State of Wisconsin Additional/Voluntary Filing #2021-02 Dated January 27, 2021

This Additional/Voluntary Filing does not concern an event described in Securities and Exchange Act Rule 15c2-12, as amended. The State of Wisconsin provides this information as it may be material to financial evaluation of one or more obligations of the State of Wisconsin.

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Information:	Financial/Operating Data Disclosures; Additional/Voluntary Disclosure; Budget			
	Attached is a report from the Legislative Fiscal dated January 26, 2021. This report contains Fund tax collection projections for the 2020-21 year and the 2021-23 biennium. In addition, the includes an estimated General Fund condition statement for the 2020-21 fiscal year.			

The State of Wisconsin is providing this Additional/Voluntary Filing with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access system. This Additional/Voluntary Filing is also available on the State of Wisconsin Capital Finance Office web site and State of Wisconsin investor relations web site at:

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The undersigned represents that he is the Capital Finance Director, State of Wisconsin Capital Finance Office, which is the office of the State of Wisconsin responsible for providing additional/voluntary filings, annual reports, and Event Filings pursuant to the State's Master Agreement on Continuing Disclosure (Amended and Restated March 1, 2019), and is authorized to distribute this information publicly.

/S/ DAVID R. ERDMAN

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State of Wisconsin

January 26, 2021

Senator Howard Marklein, Senate Chair Representative Mark Born, Assembly Chair Joint Committee on Finance State Capitol Madison, WI 53702

Dear Senator Marklein and Representative Born:

Annually, this office prepares general fund revenue and expenditure projections for the Legislature.

In odd-numbered years, our report includes estimated revenues and expenditures for the current fiscal year and tax collection projections for each year of the next biennium. This report presents the conclusions of our analysis.

Comparison with the Administration's November 20, 2020, Report

On November 20, 2020, the Departments of Administration and Revenue submitted a report to the Governor and Legislature that identified general fund revenue and expenditure projections for the 2020-21 fiscal year and the 2021-23 biennium. That report, required by statute, identifies the magnitude of state agency biennial budget requests and presents a projection of general fund tax collections.

Our analysis indicates that for the three-year period, aggregate general fund tax collections will be \$1,155.9 million higher than those of the November 20 report (\$437.4 million in 2020-21, \$265.6 million in 2021-22, and \$452.9 million in 2022-23).

Based upon the November 20 report, the administration's general fund condition statement for 2020-21 reflects a gross ending balance of \$1,221.9 million and a net balance (after consideration of the \$85.0 million required statutory balance) of \$1,136.9 million.

Our analysis indicates a gross balance of \$1,851.4 million and a net balance of \$1,766.4 million. This is \$629.5 million above that of the November 20 report. The 2020-21 general fund

TABLE 1

Estimated 2020-21 General Fund Condition Statement

2020-21

Revenues	2020-21
Opening Balance, July 1	\$1,172,354,000
Taxes	18,101,500,000
Departmental Revenues	
Tribal Gaming	0
Other	530,329,300
Total Available	\$19,804,183,300
Appropriations, Transfers, and Reserves	
Gross Appropriations	\$19,190,025,700
Biennial Appropriation Adjustment	-3,406,000
Sum Sufficient Reestimates	-257,517,500
Transfers to:	
Transportation Fund	44,095,000
Budget Stabilization Fund	231,756,000
Compensation Reserves	94,545,400
Less Lapses	-1,346,695,400
Net Appropriations	\$17,952,803,200
Balances	
Gross Balance	\$1,851,380,100
Less Required Statutory Balance	-85,000,000
Net Balance, June 30	\$1,766,380,100

The factors that make up the \$629.5 million difference are as follows. First, based on economic forecasts and tax collections to date, our estimated tax collections for 2020-21 are \$437.4 million higher than the projection of the November 20 report. In addition to the estimated increase in tax collections, there is a slight increase in departmental revenues (non-tax receipts deposited into the general fund) of \$1.4 million. Finally, net appropriations are projected to be \$190.7 million below those of the November 20 report. The additional general fund balance of \$629.5 million for 2020-21 is displayed as follows (\$437.4 million + \$1.4 million + \$190.7 million = \$629.5 million).

This reduction in net appropriations is primarily due to an increase in the amounts expected to lapse (revert) to the general fund at the end of the 2020-21 fiscal year, offset by a significant projected transfer to the budget stabilization fund.

The GPR appropriation for the medical assistance program is projected to end the 2019-21 biennium with a balance of \$685 million. This surplus, accumulated over both years of the biennium,

is primarily attributable to a provision of the federal Families First Coronavirus Response Act, which temporarily increased the state's federal matching rate by 6.2 percentage points, from 59.4% to 65.6%. Since this increase has the effect of reducing the state's share of MA benefit costs, the GPR funding budgeted for MA benefits for the 2019-21 biennium exceeds the amount needed for the program. The increased match rate first applied to expenditures occurring on January 1, 2020, and will remain in effect until the end of the calendar quarter during which the federal public health emergency declared in response to the COVID-19 pandemic is allowed to expire. The estimate above assumes that the enhanced matching rate will remain in effect through at least the end of the 2019-21 biennium.

Of the projected surplus, the Department of Administration has indicated that \$140 million is included in the general fund lapses already identified in the administration's required 2020-21 lapse plan. Consequently, of the estimated \$685 million MA program surplus, the remaining \$545 million will also lapse to the general fund. The November 20 report assumed a lapse of \$289 million from the MA benefits appropriation.

Pursuant to s. 16.518 of the statutes, if actual general fund tax collections in any year exceed amounts listed in the biennial budget act, one-half of the additional amount is transferred to the budget stabilization fund. The estimated 2020-21 tax collections of this report are \$463.5 million above the amount contained in 2019 Act 9 (the 2019-21 biennial budget). Thus, one-half of that amount (\$231.8 million) is projected to transfer to the budget stabilization fund. Under the 2020-21 tax collection estimates of the November 20 report, the transfer to the budget stabilization fund for 2020-21 was projected at \$13.1 million.

