



GOVERNOR
GREG GIANFORTE
STATE OF MONTANA

Governor's Budget
Fiscal Years 2024 – 2025

Revenue Estimates
General Fund and Select Funds

Governor's Office of Budget
and Program Planning



Volume 2

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STATE OF MONTANA

ECONOMIC OVERVIEW SECTION 1

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GOVERNOR'S OFFICE OF
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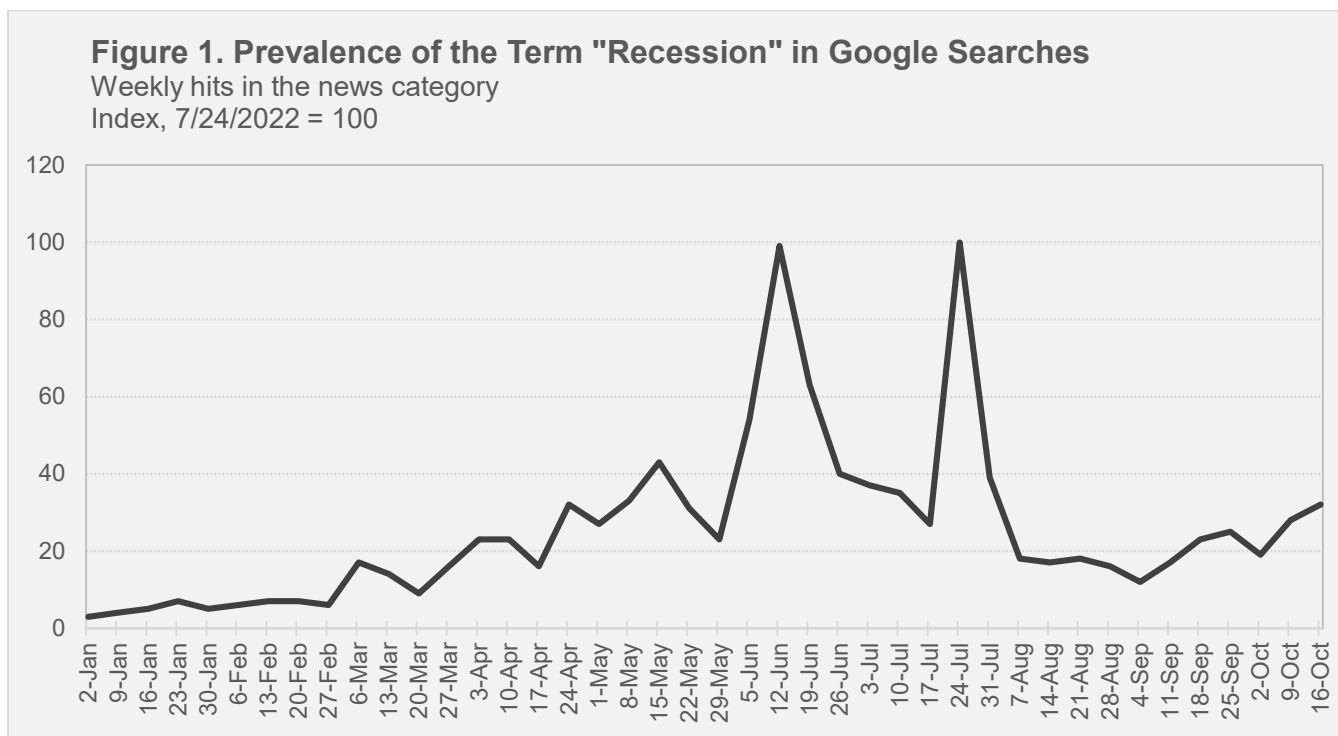
Introduction

Revenue estimates are a core piece of the executive budget, informing both current and future expenditure decisions. Appropriately digesting economic data is important to understanding the intricacies of the various sectors of the economy and how that influences tax revenue for the state of Montana. In addition to knowing the details of individual sectors, it is often helpful to zoom out to a macro view of the economy, to understand, in broad terms, the interplay among important components of the economy such as employment, inflation, consumption, government activity, etc. This section provides an overview of economic conditions in the national economy and then moves into a more detailed discussion of the current outlook for the Montana economy. The economic overview is meant to shed light on the economic assumptions that are consistent across all the revenue estimates. Further details on sector-specific economic assumptions are available in the descriptions of each individual revenue source.

National Economy

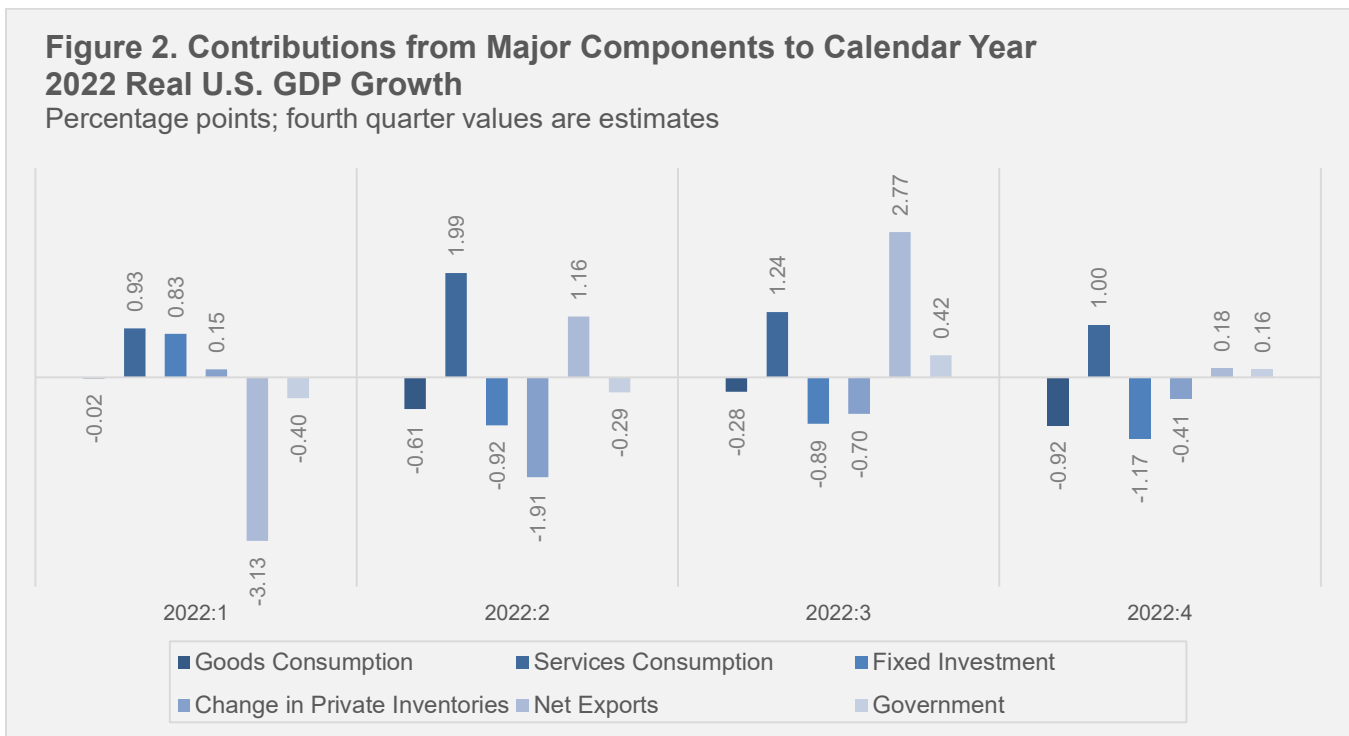
Overview

Is the U.S. economy on the brink of recession? That is the question that has characterized much of the economic discussion throughout 2022. Since the beginning of 2022, Google Trends data reveal an upward trend in the frequency of internet searches including the term “recession”. Public interest in economic recession started rising in earnest after the consumer price index report for February was released in early March, which showed headline inflation just shy of 8% year-over-year growth. Persistent price level growth above 8% and contracting real GDP from Q4 2021 levels continued to stoke public recession fears in the spring and summer months. Steep federal funds rate increases by the Federal Open Market Committee (FOMC) piled on to the darkening economic sentiment, as indicated by the big spikes in “recession” Google search hits during the weeks of the FOMC’s 75 basis point rate hikes in June and July. Recession anxiety ebbed in August – likely due to a softening of inflation in July – but regained its upward momentum in September and October as the specter of inflation and its linkage to further FOMC tightening is yet to be subdued.



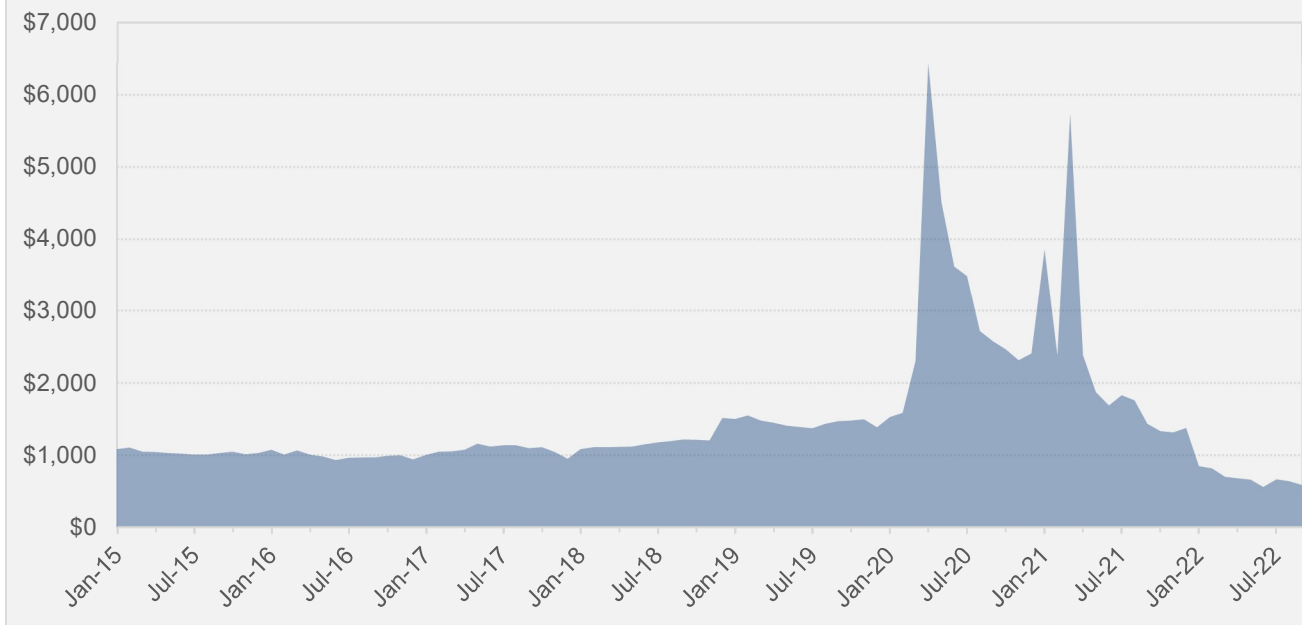
Certainly, there are aspects of the U.S. economy that have weakened in 2022. U.S. real GDP, while still posting gains over year-ago levels, contracted at an annual rate of -1.6% in the first quarter and -0.6% in the second quarter. There are

nuances to the first and second quarter 2022 GDP reports that suggest underlying economic activity was stronger than the headline numbers indicate. Imports and changes in private inventories contributed negatively to real GDP growth in the first half of 2022, combining to shave over 4 percentage points off growth during that time. The drag from imports is linked to increased prices of foreign goods resulting from heightened demand and snarled supply chains. For private inventories, it is the change in the change in inventories that matters for the calculation of GDP. If the pace of inventory additions is not at least maintained from the prior quarter, the contribution from private inventory investment will be negative. Second quarter 2022 inventory builds fell off the first quarter pace to a large degree, which caused this component to be a significant drag on growth. Third quarter real GDP bounced back in growth territory, notching a 2.6% annualized gain over the second quarter on an improved trade balance. Consumption, the largest component of GDP, and, consequently, the most important factor for moving the needle for the trajectory of the economy has yet to be a hindrance to growth in 2022. The consumer is the buoy that keeps the economy afloat and unless individuals pull back on spending the path to recession will be an arduous one.



Unfortunately, cracks are beginning to show in the consumer’s resolve. Consumption’s contribution to real GDP growth is down in 2022 from 2021 levels. Real consumer spending growth is projected to slow to near zero over the second half of 2022. Consumer sentiment has taken a beating in 2022. Inflation (particularly gasoline prices) and stock market volatility have eaten away at consumer balance sheets, but the severity has been mitigated to a degree by healthy savings balances consumers have been carrying since the pandemic. But this safety net is fraying. The stock of personal savings (measured in nominal dollars) has been eroding since the middle of 2021 and levels are now below historic norms. Individuals were able to build up massive reserves during the pandemic as the federal government unleashed wave after wave of fiscal stimulus. Through direct checks and enhanced unemployment benefits, many individuals realized a sizeable cash windfall, but, because of pandemic lockdowns the spending options were limited. The services sector of the economy was essentially shut down, so popular service-oriented businesses – restaurants, salons, movie theaters, etc. – were not available to take the dollars consumers now had in spades. So, consumers shifted to goods spending. But pandemic effects in other parts of the world snarled supply chains and many goods markets, from motor vehicles to lumber to home appliances, went haywire. Try as they might, individuals were struggling to offload their piles of cash. Incidentally, checking and savings accounts swelled. These historically large savings balances played an important role in shielding consumers from high inflation over the second half of 2021 and into 2022. Individuals were able to draw down their reserves to meet rising expenses without sacrificing their spending. Persistent inflation, however, has taken its toll. Personal saving reserves have dried up, and consumer spending is softening. Inflation continues to be at the forefront of most consumers’ minds as they assess future spending decisions.

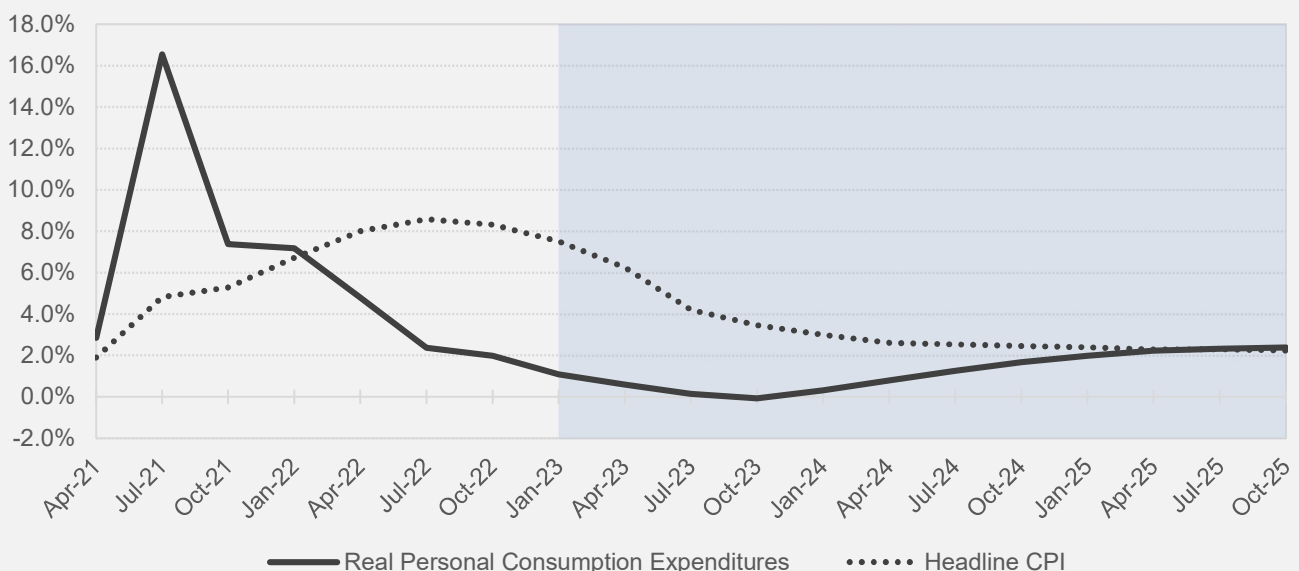
Figure 3. U.S. Personal Savings
Monthly, billions of current dollars



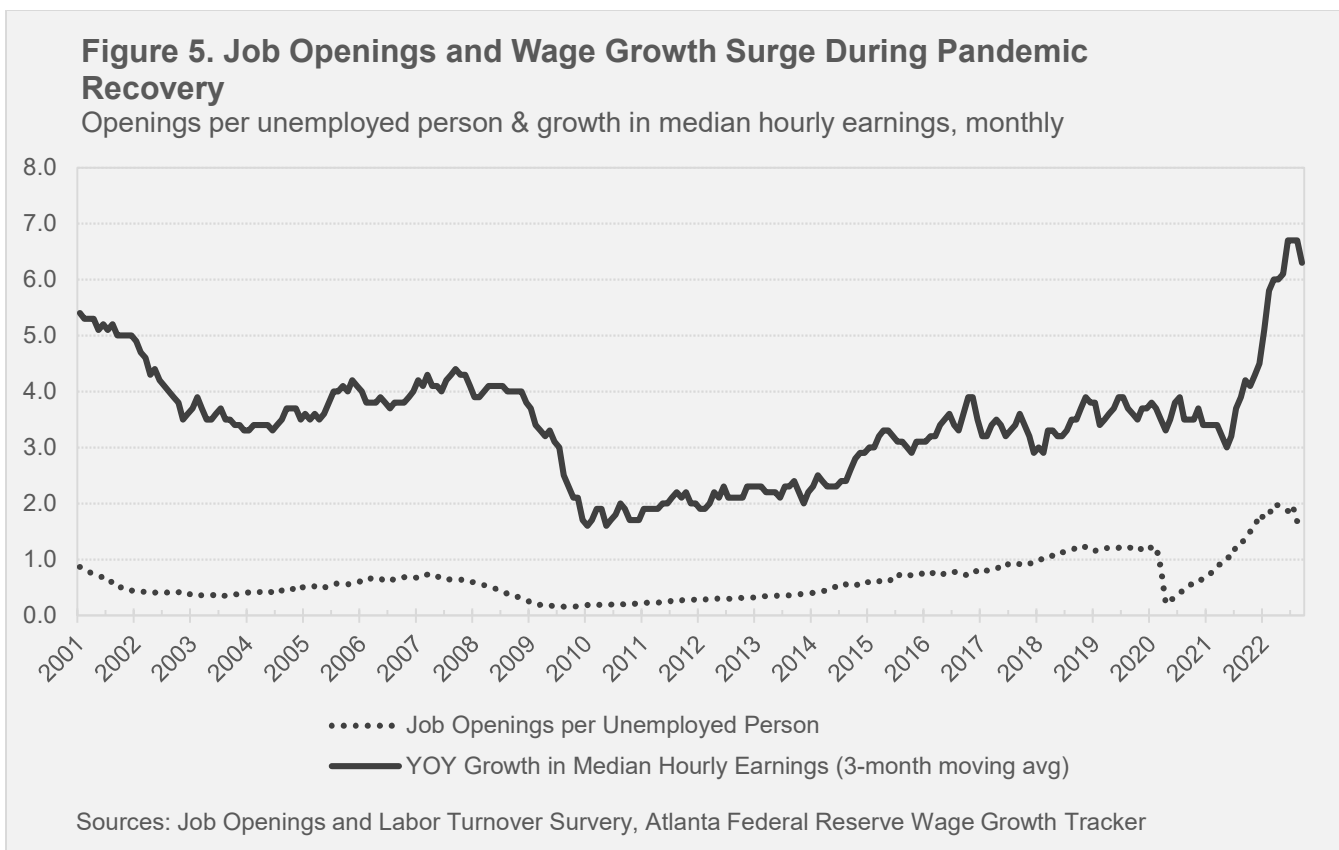
The Federal Reserve’s battle against inflation has yet to yield results. Moreover, inflation is threatening to become more entrenched as signaled by increasing growth in the core CPI (excludes food and energy prices). The combination of persistent, broad-based inflation and rapidly tightening financial conditions will continue to stress consumer finances. Of those acutely affected are renters and first-time homebuyers. Housing affordability is being hammered by the ascension of mortgage rates and prices that remain above year-ago levels and well above pre-pandemic levels. Tight existing inventories and slowing new construction offer little hope of near-term relief for housing costs. Along with elevated savings balances, strong wage growth has provided a buffer for consumers against rising price pressures. But wage growth, while still strong, is starting to show signs of softening.

Figure 4. Consumer Spending and Prices

Year-over-year changes in real consumer spending and prices
Shaded area indicates projections



The near-vertical climb of wage growth since the middle of 2021 reflects the incredible labor market imbalance that has characterized the post-pandemic recovery. Seemingly all at once, businesses across the country started hiring. Job openings surged. Payroll employment was notching monthly gains north of 400,000 (a very high mark) on a regular basis. Interestingly, the extended period of historically high payroll employment gains didn't make a dent in the level of job openings. The number of job openings per unemployed person rose steadily throughout 2021 and reached never-before-seen levels in early/mid 2022. During that time, the U.S. economy had two job openings for every unemployed person, a stunning metric. All this is illustrative of relative tightness in the elasticity of labor supply. Businesses were forced to start raising wages to attract workers who suddenly had much higher reservation wages. According to the Atlanta Federal Reserve, economy-wide wage growth rose from 3.2% in June 2021 to 6.7% in June 2022. Some of these labor market pressures have begun to ease in the second half of 2022. Job openings, openings per unemployed person, and wage growth have all turned downward. Hiring has slowed, the unemployment rate is moving sideways, and the employment-to-population ratio for prime-age workers is nearing levels consistent with a full-employment economy. Even so, it doesn't feel like labor market equilibrium has quite been reached. Further easing in wage growth and the pace of hiring and a drift upward in the unemployment rate are probably still required. Achievement of these outcomes in relatively short order would give some comfort to the Federal Reserve that the economy may dodge the dreaded wage-price spiral that makes fighting inflation even more painful.

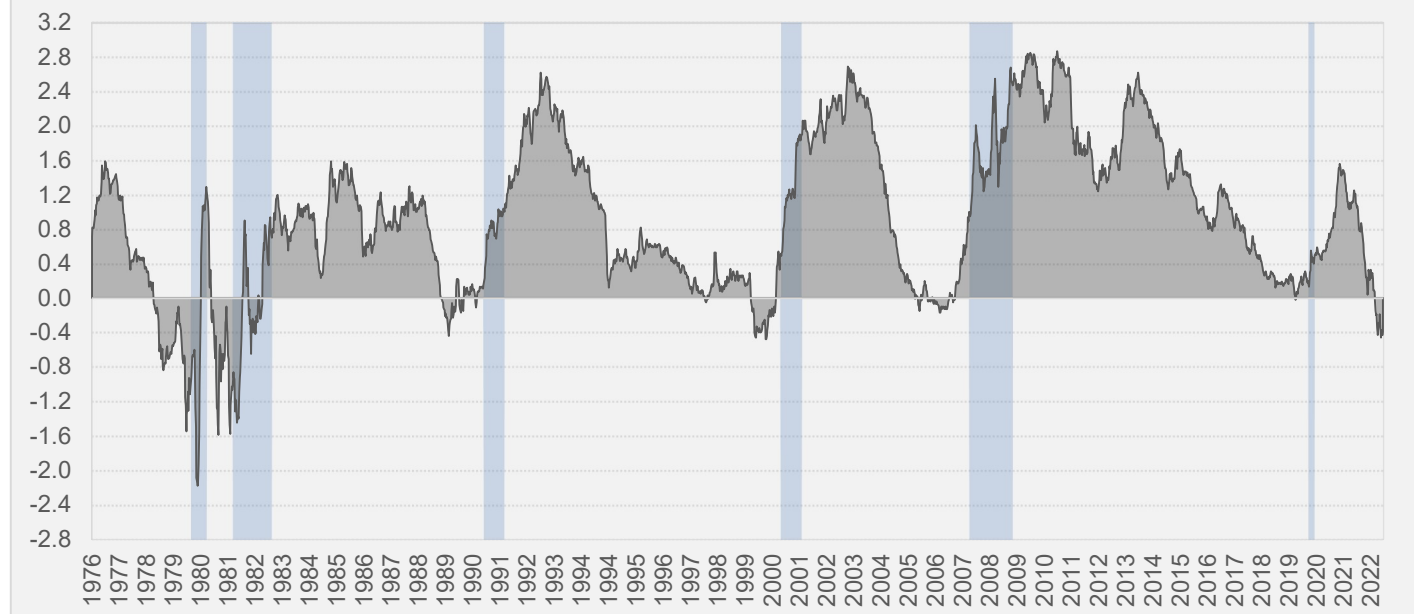


Bringing inflation down is a goal that the Federal Reserve has made zero progress toward attaining since the FOMC started monetary tightening in early 2022. Much of the inflation pressure is sourced from the supply-side of the economy. The Federal Reserve's primary monetary policy tool, manipulation of the federal funds rate, is more geared toward affecting demand behavior, which could be a reason why its usage has so far seemed ineffective. Monetary policy does, however, operate with a lag and it is unknown what inflation would look like in absence of the Federal Reserve's interest rate action. The pace at which the FOMC has been raising its target range for the federal funds rate is unprecedented. In the seven months since first action on March 17, 2022, the federal funds rate rose by 300 basis points to a target range of 3% - 3.25%. Regardless, year-over-year headline CPI inflation remains north of 8%. The Federal Reserve is fully committed to getting inflation under control, even at the expense of economic growth. Rate increases will continue until inflation shows consistent signs of slowing. Market expectations indicate the terminal range of the federal funds rate will land somewhere between 4.5% - 5% in mid-2023. This aggressive path of monetary tightening has taken its toll on

financial markets. In late 2022, the yield on the 10-year treasury note sits at 4%, the 30-year conventional mortgage rate is above 7%, the U.S. dollar continues to strengthen, and the S&P 500 has descended into a bear market and is gripped by volatility. A widely used recession predictor, inversion of the U.S. treasury yield curve, is flashing red warning lights. The 10-year treasury yield is lower than yields on all its shorter-duration counterparts, with the exception being the yield on the 1-month T-bill.

Figure 6. Spread between 10-year and 2-year treasury note yields

Percentage points, weekly; shaded bars indicate NBER-dated recessions



Economic recession has very frequently occurred within 12 months of a material (magnitude plus duration) inversion in the treasury yield curve. Such criteria have been met. The spread between the 10-year yield and the 2-year yield is the most often cited inversion metric, and it has been hovering around -40 basis points for nearly three months. Increases at the long end of the yield curve have not kept pace with the rapid ascension of the short end of the curve. Recession probability models, like the one employed by the Conference Board, are also pointing toward a recession within the next 12 months. In August 2022, the Conference Board's U.S. Recession Probability Model assigned a 96 percent likelihood of an economic downturn by mid-2023. S&P Global is projecting a recession in early 2023 as its baseline case for the U.S. economy. Real GDP growth turns negative in the fourth quarter of 2022 and maintains its downward trajectory through the first half of 2023. Weak growth returns over the second half of 2023 and proceeds at below-trend growth through 2025. The projected late-2022/early-2023 slide in real GDP becomes classified as a recession because the downturn is a little deeper, a little longer, and more widespread across economic sectors than the dip in real GDP that occurred over the first half of 2022. Weakness infects all the major components of real GDP this time around: consumption, investment, trade, and government spending.

After advancing 2.5% in 2022, real consumer spending is flat in 2023 and adds 1 percentage point to growth in each year through 2025. Goods spending takes a big hit in 2023, but rebounds thereafter. Growth in services spending retreats significantly in 2023 after posting strong gains in 2021 and 2022. It returns to trend growth by 2025. Residential investment declines in 2022 and 2023 as private housing starts crater in response to demand-restricting mortgage rates. Business investment finishes 2022 with growth but falls in 2023 and to a lesser degree in 2024. Net exports (exports minus imports) decline in 2022, rise in 2023, and resume descent through 2025. Dollar strength supports imports and hinders exports. The broad dollar exchange rate firms further in 2023 from an already strong 2022 before easing to near pre-pandemic levels by 2025. Federal government spending rises less than 2% per year from 2023-2025 after falling in 2022 because of the absence of further stimulus spending.

Along with real GDP, many other important economic indicators weaken further in 2023 and only see gradual improvement by 2025. The unemployment rate moves up over 5% in 2023, pushes higher in 2024, and falls back to its 2023 level in 2025. Payroll employment growth slips into negative territory in 2023 and maintains this softness in 2024. Growth returns in 2025. There is little improvement in the labor supply situation. Labor force growth is feeble and the

labor force participation rate for all ages moves sideways in 2023 before shrinking in both 2024 and 2025. Productivity growth averages an uninspiring 1% per year. Industrial production doesn't budge, remaining at 2022 levels in 2025. Existing home sales fall sharply in 2023 and remain below recent historical levels through 2025. Interest rates continue their climb in 2023 at the same time stock valuations decline. Despite a rough 2023, interest rates ease, and stocks advance, in 2024 and 2025, a positive development for the outlook. There are additional encouraging aspects of S&P Global's baseline scenario that cut through some of the doom and gloom that characterizes much of the current discussion around the U.S. economy.

The easing of interest rates suggests the Federal Reserve makes progress toward bringing in inflation. Indeed, projections show annual consumer price growth retreating to the central bank's preferred level of 2% by 2025. Such a rosy outlook for inflation helps boost consumer sentiment. Consumers' feelings about the economy are much improved by 2025. Wage growth averages just under 5% over the next three years. Total personal income and after-tax corporate profits also exhibit sturdy growth over that period. Vehicle sales advance each year, helped by easing supply chain constraints. Oil prices do not return to triple digit levels, keeping at bay another period of uncomfortably high gasoline prices. Natural gas prices move back to the \$4/MMBtu range by 2024 and hold steady at that level in 2025. Total consumer energy prices persist below their high 2022 level for the entire period 2023-2025, offering some relief to this relatively inelastic portion of consumer outlays.

In sum, the national economic picture darkens in 2023; however, the light starts to shine, albeit dimly, again in 2024 without much brightening in 2025. Real GDP growth slogs its way toward trend growth through 2025 but falls short. The unemployment rate finds a new home in the 5%-6% range as weakness seeps into the labor market. Headline consumer price inflation moves back to 2%. The achievement of this outcome, though, seems fraught with upside risk. Table 1 summarizes data for three key national economic indicators (on a state fiscal year basis) for 2012 through 2021 and shows forecasts from S&P Global for 2022 through 2025.

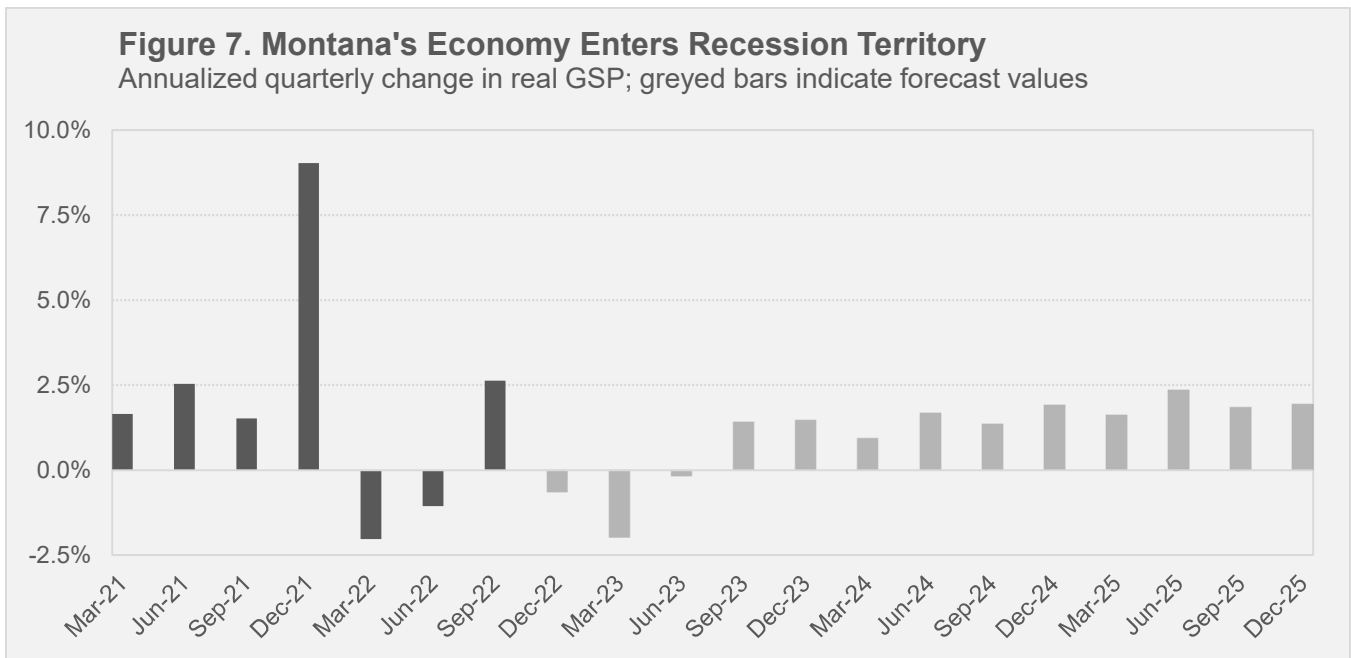
Calendar Year	U.S. Real GDP \$ Billions (2012)	Change	Unemployment Rate	Headline CPI YOY Change
2012	\$16,254	2.3%	8.1%	2.1%
2013	\$16,553	1.8%	7.4%	1.5%
2014	\$16,932	2.3%	6.2%	1.6%
2015	\$17,390	2.7%	5.3%	0.1%
2016	\$17,680	1.7%	4.9%	1.3%
2017	\$18,077	2.2%	4.4%	2.1%
2018	\$18,609	2.9%	3.9%	2.4%
2019	\$19,036	2.3%	3.7%	1.8%
2020	\$18,509	-2.8%	8.1%	1.2%
2021	\$19,610	5.9%	5.4%	4.7%
2022	\$19,945	1.7%	3.7%	8.1%
2023	\$19,851	-0.5%	5.1%	4.2%
2024	\$20,107	1.3%	5.7%	2.5%
2025	\$20,518	2.0%	5.2%	2.2%

Montana Economy

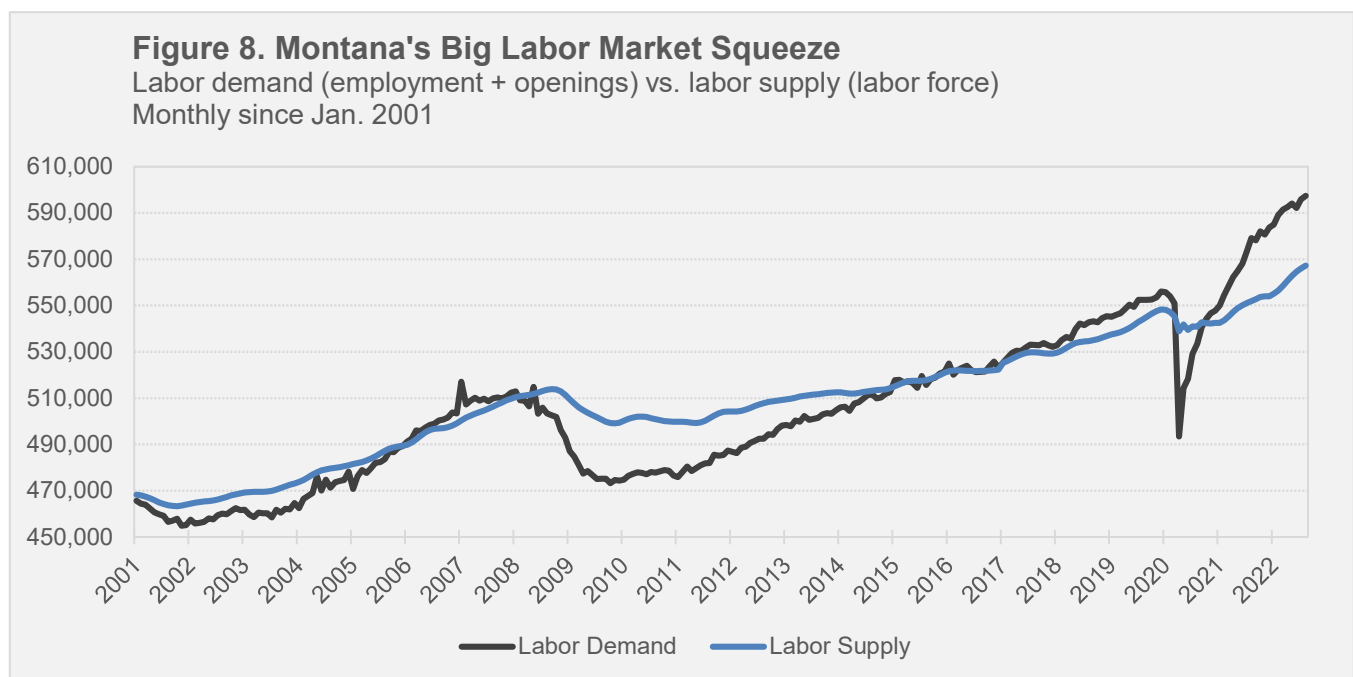
Overview

Montana's economy came roaring out of the pandemic doldrums. Annualized quarterly changes in the state's real gross state product (GSP) averaged 3.7% in 2021. Real GSP grew from \$48.2 billion in the fourth quarter of 2020 to just shy of \$50 billion in the fourth quarter of 2021. Montana's economy seemed poised to cross this threshold easily in the first quarter of 2022; instead, real GSP contracted at a 2% annualized rate. This contraction was followed by an annualized decline of 1.1% in the ensuing quarter, mirroring the movement of U.S. real GDP. Figure 7 shows observed values along with S&P Global projections of annualized quarterly changes in real GSP from 2021 through 2025. Like the U.S. economy,

Montana slides into recession in early-2023 then gradually inches its way back toward trend growth by 2025. Despite 2022's weakness in GSP, many other aspects of the Montana economy performed with unprecedented levels of strength. Montana's labor market being the case in point.



Job growth in Montana has been on a torrid pace. According to data from the BLS Current Employment Statistics survey, Montana's average monthly gain in nonfarm employment (i.e., payroll jobs) was 1,825 jobs in 2021. Average jobs added per month registered 392 in 2019. Year-to-date through September 2022, Montana is averaging nonfarm employment growth of 389 jobs per month. When self-employed workers are included, the total number of people working across Montana is at the highest level in history. In September 2022, total employment stood north of 551 thousand, a gain of 24,600 jobs (4.7% growth) since February 2020. Despite such incredible employment gains, labor demand has hardly been satiated. Montana's unemployment rate has recorded 11 consecutive readings below 3% since November 2021. Both the unemployment rate (2.3%) and the number of unemployed (13,097) hit record lows in April 2022; they have since risen, but not to a degree that is offering any meaningful relief to a historically tight labor market.



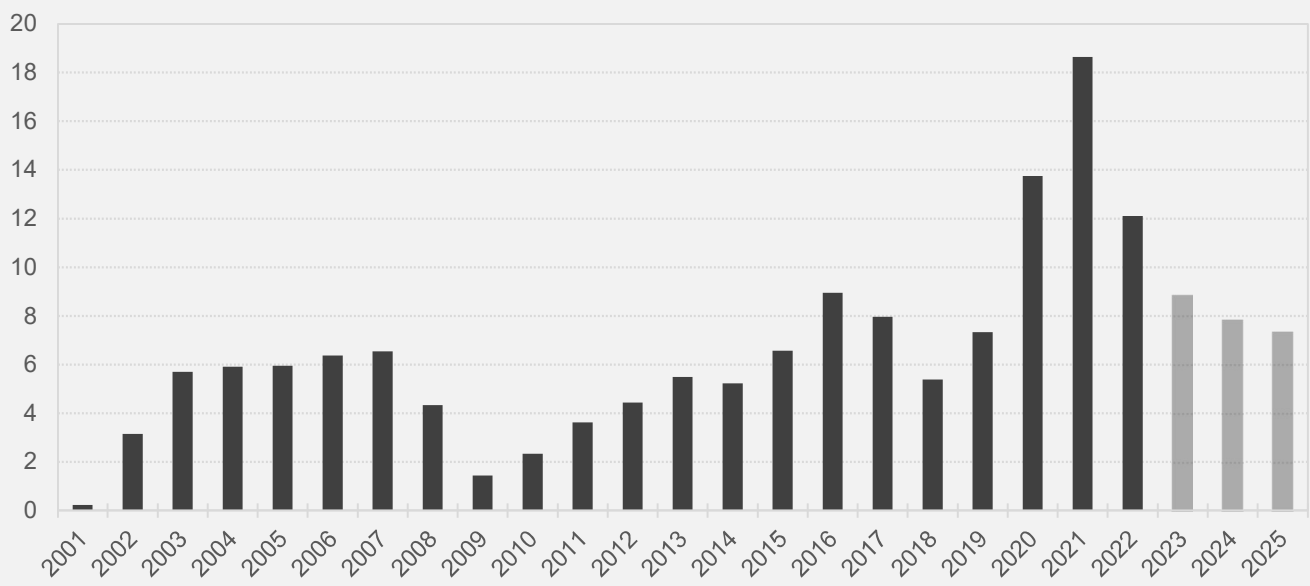
Labor demand continues to outstrip labor supply by a wide margin. Job openings and hires persist at historically high levels. In August 2022, there were 2.9 jobs available per unemployed person in Montana according to most recent data from the BLS Job Openings and Labor Turnover survey. Incredibly, this is down from highs of 3.4 - 3.5 in the middle of 2022. Other metrics of labor market tightness, such as the job vacancy rate (ratio of openings to labor supply) and the quit rate (ratio of quits to nonfarm employment), are also significantly elevated. High quit rates are indicative of workers' confidence in their ability to improve their employment situation in relatively short order by leaving their current position. When employers compete fiercely for qualified workers, wages benefit.

Indeed, wages of Montana workers have been surging. Average annual wages grew 5.9% in 2021 from 2020 levels. Increases in 2022 have been even larger. Inflation, however, has prevented the strength of nominal growth from translating to robust real growth. Real wage growth managed less than 2% growth in 2021 and is on track to register a decline in 2022. S&P Global projects nominal growth in Montana's average annual wage to reach 6.4% in 2022, but 8% headline CPI growth knocks real wage growth below zero. Real household incomes are not faring any better. The real median household income in Montana fell 5.8% in the second quarter of 2022 from a year prior. It's important to note that lingering federal stimulus effects were still impacting household incomes in the second quarter of 2021. Such effects were mostly dissipated by the third quarter of 2021; yet third quarter 2022 real median household income in Montana is expected to record a nearly 3% decline from the 2021 level. The rate of decline improves further in the fourth quarter, where the 2022 level is down 2% compared to four quarters prior.

Household formations were exceptionally strong in 2021, climbing 3.1% in the fourth quarter from the year prior, the fastest rate of increase in over 30 years. Formations continue at a respectable clip in 2022 – total households rise 2% from 468,000 at year-end 2021 to 478,000 by year-end 2022. Recent strength in household formations is linked to the pandemic's impact on migration patterns. COVID-19 made life in densely populated areas uncomfortable and cumbersome. The widespread adoption of remote work allowed many people an avenue of escape from the claustrophobia of urban life, and Montana was an attractive destination. Domestic net migration to Montana rose sharply in 2020 (13,750), surpassing 2019 (7,320) by 66% and reaching the highest mark since at least 2000. Migration climbed higher to a peak of 18,600 in 2021. The inflow of people to Montana cools in 2022 to 12,110, falling below the 2020 level but still recording a strong gain by historic standards. On the back of such strong net migration, Montana's total population notched gains of 1% in 2020 and 1.6% in 2021 (the largest advance since 1995). An increase of 1.2% is projected for 2022.

Figure 9. Destination: Montana

Annual domestic net migration (thousands) to Montana; greyed bars indicate forecast values



Looking forward, Montana is projected to enter recession in early 2023. Real GSP, employment, and real wages all decline in 2023. The labor force expands, but the participation rate ticks down. The unemployment rate rises from 2.7% in 2022 to 4.3% in 2023. Growth in most major metrics resumes for the ensuing 2025 biennium. The unemployment rate worsens to 4.9% in 2024 but retreats to 4.5% in 2025. Real wage growth inches toward 2%, notching 1.7% and 1.9% annual growth in 2024 and 2025, respectively. Total nonfarm employment sinks 0.5% in both 2023 and 2024 before adding 0.6% in 2025. Not surprisingly, given weakening wages and falling employment, real consumer spending declines in 2023 with tepid growth thereafter. Housing activity contracts in 2023, with permits, starts, and sales all coming down from 2022 levels. Median new and existing home price growth dampens while remaining positive throughout 2023 - 2025. Growth in household formations attenuates through 2024 and flattens in 2025. High commodity prices that have been a boon to Montana's mining industry in 2022 trend down through 2025 but stay high enough to support current levels of resource extraction. The strong U.S. dollar hurts Montana agriculture export volumes, bringing pain to some rural Montana communities. Net migration returns to pre-pandemic levels and Montana's total population expands by an average of just under 1% per year from 2023 - 2025. On balance, by 2025 the Montana economy is, to put it colloquially, "back to normal". A closer look at how this is manifest in the various components and sectors of Montana's economy is explored in the following sections.

A summary of selected important economic indicators for Montana is presented in Table 2. Calendar year historical data from 2012 - 2021 is displayed alongside projections from S&P Global for 2022 - 2025.

