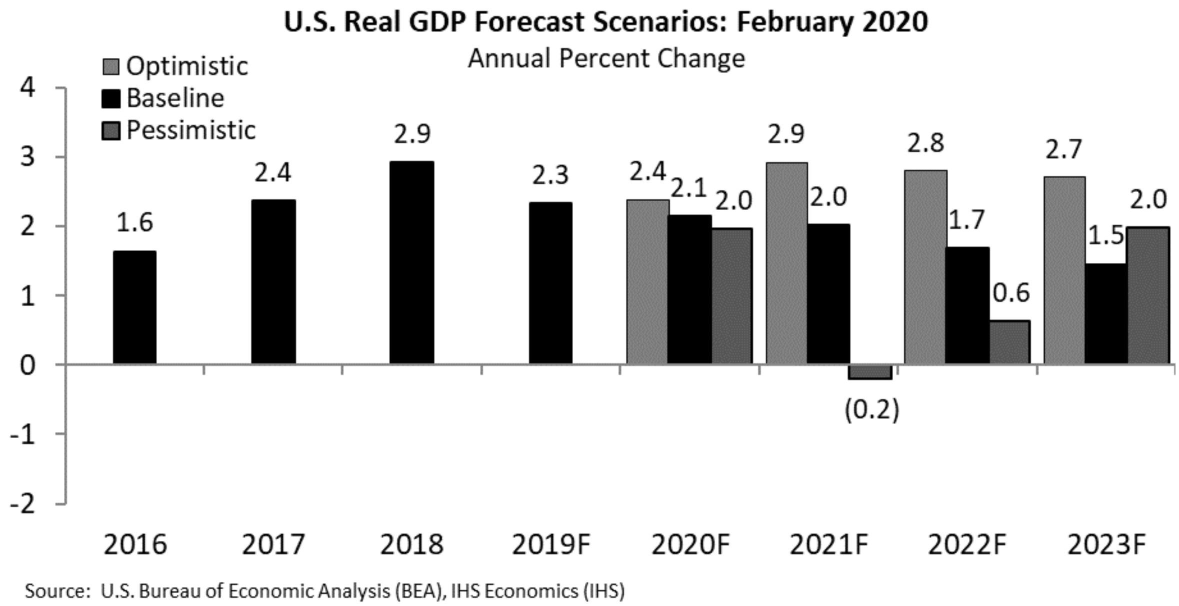
IHS expects growth through early 2021 to be supported by stable household finances, low interest rates, fiscal stimulus from the Bipartisan Budget Act of 2019, increases in U.S. oil production, partial relief from tariffs and policy uncertainty from the U.S.-China deal, and a rebound in global economies. Starting in mid-2021, IHS expects the economy to slow, as fiscal stimulus dissipates, lagging tariff and policy uncertainty effects dampen consumer sentiment and business investment, interest rates increase, a full employment labor market slows growth of labor income, and household wealth decelerates.

The IHS February 2020 outlook is similar to that of other macroeconomic forecasters. The February Blue Chip Consensus, the average of about 50 business forecasts, calls for real GDP to grow 1.9 percent in 2020, slower than the 2.1 percent that IHS expects. For 2021, the IHS forecast of 2.0 percent growth matches the Blue Chip Consensus.

Council members agree that IHS's outlook for U.S. growth is a good starting point for MMB's February 2020 economic forecast. They also agree that the risk that the economy underperforms IHS' expectations is greater than the potential for growth exceeding the forecast. Specifically, the IHS forecast depends on sustained growth in consumer spending, supported in part by growing household wealth. However, if either equity prices or home values underperform IHS' forecast, the resulting negative wealth effect could cause consumer spending to grow more slowly than IHS expects. In addition, IHS expects consumer sentiment to remain at elevated levels. Escalating policy uncertainty that makes consumers more cautious could also dampen consumer spending. Council members also warn that if U.S. trading partner economies grow more slowly than IHS expects, U.S. net exports will underperform the forecast.

Council members believe that slowing economic growth through 2023, as IHS expects, is plausible. Nevertheless, they warn that the difficulty of projecting long range economic conditions warrants caution when using forecasts for 2022 and 2023. In addition, they agree with IHS that the economy will be at greater risk of a contraction when annual growth slows to below two percent. And finally, MMB economists 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.

IHS assigns a probability of 65 percent to the February baseline outlook. They assign a 25 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 2021. 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.



IHS assigns a 65 percent probability to the February baseline outlook. They assign a 25 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 2021.

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 February 2020 Budget and Economic Forecast understates the cost of current services as provided by law in FY 2022-23 by roughly $1.119 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. Minnesota's FY 2020-21 budget reserve is $2.359 billion, or 4.9 percent of biennial revenues, the recommended level based on MMB's analysis.

BUDGET OUTLOOK

Current Biennium

When the last *Budget and Economic Forecast* was released in November, a surplus of $1.332 billion was projected for the FY 2020-21 biennium. An improved revenue forecast and lower spending estimates result in a $181 million increase in the projected balance. The current biennium is now projected to conclude with a budgetary balance of $1.513 billion.

Current Biennium: FY 2020-21 General Fund Budget
Forecast Comparison

($ in millions)	November 2019 Forecast	February 2020 Forecast	$ Change	% Change
Beginning Balance	**$3,971**	**$3,971**	**$ -**	
Revenues				
Taxes	46,580	46,669	89	0.2
Non-Tax Revenues	1,557	1,563	7	0.4
Transfers, Other Resources	520	520	0	0.0
Total Revenues	**$48,656**	**$48,752**	**$96**	**0.2%**
Expenditures				
E-12 Education	20,098	19,999	(99)	(0.5)
Property Tax Aids	3,865	3,872	7	0.2
Health & Human Services	14,677	14,682	5	0.0
Debt Service	1,132	1,130	(2)	(0.2)
All Other	8,692	8,689	(2)	(0.0)
Total Expenditures	**$48,463**	**$48,373**	**$(91)**	**(0.2)%**
Reserves	2,709	2,709	-	
Stadium Reserve	124	130	6	
Budgetary Balance	**$1,332**	**$1,513**	**$181**	

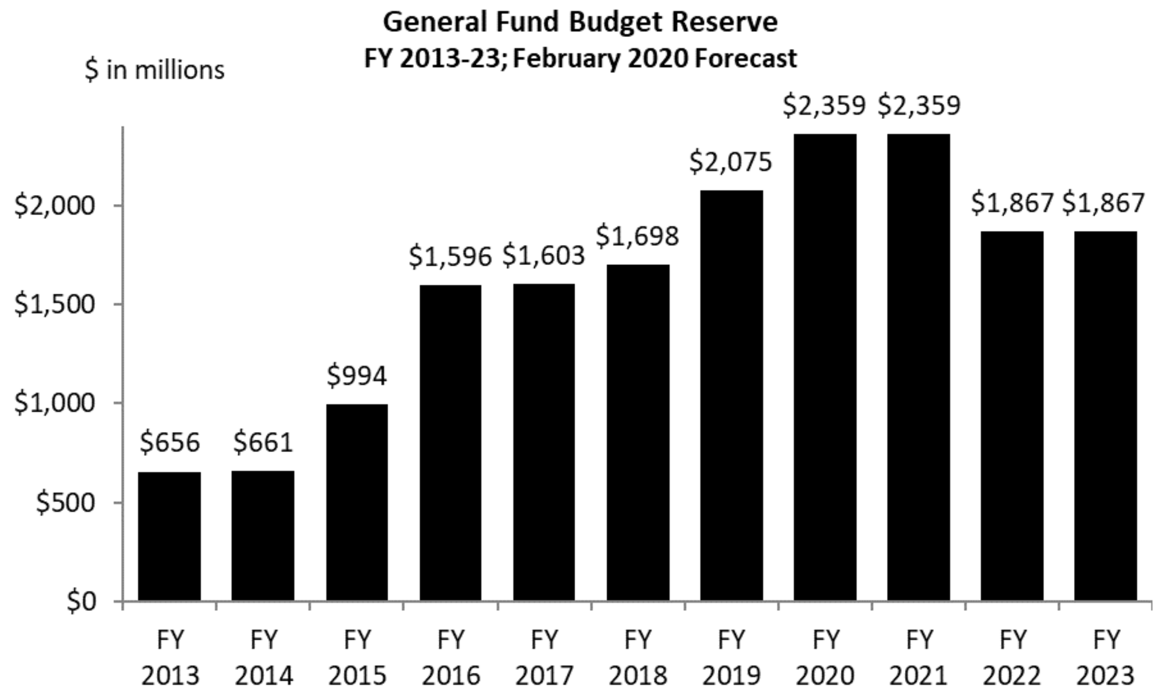
Revenues. Total general fund revenues for FY 2020-21 are projected to reach $48.752 billion, an increase of $96 million (0.2 percent) over November estimates. The overall increase is due to a $217 million (7.5 percent) adjustment to corporate franchise tax estimates, partially offset by downward revisions of $51 million (0.2 percent) to the individual income tax forecast and $81 million (0.7 percent) to the sales tax forecast. All other tax and non-tax revenues are expected to be up $11 million (0.1 percent) in aggregate.

Expenditures. While expenditures in the current biennium are projected to be $2.972 billion (3.2 percent annualized growth) higher than the previous biennium, estimates are slightly lower than prior forecast. Total spending in the FY 2020-21 biennium is now expected to be $48.373 billion, $91 million (0.2 percent) lower than prior estimates. The largest general fund budget area, E-12 education, more than accounts for the total changes. E-12 education spending is expected to be $99 million (0.5 percent) lower than November estimates. The reduction in overall growth in E-12 spending is primarily due to a lower projection of pupil growth in the current biennium, largely driven by lower actual pupil counts for the 2018-19 school year than prior estimates. A minor aggregate increase across health and human services, property tax aids and credits, debt service and all other budget areas totaling $8 million (0.0 percent) partially offset the lower growth in E-12 education.

Current Biennium: FY 2020-21 General Fund Budget
Biennial Comparison; February 2020 Forecast

($ in millions)	FY 2018-19	FY 2020-21	$ Change	Annual % Change
Beginning Balance	**$3,333**	**$3,971**	**$638**	**9.2%**
Revenues				
Taxes	43,847	46,669	2,822	3.2
Non-Tax Revenues	1,693	1,563	(130)	(3.9)
Transfers, Other Resources	499	520	21	2.1
Total Revenues	**$46,039**	**$48,752**	**$2,713**	**2.9%**
Expenditures				
E-12 Education	18,821	19,999	1,178	3.1
Property Tax Aids	3,651	3,872	221	3.0
Health & Human Services	13,298	14,682	1,384	5.1
Debt Service	1,113	1,130	17	0.8
All Other	8,518	8,689	171	1.0
Total Expenditures	**$45,401**	**$48,373**	**$2,972**	**3.2%**
Reserves	2,425	2,709	284	
Appropriation Carryforward	350	n/a	n/a	
Stadium Reserve	55	130	75	
Budgetary Balance	**$1,421**	**$1,513**		

Budget Reserve and Cash Flow Account. The budget reserve and cash flow account balances are unchanged with this budget update. The cash flow account balance is $350 million in each year FY 2020-23. The budget reserve balance for the FY 2020-21 biennium is $2.359 billion.

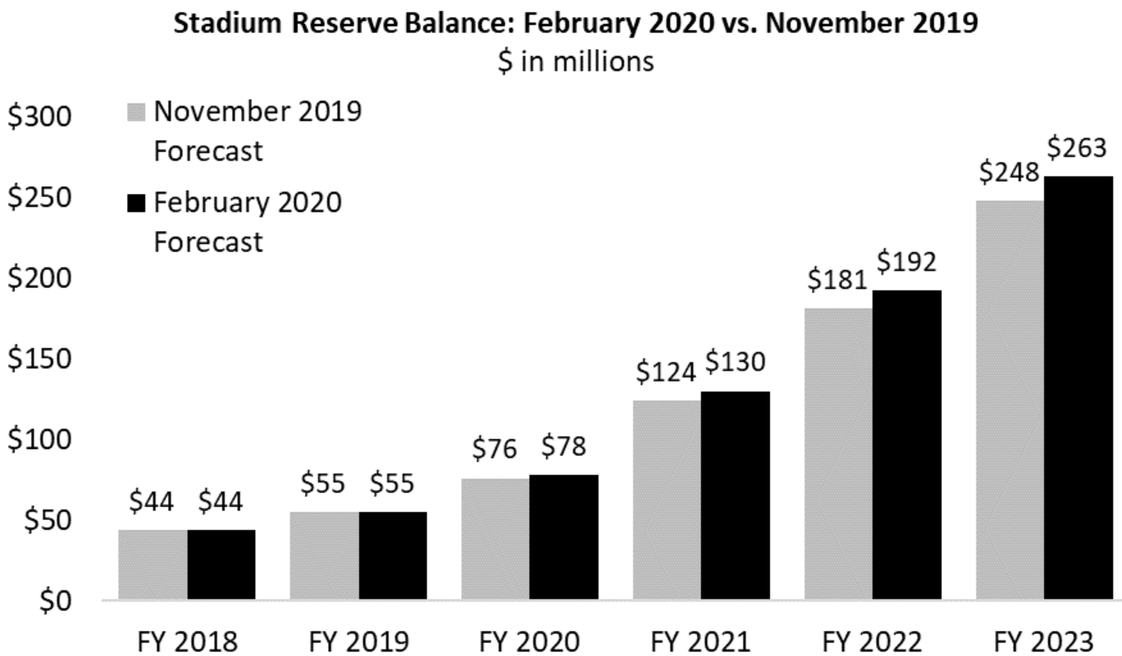


The budget reserve account balance in FY 2013 was $656 million. Since then the reserve balance has largely increased due to a law change that sets a reserve target based on the volatility of the state's revenue sources and allows for automatic allocation to the reserve when there is a projected balance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

While the budget reserve balance is at $2.359 billion for the FY 2020-21 biennium, the reserve is reduced below that balance in FY 2022. Laws 2019, 1st Special Session, Chapter 6, Article 11, Section 17, reduces the budget reserve balance by $491.369 million on the first day of FY 2022. This law was passed at the end of the 2019 Special 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.

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 the FY 2020-21 biennium, lawful gambling revenue available for stadium uses is expected to be $142 million, $6 million (4.3 percent) more than prior forecast; by the FY 2022-23 biennium lawful gambling revenue available for stadium uses is expected to grow to $182 million. Over the FY 2020-23 budget horizon, a cumulative total of $15 million more in lawful gambling receipts are projected to be available for stadium uses compared to November 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.



The stadium reserve is expected to grow to $130 million by the end of FY 2021, $6 million more than prior projections. This increase is due to higher 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 $71 million and the stadium reserve balance is expected to reach $263 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 2020, $23 million is expected to be added to the stadium reserve, by FY 2023 the amount allocated to the reserve is expected to be $71 million. Given the increasing allocation amounts, the stadium reserve balance is expected to reach $263 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 because they rely on economic and budget projections three or more years into the future. Revenue projections for FY 2022-23 are based on IHS' February baseline 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 if forecast programs. The expenditure forecast does not assume cost growth outside of specific budget areas where assumptions for cost 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 $465 million.

Planning Estimates: FY 2022-23 General Fund Budget
By Fiscal Year; February 2020 Forecast

($ in millions)	**FY 2022**	**FY 2023**	**FY 2022-23**
Forecast Revenues	$25,370	$26,131	$51,501
Projected Spending	25,306	25,730	51,036
Difference	**$64**	**$401**	**$465**
Estimated Inflation (CPI) Applied to Projected Spending[2]	*$357*	*$762*	*$1,119*

Projected inflationary growth based on the Consumer Price Index is now forecast to be 2.1 percent in FY 2022 and 2.3 percent in FY 2023. After adjusting for programs with cost increases included in the current law formula, applying the annual inflation rate, compounded over 2 years, would add approximately $1.119 billion in spending pressure to the FY 2022-23 biennium.

[2] Inflation calculation grows the estimated general fund spending base in each year by the projected CPI growth rate after removing special education, debt service, capital projects, property tax refunds, and the state share for managed and long term care. In this forecast, 33 percent of the estimated expenditure base for FY 2022-23 is removed from the inflation calculation.