Table 2 displays the calculation of the projected 2021 transfer to the budget stabilization fund.

TABLE 2

2021 Estimated Transfer to the Budget Stabilization Fund (in Millions)

Estimated 2020-21 Tax Collections	\$18,101.5
2020-21 Amount Shown in 2019 Act 9	-17,638.0
Difference	\$463.5
Difference ÷ 2	231.8
Estimated 2020-21 Transfer to the	
Budget Stabilization Fund	\$231.8

Currently, the balance in the budget stabilization fund is \$762.1 million. With the estimated 2021 transfer shown above, the balance in the fund would increase by \$231.8 million to \$993.9 million.

General Fund Tax Revenues

The following sections present information related to general fund tax revenues for 2020-21 and the 2021-23 biennium. This includes a review of the U.S. economy in 2020, a summary of the national economic forecast for 2021 through 2023, and detailed general fund tax revenue estimates for the current fiscal year and the next biennium.

Review of the National Economy in 2020

This office prepared updated revenue estimates for the 2019-21 biennium in January, 2020, based on the January, 2020, IHS Markit forecast for the U.S. economy. The forecast predicted real gross domestic product (GDP) growth of 2.1% in 2020 and 2021. The moderate growth forecast was expected to be driven by consumer spending and nonresidential fixed investment, bolstered by strong labor markets, increased spending for hiring on the 2020 decennial census, increased automobile production following the end of a strike at the General Motors Company, and the expectation that Boeing 737 MAX shipments would resume in April of 2021.

The forecast was based on various key assumptions, which included that the Federal Reserve would maintain the federal funds rate until raising it to a range of 1.75% to 2.0% in June, 2021, and that federal discretionary spending would remain within expenditure limits set by federal appropriation acts in 2019.

However, the onset of the global COVID-19 pandemic substantially altered the economic outlook. The federal government declared a national emergency in March, and states across the country shut down certain businesses deemed nonessential and issued stay-at-home orders to slow the spread of the virus. As state and local governments mandated social distancing measures, the pandemic closed businesses, disrupted supply chains, and sharply contracted consumer demand. The longest economic expansion in U.S. history, 128 straight months of growth, came to a sudden end in March.

The COVID-19 pandemic caused a historic contraction in economic activity across all sectors of the economy. Real (inflation adjusted) GDP declined year-over-year by 9.0% in the second quarter, the largest quarterly decrease since the U.S. Bureau of Economic Analysis began keeping records in 1947. The stock market experienced significant declines in March. For example, the Dow Jones Industrial Average index fell by 13.7% in March and by 23.3% in the first quarter, including the three largest single-day point drops in the history of the index (7.8% on March 9, 10.0% on March 12, and 13.0% on March 16). The contraction was caused by sudden, massive declines in employment, consumer spending, and investment.

Unemployment insurance claims spiked to historically high levels, with initial claims setting an all-time high of 6.87 million in the week ending March 28, 2020. In the second quarter of 2020 compared to the first quarter, seasonally adjusted total U.S. nonfarm payrolls sharply fell by 18.2 million workers, and the unemployment rate increased from 3.8% to 13.0%. According to the Bureau of Labor Statistics' quarterly census of employment and wages, Wisconsin employment decreased by almost 350,000 jobs in April alone. The leisure and hospitality industry was particularly hard hit, losing more than 160,000 jobs. Initial unemployment claims in Wisconsin surged to more than 215,000 in the two weeks ending March 28, 2020, and April 4, 2020.

The pandemic significantly reduced consumer spending, as well as reshuffled consumption patterns, as consumers shunned large gatherings and services provided in person. Factories temporarily closed, employers laid off or furloughed their employees, and employees shifted to remote work rather than commuting to the office. Nominal growth, which is not adjusted for inflation, of U.S. personal consumption expenditures (PCE) declined year-over-year in the second quarter by 9.7% compared to the second quarter of 2019. Notable year-over-year declines included spending on recreational services (-50.0%) and food services and accommodations (-38.3%), which were greatly impacted by business closures and social distancing measures. Consumption at home increased in other areas, with purchases of food and beverages for off-premise consumption and information processing equipment increasing by 11.1% and 9.2%, respectively, compared to the second quarter of 2019.

Nominal nonresidential fixed investment declined by 8.5% year-over-year in the second quarter, with notable declines in investment in equipment (-15.0%) and structures (-10.1%). In particular, investment in mining and petroleum structures declined by 45.3%, the Brent crude oil spot price fell by 57.4% year-over-year in the second quarter, and both supply and demand factors pushed down oil prices. Crude oil prices declined almost 26% on March 9, after the Organization of Petroleum Exporting Countries (OPEC) and Russia failed to agree to production cuts. Subsequently, both Saudi Arabia and Russia announced further increases in production. The parties later agreed to reductions in production in April, after the pandemic had significantly curtailed demand. Nominal PCE declined in the second quarter for motor fuel, lubricants, and fluids (47.0%) and new motor vehicles (10.4%). According to the U.S. Energy Information Administration, the Brent spot price declined to an average of \$18 per barrel in April, the lowest price in inflation adjusted terms since February, 1999.

The shock of the COVID-19 pandemic caused the largest consumer price decline since 2008, with the consumer price index (CPI) decreasing 3.5% on an annualized basis in the second quarter. According to the U.S. Bureau of Labor Statistics, the one-month drop in CPI in April was particularly acute in services adversely affected by social distancing measures, such as airline fares falling 12.4% and lodging decreasing 7.1%. In the second quarter, CPI for energy fell at an annualized rate of 45%, both due to a sharp fall in demand caused by the pandemic and to a preexisting excess of supply.