Calendar Year	Real GSP (millions)	Percent Change	Nonfarm Employment	Percent Change	Labor Force	Percent Change	Unemp. Rate	Percent Change	Real Avg. Wage	Percent Change
2012	\$42,341	1.1%	440,400	2.1%	507,346	1.2%	5.8	-12.5%	\$37,430	1.4%
2013	\$42,968	1.5%	448,775	1.9%	512,197	1.0%	5.3	-8.0%	\$37,265	-0.4%
2014	\$43,829	2.0%	453,392	1.0%	514,188	0.4%	4.7	-12.7%	\$37,864	1.6%
2015	\$45,396	3.6%	462,108	1.9%	519,448	1.0%	4.3	-8.2%	\$38,708	2.2%
2016	\$44,437	-2.1%	468,017	1.3%	523,792	0.8%	4.3	0.8%	\$38,659	-0.1%
2017	\$45,974	3.5%	472,933	1.1%	528,429	0.9%	4.1	-5.2%	\$38,920	0.7%
2018	\$46,584	1.3%	478,742	1.2%	533,727	1.0%	3.7	-8.3%	\$39,030	0.3%
2019	\$46,886	0.6%	484,475	1.2%	542,438	1.6%	3.6	-4.4%	\$39,406	1.0%
2020	\$46,750	-0.3%	470,317	-2.9%	542,675	0.0%	5.8	61.0%	\$41,936	6.4%
2021	\$48,976	4.8%	492,300	4.7%	549,515	1.3%	3.4	-40.7%	\$42,679	1.8%
2022	\$49,762	1.6%	506,472	2.9%	563,645	2.6%	2.7	-21.6%	\$42,025	-1.5%
2023	\$49,699	-0.1%	503,626	-0.6%	567,909	0.8%	4.3	58.8%	\$41,767	-0.6%
2024	\$50,334	1.3%	500,938	-0.5%	571,236	0.6%	4.9	14.9%	\$42,451	1.6%
2025	\$51,260	1.8%	504,000	0.6%	574,012	0.5%	4.6	-6.7%	\$43,244	1.9%

Sector Analysis

Sector breakdowns for various components of the Montana economy present data by calendar year for real GSP, employment, and income. This information is displayed in Tables 3 - 5 in the subsections that follow. All calendar years relevant to the FY 2023 - FY 2025 forecast window are included. As of the writing of this document in November 2022, all figures in the sector analysis tables are estimated values. Actuals for 2022 should finish close to their estimated values since most data through the third quarter is known.

Gross State Product

Table 3 presents Montana real gross state product by sector in levels and shares of total output. Montana is primarily a service-providing economy. Nearly 82% of real GSP is sourced from the services sector in 2022. This share rises to over 83% by 2025. The projected contraction of total real GSP in 2023 does not owe its decline to shrinking services sector output; rather, services sector GSP rises each year from 2023 through 2025. Output from the goods-producing side of the economy softens by 2.4% in 2023 relative to its 2022 level. Growth resumes in 2024 and 2025 but not at a sufficient pace to prevent the goods sector from becoming an ever-smaller share of total production.

The financial activities sector, comprising the finance, insurance, and real estate industries, is currently the largest in Montana's economy, accounting for about 18.5% of the state's real economic output. Since mid-2020 and up until recently, Montana's real estate market had been booming in certain regions of the state that became increasingly attractive to individuals looking to relocate from the nation's crowded cities. The emergence of remote work opportunities enabled significant growth in labor mobility, and Montana's scenic beauty and ample space framed the state as an enticing destination. Real estate markets are cooling quickly in the face of tightening financial conditions that are drying up construction activity and hammering home affordability. Contraction in the real estate industry is the anchor that weighs on output from the broader financial activities sector. This sector's share of the production pie shrinks to 18.3% by 2025 as it also relinquishes its position as the largest source of output to the sector encompassing the trade, transportation, and utilities industries, which moves from providing 17.3% of state output in 2022 to 18.4% in 2025. Rising real prices (due to elevated commodity prices) for trade, transportation, and utility services may be one of the sources of lift for this sector that allows it to surpass the financial activities sector in 2025.

Table 3
Montana Real Gross State Product by Sector
(Millions of 2012 dollars)

Economic Sector	2022		2023		2024		2025	
	Level	Share	Level	Share	Level	Share	Level	Share
Agriculture, Forestry, & Fishing	\$1,863	3.7%	\$1,873	3.8%	\$1,906	3.8%	\$1,933	3.8%
Mining	\$1,659	3.3%	\$1,625	3.3%	\$1,656	3.3%	\$1,684	3.3%
Construction	\$2,315	4.7%	\$2,144	4.3%	\$2,090	4.2%	\$2,039	4.0%
Manufacturing	\$3,279	6.6%	\$3,255	6.5%	\$3,255	6.5%	\$3,273	6.4%
Goods Sector Total	\$9,117	18.3%	\$8,897	17.9%	\$8,907	17.7%	\$8,929	17.4%
Trade, Transp.& Utilities	\$8,611	17.3%	\$8,781	17.7%	\$9,108	18.1%	\$9,419	18.4%
Information	\$1,655	3.3%	\$1,617	3.3%	\$1,697	3.4%	\$1,846	3.6%
Financial Activities	\$9,233	18.6%	\$9,131	18.4%	\$9,189	18.3%	\$9,399	18.3%
Professional & Business Services	\$4,932	9.9%	\$4,742	9.5%	\$4,589	9.1%	\$4,659	9.1%
Educational & Health Services	\$5,541	11.1%	\$5,729	11.5%	\$5,899	11.7%	\$6,021	11.7%
Leisure & Hospitality	\$2,740	5.5%	\$2,789	5.6%	\$2,810	5.6%	\$2,825	5.5%
Other Services	\$1,022	2.1%	\$1,015	2.0%	\$1,029	2.0%	\$1,038	2.0%
Federal Government	\$1,611	3.2%	\$1,655	3.3%	\$1,663	3.3%	\$1,656	3.2%
State and Local Government	\$4,345	8.7%	\$4,399	8.9%	\$4,502	8.9%	\$4,577	8.9%
Military	\$515	1.0%	\$506	1.0%	\$496	1.0%	\$492	1.0%
Services Sector Total	\$40,734	81.9%	\$40,926	82.3%	\$41,619	82.7%	\$42,656	83.2%
All Sectors Total	\$49,762		\$49,699		\$50,334		\$51,260	

Employment

Table 4 summarizes Montana's employment situation with levels and year-over-year percent changes by sector. Total nonfarm (payroll) employment in Montana is projected to peak at 506,472 in 2022. Montana sheds payroll jobs in 2023 and 2024, but the level of employment stays well-above the pre-pandemic peak of 489,000 achieved in February 2020. Payroll employment in the goods sector falls by 4,300 jobs from 2022 to 2025, a cumulative decline of 6.8%. The share of payroll jobs held within the goods sector falls from 12.5% in 2022 to 11.7% in 2025. Construction and manufacturing employment contracts each year following 2022, with the former thinning by 2,670 jobs and the latter by 1,570 jobs. Both industries are hurt by restrictive financial conditions, inflation, and weakening consumer demand.

Analogous to its relationship to total state output, the services sector is the primary determinant of the state's payroll employment situation. Over 87% of payroll employees in Montana work in the services sector. Within the services sector, the umbrella sector covering the trade, transportation, and utilities industries hosts the highest number of jobs. Total employment in this sector slips by 4,220 jobs from 2022 to 2025, notching losses in each year. Interesting, real GSP from the trade, transportation, and utilities sector rises in each respective year, indicating productivity gains. The sector

comprising education and health services is the next largest employer, followed by state and local government industry and the leisure and hospitality industry.

High levels of net migration into Montana during the period 2020 - 2022 may be a source of increasing demand for education services, thus contributing to consistent employment growth in that industry through 2025. Employment in the health care and social assistance industry also expands through 2025 as the overall population of Montana continues to age and the need for healthcare and social workers grows. State and local government employment grows tepidly in 2023 after sliding by 1.1% in 2022. Growth picks up in 2024 and moves sideways in 2025. Leisure and hospitality employment surged in 2021 and looks to post another strong gain in 2022 because of a swelling of nonresident visitation to Montana resulting from significant, pandemic-induced, pent-up travel demand. Job gains in this tourism-fueled industry ease in 2023 before givebacks occur in 2024 and 2025.

Table 4
Montana Employment by Sector
(thousands)

Economic Sector	2022		2023		2024		2025	
	Level	Y/Y Chg.	Level	Y/Y Chg.	Level	Y/Y Chg.	Level	Y/Y Chg.
Natural Resources & Mining	6.99	3.8%	6.76	-3.3%	6.77	0.2%	6.92	2.2%
Construction	33.88	2.5%	32.02	-5.5%	31.42	-1.9%	31.21	-0.7%
Manufacturing	22.63	5.8%	21.98	-2.9%	21.23	-3.4%	21.07	-0.8%
Goods Sector Total	63.50	3.8%	60.76	-4.3%	59.42	-2.2%	59.20	-0.4%
Transp., Trade, & Utilities	99.12	2.6%	97.34	-1.8%	95.54	-1.9%	94.90	-0.7%
Information	5.54	-0.9%	5.68	2.5%	5.86	3.2%	6.00	2.3%
Financial Activities	27.60	2.3%	27.06	-2.0%	27.56	1.9%	28.14	2.1%
Professional & Business Svcs	48.61	3.6%	46.10	-5.2%	43.75	-5.1%	44.98	2.8%
Educational & Health Svcs	81.95	2.3%	84.19	2.7%	85.50	1.6%	86.59	1.3%
Leisure & Hospitality	71.59	8.1%	73.34	2.5%	72.66	-0.9%	72.11	-0.8%
Other Services	18.86	1.9%	18.78	-0.4%	19.12	1.8%	19.60	2.5%
Federal Government	13.72	2.8%	13.91	1.4%	13.87	-0.2%	13.84	-0.2%
State & Local Government	75.97	-1.1%	76.47	0.7%	77.65	1.5%	78.63	1.3%
Services Sector Total	442.97	2.7%	442.87	0.0%	441.52	-0.3%	444.80	0.7%
Nonfarm Total	506.47	2.9%	503.63	-0.6%	500.94	-0.5%	504.00	0.6%
Agriculture, Forestry, & Fishing	9.77	-0.8%	9.69	-0.9%	9.57	-1.2%	9.63	0.6%
Military	8.04	0.3%	7.95	-1.1%	7.85	-1.2%	7.90	0.7%
All Sectors Total	524.28	2.8%	521.26	-0.6%	518.36	-0.6%	521.53	0.6%

Wage Income by Sector

Table 5 breaks out Montana wage income, in real terms, by sector and reports the levels along with the year-over-year changes. Despite expectations for strong nominal wage growth near 7%, real wages are projected to fall 1.3% in 2022 because of high inflation – the average wage across all sectors falls from \$46,970 in 2021 to \$46,370 in 2022. Continued inflation and some cooling of the job market bring the average real wage down further in 2023 to \$45,950. Return to some semblance of economic normality in 2024 and 2025 results in real wage growth settling within the historical average range of 1% - 1.5%.

Impressively, the average wage growth for the goods sector manages to post a positive reading in 2022 on the back of a 4% gain in wages for construction and mining workers. Other industries in the sector – agriculture, forestry, and fishing, along with manufacturing – experience real wage losses in 2022. In 2022, the average wage for the goods sector is estimated to be \$47,340, nearly \$1,000 higher than all-sector average. None of the industries within the goods sector experience wage growth in 2023, so the average wage shrinks 0.5% to \$47,090. Wage growth for the sector resumes in 2024 and 2025, fueled by respectable gains for construction, mining, and manufacturing jobs.

The average services sector wage declines by 1.8% in 2022 and 1% in 2023. Of the 12 industries within the services sector, eight record real wage losses in 2022, led by a 6.1% decline for state and local government jobs. Nominal wage growth in state and local government is generally tepid, so high inflation takes a big bite out of real wages for this industry. The highest real wage level is expected to belong to the information industry in 2022. It takes the crown despite a 3.6% decline from the 2021 level. Wage growth in the information industry skyrocketed in 2021, notching an 18.7% annual gain, over triple the growth of the next highest reading of 5.5% for the wholesale trade industry. The pandemic pushed so much activity to the internet that demand for data processing and publishing services experienced a major upward shift, and wages went along for the ride. As fast as information industry wages rose, they are projected to come down just as rapidly in the post-pandemic period. Following the decline in 2022, the angle of descent steepens in 2023 (-10.3%) and continues but dampens in 2024 (-3.6%). By 2025, the average wage for the information industry is the third highest among the services sector industries.

Broad recovery in services sector wages begins in 2024 with 10 of the 12 industries seeing real growth. All industries post gains in 2025. Transportation, warehousing, and utilities wages rise the fastest while military wages rise the slowest. The services sector average rises by 1.1% in 2024 and 1.6% in 2025. Wages are highest in the wholesale trade industry by 2025. It and the federal government industry are the only two industries with a real wage level above \$60,000.

Table 5
Montana Average Real Wages by Sector
(Thousands of 2012 dollars)

Economic Sector	2022		2023		2024		2025	
	Level	Y/Y Chg.	Level	Y/Y Chg.	Level	Y/Y Chg.	Level	Y/Y Chg.
Agriculture, Forestry, & Fishing	\$38.57	-1.1%	\$37.83	-1.9%	\$37.62	-0.6%	\$37.20	-1.1%
Construction and Mining	\$56.40	4.0%	\$56.37	-0.1%	\$57.17	1.4%	\$57.70	0.9%
Manufacturing	\$47.06	-1.0%	\$47.06	0.0%	\$48.08	2.2%	\$49.00	1.9%
Goods Sector Average	\$47.34	0.9%	\$47.09	-0.5%	\$47.62	1.1%	\$47.97	0.7%
Wholesale Trade	\$60.24	0.4%	\$60.87	1.1%	\$62.39	2.5%	\$63.81	2.3%
Retail Trade	\$29.21	-4.3%	\$28.99	-0.8%	\$29.59	2.1%	\$30.23	2.2%
Transportation, Warehousing, & Utilities	\$51.63	-3.9%	\$53.27	3.2%	\$55.56	4.3%	\$57.34	3.2%
Information	\$65.43	-3.6%	\$58.67	-10.3%	\$56.55	-3.6%	\$58.12	2.8%
Financial Activities	\$57.23	1.5%	\$56.37	-1.5%	\$56.25	-0.2%	\$56.73	0.8%
Professional & Business Svcs	\$56.57	2.6%	\$56.13	-0.8%	\$56.57	0.8%	\$56.83	0.5%
Educational & Health Svcs	\$42.73	-1.9%	\$43.18	1.0%	\$44.26	2.5%	\$45.26	2.3%
Leisure & Hospitality	\$22.34	-1.7%	\$21.96	-1.7%	\$22.28	1.4%	\$22.63	1.6%
Other Services	\$36.64	0.1%	\$36.67	0.1%	\$37.35	1.9%	\$37.76	1.1%
Federal Government	\$61.27	-3.9%	\$61.73	0.7%	\$62.37	1.0%	\$62.87	0.8%
State & Local Government	\$35.74	-6.1%	\$35.82	0.2%	\$36.36	1.5%	\$37.03	1.8%
Military	\$34.50	-2.5%	\$34.39	-0.3%	\$34.48	0.3%	\$34.55	0.2%
Services Sector Average	\$46.13	-1.8%	\$45.67	-1.0%	\$46.17	1.1%	\$46.93	1.6%
All Sectors Average	\$46.37	-1.3%	\$45.95	-0.9%	\$46.46	1.1%	\$47.14	1.5%

Population and Demographics

Table 6 shows Montana total population and prime working age population along with total employment (payroll employment plus self-employed) and the ratio of total employment to total population. The table includes historical observations from 2012 - 2021 and projections from S&P Global for 2022 - 2025. Montana averaged total population growth of 1% per year from 2012 through 2021, finishing this ten-year period with a strong annual gain of 1.6% as increased labor mobility during the pandemic produced a wave of worker relocations to Montana. Effects of this phenomenon on population growth linger into 2022. Total population growth levels return to historic norms for the three years from 2023 through 2025, averaging 0.9% annually over the period.

Montana's prime working age population (classified as individuals in the age range 25-54), which has been expanding since 2015, also grew considerably in 2021 and is projected to post another healthy advance in 2022. Such exceptional growth in this age cohort indicates that Montana was able to import material amounts of economically vital working age

individuals during the in-migration boom of the past few years. The population of this age group surpassed 400,000 for the first time in 2021. Expansion of the working age population is maintained through 2025 but at a decreasing rate. Continuing growth in this important population cohort is encouraging news for a state that is/has been in the throes of a massive labor shortage. Additions to the labor supply will help ease the constraint put on the economy by the dearth of quality workers. The aging of Montana's population certainly isn't making the completion of this task any easier. In fact, it's adding to the challenge because these older individuals simply work less. Additionally, they are putting upward pressure on labor demand within the health care and social assistance industry. The cohort of Montanans aged 65 and over continues to expand its population share through 2025, eclipsing one-fifth of the total population in 2023.

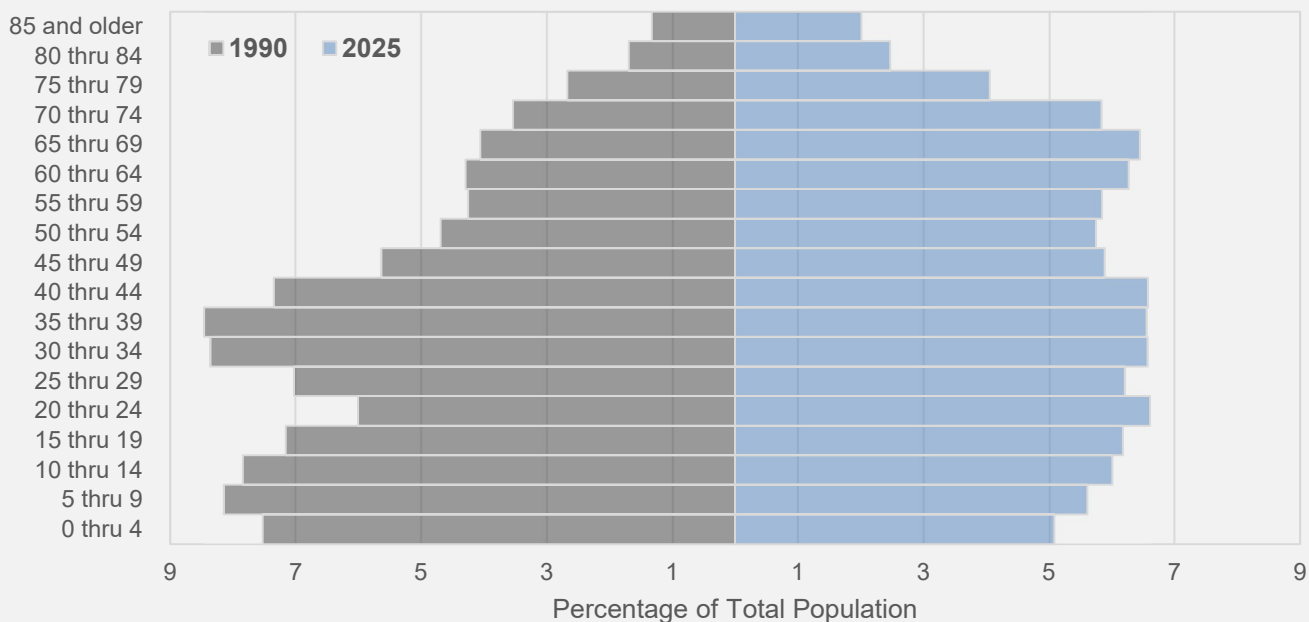
Table 7
Age Structure of the Montana Population
(thousands)

Age Cohort	2022			2023			2024			2025		
	Pop.	Y/Y Chg.	Share	Pop.	Y/Y Chg.	Share	Pop.	Y/Y Chg.	Share	Pop.	Y/Y Chg.	Share
0 thru 4	57.1	-1.7%	5.1%	57.0	-0.2%	5.0%	57.5	0.9%	5.0%	58.5	1.7%	5.1%
5 thru 14	136.2	0.4%	12.2%	135.7	-0.4%	12.0%	134.8	-0.7%	11.8%	133.5	-0.9%	11.6%
15 thru 24	143.9	1.7%	12.9%	145.3	1.0%	12.9%	146.4	0.7%	12.8%	147.0	0.4%	12.8%
25 thru 34	146.5	1.9%	13.1%	147.6	0.8%	13.1%	147.6	0.0%	12.9%	146.9	-0.5%	12.8%
35 thru 44	144.9	2.7%	13.0%	147.7	1.9%	13.1%	149.7	1.4%	13.1%	150.9	0.8%	13.1%
45 thru 54	122.9	1.6%	11.0%	125.5	2.1%	11.1%	129.1	2.9%	11.3%	133.7	3.6%	11.6%
55 thru 64	145.4	-1.7%	13.0%	142.9	-1.7%	12.7%	140.8	-1.5%	12.3%	139.3	-1.1%	12.1%
65 and Older	222.2	2.4%	19.9%	228.0	2.6%	20.2%	234.0	2.6%	20.5%	239.4	2.3%	20.8%
Total	1,119.0	1.2%		1,129.6	1.0%		1,139.8	0.9%		1,149.2	0.8%	

Table 7 shows projections for Montana population counts by defined age cohorts for 2022 through 2025. Furthermore, Figure 10 illustrates the transition that has been occurring within Montana's population over the past three decades. It shows population shares by five-year age cohorts and compares how the projected age composition in 2025 differs from where it stood in 1990.

Figure 10. The Aging of Montana

Age cohort shares of total population; 1990 vs 2025 projection



Visualizing the distribution of Montana's population by age clearly identifies the shift from young to old that has taken place since 1990. Whereas the state's population skewed younger in 1990, it is much more uniformly distributed by 2025 due to the aging of the large baby boomer population. The population share of those less than 10 years shrinks considerably from over 7% in 1990 to near 5% in 2025. In 1990, these were the baby boomer generation's children and now they are the millennial generation's children. Birth rates in Montana have fallen since 1990, explaining the contraction in the percent of the population accounted for by young children. The adolescent population has also been affected by this phenomenon. In 1990, those aged between 10 and 19 years made up 15% of the total population; by 2025, their share falls to just over 12%.

It is no surprise then, that the rate of growth in the over 65 age cohort during the period 2023 - 2025 far outpaces that of the younger cohorts. The population of very young children, those aged 0-4 years, manages only slight growth from 2022 to 2025. Population of the 5 through 14 age group declines by an average of -0.6% per year while population of the 15 through 24 age group expands but at an increasingly smaller rate. The combined population of these three young age cohorts only advances 0.6% from its 2022 level by 2025, moving from 337,200 to 339,000.

Anemic growth among the younger age cohorts in Montana is troublesome for the future of the prime working age population and by extension economic growth. Young people play a crucial role in filling entry-level and other low-skill jobs while they work their way toward educational and career advancement. Montana's labor shortage is particularly acute within the market for low-wage jobs and the population demographics reveal that a sudden boost in labor supply isn't going to be the solution.



GOVERNOR
GREG GIANFORTE

STATE OF MONTANA

GENERAL FUND
REVENUE SUMMARY
SECTION 2

OBPP Staff:

Ryan Evans	444-3163
Ralph Franklin	444-1337
Nancy Hall	444-4899
Brian Hannan	444-7802
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GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

The state general fund accounts for all the state's financial resources, except for those legally mandated to be accounted for in another fund. Revenue estimates are constructed as part of the Governor's Executive Budget to inform expenditure decisions that maintain compliance with the balanced budget requirement in Article VIII of Montana's constitution. The Governor's Office of Budget and Program Planning generates forecasts for all components of general fund revenue along with select sources of non-general fund revenue.

Discussion of Pandemic-Era Collections

General fund revenue growth over the past two years has been, in a word, torrid. Collections in FY 2021 exceeded FY 2020 by 17%. Amazingly, the pace of growth nearly doubled in FY 2022, to 31%. Total general fund receipts surged from \$2.53 billion in FY 2020 to \$3.77 billion in FY 2022, a gain of over \$1.2 billion in just two years. Prior to the onset of the COVID-19 pandemic, it took 15 years, from FY 2004 to FY 2019, for general fund revenue to increase by \$1.2 billion. Anomalous conditions in the pandemic-era economy, such as incredible stimulatory outlays from the federal government (and the nature of these outlays), the highest levels of inflation in 40 years, and widespread market imbalances, contributed to the record-setting general fund revenue growth of the past two years.

One-Time-Only Revenue

There was a substantial one-time-only element to the impressive runup in general fund revenue from FY 2020 to FY 2022, rooted in the high levels of federal stimulatory spending and price level growth that characterized those years. Taxes are collected in nominal dollars and so inflation raises the nominal revenue base, and it has compounding effects insofar as price level increases are "sticky". Expected inflation is generally around 2% per annum (the Federal Reserve's target level). Inflation above the expected rate of 2%, as has been the case over the past 18 months, can be thought of as creating one-time-only revenue if the rise is not expected to persist. Indeed, inflation is expected to retreat from its high 2021-2022 levels to the 2% target by 2024. A portion of inflation's effect on general fund revenue growth in FYs 2021, 2022, and 2023 can be allocated to the one-time-only bucket. Since FY 2021, this bucket has been overflowing with general fund receipts attributable to the stimulatory fiscal policy actions taken by the federal government over the past few years.

Federal fiscal stimulus spending during the COVID-19 pandemic was extraordinary. Total stimulus spending directed to Montana individuals, businesses, and government entities amounted to \$11.8 billion.¹ Direct payments through stimulus checks and income support administered via enhanced unemployment benefits provided individuals with immediate liquidity. Firms were able to apply for forgivable loans using the Paycheck Protection Program. State and local governments received large sums to dole out as loans, grants, etc. What effect did this extraordinary amount of federal fiscal support have on the Montana economy and how did it flow through to state tax collections?

Applying fiscal multipliers to the federal stimulus spending distributed to Montana gives the estimated impact of that spending on nominal gross state product (GSP).^{2,3} How the increase in Montana nominal GSP is reflected in general fund revenue collections is informed by the historical relationship of general fund revenue to GSP. Preceding to the pandemic years, the fiscal year general fund revenue take of prior calendar year GSP was about 5%. Using this metric, marginal nominal calendar year GSP due to federal stimulus is translated into fiscal year general fund revenue.

Federal stimulus spending was distributed across calendar years 2020 – 2022, with the lion's share going out the doors in 2021. FY 2022 general fund revenue experienced the largest one-time pop from circulating stimulus dollars. Both FY 2021 and FY 2023 record one-time revenue surges about half the size of the FY 2022 bounce. By FY 2024 the stimulus boon has mostly dissipated.

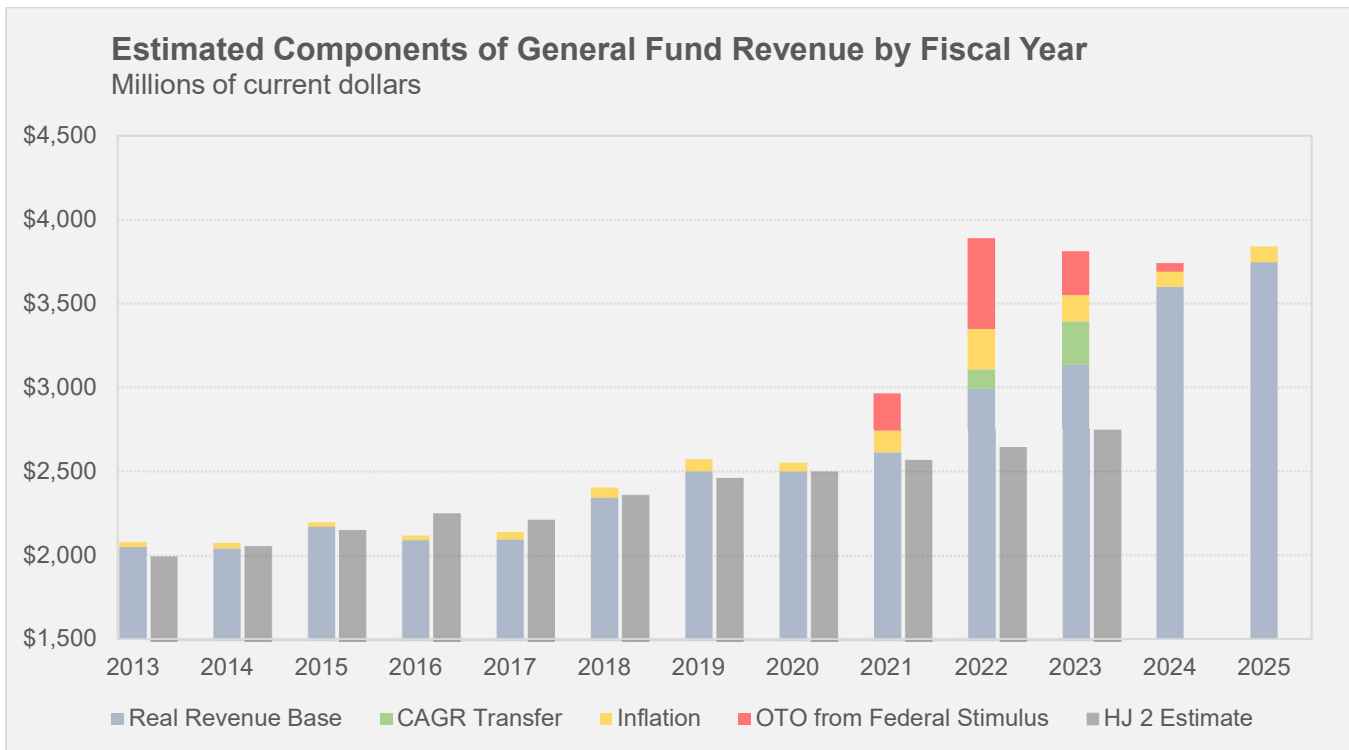
Figure 1 breaks down past and projected general fund revenue into four components to illustrate the anomalous nature

¹ Analysis of federal spending data from COVIDMoneyTracker.org.

² The fiscal multipliers assumed here are loosely based on analysis produced by the International Monetary Fund which gives ranges for fiscal policy multipliers based on the characteristics and state of the economy. Multipliers are higher in times when the output gap is negative and when monetary policy is exceptionally accommodative and constrained at the zero lower bound. Furthermore, the analysis notes that multipliers are persistent – fiscal stimulus adds to output in years beyond the year in which the outlay occurred – and are often larger in the second year.

³ Batini, et al., 2014, "Fiscal Multipliers: Size, Determinants, and Use in Macroeconomic Projections," International Monetary Fund.

of collections in the pandemic era. Past legislative revenue estimates are included as evidence for how far reality strayed from prior expectations during this period. Approximations of the real revenue base (i.e., ongoing revenue) are depicted with estimated additions from inflation, federal stimulus spending, and accounting noise related to transfers of excess general fund revenue.⁴ Actual collections left official estimates in the dust in both FY 2021 and FY 2022. The FY 2023 estimate from the 2021 legislative session is on track to be exceeded by a wide margin as well.⁵ It is estimated that in FY 2021 approximately 4.5% and 7.5% of general fund revenue came from inflation and one-time-only effects of federal stimulus spending, respectively. In FY 2022, these numbers moved up to 6% and 14%. The FY 2023 estimates nearly match those for FY 2021, with 4% of revenue coming from inflation and 7% from federal stimulus. Inflation's contribution is back to a normal level and the last bits of temporary support from federal stimulus are realized in FY 2024. Not to be lost here is the fact there has been real expansion of the revenue base. While there is clearly a “sugar-high” element to the recent surge in revenue collections, there has also been generation of new and ongoing taxable economic activity. Growth in population, employment, real wages, property valuations, capital stocks, etc. all work to elevate Montana’s tax base.



Component Detail

Of the 34 components of general fund revenue, all but eight of them recorded year-over-year increases in FY 2022. All the general fund’s major revenue sources registered healthy growth. Income tax revenue rose by 35% over FY 2021, and contributed by far the most to bottom-line growth, accounting for two-thirds of the increase in FY 2022. Broad lift across the economy in wages and asset prices funneled money through the income tax system. Corporation tax notched an annual gain north of 10% and contributed 3% to bottom-line growth. Property tax rose 8% year-over-year, also accounting for near 3% of total growth.

Revenue from the natural resource tax group grew 55% in FY 2022 on the back of widespread elevation in commodity prices. Large advances in oil and natural gas prices pushed oil and natural gas severance tax revenue to a 78% annual gain. International thermal coal prices shattered previous record highs, a development that significantly increased the value of Montana’s coal exports and the amount of severance taxes received. Coal severance tax advanced 52% in FY

⁴ 17-7-130(5), Montana Code Annotated, instructs excess general fund revenue transferred to the budget stabilization reserve fund that overflows the fund’s statutory cap to be split evenly between the general fund and the capital development fund. This movement of dollars out of the general fund, to the budget stabilization reserve fund, and then back to the general fund does not constitute actual revenue growth and so should be netted out of the bottom-line.

⁵ A new estimate for FY 2023 will be determined during the 2023 legislative session.

2022. The lofty prices for oil, natural gas, and coal flowed through to boost federal mineral royalty payments made to Montana due to the extraction of these resources from federal lands within the state's borders. In total, the natural resource tax group was responsible for 5% of the growth in FY 2022 general fund collections.

Other revenue sources that reported strong improvement in FY 2022 include interest earnings from short-term investment holdings in the Treasurer's Fund and tax receipts from lodging and rental car sales. The Treasurer's Fund invests agency cash holdings in highly liquid, ultra-short-term securities and the income from this activity benefits the general fund. The combination of record high fund balances and rapidly rising short-term interest rates sent Treasurer's Fund investment income to a 219% year-over-year gain. Travel demand surged in the wake of pandemic lockdowns and amidst dissipating COVID-19 contagion fears and people flocked to Montana. High demand conflated with supply-side restrictions (e.g., labor) to send prices for lodging and rental car services skyrocketing. Receipts from lodging and rental car sales taxes advanced by over 70% in FY 2022 over FY 2021 levels. The incredible growth in these three revenue sources had the cumulative effect of adding a touch over 3% to FY 2022 bottom-line growth.

The View Ahead

General fund revenue growth comes back to earth for FY 2023 and the ensuing 2025 biennium. The unique characteristics that have defined the economy over the past two years are fading. Federal fiscal policy is no longer a boon to the demand side of the economy, although the effects of pandemic-era stimulus on tax collections linger into FY 2024. Income growth from wage and nonwage sources attenuates as softness creeps into the labor market and financial conditions tighten further. Inflation moderates as market imbalances ease.

Total general fund revenue, net of the transfers made in FY 2022 and FY 2023 as directed by 17-7-130(5), MCA, declines by 5.9% in FY 2023 from FY 2022 (including the transfers, revenue dips 2% in FY 2023). For the 2025 biennium, growth in general fund revenue bounces back in FY 2024, to 5.3%, and eases to 2.6% in FY 2025. Economic weakness knocks down income growth. The general fund's largest revenue source, individual income tax, pulls back from its incredible FY 2022 level, falling by 14.7% in FY 2023. Moderate growth returns for the 2025 biennium, but total income tax collections are still below FY 2022 by FY 2025. Corporation income tax revenue follows suit, falling in FY 2023 with minimal gains thereafter. The effect of biennial reappraisal of property values results in a level-up in property tax revenue in FY 2024. Tax and fee revenue from motor vehicle registrations rises gradually throughout the forecast period as new vehicle sales recover. The major tax group sources 84% of general fund revenue for the 2025 biennium.

Total revenue from the natural resource tax group jumps 23% in FY 2023 due to elevated prices for coal, oil, and natural gas. Prices for these commodities retreat in FY 2024, pulling total revenue for the group down by 11%. Oil and natural gas prices level off in FY 2025, but coal prices continue to slide. FY 2025 natural resource tax revenue dips by 2%. For the 2025 biennium 4% of general fund revenue comes from the sources in this tax group.

Interest earnings revenue rockets up by almost 400% in FY 2023 because of soaring short-term interest rates and highly elevated balances in the state's treasury cash account. Average short-term rates rise slightly in FY 2024 and decline in FY 2025. Earnings from treasury cash account holdings follow suit. Long-term interest income from the coal trust fund moves up steadily from FY 2023 through FY 2025. Despite the large gains in short-term earnings, total interest earnings only account for 4% of 2025 biennium general fund revenue.

Sales tax revenue records strong gains throughout the forecast period, averaging 15% annual growth over the three years from FY 2023 – FY 2025. Collections from cannabis sales tax lead growth for the sales tax group. Cannabis revenue surges 156% in FY 2023, the first full year of implementation (recreational cannabis sales have been legal since January 1, 2022). Robust growth in this revenue source continues through the 2025 biennium. Growth in tax revenue from lodging and rental car sales stays positive through FY 2025 as Montana maintains its position as an attractive tourist destination.

Table 1 on the following page outlines the component-by-component general fund revenue forecast for FY 2023 and the subsequent 2025 biennium. FY 2022 actuals are included as well. Total general fund revenue is reported both with and without the 17-7-130(5), MCA, transfer because its magnitude in both FY 2022 and FY 2023 skews the bottom-line growth picture if it is not explicitly identified.

Table 1
General Fund Revenue
(Millions \$)

Revenue Category	Actual		25 Bienium Forecast		Biennial Share
	FY 2022	FY 2023	FY 2024	FY 2025	
Major Taxes					
Individual Income Tax	2,393.807	2,040.951	2,087.164	2,181.069	56.3%
Property Tax	335.114	351.888	445.558	447.920	11.8%
Vehicle Taxes and Fees	121.137	122.073	126.664	129.404	3.4%
Corporation Income Tax	293.683	259.200	265.600	267.200	7.0%
Insurance Premiums Tax	97.940	104.896	109.637	114.557	3.0%
Video Gambling Tax	77.881	78.040	78.970	80.383	2.1%
Total Major Taxes	3,319.564	2,957.048	3,113.593	3,220.533	83.6%
Natural Resource Taxes					
Oil and Gas Production Taxes	70.510	78.406	71.018	73.053	1.9%
U.S. Mineral Royalties	19.464	33.090	26.269	24.512	0.7%
Coal Severance Tax	15.359	22.577	19.309	16.864	0.5%
Metalliferous Mines Tax	12.210	12.428	12.145	10.857	0.3%
Electrical Energy Tax	3.930	4.006	4.114	4.222	0.1%
Wholesale Energy Transactions Tax	3.352	3.399	3.459	3.520	0.1%
Total Natural Resource Taxes	124.826	153.906	136.314	133.028	3.6%
Interest Earnings					
Coal Trust Interest Earnings	16.561	18.135	19.558	20.699	0.5%
Treasury Cash Account Interest	11.776	121.913	145.728	119.250	3.5%
Total Interest Earnings	28.337	140.047	165.286	139.949	4.0%
Liquor Taxes					
Liquor Excise and License Taxes	29.166	30.080	31.189	32.573	0.8%
Liquor Profits	18.500	19.000	20.500	22.000	0.6%
Beer Tax	3.202	3.242	3.259	3.272	0.1%
Wine Tax	2.573	2.593	2.628	2.661	0.1%
Total Liquor Taxes	53.441	54.915	57.576	60.505	1.6%
Tobacco Taxes					
Cigarette Tax	27.993	27.585	27.414	27.244	0.7%
Tobacco Products Tax	5.565	5.559	5.481	5.399	0.1%
Tobacco Settlement	3.426	3.140	3.014	2.886	0.1%
Total Tobacco Taxes	36.984	36.285	35.908	35.529	0.9%
Sales Taxes					
Telecommunications Excise Tax	8.571	7.856	7.212	6.620	0.2%
Institutional Reimbursements	13.933	6.343	6.588	10.048	0.2%
Health Care Facility Utilization Fees	3.447	3.287	3.229	3.173	0.1%
Accommodations Tax	46.175	46.808	50.803	55.978	1.4%
Rental Car Sales Tax	6.823	7.115	7.769	8.583	0.2%
Cannabis Sales Tax	14.518	37.144	50.683	57.486	1.4%
Total Sales Taxes	93.467	108.554	126.284	141.888	3.5%
Other Taxes and Revenues					
Lottery Profits	15.311	14.985	17.010	18.218	0.5%
Highway Patrol Fines	3.533	3.628	3.770	3.924	0.1%
Investment Licenses and Permits	19.352	19.669	19.474	20.229	0.5%
Contractors' Gross Receipts Tax	2.840	2.945	3.034	3.122	0.1%
Driver's License Fee	6.167	5.448	5.304	5.372	0.1%
Rail Car Tax	4.020	4.036	4.103	4.131	0.1%
Other Revenue	183.058	312.062	53.392	53.708	1.4%
Total Other Taxes	234.280	362.772	106.086	108.704	2.8%
TOTAL GENERAL FUND REVENUE	\$3,890.899	\$3,813.527	\$3,741.047	\$3,840.136	100.0%

Addendum: 17-7-130(5), MCA, Return Transfer of Excess Revenue from BSR Fund to General Fund

Transfer Amount	116.184	260.789	0.000	0.000	
Total General Fund Net of Transfer	\$3,774.714	\$3,552.738	\$3,741.047	\$3,840.136	



GOVERNOR
GREG GIANFORTE

STATE OF MONTANA

MAJOR REVENUE SECTION 3

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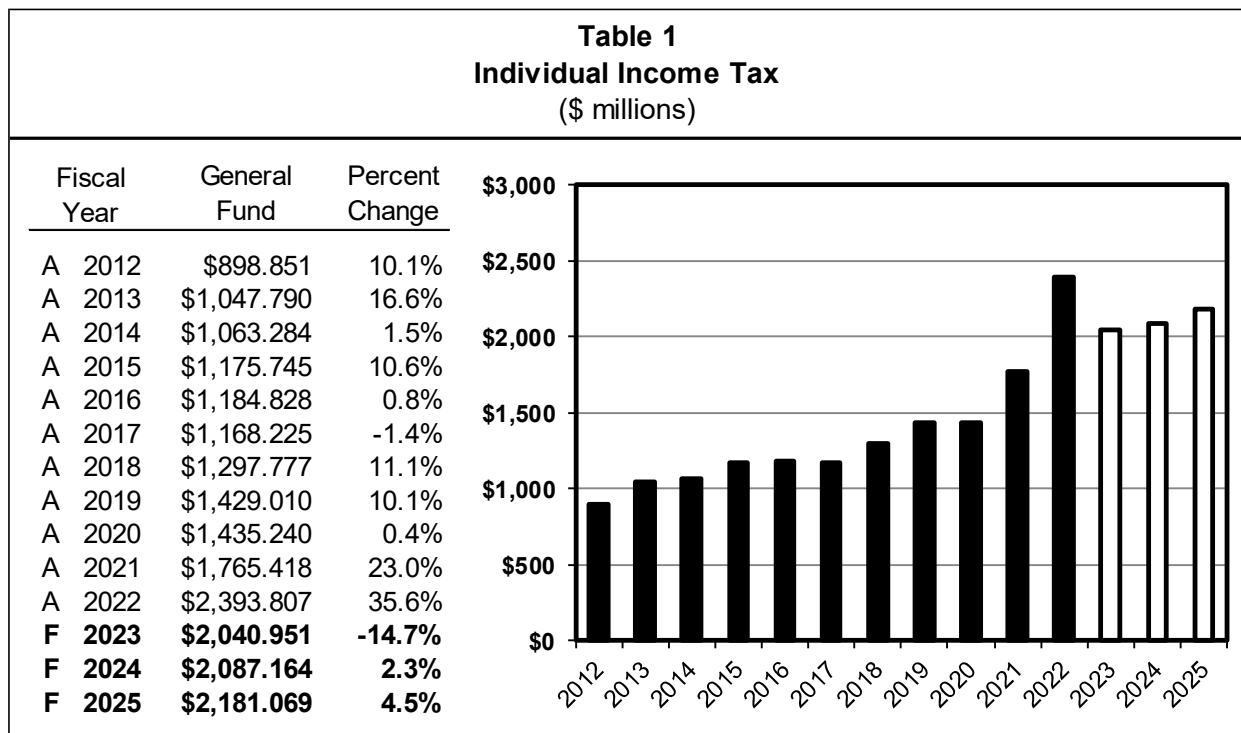
GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Revenue Description

Title 15, Chapter 30, MCA, sets a graduated individual income tax ranging from 1% to 6.75% on gross income, less exemptions, and deductions. A taxpayers' Montana adjusted gross income is based on their federal adjusted gross income but may be higher or lower as some types of income are taxed differently by the state. Itemized deductions for federal and state income tax are similar; however, state income tax is subject to a deduction limit in calculating federal taxable income and the amount of federal income tax that may be deducted in calculating state taxable income is similarly limited. Montana also allows several credits that may reduce taxpayers' liabilities.

Individual income tax is the largest single source of general fund revenue, accounting for 62% of total present law general fund revenue in FY 2022. All individual income tax revenue is allocated to the general fund.

Table 1 shows actual individual income tax revenue for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



Tax policy changes at the federal level can cause behavioral variations in the timing of state tax collections as taxpayers seek to minimize their total tax liability. The strategies are driven by the impacts at the federal level as the top marginal tax rates at the federal level are up to five times higher than state tax rates. The changes in collections in FY 2013 and FY 2014 demonstrate the revenue shifting induced by *The American Taxpayer Relief Act of 2012 (ATRA)*. To a lesser extent something similar happened in FY 2015 and FY 2016 due to the passage of the *Protecting Americans from Tax Hikes (PATH) Act of 2015*. PATH retroactively reinstated tax provisions that had expired at the end of TY 2014 and made them permanent. Such shifting appears to have occurred again in FY 2017 and FY 2018 as taxpayers anticipated federal tax policy changes with the change of presidential administration in November 2016. This may have led to deferral of capital gains realizations. Federal tax policy did in fact change, significantly, with the passage of H.R.1 in December 2017 with the *Tax Cuts and Jobs Act of 2017 (TCJA)*. A clear manifestation of this shift was a \$40 million surge in income tax payments and \$15 to \$20 million surge in property tax receipts attributable to activity at the end of December 2017.