REVENUE OUTLOOK

Current Biennium

Total general fund revenues for FY 2020-21 are now forecast to be $48.752 billion, $96 million (0.2 percent) more than the November 2019 forecast. Total tax revenues for the biennium are forecast to be $46.669 billion, $89 million (0.2 percent) above the prior estimate. A higher forecast for net corporate tax revenue more than offsets lower forecasts for the individual and general sales taxes.

Current Biennium: FY 2020-21 General Fund Revenues
November 2019 vs. February 2020 Forecast Comparison

($ in millions)	November 2019 Forecast	February 2020 Forecast	$ Change	% Change
Individual Income Tax	$26,039	$25,988	$(51)	(0.2)%
General Sales Tax	12,125	12,044	(81)	(0.7)
Corporate Franchise Tax	2,897	3,114	217	7.5
State General Property Tax	1,561	1,562	1	0.0
Other Tax Revenue	3,958	3,961	3	0.1
Total Tax Revenues	**$46,580**	**$46,669**	**$89**	**0.2%**
Non-Tax Revenues	1,557	1,563	7	0.4
Other Resources	520	520	0	0.0
Total Revenues	**$48,656**	**$48,752**	**$96**	**0.2%**

Revenues for FY 2020-21 are now expected to exceed their FY 2018-19 levels by $2.713 billion (5.9 percent). Total tax revenues are projected to be $2.822 billion (6.4 percent) more than in FY 2018-19. Individual income tax revenues account for 64 percent of the biennial tax revenue growth. State general property tax receipts in FY 2020-21 are lower than in the previous biennium. The forecast biennial decline in general property tax revenues is due to legislative changes that lowered revenues from that tax.

This is the second forecast of FY 2020-21 since FY 2020 began on July 1, 2019. After seven months of observed collections, fiscal year-to-date receipts of net non-dedicated revenues (total tax plus non-tax revenues) are $13.213 billion, 27 percent of the total expected over the biennium. With 17 months of FY 2020-21 collections left to observe, 73 percent of forecast receipts are outstanding.

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

($ in millions)	FY 2018-19	FY 2020-21	$ Change	% Change
Individual Income Tax	$24,189	$25,988	$1,799	7.4%
General Sales Tax	11,215	12,044	829	7.4
Corporate Franchise Tax	2,975	3,114	140	4.7
State General Property Tax	1,622	1,562	(60)	(3.7)
Other Tax Revenue	3,847	3,961	115	3.0
Total Tax Revenues	**$43,847**	**$46,669**	**$2,822**	**6.4%**
Non-Tax Revenues	1,693	1,563	(129)	(7.6)
Other Resources	499	520	20	4.1
Total Revenues	**$46,039**	**$48,752**	**$2,713**	**5.9%**

Individual Income Tax. Individual income tax receipts are now forecast to be $51 million (0.2 percent) less than the November forecast. The decrease is primarily due to lower forecast growth in wage and non-wage income.

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 $11.401 billion, $19 million more than estimated in November.

Calibrating the income tax model to produce our estimated base year liability generally requires making assumptions about base year growth rates for specific income types. Preliminary information from a sample of tax year 2018 Minnesota income tax returns indicates that Minnesota's wage income reported on returns in 2018 grew 4.5 percent, compared to the 4.2 percent growth that we assumed in the November forecast. Using information from 2018 Minnesota preliminary tax return sample, we assume capital gains realized by Minnesota residents in that year were flat compared to 2017, a year in which Minnesota capital gains were inflated by a one-time event. In the November forecast, we had assumed capital gains growth of 9.9 percent.

After we applied assumed growth rates to income sources and deductions, the income tax model generated liability for tax year 2018 that was $128 million below our liability estimate. This discrepancy may have arisen because of growth rates Minnesota additions, subtractions, and deductions, that are more difficult to estimate following the law changes. Taxpayer behavior in response to the 2017 federal tax law changes may have resulted in a one-time increase in Minnesota income tax liability. For example, the incentive to pre-pay 2018 property taxes in 2017 may have caused a spike in TY 2018 liability that would not continue in future years. We included an off-model adjustment in 2018 of $128 million for the liability discrepancy and did not carry the adjustment forward into subsequent forecast years.

In each year following TY 2018, our forecast for growth in adjusted gross income (AGI) is cumulatively lower than in November. Information from the Quarterly Census of Employment and Wages (QCEW) suggests that Minnesota's growth in wage and salary income was weaker in 2019 than we forecast in November. Annual growth in wage income included in AGI in 2019 is now expected to be 3.5 percent, down from 3.9 percent in the November forecast. Annual wage growth on returns is now forecast to be 3.9 percent in both 2020 and 2021, compared to 4.0 and 3.9 percent, respectively, in November. 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 November. Because Chain CPI-U is used 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 November.

Changes in expected growth rates in some non-wage income types in CY 2019 and 2020 also affect the FY 2020-21 income tax forecast. Capital gains realizations reported by Minnesota residents are now assumed to grow cumulatively 7.2 percentage points more slowly from 2017 through 2021 compared to the November forecast. The pattern of change in the capital gains forecast reduces expected income tax revenue more in the current biennium than in the next. Partly offsetting this change are higher expected growth rates in other types of non-wage income. Growth in business income is cumulatively 2.3 percentage points higher through 2021 compared to November. Dividend income grows cumulatively 9.1 percentage points faster through 2021 than in the November forecast.

The forecast for net income tax receipts from fiduciaries (estates and trusts) is $98 million higher than in November. An off-model adjustment for the expected revenue loss resulting from the Minnesota Supreme Court ruling in *Fielding v. Commissioner* is smaller than in November and raises the fiduciary forecast by $104 million in this biennium and $64 million in the next.

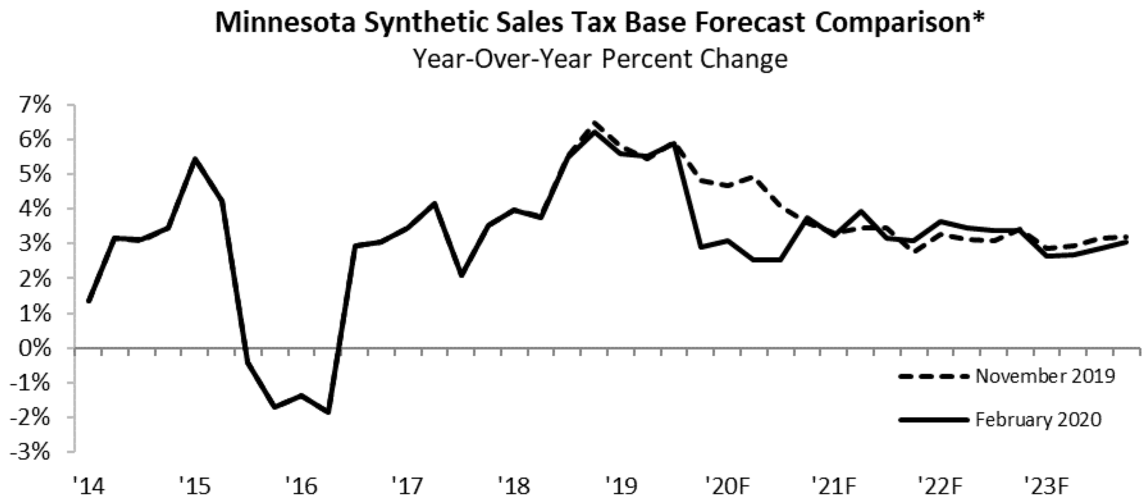
Higher than expected payments to date from non-resident partnership and S-Corps, along with higher projected growth in business income, raise the forecast for taxes paid by these entities by $13 million in FY2020-21.

Income tax withholding receipts in recent periods have been growing faster than would be expected based on observed wages in the economy. In this forecast, we assume this pattern will continue and taper off by then end of CY 2020. Due the timing of withholding receipts, this assumption increases our revenue forecast in the current biennium and reverses the change in the next.

We made an off-model adjustment for tax provisions in the federal Consolidated Appropriations Act, 2020, passed at the end of 2019. This adds a small amount of revenue to our current biennium forecast.

General Sales Tax. General sales tax revenue in FY 2020-21 is now forecast to be $81 million (0.7 percent) less than the prior forecast. The forecast for gross sales tax receipts is $74 million lower than in November, and the refunds forecast is $6 million higher.

The lower forecast for gross sales tax receipts reflects a lower forecast for taxable sales and a lower share of U.S. sales allocated to Minnesota compared to November. 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 1.5 percentage points more slowly in CY 2020 and 0.2 percentage points more slowly in CY 2021 than we had assumed in November. In addition, we allocate U.S. forecasts for goods and services in the synthetic base to Minnesota based on the state's share of total U.S. non-farm personal income. In this forecast, Minnesota's share of non-farm personal income is lower than it was in November, so we allocate a smaller share of U.S. sales to the state.



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 synthetic sales tax base, a proxy for Minnesota's actual sales tax base, is expected to grow 1.5 percentage points more slowly in CY 2020 and 0.2 percentage points more slowly in CY 2021 than we had assumed in November.

The U.S. Supreme Court decision in *South Dakota v. Wayfair* 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. In this forecast, payments by remote sellers that are newly registered to remit sales taxes following the *Wayfair* decision are not expected to grow faster than payments by other remote sellers.

Corporate Franchise Tax. The corporate franchise tax is forecast to generate $3.114 billion in FY 2020-21, $217 million (7.5 percent) more than the prior forecast. Higher forecast gross corporate payments and lower forecast refunds both contribute to the change.

So far in FY 2020, gross corporate tax receipts have exceeded the November 2019 forecast by $59 million. The higher base drives an increase in the forecast for corporate gross receipts. The IHS forecast for U.S. corporate profits is little changed since November. In this forecast, U.S. corporate profits before tax are expected to grow more slowly in each quarter of CY 2020 and 2021 compared to the November forecast. From the 2nd quarter of 2022 through 2023, corporate profits are expected to grow faster in this outlook than in November.

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

The IHS forecast for U.S. corporate profits is little changed since November. In this forecast, U.S. corporate profits before tax are expected to grow more slowly in each quarter of CY 2020 and 2021 compared to the November forecast. From the 2nd quarter of 2022 through 2023, corporate profits are expected to grow faster in this outlook than in November.

The corporate income tax forecast includes an off-model adjustment for the impact of the Historic Structure Rehabilitation Credit (HSRC). Our practice is to forecast the full revenue impact of the HSRC within corporate refunds, even though some credits accrue to non-corporate taxpayers, and some credits reduce tax payments rather than increase refunds. Total HRSCs are now forecast to be about $4 million lower in FY 2020-21 than in the November forecast.

Other Tax Revenue, Non-Tax Revenue, Other Resources. Other tax revenue is now expected to be $3 million (0.1 percent) more than the November forecast. Among other taxes, the insurance gross receipts tax shows the largest dollar amount change, $17 million (2.1 percent) more than the prior forecast. This change reflects higher than expected receipts from this tax so far in FY 2020. The cigarette and tobacco products tax forecast is $13 million lower than in November, reflecting a federal law change to raise the legal age for purchasing these products to 21.

Planning Estimates

Total revenues for FY 2022-23 are now estimated to be $51.501 billion, an increase of $2.749 billion (5.6 percent) over the current forecast for FY 2020-21 revenues. Total tax revenues for FY 2022-23 are estimated to be $49.571 billion, a 6.2 percent increase over FY 2020-21 forecast revenues.

Together, the individual income and sales taxes account for about 91 percent of the projected biennial tax revenue growth. The individual income tax shows the largest increase, growing by

$1.872 billion (7.2 percent), and contributing 65 percent of the total tax revenue biennial change. The general sales tax is expected to exceed FY 2020-21 forecast levels by $780 million (6.5 percent), accounting for 27 percent of the growth in tax revenues. The corporate franchise tax and other taxes together contribute $277 million to the biennial tax revenue change, and the state general property tax reduces biennial growth by $26 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 1.7 percent in CY 2022 and 1.5 percent in CY 2023.

Biennial Comparison: FY 2020-21 vs. FY 2022-23 General Fund Revenues
February 2020 Forecast

($ in millions)	**FY 2020-21**	**FY 2022-23**	**$ Change**	**% Change**
Individual Income Tax	$25,988	$27,860	$1,872	7.2%
General Sales Tax	12,044	12,824	780	6.5
Corporate Franchise Tax	3,114	3,240	126	4.1
State General Property Tax	1,562	1,536	(26)	(1.7)
Other Tax Revenue	3,961	4,112	151	3.8
Total Tax Revenues	**$46,669**	**$49,571**	**$2,902**	**6.2%**
Non-Tax Revenues	1,563	1,550	(13)	(0.9)
Other Resources	520	380	(140)	(26.9)
Total Revenues	**$48,752**	**$51,501**	**$2,749**	**5.6%**

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

Current Biennium

Spending estimates for FY 2020-21 are slightly lower than prior estimates for the biennium. Expenditures in the current biennium are now expected to be $48.373 billion, a reduction of $91 million (0.2 percent) from November forecast estimates.

Lower than expected pupil growth decreases forecast spending in E-12 education. These changes are slightly offset by higher expenditures in property tax aids and credits and health and human services.

Current Biennium: FY 2020-21 General Fund Expenditures
Forecast Comparison

($ in millions)	November 2019 Forecast	February 2020 Forecast	$ Change	% Change
E-12 Education	$20,098	$19,999	$(99)	(0.5)%
Property Tax Aids & Credits	3,865	3,872	7	0.2
Health & Human Services	14,677	14,682	5	0.0
Debt Service	1,132	1,130	(2)	(0.2)
All Other	8,692	8,689	(2)	0.0
Total Expenditures	**$48,463**	**$48,373**	**$(91)**	**(0.2)%**

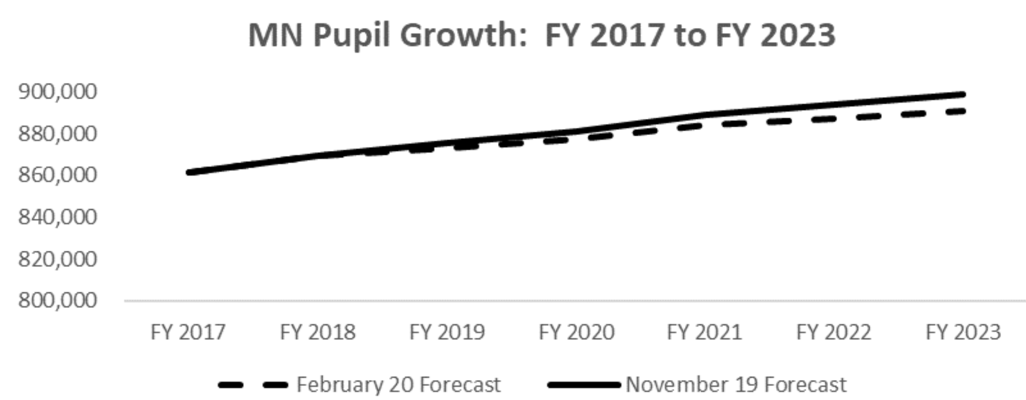
E-12 Education. E-12 education is the largest category of state general fund spending. It consists of aid programs for general education, special education, early childhood education, charter schools, nonpublic pupil programs, and integration programs. In the current biennium the state is projected to spend $19.999 billion in the E-12 bill area.

E-12 aids can be divided into two major funding streams: 1) general education, the primary source of basic operating funds for schools, and 2) categorical aid, tied to specific activities or categories of funding. The following table identifies major forecast expenditure changes from November estimates.