The fiscal and monetary policy response to the pandemic and resulting economic contraction was massive. The Federal Reserve open market committee convened on March 15, 2020, to reduce the federal funds target rate to a range of 0.00 to 0.25%. It also accelerated purchases of treasury securities and agency mortgage-backed securities (quantitative easing), expanded foreign exchange swap lines with more than a dozen central banks, and expanded short-term repurchase operations. Congress enacted a series of stimulus and pandemic response legislation. On March 18, Congress passed the Families First Coronavirus Response Act, which provided \$105 billion for extended sick leave and family medical leave related to COVID-19. On March 27, President Trump signed the Coronavirus Aid, Relief, and Economic Security Act (CARES). As estimated by the Joint Committee on Taxation and IHS Markit, this Act included \$260 billion for enhanced unemployment

benefits, almost \$1.0 trillion for loans (including forgivable loans), loan guarantees, and other business supports, \$292 billion for stimulus rebates to individuals, \$180 billion for hospitals and healthcare, \$300 billion for reduced or delayed taxes, and \$150 billion for state and local governments. Also, Congress enacted the Paycheck Protection Program and Health Care Enhancement Act on April 24, which provided an additional \$370 billion for business loans and another \$100 billion for aid to healthcare providers and COVID-19 testing. In total, federal government outlays in 2020 increased by \$2,105.3 billion, or 47.3% compared to the prior year.

Due in part to the scale of the fiscal and monetary policy response and to the relaxation of business closures and social distancing mandates, the economy rebounded significantly in May and June, but not by enough to fully recover from the declines occurring in March and April. Annualized real GDP grew by 33.4% in the third quarter over the previous quarter, but when compared to the third quarter output of the prior year, GDP actually declined by 2.8%. U.S. total nonfarm payrolls rebounded by 7.1 million as laid off workers were recalled by their employers. However, even with this brisk growth, payrolls remained 6.9% lower when compared to the third quarter of 2019. Boosted partially by the temporary hiring of 238,000 workers for the 2020 census, the unemployment rate declined from 13.0% in the second quarter to 8.8% in the third quarter. Investment continued to remain below prior year levels by 1.9% in the third quarter, although investment in some sectors rebounded. While nonresidential fixed investment was 4.1% below prior year levels, residential fixed investment grew by 11.2% year-over-year, supported by a decrease in average 30-year fixed mortgage rates to 2.95% in the third quarter of 2020.

The COVID-19 pandemic had highly uneven impacts across industry sectors as consumers shifted their spending away from in-person services and travel towards goods and preparing food at home. Social distancing measures throughout 2020 continued to reduce the demand for, and availability of, in-person services, such as recreational services, accommodations, and food services (which declined by 32.6%, 56.0%, and 11.4%, respectively, year-over-year in the third quarter). Travel and entertainment were particularly disadvantaged by containment measures since restrictions on movement and group size are problematic for those industries. Production of durable goods, on the other hand, was not similarly impacted and recovered from an annualized decline of 57.5% in the second quarter to an annualized increase of 101.3% in the third quarter after the COVID-19 lockdowns were relaxed. Nominal PCE of durable goods increased by 12.9% year-over-year in the third quarter, with spending on new motor vehicles increasing by 6.9%.

Federal stimulus increased household income and savings, notwithstanding the severe economic disruption caused by the pandemic. Bolstered by stimulus rebates, enhanced unemployment benefits, business support programs, and other transfer payments, real disposable income grew by an unprecedented 12.2% year-over-year in the second quarter. Although real disposable income declined at an annualized rate of 16.3% in the third quarter, as the stimulus waned compared to the second quarter, real disposable income actually increased by 6.8% relative to the same period in the prior year and is estimated to have increased 6.0% year-over-year in 2020. The savings rate as a percentage of disposable income increased from an average of 7.6% during 2019 to 26.0% in the second quarter of 2020 and 16.0% in the third quarter. Households were also bolstered by the recovery in the stock markets, which recovered significantly from sharp losses earlier in the year. The S&P 500 stock index, for example, increased 12.3% year-over-year in the

third quarter. Thus, real household net worth in 2020 increased 9.9%, bolstered by growth in nonfinancial assets (7.1%) such as real estate, and equity holdings (19.5%).

The COVID-19 pandemic surged in the latter half of 2020, sapping the economic recovery as the year went on. According to the COVID-19 data tracker maintained by the Centers for Disease Control and Prevention, although new COVID-19 cases leveled off after May to less than 20,000 cases per day nationwide in early June, new cases began increasing again to more than 70,000 cases per day by late July. As COVID-19 cases increased, many states called-off plans to lessen containment measures and some re-imposed restrictions on schools and business activity. Daily COVID-19 cases leveled off around 40,000 new cases each day in September, but spiked much higher at the end of October. New cases reached more than 180,000 per day in November, rising even higher to almost 250,000 in some days in December. By the end of December, nearly 350,000 Americans had died of COVID-19 and the seven-day moving average of deaths per day exceeded 2,300 (growing to 416,000 total deaths, and a seven day average of more than 3,000 per day as of January 23, 2020).

Meanwhile, federal stimulus measures expired during the summer, such as the enhanced \$600 unemployment compensation benefit expiring in July and the paycheck protection program (PPP) ceasing operations in August. As a result, the recovery began to stall short of pre-pandemic highs and the COVID-19 pandemic worsened across the country. Real GDP decreased by 2.7% in the fourth quarter of 2020 compared to the same period in 2019. When considering the entire fourth quarter, the unemployment rate improved to 6.8% as total nonfarm payrolls increased by 1.8 million. However, when compared to the same period in 2019, total nonfarm payrolls are estimated to have declined 6.9%. Personal income declined by 10.2% in the third quarter and 7.2% in the fourth quarter on an annualized basis as the effects of the stimulus faded. Nonetheless, personal incomes remained elevated in the fourth quarter when compared to the prior year (4.2%) due to the continuing effects of federal stimulus measures, such as extended availability of unemployment insurance.