Further temporary tax changes were included in the various packages to provide relief in response to the COVID-19 pandemic. Four bills passed, the two most significant of these are the *Coronavirus Aid, Relief, and Economic Security*

(CARES) Act, P.L.-116-136, passed on March 27, 2020, and the *Paycheck Protection Program and Health Care Enhancement (PPP) Act*, P.L.-116-139, passed on April 24, 2020, and amended by the *Paycheck Protection Program Flexibility Act of 2020*, P.L. No. 116-142, on June 5, 2020. All these bills are collectively referred to as the CARES Act. The changes are temporary tax law changes for TY 2020 with extensive lookback provisions. The tax law change impacts are documented in a congressional Joint Committee on Taxation (JCT) report (*JCX-11R-20*). The most significant portions of these bills are: a refundable tax credit for certain taxpayers (the nontaxable Economic Impact Payments/Recovery Rebates); employee retention credits for employers who pay their employees when closed due to COVID-19 infections; the waiver, in TY 2020, of TCJA net operating loss (NOL) provisions; allowing a five year carry-back (reclaiming prior year taxes paid, and the removal of the limitation on business losses in the TCJA for non-corporate taxpayers. The JCT estimates, as scaled to Montana, represented a reduction of roughly 8% of TY 2020 liability and approximately 4% of TY 2021 of individual income tax liability. These negative revenue impacts did not materialize in large part due to further federal pandemic support in the *American Rescue Plan Act of 2021 (P.L. 117-2)* which became law in March 2021 and among many things extended pandemic unemployment programs through September 2021, revising, and extended federal child tax credits for calendar year (CY) 2021 and provided additional support to businesses and households. The extraordinary fiscal support and economic support has resulted in growth far in excess of 2021 Legislative Session expectations. The level of fiscal support that flowed to Montana (\$11.8 billion) were documented earlier in the General Fund Revenue Summary section (section 2-1) of these estimates.

The 2021 session brought several changes to state income tax law. Notably, in the near terms, were SB 159 which reduced the top marginal income tax rate from 6.9% to 6.75% starting in TY 2022. This is approximately a 2% reduction in statewide liability. This change is superseded starting in TY 2024 by SB 399 which changes the starting point for Montana income tax to federal taxable income. Reducing the current seven bracket system to a two-rate tax system (4.7% and 6.5%). Several existing tax credits were eliminated starting in TY 2022 by SB 399. The magnitude of the change in tax liability is comparable to SB 159 stating in TY 2024.

There were several jobs' credits granted in the 2021 session: HB 252 provided credits for employer funded training for certain trades and HB 629, which grant non-refundable tax credits for employers meeting certain job growth thresholds. Other bills will have impact in the future like SB 184 which eliminates tax on certain long-term capital gains attributable to the sale of a qualifying Montana Corporation. The first firm sales eligible for the credit would be in TY 2025.

Risks and Significant Factors

- This estimate relies on the S&P Global, October 2022, baseline forecasts for much of the data used in the model. Employment levels, which have recovered beyond the previous peak, particularly rapidly in both CY 2021 and early CY 2022. Labor force growth is expected to moderate but continue to grow despite an anticipated increase in the unemployment rate in CY 2023. Despite this, total wage disbursements in Montana are expected to only decelerate from current high growth rates. The wage bill is not anticipated to shrink in CY 2023 and CY 2024.
- Economic forecasters rely heavily on Bureau of Economic Analysis (BEA) and Bureau of Labor Statistics (BLS) data for their forecasts. These agencies have standard revision schedules for preliminary data. Significant revisions to measured changes in labor market and economic conditions can, and will, change S&P Global forecasts. These data revisions have 3- to 9-month lags.
- Also contributing to the difficulty of tracking the changing dynamics of the Montana economy is the potential discrepancy between the various measures of employment activity and wages. The most accurate data are found in the Quarterly Census of Employment and Wages (QCEW) which tracks all payroll employment and wages by sector in the state, unfortunately, that data has a five-month lag. More timely sample survey measures of employment are the Current Employment Statistics (CES) survey of establishment payrolls and the model-based estimates of total employment from the Local Area Unemployment Statistics (LAUS) system. New in CY 2021 was the provision of state level Job Openings and Labor Turnover Survey (JOLTS) which provides additional insight into the function of the labor market. Because the CES survey includes data on economic sector of employment, it is a key input to the S&P Global state forecasts.
- New QCEW data, calendar year withholding data, and estimated payments data in December and January will provide more information with which to assess if these estimates will need re-centering.
- The Office of Budget and Program Planning (OBPP) monitors a wide range of economic reports, changes in S&P Global forecasts, and state revenue collections closely on an ongoing basis. Generally, monthly changes to the S&P Global forecasts historically have minor impact on the revenue estimates (+/- \$10 million a fiscal year). These shifts tend to have less impact in the near-term (six months) and greater impact in the long term. Major quarterly updates that use BEA national income and product accounts updates can have a larger impact. Again, the impact is more noticeable two or more years into the future (a general fund effect of roughly +/- \$15 to \$25

million per year). In recent years revisions to the forecasts have been far more significant, often more than \$100 million per year.

- Forecast variation has moderated from the wide swings during the pandemic and the rapid early recovery from the economic effects of the pandemic, but the watchword continues to be “uncertainty”.
- In the 2023 Biennium the changes were related to federal fiscal support and pandemic recovery. New curveballs were thrown with the war in the Ukraine disruption of commodity markets and an irregular recovery of supply chains. These were further complicated by a rapidly shift in federal Open Market Committee interest policy as a “transitory” surge in inflation began to appear becoming entrenched in the second half of CY 2022. None the less, it is assumed that the span of uncertainty has narrowed, albeit from unprecedented variation.
- The run-up in housing values and a long period of equity market appreciation reversed in CY 2022. Equity markets have been volatile and generally trended down from peak-levels at the end of 2021. While markets are down, they are still at levels comparable to late 2020, during the recovery, and above their prior peaks in 2019, before the pandemic. TY 2021 tax forms reveal extraordinary capital gains realizations. These gains could reverse rapidly. The stock of potential realizations, however, remains high.
- Despite the return to a more normal economic environment the new sources of uncertainty arise from how the economy will react to monetary policy tightening by the Federal Reserve, particularly the housing market and how a return to more normal levels of household savings, from extraordinarily high levels, will work through the economy. Other risks involve a slowdown in Montana’s net migration population surge. The migration with jobs trend is likely to continue, but at a reduced rate. This is particularly the case as housing markets appear to be entering a period of consolidation.
- This forecast was produced by applying the projected income stream patterns into the Department of Revenue TY 2021 tax record-based simulation model. As such, these forecasts incorporate the major tax policy changes in preset law highlighted above.

Income by Category

Taxpayers report income on eleven lines on the tax return and these eleven income types are forecast separately. They can be organized into five general categories: wage, salary, and tip (labor) income; ownership income; taxable retirement income; net capital gains; and interest income. Graph 1 shows these categories and their relative proportion of total taxable income.

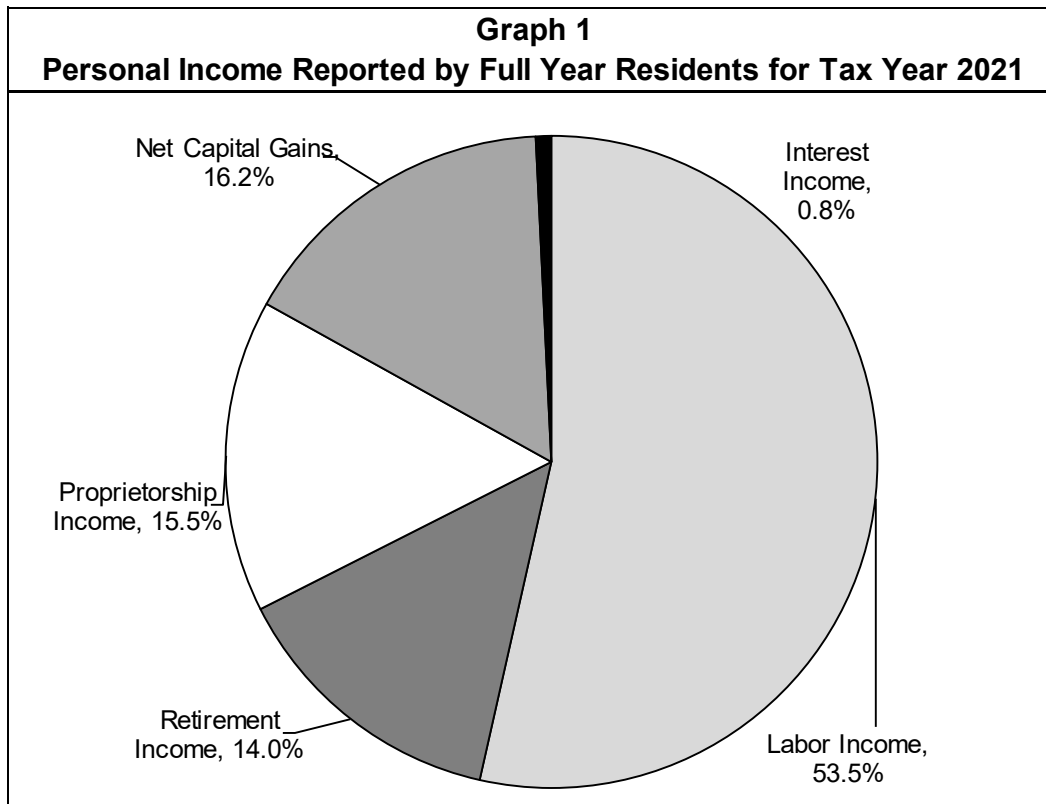


Table 2 provides more detail by showing the amount of income reported for TY 2021 by full-year residents and the percent of total reported income that category represents. The last column gives the ten-year (TY 2012 through TY 2021) average percent of total reported income for each category.

Table 2			
Tax Year Income			
(\$ millions)			
Source of Income	TY 2021 Income	Relative Share of TY 2021 Income	Ten Year Average Shares
Labor Income			
Wages, salaries, tips, etc.	\$21,416	53.5%	60.6%
Proprietorship Income			
Rents, royalties, partnerships, etc.	\$4,228	10.6%	10.3%
Net business income	\$1,176	2.9%	3.1%
Dividend income	\$1,093	2.7%	2.8%
Net farm income	-\$323	-0.8%	-0.8%
Other income	\$31	0.1%	-1.0%
Sub-Total	\$6,206	15.5%	14.5%
Retirement Income			
Taxable Social Security	\$1,496	3.7%	3.7%
Taxable Pensions, & IRAs	\$4,110	10.3%	11.0%
Sub-Total	\$5,606	14.0%	14.7%
Gains and Losses			
Capital gain or (loss)	\$6,227	15.6%	8.7%
Supplemental gains or (losses)	\$243	0.6%	0.5%
Sub-Total	\$6,470	16.2%	9.1%
Interest Income			
	\$307	0.8%	1.1%
Total	\$40,004	100.0%	100.0%

Tables 3 through 11 present the historical and forecast income for above categories. Following each table, the risks and significant factors for the forecast are listed. Forecast growth rates for the income sources, deductions, reductions, and credits are summarized in Table 12. All charts depict income reported by full-year residents. **Apart from wages and salaries, the vertical scale is held constant at a range of \$0 to \$7 billion in taxpayer income for Tables 4 through 9, the scale is reduced to \$0 to \$3.5 billion for Tables 10 and 11.** This representation better reflects the relative importance of each revenue stream. **The vertical scale for wages and salary income is four times the range of the other sources of income.**

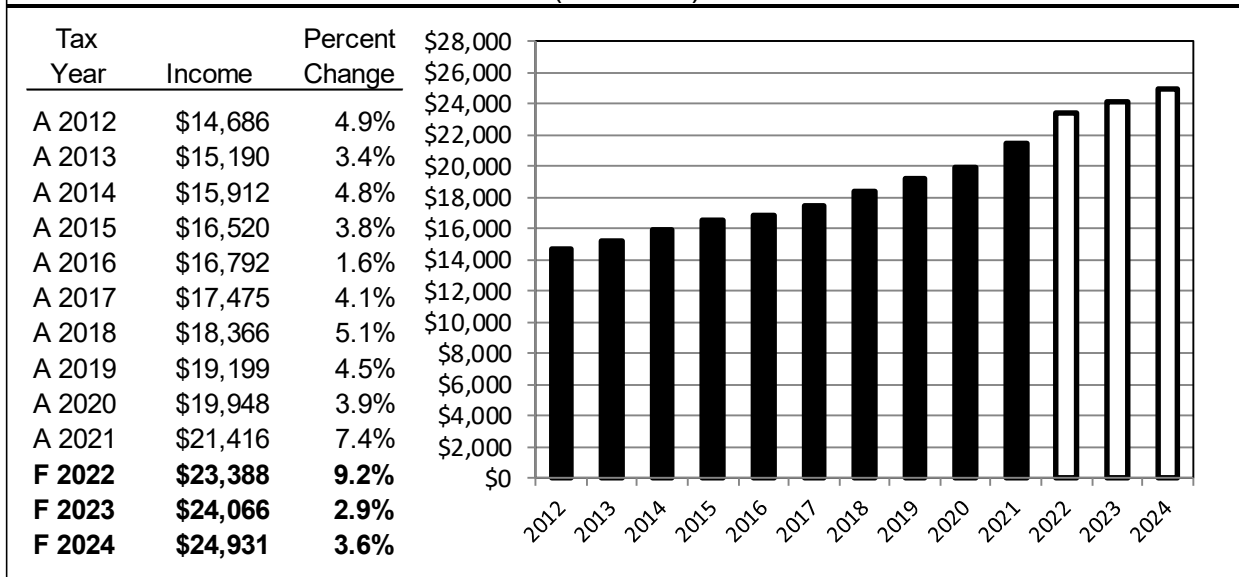
The reader is cautioned that Table 2 through Table 12 present total income before taxes.

In TY 2021, on average, every \$10,000 of income attributable to full-year resident individual income taxpayers generated roughly \$425 in TY 2019 state individual income tax liability (an effective average tax rate of 4.25% on reported taxable income).

Labor Income

Individual income taxes on wage and salary earnings are the principal source of state government tax revenue.

Table 3
Wages, Tips, and Salary Income
(\$ millions)



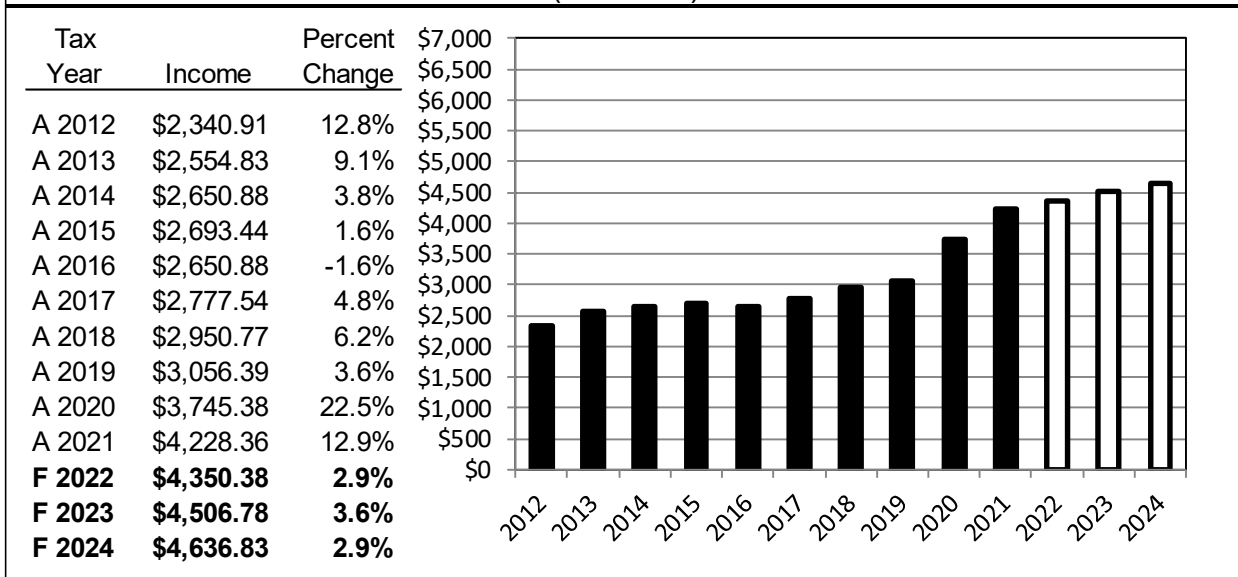
Risks and Significant Factors

- Wage withholding growth for FY 2021 was 10.4% and for FY 2022 withholding growth was 14%. This rate of growth is likely unsustainable, from base effects alone.
- Under more normal conditions the level of total Montana employment has a significant effect on labor income. This was particularly the case in the past. The proportion of the Montana working-age population in the labor force before the pandemic was matching or exceeding the high levels of the mid-2000’s. This left little room for additional increase in the level of employment because of changing demographics. Relatively slow growth in the working-age population cohort means changes in compensation will drive labor incomes more than labor force expansion.
- The level of average annual wages received by Montanans has a direct effect on the total level of taxable labor income. Increases in average wages has a positive effect on tax collections.
- OBPP tracks withholding collections relative to forecast wages reported on Montana resident tax forms. In January 2023, this data will be used to benchmark the TY 2021 wage estimate and to evaluate if the income tax estimate needs to be revised.
- Estimates naturally miss by a greater margin at significant turns in the economy and with major tax policy shifts.
- Wages are forecast to continue the rapid growth in TY 2022 and then step-down to a more moderate pace.

Proprietorship Income

Returns from owning property, businesses, farms, ranches, royalty rights or working interests in natural resources, processes, techniques, other intellectual property, or stock in companies, and other financial instrument property generates the second largest source of taxable income. Principal among these are rents, royalties, and partnership income. This is followed by net business income, dividend income, net farm income, and other miscellaneous sources of income.

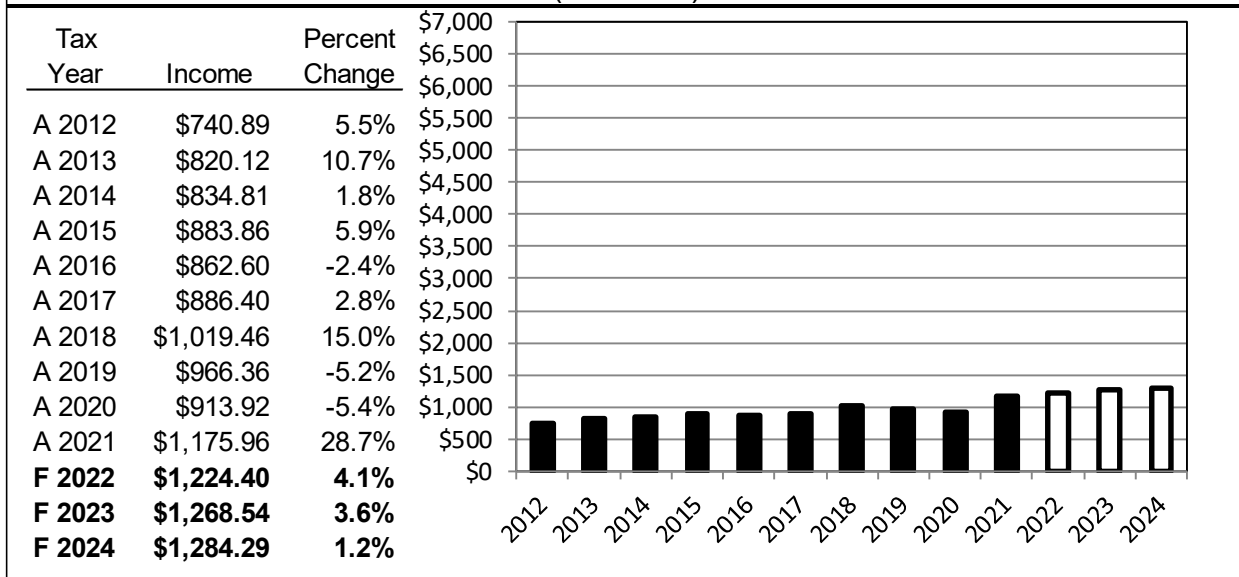
Table 4
Rents, Royalties, and Partnership Income
(\$ millions)



Risks and Significant Factors

- Prior work by the Department of Revenue examining this income stream shows that much of this income is derived from structured payments from business or enterprise sales. A portion of these business ownership transfers are demographically driven and as such may accelerate faster than trend. The pandemic may have accelerated these transfers of businesses from older owners to new – perhaps younger – owners.
- The decline in natural resource prices flattened this income source in CY 2015 and CY 2016. Some of the gains since 2019 may be attributable to better return on natural resource investments.
- Other underlying sources are anticipated to continue to grow. Residential property values have experienced strong increases but appear to be slowing at present.
- The growth rate of rents and royalty’s income shows a strong relationship with national proprietors’ income. If the economy accelerates more (less) than expected, this income source would increase (decrease).
- Mineral royalties are reported in this income category. Increases in mineral, oil, and natural gas prices, as well as production, would increase the growth of this income source.
- Federal policy changes in the TCJA, particularly the 20% federal qualified income deduction, may have shifted income into this classification of earnings and income derived from sole proprietorships, Chapter S corporations, partnerships, LLCs, and other pass-through entities.
- TY 2020 and TY 2021 saw a surge in this source of income. The forecast model retains the level but reverts to trend growth

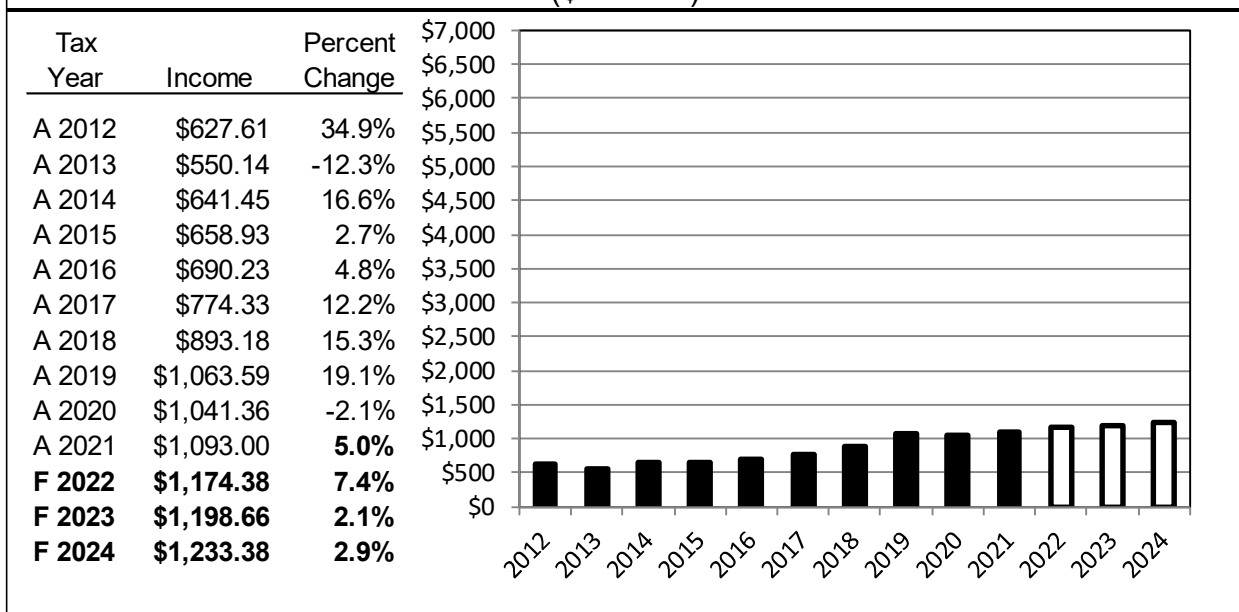
Table 5
Net Business Income
(\$ millions)



Risks and Significant Factors

- The growth in national proprietors' income is highly correlated with Montana net business income. Changes in national business income will have an impact on this source of income.
- Net business income suffered during the pandemic but has returned to prior trend level and path.

Table 6
Dividend Income
(\$ millions)



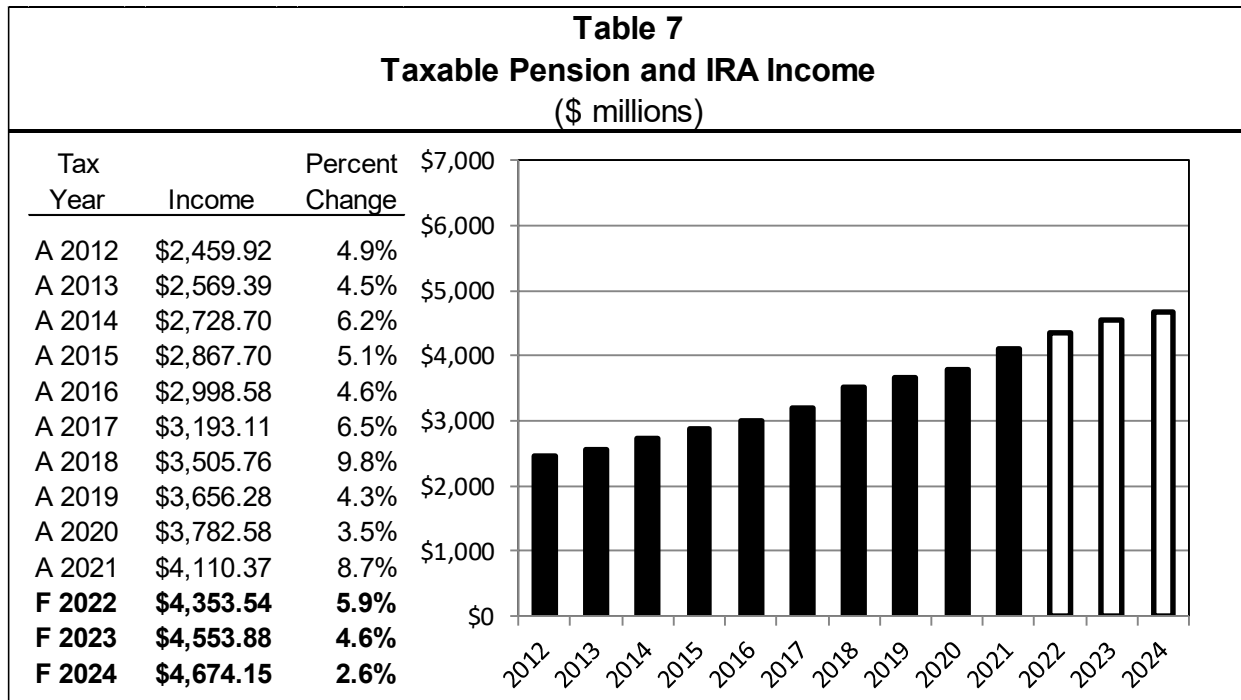
Risks and Significant Factors

- Montana dividend income is highly correlated with the national level of dividend income. If national corporate profits are significantly different than forecast, dividend income will change accordingly.

- Corporations have experienced large increases in profits over recent years and have returned some of their cash reserves as special dividends. The TCJA created preferential tax rates and accounting treatment for repatriated profits. Firms may have returned these profits to shareholders directly as special dividends (a current year taxable event) or by buying back stock (a tax event that is depended on when the shareholder realizes the gain).
- *The Inflation Reduction Act of 2022* applies a 1% excise tax on certain corporate stock buybacks, this may result in more distributable dividends, particularly in an environment of low (or negative) stock valuations.

Retirement Income

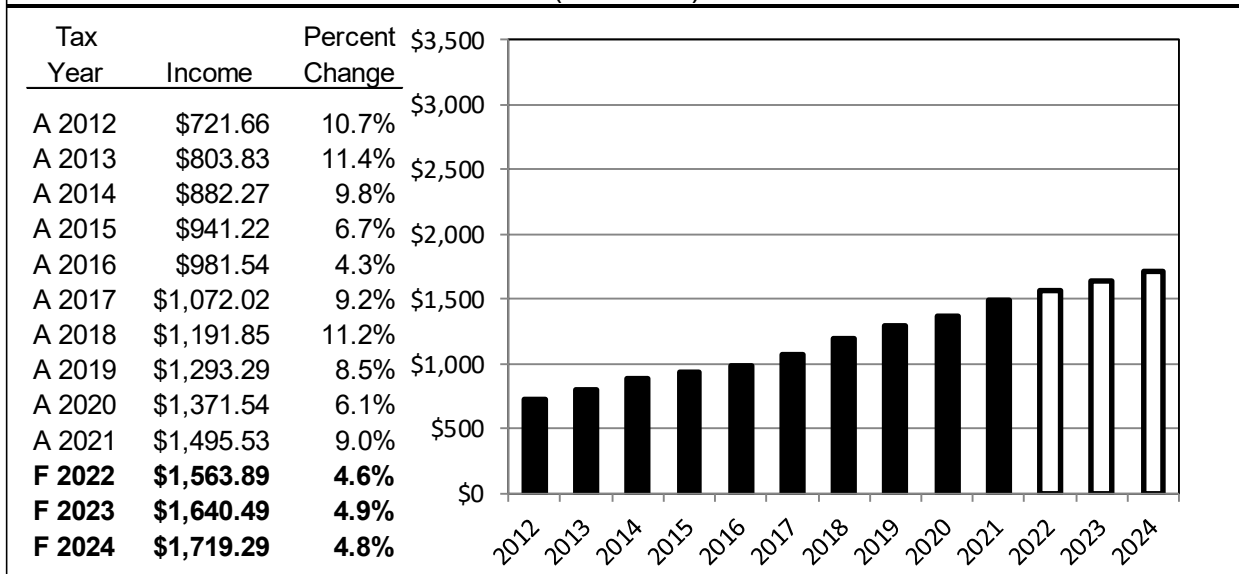
The main components of retirement income are pension and IRA income and the taxable portion of social security income. Pension and IRA income exceeds social security income but are more volatile. As the share of the population eligible for social security income grows, workers retire, and claim retirement savings thereby, leading to acceleration in this income type.



Risks and Significant Factors

- Prior years' S&P 500 stock price index and accelerating growth in the population over age 65 is expected to raise the taxable pension and IRA income stream above long run trend.
- Temporary changes to required minimum distributions from IRAs in TY 2020 as part of CARES Act changes may lead to a slower IRA income growth in TY 2020. Changes in the SECURE Act (2019) raised the age at which individuals must begin making withdrawals from their IRAs from 70 ½ to 72. The SECURE Act changes and market appreciation may reduce distributions. The two changes may lead to higher IRA withdrawals in subsequent years.

Table 8
Taxable Social Security Income
(\$ millions)



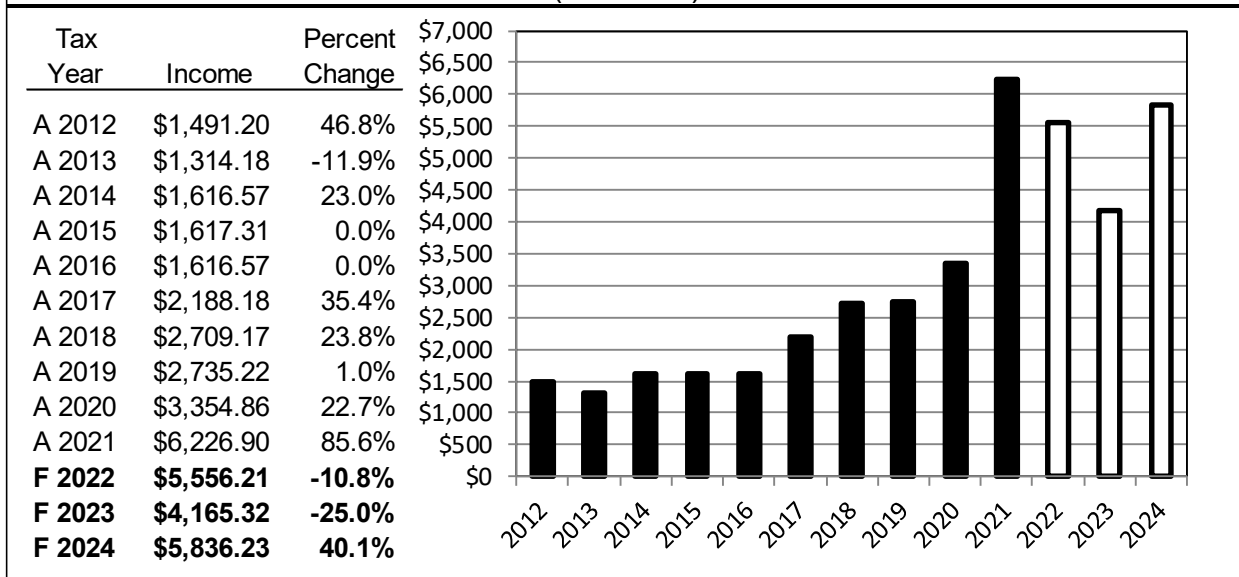
Risks and Significant Factors

- Social security is indexed for inflation. If inflation remains lower than expected, this will have a negative effect on the growth of taxable social security income.
- Montana population age 65 and older is increasing. This increases the total amount of social security income claimed. The effects of the pandemic may increase the proportion of individuals taking early retirement and lower relative taxable income from social security payments in two ways – lowered monthly payments for those recipients and reduced the portion of social security subject to tax.
- Growth in other income received by social security recipients increases the share of social security payments subject to tax – effectively taxing more of the (previously untaxed) employer contribution of an individual’s share of social security payments.
- Social security payments are scheduled to increase by around 10% in TY 2023. This estimate assumes overall trend in taxable social security. If TY 2022 taxable social security payments were to rise at twice the projected rate in 2022, that would represent about another \$80 million in income. An increase of \$80 million in income would increase tax liability by about \$5 million.

Taxable Gains and Losses

Capital gains and supplemental gains are gains or losses from the sale of assets.

Table 9
Capital Gains and Losses Income
(\$ millions)



Risks and Significant Factors

- Stock prices serve as a general indicator of the value of assets; only a portion of capital gains are from sales of stocks, but stocks are assets for which reliable price data is available.
- The timing of capital gains “realizations” – when taxpayers choose to liquidate or convert assets – determines when a capital gain is realized and becomes taxable.
- Capital gains income can be highly variable and tax planning can lead to rapid changes in capital gains income.
- TY 2021 saw an unprecedented surge in capital gains income reported on Montana tax forms from \$3.4 billion to \$6.2 billion. This is thought to be due to gains realized in the real estate and equity markets. Work done developing these estimates and alternative estimates show that the one-year change in the S&P 500 is not the best predictor of capital gains. A better fit is achieved with a model that uses a three-year change in the S&P 500. This suggests that many gains are deferred realizations. This spreads the reversal of the surge in capital gains over several years. If realizations were to drop more rapidly this would manifest itself in lower estimated payments at the end of CY 2022. Another scenario would be for capital gains realizations to slow rapidly, but because of rules around safe-harbor and minimum estimated payments we would see payments slow in April 2023.

The relationship between stock prices and capital gains is depicted in Graph 2 (below) with the forecast points indicated by white diamonds. The graph indicates that there is a strong one-to-one relationship between S&P gains and taxable capital gains. That also shows that TY 2021 is a significant outlier. TY 2022 and TY 2023 move toward trend, TY 2024 return points to below trend. Capital gains are difficult to predict for any one year but the sum of estimates for the three-year period is likely to be reasonable.

Graph 2
Capital Gains Income and the S&P 500

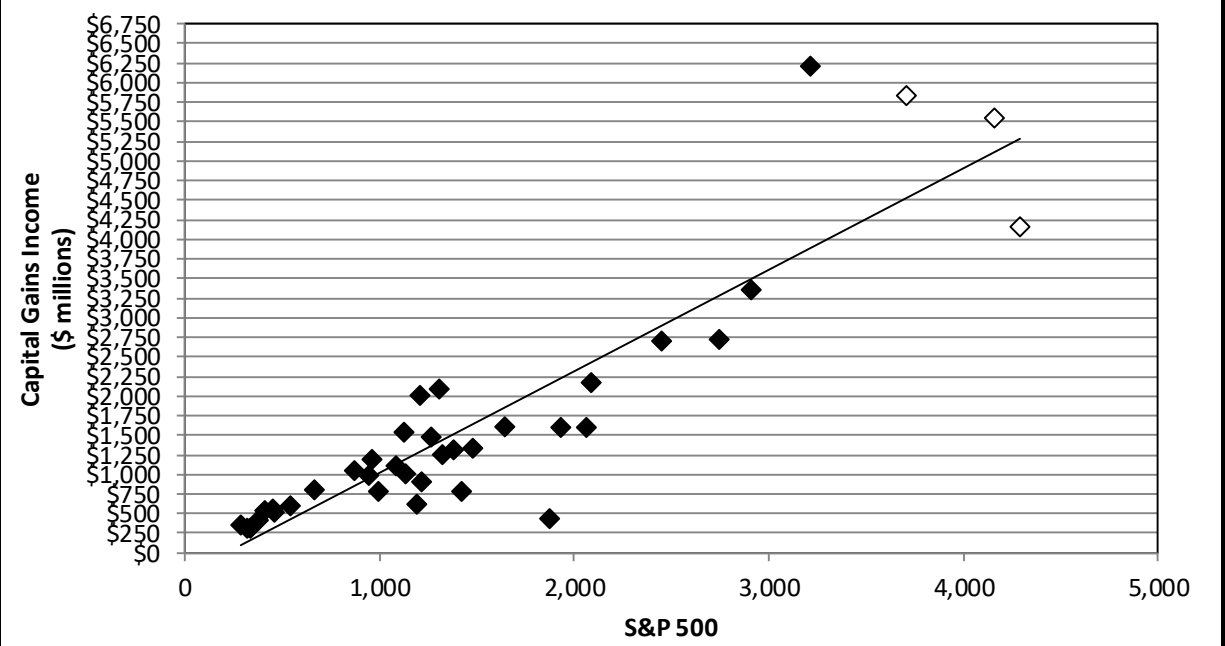
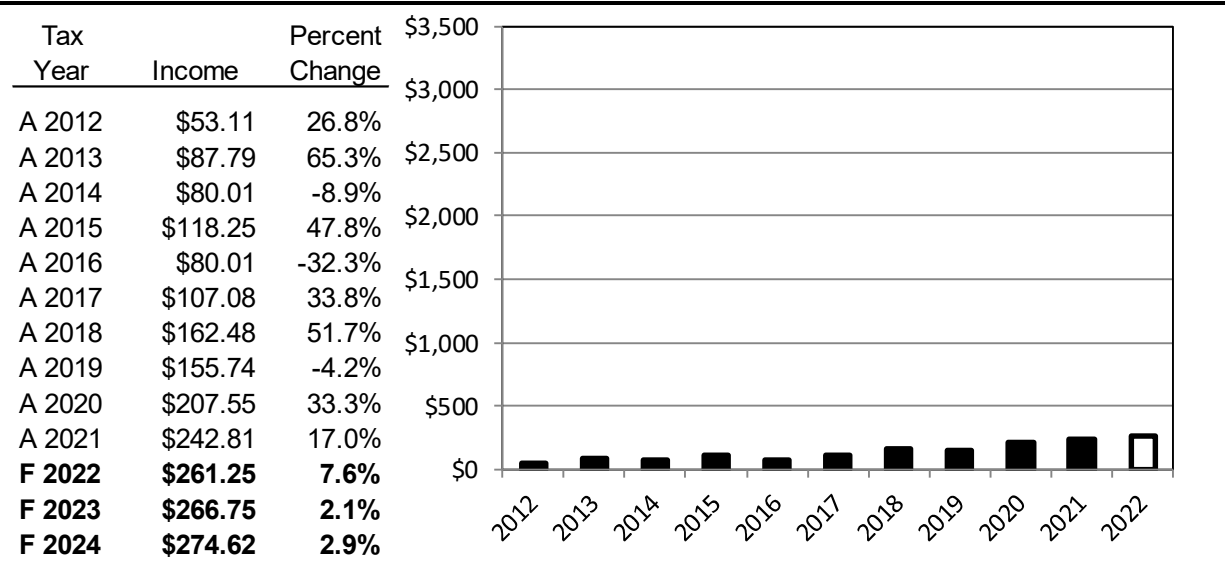


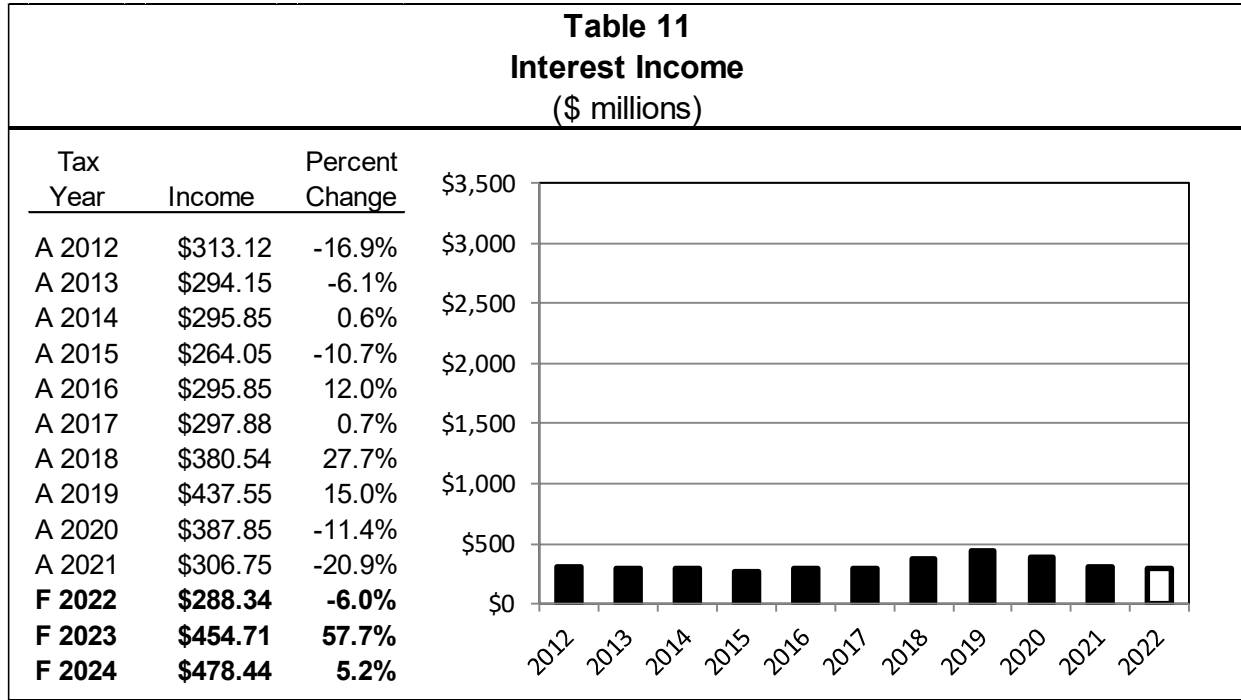
Table 10
Supplemental Gains Income
(\$ millions)



Risks and Significant Factors

- The swings in growth of supplemental gains income are tempered by the fact that it is small, contributing approximately one tenth of a percent of the taxable income stream.

Interest Income



Risks and Significant Factors

- While there have been increases in taxpayers’ savings, this has been offset by the persistence of low interest rates. Interest rates had begun to rise in 2018 and 2019 again fell to record lows in 2020. Rates have begun to rise in the second half of CY 2022, but savings balances are dropping. The increase in rates are expected to have more material effects in CY 2023. The small share of taxable income this category of income represents limits its negative impact on collections growth.

Other Sources of Income

Graphs have been omitted for these small sources of taxable income (they are shown in Table 2). Net taxable farm income has been on a long-term negative trend and is expected to hold that pattern. The other income line is a catch-all for income that does not fit in the other categories. It is usually negative and relatively small. The category is forecast to grow at a rate based on historic trends. Interestingly, in TY 2021 this category was slightly positive (\$31million) normally it is \$350 million in negative “income”.

Forecast Methodology

Income tax revenue estimates are centered around a micro simulation model (computer program) that calculates tax liability from individual income tax returns under present law. Baseline assumptions are listed in Table 12 at the end of this section. The model takes TY 2021 returns and applies income and deduction growth forecasts to individual taxpayer records estimating the tax liability to changes in income deductions, tax bracket thresholds, and other state and federal parameters representing anticipated statutory tax law in the future.

Before program implementation:

- Growth rates for income and deductions must be estimated.
- Future tax parameters such as rate brackets and caps on deductions must be calculated based on forecasts of inflation and any changes in state or federal law. The Legislative Fiscal Division (LFD) and the Office of Budget and Program Planning (OBPP) have again agreed on a common set of these tax parameters based on statute, actual changes in inflation, and forecast inflation. The Department of Revenue is the principal “custodian” of the microsimulation program.

The tax simulation program is run to project tax liability. It does so by:

- reading each full-year resident return in the latest year’s income tax returns database;

- calculates current year's tax liability for each return; optimizing each tax unit's tax strategy to minimize tax liability;
- applies an annual growth rate to each of the income and deduction line items and calculates the next year's tax liability; and
- repeats the process, growing income and deductions and calculating tax liability for each year of the forecast period.

Once the simulation program has estimated future years' tax liability for full-year resident taxpayers who filed in the past year, adjustments are made outside the model to produce projected fiscal year collections for all filers.