General Fund E-12 Education Expenditures
Change from November 2019 Estimates

($ in millions)	FY 2020-21 $ Change	FY 2020-21 % Change	FY 2022-23 $ Change	FY 2022-23 % Change
Basic Formula	$(56)	(0.5)%	$(102)	(0.8)%
Compensatory Aid	(8)	(0.8)	(48)	(4.3)
Local Optional & Referendum Revenue	(4)	(1.2)	(14)	(4.5)
All Other General Education	(2)	(0.2)	(7)	(0.8)
Total General Education Change	**(70)**	**(0.5)**	**(171)**	**(1.1)**
Special Education Aid	(29)	(0.9)	(64)	(1.6)
Other Categoricals	0	0.0	(1)	(0.1)
Total E-12 General Fund Forecast Change	**$(99)**	**(0.5)%**	**$(234)**	**(1.1)%**

E-12 spending is forecast to decrease by $99 million (0.5 percent) in FY 2020-21 compared to the November. The largest driver of change is slower than expected pupil growth, which results in lower general education spending ($70 million). Final 2018-2019 school year pupil counts have decreased by 0.3 percent compared to November estimates, creating a downward adjustment in pupil projections throughout the forecast horizon. Pupils continue to grow year-over-year but more slowly than previously anticipated. The graph below shows the recent history of estimated pupil growth.



The number of Minnesota public school students are forecast to continue to grow each year. Actual student counts for FY 2019 are lower than projected in the November forecast, slowing future growth.

Many components of the general education formula are calculated using pupil data. Basic education aid, which is based entirely on student counts, is down $56 million (0.5 percent) compared to previous projections. Likewise, local optional revenue (LOR) and referendum revenue decrease in this forecast. Reduced spending for LOR and referendum revenue is attributed to lower pupil counts as well as higher property values, which results in a decrease in state aid and an increase in the local share. Other forecast changes include an $8 million decrease in compensatory aid spending (0.8 percent). Actual student counts show an overall decline in the number of students qualifying for Free and Reduced-Price Lunch (FRPL) as well as a reduction in the ratio of students receiving FRPL compared to the overall school population.

The reduction in categorical aids is driven by lower than anticipated spending in special education ($29 million). The amount of special education aid districts receive is driven by their spending on special education services, which includes the number of students and the number and cost of teachers and paraprofessionals. The February forecast incorporates actual expenditure data from FY 2019, which came in below previous estimates.

Health and Human Services. Health and Human Services is approximately 30 percent of total state general fund spending. The majority of these expenditures (85 percent) are forecast programs including Medical Assistance (MA), Chemical Dependency (CD), the Minnesota Family Investment Program (MFIP), MFIP Child Care, Alternative Care (AC), General Assistance, Housing Support, Minnesota Supplemental Aid and Northstar Care for Children.

General fund forecast changes are primarily driven by changes to the MA forecast, since it accounts for the largest portion of forecast program expenditures. MA is a state-federal, means-tested entitlement program 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.

In FY 2020-21, anticipated HHS general fund spending is $14.682 billion, up $5 million (0.0 percent) relative to the November forecast. MA spending is up $29 million, which represents a 0.3 percent change from the November forecast. Non-health care program expenditures decreased by $24 million (1.3 percent). The following table identifies major forecast expenditure changes from November estimates.

General Fund HHS Expenditures

Change from November 2019 Estimates

	FY 2020-21		**FY 2022-23**	
($ in millions)	**$ Change**	**% Change**	**$ Change**	**% Change**
CADI Waiver Growth	$43	(1.0)%	$47	(1.1)%
Elderly & Disabled Basic Care Enrollment	(25)	(0.7)	(33)	(0.8)
All Other Medical Assistance	11	0.1	(10)	(0.2)
Total Medical Assistance Change	**$29**	**0.3%**	**$4**	**(0.0)%**
All Other HHS Changes	(24)	(1.3)	(1)	0.0
Total HHS General Fund Forecast Change	**$5**	**(0.0)%**	**$3**	**0.0%**

Medical Assistance Program

The higher MA forecast is the result of increased spending ($43 million, 1.0 percent) in the MA long-term care Community Access for Disability Inclusion (CADI) waiver. Enrollment is 1.6 percent ($19 million) higher than previous forecast, which reflects data changes since November forecast. This forecast projects an increased caseload growth rate through the next biennium. Average costs are 1.9 percent ($24 million) higher than previous forecast in the CADI waiver program due to increased payments for customized living services.

Offsetting the long-term care increases are lower MA basic care expenditures. Lower enrollment in MA elderly and disabled basic care decreases anticipated spending in the current biennium by $25 million (0.7 percent). The enrollment reduction is due to initial implementation of the Asset

Verification System, which Department of Human Services (DHS) began to implement in September 2019 to comply with federal law. MA elderly and disabled basic care programs have asset and income limits. The asset verification system checks for unreported income or assets which would make individuals ineligible for MA. DHS is in the process of mailing authorization forms to current Elderly and Disabled MA enrollees to allow verification to proceed. If enrollees do not return a signed form within the designated time period, their MA eligibility will be terminated. Based on an analysis of initial implementation, it is estimated that this requirement will reduce enrollment by 1 percent. This projection assumes 50 percent of individuals who initially lose eligibility due to this requirement will comply and have their eligibility reinstated.

Other Health and Human Services Expenditures

Spending across all non-health care programs is expected to decrease $24 million (1.3 percent) from previous forecast in FY 2020-21. This is primarily due to lower expected state spending in chemical dependency treatment services as a result of higher federal reimbursements ($11 million, 9.7 percent) and increased revenues from counties ($8 million, 23.1 percent). This forecast assumes the chemical dependency fund receives county share revenue for certain substance abuse treatment services in FY 2020. This is due to a correction and alignment of effective dates from 2019 legislative changes that should have been applied in the November 2019 forecast.

Alternative Care

Beginning January 31, 2020, a new five-year extension of the Alternative Care (AC) program began under a waiver agreement between the Department of Human Services and Centers for Medicare and Medicaid Services (CMS). The AC program diverts or delays potential Medical Assistance use by providing many of the same services as the Elderly Waiver (EW) program to people who need nursing home level of care but choose to live in the community. Alternative Care enrollees have low income and assets but do not currently meet the financial eligibility requirements for Medical Assistance.

Under a waiver agreement with CMS, the state has received a 50 percent federal share to fund the program since 2014. The new agreement includes a new federal spending cap on the AC and EW programs combined. Minnesota is responsible for paying back 50 percent of the amount over the limit. Calculation and repayment of this amount occurs in FY 2025. Federal participation in AC does not change if spending is below the combined cap. This forecast projects Minnesota will effectively reach the spending cap at the end of the 5-year period, so no fiscal impact through the current budget horizon (FY 2023) is recognized. Future legislative or forecast changes to the AC or EW programs could result in the state reaching the cap sooner than forecast, triggering federal repayment. The AC waiver is governed by terms agreed to by CMS and DHS, which include quarterly financial monitoring reports. Substantial expenditure changes relative to this forecast may result in fiscal impacts within the budget horizon. The state also has the option to end this new agreement early to mitigate the need for repayment, however the AC program would no longer receive federal share and the state would pay 100 percent of program costs.

Property Tax, Aids, and Credits. Property tax aids and credits is expected to be $3.872 billion, an increase of $7 million (0.2 percent) compared to November 2019 forecast. Homestead and renter's property tax refunds account for a significant amount of this change. Anticipated homestead property tax refund expenditures are $13 million higher than previous estimates (1.2 percent) primarily due to more filings than previously expected. Renter's property tax refund expenditures, on the other hand, are $5 million lower than previously estimated (1.1 percent), largely driven by a downward adjustment in the number of filings. Spending in Local Government Aid (LGA) and County Program Aid (CPA) increases by $1 million in FY 2021 due to a calculation error, which understated the adjusted net tax capacity for three cities and the counties of jurisdiction. This forecast reflects allocation formula corrections for these programs.

Debt Service and All Other. Debt service expenditures for the current biennium are forecast to be $1.130 billion in the current biennium, which is a $2 million (0.2 percent) reduction from prior estimates. The reduction is due to lower bond interest rates. Lower bond interest rates result in higher bond premiums, which decrease the estimated size of the bond sales and forecasted debt service payments. This forecast makes the same assumptions for future capital budgets as November: $755 million in even year legislative sessions and $240 million in odd year sessions.

All other bill area spending is forecast to total $8.689 billion, a $2 million (0.0 percent) decrease from the November forecast.

Planning Estimates

Expenditures in the FY 2022-23 biennium are forecast to reach $51.036 billion, a reduction of $222 million (0.4 percent) from November forecast estimates. As in the current biennium, lower education spending is slightly offset by higher expenditures in property tax aids and credits and health and human services.

Planning Estimates: FY 2022-23 General Fund Expenditures
Forecast Comparison

($ in millions)	November 2019 Forecast	February 2020 Forecast	$ Change	% Change
E-12 Education	$90,979	$20,745	$(234)	(1.1)%
Property Tax Aids & Credits	4,158	4,170	12	0.3
Health & Human Services	16,382	16,386	3	0.0
Debt Service	1,206	1,205	(1)	(0.1)
All Other	8,531	8,530	(1)	0.0
Total Expenditures	**$51,257**	**$51,306**	**$(222)**	**(0.4)%**

E-12 Education. E-12 expenditures in FY 2022-23 are forecast to be $20.745 billion, $234 million (0.5 percent) below November forecast estimates. The lower forecast for general education spending resulting from slower pupil growth continues into the planning years. This drives a decrease in basic education aid of $102 million (0.8 percent) compared to November forecast. Compensatory aid estimates are $48 million (4.3 percent) lower than November, which is based on fewer qualifying students and lower the ratio of students receiving FRPL compared to the overall school population. Special education aid is $64 million (1.6 percent) lower than previously estimated. This change is a continuation of lower than expected costs and fewer pupils in the current biennium.

Health & Human Services. Health and human services expenditures are projected to total $16.386 billion in the next biennium, an increase of $3 million (0.0 percent) from November forecast. Changes to Medical Assistance (MA) drive the increase ($4 million, 0.0 percent) but are partially reduced by decreased spending in non-health care programs ($1 million, 0.0 percent).

Higher enrollment and increased average payments in MA's CADI waiver, which is seen in the current biennium, continues to impact spending estimates in the FY 2022-23 biennium. This results in increased CADI spending of $47 million (1.1 percent). MA disabled and elderly basic care enrollment decreases, reducing projected expenditures by $33 million (0.8 percent). This forecast also recognizes a reduction in caseload growth in Personal Care Assistance and Community First Services and Support in the FY2022-23 biennium, which decreases MA spending by $15 million.

Property Tax, Aids, and Credits. Property tax aids and credits spending in the FY 2022-23 biennium is expected to total $4.170 billion, $12 million (0.3 percent) more than the November 2019 forecast. The number of renter's property tax refund filings is lower than previous estimates, resulting in a decrease of $3 million (0.7 percent) in expenditures. The trend of additional homestead property tax refund filings is also expected to continue, but is tempered by higher projected income growth, resulting in an estimated increase of $16 million (1.4 percent) over November estimates. This forecast also reflects a decrease in agricultural homestead market value credits of $2 million (3.1 percent) in the next biennium. Agricultural homestead market values are lower than previously forecast, which leads to a decrease in projected spending across all forecast years.

Debt Service and All Other. Debt service expenditures are forecast to be $1.205 billion in the next biennium, which is $1 million (0.1 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 forecasted debt service payments. The decline in debt service expenditures due to lower interest rates was partially offset by a decrease in short-term investment earnings on cash balances in the bond proceeds and debt service funds.

All other bill area spending is forecast to total $8.530 billion, a $1 million (0.0 percent) decrease from the November forecast.