As COVID-19 cases surged significantly in December, total nonfarm payrolls are estimated to have decreased by approximately 140,000, which is the first time payrolls decreased since the recovery began. Food service and drinking establishments were particularly hard hit with job losses exceeding 372,000 in that month alone. A particular concern is that the length of the pandemic has increased the long-term unemployed (defined as unemployed for 27 weeks or more) to such an extent that more than 37% of all the unemployed are now so labeled. In December, the long-term unemployed increased by 27,000 to 4.0 million, the largest amount recorded since November, 2013. Such persons may find it more challenging to find another job, thereby slowing the recovery.

Two recent developments will greatly impact the economy going forward. First, the federal Food and Drug Administration issued emergency use authorizations for multiple vaccines for COVID-19. Vaccinations began to be administered in December, and will continue to be distributed nationwide throughout 2021. Second, President Trump signed the Consolidated Appropriations Act of 2021 (CAA) on December 27, which provides for additional stimulus of approximately \$900 billion. This includes: (a) \$325 billion for small business relief, including \$284 billion for another round of forgivable PPP loans; (b) \$166 billion of stimulus rebates for persons with adjusted gross income below \$75,000 (\$150,000 for married couples); (c) \$120 billion for the extension of

unemployment compensation programs that are now scheduled to phase out after March 14, 2021; (d) \$125 billion to states for education, transportation, and COVID-19 mitigation; and (e) the remaining amounts support a number of federal programs, including community development lending programs, vaccine distribution and procurement, rental assistance, enhanced SNAP benefits, additional childcare funding, and additional funding for broadband, as well as a number of tax law changes included in the CAA.

National Economic Forecast

Under the January, 2021, forecast, IHS Markit predicts real GDP growth to rebound strongly to 4.0% in 2021 and 3.9% in 2022. The forecast is bolstered by CAA stimulus spending in the short term and the inoculation campaign, which allows for relaxed social distancing measures and releases pent-up demand for in-person services. IHS Markit expects a transition of PCE on services to return to a pre-pandemic trend in 2023, with such spending growing significantly over the second half of 2021.

The forecast is based on the following key assumptions. First, the seven-day average of COVID-19 infections peaks in January and falls significantly, as widespread inoculation of the population is achieved by the summer. Second, the forecast incorporates stimulus spending from the CAA, but does not include further federal stimulus in its January forecast. Third, the Federal Reserve is expected to maintain the federal funds rate target near 0% until late 2026, while expanding its treasury holdings to another \$1.4 trillion. Fourth, it is assumed that the tariffs and trade agreements made between the U.S. and China remain in effect. Fifth, real, trade-weighted foreign GDP is expected to rebound, after declining by 5.7% in 2020, to growing by 4.4% in 2021, as the COVID-19 pandemic recedes. Finally, the price of Brent crude oil will gradually recover from a low of \$29 per barrel in the second quarter of 2020 to \$50 per barrel by late 2021.

The forecast is summarized in Table 3, which reflects IHS Markit's January, 2021, baseline outlook. Selected baseline projections are presented in more detail below, with alternative optimistic and pessimistic scenarios discussed thereafter.

Employment. Given the continuing challenges faced by in-person services, the employment outlook remains linked to COVID-19 caseloads and the rollout of vaccines. The employment market at the end of 2020 continued the pattern from earlier in that year, such that in-person services where social distancing is difficult to implement (such as recreation, casinos, and amusement), are hardest hit by the pandemic. Other sectors where such restrictions pose less of a challenge (such as construction and manufacturing) continue to rebound.

Notwithstanding the difficulties at the end of 2020, IHS Markit forecasts that the federal stimulus and a successful inoculation campaign will cause payroll employment to increase beginning in January and through the second half of 2021. The unemployment rate is forecast to generally decline over 2021, falling from 6.7% in December of 2020 to 4.3% by the end of 2021. Afterwards, the unemployment rate is forecast to continue improving to 3.9% in 2022, before stabilizing at 4.1% in 2023.

Personal Income. Despite the enormous job losses and disruption to the economy caused by the COVID-19 pandemic, income and savings in 2020 actually increased due to the large amount of transfer payments and government support from CARES and other stimulus measures. IHS Markit expects the \$900 billion stimulus enacted under the CAA to similarly support personal income in the economy in the first quarter of 2021, lifting incomes by nearly \$2.0 trillion (at an annualized rate). IHS Markit forecasts that real disposable income will grow by 23.9% in the first quarter (compared to the previous quarter), but then decline by 17.5%, 2.6%, and 0.5% in the remaining quarters of 2021 as the effects of the stimulus fade. Meanwhile, wage and salary disbursements are forecast to recover from 0.6% growth in 2020 to 6.3% in 2021. As a result, IHS Markit forecasts that overall personal income will grow by 1.6% in 2021, 2.0% in 2022, and by 4.2% in 2023.

TABLE 3

Summary of National Economic Indicators IHS Markit Baseline Forecast, January, 2021 (\$ in Billions)

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Nominal Gross Domestic Product	\$20,921.3	\$22,117.3	\$23,415.5	\$24,489.7
Percent Change	-2.4%	5.7%	5.9%	4.6%
Real Gross Domestic Product	\$18,411.1	\$19,151.2	\$19,907.0	\$20,405.0
Percent Change	-3.6%	4.0%	3.9%	2.5%
Consumer Prices (Percent Change)	1.3%	2.1%	2.5%	2.1%
Personal Income	\$19,718.0	\$20,039.2	\$20,431.9	\$21,294.6
Percent Change	6.3%	1.6%	2.0%	4.2%
Nominal Personal Consumption Expenditures	\$14,141.3	\$15,003.8	\$15,921.1	\$16,599.0
Percent Change	-2.8%	6.1%	6.1%	4.3%
Economic Profits	\$2,045.1	\$2,016.7	\$2,013.5	\$2,166.2
Percent Change	-9.1%	-1.4%	-0.2%	7.6%
Unemployment Rate	8.1%	5.2%	3.9%	4.1%
Total Nonfarm Payrolls (Millions)	142.3	146.5	151.4	152.5
Percent Change	-5.8%	3.0%	3.3%	0.8%
Light Vehicle Sales (Millions of Units)	14.39	15.95	16.09	16.14
Percent Change	-15.1%	10.8%	0.9%	0.3%
Sales of New and Existing Homes (Millions of Units) Percent Change	6.443 7.1%	6.996 8.6%	6.702 -4.2%	6.273 -6.4%
Housing Starts (Millions of Units)	1.383	1.493	1.298	1.202
Percent Change	6.8%	7.9%	-13.0%	-7.4%