Adjustments are made for:

- Projected growth in the number of taxpayers.
- Changes to state and federal tax law.
- Fiscal year timing of calendar year tax liability.
- An estimate of revenue from less than full-time residents.
- Reductions in tax liability due to the use of tax credits.
- Accounting for revenue from audits, penalties, and interest not already included in the base calculations; and
- Other adjustments for shifts due to legislation for which there are not yet records in the model. This forecast has base adjustments for likely tax records not in the November tax extract and adjustments for State ARPA project disbursements.

Distribution

All individual income tax revenue is distributed to the general fund.

Data Sources

Revenue data is from SABHRS and the Department of Revenue. Past employment and wage data are from the Bureau of Labor Statistics. Employment, wage, interest rate, inflation, and other economic forecasts are from the U.S. and Montana S&P Global forecast release as of October 2022.

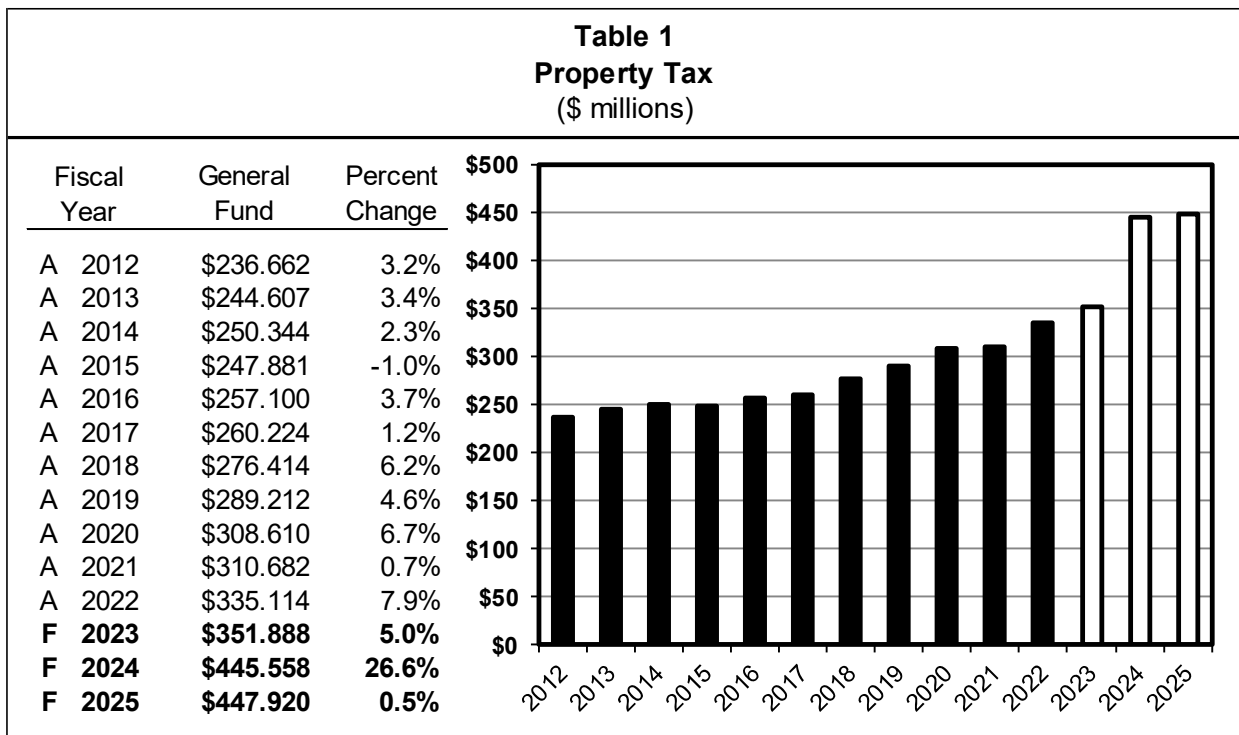
Table 12
Actual and Projected Growth Rates for Line Items

Income Item:	Actual					Forecast		
	TY 2017	TY 2018	TY 2019	TY 2020	TY 2021	TY 2022	TY 2023	TY 2024
Wages, salaries, tips, etc.	4.1%	5.1%	4.5%	3.9%	7.4%	9.2%	2.9%	3.6%
Interest income	0.7%	27.7%	15.0%	-11.4%	-20.9%	-6.0%	57.7%	5.2%
Dividend income	12.2%	15.3%	19.1%	-2.1%	5.0%	7.4%	2.1%	2.9%
Net business income	2.8%	15.0%	-5.2%	-5.4%	28.7%	4.1%	3.6%	1.2%
Capital gain or (loss)	35.4%	23.8%	1.0%	22.7%	85.6%	-10.8%	-25.0%	40.1%
Supplemental gains or (losses)	33.8%	51.7%	-4.2%	33.3%	17.0%	7.6%	2.1%	2.9%
Rents, royalties, partnerships, etc.	4.8%	6.2%	3.6%	22.5%	12.9%	2.9%	3.6%	2.9%
Taxable IRAs and pensions	6.5%	9.8%	4.3%	3.5%	8.7%	5.9%	4.6%	2.6%
Taxable portion of Soc. Sec.	9.2%	11.2%	8.5%	6.1%	9.0%	4.6%	4.9%	4.8%
Net farm income	0.3%	34.5%	9.6%	-25.3%	26.6%	30.8%	3.9%	2.2%
All other income	5.2%	5.4%	37.1%	-65.0%	-118.4%	-883.8%	-11.2%	-30.9%
Fed. Adj. to Income:	1.9%	-10.9%	2.3%	-0.7%	-4.9%	15.2%	8.0%	7.9%
Montana Additions:	TY 2017	TY 2018	TY 2019	TY 2020	TY 2021	TY 2022	TY 2023	TY 2024
Interest on state & county bonds	-6.4%	11.2%	6.2%	1.1%	-16.0%	2.5%	5.9%	5.0%
Federal income tax refunds	6.0%	-3.7%	-27.7%	-34.5%	-8.1%	-2.4%	-0.7%	-2.5%
All Other additions	5.5%	9.1%	-5.2%	83.8%	-50.2%	31.2%	3.1%	4.8%
Montana Subtractions:	TY 2017	TY 2018	TY 2019	TY 2020	TY 2021	TY 2022	TY 2023	TY 2024
Farm risk management account	-69.8%	226.0%	82.8%	-62.0%	1855.1%	-74.4%	18.2%	15.1%
Exclusion for savings bonds	9.5%	39.8%	37.0%	-32.5%	-19.5%	-10.3%	103.5%	7.3%
Unemployment income	-7.7%	-7.2%	2.3%	982.3%	-66.4%	2.6%	23.3%	-1.4%
Medical savings account exclusion	1.8%	2.6%	12.6%	2.4%	2.6%	2.3%	2.2%	2.2%
Family education account exclusion	294.4%	13.8%	7.6%	5.6%	17.6%	3.7%	3.6%	3.5%
First-time homebuyers exclusion.	-2.0%	5.7%	3.8%	32.8%	-4.6%	5.9%	5.9%	5.9%
Health care professional loan exclusion	2.9%	8.3%	8.3%	-16.2%	-13.7%	-8.0%	-4.3%	-2.3%
All other subtractions	-0.8%	0.4%	3.1%	22.5%	-24.7%	5.9%	5.9%	5.9%
Itemized Deductions:	TY 2017	TY 2018	TY 2019	TY 2020	TY 2021	TY 2022	TY 2023	TY 2024
Medical insurance premiums	6.2%	13.0%	-4.5%	2.4%	8.2%	3.8%	3.8%	3.8%
Medical deduction	4.7%	1.8%	-3.9%	-6.2%	1.2%	0.1%	0.3%	0.3%
Long-term care insurance	-0.3%	-3.4%	-0.7%	0.0%	-1.7%	-0.9%	-0.9%	-0.9%
Balance of federal tax	-35.6%	21.1%	-0.3%	9.9%	16.0%	8.2%	8.2%	8.2%
Additional federal prior year tax	12.5%	-15.7%	-58.4%	-22.0%	31.6%	3.0%	3.0%	3.0%
Property taxes	9.8%	2.1%	8.9%	0.3%	2.9%	4.7%	3.7%	4.1%
Other deductible taxes	-6.3%	-31.7%	-16.3%	-19.1%	9.8%	3.0%	3.0%	3.0%
Home mortgage interest	2.5%	0.6%	6.3%	1.2%	-8.7%	3.5%	3.5%	3.5%
Deductible investment interest	4.3%	58.7%	-4.5%	-5.1%	-11.5%	0.4%	1.8%	0.0%
Contributions	-5.0%	12.1%	3.1%	-13.5%	24.6%	4.6%	4.6%	4.6%
Child/dependent care expenses	-9.4%	-18.2%	-20.9%	-2.4%	-1.6%	0.0%	0.0%	0.0%
Casualty and theft losses	-24.2%	-10.2%	-65.7%	107.5%	-45.6%	0.0%	0.0%	0.0%
Tier II - Miscellaneous	-26.8%	38.1%	113.1%	-62.9%	43.6%	3.5%	3.5%	3.5%
Gambling losses	15.5%	-4.6%	0.3%	-43.7%	96.3%	0.0%	0.0%	0.0%
Credits	TY 2017	TY 2018	TY 2019	TY 2020	TY 2021	TY 2022	TY 2023	TY 2024
Total Allowable Credits	-9.4%	-18.2%	-20.9%	-2.4%	-1.6%	0.0%	0.0%	0.0%
Full-Year Resident Returns	568,536	584,552	594,722	606,677	609,461	613,227	616,683	617,872

Revenue Description

Title 15, Chapter 6, Part 1, MCA, identifies the classes of property subject to taxation and the applicable tax rate. Property tax revenue is collected directly from mills levied on property and indirectly from non-levy revenue sources. The state general fund receives property tax revenue from statewide levies for: elementary school BASE funding of 33 mills (20-9-331, MCA), high school BASE funding of 22 mills (20-9-333, MCA), and the 40 mills state equalization aid levy (20-9-360, MCA), commonly referred to collectively as the 95 mills levy. In addition, there is a 1.5 mill levy on property in counties with colleges of technology (20-25-439, MCA). Non-levy revenues (principally coal gross proceeds and federal forest receipts) are shared with local taxing jurisdictions based on the proportion of state mills levied in the respective taxing jurisdictions.

Table 1 shows property tax collections for FY 2012 through FY 2022 and the forecast for FY 2023 through FY 2025.



Risks and Significant Factors

- Property taxes constitute the largest single statewide tax source from the combined perspective of state and local government, schools, and special districts as these collected over \$2.194 billion in property taxes and fees in tax year (TY) 2021 (FY 2022). The state general fund receives around 16.75% of the mill levies.
- Misclassification of non-levy revenues on county collection reports leads to inconsistencies in the allocation of mill levy and non-levy revenue in the state accounting (SABHRS) system.
- Protested property settlements and court decisions have reduced property tax value-at-risk.
- The most significant recent policy changes have been related to moving agricultural, commercial, and residential property from a six-year appraisal cycle to two-year appraisal under SB 157 during the 2015 session, all other property is assessed annually except forest property (class 10) which remains on a six-year cycle but uses 10-year (Olympic) average timber prices. With SB 157, tax rates were adjusted to apply to the full market value of the reappraised property and eliminated the class 4 homestead and comstead exemptions. The Montana Property Tax Assistance Program (PTAP) and Montana Disabled Veteran Property Tax Relief Programs were modified to account for the change in class 4 residential property taxation.
- Significant 2017 session property tax legislation included: SB 94 which capped land value to 150% of the improvement (residence) assessed value for certain property held within a family; SB 132 which provided a ten-

year exemption for certain class 5 (pollution control equipment) and class 15 (carbon sequestration and CO₂ pipeline) property; and SB 359 which created a new property tax classification (class 17) for qualified data centers with a tax rate of 0.9%.

- The 2019 session had only one bill with direct revenue impact: HB 24 streamlined irrigation cost reporting.
- During the 2021 session there were several bills directly affecting revenue: HB 303 increased the business equipment (Class 8) market value exemption from \$100,000 to \$300,000; HB 191 revised the residential property tax credit for the elderly by increasing the income exclusion and the maximum credit; HB 394 made permanent the temporary exemption in SB 132 (2019) for certain class 17 and class 5 property; SB 51 created a 10-year tax moratorium for qualifying new broadband fiber optic and cable property; SB 263 mandated a forest lands advisory commission study of the taxation of forest lands and proposal of new class 10 rates in the 2023 session.
- 2021 session bills with administrative effects include: HB 23 revising the tax lien process; HB 298 and SB 212 modify property tax notifications to enhance their transparency and provide economic context; HB 357 revised the property tax assistant program inflation factor to track the Personal Consumption Expenditure (PCE) deflator; HB 616 clarifies that the creation of Tax Increment Financing (TIF) districts must receive a positive vote by the overseeing elected body. The property tax adjudication system was modified by SB 205 (re)naming the Montana Tax Appeal Board (MTAB) and with SB 126 MTAB was ordered to consider independent appraisals and the burden of proof standard was reversed for MTAB cases from the taxpayer to the Department of Revenue.
- SB 288 expanded the types of agriculture processing facilities eligible for property tax exemption.
- TIFs and special district laws were revised by SB 385 limiting special districts to 13 years and requiring an enabling vote by elected representatives. Finally, SB 388 expanded the use of TIFs for infrastructure projects.

Risks to the forecast

- Class 4 residential property could experience additional new property with the acceptability of telecommuting
- Rising interest rates could slow growth by decreasing commercial and industrial capital investment
- Lags inherent in capital investment could lead to an underestimate of plant and equipment put in place
- Unanticipated growth in tax increment financing districts (TIFs) could lower state and local tax collections
- Class 13 telecommunications property may grow faster than expected given current large public investments

These estimates are based on present law, and present law reappraisal statutes.

Estimate Summary

The presentation of this forecast starts with a summary of the full general fund property tax estimate (Table 2). The summary is followed by a step-by-step presentation of the methodology used to estimate each component of the estimate.

Table 2					
Summary of General Fund Property Tax Revenue					
(\$ millions)					
	--- Actual ---		----- Forecast -----		
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Property Tax - 95 Mill Levy	\$298.567	\$326.22	\$339.75	\$430.31	\$436.05
Property Tax - 1.5 Mill Levy	\$1.531	\$1.645	\$1.679	\$2.138	\$2.166
Net Protested Property Taxes	-\$0.034	-\$0.011	-\$0.011	-\$0.011	-\$0.011
Net Property Mill Levy Revenue	\$300.065	\$327.849	\$341.421	\$432.442	\$438.210
Non-Levy Revenue:					
Coal Gross Proceeds	\$7.710	\$5.828	\$7.681	\$10.503	\$8.975
Federal Forest Reserves	\$3.116	\$2.792	\$2.764	\$2.591	\$0.713
All Other (last known year)	\$0.022	\$0.022	\$0.022	\$0.022	\$0.022
Subtotal Non-Levy Revenue ¹	\$10.847	\$8.642	\$10.467	\$13.116	\$9.710
Total Property Tax Revenue	\$310.912	\$336.491	\$351.888	\$445.558	\$447.920

¹ Actual collections do not tie to SABHRS totals exactly in Table 1 because of cash vs. accrual accounting differences and account misallocations within non-levy revenue in county collections reports .

Property Tax Forecast Methodology

The property tax forecast is built by estimating growth rates for TY assessed market value for each property class and converting the assessed market value into taxable value using statutory tax rates and exemptions. For most property, the tax year property sets the basis of the subsequent fiscal year (FY) receipt of revenue. This method facilitates the estimation of the underlying property growth and minimizes the need for adjustments for changes in tax rates, and local property tax abatements. Adjustments are made for tax increment financing districts (TIFs) which do not transfer state equalization levies to the state (or local millage to their respective districts) on their incremental taxable value. TIFs do transfer their six-mill university levies to the state special revenue fund for the university system. The revenue due the state is then allocated to the fiscal year of receipt. A separate forecast is made for each non-levy revenue source. These estimates are summed to form the general fund property tax revenue estimate.

There are six main steps followed to calculate the state general fund property tax revenue generated from the 95-mill levy, the 1.5 mill levy, and non-levy revenue shared based on jurisdiction mill shares.

Step 1. Estimate the growth rate for the assessed market value of each class of property.

Historical trends in assessed market value serve as the foundation for estimating future property value. Adjustments are made for major new investments and law changes. Growth rates are determined independently for each class of property.

Table 3 is a summary of assessed market value and growth for all property except class 3 (agricultural land), class 4 (residential and commercial real property), class 10 (forest property). Classes 3, 4 and 10 will be presented in detail in the section on cyclically reappraised property which follows the summary of annually re-assessed classes of property.

Of note in Table 3 (below):

- **Class 1**, net proceeds of mines (except metal mines and bentonite) are dependent on construction activity; net proceeds are expected to oscillate around the long-run growth rate. Bentonite moved from the class in TY 2005.
- The forecast for **class 2**, net proceeds of metal mines, is based on the S&P Global projection of the producer price for metals. Metal mines property taxes are based on the prior calendar year's production value.
- **Class 5** (rural co-op and pollution control property) is adjusted for the effects of HB 156 (2015), SB 132 (2017) and HB 394 (2021) – resulting in no growth in the pollution control sub-class. The remainder grows at trend.
- **Class 8** business equipment property trend growth is estimated on the market value with adjustments for large one-time investments and property eliminated from the class by SB 372 (2011), SB 96 (2013), and HB 303 (2021). Those bills first converted the exclusion threshold to an exemption, then created two tax rates 1.5% for the first \$6 million in market value and a 3% tax rate for the rest. The bills progressively raised the exemption level which now stands at \$300,000. The class continues to grow but at a somewhat reduced trend rate after adjusting for settlements and pauses in investment following commodity price declines. The *Hiland Crude* decision shifted some property into class 8 from class 9.
- **Class 9** (pipeline and electrical transmission property) is expected to revert to a long-term growth after adjusting for surges in pipeline property and the *Hiland Crude* decision which clarified the classification of gathering lines and maintained central assessment for the class.
- Centrally assessed **class 13** property valuation reductions due to prior court rulings and protested tax settlements are assumed to have been fully incorporated into tax base. The class is forecast to have little growth.
- **Class 14** (formerly wind generation property) expanded rapidly with the Montana-Alberta Tie-Line. New projects supported growth, albeit at a slower rate. Tax settlements reversed some of the prior surge in property growth. New facilities are assumed to more than offset depreciation of existing facilities as the federal production tax credit for renewable energy has been extended through calendar year (CY) 2024 under the *Inflation Reduction Act of 2022*. The new property enters the class at a lower temporary rate which slows taxable value growth.
- **Class 15** includes the current pipeline supplying CO₂ for injection into the Bell Creek oil formation. No value growth is expected from certain new property, which was abated by HB 156 (2015) and SB 132 (2017). The remaining property in the class is assumed to depreciate.
- No value is anticipated to be added to **class 16** (high-voltage DC) property linking regional electrical grids.
- **Class 17** (qualified data centers) appears in TY 2022 and is assumed to grow at twice the national rate.

Table 3
Summary of Assessed Market Value
(\$ millions)

Tax Year	Class 1 Net Proceeds		Class 2 Gross Proceeds		Class 5 Rural Co-Op & Pollution Control		Class 7 Locally Assessed Utilities		Class 8 Business Equipment (FY adjusted)		Class 9 Pipelines & Electricity Transmission	
	Assessed Value	Percent Change	Assessed Value	Percent Change	Assessed Value	Percent Change	Assessed Value	Percent Change	Net Assessed Value	Percent Change	Assessed Value	Percent Change
A 2012	\$4.189	6.6%	\$31.132	35.4%	\$1,522.562	12.4%	\$14.631	-2.0%	\$7,024.756	8.7%	\$2,687.917	6.0%
A 2013	\$3.272	-21.9%	\$30.597	-1.7%	\$1,501.919	-1.4%	\$15.023	2.7%	\$7,200.080	2.5%	\$2,947.230	9.6%
A 2014	\$3.791	15.9%	\$25.555	-16.5%	\$1,485.501	-1.1%	\$14.773	-1.7%	\$7,088.731	-1.5%	\$3,122.440	5.9%
A 2015	\$3.907	3.1%	\$26.517	3.8%	\$1,550.769	4.4%	\$14.866	0.6%	\$7,250.378	2.3%	\$3,587.141	14.9%
A 2016	\$4.080	4.4%	\$19.454	-26.6%	\$1,636.805	5.5%	\$14.241	-4.2%	\$7,096.595	-2.1%	\$3,986.808	11.1%
A 2017	\$3.984	-2.4%	\$17.890	-8.0%	\$1,604.336	-2.0%	\$14.330	0.6%	\$6,664.994	-6.1%	\$4,214.396	5.7%
A 2018	\$4.795	20.4%	\$22.274	24.5%	\$1,589.441	-0.9%	\$15.191	6.0%	\$7,150.077	7.3%	\$4,176.210	-0.9%
A 2019	\$5.584	16.5%	\$25.979	16.6%	\$1,583.769	-0.4%	\$0.038	-99.7%	\$9,358.695	30.9%	\$4,227.858	1.2%
A 2020	\$4.745	-15.0%	\$31.695	22.0%	\$1,692.296	6.9%	\$0.038	-1.1%	\$6,617.435	-29.3%	\$4,516.422	6.8%
A 2021	\$3.929	-17.2%	\$41.809	31.9%	\$1,732.329	2.4%	\$0.035	-6.6%	\$6,897.917	4.2%	\$4,635.886	2.6%
A 2022	\$4.432	12.8%	\$47.470	13.5%	\$1,782.072	2.9%	\$0.220	522.4%	\$6,280.599	-8.9%	\$5,220.024	12.6%
F 2023	\$4.833	9.1%	\$53.993	13.7%	\$1,807.508	1.4%	\$0.220	0.1%	\$6,472.727	3.1%	\$5,352.915	2.5%
F 2024	\$4.612	-4.6%	\$45.484	-15.8%	\$1,833.306	1.4%	\$0.220	0.0%	\$6,692.799	3.4%	\$5,489.191	2.5%

Tax Year	Class 12 Airlines & Railroads		Class 13 Telecommunication & Electrical Generation		Class 14 Renewable Energy Production & Transmission		Class 15 CO2/Qualifying Liquid Pipeline Property		Class 16 High Voltage DC Converter Property		Class 17 Qualified Data Center	
	Assessed Value	Percent Change	Assessed Value	Percent Change	Assessed Value	Percent Change	Assessed Value	Percent Change	Assessed Value	Percent Change	Assessed Value	Percent Change
A 2012	\$2,067.948	35.6%	\$3,435.972	0.2%	\$550.740	-3.6%						
A 2013	\$2,097.157	1.4%	\$2,876.381	-16.3%	\$1,025.784	86.3%						
A 2014	\$2,197.681	4.8%	\$2,831.344	-1.6%	\$980.529	-4.4%	\$63.931		\$0.000			
A 2015	\$2,221.753	1.1%	\$2,974.469	5.1%	\$957.970	-2.3%	\$117.162	83.3%	\$0.000			
A 2016	\$2,503.508	12.7%	\$3,030.510	1.9%	\$880.904	-8.0%	\$165.687	41.4%	\$0.000			
A 2017	\$2,843.525	13.6%	\$2,992.082	-1.3%	\$841.477	-4.5%	\$171.450	3.5%	\$0.000			
A 2018	\$2,823.509	-0.7%	\$2,877.270	-3.8%	\$761.927	-9.5%	\$151.199	-11.8%	\$0.000		\$0.000	
A 2019	\$2,720.418	-3.7%	\$2,838.929	-1.3%	\$825.784	8.4%	\$148.772	-1.6%	\$0.000		\$0.000	
A 2020	\$3,161.348	16.2%	\$2,713.175	-4.4%	\$772.732	-6.4%	\$143.388	-3.6%	\$0.000		\$0.000	
A 2021	\$3,161.348	0.0%	\$2,549.664	-6.0%	\$866.999	12.2%	\$143.186	-0.1%	\$0.000		\$0.000	
A 2022	\$3,357.298	6.2%	\$2,474.775	-2.9%	\$1,205.409	39.0%	\$190.529	33.1%	\$0.000		\$196.819	
F 2023	\$3,211.430	-4.3%	\$2,482.199	0.3%	\$1,305.442	8.3%	\$190.529	0.0%	\$0.000		\$207.054	5.2%
F 2024	\$3,309.762	3.1%	\$2,489.646	0.3%	\$1,459.015	11.8%	\$190.529	0.0%	\$0.000		\$217.821	5.2%

No class 16 - High Voltage DC Converter property has been identified in the TY 2023 to TY 2024 time horizon.

Step 2. Estimate the growth of property subject to cyclical reappraisal (classes 3, 4, and 10).

TY 2023 (FY 2024) marks the fourth (two-year) valuation cycle instituted by SB 157 (2015) for agricultural land (class 3 property) and commercial and residential real property (class 4 property). Class 10 forest property starts year three in its six-year reappraisal cycle.

For classes 3 and 4, forecast growth is derived by calculating the interaction of long-run trends, new property growth, and biennial reappraisal. Per present law, tax rates are held constant, new property is added annually at trend, and valuations are adjusted for the statewide average two-year change in existing home values. Preliminary estimates of TY 2023 reappraisal change are based on S&P Global estimates of median existing home prices in Montana. These reappraisal estimates are approximations and are not the final estimates produced by the Department of Revenue’s statistical modeling and appraisal activities.

Class 3 – Agricultural Land

Agricultural land is assessed based on its production value. This is assessed based on changes in reference to agricultural products (cattle for grazing land, spring wheat for crop land, and alfalfa hay for irrigated land), average production

practices -- controlling for soil and climatological characteristics -- instead of market value. Table 4 presents the estimate of class 3 productivity value and taxable value growth. The base growth rate of agricultural land is -0.50% during the forecast period. The negative growth rate is due to the gradual conversion of class 3 land to other uses (commercial and residential parcels). Due to reappraisal, the assessed value grows biennially based on the 10-year Olympic average change in the reference commodity prices. Rising grazing and hay prices are offset by declines in wheat prices resulting in a small (0.75%) reappraisal change. The other feature of class 3 is the applicable tax for agricultural property is higher than the statutory rate because small agricultural parcels, those that do not meet a minimum income threshold (non-qualified agricultural land), have a higher tax rate.

	TY 2021	TY 2022	TY 2023	TY 2024
Productivity Value	\$6,700.41	\$6,678.28	\$6,674.33	\$6,620.72
Statutory Tax Rate	2.16%	2.16%	2.16%	2.16%
<i>(Applicable tax rate)</i>	2.30%	2.28%	2.28%	2.28%
Total Taxable Value	\$153.981	\$152.236	\$152.146	\$150.924
Productivity Value Growth	-3.50%	-0.33%	0.75%	0.00%
Base Growth	1.44%	-0.80%	-0.80%	-0.80%
Taxable Value Percent Change	-2.06%	-1.13%	-0.06%	-0.80%

Class 4 – Residential and Commercial Real Property

Because valuations for commercial and residential property are driven by different factors, each subclass is estimated and presented separately.

Class 4 Residential Real Property

Table 5 presents the forecast of market and resulting taxable value for residential class 4 property. The forecast is based on underlying residential property growth of averaging 1.6% in TY 2023 and TY 2024 (TY 2022 is known). That estimate is based on prior year estimated household formation which is then used to extrapolate base new property growth. This growth is combined with the TY 2023 median, existing home, price growth forecast by S&P Global for Montana which is used to approximate the anticipated reappraisal change and is highlighted in gray.

Additionally, there has been a growing number of properties in which the improvement value exceeds \$1.5 million. These properties pay a 1.89% rate on the increment over \$1.5 million per 15-6-135 (3)(b), MCA. There is also an adjustment for the reduction in taxable value granted homeowners that qualify for the Property Tax Assistance Program (PTAP), the Disabled American Veterans (DAV) property tax assistance program and the valuation limitation in SB 94 (2017) for residences with disproportionate land values. The revenue effects of these programs, unlike local property tax abatements, reduce state mill collections. The taxable value for these tax programs is assumed to be a fixed share of taxable value during the forecast period.

	TY 2021	TY 2022	TY 2023	TY 2024
Market Value	\$133,621.458	\$137,668.462	\$200,670.160	\$203,479.542
Tax Rate	1.35%	1.35%	1.35%	1.35%
Taxable Value (calculated)	\$1,803.890	\$1,858.524	\$2,709.047	\$2,746.974
Est. PTAP/DAV/HB 75 Reductions	(\$13.228)	(\$8.829)	(\$12.87)	(\$13.05)
Total Taxable Value	\$1,790.661	\$1,849.696	\$2,696.178	\$2,733.925
Est. Household Formation	1.7%	3.1%	2.0%	1.4%
Est. Housing Value Change	11.4%	0.0%	43.8%	0.0%
Taxable Value Percent Change	14.9%	3.3%	45.8%	1.4%

Class 4 Commercial Real Property

Commercial real property estimates are presented in Table 6. New property is assumed to grow biennially with growth matching the prior cycle average annual growth. Due to reappraisal, the market value existing property moves biennially. For this estimate statewide average reappraisal growth is assumed to be 50% of the residential property valuation change and base growth is assumed the prior cycle average. The estimate of present law reappraisal change for the upcoming cycle is highlighted in gray.

	TY 2021	TY 2022	TY 2023	TY 2024
Market Value	\$25,029.731	\$25,348.417	\$29,631.022	\$29,858.179
Reductions	(\$3.598)	(\$3.361)	(\$3.929)	(\$3.959)
Total Taxable Value	\$469.464	\$475.724	\$556.098	\$560.361
Base Growth	0.26%	1.27%	0.77%	0.77%
Change in Value	9.0%	0.00%	16.1%	0.00%
Taxable Value Percent Change	9.26%	1.33%	16.89%	0.77%

Certain properties, generally land dedicated to golf courses as classified under 15-6-134(2)(c), MCA, are taxed at one-half of the standard class 4 tax rate. This reduction is assumed to be a constant share during the forecast period.

Class 10 Forest Land

Forest land, like agricultural land, is assessed based on its productivity value. Table 7 presents the estimate of class 10 taxable value. The base growth rate of forest land is assumed to be negative 0.50% in TY 2023 and TY 2024 as class 10 property is reduced when land is converted to commercial and residential parcels or reclassified as exempt property. SB 236 set the tax rate for TY 2021 (0.34%) and TY 2022 (0.31%) and returns the tax rate to 0.37% in TY 2023. Because forest land is reappraised on a six-year cycle these estimates assume the productivity value growth between TY 2015 and TY 2021 is phased-in in one-sixth increments (roughly \$125 million per year). That is, the value change of forest production that accumulated over the prior six-years is applied incrementally to the six-years of the new reappraisal cycle.

	TY 2021	TY 2022	TY 2023	TY 2024
Productivity Value	\$1,411.217	\$1,526.750	\$1,644.526	\$1,761.714
Tax Rate	0.34%	0.31%	0.37%	0.37%
Taxable Value	\$4.798	\$4.733	\$6.085	\$6.518
Base Growth	0.50%	-0.50%	-0.50%	-0.50%
Taxable Value Growth	-1.48%	-1.36%	28.6%	7.13%

Step 3. Determine the tax rate for each class of property.

As stated previously, tax rates for each class of property are set in statute. However, classes 3 and 4 have special rates which apply to sub-categories of property. In class 3, parcels of agricultural land that are less than 160 acres in size that do not generate at least \$1,500 in agricultural production per year are considered “non-qualified agricultural land” and have a tax rate seven times the standard class 3 rate for grazing land. Because of this, the applicable rate is higher than the standard tax rate. This increment was calculated for the forecast period.

In class 4, residential properties of individuals who meet qualifying statutory residence, income, and tenure conditions receive reduced tax rates (property tax assistance program, disabled American veterans’ program, and capped land valuation for certain long-held family property). Some commercial properties are taxed at a lower than the standard rate – examples are properties that receive new and expanding industry property (local) abatements and commercial golf courses (lower statutory class 4 rate). Under SB 372 (2011), SB 96 (2013), and HB 303 class 8 property has a two-tiered tax rate with a \$300,000 market value exemption. The statutory class 8 effective weighted average rate, before local abatements, is presented in Table 8. The table summarizes standard statutory property tax rates for TY 2021 through TY 2024 (FY 2025) for all classes of property.

Tax Year	Class 1 Mine Net Proceeds	Class 2 Mine Gross Proceeds	Class 3 Ag Land ¹	Class 4 Residential	Class 4 Commercial	Class 5 Co-op & Pollution Control ⁴	Class 7 Locally Assessed Utilities	Class 8 Business Equipment ³	Class 9 Pipelines, Utility Non- Generating	Class 10 Forest land	Class 12 Airlines & Railroads ²	Class 13 Telecomm & Electrical Generation	Class 14 Renewable Energy & Transmission	Class 15 CO ₂ /Cert. Liquid Pipeline ⁵	Class 16 High Voltage DC	Class 17 Qualified Data Center
2021	3.00%	3.00%	2.16%	1.35%	1.89%	3.00%	8.00%	2.24%	12.00%	0.34%	3.12%	6.00%	3.00%	1.50%	2.25%	0.90%
2022	3.00%	3.00%	2.16%	1.35%	1.89%	3.00%	8.00%	2.24%	12.00%	0.31%	3.06%	6.00%	3.00%	1.50%	2.25%	0.90%
2023	3.00%	3.00%	2.16%	1.35%	1.89%	3.00%	8.00%	2.24%	12.00%	0.37%	3.06%	6.00%	3.00%	1.50%	2.25%	0.90%
2024	3.00%	3.00%	2.16%	1.35%	1.89%	3.00%	8.00%	2.24%	12.00%	0.37%	3.06%	6.00%	3.00%	1.50%	2.25%	0.90%

¹ Actual rate is higher due to the rate on non-qualified ag land. ² The class 12 rate is calculated as the weighted average of all commercial and industrial property in the prior year.
³ Blended rate – The first \$300,000 in market value of business equipment property is exempt for all taxpayers, a rate of 1.5% applies to the next \$6 million in property value, and 3.0% on all property above that level.
⁴ Certain pollution control equipment (class 5) is now exempt from taxation. ⁵ The rate is 3.0%, but new class 15 carbon dioxide pipelines receive a full exemption (as of TY 2021).

The class 12 tax rate is calculated under the provisions of the federal 4-R Act. The provisions of the act prohibit state, county, and local taxing jurisdictions from assessing certain transportation property (airlines and railways) at a higher ratio of assessed value to true market value than other commercial and industrial property within the jurisdiction. Class 12 property is assessed annually and is the weighted average tax rate for all commercial and industrial property in the state. Class 4 commercial property represents over half of statewide commercial and industrial property and is assessed on a two-year cycle. In order to comply with the 4-R Act, the Department of Revenue uses commercial property sales to calculate the required adjustment to the class 4 commercial tax rate used in the class 12 weighted average. This revenue estimate assumes the class 12 rate is constant for the forecast period as class 4 commercial property is now assessed on a biennial basis instead of a six-year cycle. The tax rate for TY 2022 was published by Department of Revenue in June 2022.

Step 4. Calculate the statewide fiscal year taxable value for each class of property.

For all classes of property except class 8, the tax collected on the calendar year taxable value is the next fiscal year’s revenue. That is, TY 2022 property assessments lead to FY 2023 revenue. However, property in class 8 (business equipment) consists of two types of property, each with a different billing cycle. Class 8 taxable value needs to be adjusted

for the timing of those payments. Personal property not-liened-to-real property (or “strict”-personal property) represents 34% of the taxable value in the class. This personal property is assessed in the spring of the calendar year and bills are paid in May of the ongoing fiscal year. Class 8 real property and class 8 personal property liened-to-real property (secured permanently or legally to real property), represent 66% of the value of the class and have tax payments due in November and May. Therefore, FY 2022 taxable value is 66% of TY 2021 taxable value and 34% of TY 2022 taxable value. The class 8 taxable value presented in the Summary of Assessed Market Value (Table 3) and the summary of taxable value (Table 9) include this adjustment.

Note: The discussion from this point forward will focus on fiscal year receipts.

Table 9 presents the result of applying statutory tax rates (Table 8) to tax year assessed values adjusted for the expected timing of the state’s property tax receipts. TY 2022 certified taxable values were released in early August 2022, except for tax protests and settlements, most of FY 2023 billing, and therefore collections, are essentially known.

Class & Property Description	FY 2022	FY 2023	FY 2024	FY 2025
1. Net Proceeds	\$3.929	\$4.432	\$4.833	\$4.612
2. Mine Gross Proceeds	\$41.809	\$47.470	\$53.993	\$45.484
3. Agricultural Land	\$153.981	\$152.236	\$152.146	\$150.924
4. Residential & Commercial Real Property	\$2,260.126	\$2,325.420	\$3,252.276	\$3,294.286
5. Rural Co-Op Utilities and Pollution Control	\$51.970	\$53.462	\$54.225	\$54.999
7. Non-centrally Assessed Utilities	\$0.003	\$0.018	\$0.018	\$0.018
8. Business Equipment (FY adjusted)	\$154.790	\$140.938	\$145.249	\$150.187
9. Pipelines, Electrical Transmission Lines	\$556.306	\$626.403	\$642.350	\$658.703
10. Forest Land	\$4.798	\$4.733	\$6.085	\$6.518
12. Airlines/Railroads	\$98.453	\$102.545	\$98.090	\$101.093
13. Telecommunication & Electrical Generation	\$152.980	\$148.486	\$148.932	\$149.379
14. Renewable Energy Production & Transmission	\$20.909	\$29.858	\$33.189	\$38.047
15. CO2/Qualifying Liquid Pipelines	\$2.148	\$2.858	\$2.858	\$2.858
16. High Voltage DC Converter Property	\$0.000	\$0.000	\$0.000	\$0.000
17. Data Server Facility	\$0.000	\$1.771	\$1.863	\$1.960
Statewide Taxable Value	\$3,502.202	\$3,640.629	\$4,596.107	\$4,659.069

Table 10 presents the annual change in the forecast taxable values (from Table 9), by class, to facilitate comparability to the estimates presented by the Legislative Fiscal Division. These growth rates are important in projecting taxable value for property tax fiscal impact of legislation estimates.

Table 10
Forecast Annual Percent Change in Taxable Value

Class & Property Description	FY 2022	FY 2023	FY 2024	FY 2025
1. Net Proceeds	-17.2%	12.8%	9.1%	-4.6%
2. Mine Gross Proceeds (w/o Abatements)	31.9%	13.5%	13.7%	-15.8%
3. Agricultural Land	-2.1%	-1.1%	-0.1%	-0.8%
4. Residential & Commercial Real Property	13.7%	2.9%	39.9%	1.3%
<i>Residential</i>	14.9%	3.3%	45.8%	1.4%
<i>Commercial</i>	9.3%	1.3%	16.9%	0.8%
5. Rural Co-Op Utilities and Pollution Control	2.4%	2.9%	1.4%	1.4%
7. Non-centrally Assessed Utilities	-6.6%	522.4%	0.1%	0.0%
8. Business Equipment (FY adjusted)	4.2%	-8.9%	3.1%	3.4%
9. Pipelines, Electrical Transmission Lines	2.6%	12.6%	2.5%	2.5%
10. Forest Land	-1.5%	-1.4%	28.6%	7.1%
12. Airlines/Railroads	-2.5%	4.2%	-4.3%	3.1%
13. Telecommunication & Electrical Generation	-6.0%	-2.9%	0.3%	0.3%
14. Renewable Energy Production & Transmission	15.3%	42.8%	11.2%	14.6%
15. CO2/Qualifying Liquid Pipelines	-0.1%	33.1%	0.0%	0.0%
16. High Voltage DC Converter Property	0.0%	0.0%	0.0%	0.0%
17. Data Server Facility			5.2%	5.2%
Statewide Taxable Value Growth	9.1%	4.0%	26.2%	1.4%

Step 5. Determine the taxable value base for statewide mill levies and 95 mill revenue.

The calculation of 95 mill revenue requires adjustments for Tax Increment Financing Districts and Targeted Economic Development Districts (TIFs & TEDDs). These districts do not transfer all the 95-mill revenue generated in the district to the state. As authorized under Title 7, chapter 14, part 42, MCA, they retain the taxes generated from most millage in the district, except the 6 mill university levies and parts of millage in new TIF districts (per 2021 session SB 385 and SB 388) on the taxable value “increment” greater than the taxable value that existed when the district was created, commonly referred to as the “incremental value”. The districts have a finite duration tied to the districts initial charter (generally 15 years). TIF districts can be extended, generally to recover bonded debt. The 95 mills revenue generated from these increments is deducted from the estimate of state property tax revenue. This estimate grows TY 2022 TEDD and TIF incremental taxable value by trend district taxable value growth, net of the property in expiring districts. During the forecast period, up to four TIF districts are likely to expire potentially releasing around \$7.3 million in taxable value in FY 2024 and an additional \$0.9 million in FY 2025 back to their encompassing jurisdictions (\$8.3 million represents \$790,000 in state 95 mill revenue).

Because the calculation of total property tax revenue is estimated by applying the standard statutory tax rates to the assessed market value property base, no adjustment is needed for locally abated property. Table 11 displays the calculation of state revenue generated from the 95 mill levies.

Table 11
Calculation of General Fund Revenue from 95 Mill Levy
(\$ millions)

Calculation	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Statewide (FY) Taxable Value	\$3,211.427	\$3,502.202	\$3,640.629	\$4,596.107	\$4,659.069
Subtract TIF Taxable Value	(\$68.613)	(\$68.360)	(\$64.288)	(\$66.477)	(\$69.022)
Taxable Value for 95 Mills	\$3,142.814	\$3,433.842	\$3,576.342	\$4,529.630	\$4,590.046
Apply 95 Mills	0.095	0.095	0.095	0.095	0.095
State Revenue from 95 Mills	\$298.567	\$326.215	\$339.752	\$430.315	\$436.054

Table 12 shows the forecast for the 1.5 mill levy revenue for colleges of technology and is based on the taxable value in counties with colleges of technology after adjusted for county TIFs.

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
COT County Taxable Value	\$1,056.656	\$1,126.792	\$1,157.526	\$1,461.317	\$1,481.335
COT County TIF Value	(\$36.027)	(\$30.163)	(\$38.438)	(\$36.148)	(\$37.379)
Taxable Value for 1.5 Mills	\$1,020.629	\$1,096.628	\$1,119.088	\$1,425.168	\$1,443.956
Apply 1.5 Mills	0.0015	0.0015	0.0015	0.0015	0.0015
1.5 Mill Levy Revenue	\$1.531	\$1.645	\$1.679	\$2.138	\$2.166

Step 6. Calculate total general fund property tax revenue due from mill levies and non-levy revenues.

The non-levy revenue generated in counties is shared with the state based on the relative distribution of state and local education mills. These include coal gross proceeds (in counties that have coal production) and federal forest receipts (in counties that have national forests). Additionally, there is an assortment of miscellaneous revenues that are collected by counties that are shared with the state based on the proportionate state and local mills levied in the jurisdictions.

The base for coal gross proceeds non-levy revenue is the coal severance tax reports. The coal gross proceeds tax is a 5% levy on the gross value of coal produced. The state receives the TY 1989, elementary and high school mills (55 mill) share of coal gross proceeds tax collections. Under SB 266 (2011), the coal gross proceeds tax rate for underground mines was reduced to 2.5% for an initial period of ten years. The reduced tax rate would be available to any new or qualifying expanding underground mine for the first ten years of production. SB 328 passed by the 2019 Legislature granted counties the ability to abate up to 50% of local coal gross proceeds tax from surface mines in their jurisdictions.

The 2001 federal Secure Rural Schools and Communities Act (SRS) was reauthorized and fully funded through FY 2012 under the Emergency Economic Stabilization Act of 2008. The Act was reauthorized and funded for FY 2013 by Public Law 112-141, in July 2012; reauthorized by section 524 of P.L. 114-10 extending payments through FY 2016. SRS lapsed for FY 2017 but was extended for FY 2018 and FY 2019 by the Bipartisan Balanced Budget Act of 2018. SRS payments were expected to expire in FY 2019 but were extended through FY 2021 by H.R.1865 - *Further Consolidated Appropriations Act, 2020* in December 2019. In November 2021, payments were again reauthorized by the *Infrastructure Investment and Jobs Act* (P.L.117-58, Section 41202) - for federal fiscal years 2021 through 2023 (SFY 2024) and will revert to the *1908 Act* 25% distribution of the seven-year average of federal forest receipts in FY 2025. The state receives the 55 mills share of the one-third share of Title I funds that are allocated statutorily to countywide school levies. In recent years, that has meant approximately 20% of all Title I payments accrue to the state general fund due to the proportional share of school equalization mills. For the state general fund that results in about \$2.46 million in FY 2023 and FY 2024 with a drop to around \$475,000 in FY 2025 when the program is yet again scheduled to expire.

All other non-levy revenues are set at the level of the last known year's total (FY 2021).

Summary

Table 13 combines the 95 mills revenue, 1.5 mill revenue, anticipated centrally assessed protested property taxes (net of known settlements) that may be allocated to the protested reserved account, and non-levy revenues. Table 13 restates the values presented earlier in the initial summary (Table 2).

	--- Actual ---		----- Forecast -----		
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Property Tax - 95 Mill Levy	\$298.567	\$326.22	\$339.75	\$430.31	\$436.05
Property Tax - 1.5 Mill Levy	\$1.531	\$1.645	\$1.679	\$2.138	\$2.166
Net Protested Property Taxes	-\$0.034	-\$0.011	-\$0.011	-\$0.011	-\$0.011
Net Property Mill Levy Revenue	\$300.065	\$327.849	\$341.421	\$432.442	\$438.210
Non-Levy Revenue:					
Coal Gross Proceeds	\$7.710	\$5.828	\$7.681	\$10.503	\$8.975
Federal Forest Reserves	\$3.116	\$2.792	\$2.764	\$2.591	\$0.713
All Other (last known year)	\$0.022	\$0.022	\$0.022	\$0.022	\$0.022
Subtotal Non-Levy Revenue ¹	\$10.847	\$8.642	\$10.467	\$13.116	\$9.710
Total Property Tax Revenue	\$310.912	\$336.491	\$351.888	\$445.558	\$447.920

¹ Actual collections do not tie to SABHRS totals exactly in Table 1 because of cash vs. accrual accounting differences and account misallocations within non-levy revenue in county collections reports .