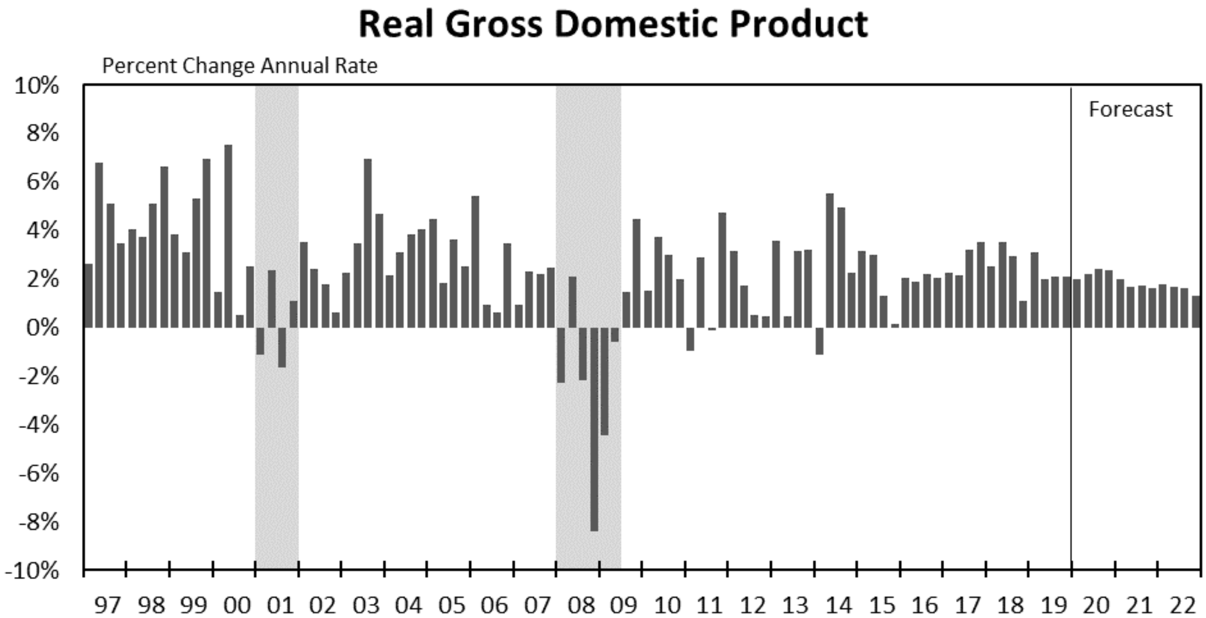
APPENDIX

ECONOMIC DATA

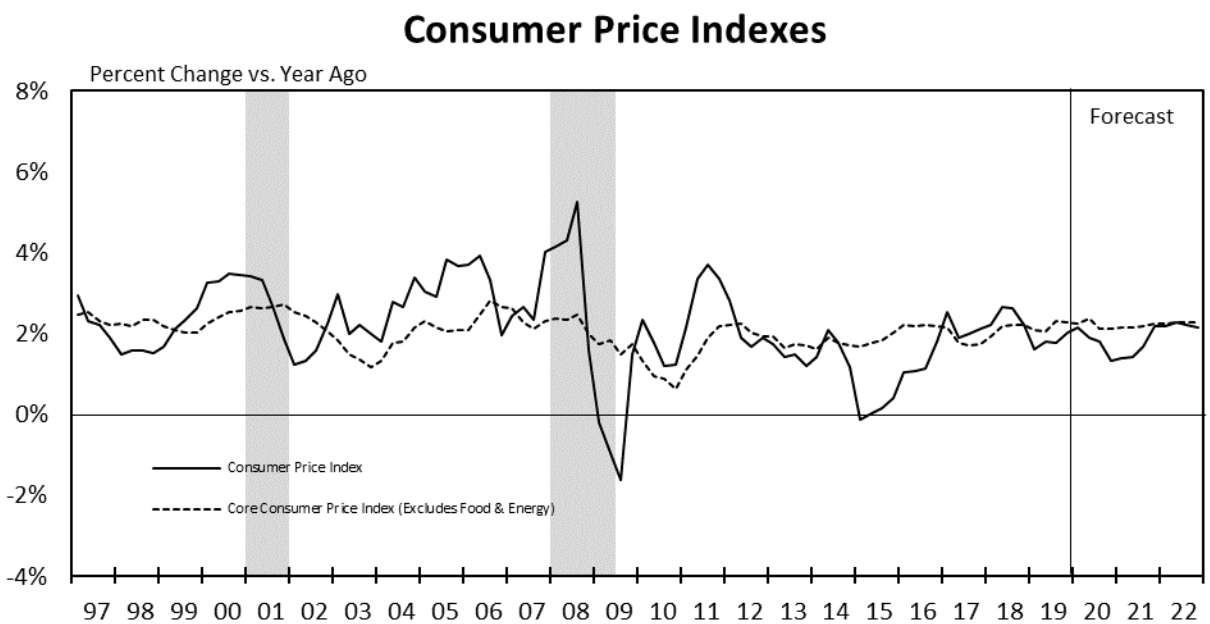
REVENUE EXPERIENCE

GENERAL FUND BALANCE SHEETS

OTHER DATA

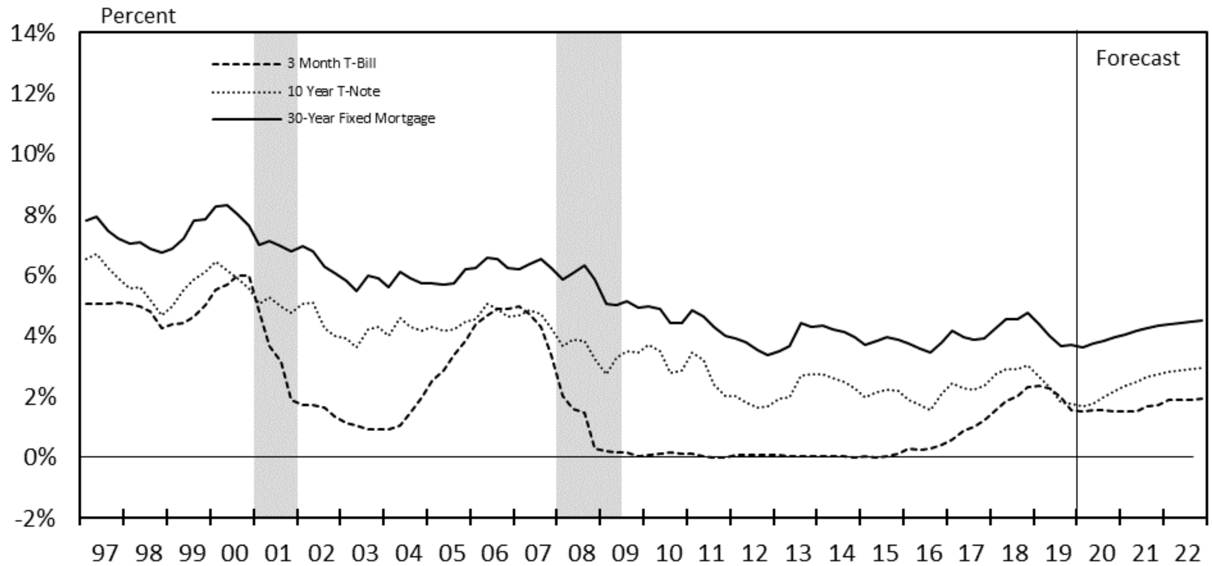


Annual real GDP growth rates decline each year of the forecast from 2.3 percent in 2019 to 1.5 percent in 2023. This trend is consistent with the expectation of continued, but slowing, growth in employment and labor force. The relatively high 2.9 percent growth rate in 2018 likely reflects deficit-financed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



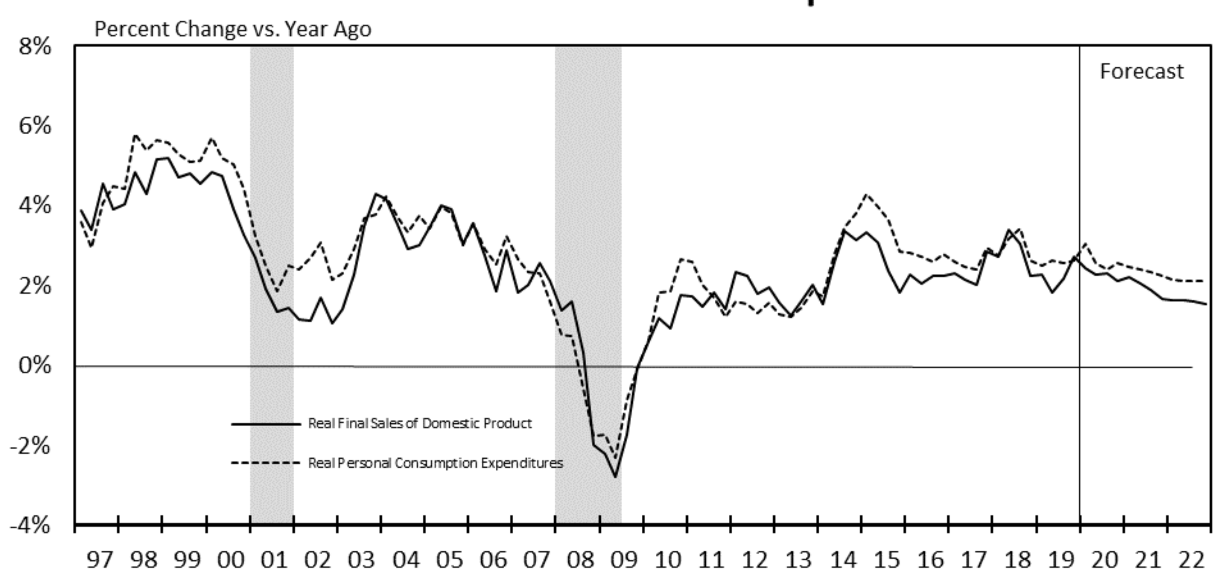
Year-over-year growth in the Consumer Price Index (CPI) rises from about 1.8 percent in 2019 to 2.5 percent in 2023, consistent with a tight labor market and steady demand for goods and services. Annual growth in the Core CPI gradually rises to 2.3 percent.

Interest Rates

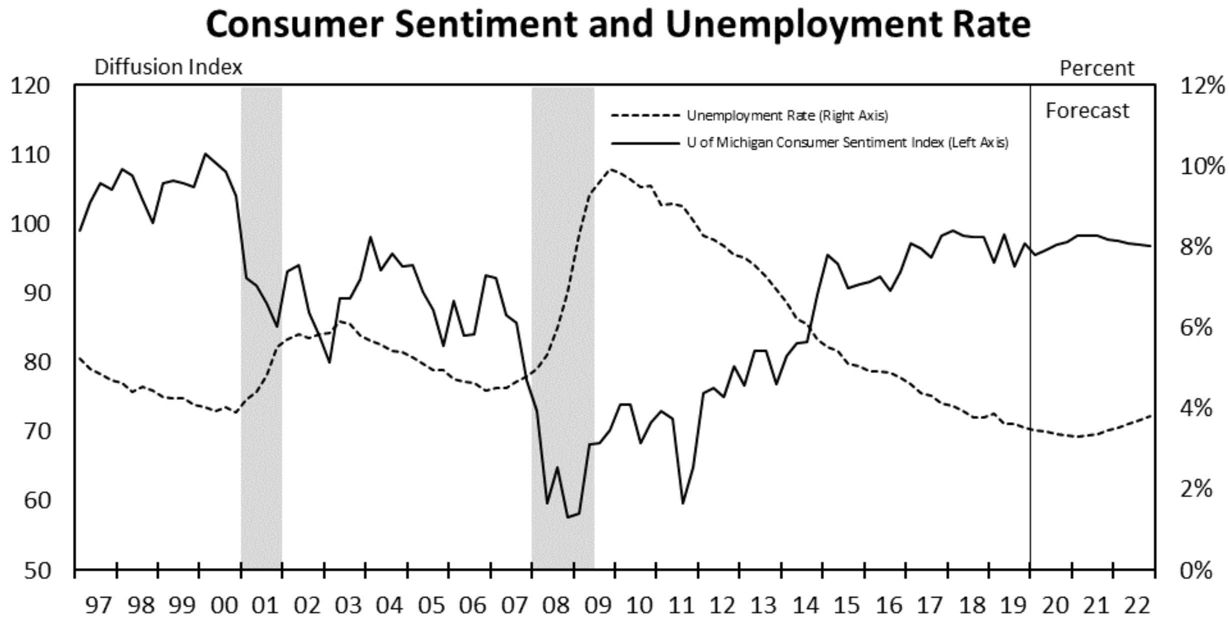


In 2019, the FOMC cut the federal funds rate target range three times--in July, September, and October--bringing it to a range of 1.50 to 1.75 percent. IHS expects the Fed to take no further action on the federal funds rate until mid-2021, when they are expected to begin a tightening cycle of 100 basis points through 2023.

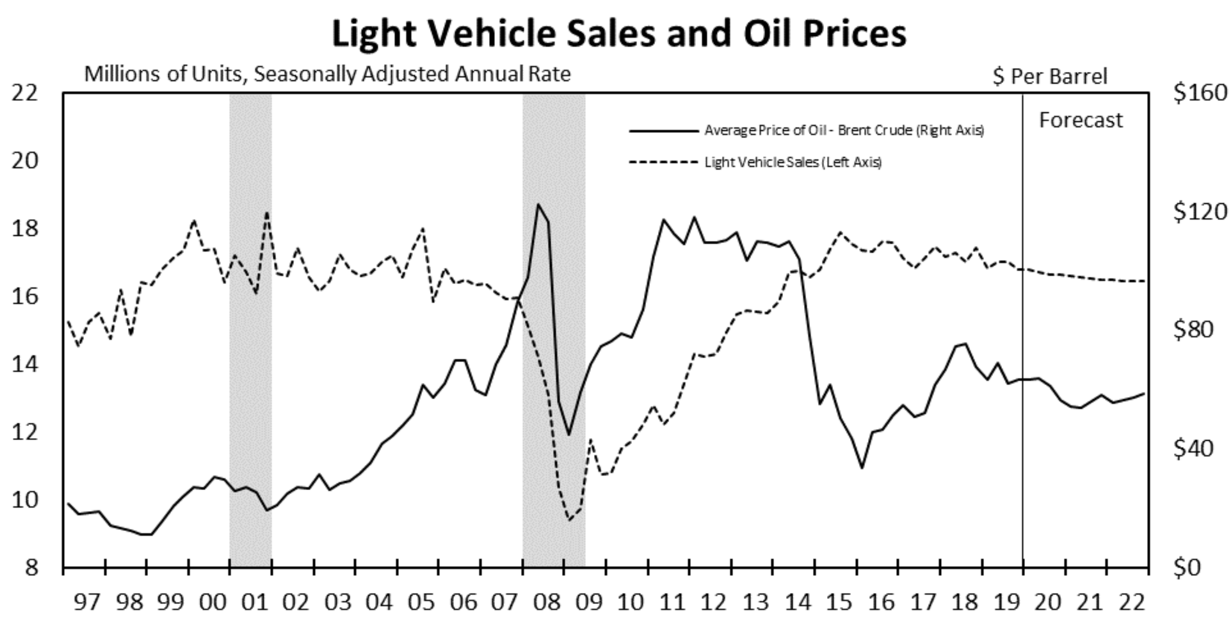
Real Final Sales & Consumption



Real final sales of domestic product are expected to increase slightly in 2020 before leveling off again below 2.0 percent in 2022. Hiring for the 2020 census temporarily boosts personal consumption expenditures (PCE) early in the year. IHS expects PCE to grow 2.6 percent in 2020, the same rate as in 2019, before softening to 2.4 percent in 2021 due to slowing growth of personal income.

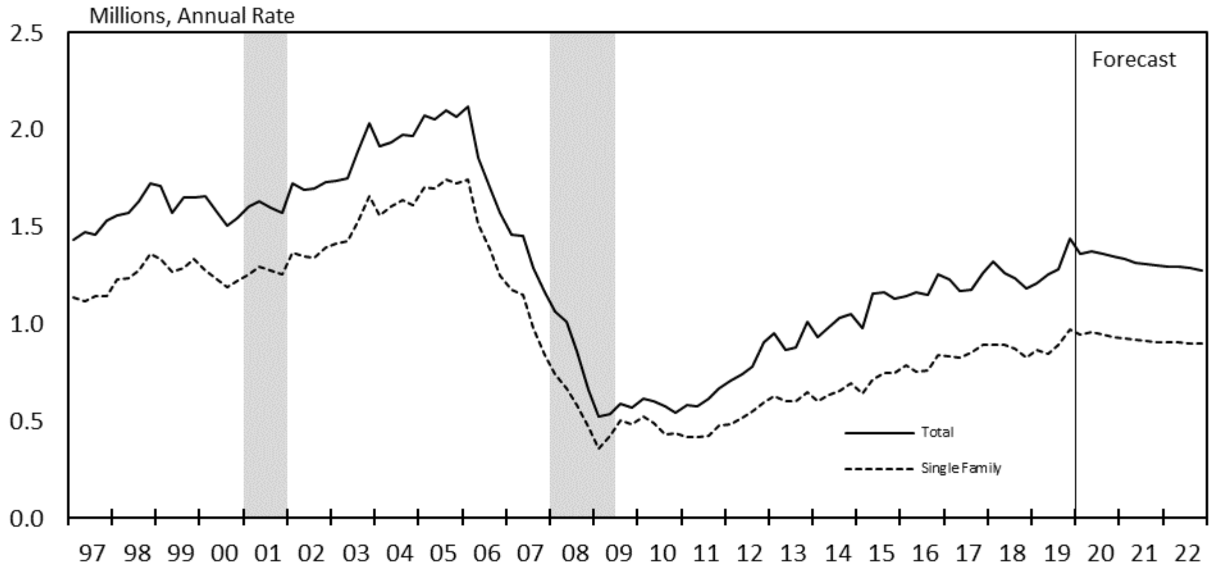


Consumer mood remains elevated. The University of Michigan Consumer Sentiment Index (left axis) rose to an eight-month high in January 2020. In the forecast, consumer sentiment stabilizes at less than 5 points short of 100, a healthy reading for this indicator. IHS expects we are very near the cyclical low for unemployment, with the trough of 3.3 percent realized in late-2020 and into early 2021.



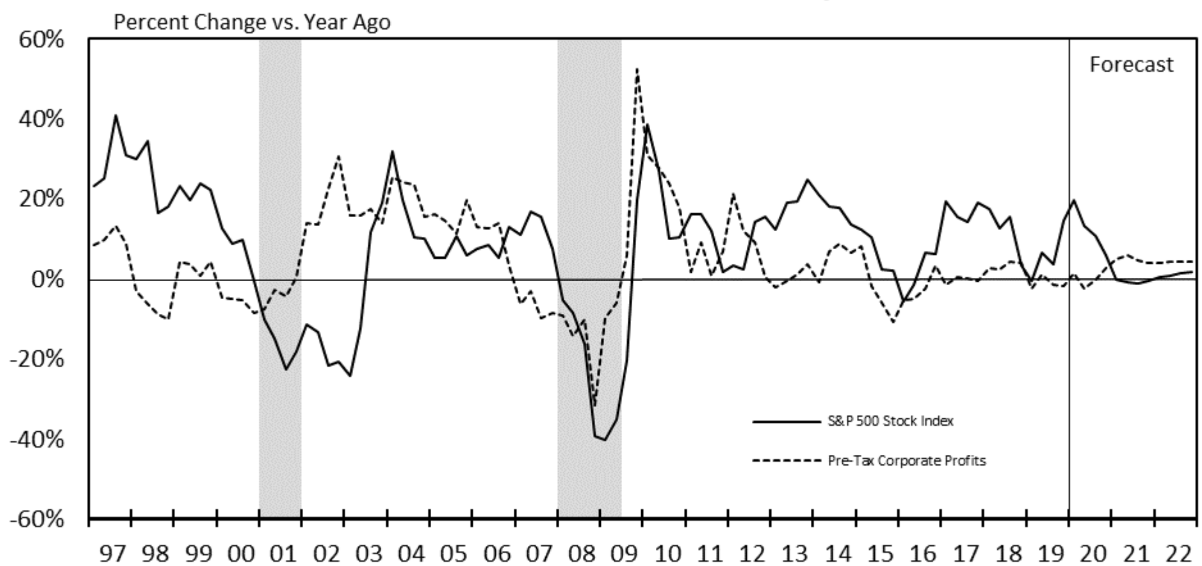
In this outlook, light vehicle sales trend down from an annual average of 16.9 million units in 2019 to 16.4 million units in 2023, consistent with a decelerating economy. The price of Brent crude oil is expected to average $61/barrel in 2020, down from $64/barrel in 2019. The IHS forecast predicts a further decline to $55 per barrel in 2021 followed by a rise to just above $62 at the end of 2023.