Personal Consumption Expenditures. IHS Markit forecasts that the stimulus will maintain nominal PCE in the near term, by supporting consumer spending in the first quarter (0.2%) notwithstanding the surge in COVID-19 cases, then later serving as a bridge to improved economic circumstances as the population is inoculated through the rest of the year. Distribution of the vaccines is expected to release pent up demand for consumer services in the second half of 2021, when spending on services other than healthcare, housing, and utilities is expected to jump by 12.6%. By comparison, as spending patterns return to their pre-pandemic trends, spending on goods is expected to grow more slowly as consumers return to spending on services. For example, spending at restaurants is expected to grow, whereas purchases for eating at home are expected to decline. Overall, nominal PCE is forecast to grow 6.1% in 2021 and 2022, before slowing to 4.3% in 2023.

Consumer Prices. Following a decline in the second quarter (-3.5%), consumer prices rebounded in the third (5.2%) and fourth (2.2%) quarters of 2020 as the economy recovered. However, IHS Markit forecasts prices to be temporarily depressed in the first (1.8%) and second (1.7%) quarters of 2021 by the pandemic, as the slack in the labor market is expected to depress cost pressures on employers. Over the next three years, inflation is expected to increase by 2.1% in 2021, 2.5% in 2022, and 2.1% in 2023. This is due primarily to two factors. First, IHS Markit is forecasting that the U.S. dollar will depreciate 7.9% by the end of 2022, thereby increasing the costs of imports and, by extension, the pricing power of import competing domestic producers. Also, energy prices are expected to rebound as the price of West Texas Intermediate crude oil rises from \$42.51 per barrel in the fourth quarter of 2020 to \$53.47 by the end of 2022.

IHS Markit forecasts that CPI will remain above 2.0% over the next several years, in part, because the Federal Reserve has altered its approach to evaluating its dual mandate of full employment and stable inflation. Given the low inflation and low unemployment rates in 2019, recent evidence supports that higher amounts of employment than previously assumed can be attained without sustained increases in inflation. Thus, the Federal Reserve is expected to maintain its 2% inflation target as an average, rather than a ceiling, whereby inflation may temporarily grow beyond 2.0% without the Federal Reserve raising interest rates. This revised approach may provide room for recovery in the labor market without incurring market expectations of increasing inflation in the long term.

Housing. The pandemic briefly disrupted the housing market in the second quarter of 2020, with housing starts declining 14.1% year-over-year. However, the housing market quickly rebounded, fueled by record low mortgage rates of 2.77% on a conventional 30-year fixed mortgage by the fourth quarter of 2020. Housing starts grew by 6.8% in 2020, with starts for single-family units growing 10.7%, partly offset by a decline in multi-family housing starts of 1.8%. Overall, residential fixed investment grew 9.3% in 2020.

IHS Markit forecasts some of the strength in the housing market to carry over into 2021, with residential fixed investment growing 13.1% in 2021, housing starts growing by 7.9%, and the price of average existing houses growing by 9.0% for a 1996-style home. However, IHS Markit projects that housing starts will decline in 2022 and 2023 by 13.0% and 7.4%, respectively, based on projected decreases in household formation. Sales of new houses are projected to decrease by 0.9% in 2021, 9.7% in 2022, and 6.7% in 2023.

Business Investment. Growth in nonresidential fixed investment is expected to rebound after declining by 3.8% in 2020 to 7.5% in 2021, 6.9% in 2022, and 5.4% in 2023. The anticipated growth is supported by investment in equipment (13.2% in 2021 and 5.9% in 2022 before tapering off to 2.8% in 2023). Growth is bolstered by the return to service of Boeing's 737 MAX line of aircraft in December of 2020 and the anticipated fulfillment of deliveries going forward. The recovery in energy prices is anticipated to boost investment in mining and petroleum structures in the second half of 2021, growing by 22.4% in 2022 and 10.4% in 2023 (following declines of 41.3% in 2020 and 4.4% in 2021).

Inventories fell by \$71.9 billion in 2020, which detracted 0.58 percentage points from GDP growth. This is partly due to supply disruptions caused by the pandemic in the second quarter, when inventories were drawn down as manufacturers were temporarily closed and businesses were reluctant to rebuild inventories during the downturn. IHS Markit expects businesses to rebuild inventories roughly at the rate of final sales in the near term, increasing by \$96.9 billion in 2021, \$127.1 billion in 2022, and \$100.5 billion in 2023. IHS Markit expects inventory investment to contribute 0.82 percentage points to GDP growth in 2021, 0.12 percentage points in 2022, and to reduce GDP growth by 0.12 percentage points in 2023.

Corporate Profits. Corporate before-tax book profits decreased by 7.2% in 2020 and are forecast to increase by 0.6% in 2021, 0.1% in 2022, and 10.2% in 2023. Economic profits, which are adjusted for inventory valuation and capital consumption at current cost (and thus are not affected by federal tax laws), declined 9.1% in 2020. IHS Markit forecasts further declines of 1.4% in 2021 and 0.2% in 2022, before rebounding 7.6% in 2023. The 2021 forecast assumes that the effective federal corporate tax rate for all industries was 13.3% in 2020, and that it will increase to 14.1% in 2021, 14.5% in 2022, and 14.1% in 2023.