Distribution

The general fund receives 100% of the 33 mill elementary equalization levy, the 22 mill high school equalization levy, and the 40 mill state equalization aid levy, as well as the 1.5 mill levy for colleges of technology. Only the state general fund portion of non-levy revenues are presented in Table 13.

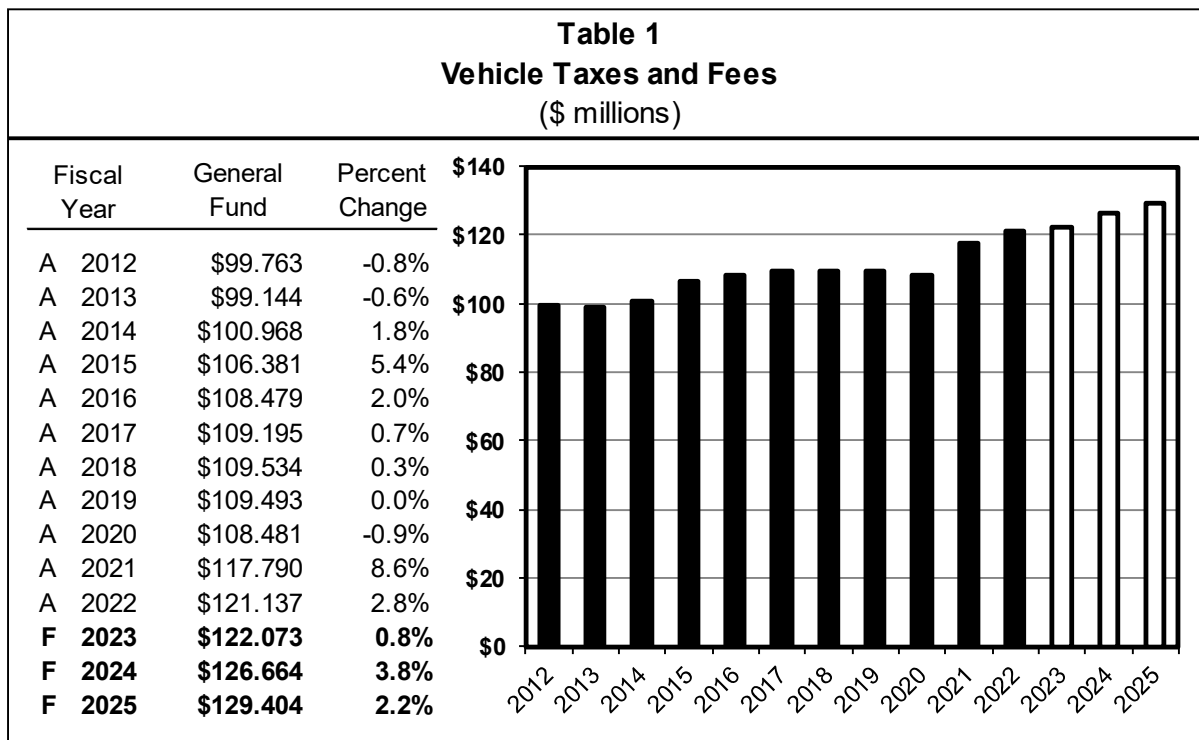
Data Sources

Tax collections are extracted from the state accounting system (SABHRS). The summary property tax database and other property tax reports were provided by the Department of Revenue. The Office of Public Instruction prepares the FP6b summary of county school revenues used in the estimates of "all other" non-levy revenue. The producer price index for metals is from the S&P Global, October 2022, U.S. forecast. Household formations and existing Montana housing prices are from S&P Global, October 2022, Montana forecast.

Revenue Description

Title 23 and Section 61-3-221 and 61-3-562, MCA, provide for multiple fees and fees-in-lieu of taxes on motor vehicles, which include light vehicles, heavy vehicles weighing more than one ton, motor homes, trailers, travel trailers, watercraft, motorcycles, snowmobiles, and off-highway vehicles. Fees are based on one or a combination of the following criteria: age, weight, size, and vehicle type.

Table 1 shows actual revenue for vehicle taxes and fees to the general fund for FY 2012 - FY 2022 and forecast revenue for FY 2023 - FY 2025.



Registration fees for light vehicles (cars, light trucks, and sport utility vehicles) represent approximately three-fourths of general fund revenue from motor vehicle fees. Vehicles 0-4 years old (new age cohort) and 5-10 years old (mid age cohort) must register on an annual basis. Vehicles over the age of 10 years (old age cohort) have the option of registering annually or registering permanently. Once a vehicle undergoes permanent registration, it is no longer subject to annual fees unless it changes ownership. The stock of cars and trucks that register on an annual basis consists of approximately 820,000 vehicles. This number does not include permanent registrations. Including vehicles registering permanently, there are approximately 900,000 light vehicles each year that pay registration fees to the State of Montana.

Shifts in the age distribution of the vehicle stock influences total revenue collections because newer vehicles are subject to higher fees than older vehicles. Annual registration fee amounts range from \$217 for vehicles in the new age cohort, \$87 for vehicles in the mid age cohort, and \$28 for vehicles in the old age cohort. The fee for permanent registration is \$87.50. New cohort registrations have a disproportionate effect on revenue collections because the fee associated with this age class is over two times higher than the mid cohort fee and over seven times higher than the old cohort fee. Consequently, the number of vehicles in the new cohort has a large impact on motor vehicle revenue and significant changes in the proportion of new cohort registrations to total registrations tend to have persistent effects on revenue collections because of the way vehicles flow through the registration system.

The new and mid cohort groups both account for 25% - 30% of total registrations in a year, but vehicles in the new cohort generate between 55% and 60% of annual light vehicle registration revenue while mid cohort vehicles account for

approximately 25% of revenue. Old cohort vehicles account for about 30% of annual registrations and contribute 10% of annual revenue. Permanent registrations make up 5% - 10% of total registrations and produce 5% - 10% of annual revenue.

Registration of vehicles other than light vehicles offers a relatively stable source of revenue, accounting for between 13% - 14% of total motor vehicle revenue annually. These vehicles include heavy trucks, watercraft, trailers, off-highway vehicles, and others. A small portion of motor vehicle revenue comes from fees associated with the issuance of titles, license plates, etc. Revenue from these fees is driven primarily by the volume of new vehicle registrations requiring Montana identification. There are numerous general fund accounts into which vehicle taxes and fee revenue is recorded. Table 2 summarizes revenue collections by grouping similar fees into broad categories. These groupings include revenue from registrations of light vehicles, registrations of other vehicles, permanent registrations, fees associated with titles, license plates, and related items.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Light Vehicle Registrations	\$81.598	\$82.277	\$81.693	\$81.356	\$85.204	\$87.293
Other Vehicle Registrations	\$14.295	\$14.323	\$14.490	\$14.232	\$17.842	\$18.070
Other Fees	\$7.353	\$6.445	\$6.476	\$6.271	\$6.823	\$7.081
<i>of which "other fees" revenue from:</i>						
<i>New Plates</i>	\$1.538	\$0.908	\$0.917	\$0.928	\$1.208	\$1.190
<i>Specialty Plates</i>	\$1.467	\$1.457	\$1.179	\$1.131	\$1.168	\$1.108
<i>Titles</i>	\$2.750	\$2.742	\$2.817	\$2.707	\$3.125	\$3.164
<i>Other</i>	\$1.598	\$1.338	\$1.563	\$1.505	\$1.322	\$1.619
Permanent Registrations	\$5.949	\$6.489	\$6.833	\$6.622	\$7.921	\$8.694
<i>Light Vehicles</i>	\$5.293	\$5.806	\$6.189	\$6.034	\$7.209	\$8.020
<i>Motor Homes</i>	\$0.657	\$0.683	\$0.644	\$0.588	\$0.712	\$0.674
Total	\$109.195	\$109.534	\$109.493	\$108.481	\$117.790	\$121.137

Motor vehicle revenue responded to the decrease in light vehicle purchases that occurred during the Great Recession, dropping steadily from FY 2007 to FY 2013. Because of the cohort nature of motor vehicle revenue, the effects of this recession-induced decline in new light vehicle purchases (particularly in FY 2009 and FY 2010) will move through each registration category as the vehicles age. The recession eroded the revenue base for new cohort vehicles from FY 2009 through FY 2013 and started to effect registration revenue for mid cohort vehicles in FY 2014. Mid cohort registration revenue declined each year from FY 2014 – FY 2018 as the recessionary dip in vehicle purchases took full effect. Mid cohort registration revenue bottomed in FY 2019 before the crop of vehicles purchased in FY 2015 helped lift revenue in FY 2020. New vehicle registrations grew each year from FY 2016 – FY 2018, which has translated to a swelling of mid cohort registrations in FY 2021 and FY 2022. The recessionary effects are now visible in the old cohort. Annual registrations of vehicles over 10 years old have been falling since FY 2017. Further declines in registration activity are expected for this age cohort, but the marginal effect on motor vehicle revenue is minimal because of the lower registration fee.

Permanent registrations not only come from vehicles transitioning from an annual registration schedule, but also from turnover – i.e., changing ownership – within the age group of vehicles 11 years and older. The impact of the Great Recession was expected to cause a slowdown in permanent registration activity through the channel of a shrinking population of vehicles eligible for permanent registration but still registering annually. This outcome was expected to begin in FY 2020 with the strongest effects being realized in FYs 2021 and 2022. Indeed, there was a contraction in the volume of permanent registrations in FY 2020, but the magnitude of the dip was much smaller than initially assumed. Permanent registrations surged in FYs 2021 and 2022, a complete reversal of the predicted trend. The reason for these divergent

results seems to be the disruption in the market for new and used vehicles caused by the COVID-19 pandemic. Concurrent elevated demand from stimulatory fiscal policy and suppressed supply from constrained global production and transportation capacity created a shortage of new vehicles that began in 2020 and has persisted so far through 2022. This market imbalance fueled rapidly rising prices for new vehicles that pushed many consumers out of the market. Instead of forgoing a vehicle purchase altogether, however, consumers alienated from the new vehicle market moved instead to the used vehicle market. This substitution effect created a big upward shock to used vehicle demand, sending prices soaring to record levels. More owners were willing to sell their vehicles at these elevated prices and so market transactions became more prevalent. A byproduct of this phenomenon was a heightened rate of used vehicle turnover which led to a rise in the number of permanent registrations related to changes in vehicle ownership.

Risks and Significant Factors

- Once a vehicle is purchased, it flows through the three age cohorts over the course of its life and eventually exits the vehicle revenue base when it is permanently registered (unless it changes ownership) or is removed from service. Ebbs and flows in the volume of entries and exits to and from each age cohort are a function of economic conditions that influence factors such as vehicle sales and migration patterns. Since these fluctuations persist in the annual registration revenue pool as vehicles move through the different age cohorts, significant shocks to new vehicle purchases are an important determinant of future revenue streams.
- Only vehicles over ten years old can register permanently. Permanently registered vehicles only re-enter the vehicle tax collection system upon a change of ownership. For a permanently registered vehicle that changes ownership, the duration of the vehicle's presence in the tax collection system depends on the decision of the new owner to either register the vehicle annually or permanently. This change in ownership of permanently registered vehicles is a source of forecasting error because it is difficult to estimate how many previously permanently registered vehicles reappear in the revenue pool.
- High prices continue to characterize the markets for new and used vehicles. New vehicle prices are still posting year-over-year gains. Used vehicle prices have been falling since the beginning of 2022 but are still well above normal levels. Substitution-driven activity in the used vehicle market should stay elevated as long as new vehicle prices persist at their incredible levels.
- Supply of new vehicles remains constrained by component shortages. Nationwide new vehicle sales are near 4 million units below pre-pandemic levels. As supply-side pressures ease, new vehicle sales are expected to rise at a modest pace through the forecast period, but the risk of deviation is certainly more heavily weighted to the downside. Slowing economic growth and rising recession fears could cause a marked pull back in vehicle demand if consumers start to play defense against the potential for future income losses.

Forecast Methodology

The method employed to forecast motor vehicle taxes and fees revenue is outlined below. There are four steps in the estimating process. The first step is to estimate the age distribution of vehicles in the registration pool, i.e., the number of vehicles registering in each of the new, mid, and old age cohorts along with permanent registrations. Second, total annual light vehicle registration revenue is calculated. Each annual registration cohort is associated with a different fee and total registration revenue for each cohort is the product of the registration count and the fee amount. Third, revenue from other vehicle registrations and fees is determined, except for permanent registrations. In the fourth step, revenue from all sources is combined along with permanent registration revenue to arrive at the amount to be deposited in the general fund.

Step 1. Age Distribution of the Motor Vehicle Stock

Table 3 presents the actual and estimated distribution of annually registering vehicles by age cohort by fiscal year. The population of the new age cohort is projected to grow in each year of the forecast period. New vehicle sales continue their gradual pace of growth since FY 2020 and first-time registrations in the new cohort that are not due to new vehicle sales are forecast to stay steady near FY 2022 levels. The population of the mid age cohort declined from just over 300,000 vehicles in FY 2012 to 235,000 vehicles in FY 2019 as new vehicles put into service in the years during and immediately following the Great Recession reached 5-10 years in age. These same vehicles have been aging out of the mid cohort and into the old cohort over the past few years. As a result, mid cohort registrations exhibited strong growth in FYs 2021 and 2022. This upward trajectory continues through the forecast period. The opposite is true for the old cohort population of vehicles. The effect of the Great Recession's negative demand shock is not yet fully phased out of this age cohort so registrations for this group continue falling through FY 2025, albeit at a decreasing pace. Permanent registrations are

expected to expand in each year of the forecast period. Rising mid-to-permanent registrations and sustained turnover in the used vehicle market provide the basis for the increasing number of permanent registrations.

New Cohort. The total number of vehicles in the new cohort is estimated by first starting with the population of the new cohort in the previous year less the vehicles that will age into the mid cohort. Estimated new sales are then added to this figure. Finally, an adjustment is made to account for vehicles that enter the new age cohort for reasons other than new sales (e.g., move to Montana from out-of-state) and vehicles that exit the cohort for reasons other than switching to the mid cohort (e.g., removed from service or move out of Montana).

Mid Cohort. The population of vehicles in the mid cohort for a given year is estimated in a similar manner as above. The previous year's mid cohort population is used as a starting point. Vehicles leaving the new cohort and entering the mid cohort are added to the prior year's mid cohort population and vehicles aging out of the mid cohort are removed. The net gain or loss from vehicles moving in or out of Montana, as well as vehicles removed from service, is accounted for as well.

Old Cohort. Primary new entrants into the old cohort consist of vehicles achieving 11 years of age and moving out of the mid cohort. An estimate of this new population in the old cohort is added to the prior year's old cohort population. Estimated permanent registrations are subtracted away. An adjustment is included to capture the net effect on the old cohort population of vehicles that change ownership and re-enter the pool, move into the state, move out of the state, or are removed from service.

Permanent Registrations. Permanent registrations can occur when a vehicle ages out of the mid cohort and immediately registers as permanent, when a vehicle in the old cohort switches from annual registration to permanent registration, when a vehicle registered as permanent changes ownership and is permanently registered again by the new owner, or when a vehicle older than ten years moves to Montana and registers permanent in the state. Permanent registrations are estimated as a percentage of prior-year mid cohort registrations, a relationship that has been relatively stable over the past five years.

Table 3 shows the number of vehicles that permanently register each year as well as an estimate of the cumulative number of permanently registered vehicles in Montana. Cumulative permanent registrations are calculated by adding new permanent registrations to the existing total minus an estimate of vehicles that leave the population.

Fiscal Year	Annual Registrations					Permanent Registrations	
	0 to 4 Years	5 to 10 Years	Over 10 Years	All	Percent Change	Annual Permanent Registrations	Cumulative Permanent Registrations Since FY 2007
A 2019	237,502	235,600	332,684	805,786	-2.1%	72,327	483,848
A 2020	232,478	248,578	316,473	797,529	-1.0%	71,168	532,920
A 2021	243,349	277,112	297,316	817,777	2.5%	82,791	591,374
A 2022	246,556	292,676	277,187	816,419	-0.2%	91,576	655,944
F 2023	248,517	304,962	265,126	818,605	0.3%	93,605	719,594
F 2024	256,476	321,672	259,923	838,071	2.4%	101,121	787,853
F 2025	264,639	325,204	256,159	846,002	0.9%	103,213	855,087

Step 2. Annual Registration Revenue

Multiply the estimated population of each age cohort by its respective registration fee. Table 4 presents the estimated revenue from light vehicle registrations by age class. Revenue from new and mid cohort registrations rises in each year of the forecast period. Recessionary effects result in lower revenue from old cohort registrations. Total light vehicle annual

registration revenue rises from \$88 million in FY 2023 to \$93 million in FY 2025, an average annual growth rate of just over 2%.

Fiscal Year	0 to 4 Years \$217 Fee	5 to 10 Years \$87 Fee	Over 10 Years \$28 Fee	Annual Light Vehicle Revenue
A 2019	\$51.538	\$20.497	\$9.315	\$81.693
A 2020	\$50.448	\$21.626	\$8.861	\$81.356
A 2021	\$52.807	\$24.109	\$8.325	\$85.204
A 2022	\$53.503	\$25.463	\$7.761	\$86.727
F 2023	\$53.928	\$26.532	\$7.424	\$87.883
F 2024	\$55.655	\$27.985	\$7.278	\$90.919
F 2025	\$57.427	\$28.293	\$7.172	\$92.892

Step 3. Other Vehicle Registrations and Fees

Additional motor vehicle revenue comes from registrations other than those for light vehicles (motor homes, large vehicles, boats, etc.), as well as from licensing, plating, titling, and other fees. The other registration and fee revenue categories are expected to grow at the same rate as annual light vehicle registration revenue over the forecast period. This information is summarized in Table 5. This method maintains the relative share each revenue category represents of total motor vehicle revenue collections net of permanent registration revenue.

Fiscal Year	Light Vehicle Revenue	Percent Change	Other Vehicle Registration Revenue	Percent Change	All Other Fees	Percent Change	Total (Before Permanent Registrations)	Percent Change
A 2019	\$81.693	-0.7%	\$15.135	0.9%	\$6.476	0.5%	\$103.304	-0.4%
A 2020	\$81.356	-0.4%	\$14.821	-2.1%	\$6.271	-3.2%	\$102.447	-0.8%
A 2021	\$85.204	4.7%	\$18.554	25.2%	\$6.823	8.8%	\$110.581	7.9%
A 2022	\$87.293	2.5%	\$18.744	1.0%	\$7.081	3.8%	\$113.118	2.3%
F 2023	\$87.883	0.7%	\$18.871	0.7%	\$7.129	0.7%	\$113.883	0.7%
F 2024	\$90.919	3.5%	\$19.523	3.5%	\$7.375	3.5%	\$117.816	3.5%
F 2025	\$92.892	2.2%	\$19.946	2.2%	\$7.535	2.2%	\$120.373	2.2%

Step 4. Combine All Estimates

Permanent registration revenue is combined with all other vehicle taxes and fees revenue to determine total motor vehicle revenue. The results are presented in Table 6. Total revenue is expected to exhibit moderate growth over the forecast period.

Table 6				
All Vehicle Taxes and Fees Revenue				
(\$ millions)				
Fiscal Year	Total Collections Net of Permanent Registrations	Permanent Registration Estimate	Total Revenue	Percent Change
A 2019	\$103.304	\$6.189	\$109.493	0.0%
A 2020	\$102.447	\$6.034	\$108.481	-0.9%
A 2021	\$110.581	\$7.209	\$117.790	8.6%
A 2022	\$113.118	\$8.020	\$121.137	2.8%
F 2023	\$113.883	\$8.190	\$122.073	0.8%
F 2024	\$117.816	\$8.848	\$126.664	3.8%
F 2025	\$120.373	\$9.031	\$129.404	2.2%

Data Sources

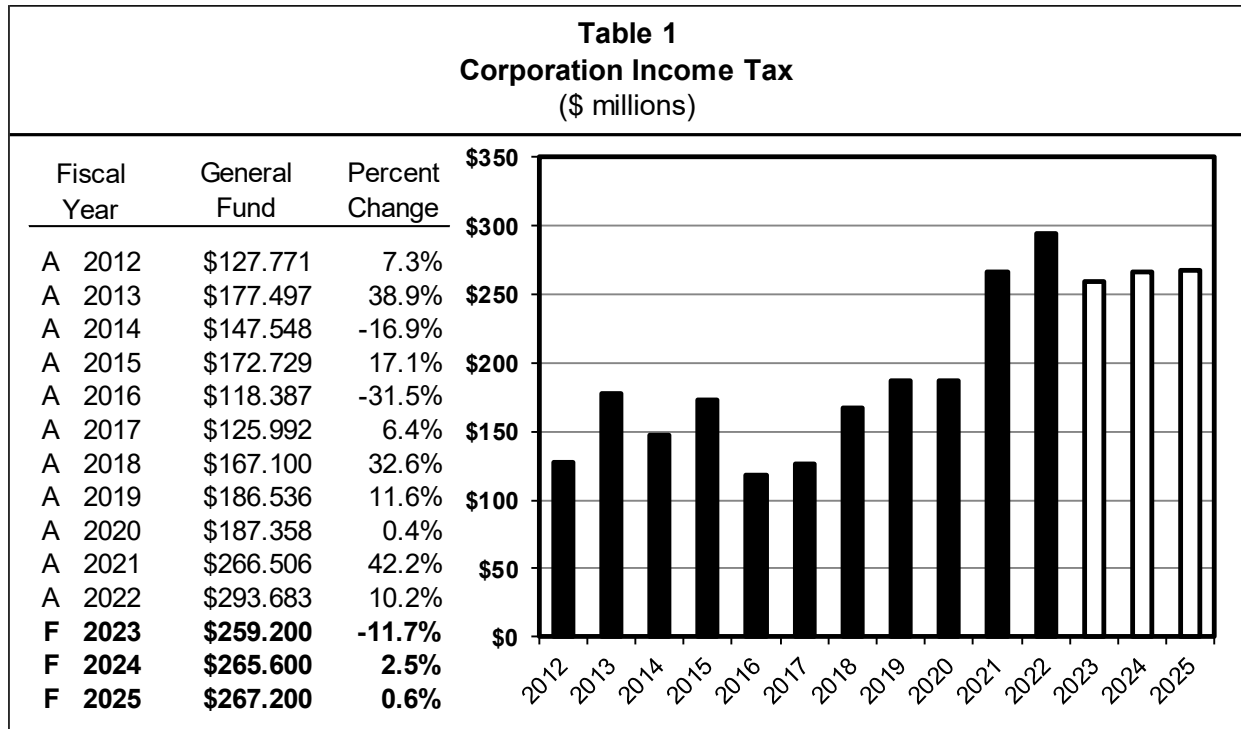
Tax revenue data are from SABHRS. Detailed Montana vehicle registration data are provided by the Department of Justice Motor Vehicle Division.

Revenue Description

Montana imposes a corporation income tax on net corporate profits apportioned to Montana per 15-31-121, MCA. The tax is levied at a flat rate of 6.75% of net income; however, corporations making a “water’s edge” election to exclude overseas net profits, are taxed at 7%. Since FY 2006, revenues have been deposited 100% in the general fund.

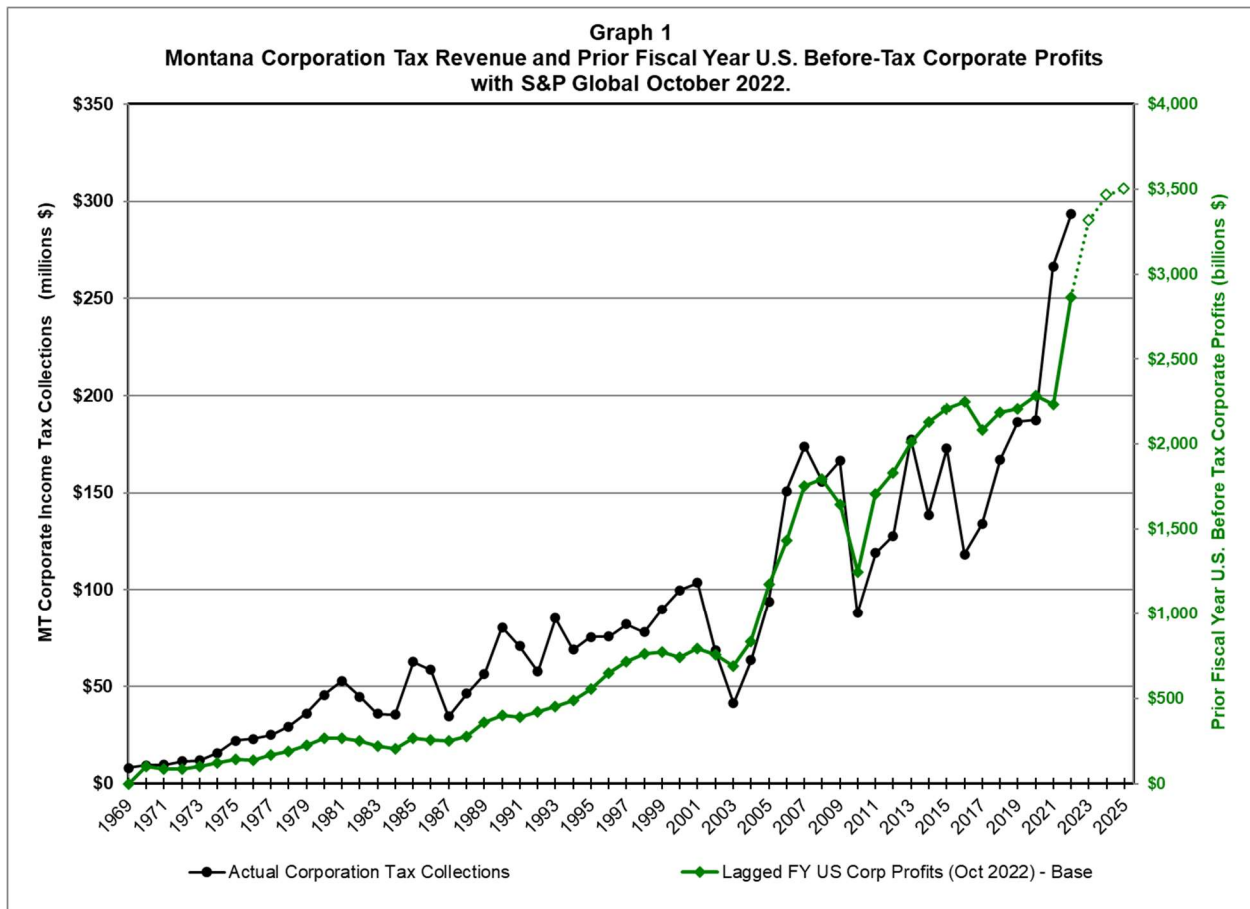
Corporations expecting to have tax liability of at least \$5,000 are required to make quarterly estimated payments. Returns are due five months after the end of the corporate fiscal year, but a corporation may elect to take an automatic six-month extension. The Department of Revenue may grant additional extensions. Unlike individuals, corporate fiscal years do not necessarily follow the calendar year. Corporations taking an extension and expecting to have tax liability greater than their estimated payments generally make a tentative payment when their return would normally be due. There is a minimum corporation tax of \$50 per year, the overwhelming majority of the approximately 18,000 “C-Corps” registered to do business in Montana pay the minimum tax.

Table 1 shows general fund revenue from corporation income taxes for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



Corporate tax revenue fell by more than 47% in FY 2010. This reflects the sharp decline in corporate profits from their 2007 peak to 2009 trough, a result of the “Great Recession”. Collections recovered in FY 2011 through FY 2013. Volatility in FY 2014 through FY 2017 appears to reflect commodity price changes, federal tax policy, and state tax policy. Surges in collections since FY 2020 appear to be related to increases in corporate profits.

Graph 1 presents the relationship between U.S. corporate profits and Montana corporation tax collections which underpin the regression model used to produce the Montana corporate tax revenue estimate.



Actual corporate profits grew through FY 2014 (the lagged value is FY 2015 in the graph), with the exception of FY 2003, FY 2009, FY 2010. It appears that the timing effects of changing federal business tax provisions which granted extensions, expansions, and retroactive tax preferences (for instance, bonus depreciation and expensing rule changes) have led to unanticipated changes in collections. Revenue again fell sharply in FY 2016 and then began recovering. With the unwinding of the pandemic, collections began to surge surpassing expectations in FY 2021 and FY 2022.

The sources of variation and unpredictability of Montana corporation tax collections stems from frequent shifts in federal tax law affecting corporations since 2002 leading to recurring irregular shifts in taxpaying strategies for firms. The most significant policy change is a product of the *Tax Cuts and Jobs Act of 2017* (TCJA) that passed on December 22, 2017. The TCJA works to transition federal taxation of corporate profits to a more territorial-based system and provides for a lower, and flat, federal corporation tax rate of 21% for profits received after December 31, 2017. Corporations with fiscal years that span this period must prorate their profits for tax purposes. This may have caused shifts in profit recognition between calendar year (CY) 2017 and CY 2018. Other TCJA features like the federal transition tax (IRC form 935) for repatriated profits have limited effects on Montana as income from most “water’s edge” filers is excluded from their Montana apportioned share of taxable profits. Worldwide filers that included any of that income in their Montana filing get to deduct 100% of that income.

Bonus depreciation under the TCJA was again extended and expanded. The TCJA raised first-year “bonus” depreciation to 100% through CY 2022. The rate then phases down 20% each year, expiring after CY 2026. The bonus depreciation rate (50%) had been expected to expire under prior law (*Protecting Americans from Tax Hikes Act of 2015* (PATH), P.L. 114-113) in CY 2019 (CY 2020 for certain long-production period property). Previously these were originally set to expire in CY 2014. The *American Taxpayer Relief Act of 2012* (ATRA) P.L. 112-240, passed as part of the “fiscal cliff” deal on January 2, 2013, appears to have affected the 2015 biennia collections. PATH passed in December 2015, has affected 2017 biennia collections. Similar shifts appear to be at play with the TCJA.

The TCJA also expanded Section 179 business cost expensing increasing the deduction to \$1 million and increasing the phase-out to \$2.5 million. Each round of changes made tax benefits more extensive, retroactively on several occasions.

State law changes may have also affected these collections as SB 550 (2017) created a \$500,000 limitation on the amount of net operating loss (NOL) carrybacks. (The bill also extended the NOL carry-forward period to ten years.) This should limit larger refunds starting in FY 2019. It is possible that firms, that were able to use NOLs, used more of them before the limitation became effective in TY 2018.

In response to the pandemic, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was enacted on March 27, 2020. While the law targeted individuals and small businesses (sole-proprietors, partnerships, LLCs, and other “pass-through” entities) corporations in some sectors received direct transfer payments, and others received fees for managing federal loan programs, and all received temporary net operating losses tax preferences. Discussions with analysts with the congressional Joint Committee on Taxation indicated that the committee’s revenue estimate did include substantial tax benefits for corporations. These changes were thought to increase revenue risk to state individual income tax collections and likely reduced future state corporation tax collections. The assumption was that the pandemic would increase corporates losses -- the data shows that does not happen.

While the Federal provisions provided for an expansion of the federal lookbacks (re-claiming prior-year taxes paid using current losses), Montana law (SB 550) limits the near-term refund risk. Firms tend to carry-forward substantial NOLs from year to year. It is assumed that future revenue risk, while unknown, is relatively modest due to this limitation. The fiscal note for SB 550 shows NOL carry-backs averaged \$6 million per year from tax year (TY) 2011 through TY 2014. The SB 550 limitation would convert losses into carry-forward NOLs, the CARES Act was anticipated to do the same. This does not yet appear to have materialized.

U.S. corporate profits appear to be rising to new peaks in a more stable federal tax policy environment which suggests rising collections and a more stable collections outlook. However, there are law changes at the federal level, *The Inflation Reduction Act of 2022* creates a new 15% corporate alternative minimum tax, and a 1% excise tax on certain corporate stock buybacks, these changes are not anticipated to generate notable impacts on the basis for Montana corporation income tax.

There were 2021 Session changes to Montana corporation income tax. Montana modified its three-factor apportionment formula (property, payroll, and sales) making sales double-weighted (SB 376). This affects multinational and multi-state corporations.

Risks and Significant Factors

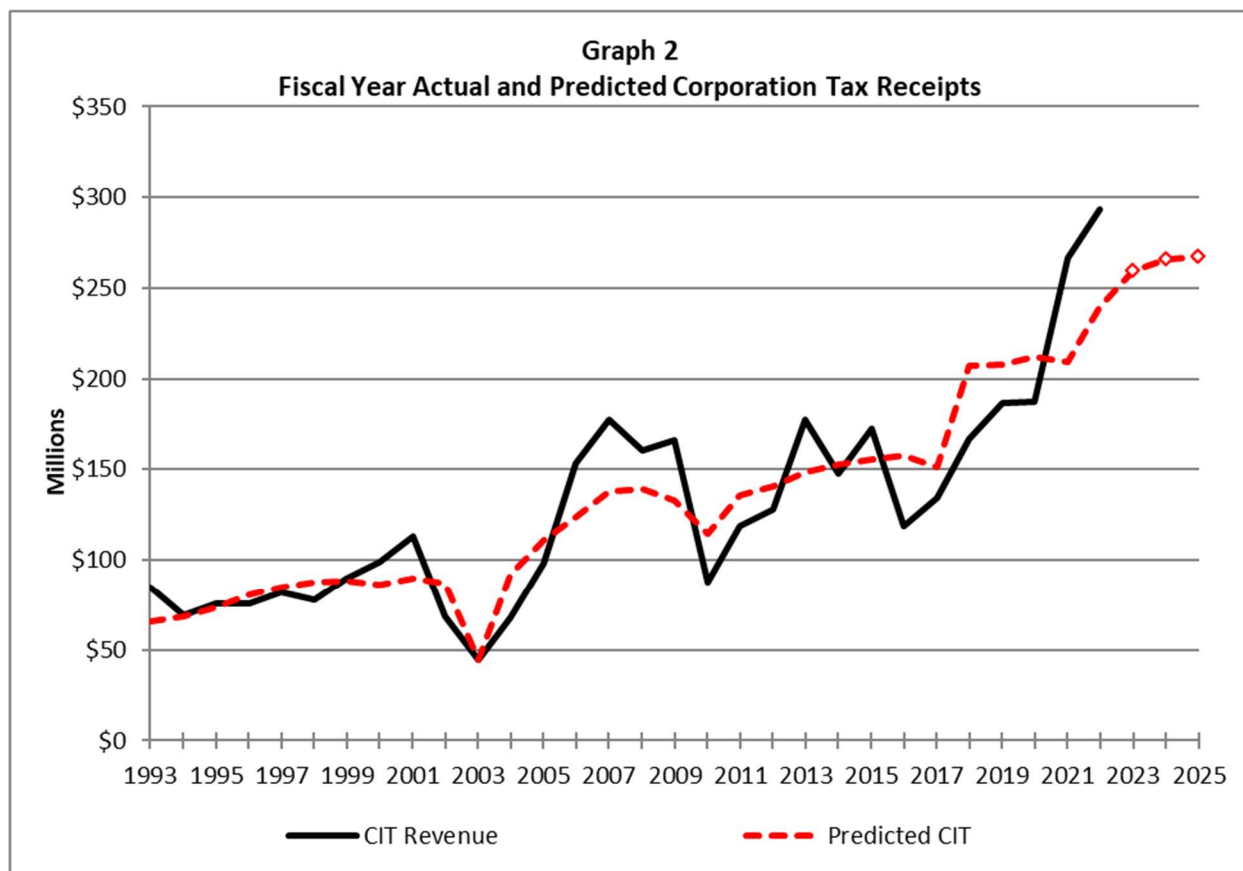
- Corporate tax revenue is highly correlated with the profitability of corporations doing business in the United States.
- The variation in corporate tax revenue can be much greater than that of corporate profits as Montana allows:
 - Firms to accumulate net operating losses for up to ten years to offset current and future taxable income.
 - Corporations may amend returns (back three years) and use current losses to partially offset past taxes.
 - Business structures and tax treatment of expenditures and income may change.
- A series of federal policy (2002, 2003, 2008, 2009, 2010, 2011, 2012, 2014, 2015, and 2017) changes to expensing and depreciation rules have introduced additional variation in collections. Many of these rules are now permanent. However, forecast models cannot fully account for these changes, nor the behavioral response to the changes. These factors have weakened the predictive power of the corporate tax collection models.
- Changes in accounting rules regarding expensing and depreciation shift taxes into later years. It is also important to recognize that accelerated depreciation does not reduce tax liability; rather the liability is shifted into the future.
- Corporations may reorganize their business structures which can have significant effects on the level and allocation of tax receipts. These changes tend to shift collections between corporation tax and individual income tax. The implications for Montana are difficult to establish as Montana’s total collections from these business structures are dependent on the Montana apportionment factors for corporations and the residency status of pass-through owners’ partnership distributions or dividends, if the source is not of clear Montana origin.
- In recent years there have been approximately 18,000 companies that filed corporate income forms in Montana. The top 100 filers had around 70% of the total tax liability. If one of these top tax-filing companies has significantly more (or less) tax liability than expected, it could have a significant impact on collections.
- The true stock of carry-forward losses is not known. The extent to which firms will use losses to offset recent profits is also not known. Greater than historical use of these accumulated losses may lower corporation tax collections.
- Lower federal tax rates instituted with the TCJA, may induce firms with worldwide presence to report more federal taxable income in the United States. Federal taxable income is the starting point for Montana corporate income tax.
- Volatility in commodity prices adds more unpredictability to the already challenging corporation tax estimate.

Forecast Methodology

Step 1. Total corporate income tax collections for FY 1993 through FY 2022 were regressed against the prior fiscal year national corporate profits (before taxes), a variable to account for the TCJA, and a dummy variable for the extraordinary decline in revenue in FY 2003. The standard error of any year's estimate is wide (the standard error is 18.7%). The average for a multi-year period is likely to hold. While the model R² is good at 0.917, given the wide confidence intervals, the model is effectively a fancy moving average.

Step 2. The model parameters were then used with the S&P Global forecast of corporation before tax profits to calculate an expected future level of Montana corporation tax collections. The tax strategies of U.S. corporations doing business in Montana are unknown but assumed to follow historical patterns. The model implicitly assumes pre and post pandemic average sector weights and tax liability relative to U.S. economic sector profits; as such, the model implicitly uses historical economic sector weights of Montana corporation profits.

Graph 2 presents the actual fiscal year collections and modeled (predicted) collections. The model predicted (forecast) values for FY 2023, FY 2024 and FY 2025 are those presented in Table 1.



Distribution

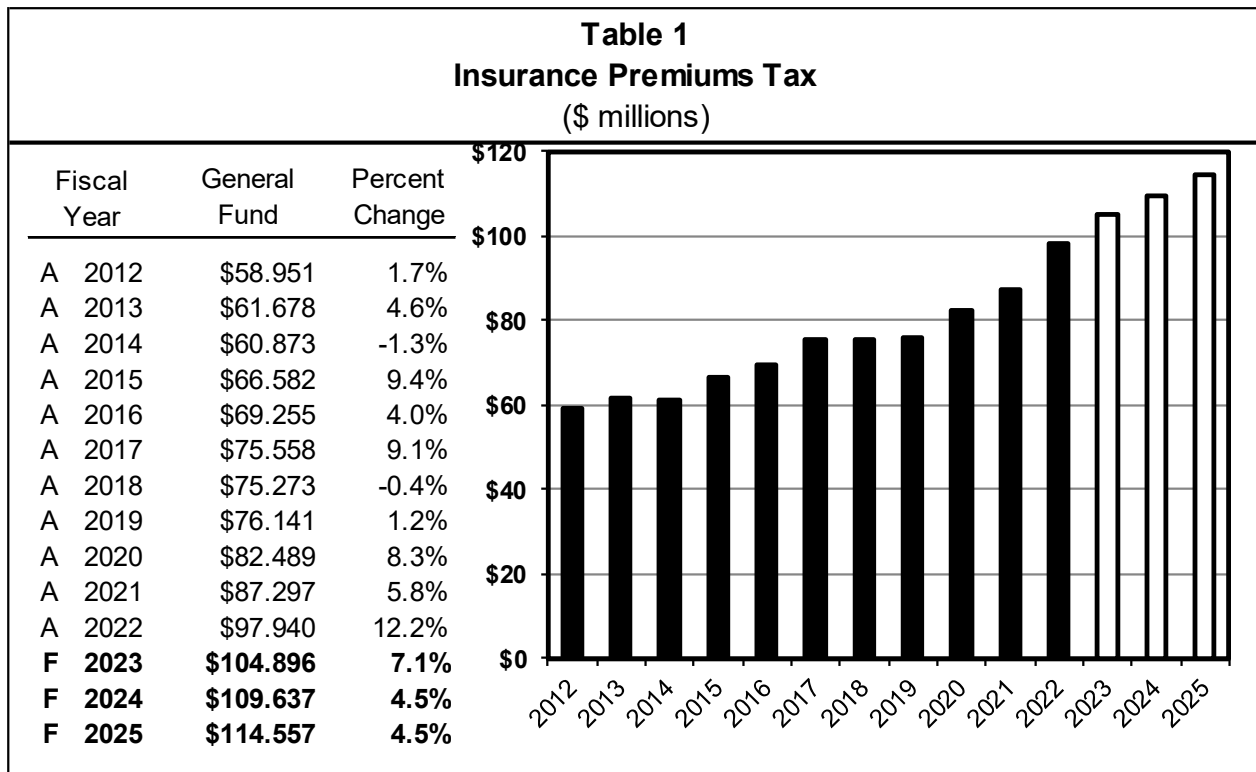
100% of the corporation tax revenue collected is distributed to the general fund.

Data Sources

Collections data were obtained from SABHRS. Revenues prior to FY 1993 are from LFD historical records, U.S. corporation profits and forecasts are from the October 2022, S&P Global forecasts. The Department of Revenue provided the corporation tax annual master files through the latest available dataset (TY 2020).

Revenue Description

Per 33-2-705, MCA, Montana levies a tax of 2.75% on net premiums on all insurance policies except those issued by health service corporations (HSCs). HSCs are exempt from all premium taxes under 33-30-203, MCA. An additional surcharge of 2.5% on premiums is collected for fire and casualty insurance on property (50-3-109, MCA). There is also a premium insurance tax for captive insurance companies levied under 33-28-201, MCA. Starting in November 2008, Initiative 155 transfers 33% of insurance premium taxes collected (under 33-2-705, MCA) to a state special revenue fund for the Healthy Montana Kids Plan Act (53-4-1101, MCA). HB 676 of the 2009 session reduced the transfer to 16.67% for the 2011 and 2013 biennia, but the transfer returned to 33% for the 2015 biennium and beyond. The State Auditor’s Office (SAO) administers the collection of these taxes.



Risks and Significant Factors

- In August 2013, Health Care Services Corporation (HCSC) purchased Blue Cross Blue Shield of Montana (BCBS). As a result of the merger, premiums paid to BCBS are now taxable. As BCBS market share changes, so will taxable insurance premium.
- The Montana HELP Act, passed during the 2015 Legislature, expanded Medicaid effective January 2016. The HELP Act contributed to the decrease in the uninsured rate in Montana, however, the fees paid to the third-party administrator by HELP members are not taxable.
- Financial or other turmoil raises insurer’s costs; slow wage growth may reduce insurance purchases.
- Premium tax collections tend to move counter-cyclically with financial markets as companies collect premiums from policy holders and pay claims from premiums and investment earnings. When investment earnings are high, insurance companies can reduce premiums charged to clients.
- SB 76 from the 2021 session increased the State Auditor’s Office’s share of revenue from the captive premium taxes from 5% to 20%. While the percent increase was significant, the impact to the general fund is less than \$250K per year.

Forecast Methodology

Step 1. Insurance premium taxes forecast. Insurance premium taxes, before offsets, are projected from a model of the relationship of insurance premium tax collections with respect to the average S&P 500 stock index value for the prior calendar year.

Step 2. Calculate insurance tax bases for distributions. Captive insurance company premiums taxes, yearly insurance premium taxes, and surplus lines taxes need to be estimated and excluded from insurance premium taxes that are the base for distributions to the Healthy Montana Kids fund. This also allows for the calculation of captive insurance company insurance premium taxes that are directed to the captive insurance company administration fund.

Captive insurance companies are regulated under Title 33, Chapter 28, of the Montana Code, (SB 373 of the 2001 Legislature). Captive insurance firms pay tax on premiums collected under 33-28-201, MCA, and were recorded in the same account as premium taxes collected under 33-2-705, MCA, until FY 2010. The 2007 Legislature, through SB 161, reserved five percent (5%) of the tax paid by captive insurance companies for the oversight of captive insurance companies. As mentioned above, SB 76 from the 2021 session increased the funding reserved from captive insurance companies to 20%. HB 160, 2009 session, reduced the number of tax rate bands from four to two (with no revenue effects) and allowed for quarterly proration of initial year fees.

Step 3. Calculate fire surtax. The Fire Marshal surtax on fire and casualty insurance is projected using the growth in total estimated insurance base. Table 2 lists the actual fire/casualty (or Fire Marshall tax) and forecast collections. Surtax collections represented 7.9% of gross insurance premiums taxes in FY 2022.