Housing Starts

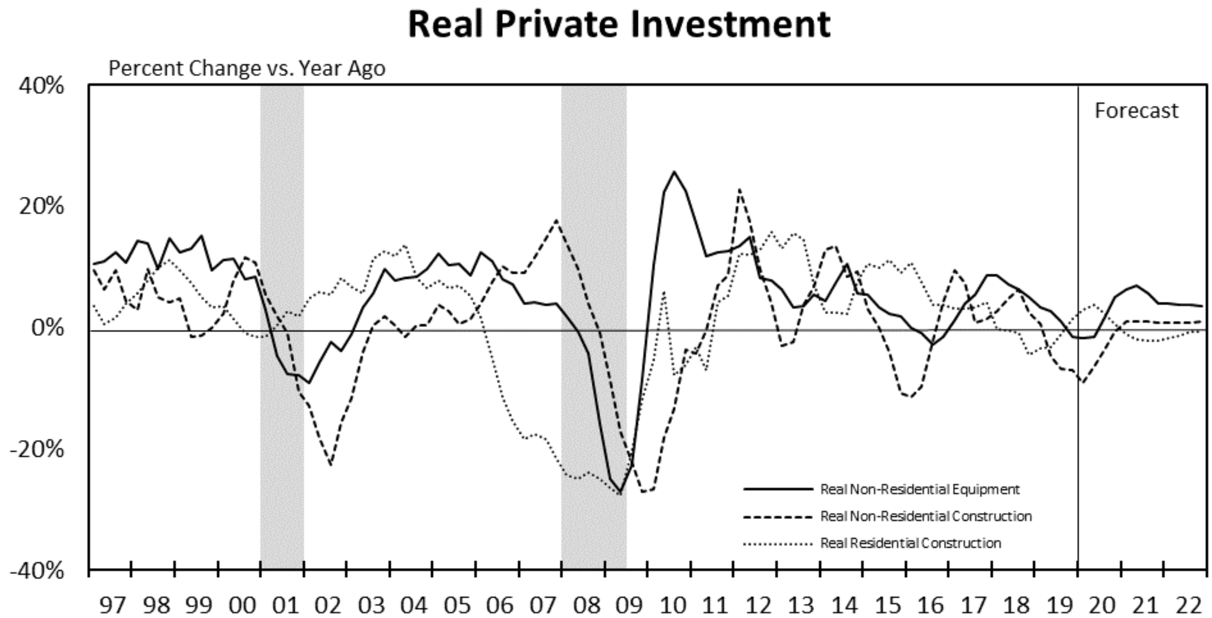


Driven by a mild December, the housing market had a very strong fourth quarter in 2019 with total housing starts surging above the recent trend. The annual rate rose to 1.3 million starts, the highest reading in 13 years. All regions had double-digit gains, except the South where they rose 9.3 percent. Total housing starts are expected to average 1.3 million units per year between 2019 and 2022.

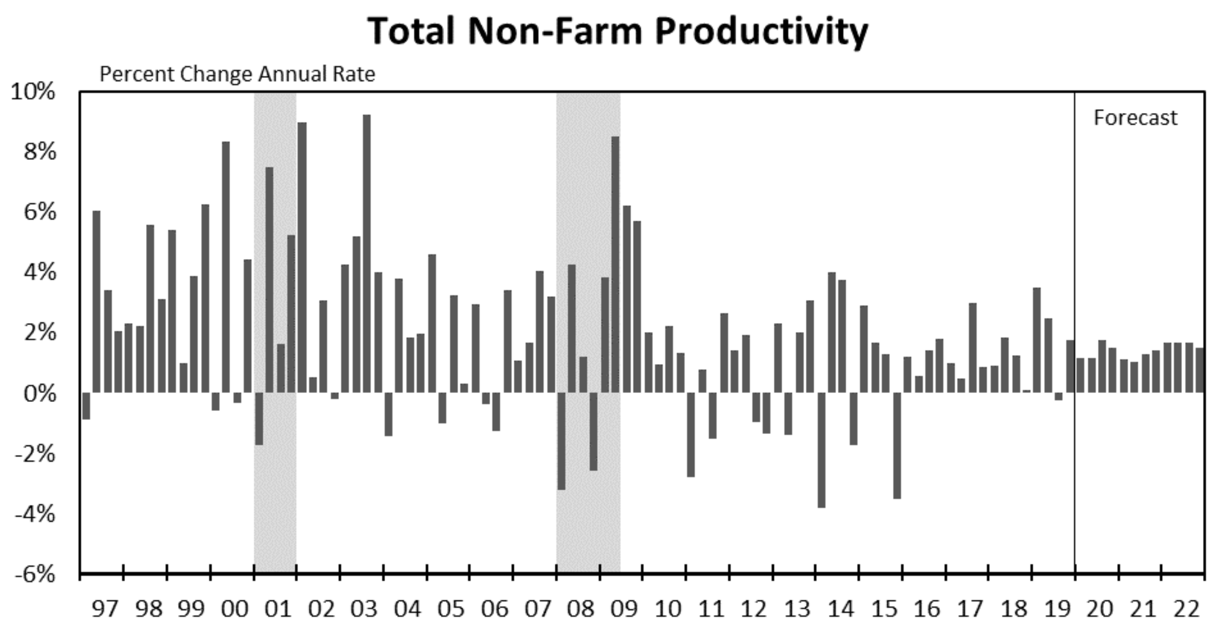
S&P 500 Stock Index and Pre-Tax Corporate Profits



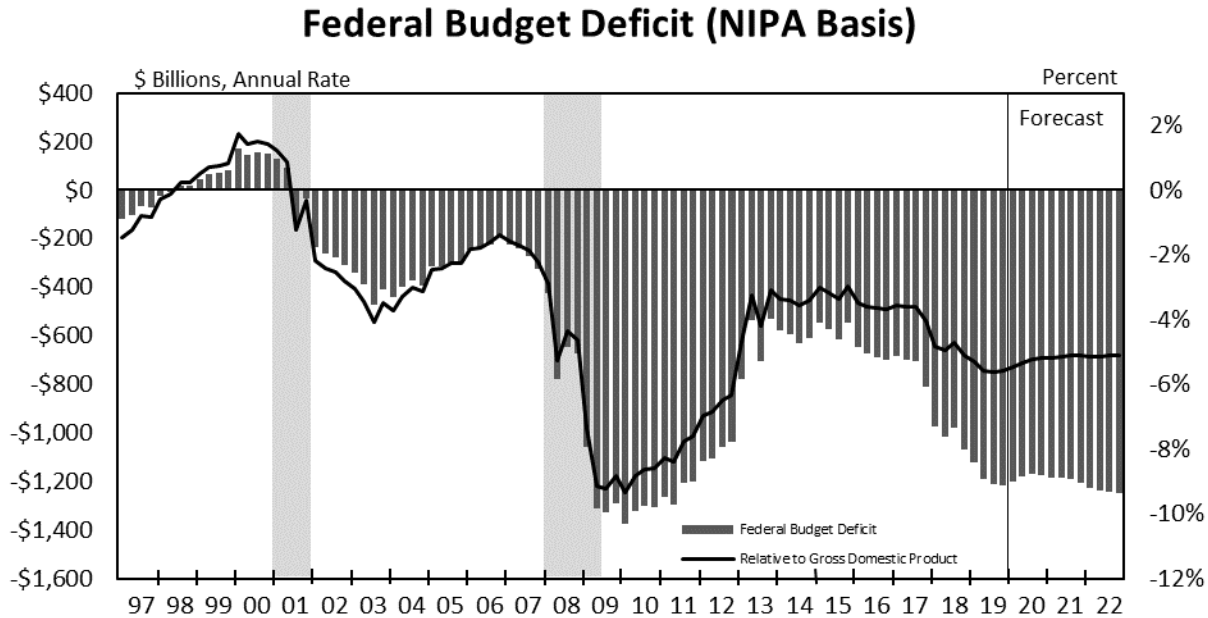
The S&P 500 and other key stock indices moved to new record highs in January 2020 as investors reacted to the "phase one" trade agreement between the U.S. and China. IHS expects a year over year gain (change in annual averages) in the S&P 500 of 12.3 percent in 2020 following a 6.1 percent gain in 2019. Corporate profits growth gradually accelerates through 2020 before levelling off at 4.3 percent in 2022.



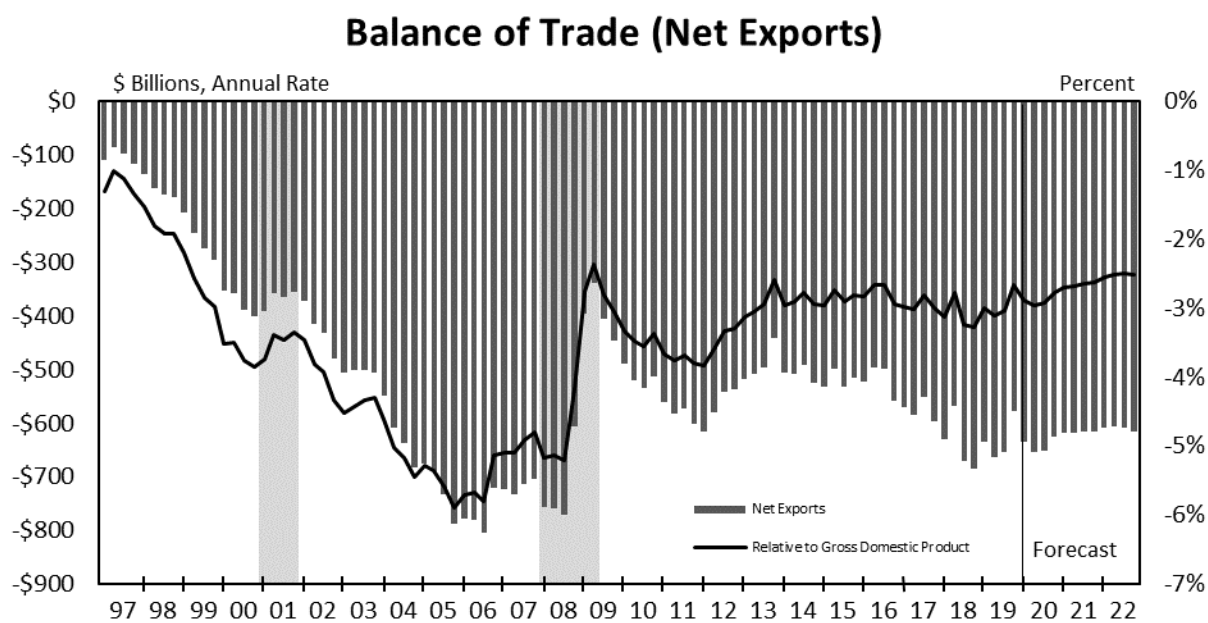
In the IHS outlook, growth rates for real non-residential equipment investment fall from 6.8 percent in 2018 to 1.4 percent in 2019 and 0.9 percent in 2020, before recovering to annual growth rates of 5.8 and 3.8 percent in 2021 and 2022, respectively. Real non-residential construction declines 4.4 percent in 2019 and 5.0 in 2020 and returns to positive growth in 2021. Real residential construction is expected to grow 2.4 percent in 2020 and then contract 1.3 percent per year on average through 2023.



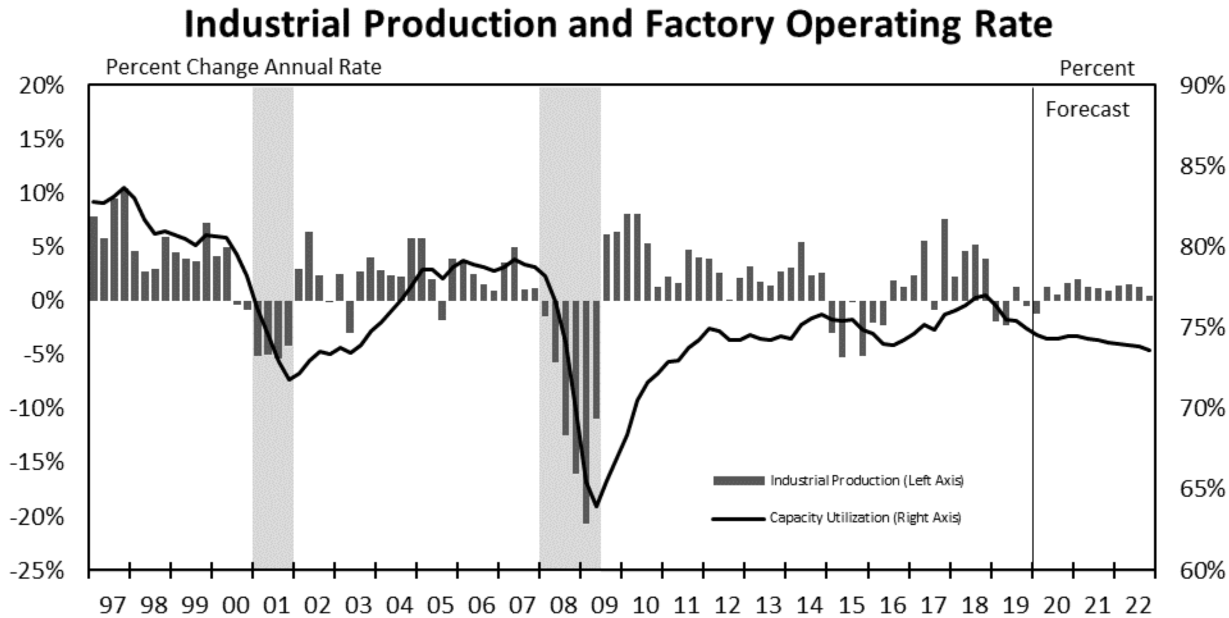
Annual non-farm private sector productivity is expected to grow 1.7 percent in 2019, the highest annual growth rate since 2010. Growth is expected to decelerate through 2022, before picking up to 1.8 in 2023. Non-farm productivity growth of less than 2 percent is consistent with a GDP growth rate of less than 3.0 percent.



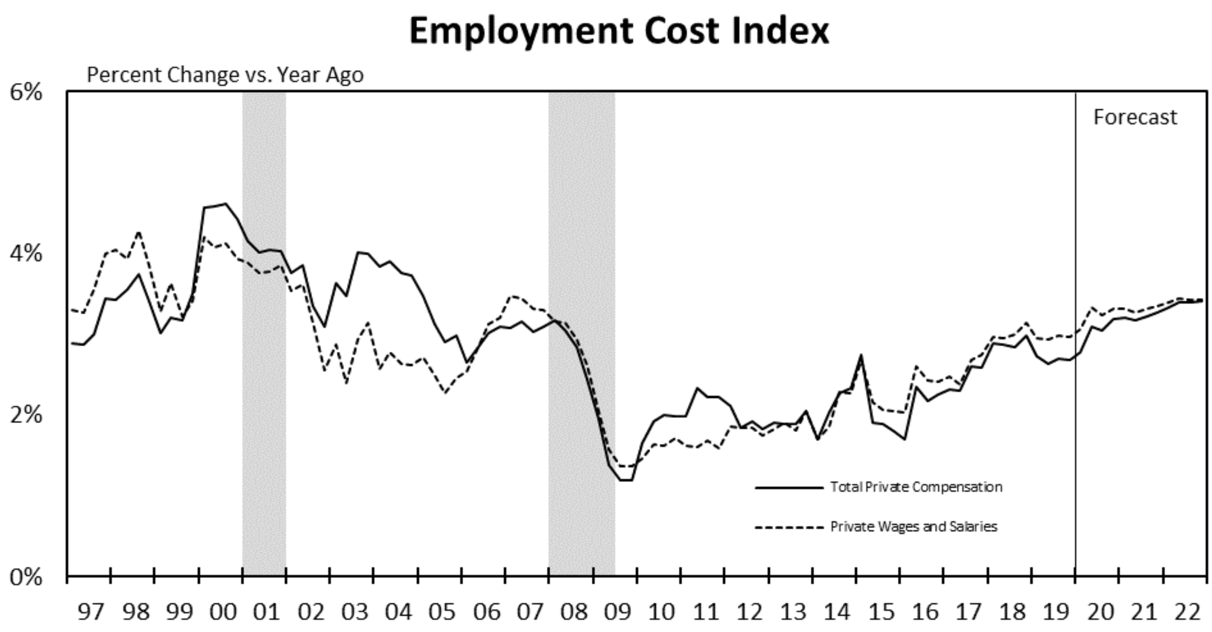
The federal budget deficit as a percent of GDP has grown from 3.7 percent in 2017 to the current share of 5.5 percent. This change is largely due to the revenue loss from the Tax Cut and Jobs Act passed at the end of 2017. The deficit is expected to remain above one trillion dollars through the forecast horizon.