Fiscal Policy. According to the final monthly Treasury statement for federal fiscal year 2019-20, the federal deficit was \$3.1 trillion. This was due to the significant increase in the amount of stimulus spending, including amounts authorized under CARES. IHS Markit estimates that spending by the federal government accounted for 0.27 percentage points of GDP growth in 2020, but will contribute only 0.11 percentage points in 2021 and will detract 0.13 percentage points in 2022 as the effects of the stimulus fade. By contrast, state and local government spending is estimated to have reduced GDP growth by 0.11 percentage points in 2020 due to spending cuts as a result of declining tax revenues during the pandemic.

The forecast assumes continued stimulus programs under the CAA, with more than half of the stimulus disbursing in the first quarter of 2021. The Biden administration recently released a \$1.9 trillion COVID-19 relief plan, which would indicate that further stimulus measures may be forthcoming. However, additional federal stimulus is not included in IHS Markit's baseline forecast.

Monetary Policy. The Federal Reserve indicated in an open market committee statement issued December 16, 2020, that the federal funds rate would remain near 0% until labor market conditions are consistent with maximum employment and inflation has risen to 2%, and is on track to exceed 2%, for some time. Further, it stated that it would continue purchasing Treasury securities and agency mortgage-backed securities at an average rate of \$120 billion per month until substantial

progress had been made towards its employment and inflation goals.

As discussed, mortgage rates fell to a historic low in 2020. For comparison, the average annual yield on the 10-year U.S. Treasury note fell to 0.89% in 2020, briefly falling to an all-time low of 0.318% in early March. The yield is expected to remain low, at 1.09% in 2020, 1.26% in 2022, and 1.42% in 2023.

International Trade. Real exports and imports rose sharply in the third quarter of 2020 (annualized growth of 59.6% and 93.1%, respectively) after sharply contracting in the second quarter. Imports have rebounded more strongly than exports, reflecting recovery in domestic demand relative to foreign markets. Also, the dollar exchange rate of a broad index of trade partners appreciated 5.9% year-over-year in the second quarter, reflecting a fall in value of emerging market currencies. Since then the dollar declined somewhat, ending the year up 2.0%. IHS Markit forecasts that the dollar will fall by 7.0% in 2021, 3.7% in 2022, and 0.5% in 2023 due to the expectation that interest rates in the U.S. will remain low for an extended period of time (low interest rates tend to reduce the exchange rate as investors look elsewhere for growth).

Overall, net exports reduced GDP growth by 0.12 percentage points in 2020 and are forecast to reduce GDP by 1.04 percentage points in 2021. Afterwards, net exports are forecast to contribute 0.54 percentage points to GDP growth in 2022 and 0.69 percentage points in 2023, because growth in exports is anticipated to outpace growth in imports as economic conditions improve in foreign markets.

Alternative Scenarios. IHS Markit's 2021 forecast also includes an optimistic scenario and a pessimistic scenario. Under the optimistic scenario, IHS Markit assigns a 20% probability that a faster recovery results from a decline in COVID-19 cases, hospitalizations, and deaths as use of the vaccine and observance of social distancing guidelines become more widespread. As the pandemic declines, consumers resume their pre-pandemic spending patterns quicker than assumed under the baseline forecast. Further, under the optimistic scenario, consumer spending and business fixed investment rise more quickly in the fourth quarter of 2020 than previously estimated, improving economic conditions coming into 2021. The unemployment rate improves to below 4.5% by the middle of 2021. Real GDP rebounds 5.3% in 2021 and 3.9% in 2022, crossing the pre-pandemic peak in the second quarter of 2021.

Under the pessimistic scenario, to which IHS Markit assigns a 30% probability, containment measures are reintroduced to combat the surge in COVID-19 that is currently occurring. The surge in the pandemic causes consumer spending to fall below the baseline over the next several quarters, growing by only 3.4% in 2021 and 3.6% in 2022, thereby restraining the economic recovery. The unemployment rate continues to decline, but at a slower pace, not falling below 5% until early 2022. Overall, the recovery takes longer than forecast in the baseline, as real GDP grows by 3.0% in 2021 and 3.9% in 2022.

On January 14, 2020, the Biden administration proposed a \$1.9 trillion stimulus plan, including additional stimulus rebates of \$1,400 for most individuals, expanded unemployment benefits of \$400 per week through September, expanding the federal child tax credit, and providing

increased funding for state and local governments, K-12 schools, and institutions of higher education. It should be noted that IHS Markit's January forecast preceded this proposal, and neither the baseline scenario, optimistic scenario, nor the pessimistic scenario anticipated any additional federal stimulus being enacted in the next several months.

General Fund Taxes

Table 4 shows general fund tax revenue estimates for 2020-21 and for each year of the 2021-23 biennium. Over the three-year period, these estimates are \$1,155.9 million (2.1%) higher than the projections released by the Department of Revenue (DOR) last November. By year, the new estimates are higher than DOR's projections by \$437.4 million in 2020-21, \$265.6 million in 2021-22, and \$452.9 million in 2022-23. Over the three-year period, compared to the November 20 report, the estimates are higher for corporate income/franchise taxes (\$547.6 million), sales and use taxes (\$421.5 million), and individual income taxes (\$210.8 million).