Step 4. Calculate insurance licenses and permits revenue. Revenue from insurance licenses and permits represented 5.3% of gross insurance premiums taxes in FY 2020 and this percentage is held constant during the forecast period.

Step 5. Total the estimates. Total general fund insurance premiums tax revenue (net of offsets and I-155 distributions), fire/casualty insurance surtax, and licenses and permits fees are summed to determine the estimate of insurance premiums tax collections for FY 2023, FY 2024, and FY 2025.

Distribution

- Distributions to the general fund, Healthy Montana Kids fund, SAO Insurance Operations and the Captive Insurance fund are presented in Table 2.

Tax/Fund	Fund	FY 2022	FY 2023	FY 2024	FY 2025
Captive Premium Tax		\$1.545	\$1.624	\$1.708	\$1.796
General Fund (80%)	01100	\$1.239	\$1.299	\$1.366	\$1.437
Captive Insurance Operations (20%)	02528	\$0.305	\$0.325	\$0.342	\$0.359
Other Insurance Taxes		\$8.179	\$9.209	\$10.369	\$11.675
Retaliation Tax	02235	\$0.473	\$0.630	\$0.765	\$0.623
Insurance Licenses & Permits		\$7.706	\$8.579	\$9.604	\$11.052
<i>Of which:</i>					
General Fund (est. 0.58%)	01100	\$0.038	\$0.050	\$0.056	\$0.064
SAO Insurance Operations (est. 97.71%)	02235	\$7.585	\$8.382	\$9.384	\$10.799
Captive Insurance Operations (est. 1.71%)	02528	\$0.083	\$0.147	\$0.164	\$0.189
Insurance Taxes and Offsets		\$18.313	\$19.593	\$20.565	\$21.587
Fire & Casualty Surtax (GF)	01100	\$11.537	\$12.344	\$12.956	\$13.600
Surplus Lines Tax	01100	\$6.775	\$7.249	\$7.609	\$7.987
Insurance Premium Tax - Yearly (GF)	01100	\$0.000	\$0.000	\$0.000	\$0.000
I-155 Premium Insurance Tax		\$117.519	\$125.305	\$130.821	\$136.522
Healthy Montana Kids Fund (33%)	02597	\$39.169	\$41.351	\$43.171	\$45.052
General Fund (67%)	01100	\$78.350	\$83.954	\$87.650	\$91.470
Gross Insurance Taxes, Licenses, & Fees	All Funds	\$145.556	\$155.731	\$163.463	\$171.579
Distribution of All Insurance Taxes, Licenses and Fees					
Fund	Fund	FY 2022	FY 2023	FY 2024	FY 2025
General Fund	01100	\$97.940	\$104.896	\$109.637	\$114.557
SAO Insurance Operations	02235	\$8.058	\$9.013	\$10.149	\$11.421
Captive Insurance Operations	02528	\$0.389	\$0.472	\$0.506	\$0.548
Healthy Montana Kids Fund	02597	\$39.169	\$41.351	\$43.171	\$45.052
Gross Insurance Taxes, Licenses, & Fees	All Funds	\$145.556	\$155.731	\$163.463	\$171.579

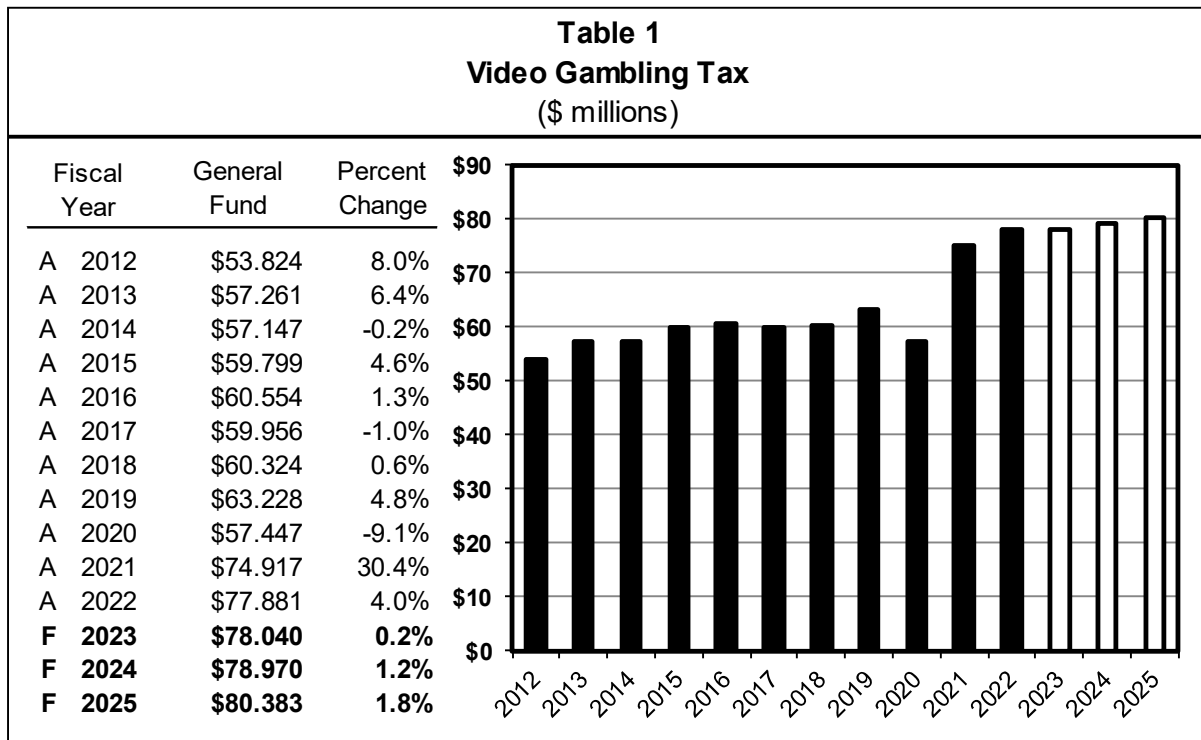
Data Sources

Tax collections are from SABHRS and the Department of Revenue GENTAX system. The S&P 500 stock index is from S&P Global.

Revenue Description

In accordance with 23-5-610, MCA, a 15% tax is imposed on the gross machine income received from video gambling machines in the state of Montana. Allowable video gambling activity in Montana consists of bingo, keno, poker, line games, and multigame terminals. Gross machine income is the difference between total receipts from a machine and cash payouts. All video gambling tax collections are deposited in the general fund.

Table 1 shows actual video gambling revenue to the general fund for FY 2012 through FY 2022 and projected revenue for FY 2023 through FY 2025.



According to the Montana Department of Justice, there are 1,400 licensed gambling establishments in Montana that operate over 15,000 video gambling machines.

Revenue from video gambling activity in Montana set a record in each of the past two fiscal years, eclipsing \$70 million for the first time in FY 2021 and then rising another 4% in FY 2022. This growth came on the heels of a significant COVID-19 induced drop in revenue in FY 2020. Prior to that, annual revenue was steady around the \$60 million mark for the five years from FY 2015 – FY 2019.

Healthy growth in Montana disposable income supported the level-up in receipts that began in FY 2021. Pandemic-era stimulatory spending action by the federal government boosted incomes for Montanans across the economic spectrum. A major source of this windfall was direct cash infusions from stimulus checks and enhanced unemployment benefits. Additional lift to incomes occurred because of the strong economic growth that took place during and following the reopening of the state and national economy. This income effect increased the demand for video gaming services in FY 2021 and FY 2022. Statewide video gaming consumer expenditures totaled \$2.5 billion in FY 2021 and \$2.6 billion in FY 2022, which is 23% above the previous high-water mark of \$2.1 billion in FY 2019. Individuals allocated 4.6% and 4.7% of their disposable income to video gaming in FYs 2021 and 2022, respectively. These income shares are right in line with the previous five-year average.

Looking ahead through the 2025 biennium, total fiscal year Montana disposable income is projected to average 5.5% per

annum. The share of disposable income used for consumption of video gaming services falls from its FY 2022 level to average 4.4% over the forecast period. With this lower income share, the level of total video gaming expenditures moves sideways in FY 2023 and only gradually rises in FY 2024 and FY 2025. The implication is that individuals are either content with their current nominal level of video gaming consumption or are being required to shift some of their disposable income that would otherwise be spent at video gaming terminals to cover rising costs in other areas of their consumption basket. Given the current inflationary environment, the latter seems more likely to be the case. The other factor putting a damper on growth in video gaming spending is the dimming outlook for economic growth with the threat of recession looming ever larger. Individuals will be hesitant to raise their nominal level of recreational spending when there is potential economic pain on the horizon. Video gaming tax collections follow the trend of total expenditures, staying essentially flat in FY 2023 and rising 1.2% in FY 2024 and 1.8% in FY 2025.

Table 2 shows nominal Montana disposable income, total video gambling expenditures, and the ratio of expenditures to disposable income for FY 2012 through FY 2022, with estimates for FY 2023 through FY 2025.

	Fiscal Year	Montana Disposable Income		Video Gambling Expenditures	% of Disp. Income	Tax Revenue
A	2012	\$35,966	÷	\$1,794	= 5.0%	\$53.824
A	2013	\$37,069	÷	\$1,909	= 5.1%	\$57.261
A	2014	\$37,831	÷	\$1,905	= 5.0%	\$57.147
A	2015	\$39,934	÷	\$1,993	= 5.0%	\$59.799
A	2016	\$40,644	÷	\$2,018	= 5.0%	\$60.554
A	2017	\$42,449	÷	\$1,999	= 4.7%	\$59.956
A	2018	\$44,685	÷	\$2,011	= 4.5%	\$60.324
A	2019	\$46,898	÷	\$2,108	= 4.5%	\$63.228
A	2020	\$50,510	÷	\$1,915	= 3.8%	\$57.447
A	2021	\$54,321	÷	\$2,497	= 4.6%	\$74.917
A	2022	\$55,525	÷	\$2,596	= 4.7%	\$77.881
F	2023	\$58,539	÷	\$2,601	= 4.4%	\$78.040
F	2024	\$61,910	÷	\$2,632	= 4.3%	\$78.970
F	2025	\$64,998	÷	\$2,679	= 4.1%	\$80.383

Risks and Significant Factors

- State and federal policy that directly impacts individuals' disposable incomes has flow-through effects on video gambling activity.
- Consumer price inflation remains stubbornly elevated. Continuing price inflation could cause further reshuffling of expenditure shares among consumers of video gaming services. It may be necessary for individuals to shift more spending to cover rising costs of food, rent, apparel, etc., to the detriment of spending on recreation activities. The share of income devoted to video gaming could fall further than forecast as a result. This effect could be exacerbated if economic growth continues its weakness or an outright recession comes to pass, leading to depressed income growth.

Forecast Methodology

Video gambling revenue is forecast using a multiple linear regression model. The model uses quarterly data, and video gambling receipts are regressed on a collection of independent variables. These independent variables include Montana personal consumption expenditures on recreation services, the percentage of disposable income saved, and dummy variables to account for changes in the economic landscape.

Consumption expenditures on recreation services is included as an indicator of individuals' willingness to pay for video

gaming services. Savings as a percent of disposable income are included in the model to capture changes in individuals' propensity to consume a dollar of disposable income. Savings rates and video gaming expenditures are expected to be inversely related. The dummy variables account for the effects of the Great Recession and COVID-19 lockdowns on video gaming tax receipts.

Gambling receipts, recreation spending, and the savings rate are transformed with the natural log function. The natural log transformation straightens out any non-linearities in the raw data, allowing for better estimation using the linear regression model. Additionally, the coefficients in a log-log model are interpretable directly as elasticities.

The regression model produces coefficient estimates for the effect of recreation spending, saving, and economic conditions on video gambling revenue. Each of these variables, except for the savings rate, has a statistically significant coefficient estimate and all have the expected sign (i.e., the direction of the impact on gambling receipts). Recreation spending has a positive effect on video gambling revenue, while challenging economic conditions contribute negatively to receipts. Because of the statistical insignificance of its coefficient estimate, the impact of the savings rates on video gaming tax collections is not distinguishable from zero.

By multiplying the estimated regression coefficients against forecast values of the independent variables, future estimates of quarterly video gambling revenue are obtained for FY 2023, FY 2024, and FY 2025. These quarterly forecasts are summed to produce annual estimates of video gambling revenue.

Distribution

All of the revenue collected from the video gambling tax is distributed to the general fund.

Data Sources

Historic video gambling revenues were obtained from SABHRS and the Department of Justice. Historical and forecast values for Montana-specific economic indicators were obtained from S&P Global.



GOVERNOR
GREG GIANFORTE

STATE OF MONTANA

NATURAL RESOURCE
REVENUE
SECTION 4

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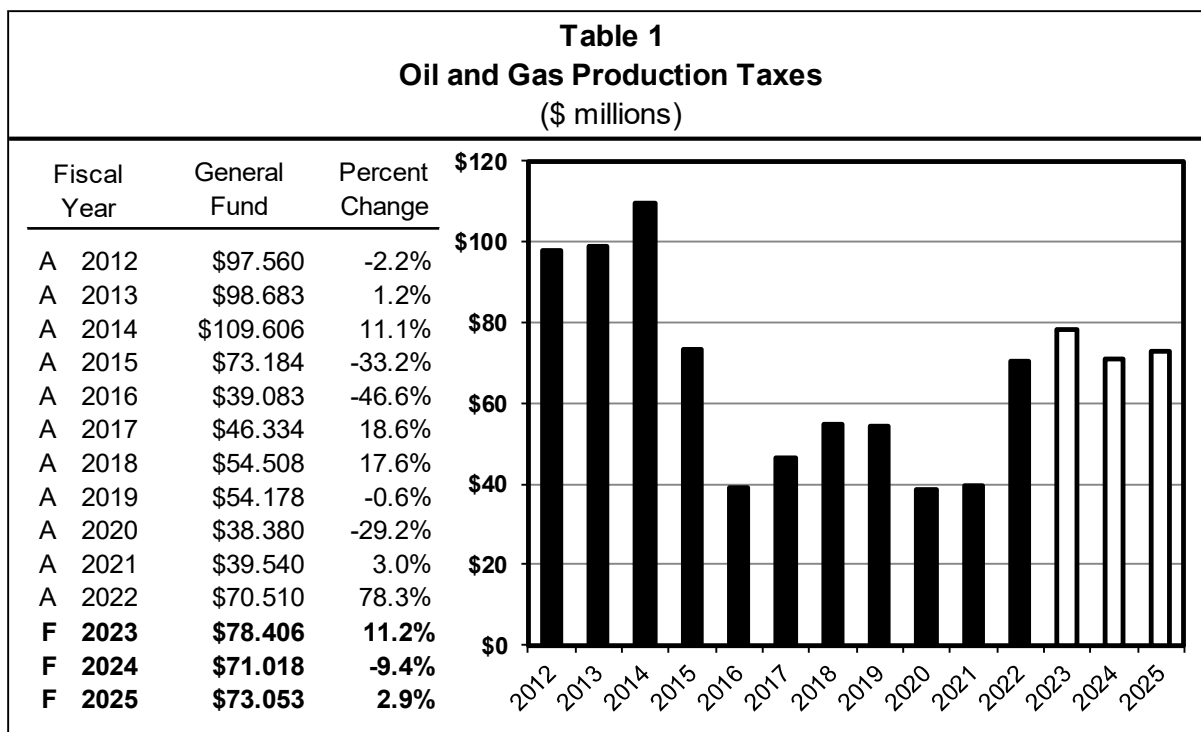


GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Revenue Description

In accordance with 15-36-304, MCA, Montana taxes the gross value of oil and natural gas production. The tax rates vary depending on the resource being extracted, the method of production, the age of the well, and the resource price. Working interest owners who incur the costs of production pay lower tax rates than parties that receive royalty payments from production of the oil and/or natural gas. Revenues are distributed to a variety of state and local government funds. Oil and natural gas production tax deposits to the general fund average about 45% of total production tax collections.

Table 1 shows actual general fund revenue from the oil and natural gas production tax for FY 2012 through FY 2022 and projected revenues for FY 2023 through FY 2025.



Because the oil and natural gas production tax is assessed on the gross value of output, changes in tax revenue move in near lockstep with changes in resource prices, particularly the price of oil. At the start of the past decade the price of West Texas Intermediate oil – the national benchmark price – stayed consistently in the \$90 - \$100 per barrel range. This stretch of consistency came to end when oil and natural gas prices started to decline in the summer of 2014 and continued to fall rapidly into the winter of 2015, shedding over 50% in value during that time. Shifts in the balance of demand and supply in the global oil market brought some recovery to oil prices in 2017 and prices fluctuated in the \$50 - \$70 per barrel range through 2019. Oil prices were trending the same direction into 2020 before the COVID-19 virus swept across the globe causing economic turmoil that led to a freefall in oil prices as demand evaporated. Montana oil producers likely shut-in some production in response to unfavorable well economics caused by exceptionally low oil prices in the second quarter of 2020. In 2021, as the world emerged from pandemic shutdowns, oil prices began a steady march upward on the back of revitalized demand. In early 2022, the war in Ukraine added another spark to rising oil prices. The level of WTI surged past \$100 per barrel and held steady there for multiple months before retreating to the \$90 mark. For the forecast period, the price of WTI is projected to hover around \$90 per barrel.

The production tax rates applicable for working and royalty ownership interests of a well, as established in 15-36-304, MCA, are outlined in Table 2. The production tax rates in the table reflect the statutory percentages. In addition, the combined tax rates that include the Board of Oil and Gas Conservation (BOGC) privilege and license tax (0.3%) are shown. The tax rate on royalties is constant, regardless of the tax rate on the working interest.

**Table 2
Oil and Natural Gas Tax Rates by Well & Ownership Classification**

Product	Well Classification	Working Interest		Royalty Interest	
		Production Tax Rate	Total Tax ¹	Production Tax Rate	Total Tax ¹
Natural Gas	Vertical Wells				
	First 12 Months -----	0.50%	0.80%	14.80%	15.10%
	After 12 Months:				
	Drilled Post-1999 -----	9.00%	9.30%	14.80%	15.10%
	Drilled Pre-1999 -----	14.80%	15.10%	14.80%	15.10%
	Stripper Well Drilled Pre-1999 -----	11.00%	11.30%	14.80%	15.10%
	Horizontally Completed Wells				
	First 18 Months -----	0.50%	0.80%	14.80%	15.10%
	After 18 Months -----	9.00%	9.30%	14.80%	15.10%
	Oil	Vertical Wells			
Primary Recovery Production:					
First 12 Months -----		0.50%	0.80%	14.80%	15.10%
After 12 Months:					
Drilled Pre-1999 -----		12.50%	12.80%	14.80%	15.10%
Drilled Post-1999 -----		9.00%	9.30%	14.80%	15.10%
Pre-1999 Stripper Wells:					
More than 3 bbls/day -----		9.20%	9.50%	14.80%	15.10%
3 bbls/day or less:					
Stripper Well Exemption Production ² ---		0.50%	0.80%	14.80%	15.10%
Stripper Well Bonus Production -----		5.00%	5.30%	14.80%	15.10%
Post-1999 Stripper Wells:					
More than 3 bbls/day:					
First 1-10 bbls/day -----		5.50%	5.80%	14.80%	15.10%
More than 10 bbls/day -----		9.00%	9.30%	14.80%	15.10%
3 bbls/day or less:					
Stripper Well Exemption Production ² --		0.50%	0.80%	14.80%	15.10%
Stripper Well Bonus Production -----		6.00%	6.30%	14.80%	15.10%
Horizontally Completed Wells					
First 18 Months -----		0.50%	0.80%	14.80%	15.10%
After 18 Months:					
Drilled Pre-1999 -----	12.50%	12.80%	14.80%	15.10%	
Drilled Post-1999 -----	9.00%	9.30%	14.80%	15.10%	
Incremental Secondary Production ^{3,4} --	8.50%	8.80%	14.80%	15.10%	
Incremental Tertiary Production ^{3,4} -----	5.80%	6.10%	14.80%	15.10%	
Horizontally Recompleted Wells					
First 18 Months -----	5.50%	5.80%	14.80%	15.10%	
After 18 Months:					
Drilled Pre-1999 -----	12.50%	12.80%	14.80%	15.10%	
Drilled Post-1999 -----	9.00%	9.30%	14.80%	15.10%	

1 Includes BOGC privilege & license tax and oil & natural gas resource account tax

2 Tax rate effective when quarter average oil price received by producer < \$54/bbl, otherwise taxed at stripper well bonus production rate

3 Tax rate effective when quarter average oil price received by producer < \$54/bbl, otherwise taxed at primary recovery rates

4 Applies only to the amount of increased production above the decline rate schedule

Risks and Significant Factors

Prices

- Oil prices are a key driver of Montana oil and natural gas production tax revenue, accounting for most of the variation in tax revenue in recent years. There is over 90% correlation between changes in oil prices and changes in production tax revenue.
- The volatility of oil and natural gas prices makes it difficult to predict their future paths. Prices are determined by supply and demand, which can be affected by shocks such as technological change, extreme weather phenomena, and geopolitical events. Shocks to oil and natural gas markets can cause large, sudden dips or spikes in prices that may persist for short or long periods of time.
- Montana oil prices are linked to national and international prices and move in tandem with these prices. West Texas Intermediate (WTI) is the U.S. benchmark oil price and Brent is the international benchmark oil price. Prices received for Montana oil are lower than these benchmark prices. The margin between the price for Montana oil and the price for WTI or Brent oil reflects the transportation costs required to get Montana's oil to major market destinations. The margin between the Montana price and the benchmark prices generally widens or narrows depending on existing transportation constraints. This margin has narrowed considerably over the past few years as declining Montana production and increased takeaway capacity reduced transportation bottlenecks.
- The relationship between Montana natural gas prices and the U.S. benchmark Henry Hub price isn't as directly linked as it is for oil prices. Regional market dynamics such as weather, pipeline accessibility, and demand creation or destruction make it so there isn't a consistent margin between benchmark prices and prices received by Montana producers.
- There is a large network of natural gas pipelines in the U.S. and Canada, which provides a much more fluid market for natural gas, allowing Montana to export natural gas relatively easier and at lower cost than oil.
- The U.S. maintains an influential and growing presence in global oil and natural gas markets. On the one hand, this exposure to world markets can increase domestic prices because the marginal unit of output is available for export. On the other hand, it can also mitigate price volatility because U.S. output can act as a balancing agent to movements in global supply and demand.
- The ongoing conflict between Russia and Ukraine will continue to pose a risk to global oil and natural gas markets. European natural gas prices have surged to incredible levels following significant curtailment of natural gas inflows from Russia. The severe market imbalance in Europe is creating worldwide reverberations. The U.S. is rapidly expanding liquefied natural gas (LNG) export capacity to fill the giant hole in European supplies, which has fueled large upswings in U.S. domestic natural gas prices.
- The Organization of Petroleum Exporting Countries (OPEC) still wields significant power in the oil market and can affect the price of oil via changes to its production quota. Cooperation among OPEC members is key to the group's ability to manipulate oil prices.

Production

- Montana oil production is sourced primarily from horizontal wells drilled in the Bakken shale formation in the far eastern part of the state.
- Horizontal oil wells have much quicker decline rates than conventional vertical wells. This has introduced an element of volatility into Montana's oil production profile that didn't exist when conventional legacy production dominated oil output in the state. Because stability in production from horizontal wells relies on constant drilling of new wells, any change in the pace of drilling will impact the rate of oil production.
- Since the oil price slump in late 2014, drilling activity in Montana has been minimal with a small number of new wells being drilled in the Bakken formation each year. So far in 2022, an uptick in operating rigs in the state is correlated with the surge in oil prices. Production is expected to rise as these wells are completed.
- Oil and natural gas production can be negatively affected by harsh weather conditions, especially in the shale formations where cold temperatures and high winds can put a stop to well drilling and completion activities.
- Exploration and production activity in other parts of Montana has not proved to be nearly as fruitful as the Bakken. Output from the historically productive Red River formation has been declining steadily. Efforts to inject CO₂ into the Bell Creek field in Powder River County have been successful in enhancing oil output from the legacy field. Montana's Cedar Creek Anticline is slated for CO₂ injection as well and offers productive potential as a source of tertiary recovery.
- Montana natural gas production comes primarily in the form of associated gas from oil production in the

Bakken region. Gas well drilling is nonexistent in the state. The future of the state's natural gas output is nearly fully tied to Bakken oil well drilling activity.

Forecast Methodology

Step 1. Estimate oil and natural gas production.

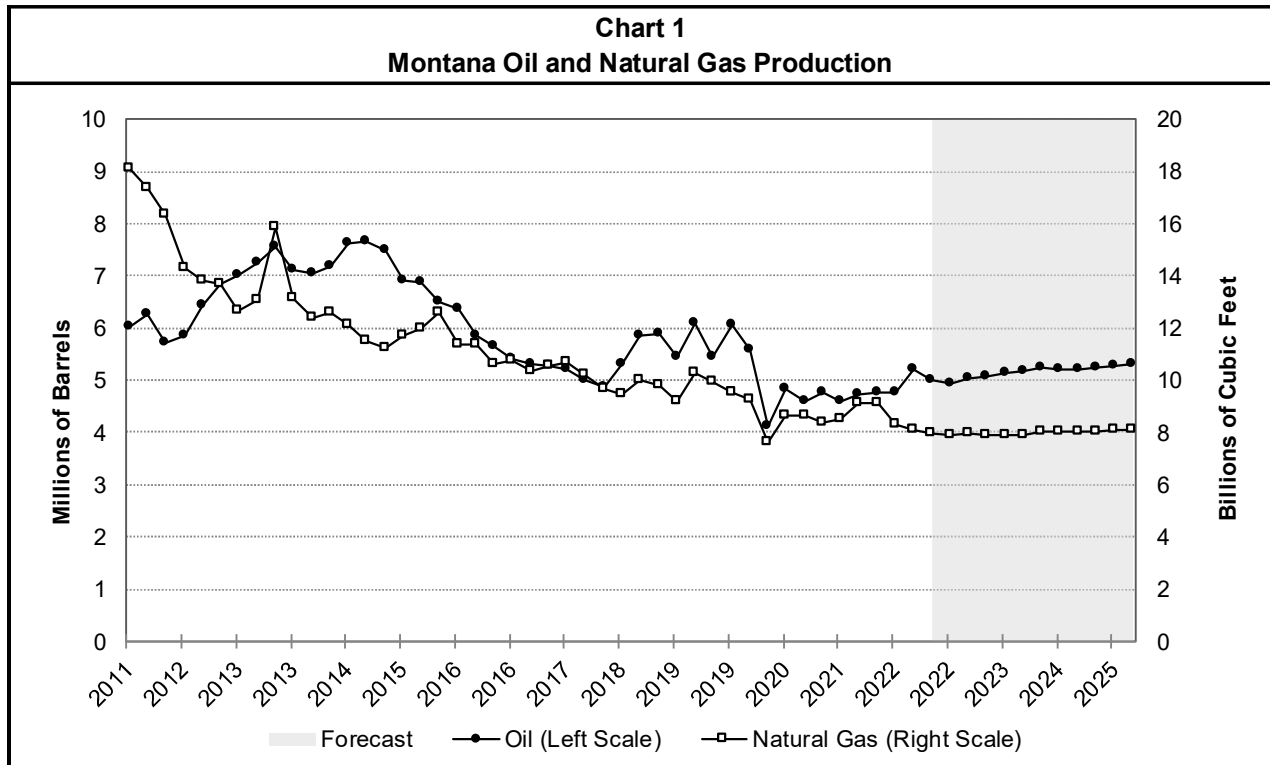
Oil Production

- Using quarterly data, oil production is split into holiday and non-holiday production and each class of production is forecast separately. Output from non-holiday wells is estimated using a time series model. The forecast projects the production path for the existing stock of non-holiday oil wells. If there are producing wells on holiday status that move outside the 18-month holiday window during the forecast period, output from these wells is added to the non-holiday production estimate once holiday status is relinquished. The forecast for holiday oil production is based on estimated new well completions and the typical production decline schedule for a newly completed (usually Bakken) well. Aggregate Montana oil production is the sum of the non-holiday and holiday forecasts.
- The forecast for total Montana oil production moves upward through FY 2023, a reflection of the recent increase in drilling rig deployment which is linked to an expected higher rate of new well completions. The projected level of oil prices is enough to sustain moderate but consistent drilling and new well completion activity throughout the forecast period. Production flattens in FY 2024 and moves sideways into FY 2025, settling at an equilibrium production volume of about 5 million barrels per quarter.

Natural Gas Production

- Natural gas production is modeled to follow the trend in oil production. Fluctuations in natural gas output are tightly linked to associated gas production from Bakken oil wells. Forecast Montana natural gas production is estimated to move mostly sideways with a slight upward drift from FY 2023 through FY 2025.

Chart 1 shows the actual and projected quarterly total production levels of oil and natural gas in Montana from FY 2012 through FY 2025.



Step 2. Estimate oil and natural gas prices.

Oil Prices

- Montana oil prices are estimated based on their historical relationship with WTI prices. Movements in Montana oil prices are highly correlated with movements in WTI prices, making the price of WTI a significant determinant of the price of Montana oil. Forecast values of WTI prices through FY 2025 are used to generate projected Montana prices for the same period via an estimated discount Montana prices take to WTI. The current margin between the price of Montana oil and the price of WTI is around \$4.50 per barrel.
- The average price for Montana oil is forecast to rise in FY 2023 and then trend down in both FY 2024 and FY 2025. The margin between Montana and WTI oil prices has narrowed as oil production in the Bakken region has slowed, easing transportation constraints, and lowering the cost of shipping Montana oil to market destinations.

Natural Gas Prices

- Montana natural gas prices are modeled against the benchmark Henry Hub price. Fluctuations in Henry Hub prices are generally reflected in Montana natural gas prices. Montana natural gas usually sells at a discount to the Henry Hub price. An estimate of the Henry Hub-Montana price margin is used to project Montana prices based on forecast values of Henry Hub prices. Through the forecast period the price for Montana natural gas is estimated to trade at an average discount of \$0.75 per mcf to the Henry Hub price.
- Montana natural gas prices are forecast to climb sharply in FY 2023, following this spike with a hard adjustment downward in FY 2024. Prices decline further in FY 2025, but by a much smaller margin. During this time, Montana prices are estimated to remain below the Henry Hub price. This has generally been the case historically, but there have been instances where Montana prices have matched or briefly eclipsed Henry Hub prices.

Table 3 shows quarterly WTI and Montana oil prices in dollars per barrel. Actual prices are shown from FY 2012 through FY 2022 and forecast prices are shown for FY 2023 through FY 2025.

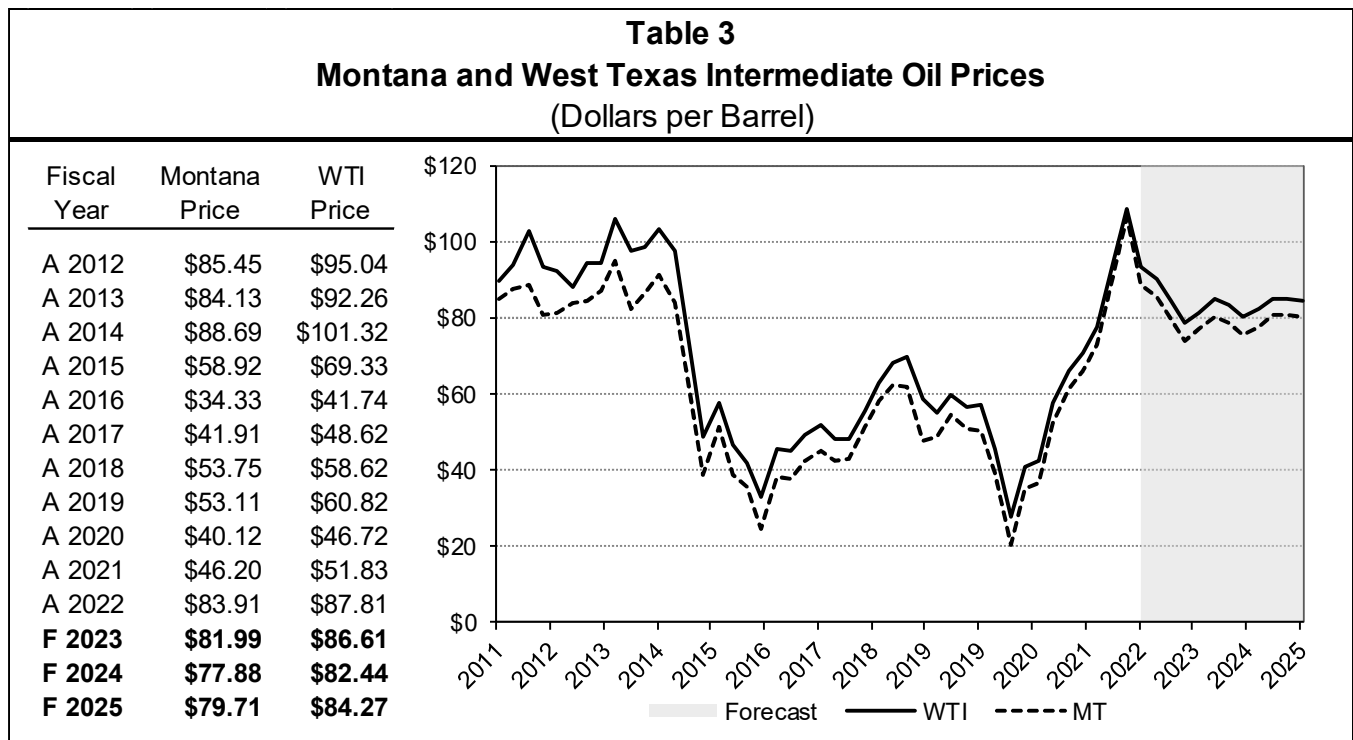
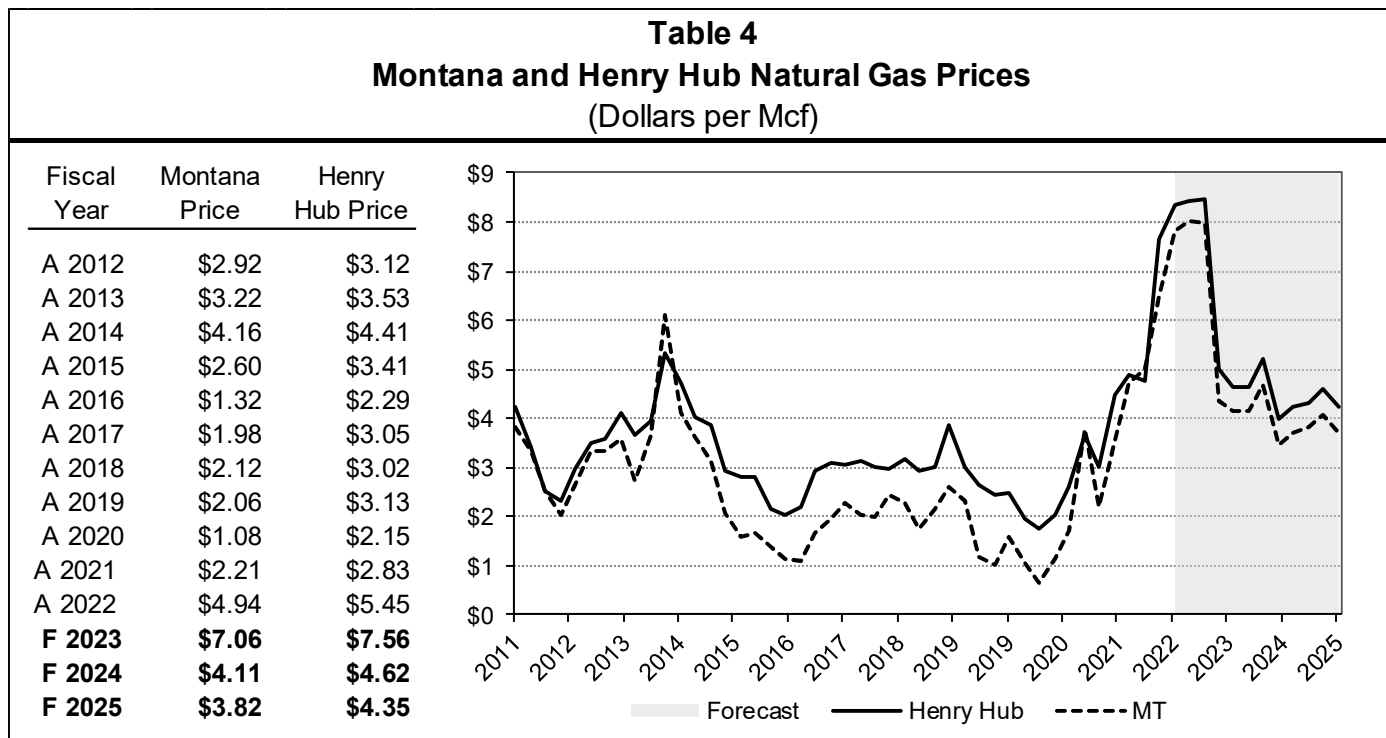


Table 4 shows quarterly Henry Hub and Montana natural gas prices in dollars per thousand cubic feet (Mcf). Actual prices are shown for FY 2012 through FY 2022 and forecast prices are shown for FY 2023 through FY 2025.



Step 3. Estimate effective tax rates for oil and natural gas production and determine tax revenue.

- Effective tax rates are estimated for both working and royalty ownership interests. The effective tax rate for the working interest portions of oil and natural gas production varies from year to year because there are different nominal tax rates for different types of working interest production. All royalty interest production is taxed at one rate, so the effective tax rate is equal to the nominal tax rate.
- A four-year moving average is used to estimate effective working interest tax rates for oil and natural gas production over the forecast period. Effective royalty tax rates are assumed to equal the nominal rates for all forecast years.
- Working interest oil tax revenue is determined by multiplying the effective working interest tax rate for oil production by the estimated gross value of working interest oil production. Tax revenue for the working interest portion of natural gas revenue is determined by the same method.
- Royalty tax revenue for oil and natural gas is calculated by applying the royalty tax rate of 15.10% to the gross royalty value of oil and natural gas production.
- Total oil and natural gas tax revenue to be distributed to the state is equal to the sum of working interest and royalty interest tax revenue from oil and natural gas production.

Table 5 shows the components that determine total tax revenue from oil production in Montana. Similarly, Table 6 summarizes how total tax revenue from natural gas production is calculated. Table 7 shows the combination of oil and natural gas tax revenue, plus audit, penalty, and interest income, to determine total tax revenue received by the state. All the tables show actual values for FY 2012 - FY 2022 and forecast values for FY 2023 - FY 2025.

Table 5
Montana Oil Revenue
(\$ millions)

Fiscal Year	Millions of Barrels of Oil	Gross Value	Non-Taxable Royalty Value	Taxable Value	Average Tax Rate	Tax Revenue
A 2012	23.825	\$2,036.262	\$53.975	\$1,982.287	X 9.18%	\$186.940
A 2013	27.517	\$2,317.461	\$60.638	\$2,256.824	X 8.15%	\$188.825
A 2014	28.928	\$2,568.789	\$64.325	\$2,504.464	X 8.20%	\$210.705
A 2015	29.700	\$1,757.886	\$46.295	\$1,711.591	X 8.30%	\$145.925
A 2016	25.586	\$878.660	\$24.333	\$854.327	X 9.16%	\$80.490
A 2017	21.635	\$905.505	\$25.367	\$880.138	X 10.18%	\$92.153
A 2018	20.380	\$1,095.716	\$32.652	\$1,063.064	X 9.96%	\$109.153
A 2019	23.289	\$1,238.749	\$36.398	\$1,202.351	X 8.96%	\$111.037
A 2020	21.225	\$883.834	\$24.316	\$859.518	X 8.66%	\$76.550
A 2021	18.768	\$865.780	\$24.533	\$841.246	X 9.34%	\$80.881
A 2022	19.437	\$1,641.643	\$46.161	\$1,595.482	X 9.04%	\$148.461
F 2023	20.062	\$1,644.035	\$45.067	\$1,598.968	X 8.62%	\$141.643
F 2024	20.742	\$1,615.423	\$44.283	\$1,571.140	X 8.39%	\$135.573
F 2025	21.054	\$1,678.258	\$46.006	\$1,632.252	X 8.38%	\$140.567

Table 6
Natural Gas Production Revenue
(\$ millions)

Fiscal Year	Billions of Cubic Feet of Gas	Gross Value	Non-Taxable Royalty Value	Taxable Value	Average Tax Rate	Tax Revenue
A 2012	66.030	\$196.678	\$8.002	\$188.675	X 9.54%	\$18.764
A 2013	53.227	\$170.922	\$6.430	\$164.493	X 9.29%	\$15.874
A 2014	54.016	\$219.206	\$8.337	\$210.869	X 9.13%	\$20.006
A 2015	46.553	\$121.616	\$4.978	\$116.638	X 9.12%	\$11.085
A 2016	47.261	\$62.839	\$2.670	\$60.169	X 9.60%	\$6.031
A 2017	42.234	\$83.610	\$2.688	\$80.923	X 10.09%	\$8.439
A 2018	40.059	\$84.892	\$2.660	\$82.231	X 9.85%	\$8.361
A 2019	39.316	\$80.588	\$2.434	\$78.154	X 9.54%	\$7.687
A 2020	36.345	\$39.983	\$1.191	\$38.792	X 9.68%	\$3.869
A 2021	34.206	\$75.040	\$2.534	\$72.506	X 9.90%	\$7.429
A 2022	34.659	\$169.526	\$5.334	\$164.192	X 9.75%	\$16.522
F 2023	31.658	\$223.412	\$8.368	\$215.044	X 9.59%	\$21.436
F 2024	31.851	\$130.812	\$4.900	\$125.913	X 9.59%	\$12.542
F 2025	32.263	\$123.368	\$4.621	\$118.747	X 9.57%	\$11.803

Table 7
Montana Oil and Gas Tax Revenue
(\$ millions)

Fiscal Year	Oil Revenue		Natural Gas Revenue		Audits, Penalties, & Interest	=	Total Revenue
A 2012	\$186.940	+	\$18.764	+	\$0.737	=	\$206.440
A 2013	\$188.825	+	\$15.874	+	\$1.366	=	\$206.065
A 2014	\$210.705	+	\$20.006	+	\$0.864	=	\$231.575
A 2015	\$145.925	+	\$11.085	+	-\$0.605	=	\$156.406
A 2016	\$80.490	+	\$6.031	+	\$0.772	=	\$87.293
A 2017	\$92.153	+	\$8.439	+	\$0.408	=	\$101.000
A 2018	\$109.153	+	\$8.361	+	\$1.959	=	\$119.472
A 2019	\$111.037	+	\$7.687	+	\$0.720	=	\$119.443
A 2020	\$76.550	+	\$3.869	+	-\$0.007	=	\$80.412
A 2021	\$80.881	+	\$7.429	+	\$0.250	=	\$88.560
A 2022	\$148.461	+	\$16.522	+	-\$0.184	=	\$164.799
F 2023	\$141.643	+	\$21.436	+	\$0.195	=	\$163.273
F 2024	\$135.573	+	\$12.542	+	\$0.063	=	\$148.178
F 2025	\$140.567	+	\$11.803	+	\$0.081	=	\$152.451

Distribution

Oil and natural gas revenue is distributed in accordance with 15-36-331, MCA.

The BOGC imposes a privilege and license tax in addition to the base oil and natural gas tax rates. This tax rate is currently set at 0.3% of the gross value of oil and natural gas production.

Total oil and gas production tax revenue in Montana is divided between the state and local governments. Prior to HB 748 (2003 session), the distribution was based primarily on property tax mill levies. After HB 748, the counties and schools were each assigned a percentage of the production tax revenue generated in their county that they would receive. Beginning in FY 2012, SB 329 (2011 session) capped the amount of oil and natural gas receipts distributed to a school district at 130% of a district's maximum general fund budget (with some exceptions), and distributed any excess revenues to various state special revenue accounts (guarantee account, state school oil and gas impact fund, and county oil and natural gas impact fund). The 2013 legislative session passed SB 175, which changed the local distribution of oil and natural gas tax revenue starting in FY 2014. The amount of oil and natural gas revenue a school district could receive was still capped at 130% of the district's maximum budget; however, school districts with budgets less than \$1.5 million were allowed to keep revenue equivalent to up to 150% of their maximum budget. Per SB 175, any excess tax revenue existing in a school district after these budget-based limits were reached was distributed outwardly to other school districts in a concentric circle pattern until all the excess revenue was exhausted. During the 2015 legislative session, SB 175 was replaced with SB 260, which did away with the concentric circle method of distribution and instead established two negotiated rulemaking committees that were tasked with determining how to allocate the excess tax revenue. Each committee was assigned the authority to portion out 50% of the available revenue. House Bill 647 from the 2017 regular session did away with the rulemaking committee distribution and changed the law so that any oil and natural gas revenue in excess of 130% of a school district's maximum budget is deposited into the guarantee fund (20-9-310, MCA).

The state share of oil and natural gas production tax revenue is divided among various funds according to the following schedule:

- 2.16% to the natural resource projects state special revenue account.
- 2.02% to the natural resource operations state special revenue account.
- 2.95% to the orphan share account.
- 2.65% to the university system.

- The remainder (90.22%) to the general fund.

Table 8 shows the actual distribution of oil and natural gas production tax revenues for FY 2022 and forecast distributions for FY 2023 through FY 2025.