After a surge during Q4 of 2019, net exports are expected to return to the declining trend that began in early 2014. IHS expects exports to decline in Q1 of 2020 and become a consistent source of drag for GDP growth throughout the forecast. Temporary relief for GDP is expected in Q3 of 2020 when IHS assumes the resumption of Boeing 737 MAX exports. Notably, in this forecast the U.S. is on track to become a net exporter of petroleum and petroleum products (measured as the real value of goods) in 2023.

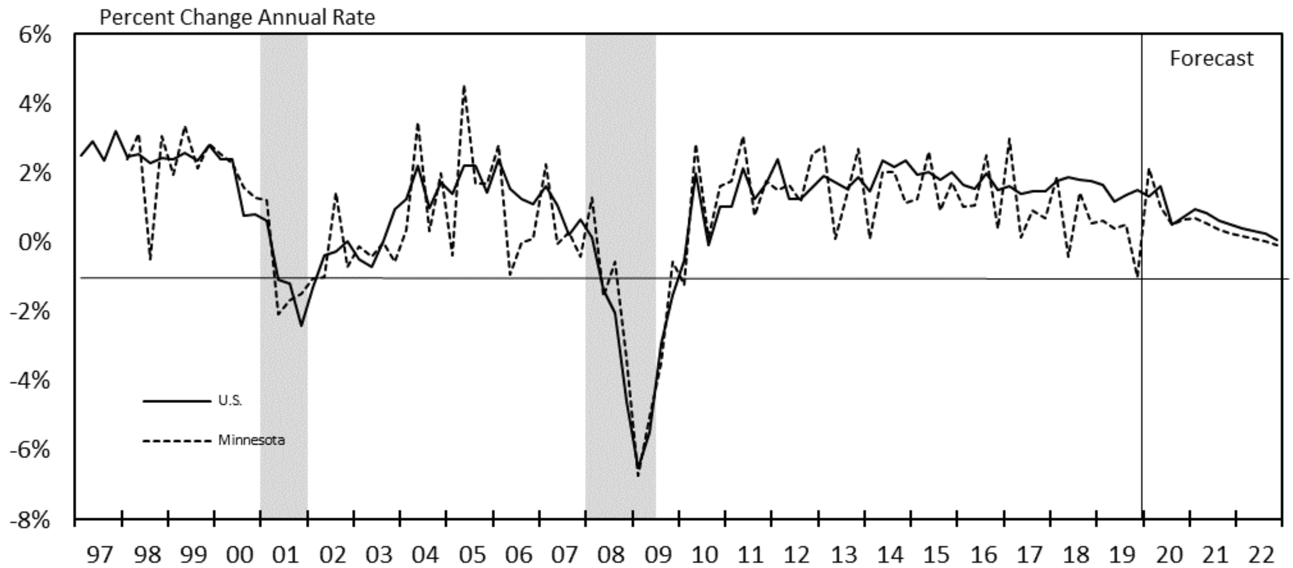


In this forecast, industrial production stays at 2019 levels in 2020, with an annual growth rate of 0.0 percent. It recovers with growth rates of 1.4 and 1.2 percent in 2021 and 2022, respectively. Capacity utilization ranges between 73 and 74 percent over the forecast horizon.



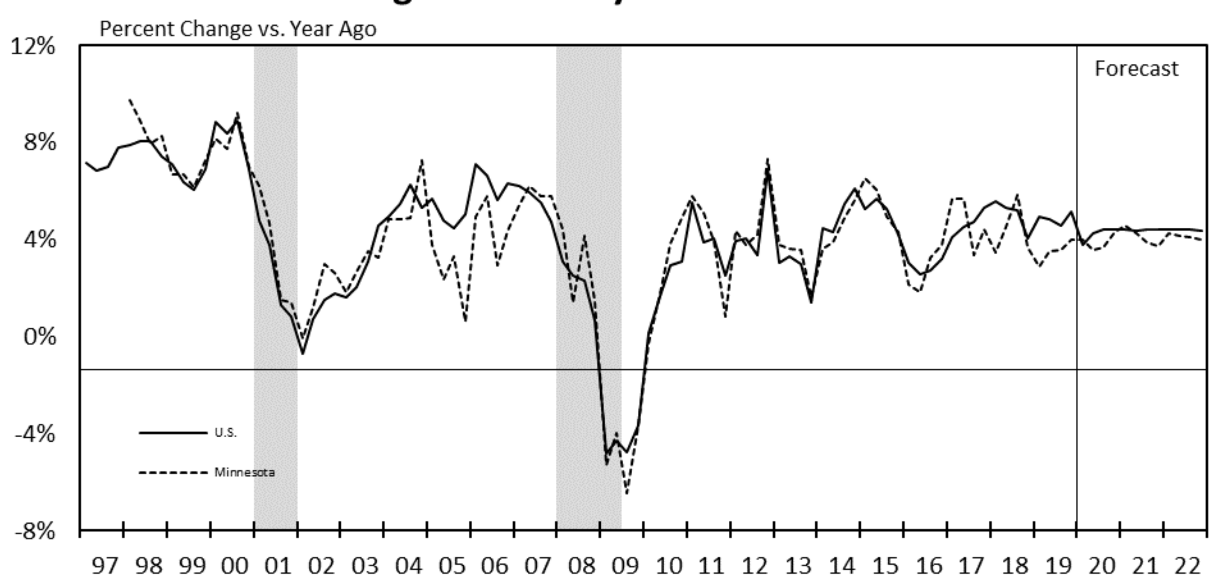
Annual growth in the Employment Cost Index (ECI) for wages rises from 3.0 percent in 2019 to 3.2 in 2020 and 3.3 in 2021, followed by 3.4 in 2022 and 2023. In each year of the forecast, growth in the wage portion of the ECI exceeds or matches the total private compensation growth rate.

Total Non-Farm Employment



Minnesota employment growth lagged national employment growth nearly a full percentage point in 2018, and MMB expects the state's employment growth will lag the nation's by more than a percentage point in 2019. Both U.S. and Minnesota employment are 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



In 2019, Minnesota wages and salaries are estimated to have grown 3.5 percent, compared to 4.9 percent nationally. We expect Minnesota wages and salaries to grow slightly slower than U.S. wages through the remainder of the forecast period.

Minnesota Economic Forecast Summary

Forecast 2016 to 2023 - Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Current Dollar Income (Billions of Dollars)								
Personal Income	293.894	305.795	322.728	336.720	349.285	363.788	378.798	392.825
%Chg	2.5	4.0	5.5	4.3	3.7	4.2	4.1	3.7
Wage & Salary Disbursements	158.072	165.634	172.887	178.944	185.943	193.598	201.565	209.025
%Chg	2.8	4.8	4.4	3.5	3.9	4.1	4.1	3.7
Non-Wage Personal Income	135.822	140.161	149.840	157.776	163.340	170.190	177.233	183.800
%Chg	2.1	3.2	6.9	5.3	3.5	4.2	4.1	3.7
Supplements to Wages & Salaries	35.583	35.347	37.158	38.329	39.299	40.751	42.362	43.887
%Chg	6.9	-0.7	5.1	3.2	2.5	3.7	4.0	3.6
Dividends, Interest, & Rent Income	58.299	61.651	66.926	68.630	71.293	73.784	76.757	80.449
%Chg	3.9	5.7	8.6	2.5	3.9	3.5	4.0	4.8
Farm Proprietors Income	0.592	1.176	1.139	2.624	2.968	4.190	5.197	4.927
%Chg	-76.4	98.6	-3.2	130.4	13.1	41.2	24.0	-5.2
Non-Farm Proprietors Income	20.952	21.088	21.933	22.883	23.444	23.519	23.344	23.091
%Chg	-1.9	0.6	4.0	4.3	2.5	0.3	-0.7	-1.1
Personal Current Transfer Receipts	46.249	47.825	50.817	54.364	56.281	58.954	61.707	64.644
%Chg	3.5	3.4	6.3	7.0	3.5	4.7	4.7	4.8
Less: Contrib. for Gov. Social Ins.	24.640	25.671	26.830	27.766	28.647	29.710	30.839	31.898
%Chg	2.9	4.2	4.5	3.5	3.2	3.7	3.8	3.4
Real Income (Billions of 2009 Dollars)								
Real Personal Income	282.335	288.673	298.412	307.016	313.355	320.783	327.413	332.460
%Chg	1.4	2.2	3.4	2.9	2.1	2.4	2.1	1.5
Real Wage & Salary Disbursements	151.853	156.360	159.864	163.160	166.818	170.710	174.225	176.903
%Chg	1.7	3.0	2.2	2.1	2.2	2.3	2.1	1.5
Employment (Thousands)								
Employment - Total Non-Farm Payrolls	2,905.1	2,945.0	2,970.1	2,984.7	3,006.4	3,024.2	3,030.0	3,025.6
%Chg	1.4	1.4	0.9	0.5	0.7	0.6	0.2	-0.1
Construction	117.6	121.2	123.2	128.3	128.9	129.3	129.9	130.7
%Chg	1.0	3.1	1.6	4.2	0.5	0.3	0.5	0.7
Manufacturing	319.6	320.2	323.8	325.7	321.8	319.2	318.7	318.9
%Chg	0.1	0.2	1.1	0.6	-1.2	-0.8	-0.2	0.1
Private Service-Providing	2,042.4	2,073.5	2,090.8	2,097.5	2,119.8	2,137.9	2,140.3	2,131.5
%Chg	1.9	1.5	0.8	0.3	1.1	0.9	0.1	-0.4
Government	419.3	423.6	425.7	426.5	429.5	431.4	434.7	438.0
%Chg	0.1	1.0	0.5	0.2	0.7	0.4	0.8	0.8
Minnesota Civilian Labor Force	3,033.5	3,056.9	3,069.4	3,106.4	3,137.4	3,146.0	3,152.3	3,156.8
Unemployment Rate (%)	3.9	3.4	2.9	3.2	2.9	2.7	2.8	3.2
Demographic Indicators (Millions)								
Total Population	5.523	5.566	5.606	5.640	5.677	5.714	5.751	5.789
%Chg	0.7	0.8	0.7	0.6	0.7	0.7	0.7	0.6
Total Population Age 16 & Over	4.376	4.415	4.448	4.476	4.509	4.542	4.575	4.608
%Chg	0.8	0.9	0.8	0.6	0.7	0.7	0.7	0.7
Total Population Age 65 & Over	0.830	0.859	0.889	0.918	0.949	0.980	1.011	1.043
%Chg	3.5	3.5	3.5	3.3	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
Housing Indicators (Thousands)								
Total Housing Permits (Authorized)	23.636	24.334	26.273	29.826	27.592	26.450	25.759	25.734
%Chg	16.3	3.0	8.0	13.5	-7.5	-4.1	-2.6	-0.1
Single-Family	13.711	14.785	14.133	14.489	14.509	13.474	12.844	13.218
%Chg	11.2	7.8	-4.4	2.5	0.1	-7.1	-4.7	2.9

Source: Minnesota Management & Budget (MMB) February 2020 Forecast

U.S. Economic Forecast Summary

Forecast 2016 to 2023, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Real National Income Accounts (Billions of 2009 Dollars)								
Real Gross Domestic Product (GDP)	17,688.9	18,108.1	18,638.2	19,072.5	19,481.5	19,875.2	20,208.7	20,502.8
%Chg	1.6	2.4	2.9	2.3	2.1	2.0	1.7	1.5
Real Consumption	12,247.5	12,566.9	12,944.5	13,279.6	13,630.2	13,953.0	14,248.7	14,559.6
%Chg	2.7	2.6	3.0	2.6	2.6	2.4	2.1	2.2
Real Nonresidential Fixed Investment	2,425.3	2,531.2	2,692.3	2,749.8	2,779.5	2,901.3	2,993.1	3,071.7
%Chg	0.7	4.4	6.4	2.1	1.1	4.4	3.2	2.6
Real Residential Investment	591.2	611.9	602.9	593.5	608.2	598.0	591.9	586.8
%Chg	6.5	3.5	-1.5	-1.5	2.5	-1.7	-1.0	-0.9
Real Personal Income	15,487.3	15,933.3	16,476.8	16,981.6	17,382.9	17,781.5	18,138.4	18,487.6
%Chg	1.5	2.9	3.4	3.1	2.4	2.3	2.0	1.9
Current Dollar National Income Accounts (Billions of Dollars)								
Gross Domestic Product (GDP)	18,715.0	19,519.4	20,580.2	21,429.0	22,270.0	23,212.4	24,169.7	25,118.3
%Chg	2.7	4.3	5.4	4.1	3.9	4.2	4.1	3.9
Personal Income	16,121.2	16,878.8	17,819.2	18,624.2	19,375.8	20,165.4	20,985.0	21,844.7
%Chg	2.6	4.7	5.6	4.5	4.0	4.1	4.1	4.1
Wage & Salary Disbursements	8,083.5	8,462.1	8,888.5	9,323.0	9,716.7	10,145.0	10,594.0	11,045.7
%Chg	2.9	4.7	5.0	4.9	4.2	4.4	4.4	4.3
Non-Wage Personal Income	8,037.7	8,416.7	8,930.7	9,301.2	9,659.1	10,020.4	10,391.0	10,799.0
%Chg	2.2	4.7	6.1	4.1	3.8	3.7	3.7	3.9
Price and Wage Indexes								
U.S. GDP Deflator (2005=1.0)	105.770	107.795	110.382	112.358	114.310	116.787	119.597	122.508
%Chg	1.0	1.9	2.4	1.8	1.7	2.2	2.4	2.4
U.S. Consumer Price Index (1982-84=1.0)	2.400	2.451	2.511	2.557	2.603	2.646	2.705	2.771
%Chg	1.3	2.1	2.4	1.8	1.8	1.7	2.2	2.5
Employment Cost Index (Dec 2005=1.0)	1.264	1.295	1.332	1.368	1.409	1.455	1.504	1.555
%Chg	2.1	2.5	2.9	2.7	3.0	3.2	3.4	3.4
Employment (Thousands)								
Employment - Total Non-Farm Payrolls	144.3	146.6	149.1	151.4	153.3	154.6	155.2	155.3
%Chg	1.8	1.6	1.7	1.6	1.3	0.8	0.4	0.0
Construction	6.7	7.0	7.3	7.5	7.6	7.7	7.7	7.8
%Chg	4.1	3.6	4.6	2.8	1.4	0.8	0.8	0.7
Manufacturing	12.4	12.4	12.7	12.8	12.8	12.6	12.5	12.5
%Chg	0.1	0.7	2.0	1.2	-0.6	-1.5	-0.5	-0.3
Private Service-Providing	102.4	104.2	105.9	107.7	109.4	110.7	111.2	111.0
%Chg	2.2	1.8	1.7	1.7	1.6	1.2	0.4	-0.1
Government	22.2	22.4	22.4	22.6	22.8	22.9	23.0	23.2
%Chg	0.9	0.5	0.4	0.5	1.2	0.2	0.7	0.7
U.S. Civilian Labor Force	159.2	160.3	162.1	163.5	165.4	166.6	167.8	168.7
Employment - Household Survey	151.4	153.3	155.8	157.5	159.8	161.0	161.6	161.6
Unemployment Rate (%)	4.9	4.4	3.9	3.7	3.4	3.4	3.7	4.2
Other Key Measures								
Non-Farm Productivity (index, 2005=1.0)	1.030	1.044	1.057	1.075	1.089	1.103	1.120	1.139
%Chg	0.3	1.3	1.3	1.7	1.3	1.3	1.5	1.8
Total Ind. Production (index, 2007=100)	102.072	104.441	108.562	109.449	109.478	111.009	112.339	113.236
%Chg	-2.0	2.3	3.9	0.8	0.0	1.4	1.2	0.8
Manhours in Private Non-Farm Estab.Billions of Hours	204.3	207.8	212.0	214.9	217.1	219.3	220.0	219.6
%Chg	1.6	1.7	2.0	1.4	1.0	1.0	0.3	-0.2
Average Weekly Hours	32.4	32.4	32.4	32.3	32.2	32.2	32.2	32.2
Manufacturing Workweek	41.9	41.9	42.1	41.6	41.4	41.5	41.4	41.2