TABLE 4

Projected General Fund Tax Collections (\$ in Millions)

	2019-21 Biennium		2021-23 Biennium	
	2019-20	2020-21	2021-22	2022-23
	<u>Actual</u>	Estimated	Estimated	Estimated
Individual Income	\$8,742.3	\$8,640.0	\$8,900.0	\$9,340.0
Sales and Use	5,836.2	5,915.0	6,310.0	6,595.0
Corporate Income/Franchise	1,607.9	2,205.0	1,730.0	1,835.0
Public Utility	357.2	352.0	359.0	361.0
Excise				
Cigarette	523.5	507.0	494.0	483.0
Tobacco Products	91.3	90.0	92.0	96.0
Vapor Products	1.3	1.3	1.7	2.0
Liquor and Wine	54.8	60.0	57.0	58.0
Beer	8.5	9.2	8.7	8.7
Insurance Company	217.4	211.0	218.0	226.0
Miscellaneous Taxes	91.8	111.0	112.0	111.0
Total	\$17,532.2	\$18,101.5	\$18,282.4	\$19,115.7
Change from Prior Year Percent Change		\$569.3 3.2%	\$180.9 1.0%	\$833.3 4.6%

The increased estimates for 2020-21 are primarily due to: (a) improved tax collections through December, specifically corporate tax receipts; and (b) an improved near-term forecast from IHS Markit. For November and December, corporate tax collections are \$232 million (68%) higher compared to collections in the same two months in 2019. Compared to the November forecast (the

basis of the administration's November 20 report), IHS Markit incorporates the impact of the recently enacted CAA (previously no federal stimulus was included in the forecast), and an improved near-term outlook for economic growth as the COVID-19 inoculation campaign is already under way (previously assumed vaccines would first become available in mid-2021). As a result, Markit has revised its January forecast for 2021 higher for real GDP (0.6 percentage points), personal income (3.0 percentage points), PCE (0.6 percentage points), and economic profits (11.1 percentage points), compared to its November forecast. Similarly, the January forecast assumes improved economic activity for 2022 and 2023, compared to the November forecast.

Individual Income. Total individual income tax collections are estimated at \$8,640.0 million in 2020-21, which represents a 1.2% decline in comparable revenues over the prior fiscal year. Estimated individual income tax collections increase to \$8,900.0 million in 2021-22, and again to \$9,340.0 million in 2022-23, representing annual growth of 3.0% and 4.9% respectively.

Based on preliminary collections information through December, 2020, individual income tax revenues for the current fiscal year are 0.8% higher than such revenues through the same period in 2019. However, these revenues are expected to decrease at a rate of 1.1% over the next six months, in part due to the pandemic stagnating economic activity in 2020. Much of this stagnation in 2020 will be reflected when individuals file their tax year 2020 returns in April, 2021. For example, individuals whose earnings declined in 2020 following a pandemic-related job loss will likely owe a lesser amount of tax when they file in April, 2021, than in the previous year. As a result, net refunds (total refunds owed to taxpayers less final payments owed by taxpayers) are expected to be larger in 2020-21 relative to 2019-20.

Another factor expected to increase net refunds in April, 2021, is the individual income tax rate reduction under 2019 Act 10, which is based on sales tax revenues collected by remote sellers and marketplace providers during the period October 1, 2019, through September 30, 2020. The rate reduction is designed to offset the amount of additional sales tax collections from these sellers, and splits the amount of the reduction equally between the two bottom individual income tax brackets. The sales tax amount was considerably higher than previously estimated, so the resulting income tax rate reduction for tax year 2020 was larger than anticipated.

Enhanced unemployment compensation payments from the federal government throughout 2020 and into March, 2021, are generally taxable under state law, so the enhanced amounts in 2020 are expected to partly offset the increase in refunds described above. Moreover, during the pandemic, many more taxpayers are choosing to have tax amounts withheld from their unemployment payments than in prior periods. For unemployment payments made in the first half of tax year 2021, this also increases withholding tax collections in state fiscal year 2020-21, to the extent taxpayers elect to have tax amounts withheld from such payments.

Projected annual growth in individual estimated payments in 2020-21 is also expected to avert a sharper decline in individual income tax collections. Early indications of individual estimated payments for January, 2021, (historically one of the largest months for estimated payments) suggest considerable growth over the prior January. This corresponds to the projections from IHS Markit of growth in the relevant economic indicators for the second half of state fiscal year 2020-21. Finally, annual growth in total individual income tax collections is expected to resume in 2021-22 and in 2022-23, as the economy is projected to rebound from the pandemic. IHS Markit predicts wages and salaries will grow steadily throughout the biennium, beginning in the second quarter of 2021, and expects that taxable personal income will display year-over-year growth in 2021-22 and in 2022-23.

General Sales and Use Tax. State sales and use tax revenues totaled \$5,836.2 million in 2019-20, and are estimated at \$5,915.0 million in 2020-21. The estimate represents growth of 1.4% over the prior year. Sales tax collections through December, 2020, are 1.3% higher than the same period in 2019. Adjusting for law changes since the January, 2020, estimate, year-to-date growth is approximately 0.1%. The lower estimated annual growth in 2020-21 reflects changes to state and federal law, including the repeal, effective July 1, 2020, of the state's imposition of sales tax on internet access services (estimated at \$166 million), pursuant to 2017 Act 59. This reduction is partly offset by additional revenues estimated from the 2019 Act 10 provision that requires marketplace providers to collect and remit sales tax.

Sales tax revenues in the next biennium are estimated at \$6,310.0 million in 2021-22 and \$6,595.0 million in 2022-23, reflecting growth of 6.7% and 4.5%, respectively. The strong growth in 2021-22 reflects the economic recovery projected by IHS Market's January forecast, as mentioned previously, driven largely by an increase in demand for consumer services as distribution of vaccines becomes more widespread.

Corporate Income/Franchise Tax. Corporate income/franchise taxes were \$1,607.9 million in 2019-20, which grew 20.2% above the previous year. Corporate tax revenues are projected to be \$2,205.0 million in 2020-21, \$1,730.0 million in 2021-22, and \$1,835.0 million in 2022-23, reflecting growth of 37.1% in 2020-21, a contraction of 21.5% in 2021-22, and growth of 6.1% in 2022-23. The estimates generally reflect forecasted growth in economic profits (10.6% in 2020-21, -10.0% in 2021-22, and 8.3% in 2022-23) and year-to-date corporate tax collections, which have grown by 64% compared to the same period through December of last year.