Table 8				
Oil and Gas Tax Revenue Distribution				
(\$ millions)				
Entity	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025
Tax Revenue	\$155.819	\$163.273	\$148.178	\$152.451
BOGC	\$4.085	\$4.669	\$4.366	\$4.504
Oil & Gas Natural Resource Acct.	\$0.817	\$0.934	\$0.873	\$0.901
Guarantee Fund	\$1.559	\$1.634	\$1.483	\$1.526
Local Share	\$71.204	\$69.13	\$62.74	\$64.55
State Share	\$78.153	\$86.906	\$78.716	\$80.972
Natural Resource Projects Acct. (2.16%)	\$1.688	\$1.877	\$1.700	\$1.749
Natural Resource Operations Acct. (2.02%)	\$1.579	\$1.755	\$1.590	\$1.636
Orphan Share Acct. (2.95%)	\$2.306	\$2.564	\$2.322	\$2.389
University System (2.65%)	\$2.071	\$2.303	\$2.086	\$2.146
General Fund Share (90.22%)	\$70.510	\$78.406	\$71.018	\$73.053

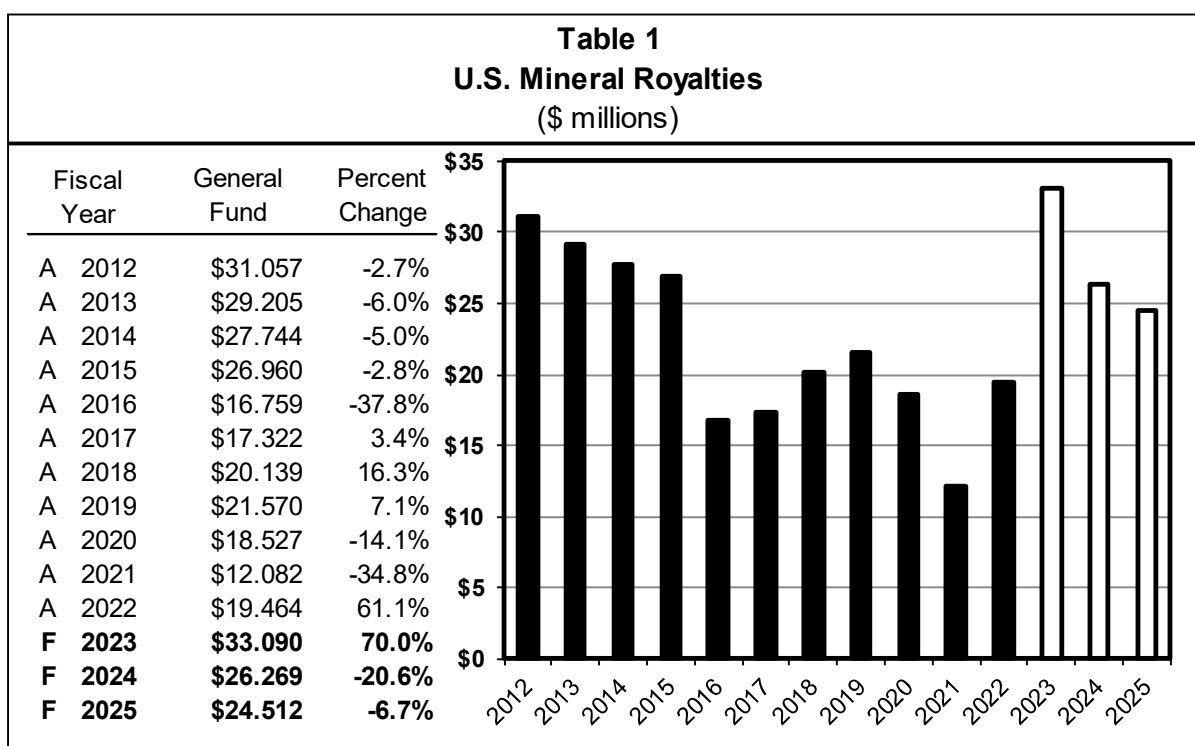
Data Sources

Montana oil and natural gas production tax data are sourced from the Montana Department of Revenue. Historic and forecast WTI prices and Henry Hub prices are from S&P Global and the U.S. Energy Information Administration. Supplemental data are obtained from the Montana Board of Oil and Gas Conservation and the U.S. Energy Information Administration.

Revenue Description

In accordance with 30 USC, Section 191, a portion of the revenue from minerals extracted in Montana from federal land must be shared with the state of Montana. When the U.S. government leases public lands for mineral production, it distributes a portion of the royalty income it receives from resource extraction to the state where the leased land is located. Generally, U.S. states receive 50% of the royalty revenue from resource extraction on federal lands within the state, less 2% to account for administrative costs. Montana distributes its share of federal mineral royalty revenue 75% to the general fund and 25% to an account in the state special revenue fund. The state special revenue is for distribution to local governments with impacts from mineral extraction, per 17-3-240, MCA.

Table 1 shows actual revenue to the general fund from U.S. mineral royalties for FY 2012 through FY 2022 and forecast revenues for FY 2023 through FY 2025.



General fund revenue from U.S. mineral royalties fluctuates as mineral prices and production levels change. Over the past decade, royalty revenues have exhibited a general downward trend. This trend was gradual decline from FY 2012 – FY 2015, but a culmination of relatively low resource production volumes (notably coal) and significantly depressed oil and natural gas prices caused a sharp drop in royalty receipts in FY 2016. A rebound in coal production and oil prices in the three years following, helped reverse the multi-year decline in mineral royalty revenue. Collections turned downward again in FY 2020 as the world economy slowed considerably in response to the emergence and rapid spread of the COVID-19 virus. Economic shutdowns sapped energy demand. Oil prices crashed hard in the fourth quarter of FY 2020. These developments led to lower resource prices and volumes for Montana, which translated into depressed severance tax and royalty revenues in FY 2020 and FY 2021. Post-pandemic increases in energy demand plus the shock to commodity markets from the conflict between Russia and Ukraine led to resurgent prices for coal, oil, and natural gas which pushed royalty revenues higher in FY 2022. These elevated prices are the source of strong revenue growth in FY 2023. Retreating coal prices from their current record territory brings forecasted revenue down in FY 2024 and FY 2025.

Coal is the leading source of U.S. mineral royalty revenue for Montana, averaging about 60% of total collections over the last five years. Oil is the second largest revenue source followed by natural gas, averaging 30% and 6% of total receipts, respectively. Royalties from other mineral sources along with bonus and rental payments round out the remainder of

revenue. Roughly half of coal production in Montana occurs on federal land. Federal coal production in Montana is expected to remain relatively stable from FY 2023 – FY 2025. Production of oil and gas in Montana isn't as concentrated on federal lands as coal production. About 15% of oil production and 30% of natural gas production in Montana occurs on federal lands. The development of the Bakken shale formation in eastern Montana led to a shift in more oil and natural gas being produced on privately-owned land.

Risks and Significant Factors

- Most royalty revenue is calculated as a percentage of the gross value of the minerals produced. As prices fluctuate, so does royalty revenue. Oil and natural gas prices are typically more volatile than coal prices and have the potential to deviate significantly from expectations over the forecast period. This risk may be more applicable than usual to coal prices this forecast cycle because of tight global coal markets. International thermal coal prices have displayed unprecedented behavior over the past year, accelerating to incredible highs. Montana has exposure to the global market via exports through a British Columbia terminal. Such elevated world thermal coal prices, if they persist, will increase the production value of some of Montana's federal land sourced coal volumes, leading to higher state royalty receipts.
- As became apparent with the passage of the FY 2009 federal budget, Congress can change the amount of revenue that gets distributed to the state. Also, changes to the federal Mineral Management Service may affect the timing of revenue flows from year to year.
- The rebound of oil prices in 2022 has led to a small uptick in drilling activity in Montana. This development is expected to bring a slight boost to oil and gas production in Montana during the forecast period.
- In April 2022 the U.S. Department of Interior announced an increase in the federal royalty rate for new oil and gas leases. New leases will now carry a royalty rate of 18.75%, up from the previous rate of 12.5%.

Forecast Methodology

Step 1. Forecast the gross value of coal, oil, and natural gas production on federal land by multiplying estimated production by estimated price. Historical proportions of resource production on federally owned land in Montana to total state production are used to estimate future production for each resource type. Estimated federal production proportions for each resource type are then multiplied by estimated total Montana production for each resource to determine estimated federal production. Forecast federal production volumes are then multiplied by an estimated price for each resource to determine gross value. The total production and price estimates for coal, oil, and natural gas come from data contained in each resource's respective revenue estimate.

Step 2. Estimate the federal royalty rate to be applied to the gross value of each resource type. The nominal federal royalty rate for coal is 12.5%. As of April 2022, the nominal royalty rate for new oil and gas leases moved up to 18.75%. Existing oil and natural gas production is still subject to the old 12.5% rate. The effective federal royalty rate is often lower than the nominal rate. The effective federal royalty rate is estimated for each resource type over the forecast period. To determine estimated total royalty revenue from coal, oil, and natural gas production on federal lands in Montana, the gross value of production for each resource type is multiplied by the effective federal royalty rate.

Step 3. Calculate the average percentage of receipts that are remitted by the federal government to the state for each resource type. Although the federal government is required to return 48% of the revenue to the state, there are exceptions that may reduce the actual percentage to less than 48%. This is primarily dependent on the nature of the property where the federal lease is issued. For example, a federal lease could be on General Services Administration (GSA) land, in which case 100% of the revenue would be distributed to the U.S. Treasury. Federal leases on Indian reservations and timing issues between fiscal years can also contribute to variation. The percentage of federal royalty revenue estimated to be returned to the state is estimated using an average of past years' state shares. The state's percentage is multiplied by total federal royalty revenue to yield total state mineral royalty revenue from coal, oil, and natural gas extraction.

Step 4. Estimate revenue from sources other than coal, oil, and natural gas, as well as rental and bonus payments using an average of prior years' revenue. Add rental/bonus and other revenue to the state's share of coal, oil, and natural gas revenue to obtain total mineral royalty revenue.

Table 2 shows actual revenues, royalty rates, and state revenue from federal mineral royalties for FY 2012 through FY 2022. Forecast numbers are shown for FY 2023 through FY 2025.

Table 2					
U.S. Mineral Royalty Revenue by Source					
(\$ millions)					
Fiscal Year	Coal Royalty Revenue	Oil Royalty Revenue	Natural Gas Royalty Revenue	Other Revenue	Total Revenue
A 2012	\$27.245	\$12.545	\$2.701	-\$1.082	\$41.409
A 2013	\$21.041	\$11.575	\$1.679	\$4.646	\$38.940
A 2014	\$20.397	\$12.471	\$3.493	\$0.631	\$36.992
A 2015	\$19.404	\$11.821	\$1.978	\$2.744	\$35.947
A 2016	\$18.138	\$5.654	\$1.173	-\$2.619	\$22.345
A 2017	\$16.363	\$6.206	\$0.344	\$0.184	\$23.096
A 2018	\$17.858	\$6.939	\$1.602	\$0.454	\$26.852
A 2019	\$16.615	\$9.107	\$1.384	\$1.654	\$28.760
A 2020	\$16.308	\$6.183	\$1.047	\$1.165	\$24.703
A 2021	\$9.116	\$5.491	\$1.320	\$0.182	\$16.109
A 2022	\$13.733	\$10.007	\$1.610	\$0.602	\$25.952
F 2023	\$27.960	\$11.189	\$4.321	\$0.650	\$44.119
F 2024	\$20.856	\$11.144	\$2.547	\$0.478	\$35.025
F 2025	\$18.263	\$11.375	\$2.469	\$0.576	\$32.683

Distribution

U.S. mineral royalties are distributed to both the general fund and the mineral impact account in accordance with 17-3-240, MCA. Table 3 shows the distribution of U.S. mineral royalty revenue to the state of Montana for FY 2012 through FY 2022 along with the estimated distribution for FY 2023 through FY 2025.

Table 3			
U.S. Mineral Royalty Revenue Distribution			
(\$ millions)			
Fiscal Year	General Fund (75%)	Mineral Impact (25%)	Total
A 2012	\$31.057	\$10.352	\$41.409
A 2013	\$29.205	\$9.735	\$38.940
A 2014	\$27.744	\$9.248	\$36.992
A 2015	\$26.960	\$8.987	\$35.947
A 2016	\$16.759	\$5.586	\$22.345
A 2017	\$17.322	\$5.774	\$23.096
A 2018	\$20.139	\$6.713	\$26.852
A 2019	\$21.570	\$7.190	\$28.760
A 2020	\$18.527	\$6.176	\$24.703
A 2021	\$12.082	\$4.027	\$16.109
A 2022	\$19.464	\$6.488	\$25.952
F 2023	\$33.090	\$11.030	\$44.119
F 2024	\$26.269	\$8.756	\$35.025
F 2025	\$24.512	\$8.171	\$32.683

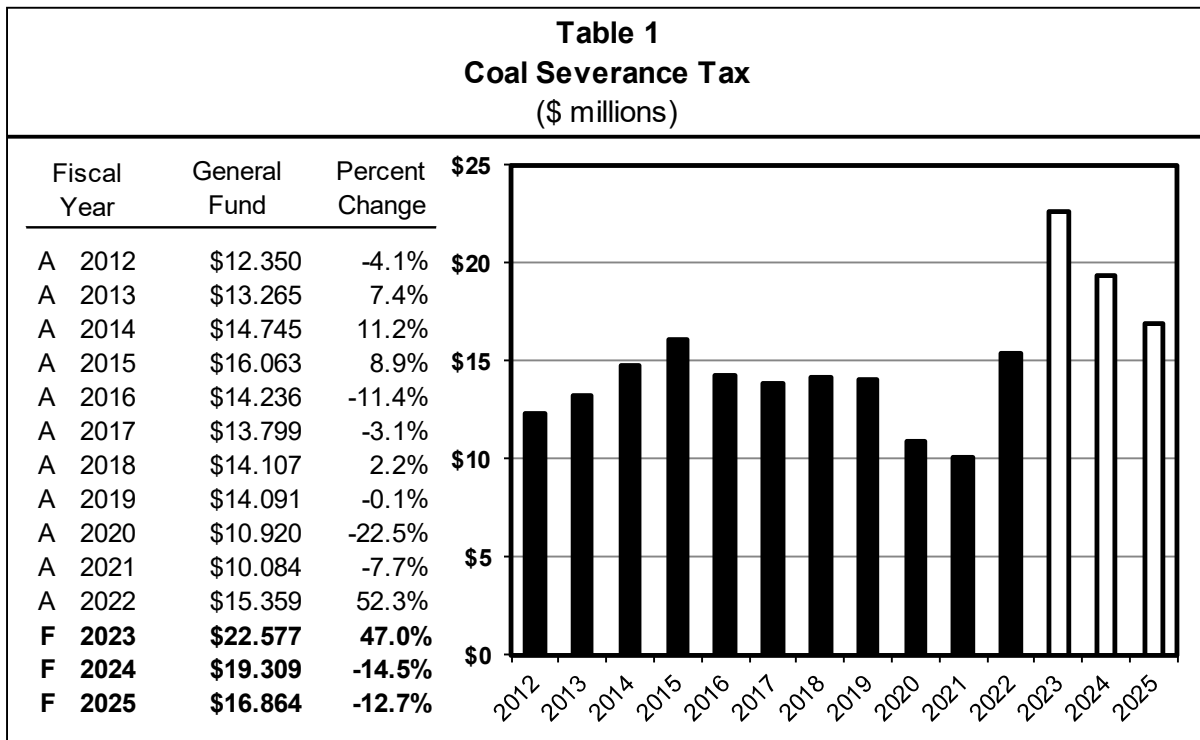
Data Sources

General fund and mineral impact account revenue are from SABHRS. Federal mineral statistics are available from the Department of Interior's Office of Natural Resources Revenue.

Revenue Description

In accordance with 15-35-103, MCA, Montana levies a tax on the value of coal produced in the state. The tax rate on coal varies with heat content of the coal (measured in Btu per pound) and the type of mine (open pit, auger or underground). Each producer is exempt from tax on 20,000 tons per year. If a producer mines 50,000 tons or less per year, they are exempt from the tax entirely.

Table 1 shows actual coal severance tax revenue to the general fund for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



Montana produces sub-bituminous coal from the Powder River Basin in the south-central region of the state and is one of the top producers in the country accounting for 4-5% of the nation’s total output. The majority of Montana coal is consumed by domestic electric power plants in Montana, Michigan, and Minnesota. Most of Montana’s in-state coal consumption occurs at the Colstrip Power Plant, which receives its fuel directly from the adjacent Rosebud mine. Michigan is the largest out-of-state domestic consumer, followed by Minnesota, Washington, and Arizona. Montana also has exposure to international markets via exports through the Westshore Terminal in British Columbia. A massive run-up in international coal prices over the past couple years has altered the market dynamics for Montana coal. Prices well above previous record highs have created strong viability of Montana’s product on the global market. Consequently, export volumes from Montana have been rising insofar as current shipments contracts allow.

This opportunity for Montana producers to meet heightened thermal coal demand from foreign consumers comes at a time when domestic demand is waning. Coal-fired electric generation has been on a strongly downward trend since 2010; however, this consistent decline has stalled out recently due to the surge in natural gas prices (coal’s primary competitor for electricity generation). Many electric power stations, including some that burn Montana coal, are delaying planned retirement dates because coal has suddenly become an economical substitute to natural gas for power generation. This marginal shift back to coal is expected to be an impermanent development for the U.S. electric power sector and the outlook for domestic coal consumption remains dim.

Coal is no longer the primary source of U.S. electricity generation, having surrendered this title to natural gas in 2016.

Coal's competitiveness in the electric power sector is being hampered by tightening emissions regulations as stricter air pollution controls have assisted in spurring the closure of aging coal-fired power plants across the country. Nearly 70 gigawatts of coal-fired generation at electric utilities have been shuttered since the start of 2010, and more closures are on the horizon. Montana has not been immune. Colstrip Units 1 and 2 ceased operation at the beginning of 2020. Units 3 and 4 are still operational and are expected to produce electricity for years to come, but there remains a risk of premature closure. The erosion of domestic demand has also led to the closure of Montana's Decker and Savage coal mines. The Energy Information Administration (EIA) is projecting a steady decline in U.S. coal-fired electric generating capacity over the next few years. Coal-fired electric power sector capacity falls from 207 gigawatts in 2021 to 190 gigawatts by the end of 2023 according to the EIA's Annual Energy Outlook Reference Case.

Coal severance tax revenue is distributed to numerous funds, many of which aid in the support of natural resource development projects and impact mitigation plans. The largest share of the coal severance tax (50%) is deposited into the coal severance tax trust fund which earns interest for the benefit of local infrastructure projects and public school facilities. For more information on the coal severance tax trust fund see section 10-3.

Risks and Significant Factors

- The closure of the Decker mine in early 2021 permanently removed 3-4 million tons from Montana's coal production capacity. Future severance tax collections will be lower as a result.
- Michigan's St. Clair power plant, a consumer of coal from the Spring Creek mine, retired at the end of May 2022. This loss of domestic demand may reduce output from the Spring Creek mine unless other customers, either domestic or foreign, can be found.
- Post-pandemic global economic growth fostered a renewed appetite for coal in the Asia-Pacific region. This development plus the added shock to energy markets provided by the Russia-Ukraine conflict sent international thermal coal prices to the moon. Montana mines have exposure to these incredibly high prices and so long as prices stay elevated coal severance tax collections will benefit.
- Domestic coal prices could continue rising if natural gas prices maintain their current high levels.

Forecast Methodology

Below are the steps involved in forecasting coal severance tax revenue:

Step 1. Estimate the quarterly average coal price across all mines using a simple linear regression model with the quarterly average international thermal coal price as the input. The estimated price for the fiscal year is the four-quarter average.

Step 2. Forecast total monthly coal production from taxable mines in Montana. Total monthly production is estimated using an ARIMA model. First-differencing is applied to the production series and the model consists of a one-period autoregressive lag and a seasonal autoregressive lag. The first-difference process addresses the problem of inconsistency in the statistical properties of the dependent series. Application of this technique improves the model's predictive power. The one-period lag allows the model to use last period's production to help inform the current period's production. The seasonal lag helps control for seasonality in the coal production series by including coal production twelve months prior to the current period as a relevant predictor.

Step 3. Monthly coal production estimates are summed by fiscal year and then multiplied by the estimated price for that year to obtain total gross value of the coal produced.

Step 4. Estimate total deductions and exemptions for the fiscal year to determine taxable coal production. Deductions and exemptions include the first 20,000 tons produced in a year (for operator's with over 50,000 tons of production per year), and the deductions for other state and federal tax liabilities related to coal production including the black lung tax, the coal gross proceeds tax, federal reclamation tax, and others.

Step 5. Apply an estimated average tax rate to yield total coal severance tax revenue.

Table 2 shows actual coal production, average price per ton, total deductions, taxable revenue, average tax rate, and total coal severance tax revenue for FY 2020 through FY 2022, along with estimates for FY 2023 through FY 2025.

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Tons Produced	29.710	24.553	27.616	27.556	27.727	27.063
Average FOB Price	x \$20.67	x \$19.99	x \$34.34	x \$45.80	x \$34.61	x \$30.93
Gross Revenue	\$613.968	\$490.844	\$948.353	\$1,262.183	\$959.638	\$837.153
Exemptions	- \$130.147	- \$108.928	- \$171.208	- \$266.644	- \$202.729	- \$176.854
Taxable Revenue	\$483.821	\$381.916	\$777.145	\$995.539	\$756.909	\$660.300
Average Tax Rate	x 10.56%	x 10.95%	x 8.71%	x 9.45%	x 9.45%	x 9.45%
Tax Revenue	<u>\$51.078</u>	<u>\$41.829</u>	<u>\$67.665</u>	<u>\$94.046</u>	<u>\$71.503</u>	<u>\$62.377</u>

Distribution

Coal Severance tax is distributed in accordance with 15-35-108, MCA. Table 3 shows the distribution of actual and estimated coal severance tax revenue for FY 2022 through FY 2025. The amount shown in Table 3 for total coal severance tax revenue differs slightly from Table 2 because estimated audit, penalty, and interest payments are included in the Table 3 total.

Entity	Percent Allocation	FY 2022 Actual	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected
Coal Tax Trust Fund (50%)	50.00%	\$32.669	\$47.776	\$36.504	\$31.941
Long Range Building Program Account	12.00%	\$7.841	\$11.466	\$8.761	\$7.666
Basic Library Services	0.93%	\$0.608	\$0.889	\$0.679	\$0.594
Conservation Districts	3.71%	\$2.424	\$3.545	\$2.709	\$2.370
Growth Through Agriculture Act	0.82%	\$0.536	\$0.784	\$0.599	\$0.524
Coal Board (5.8% in FY 2023)	2.90%	\$3.790	\$5.542	\$2.117	\$1.853
Parks Trust Fund	1.27%	\$0.830	\$1.214	\$0.927	\$0.811
Renewable Resource Loan Debt Service Fund	0.95%	\$0.621	\$0.908	\$0.694	\$0.607
Capitol Art Protection Trust Fund	0.63%	\$0.412	\$0.602	\$0.460	\$0.402
DEQ Mine Permitting and Restoration	\$250k	\$0.250	\$0.250	\$0.250	\$0.250
General Fund	Remainder	\$15.359	\$22.577	\$19.309	\$16.864
Total Coal Severance Tax		\$65.339	\$95.551	\$73.009	\$63.882

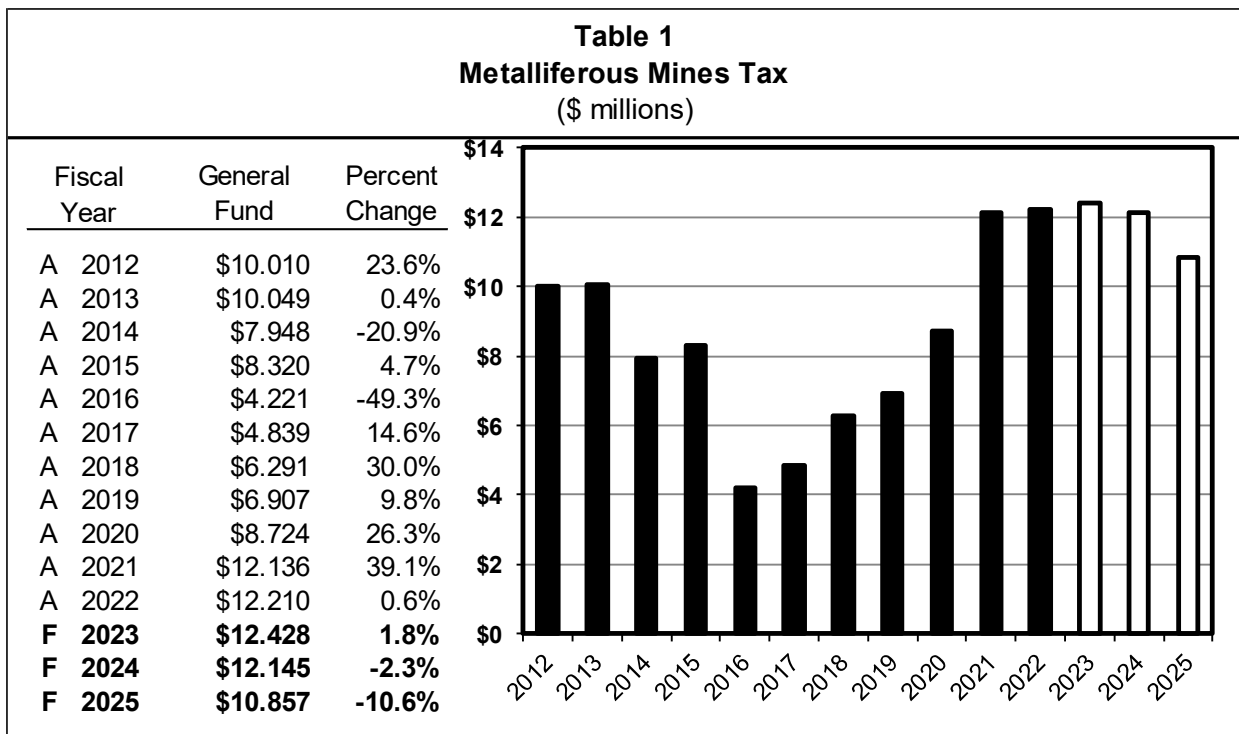
Data Sources

Historical quarterly coal data are from the Department of Revenue. Monthly coal production data are from the Department of Labor and Industry.

Revenue Description

Montana levies a tax on the gross value of metals mined in the state under 15-37-101, MCA. Gross value (15-23-801, MCA) is the market value of the refined product, less the costs of transporting unrefined product and its refining. The first \$250,000 of gross value is not taxed; this effectively exempts small mines from this tax. The tax rate for production beyond \$250,000 depends on the amount of processing. Concentrate, which is non-smelted ore, has a tax rate of 1.81%. Metals that have been separated from impurities by smelting are taxed at 1.6% (15-37-103, MCA).

Revenues from the metal mines tax are divided between the state and counties that have fiscal or economic impacts from large-scale mining per 15-37-117, MCA. From FY 2006 through FY 2015, the general fund received 57% of the total tax collected. With the passage of SB 20 (2015), the state general fund receives 47% of metal mines tax collections through FY 2026. HB 442 of the 2017 Session grants the state the authority to withhold metal mine tax distributions to local governments, as offsets, if these units fail to meet financial reporting and payment remittance deadlines. There were no changes to metal mines tax in the 2019 and 2021 Sessions. Table 1 shows actual general fund revenue for FY 2012 through FY 2022 and projected revenue for FY 2023 through FY 2025.



Revenue recovered from declines during the “Great Recession” with higher prices through FY 2013. Price declines, a mine closure, and the winding down of an existing mine led to a subsequent revenue drop. Prices and production for platinum metals group (platinum, palladium, and rhodium) are driving increases in metal mines tax collections. The outlook for metals prices which have risen with the recovery from the pandemic and commodity supply disruptions are expected to moderate and then decline.

Risks and Significant Factors

- Production varies over time, but mines have cost optimal life-cycle production profiles, so production primarily varies based on the number of mines in operation and their remaining minable reserves. Production shifts tend to be slow.
- New financing could reopen existing mines; however, new production is not contemplated in the forecast horizon.
- The proportional value weight of production for each type of metal drives collections. Metals production with impact are (in alphabetic order) copper, gold, molybdenum, palladium, platinum, rhodium, and silver.
 - Rapid metal price shifts cause changes in overall tax revenue. Montana has benefited from significant increase

- in the price of palladium relative to the price of platinum which has reversed the historical pattern.
- o Metal producers can deduct transportation, treatment, and refining costs from the gross value of production.
- o This estimate assumes that the mix of metals produced will remain substantially as it was in FY 2019 - FY 2022.

Forecast Methodology

There are three steps in estimating metal mines tax revenue:

Step 1. FY 2022 production and prices serve as the base for this revenue estimate. Total revenue is projected from change in the weighted average of the price forecast of three reference metals (copper, platinum, and gold). That forecast is from the *Commodity Markets Outlook* available in late April and late October from The World Bank. Production and is adjusted for known planned changes in metal production on a value share basis.

Step 2. Transportation, refining, and treatment cost deductions are assumed to maintain their FY 2019 - FY 2022 share of the total value of production during the forecast period. These are deducted from the gross value of the minerals.

Step 3. The average tax rate from FY 2019 through FY 2022 is applied to the value of production yielding tax liability.

Table 2 shows the gross value of all mined metal products in Montana, deductions taken by the producers, the average tax rate, and the total tax revenue generated for the metal mines license tax (the table presents cash collections).

Fiscal Year	Gross Value	Deductions	Net Value	Average Tax Rate	Tax Revenue
A 2022	\$1,473.1	\$88.9	\$1,384.2	1.65%	\$22.89
F 2023	\$1,426.2	\$86.0	\$1,340.2	1.64%	\$22.04
F 2024	\$1,452.5	\$87.6	\$1,364.9	1.65%	\$22.47
F 2025	\$1,420.6	\$85.7	\$1,334.9	1.65%	\$22.00

Distribution

Table 3 shows the 15-37-117, MCA, distribution of the metal mines tax.

Fund	Actual FY 2022	Projected FY 2023	Projected FY 2024	Projected FY 2025
General Fund (47%)	\$12.210	\$10.356	\$10.561	\$10.340
Hard-Rock Mining Impact Trust (2.5%)	\$0.649	\$0.551	\$0.562	\$0.550
Impacted Counties (35.0%)	\$9.092	\$7.712	\$7.865	\$7.700
Natural Resource Operations (7.0%)	\$1.818	\$1.542	\$1.573	\$1.540
Hard-Rock Mining Debt Service (8.5%)	\$2.208	\$1.873	\$1.910	\$1.870
Total Collections	\$25.978	\$22.035	\$22.471	\$21.999

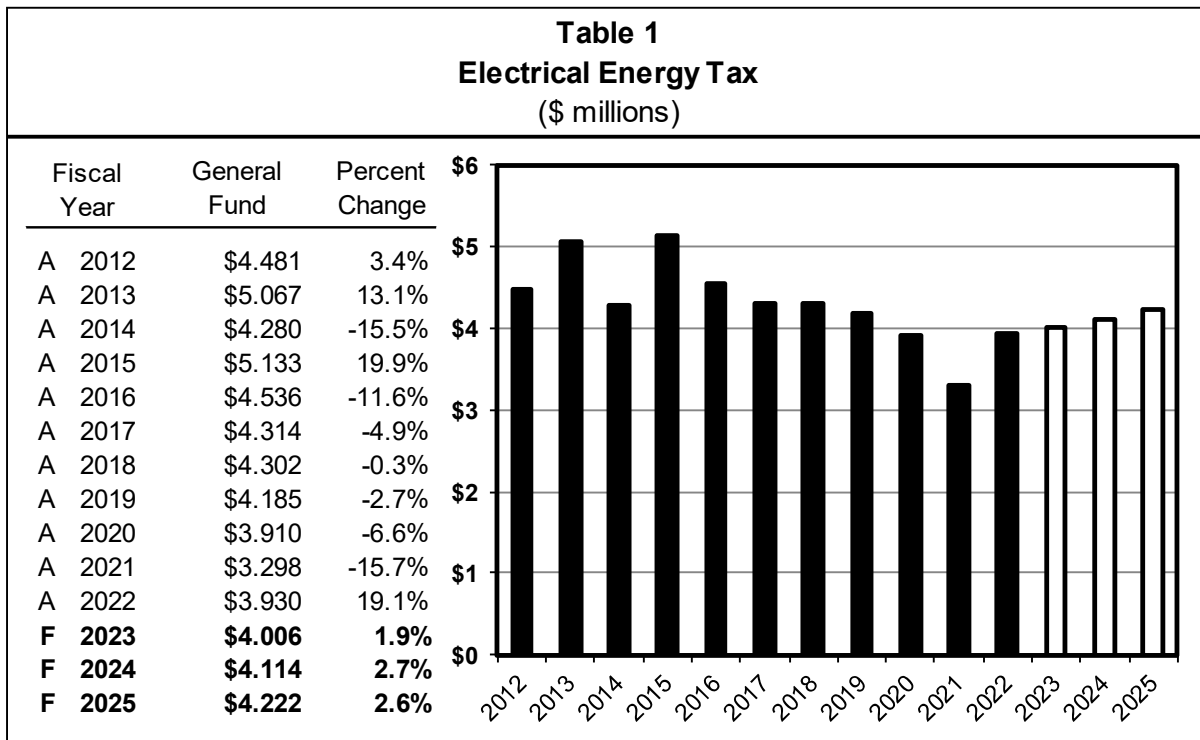
Data Sources

Production, value, and deduction data are from the Department of Revenue as of November 1, 2022. Collections are from SABHRS. Price forecasts are from The World Bank's *Commodity Markets Outlook (October 2022)*.

Revenue Description

In accordance with 15-51-101, MCA, Montana levies an electrical energy producer’s license tax (EET) at a rate of \$0.0002 per kilowatt hour (kWh). The tax applies to all electricity generated, manufactured, or produced in Montana for barter, sale, or exchange. Electricity generated for plant use is excluded from the tax. All revenue from the electrical energy producer’s license tax is allocated to the general fund.

Table 1 shows actual general fund revenue collections from the electrical energy producer’s license tax for FY 2012 through FY 2022, and the forecast for FY 2023 through FY 2025.



Montana’s electric power sector has total generation capacity of about 5,800 megawatts. The state’s primary energy source is hydroelectric power, accounting for nearly half of all electrical generating capacity. The closure of the Colstrip power plant’s two older generating units in January 2020 reduced Montana’s generating capacity and significantly lowered coal’s share of Montana’s electric generation portfolio. Colstrip remains Montana’s largest generating facility. The plant’s roughly 1,600 MW capacity accounts for a little over one quarter of the state total. With the partial closure of the Colstrip power plant, coal relinquished its status as the dominant source of electricity generation in Montana. Wind is Montana’s third largest source of electricity. It comprises 15% of the state’s generation mix and is the resource that offers the largest potential for growth moving forward. Multiple new wind facilities have commenced commercial operation in recent years and more projects are slated for development.

Risks and Significant Factors

- Montana continues to see steady growth in electricity generation from renewable sources, with the major contributions coming from wind resources. There is potential for multiple large wind farms to come online during the forecast period. The first phase of the Clearwater Wind Project in southeastern Montana is expected to begin operation by the end of 2022. Phases II and III of the Beaver Creek facility in Stillwater County are slated to commence generation by the end of 2023.

Forecast Methodology

Electrical energy tax revenue is forecast by multiplying projected taxable kWhs by the statutory tax rate. Electrical output subject to taxation is slightly lower than total output because producers can deduct the amount of electricity used for plant operations. Taxable kWhs are forecast on a quarterly basis. The quarterly series is seasonally adjusted, and a linear exponential smoothing model is used to forecast the adjusted series. Usage of the linear exponential smoothing model allows estimated values to be informed by both level and trend components of the series. Forecast observations of the adjusted series are re-seasonalized to arrive at the final values. Quarterly observations are summed to fiscal year totals.

Estimated annual taxable kWhs are multiplied by the statutory tax rate of \$0.0002 per kWh to determine tax revenue.

Table 2 shows actual electricity production and tax revenue for FY 2012 through FY 2022 and forecast values for FY 2023 through FY 2025.

Table 2				
Taxable Electricity Production & Tax Revenue				
(\$ millions)				
Fiscal Year	KWh (millions)		Tax Rate	Tax Revenue
A 2012	23,580.943	X	\$0.0002	= \$4.481
A 2013	25,021.868	X	\$0.0002	= \$5.067
A 2014	21,140.289	X	\$0.0002	= \$4.280
A 2015	25,391.141	X	\$0.0002	= \$5.133
A 2016	21,583.999	X	\$0.0002	= \$4.536
A 2017	21,446.685	X	\$0.0002	= \$4.314
A 2018	21,666.773	X	\$0.0002	= \$4.302
A 2019	20,996.870	X	\$0.0002	= \$4.185
A 2020	19,862.614	X	\$0.0002	= \$3.910
A 2021	16,492.194	X	\$0.0002	= \$3.298
A 2022	19,472.771	X	\$0.0002	= \$3.930
F 2023	19,788.993	X	\$0.0002	= \$3.994
F 2024	20,297.909	X	\$0.0002	= \$4.096
F 2025	20,806.825	X	\$0.0002	= \$4.199

Distribution

Pursuant to 15-51-103 and 17-2-124, MCA, the general fund receives 100% of the electrical energy tax.

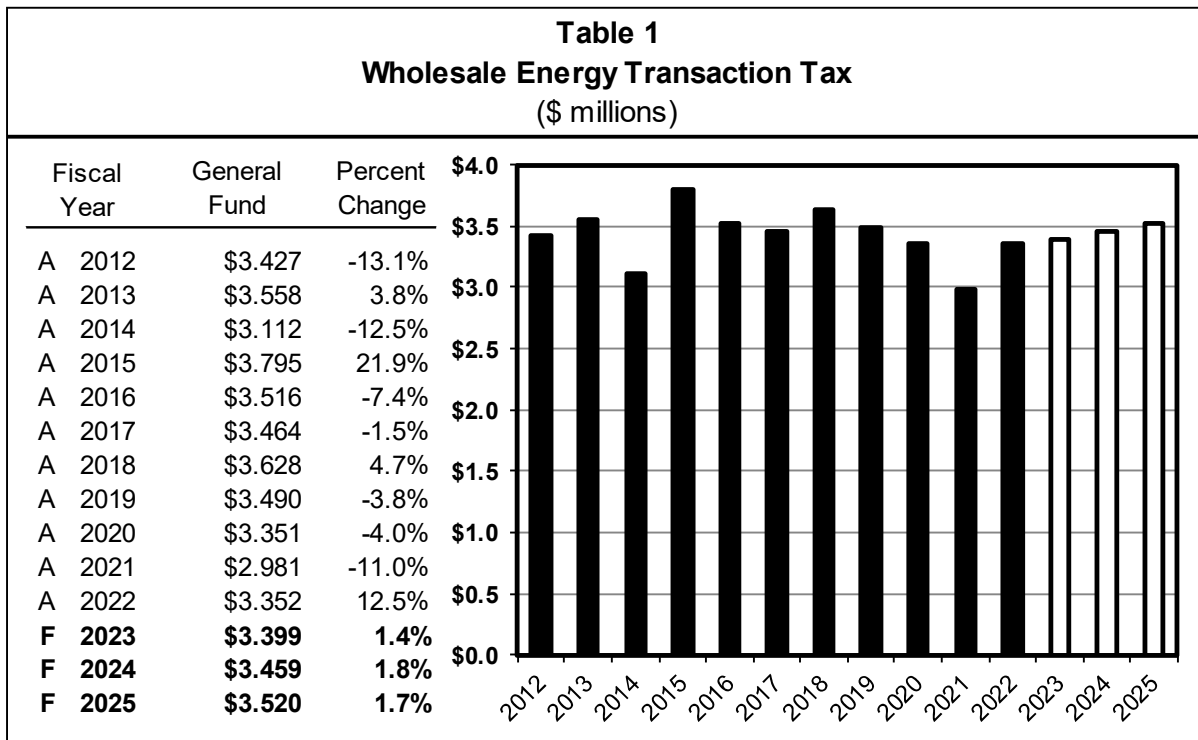
Data Sources

Historical electricity data are provided by the Department of Revenue.

Revenue Description

In accordance with 15-72-104, MCA, Montana levies a wholesale energy transaction (WET) tax at a rate of \$0.00015 per kilowatt hour (kWh) on the movement of electricity by a transmission service provider in the state. The movement of electricity includes in-state production delivered out-of-state, in-state production delivered in-state, and out-of-state production delivered in-state. This tax became effective January 1, 2000.

Table 1 shows actual general fund collections from the WET tax for FY 2012 through FY 2022 and the projected revenue for FY 2023 through FY 2025.



Montana is a net exporter of electricity. The state’s import-export balance is narrowing now that output from the Colstrip power plant is lower due to the shutdown of its older two units, which shipped most of their output west to Washington and Oregon. Total electrical generation capacity in Montana is about 5,800 megawatts. Additional wind resources are projected to come online during the forecast period, with one of these projects intending to tie into the existing transmission lines coming out of the Colstrip power plant.

Risks and Significant Factors

- The volatility in tax collections from electrical energy transmission in Montana stems from variation in total kilowatt hours (kWhs) delivered out-of-state, which is generally more than the amount of kWhs generated for delivery in-state.
- Montana continues to see steady growth in electricity generation from renewable sources, with the major contributions coming from wind resources. There is potential for multiple large wind farms to come online during the forecast period. The first phase of the Clearwater Wind Project in southeastern Montana is expected to begin operation by the end of 2022. Phases II and III of the Beaver Creek facility in Stillwater County are slated to commence generation by the end of 2023.

Forecast Methodology

WET tax revenue is forecast by multiplying estimated taxable kWhs from in-state and out-of-state transmission by the statutory tax rate. For in-state generation that is sent out-of-state, the total amount of kWhs generated is reduced by 5% to account for line losses during transmission.

Taxable kWhs for out-of-state delivery and in-state delivery are estimated separately, but via the same methodology. Taxable kWhs are forecast on a quarterly basis. The quarterly series is seasonally adjusted, and a linear exponential smoothing model is used to forecast the adjusted series. Usage of the linear exponential smoothing model allows estimated values to be informed by both level and trend components of the series. Forecast observations of the adjusted series are re-seasonalized to arrive at the final values. Quarterly observations are summed to fiscal year totals.

Estimated annual taxable kWhs are multiplied by the statutory tax rate of \$0.00015 per kWh to determine tax revenue.

Table 2 shows actual taxable electricity production and realized tax revenue for FY 2012 through FY 2022 and forecasts for FY 2023 through FY 2025.

Table 2			
Taxable kWh for Wholesale Energy Tax			
(\$ millions)			
Fiscal Year	Taxable KWh (million)	Tax Rate	Tax Revenue
A 2012	22,519.496	x 0.00015 =	\$3.427
A 2013	24,838.693	x 0.00014 =	\$3.558
A 2014	20,962.124	x 0.00015 =	\$3.112
A 2015	24,878.014	x 0.00015 =	\$3.795
A 2016	22,875.105	x 0.00015 =	\$3.516
A 2017	23,129.308	x 0.00015 =	\$3.464
A 2018	23,558.590	x 0.00015 =	\$3.628
A 2019	23,195.901	x 0.00015 =	\$3.490
A 2020	22,398.297	x 0.00015 =	\$3.351
A 2021	20,035.391	x 0.00015 =	\$2.981
A 2022	22,066.091	x 0.00015 =	\$3.352
F 2023	22,718.062	x 0.00015 =	\$3.399
F 2024	23,122.437	x 0.00015 =	\$3.459
F 2025	23,526.813	x 0.00015 =	\$3.520

Distribution

Pursuant to 15-72-106, MCA, the general fund receives 100% of the WET tax.

Data Sources

Historical electricity data are provided by the Department of Revenue.



GOVERNOR
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STATE OF MONTANA

INTEREST REVENUE SECTION 5

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GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

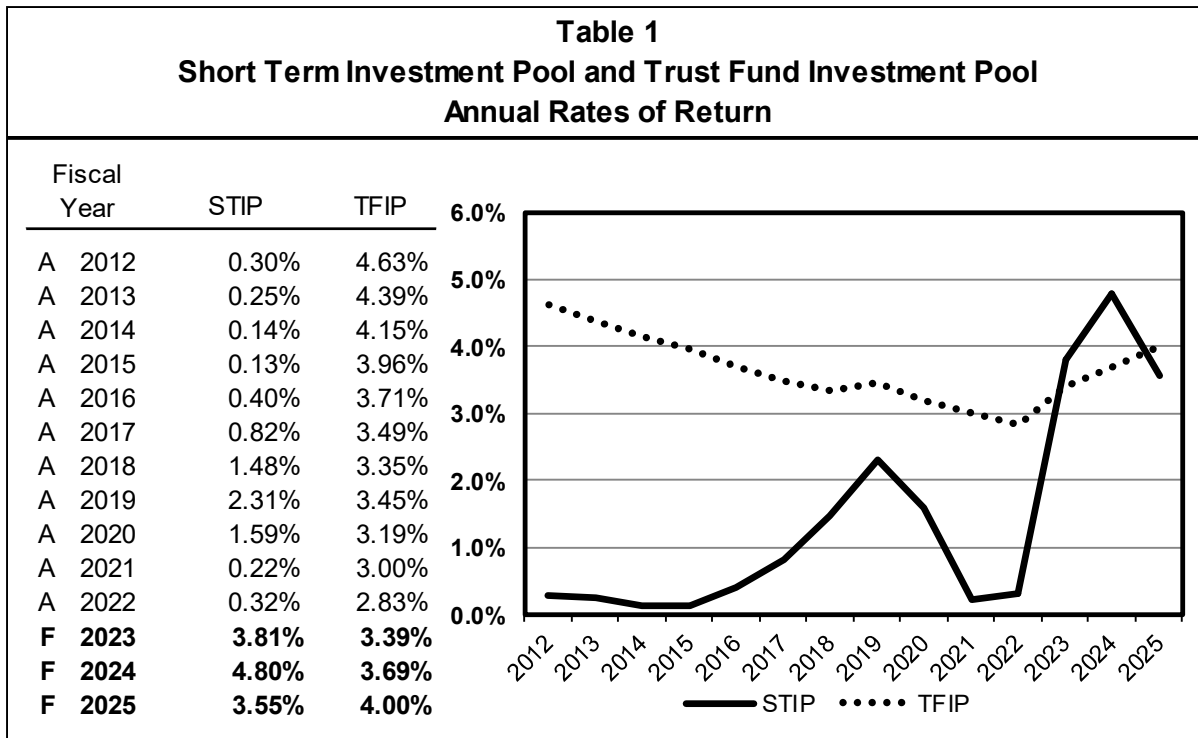
Revenue Description

Under Article VIII, Section 13 of the Montana Constitution the Legislature is required to provide for a Unified Investment Program for public funds held by both state and local government. The Montana Board of Investments (BOI) was created and given sole authority to manage the investment of state funds.