Source: IHS Economics; February 2020 Baseline

Alternative Forecast Comparison

Calendar Years

	19Q3	19Q4	20Q1	20Q2	20Q3	20Q4	2018	2019	2020	2021
Real Gross Domestic Product (GDP), Percent Change, Seasonally Adjusted at Annual Rate										
Blue Chip Consensus (02-20)	2.1	2.1	1.6	1.9	1.9	2.0	2.9	2.3	1.9	2.0
IHS Economics Baseline (02-20)	2.1	2.1	2.0	2.2	2.4	2.4	2.9	2.3	2.1	2.0
Moody's Analytics (02-20)	2.1	2.1	1.2	1.8	1.8	1.4	2.9	2.3	1.7	2.0
S&P Economic Forecast (12-19)	1.9	1.6	2.2	1.9	1.8	**	2.9	2.3	1.9	1.8
Wells Fargo (02-20)	2.1	2.1	1.5	2.4	2.4	2.3	2.9	2.3	2.0	2.3
CBO Outlook (01-20)	2.1	2.3	2.0	2.5	2.2	2.2	2.9	2.3	2.2	1.9
Consumer Price Index (CPI), Percent Change, Seasonally Adjusted at Annual Rate (except where noted)										
Blue Chip Consensus (02-20)	1.8	2.6	1.7	1.7	1.5	1.4	2.4	1.8	2.1	2.0
IHS Economics Baseline (02-20)	1.8	2.6	1.4	1.9	1.4	0.7	2.4	1.8	1.8	1.7
Moody's Analytics (02-20)	1.8	2.6	0.6	1.7	2.6	2.8	2.4	1.8	2.5	2.4
S&P Economic Forecast (12-19)*	1.8	1.6	2.0	1.8	1.8	**	2.1	2.2	2.0	2.0
Wells Fargo (02-20)*	1.8	2.0	2.3	2.0	2.1	2.0	2.4	1.8	2.1	2.1
CBO Outlook (01-20)	1.8	2.8	2.6	1.8	2.6	2.5	2.4	1.8	2.4	2.5

* Year-over-Year Percent Change

**Not Available

IHS Economics Baseline Forecast Comparison

Calendar Years

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

Source: IHS Economics

Forecast Comparison: Minnesota & U.S.

Forecast 2016 to 2021, Calendar Years

	2016	2017	2018	2019	2020	2021	2022	2023
Personal Income (Billions of Current Dollars)								
Minnesota								
February 2020	293.9	305.8	322.7	336.7	349.3	363.8	378.8	392.8
%Chg	2.5	4.0	5.5	4.3	3.7	4.2	4.1	3.7
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
U.S.								
February 2020	16,121	16,879	17,819	18,624	19,376	20,165	20,985	21,845
%Chg	2.6	4.7	5.6	4.5	4.0	4.1	4.1	4.1
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
Wage and Salary Disbursements (Billions of Current Dollars)								
Minnesota								
February 2020	158.1	165.6	172.9	178.9	185.9	193.6	201.6	209.0
%Chg	2.8	4.8	4.4	3.5	3.9	4.1	4.1	3.7
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
U.S.								
February 2020	8,083	8,462	8,888	9,323	9,717	10,145	10,594	11,046
%Chg	2.9	4.7	5.0	4.9	4.2	4.4	4.4	4.3
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
Total Non-Farm Payroll Employment (Thousands)								
Minnesota								
February 2020	2,905	2,945	2,970	2,985	3,006	3,024	3,030	3,026
%Chg	1.4	1.4	0.9	0.5	0.7	0.6	0.2	-0.1
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
U.S.								
February 2020	144,348	146,611	149,064	151,404	153,334	154,570	155,224	155,252
%Chg	1.8	1.6	1.7	1.6	1.3	0.8	0.4	0.0
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
Average Annual Non-Farm Wage (Current Dollars)								
Minnesota								
February 2020	54,412	56,242	58,209	59,955	61,849	64,017	66,524	69,087
%Chg	1.3	3.4	3.5	3.0	3.2	3.5	3.9	3.9
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
U.S.								
February 2020	56,000	57,718	59,629	61,577	63,369	65,634	68,250	71,147
%Chg	1.1	3.1	3.3	3.3	2.9	3.6	4.0	4.2
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

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
Individual Income Tax (Calendar Year)								
Minnesota Non-Farm Tax Base								
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
February 2020	237.324	248.372	261.746	270.458	280.678	290.903	301.6675	312.565
%Chg	2.6	4.7	5.4	3.3	3.8	3.6	3.7	3.6
Minnesota Wage and Salary Disbursements								
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
February 2020	158.072	165.634	172.887	178.944	185.943	193.598	201.565	209.025
%Chg	2.8	4.8	4.4	3.5	3.9	4.1	4.1	3.7
Minnesota Dividends, Interest, & Rental Income								
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
February 2020	58.299	61.651	66.926	68.630	71.293	73.784	76.757	80.449
%Chg	3.9	5.7	8.6	2.5	3.9	3.5	4.0	4.8
Minnesota Non-Farm Proprietors' Income								
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
February 2020	20.952	21.088	21.933	22.883	23.444	23.519	23.344	23.091
%Chg	-1.9	0.6	4.0	4.3	2.5	0.3	-0.7	-1.1

Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2016	2017	2018	2019	2020	2021	2022	2023
General Sales Tax (Fiscal Year)								
Minnesota Synthetic Sales Tax Base								
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	83.155	85.978	88.853	94.014	98.781	102.337	105.558	108.805
%Chg	-1.3	3.4	3.3	5.8	5.1	3.6	3.1	3.1
February 2020	83.242	86.073	88.944	94.015	97.387	100.652	104.004	107.143
%Chg	-1.3	3.4	3.3	5.7	3.6	3.4	3.3	3.0
**Historical data revised as a result of comprehensive GDP account revisions*								
Minnesota's Proxy Share of U.S. Consumer Durable Spending (Excluding Autos)								
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	15.271	15.944	16.788	17.315	18.516	19.080	19.455	19.839
%Chg	4.6	4.4	5.3	3.1	6.9	3.0	2.0	2.0
February 2020	15.271	15.944	16.788	17.311	18.115	18.548	18.919	19.298
%Chg	4.6	4.4	5.3	3.1	4.6	2.4	2.0	2.0
Minnesota's Proxy Share of U.S. Capital Equipment Spending								
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	11.650	11.934	12.959	13.419	13.437	13.815	14.075	14.276
%Chg	-24.2	2.4	8.6	3.5	0.1	2.8	1.9	1.4
February 2020	11.650	11.934	12.959	13.417	13.197	13.609	14.012	14.339
%Chg	-24.2	2.4	8.6	3.5	-1.6	3.1	3.0	2.3
Minnesota's Proxy Share of U.S. Construction Spending								
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	7.848	8.183	8.453	8.814	8.908	9.154	9.448	9.804
%Chg	-1.3	3.4	3.3	5.8	5.1	3.6	3.1	3.1
February 2020	7.934	8.278	8.554	8.837	9.014	9.160	9.357	9.665
%Chg	1.6	4.3	3.3	3.3	2.0	1.6	2.2	3.3

Factors Affecting Tax Revenue (Continued)

Billions of Current Dollars

	2016	2017	2018	2019	2020	2021	2022	2023
Corporate Franchise Tax (Calendar Year)								
U.S. Corporate Profits (w/ IVA and capital consumption adjustment, less profits from Federal Reserve)								
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
February 2020	1,920.4	1,976.5	2,062.6	2,000.6	2,025.5	2,124.3	2,222.896	2,335.334
%Chg	0.7	2.9	4.4	-3.0	1.2	4.9	4.6	5.1
Deed & Mortgage Tax (Fiscal Year)								
U.S. New and Existing Home Sales (Current $ Value)								
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
February 2020	1,462.5	1,598.8	1,667.5	1,644.1	1,806.3	1,890.5	1,907.6	1,927.7
%Chg	9.2	9.3	4.3	-1.4	9.9	4.7	0.9	1.1

Current Fiscal Year-to-Date

November 2019 Forecast vs Actual Revenue Comparison
Fiscal Year-to-Date 2020; July 2019 - January 2020
($ IN THOUSANDS)

	FORECAST REVENUES	ACTUAL REVENUES	VARIANCE ACT-FCST
Individual Income Tax			
Withholding	5,602,660	5,636,250	33,589
Declarations	1,352,900	1,209,411	(143,489)
Miscellaneous	431,503	452,147	20,644
Gross	7,387,063	7,297,807	(89,257)
Refund	220,444	264,459	44,015
Net	7,166,619	7,033,347	(133,272)
Corporate Franchise Tax			
Declarations	825,227	860,017	34,790
Miscellaneous	144,928	168,911	23,983
Gross	970,154	1,028,928	58,774
Refund	150,002	155,927	5,925
Net	820,152	873,001	52,849
General Sales and Use Tax			
Gross	3,502,078	3,508,451	6,373
Mpls. sales tax transferred to MSFA	1,291	1,432	140
Sales Tax Gross	3,503,369	3,509,882	6,513
Refunds (including Indian refunds)	88,438	81,887	(6,551)
Net	3,414,932	3,427,996	13,064
Other Revenues:			
Net Estate	96,541	90,761	(5,779)
Net Liquor/Wine/Beer	50,820	50,187	(633)
Net Cigarette/Tobacco	346,759	322,359	(24,401)
Deed and Mortgage	170,996	167,681	(3,315)
Net Insurance Premiums Taxes	189,961	194,546	4,585
Net Lawful Gambling	46,823	52,453	5,631
Health Care Surcharge	122,648	114,462	(8,186)
Other Taxes	5	232	227
Statewide Property Tax	371,596	373,187	1,592
DHS SOS Collections	44,365	50,860	6,495
Investment Income	48,754	48,837	82
Tobacco Settlement	147,900	144,469	(3,431)
Dept. Earnings & MSOP Recov.	121,987	126,710	4,723
Fines and Surcharges	37,771	36,101	(1,670)
Lottery Revenues	24,859	26,265	1,406
Revenues yet to be allocated	6,600	(53)	(6,653)
Residual Revenues	59,924	81,727	21,803
Other Subtotal	1,888,311	1,880,786	(7,525)
Other Refunds	2,438	3,207	769
Other Net	1,885,873	1,877,579	(8,294)
Total Gross	**13,748,897**	**13,717,403**	**(31,495)**
Total Refunds	**461,322**	**505,480**	**44,158**
Total Net	**13,287,576**	**13,211,923**	**(75,653)**

FY 2020-21 General Fund Budget

February 2020 Forecast
($ in thousands)

	Feb Fcst FY 2020	Feb Fcst FY 2021	Biennial Total FY 2020-21
Actual & Estimated Resources			
Balance Forward From Prior Year	3,971,359	3,782,376	3,971,359
Current Resources:			
Tax Revenues	22,770,622	23,898,723	46,669,345
Non-Tax Revenues	787,262	776,134	1,563,396
Subtotal - Non-Dedicated Revenue	23,557,884	24,674,857	48,232,741
Transfers In	155,936	300,050	455,986
Prior Year Adjustments	26,660	36,985	63,645
Subtotal - Other Revenue	182,596	337,035	519,631
Subtotal-Current Resources	23,740,480	25,011,892	48,752,372
Total Resources Available	**27,711,839**	**28,794,268**	**52,723,731**
Actual & Estimated Spending			
E-12 Education	9,854,258	10,144,623	19,998,881
Higher Education	1,698,853	1,707,299	3,406,152
Property Tax Aids & Credits	1,861,901	2,010,277	3,872,178
Health & Human Services	7,260,120	7,421,916	14,682,036
Public Safety & Judiciary	1,254,418	1,259,524	2,513,942
Transportation	210,447	138,190	348,637
Environment	174,898	167,282	342,180
Agriculture & Housing	127,583	120,126	247,709
Jobs, Economic Development & Commerce	201,867	170,397	372,264
State Government & Veterans	620,003	586,638	1,206,641
Debt Service	540,081	589,970	1,130,051
Capital Projects & Grants	130,034	141,870	271,904
Estimated Cancellations	-5,000	-15,000	-20,000
Total Expenditures & Transfers	**23,929,463**	**24,443,112**	**48,372,575**
Balance Before Reserves	**3,782,376**	**4,351,156**	**4,351,156**
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	2,358,698	2,358,698	2,358,698
Stadium Reserve	78,228	129,714	129,714
Budgetary Balance	**995,450**	**1,512,744**	**1,512,744**

FY 2020-21 General Fund Budget

February 2020 Forecast vs November 2019 Forecast
($ in thousands)

	Nov Fcst FY 2020-21	Feb Fcst FY 2020-21	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,971,359	3,971,359	0
Current Resources:			
Tax Revenues	46,580,191	46,669,345	89,154
Non-Tax Revenues	1,556,502	1,563,396	6,894
Subtotal - Non-Dedicated Revenue	48,136,693	48,232,741	96,048
Transfers In	455,986	455,986	0
Prior Year Adjustments	63,579	63,645	66
Subtotal - Other Revenue	519,565	519,631	66
Subtotal-Current Resources	48,656,258	48,752,372	96,114
Total Resources Available	**52,627,617**	**52,723,731**	**96,114**
Actual & Estimated Spending			
E-12 Education	20,098,373	19,998,881	-99,492
Higher Education	3,406,152	3,406,152	0
Property Tax Aids & Credits	3,864,705	3,872,178	7,473
Health & Human Services	14,676,802	14,682,036	5,234
Public Safety & Judiciary	2,513,942	2,513,942	0
Transportation	348,637	348,637	0
Environment	342,520	342,180	-340
Agriculture & Housing	247,709	247,709	0
Jobs, Economic Development & Commerce	372,168	372,264	96
State Government & Veterans	1,208,165	1,206,641	-1,524
Debt Service	1,131,840	1,130,051	-1,789
Capital Projects & Grants	272,319	271,904	-415
Estimated Cancellations	-20,000	-20,000	0
Total Expenditures & Transfers	**48,463,332**	**48,372,575**	**-90,757**
Balance Before Reserves	**4,164,285**	**4,351,156**	**186,871**
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,358,698	2,358,698	0
Stadium Reserve	123,808	129,714	5,906
Budgetary Balance	**1,331,779**	**1,512,744**	**180,965**

Biennial Comparison

February 2020 Forecast
($ in thousands)