Two factors account for the forecasted decline in 2021-22. First, state income and franchise tax filing deadlines for estimated payments and net final payments due in April, May, and June were extended to July 15, 2020. All of these amounts accrued to 2019-20, except that a portion of corporate estimated payments were thrown forward and attributed to state fiscal year 2020-21. Under accounting principles applied by DOR, corporate estimated payments received in July of 2020 that relate to a taxable year ending on or before June 30, 2020, were attributed to state fiscal year 2019-20. Any estimated payments related to a taxable year ending after that date were thrown forward to 2020-21. DOR received \$280 million in corporate estimated payments in July of 2020, which is \$243 million more than was received in July of 2019 (\$37 million). DOR determined that \$97 million was attributed to 2019-20, and the remaining \$183 million was thrown forward and attributed to 2020-21. This compares to July, 2019, estimated payments of \$37 million, of which \$28 million was thrown forward to the following fiscal year. As a result, collections in 2020-21 are enhanced by a one-time increase of approximately \$155 million. Because the thrown forward amount is not expected to reoccur, collections in 2021-22 are not similarly enhanced, and thus decline by \$155 million relative to 2020-21.

Second, year-to-date corporate audit payments in 2020-21 are \$50.5 million higher compared with the same period through December in 2019-20, which was a very strong year for audit collections. According to DOR, the sharp increase in corporate audit payments reflects economic activity from prior years and is unlikely to repeat. Thus, it is anticipated that audits will decline in 2021-22 relative to 2020-21 by \$50.0 million. Together with the thrown forward amounts, collections in 2021-22 are expected to be below the baseline compared to 2020-21 by \$205 million, prior to accounting for expected changes in economic activity.

Public Utility Taxes. Revenues from public utility taxes totaled \$357.2 million in 2019-20 and are estimated at \$352.0 million in 2020-21, \$359.0 million in 2021-22, and \$361.0 million in 2022-23. Year-over-year, these amounts represent a decrease of 1.5% in 2020-21, an increase of 2.0% in 2021-22, and an increase of 0.6% in 2022-23. Utilities providing electric and natural gas service represent a majority of public utility tax revenues (69% in 2019-20). In response to the COVID-19 pandemic, shifting living and working habits (as well as declining economic activity) have decreased retail sales of electricity to commercial and industrial customers by 6.2% and increased sales to residential customers by 5.1%, for a total decline of 1.8% year-over-year, according to retail electricity sales data reported by Wisconsin utilities through September 30, 2020. Payments by the next largest taxpayer group, telecommunications companies, are expected to decline over the 2021-23 biennium as the exemption enacted under 2019 Act 128 for property providing broadband internet service in rural areas begins to phase in, reducing utility tax collections by an estimated \$2.3 million in 2021-22 and \$3.6 million in 2022-23. As a result of litigation over assessment methodology, a refund totaling \$7.2 million was paid to several utilities in 2020-21. The settlement included a change in methodology that is expected to reduce future year assessed values and resulting tax collections for certain ad valorem taxpayers. Overall, utility tax collections are expected to rebound in 2021-22 and 2022-23 as economic conditions improve.

Excise Taxes. General fund excise taxes are imposed on cigarettes, liquor (including wine and hard cider), other tobacco products, vapor products, and beer. In 2019-20, excise tax collections totaled \$679.4 million, of which \$523.5 million (77%) was from the excise tax on cigarettes. Total excise tax collections in 2019-20 represented an increase of 2.6% from the prior fiscal year, primarily driven by cigarette and tobacco tax collection increases of 1.8% and 6.8%, respectively. Excise tax revenues are estimated at \$667.5 million in 2020-21, which represents decreased revenues of 1.8%. This estimate accounts for a recent federal law that prohibits sales of cigarettes and tobacco products to individuals under the age of 21, which is expected to decrease state excise tax revenues by \$10.2 million on an annualized basis beginning in October of 2020. Excise tax revenues over the next biennium are estimated to decline by 2.1% to \$653.4 million in 2021-22 and by 0.9% to \$647.7 million in 2022-23, driven by an ongoing trend of declining cigarette consumption.

Insurance Premiums Taxes. Insurance premiums taxes were \$217.4 million in 2019-20. Revenues are projected to decrease to \$211.0 million in 2020-21, and increase to \$218.0 million in 2021-22 and \$226.0 million in 2022-23. It is anticipated that collections resulting from certain retaliation amendments totaling more than \$10 million last Spring may not repeat. Thus, collections in 2020-21 are forecast to decline 2.9%. The estimates are otherwise based on growth in year-to-date insurance premiums tax collections, historic collections growth trends, and projected growth in consumer spending on insurance.

Miscellaneous Taxes. Miscellaneous taxes include the real estate transfer fee, municipal and circuit court-related fees, and a small amount from the occupational tax on coal. Miscellaneous tax revenues were \$91.8 million in 2019-20, of which 84% was generated from the real estate transfer fee. Based on the economic forecast for the housing sector, as well as collections through December, 2020, miscellaneous taxes are projected to increase to \$111.0 million in 2020-21, which represents a 20.9% increase from 2019-20 collections. As previously mentioned, this large increase is driven by elevated demand for housing due to low mortgage rates, as well as rising house prices. Housing starts and sales of new and existing houses are projected to decline starting in 2021-22. However, the continued rise in prices of existing houses is expected to slightly offset this decline until 2022-23. As a result, miscellaneous taxes are estimated to increase by 0.9% to \$112.0 million in 2021-22 and decrease by 0.9% to \$111.0 million in 2022-23.

This office will continue to monitor state revenues and expenditures and new economic forecasts, and notify you and your colleagues of any further adjustments that may be necessary.

Sincerely,

B5 Long

Robert Wm. Lang Director

RWL/lb cc: Members, Wisconsin Legislature