	Actual FY 2018-19	Feb Fcst FY 2020-21	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,971,359	638,097
Current Resources:			
Tax Revenues	43,847,316	46,669,345	2,822,029
Non-Tax Revenues	1,692,791	1,563,396	-129,395
Subtotal - Non-Dedicated Revenue	45,540,107	48,232,741	2,692,634
Dedicated Revenue	1,996	0	-1,996
Transfers In	333,079	455,986	122,907
Prior Year Adjustments	164,293	63,645	-100,648
Subtotal - Other Revenue	499,368	519,631	20,263
Subtotal-Current Resources	46,039,475	48,752,372	2,712,897
Total Resources Available	**49,372,737**	**52,723,731**	**3,350,994**
Actual & Estimated Spending			
E-12 Education	18,820,859	19,998,881	1,178,022
Higher Education	3,293,649	3,406,152	112,503
Property Tax Aids & Credits	3,650,488	3,872,178	221,690
Health & Human Services	13,298,218	14,682,036	1,383,818
Public Safety & Judiciary	2,356,579	2,513,942	157,363
Transportation	362,560	348,637	-13,923
Environment	353,458	342,180	-11,278
Agriculture & Housing	236,742	247,709	10,967
Jobs, Economic Development & Commerce	425,357	372,264	-53,093
State Government & Veterans	1,196,395	1,206,641	10,246
Debt Service	1,112,908	1,130,051	17,143
Capital Projects & Grants	294,118	271,904	-22,214
Other	47	0	-47
Estimated Cancellations	0	-20,000	-20,000
Total Expenditures & Transfers	**45,401,378**	**48,372,575**	**2,971,197**
Balance Before Reserves	**3,971,359**	**4,351,156**	**379,797**
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,074,733	2,358,698	283,965
Stadium Reserve	55,075	129,714	74,639
Appropriations Carried Forward	70,978	0	-70,978
Budgetary Balance	**1,420,573**	**1,512,744**	**92,171**

FY 2022-23 General Fund Budget

February 2020 Forecast
($ in thousands)

	Feb Fcst FY 2022	Feb Fcst FY 2023	Biennial Total FY 2022-23
Actual & Estimated Resources			
Balance Forward From Prior Year	4,351,156	4,415,452	4,351,156
Current Resources:			
Tax Revenues	24,401,403	25,169,867	49,571,270
Non-Tax Revenues	779,026	770,999	1,550,025
Subtotal - Non-Dedicated Revenue	25,180,429	25,940,866	51,121,295
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	25,370,361	26,130,880	51,501,241
Total Resources Available	**29,721,517**	**30,546,332**	**55,852,397**
Actual & Estimated Spending			
E-12 Education	10,295,510	10,449,204	20,744,714
Higher Education	1,703,064	1,703,064	3,406,128
Property Tax Aids & Credits	2,070,142	2,100,091	4,170,233
Health & Human Services	8,067,597	8,318,085	16,385,682
Public Safety & Judiciary	1,256,962	1,259,472	2,516,434
Transportation	123,718	123,278	246,996
Environment	166,177	166,099	332,276
Agriculture & Housing	121,421	121,421	242,842
Jobs, Economic Development & Commerce	162,871	166,117	328,988
State Government & Veterans	584,987	587,250	1,172,237
Debt Service	610,195	594,771	1,204,966
Capital Projects & Grants	148,421	155,689	304,110
Estimated Cancellations	-5,000	-15,000	-20,000
Total Expenditures & Transfers	**25,306,065**	**25,729,541**	**51,035,606**
Balance Before Reserves	**4,415,452**	**4,816,791**	**4,816,791**
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	1,867,329	1,867,329	1,867,329
Stadium Reserve	191,509	262,708	262,708
Budgetary Balance	**2,006,614**	**2,336,754**	**2,336,754**

Biennial Comparison

February 2020 Forecast

($ in thousands)

	Feb Fcst FY 2020-21	Feb Fcst FY 2022-23	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	3,971,359	4,351,156	379,797
Current Resources:			
Tax Revenues	46,669,345	49,571,270	2,901,925
Non-Tax Revenues	1,563,396	1,550,025	-13,371
Subtotal - Non-Dedicated Revenue	48,232,741	51,121,295	2,888,554
Transfers In	455,986	305,460	-150,526
Prior Year Adjustments	63,645	74,486	10,841
Subtotal - Other Revenue	519,631	379,946	-139,685
Subtotal-Current Resources	48,752,372	51,501,241	2,748,869
Total Resources Available	**52,723,731**	**55,852,397**	**3,128,666**
Actual & Estimated Spending			
E-12 Education	19,998,881	20,744,714	745,833
Higher Education	3,406,152	3,406,128	-24
Property Tax Aids & Credits	3,872,178	4,170,233	298,055
Health & Human Services	14,682,036	16,385,682	1,703,646
Public Safety & Judiciary	2,513,942	2,516,434	2,492
Transportation	348,637	246,996	-101,641
Environment	342,180	332,276	-9,904
Agriculture & Housing	247,709	242,842	-4,867
Jobs, Economic Development & Commerce	372,264	328,988	-43,276
State Government & Veterans	1,206,641	1,172,237	-34,404
Debt Service	1,130,051	1,204,966	74,915
Capital Projects & Grants	271,904	304,110	32,206
Estimated Cancellations	-20,000	-20,000	0
Total Expenditures & Transfers	**48,372,575**	**51,035,606**	**2,663,031**
Balance Before Reserves	**4,351,156**	**4,816,791**	**465,635**
Cash Flow Account	350,000	350,000	0
Budget Reserve	2,358,698	1,867,329	-491,369
Stadium Reserve	129,714	262,708	132,994
Budgetary Balance	**1,512,744**	**2,336,754**	**824,010**

FY 2022-23 General Fund Budget

February 2020 Forecast vs November 2019 Forecast
($ in thousands)

	Nov Fcst FY 2022-23	Feb Fcst FY 2022-23	$ Change
Actual & Estimated Resources			
Balance Forward From Prior Year	4,164,285	4,351,156	186,871
Current Resources:			
Tax Revenues	49,550,730	49,571,270	20,540
Non-Tax Revenues	1,546,198	1,550,025	3,827
Subtotal - Non-Dedicated Revenue	51,096,928	51,121,295	24,367
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	51,476,874	51,501,241	24,367
Total Resources Available	**55,641,159**	**55,852,397**	**211,238**
Actual & Estimated Spending			
E-12 Education	20,979,022	20,744,714	-234,308
Higher Education	3,406,128	3,406,128	0
Property Tax Aids & Credits	4,158,387	4,170,233	11,846
Health & Human Services	16,382,329	16,385,682	3,353
Public Safety & Judiciary	2,516,434	2,516,434	0
Transportation	246,996	246,996	0
Environment	332,454	332,276	-178
Agriculture & Housing	242,842	242,842	0
Jobs, Economic Development & Commerce	328,755	328,988	233
State Government & Veterans	1,172,731	1,172,237	-494
Debt Service	1,206,332	1,204,966	-1,366
Capital Projects & Grants	304,786	304,110	-676
Estimated Cancellations	-20,000	-20,000	0
Total Expenditures & Transfers	**51,257,196**	**51,035,606**	**-221,590**
Balance Before Reserves	**4,383,963**	**4,816,791**	**432,828**
Cash Flow Account	350,000	350,000	0
Budget Reserve	1,867,329	1,867,329	0
Stadium Reserve	247,596	262,708	15,112
Budgetary Balance	**1,919,038**	**2,336,754**	**417,716**

FY 2018-23 Planning Horizon

February 2020 Forecast
($ in thousands)

	Actual FY 2018-19	Feb Fcst FY 2020-21	Feb Fcst FY 2022-23
Actual & Estimated Resources			
Balance Forward From Prior Year	3,333,262	3,971,359	4,351,156
Current Resources:			
Tax Revenues	43,847,316	46,669,345	49,571,270
Non-Tax Revenues	1,692,791	1,563,396	1,550,025
Subtotal - Non-Dedicated Revenue	45,540,107	48,232,741	51,121,295
Dedicated Revenue	1,996	0	0
Transfers In	333,079	455,986	305,460
Prior Year Adjustments	164,293	63,645	74,486
Subtotal - Other Revenue	499,368	519,631	379,946
Subtotal-Current Resources	46,039,475	48,752,372	51,501,241
Total Resources Available	**49,372,737**	**52,723,731**	**55,852,397**
Actual & Estimated Spending			
E-12 Education	18,820,859	19,998,881	20,744,714
Higher Education	3,293,649	3,406,152	3,406,128
Property Tax Aids & Credits	3,650,488	3,872,178	4,170,233
Health & Human Services	13,298,218	14,682,036	16,385,682
Public Safety & Judiciary	2,356,579	2,513,942	2,516,434
Transportation	362,560	348,637	246,996
Environment	353,458	342,180	332,276
Agriculture & Housing	236,742	247,709	242,842
Jobs, Economic Development & Commerce	425,357	372,264	328,988
State Government & Veterans	1,196,395	1,206,641	1,172,237
Debt Service	1,112,908	1,130,051	1,204,966
Capital Projects & Grants	294,118	271,904	304,110
Other	47	0	0
Estimated Cancellations	0	-20,000	-20,000
Total Expenditures & Transfers	**45,401,378**	**48,372,575**	**51,035,606**
Balance Before Reserves	**3,971,359**	**4,351,156**	**4,816,791**
Cash Flow Account	350,000	350,000	350,000
Budget Reserve	2,074,733	2,358,698	1,867,329
Stadium Reserve	55,075	129,714	262,708
Appropriations Carried Forward	70,978	0	0
Budgetary Balance	**1,420,573**	**1,512,744**	**2,336,754**

Historical and Projected Revenue Growth

February 2020 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
Individual Income Tax	$10,739	$10,931	$11,784	$12,405	$12,493	$13,495	$13,689	$14,171	
$ change	335	192	852	622	87	1,003	193	482	
% change	**3.2%**	**1.8%**	**7.8%**	**5.3%**	**0.7%**	**8.0%**	**1.4%**	**3.5%**	**4.0%**
Sales Tax	$5,233	$5,405	$5,453	$5,762	$5,928	$6,116	$6,314	$6,510	
$ change	101	172	48	309	166	188	198	196	
% change	**2.0%**	**3.3%**	**0.9%**	**5.7%**	**2.9%**	**3.2%**	**3.2%**	**3.1%**	**3.2%**
Corporate Tax	$1,473	$1,205	$1,315	$1,660	$1,589	$1,525	$1,602	$1,638	
$ change	18	(268)	109	345	(71)	(64)	77	36	
% change	**1.2%**	**-18.2%**	**9.1%**	**26.3%**	**-4.3%**	**-4.1%**	**5.1%**	**2.3%**	**1.5%**
Statewide Property Tax	$854	$858	$811	$811	$788	$774	$768	$768	
$ change	16	4	(47)	(1)	(23)	(13)	(7)	0	
% change	**1.9%**	**0.5%**	**-5.5%**	**-0.1%**	**-2.9%**	**-1.7%**	**-0.8%**	**0.0%**	**-1.5%**
Other Tax Revenue	$1,812	$1,833	$1,885	$1,961	$1,973	$1,988	$2,029	$2,083	
$ change	53	21	53	76	12	15	41	54	
% change	**3.0%**	**1.1%**	**2.9%**	**4.0%**	**0.6%**	**0.8%**	**2.1%**	**2.7%**	**2.0%**
Total Tax Revenue	$20,110	$20,233	$21,248	$22,600	$22,771	$23,899	$24,401	$25,170	
$ change	524	122	1,015	1,352	171	1,128	503	768	
% change	**2.7%**	**0.6%**	**5.0%**	**6.4%**	**0.8%**	**5.0%**	**2.1%**	**3.1%**	**3.3%**
Non-Tax Revenues	$779	$819	$814	$879	$787	$776	$779	$771	
$ change	27	40	(5)	65	(92)	(11)	3	(8)	
% change	**3.5%**	**5.1%**	**-0.6%**	**8.0%**	**-10.4%**	**-1.4%**	**0.4%**	**-1.0%**	**-0.2%**
Transfers, All Other	$262	$282	$235	$264	$183	$337	$190	$190	
$ change	91	20	(47)	29	(82)	154	(147)	0	
% change	**53.6%**	**7.8%**	**-16.6%**	**12.3%**	**-30.9%**	**84.6%**	**-43.6%**	**0.0%**	**-4.5%**
Total Revenue	$21,151	$21,334	$22,297	$23,743	$23,740	$25,012	$25,370	$26,131	
$ change	642	182	963	1,446	(2)	1,271	358	761	
% change	**3.1%**	**0.9%**	**4.5%**	**6.5%**	**0.0%**	**5.4%**	**1.4%**	**3.0%**	**3.1%**

Historical and Projected Spending Growth

February 2020 Forecast - General Fund
($ in millions)

	Actual FY 2016	Actual FY 2017	Actual FY 2018	Actual FY 2019	Fcst FY 2020	Fcst FY 2021	Plng FY 2022	Plng FY 2023	Average Annual
E-12 Education	$8,507	$8,901	$9,233	$9,588	$9,854	$10,145	$10,296	$10,449	
$ change	319	394	332	355	266	290	151	154	
% change	**3.9%**	**4.6%**	**3.7%**	**3.8%**	**2.8%**	**2.9%**	**1.5%**	**1.5%**	**3.0%**
Higher Education	$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	**5.3%**	**1.7%**	**6.1%**	**-0.5%**	**3.4%**	**0.5%**	**-0.2%**	**0.0%**	**1.6%**
Prop. Tax Aids & Credits	$1,646	$1,675	$1,724	$1,927	$1,862	$2,010	$2,070	$2,100	
$ change	33	29	49	203	(65)	148	60	30	
% change	**2.1%**	**1.8%**	**2.9%**	**11.8%**	**-3.4%**	**8.0%**	**3.0%**	**1.4%**	**3.5%**
Health & Human Services	$5,601	$5,944	$6,622	$6,677	$7,260	$7,422	$8,068	$8,318	
$ change	(590)	343	678	55	584	162	646	250	
% change	**-9.5%**	**6.1%**	**11.4%**	**0.8%**	**8.7%**	**2.2%**	**8.7%**	**3.1%**	**5.8%**
Public Safety & Judiciary	$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	**0.6%**	**8.9%**	**-0.3%**	**8.5%**	**2.3%**	**0.4%**	**-0.2%**	**0.2%**	**2.8%**
Debt Service	$609	$529	$563	$550	$540	$590	$610	$595	
$ change	(14)	(80)	34	(13)	(10)	50	20	(15)	
% change	**-2.3%**	**-13.1%**	**6.4%**	**-2.4%**	**-1.8%**	**9.2%**	**3.4%**	**-2.5%**	**-0.3%**
All Other	$1,218	$1,300	$1,424	$1,444	$1,460	$1,310	$1,303	$1,305	
$ change	28	82	124	20	15	(150)	(7)	5	
% change	**2.4%**	**6.8%**	**9.5%**	**1.4%**	**1.1%**	**-10.3%**	**-0.5%**	**0.2%**	**1.0%**
Total Spending	$20,152	$21,039	$22,347	$23,054	$23,929	$24,443	$25,306	$25,730	
$ change	(141)	887	1,308	707	875	514	863	423	
% change	**-0.7%**	**4.4%**	**6.2%**	**3.2%**	**3.8%**	**2.1%**	**3.5%**	**1.7%**	**3.6%**

FY 2013-2023 Stadium Reserve Balance

February 2020 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
Actual & Estimated Resources											
Beginning Balance	0	0	39,780	32,634	22,535	26,821	44,171	55,075	78,228	129,714	191,509
Prior Year Adjustments	0	0	0	0	0	0	0	42	0	0	0
Current Resources:											
Gambling Revenue	89	6,360	12,107	19,389	26,989	38,675	52,835	65,250	76,850	86,450	95,950
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	17,183	18,224	18,513
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
Current Resources	**85**	**50,260**	**23,007**	**27,555**	**45,406**	**58,675**	**52,835**	**65,250**	**94,033**	**104,674**	**114,463**
Actual & Estimated Spending											
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	8,261	8,553	8,791	9,080
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	1,022	1,138	1,234	1,329
Total Uses	**370**	**10,480**	**33,342**	**40,917**	**41,120**	**41,325**	**41,932**	**42,139**	**42,547**	**42,879**	**43,264**
Sources Minus Uses	**-285**	**39,780**	**-10,336**	**-13,362**	**4,286**	**17,350**	**10,903**	**23,111**	**51,486**	**61,795**	**71,199**
Expenses Covered by General Fund[1]	370	0	3,190	3,263	0	0	0	0	0	0	0
Use of the Reserve	0	0	[7,145]	[10,099]	0	0	0	0	0	0	0
Stadium Reserve Balance	**0**	**39,780**	**32,634**	**22,535**	**26,821**	**44,171**	**55,075**	**78,228**	**129,714**	**191,509**	**262,708**

[1]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.