The BOI invests state cash holdings and fund balances in both short-term and long-term assets, with the investment strategy dependent on the specific needs of the account or fund. The BOI invests most agency cash and a small portion of fund balances in the short-term investment pool (STIP). Assets in the STIP have a maximum maturity of two years or less in order to maintain a high level of liquidity. In addition to maintaining liquidity, the STIP is managed in a way that aims to preserve the principle of an investment while at the same time maximizing investment income.

State trust fund balances are invested by the BOI in the Trust Fund Investment Pool (TFIP). The TFIP’s portfolio is diversified among three main asset classes: investment grade fixed income assets, high-yield fixed income assets and core real estate assets. The latter two investment classes are limited to 10% and 30% of the total TFIP portfolio, respectively. The allocation for the real estate asset class was increased in FY 2020 as part of a change in BOI’s investment policy statement in response to the economic fallout of the COVID-19 pandemic. The TFIP is managed with the goal of providing a consistent and competitive stream of income to pool participants.

Estimates for the rates of return on the STIP and TFIP are used to forecast interest revenue for the treasury cash account, the common school trust, the various coal trusts, and several other funds. Table 1 shows actual annual percentage interest rates for both STIP and TFIP in FY 2012 through FY 2022, and projections for FY 2023 through FY 2025.



The interest rate on STIP investments generally moves in line with the federal funds rate, and so is sensitive to changes in Federal Reserve monetary policy. The federal funds rate is the interest rate banks receive on overnight loans that are used to meet daily reserve requirements. The Federal Open Market Committee (FOMC) instituted unprecedented monetary easing in response to rapidly deteriorating economic conditions that began in 2008. The FOMC slashed the target level of the federal funds rate to near zero in 2009 in effort to stimulate the economy. Following the Great Recession, rock-bottom rates were the norm from 2010 - 2015 as the nation struggled to mount an economic recovery. This

benchmark short-term interest rate remained in the range of 0% - 0.25% for seven years until moving up slightly in December 2015. Eventually, short-term interest rates started surging as the Federal Reserve shifted course on monetary policy and began raising rates in earnest in 2016 to keep step with a strengthening U.S. economy. Economic momentum was quickly extinguished in early 2020 when the COVID-19 virus burst onto the world stage. As the U.S. dealt with surging infections and economic shutdowns, the FOMC reinstated accommodative monetary policy by slashing the target federal fund rate back to near-zero levels.

Consumer price inflation began to emerge in the spring of 2021 and steadily crept upward in the following months. By January 2022 year-over-year growth in the headline CPI was 7.5% and pressure on the Fed to move off the zero-lower bound for the federal funds rate was intensifying. By March headline inflation was 8.6% and the FOMC instituted its first rate hike since cutting them to near-zero in early 2020. This 25 basis-point tick upward in March was followed by a 50 basis-point increase in May and a 75 basis-point increase in each of June and July. This accelerated pace of tightening stemmed from persistently high year-over-year CPI growth into the summer of 2022. Rate hikes are expected to continue while inflation remains elevated. At this point the terminal level of the fed funds rate is projected to reach the range of 4.5% - 5% and be achieved in the middle of 2023. This implies that inflation has fallen back to Fed-preferred levels by that time. If so, the Fed is likely to institute rate cuts to bring monetary policy back to neutral by late 2023 or early 2024.

Long-term rates suffered during the Great Recession as investors piled into safer assets. The combination of shrinking supply and soaring demand bid up safe asset prices, reducing yields. These assets maintained low yields for years following the downturn, which resulted in a steady decline in the overall rate of return on TFIP assets over the past decade. This trend evolved as relatively high yield securities matured and were replaced in the asset pool by lower-yielding securities. The TFIP is primarily invested in medium-to-long-term investment grade assets, which are comprised of securities that are generally viewed as safe from default, such as U.S. government debt. Low yields on U.S. government debt influence yields on investment grade corporate bonds and other similar assets. The overall TFIP rate of return showed signs of turning around in FY 2019 after a decade of decline, but this recovery was short-lived. Long-term yields plunged once again as COVID-19 clouded the economic outlook. Relatively low-yield assets once again accumulated in the TFIP during 2020 and 2021. Long-term rates started climbing early in 2022 and surged in the spring before flattening mid-year before resuming an upward march. The yield on the U.S. 10-year treasury currently sits north of 4%. These gains in market rates help pull TFIP yields upward through the forecast period.

Risks and Significant Factors

- Inflation has the full attention of the Federal Reserve. The FOMC will keep raising the target range of the federal funds rate until there comes a consistent softening in consumer price growth. If this happens sooner than expected, realized STIP rates will likely be lower than forecast and vice versa if taming inflation becomes a more arduous task.
- The current health of the U.S. economy and the outlook for growth shapes policy decisions and investor preferences.
- The FOMC's interpretation of economic conditions will determine their policy approach regarding target levels of the federal funds rate. Both forward guidance by the Fed and actual rate adjustments will influence STIP interest earnings over the forecast period.
- Changes in the supply and demand of safe assets will be linked to the realized rate of return for the TFIP. Both domestic and global factors will influence the safe asset market in the years to come. Risk appetites of private investors do and will continue to play a large role in shaping the demand for these investment grade securities.
- Stock market volatility can affect both short-term and long-term interest rates. Heightened volatility can shift investment demand away from equities and toward safer securities.

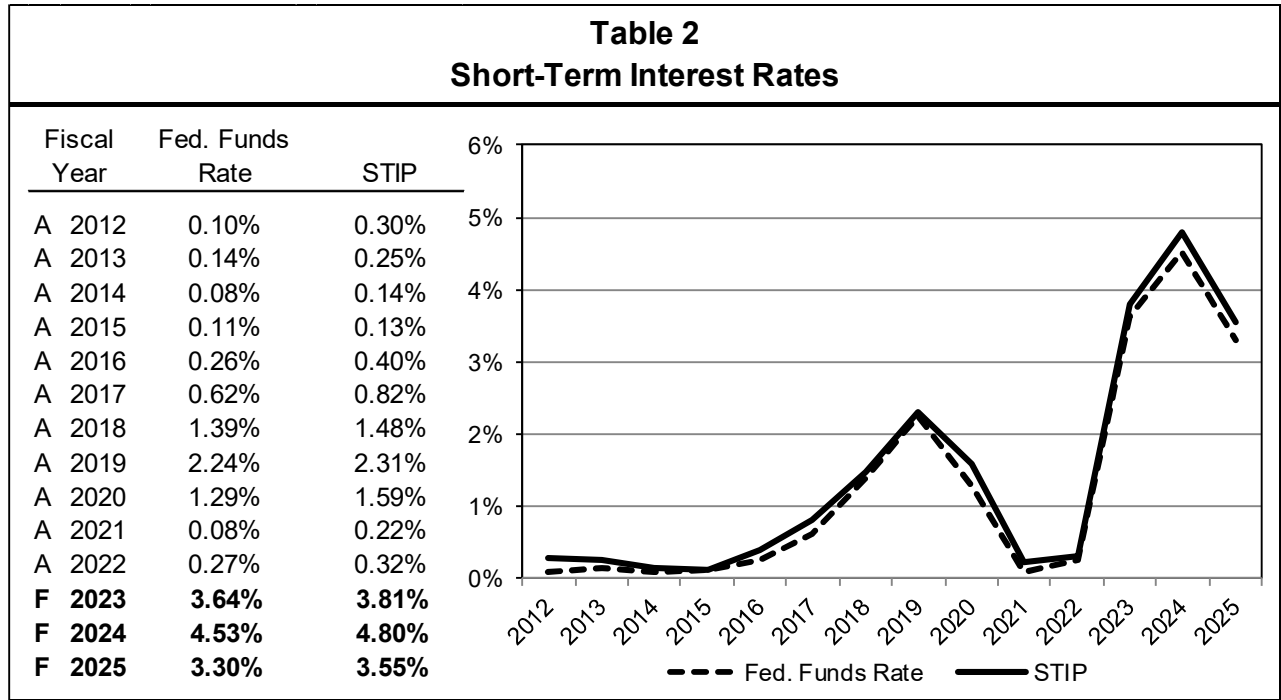
Forecast Methodology

Short Term Investment Pool

STIP interest rates are modeled against the federal funds rate. Changes in the STIP rate follow, with a slight lag, changes in the federal funds rate. In levels, the STIP rate exceeds the federal funds rate by a small, but varying margin. Returns on the types of assets held in the STIP generally carry a higher yield due to risk and term premiums. A large portion of STIP holdings are in short-term securities other than U.S. treasury or agency securities. U.S. government and agency debt are more closely linked to the federal funds rate.

Quarterly observations of annualized STIP rates are modeled using a simple OLS regression that includes the quarterly average effective federal funds rate as the input. Inclusion of the federal funds rate allows the model to capture information about movement in short-term interest rates associated with safe, highly liquid, short-term securities of the kind held in the STIP. The model projects the STIP rate moving strongly upward in FY 2023, with a modest further increase in FY 2024 and a decline in FY 2025. This projection is consistent with the expected path of the federal funds rate through the 2025 biennium.

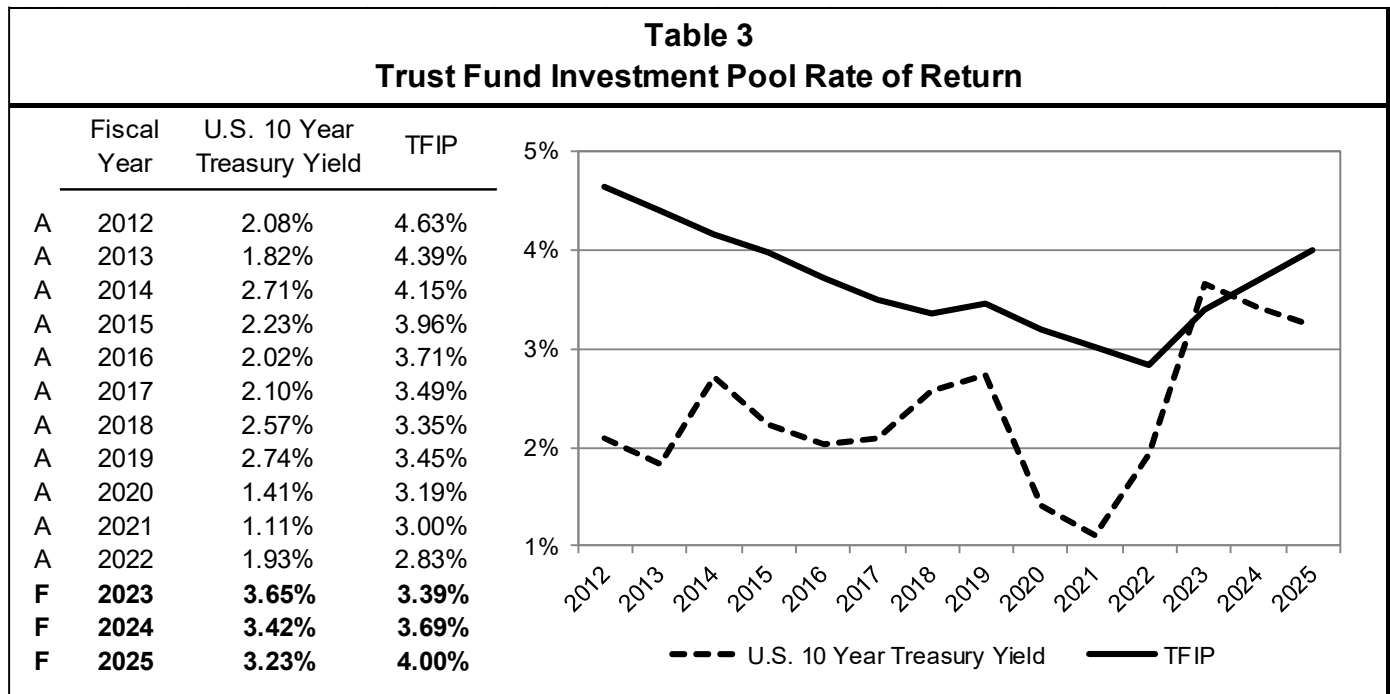
Table 2 shows actual values for the average STIP rate and average federal funds rate for FY 2012 through FY 2022 and forecast values for FY 2023 through FY 2025.



Trust Fund Investment Pool

The TFIP rate forecast is informed by yield projections put together by the BOI. The BOI estimates forward-looking monthly yields for each TFIP participating fund using realized book yields and assumptions about current market yields and the weighted average time-to-maturity of each fund's collection of securities. A fund's book yield is expected to achieve the assumed market yield. Typically, this process takes about five years to complete. The transition from book yield to market progresses on a linear path. Currently, market yields are well above observed book yields so yields for all TFIP participating funds rise through FY 2025. To arrive at an estimate of the overall rate of return for the TFIP, a weighted average yield is calculated across all TFIP funds with each fund's share of the pool used as the weighted factor.

Table 3 shows actual values for the average TFIP rate and average yield on the 10-year U.S. treasury bill for FY 2012 through FY 2022 and forecast values for FY 2023 through FY 2025.



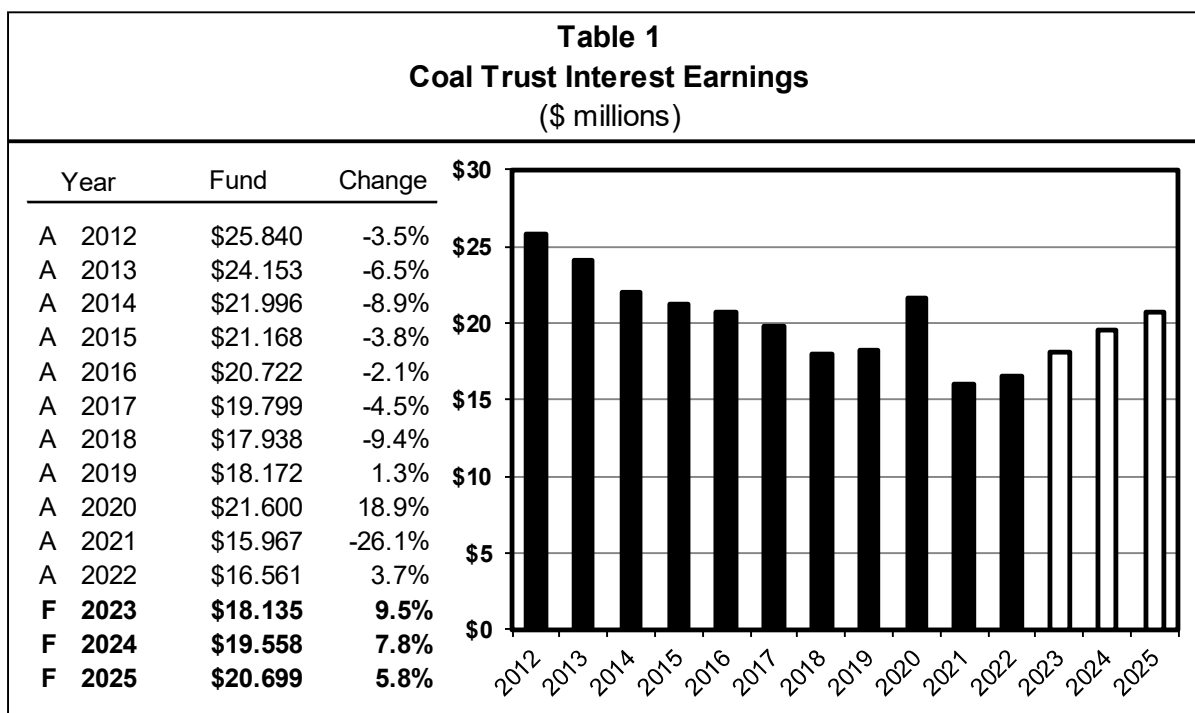
Data Sources

The Montana BOI provides monthly reports on STIP and TFIP investment earnings and balances. Federal funds rate data are from S&P Global.

Revenue Description

Article IX, Section 5, of the Montana Constitution established the coal severance tax trust fund. The principle of this trust fund is inviolate unless acted upon by a three-fourths vote of the legislature. Under current law, 50% of the severance tax revenue from coal production in Montana is deposited into the trust fund and is dispersed among various sub-trusts. The individual trust funds are described in more detail in the *Introduction to the Coal Trust Fund* section. The largest fund within the coal tax trust fund is the coal tax permanent fund (permanent fund). Interest earnings from the permanent fund are allocated to the general fund.

Table 1 shows actual interest earnings deposited into the general fund from the coal tax trust fund from FY 2012 through FY 2022 and the forecast amounts for FY 2023 through FY 2025. The amounts in Table 1 include interest earnings from the permanent fund as well as the coal tax bond fund (which has as its balance, sufficient funds to meet all principal and interest payments on coal severance tax bonds in a fiscal year) and other income minus expenses.



Declining interest earnings from the permanent fund over the past decade reflect the impact of the Great Recession’s upheaval of financial markets. Bond yields dropped during the economic downturn and remained low for an extended period post-recession. As a result, the rate of return of the trust fund investment pool (TFIP) – the primary investment pool of the permanent fund – fell as higher-yield bonds matured and lower-yield bonds took their place. This trend started to turn around in FY 2019. The exit of recession era securities and the entrance of higher-yield securities was beginning to lift the overall rate of return for the TFIP. Projections showed a continuation of this trend in the following years, but the emergence of the COVID-19 pandemic and the associated economic disruption in the latter half of FY 2020 pushed market interest rates back to the lows of a decade prior. The fall in medium and long-term bond yields put a halt to the improving return performance of permanent fund investments. Relatively low-yield bonds accumulated in the TFIP during FY 2021 and FY 2022. The Montana Board of Investments (BOI) made some adjustments to the investment strategy of the TFIP, allocating more funds to higher yield real estate assets to mitigate the impact of low bond yields. Market yields started rising quickly in 2022 in response to the Fed’s aggressive action toward reigning in high inflation with sharp increases in the target range for the federal funds rate. The entrance of these higher-yield securities in the TFIP helps boost coal permanent fund earnings each year through FY 2025. Additional support for higher earnings from the coal permanent fund’s TFIP holdings comes from recent reallocation by the Montana Board of Investments of TFIP funds to increase the pool’s exposure to higher-yielding real estate assets.

The permanent fund currently does not receive any distribution from coal severance tax revenue. Of the money deposited into the coal tax trust fund, 75% is allocated to the school facilities fund (established by SB 260 during the 2017 legislative session), and 25% is allocated to the big sky economic development fund. Once the school facilities fund balance reaches \$200 million, its allocation is routed back to the permanent fund. This will not occur within the current FY 2023 – FY 2025 forecast window.

The Montana Board of Investments (BOI) distributes permanent fund dollars across three main investment pools: the TFIP, the short-term investment pool (STIP), and loans. The permanent fund balance is generally invested 60%-80% in the TFIP, 20%-40% in loans, and 2%-3% in the STIP. Loan balances and TFIP balances tend to move in the opposite direction of one another. The TFIP balance is used to fund loan issuances and as loans are paid back, the money is invested in the TFIP if it is not recycled back into more loans. Looking forward, the distribution of the permanent fund balance across loans, the TFIP, and the STIP is expected to remain relatively stable.

Risks and Significant Factors

- Coal permanent fund balances are primarily invested in the TFIP, so the TFIP asset mix and the returns on those assets are a large determinant of permanent fund interest earnings.
- TFIP yields are a function of both current and historical market conditions. Current yields on TFIP investments are still being impacted by the low-rate environment that prevailed during most of 2020 and 2021. Rates have been rising in 2022 as the Fed moves aggressively to fight off persistently high inflation. This climb in medium-to long-term interest rates should flow through to TFIP yields near the end of the 2025 biennium.
- The steep ascension of short-term interest rates has boosted yields on STIP assets significantly. Short-term market rates are expected to keep moving upward through 2022 and into 2023 as the Fed works to bring down inflation. STIP income for the small portion of coal trust fund balances invested in this asset pool will continue to grow considerably through FY 2023. Growth in STIP income will flatten in FY 2024 and move slightly downward in FY 2025.
- The future path of market interest rates will depend on how the Fed continues to conduct monetary policy, market interpretations of the central bank's actions, and whether the U.S. economy continues to flirt with recession.

Forecast Methodology

There are three main steps taken to determine total interest income deposited to the general fund from the coal tax trust fund. These steps are detailed below and include estimating future balances and interest rates for each of the three investment pools (TFIP, STIP and loans), determining annual interest income from each pool, adding in estimated income from other sources and subtracting expenses.

Step 1. Forecast balances and interest rates for TFIP investments, STIP investments, and loans.

TFIP: Without any distribution from coal severance tax, the balance of TFIP investments is projected to stay stable through FY 2025. The interest rate on TFIP investments rises in each year of the FY 2023 – FY 2025 period as low-yield pandemic-era securities mature and are replaced by current higher-yield counterparts.

STIP: The STIP investment balance is estimated to remain stable from FY 2023 - FY 2025. Interest rates on STIP investments are projected to rise steeply in FY 2023, reflecting the aggressive path of monetary tightening currently being carried out by the Federal Reserve. The overall STIP rate climbs slightly higher in FY 2024 and falls in FY 2025 when the Fed is expected to start bringing the target range for the federal funds rate back to a neutral level.

Loans: Like TFIP and STIP balances, permanent fund loan balances are projected to remain flat. Loan interest rates are projected to be stable as well.

Step 2. Forecast interest rates for each investment pool are applied to their respective balances to determine annual income. TFIP income, STIP income, and loan income are summed for each year in the forecast period to determine total permanent fund interest income.

Step 3. Other income and administrative expenses are then estimated and added to total interest income to determine total coal trust revenue.

Table 2 shows the annual average balance, rate of return, and income for each investment category for FY 2020 through FY 2022. Forecast values are included for FY 2023 through FY 2025.

Table 2							
Coal Trust Interest Income							
(\$ millions)							
<u>Loan Income</u>				<u>TFIP Income</u>			
Fiscal Year	Balance	Interest Rate	Income	Fiscal Year	Balance	Interest Rate	Income
A 2020	\$174.423	2.86%	\$4.995	A 2020	\$346.227	3.43%	\$11.865
A 2021	\$199.966	2.60%	\$5.201	A 2021	\$326.025	3.39%	\$11.067
A 2022	\$191.714	2.40%	\$4.596	A 2022	\$339.441	3.43%	\$11.629
F 2023	\$191.316	3.00%	\$5.748	F 2023	\$339.918	3.55%	\$12.073
F 2024	\$191.251	3.19%	\$6.109	F 2024	\$340.019	3.82%	\$12.990
F 2025	\$191.230	3.38%	\$6.472	F 2025	\$340.038	4.09%	\$13.905
<u>STIP Income</u>				<u>Trust Fund Total</u>			
Fiscal Year	Balance	Interest Rate	Income	Fiscal Year	Balance	Interest Rate	Income
A 2020	\$23.301	1.72%	\$0.400	A 2020	\$543.951	3.17%	\$17.261
A 2021	\$19.034	0.20%	\$0.039	A 2021	\$545.025	2.99%	\$16.306
A 2022	\$13.936	0.31%	\$0.043	A 2022	\$545.092	2.98%	\$16.268
F 2023	\$13.844	3.80%	\$0.526	F 2023	\$545.078	3.37%	\$18.347
F 2024	\$13.793	4.80%	\$0.662	F 2024	\$545.062	3.63%	\$19.761
F 2025	\$13.790	3.55%	\$0.490	F 2025	\$545.057	3.83%	\$20.867

Table 3 shows actual administrative expenses, other income, and interest income for FY 2018 through FY 2022 and forecast amounts for FY 2023 through FY 2025. The last column shows the total revenue from the coal severance tax trust fund that is deposited into the general fund.

Table 3				
Coal Trust Total General Fund Revenue				
(\$ millions)				
Fiscal Year	Interest Income	Other Income	Admin. Expense	Total Revenue
A 2018	\$17.985	+ \$0.259	+ (\$0.306)	= \$17.938
A 2019	\$18.359	+ \$0.204	+ (\$0.391)	= \$18.172
A 2020	\$17.261	+ \$4.819	+ (\$0.479)	= \$21.600
A 2021	\$16.306	+ \$0.139	+ (\$0.478)	= \$15.967
A 2022	\$16.268	+ \$0.139	+ (\$0.059)	= \$16.561
F 2023	\$18.347	+ \$0.139	+ (\$0.352)	= \$18.135
F 2024	\$19.761	+ \$0.139	+ (\$0.342)	= \$19.558
F 2025	\$20.867	+ \$0.139	+ (\$0.308)	= \$20.699

Other income is derived primarily from the following two sources: 1) interest earned on a bond fund that provides debt security for coal severance tax bonds; and 2) interest earned on the short-term investment of the coal tax income fund, which comes from the deposit of interest earnings from both the permanent fund and the bond fund into the coal tax

income fund. Although the balance of the coal tax income fund is swept monthly into the general fund, it is invested in STIP during the interim. The income from this investment is returned to the income fund before being deposited into the general fund. Occasionally securities gains provide a boost to other income, which occurred in FY 2020. The Board of Investments sold bonds in the latter part of FY 2020 to reallocate some funds in an effort to maintain the long-term rate of return for the permanent fund. Other income returned to more normal levels in FY 2021 and FY 2022 and is expected to stay that way for the years FY 2023 – FY 2025.

Data Sources

The State Street Bank and BOI provide monthly reports on the trust fund balances and income. Fiscal year end revenues and administrative expenses were obtained from SABHRS.

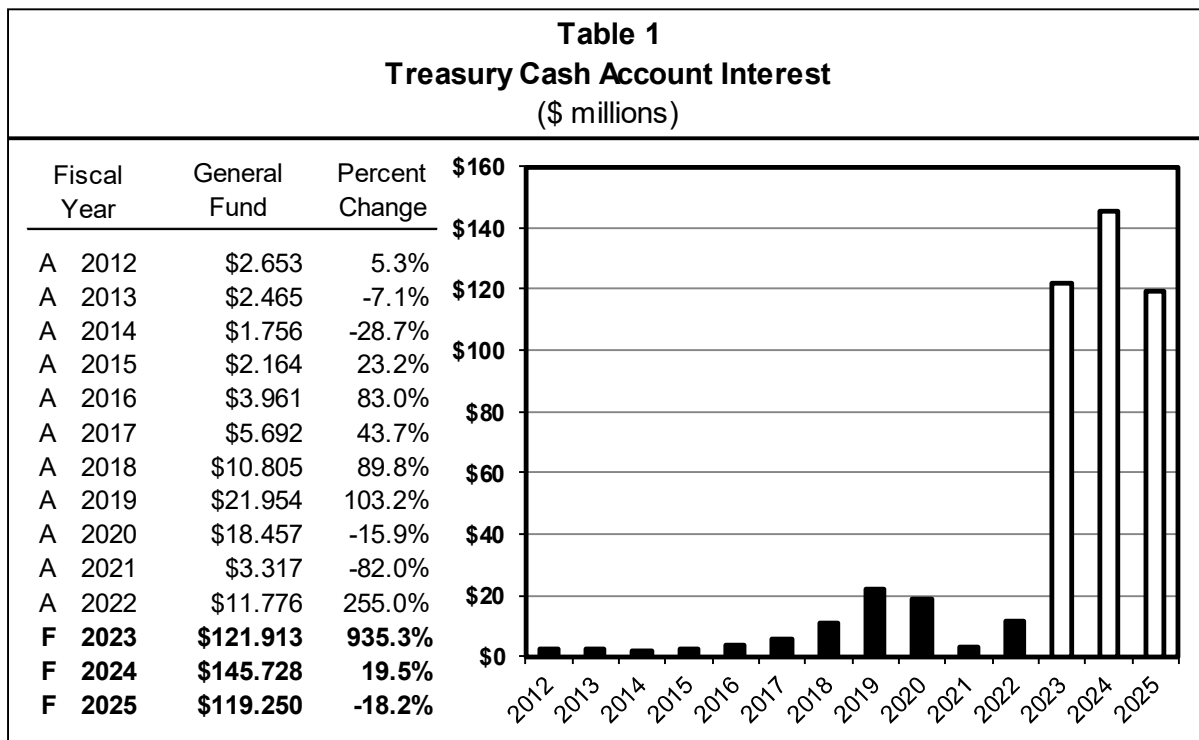
Treasury Cash Account Interest

2025 Biennium

Revenue Description

Section 17-6-202(2), MCA, establishes the treasury cash account (TCA). According to the law, securities and cash in all treasury fund accounts that are not designated to specific sources are to be pooled in the TCA to be managed by the Montana Board of Investments (BOI). Included in the TCA are general fund cash balances. The interest earnings from the investment of TCA funds are deposited into the general fund.

Table 1 shows general fund revenue from TCA interest earnings for FY 2012 through FY 2022 and projected revenues for FY 2023 through FY 2025.



General fund revenue from TCA interest earnings is subject to a high degree of volatility due to the short-term nature of TCA investments. The TCA primarily features short-term investments because the account needs to maintain liquidity to ensure the availability of funds for expenditure. The TCA's high exposure to short-term interest rate risk can cause large and rapid changes in the account's earnings from year-to-year. Over the past decade TCA earnings have ranged from a low of \$1.76 million in FY 2014 to a high of \$21.95 million in FY 2019. Short-term interest rates remained near zero for a considerable time following the Great Recession, resulting in historically low rates of return for TCA investments.

Interest earnings began to climb from rock-bottom levels in FY 2017 and exhibited exponential growth through FY 2019. This upward momentum was stymied by the arrival of the COVID-19 pandemic in late FY 2020. In response to pandemic-fueled economic turmoil, the Federal Reserve pursued aggressive monetary policy easing. The movement of the federal funds rate back to the zero lower bound in 2020 pulled TCA earnings down in FY 2020 and FY 2021. Demand and supply imbalances that emerged as the economy reopened created inflation pressures that started in 2021 and have persisted so far into 2022. Stubbornly high inflation has kicked the Fed into rapid rate hike mode. The Fed has increased the target range of the federal funds rate from 0% - 0.25% in March 2022 to 3% - 3.25% in September 2022, with more upward movement on the horizon. Market expectations are for the benchmark rate at the end of this rate hike cycle to be in the range of 4.5% - 4.75%.

The TCA is invested heavily in the Montana Board of Investment's Short-Term Investment Pool (STIP), so the pool's rate of return has a direct impact on TCA revenue. There is an approximate 45-day lag between a change in market short-

term interest rates and a change in the STIP interest rate. STIP yields have ascended alongside the incredible runup in short-term market interest rates. TCA earnings during the last four months of FY 2022 benefited from rising STIP yields, helping push year-over-year growth for FY 2022 to 255%. For FY 2023 and the subsequent biennium, elevated short-term interest rates aid in pushing annual TCA earnings to record levels above \$100 million per year. Strong fund balances and a novel investment strategy recently rolled out by the BOI also contribute to the robust outlook for TCA earnings through the 2025 biennium.

A portion of TCA funds have historically also been invested in short/medium-term securities, but to a much lesser degree than STIP. Security investments can include U.S. Treasury obligations, direct obligations of the U.S. mortgage agencies, Federal Farm Credit Bank, and Federal Home Loan Bank, collateralized tri-party repurchase obligations, and fixed income obligations of other U.S. agencies or corporate entities. The time-to-maturity is constrained to three years or less for liquidity purposes.

On November 30, 2021, the BOI adopted a new policy statement for the TCA that added trust fund investment pool (TFIP) holdings to the list of permitted investments. The impetus for the policy change was a desire to allow a portion of TCA holdings to benefit from the higher yield associated with long-term investments. To avoid any issues with liquidity, which the TCA has an obligation to maintain, there is a maximum threshold assigned to the total balance of securities and TFIP holdings within the TCA.

Per BOI investment policy statement 40.943(F)(1), securities and TFIP purchases are permitted only up to an amount equal to 50% of the lowest 12-month average account balance over the past 10 one-year periods. The BOI is currently building up this TFIP balance in the TCA and it is expected to meet the maximum threshold (~\$300 million) near the end of FY 2023 or beginning of FY 2024. If the total securities and TFIP investment balance exceeds the 50% threshold, prudent sales are not required until the balance breaches 60%.

Risks and Significant Factors

- The STIP rate of return is tied closely to benchmark short-term market interest rates such as the federal funds rate. Monetary policy aimed at changing these rates influences TCA revenue because of the account's high exposure to STIP investments.
- The Federal Reserve's current rate hike cycle is fully tied to inflation behavior, so the future path of inflation will determine the pace and direction of further monetary policy action. If elevated inflation persists despite the Fed's recent efforts, short-term rates could surpass current expectations for the cycle peak. The opposite may be true if inflation starts to come in quickly over the next few months.
- The balance of funds in the TCA has an impact on interest earnings generated from the account. Strong general fund revenue in FYs 2021 and 2022, coupled with pandemic-era federal fiscal aid contributed to record TCA balances, particularly in FY 2022. General fund expenditures will draw these balances down, but they are projected to remain high relative to historical levels. Economic and political factors could significantly alter the expected movement in TCA balances during the forecast period.

Forecast Methodology

The amount of total TCA interest income deposited to the general fund is determined in three main steps. Details for each step of the estimation process are given below.

Step 1. Estimate the balance of funds in each investment pool within the TCA and the respective rate of return.

STIP: The balance of STIP investments is projected to decline significantly by the end of FY 2023, moving in step with an estimated decline in general fund cash balances. STIP holdings tick up in FY 2024 and move sideways in FY 2025.

Medium Term Securities: The balance of this investment class remains steady at its FYE 2022 level throughout the forecast period.

TFIP: TCA TFIP holdings rise throughout FY 2023 and reach the maximum threshold in early FY 2024. The threshold level does not change during the 2025 biennium, so the TFIP balance stays constant once the maximum allowable balance is achieved.

Step 2. Estimated yields for each investment pool in the TCA are applied to their respective balances to determine annual interest income from each asset class. STIP, TFIP, and medium-term bond income added together to come up with total TCA gross investment income.

Step 3. Estimated other revenue and expenses are added to investment income to arrive at total income transferred to the general fund.

Table 2 shows the average annual balance, rate of return and interest income for STIP holdings, TFIP holdings, and medium-term bond assets, along with the fund total, for FY 2018 to FY 2022, and forecast amounts for FY 2023 through FY 2025.

Table 2							
TCA Balances & Rates of Return by Investment Type							
(\$ millions)							
Fiscal Year	<u>STIP</u>			<u>Medium Term Bonds</u>			
	Balance	Interest Rate	Interest Income	Balance	Interest Rate	Interest Income	Non Interest Income
A 2018	\$664.37	1.50%	\$9.94	\$72.73	0.38%	\$0.28	\$0.66
A 2019	\$914.32	2.29%	\$20.94	\$49.26	0.00%	\$0.00	\$1.10
A 2020	\$1,150.68	1.57%	\$18.03	\$27.00	0.00%	\$0.00	\$0.80
A 2021	\$1,774.35	0.19%	\$3.38	\$0.00	0.00%	\$0.00	\$0.32
A 2022	\$2,853.34	0.36%	\$10.26	\$64.84	0.36%	\$0.23	\$0.08
F 2023	\$2,978.71	3.68%	\$109.68	\$74.84	3.40%	\$2.55	\$0.59
F 2024	\$2,644.39	4.79%	\$126.70	\$74.84	4.66%	\$3.49	\$0.75
F 2025	\$2,824.07	3.57%	\$100.71	\$74.84	4.04%	\$3.03	\$0.75
Fiscal Year	<u>TFIP</u>			<u>Treasurer's Fund Total</u>			
	Balance	Interest Rate	Interest Income	Balance	Interest Rate	Interest Income	Total Income
A 2018				\$737.10	1.39%	\$10.22	\$10.88
A 2019				\$963.58	2.17%	\$20.94	\$22.04
A 2020				\$1,177.68	1.53%	\$18.03	\$18.83
A 2021				\$1,774.35	0.19%	\$3.38	\$3.70
A 2022	\$46.22	2.59%	\$1.20	\$2,964.40	0.39%	\$11.69	\$11.77
F 2023	\$215.71	4.30%	\$9.27	\$3,269.26	3.72%	\$121.50	\$122.09
F 2024	\$330.53	4.53%	\$14.98	\$3,049.76	4.76%	\$145.17	\$145.93
F 2025	\$330.53	4.53%	\$14.98	\$3,229.44	3.68%	\$118.72	\$119.48

Table 3 shows the net amount of other income and expenses associated with the TCA for FY 2018 to FY 2022 and estimated amounts for FY 2023 through FY 2025. Projections are created using a five-year moving average.

Table 3					
TCA Income to General Fund					
(\$ millions)					
Fiscal Year	Investment Income		Other Income and Expenses		Total Income
A 2018	\$10.88	+	(\$0.08)	=	\$10.81
A 2019	\$22.04	+	(\$0.08)	=	\$21.95
A 2020	\$18.83	+	(\$0.37)	=	\$18.46
A 2021	\$3.70	+	(\$0.38)	=	\$3.32
A 2022	\$11.77	+	\$0.01	=	\$11.78
F 2023	\$122.09	+	(\$0.18)	=	\$121.91
F 2024	\$145.93	+	(\$0.20)	=	\$145.73
F 2025	\$119.48	+	(\$0.23)	=	\$119.25

Data Sources

Data were obtained from SABHRS, the State Street Bank, the BOI, and the Department of Administration.



GOVERNOR
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STATE OF MONTANA

ALCOHOL REVENUE SECTION 6

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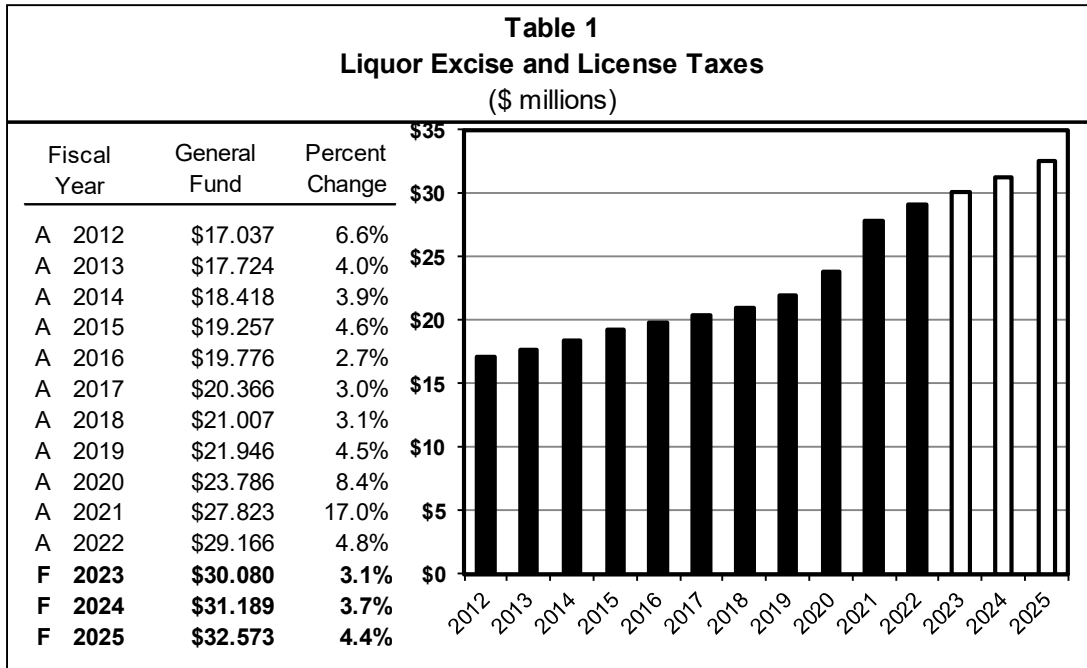


GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Revenue Description

According to 16-1-401 and 16-1-404, MCA, the Department of Revenue is directed to collect an *excise* tax of 16% and a *license* tax of 10% of the retail selling price on all liquor sold and delivered in the state and manufactured by distillers producing 200,000 or more proof gallons of alcohol annually. Both the excise and license tax rates are smaller for distillers that produce less than 200,000 proof gallons of alcohol. Currently, the majority of the distilled spirits sold in the state of Montana are acquired from vendors that produce more than 200,000 proof gallons annually.

Section 16-1-404, MCA, states that 65.5% of the liquor *license* tax is deposited to the Department of Public Health and Human Services (DPHHS) to fund treatment, rehabilitation, and prevention of alcoholism and chemical dependency. Three Indian tribes have an agreement with the state and a portion of the remaining revenue from both the excise and license tax is shared with tribes that have a revenue sharing agreement with the state. The remaining revenue, 34.5%, is deposited to the general fund.



Risk and Significant Factors

- Between FY 2016 and FY 2019, the number of liquor bottles sold increased an average of 3.7% per year. Due in part to the global pandemic bottles sold increased significantly in fiscal years 2020, 2021, and 2022, where the increases year-over-year were 16.9%, 20.7%, and 10.6% respectively. The relative slowdown in FY 2022 is viewed as a return to near trend growth for the forecast period.
- SB 5, passed during the 2017 Special Session, eliminated the lottery system that was in place for liquor, beer, and restaurant licenses, and replaced it with a competitive bidding process. Licenses become available for the bidding process for several reasons, including as a result of increased quotas, closure of a business, or lapse in payment of license fees. Revenue from the new auction system is included in other revenue.

Forecast Methodology

The general fund share of the liquor excise and license tax is prepared in five steps:

- Step 1.** Calculate gross sales.
- Step 2.** Calculate retail selling value.
- Step 3.** Calculate gross liquor excise and license tax collections.
- Step 4.** Calculate tribal portion of revenue.
- Step 5.** Calculate liquor excise and license tax general fund revenue.

Distribution

Table 2 shows liquor license tax is first distributed to DPHHS and then revenue from the liquor excise tax is added. Finally, tribal revenues are subtracted to obtain general fund revenue.

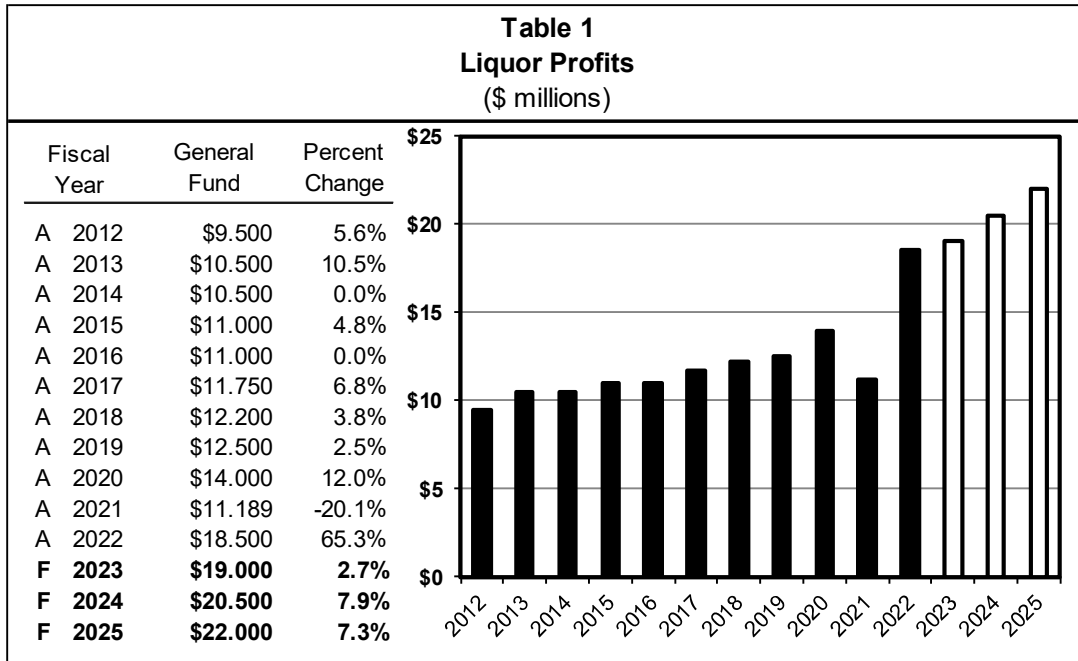
Description	Actual FY 2022	Projected FY 2023	Projected FY 2024	Projected FY 2025
Liquor License Tax	\$15,421,962	\$15,839,937	\$16,140,297	\$16,856,419
Less DPHHS Share (65.5%)	\$10,101,385	\$10,375,158	\$10,571,895	\$11,040,955
Remaining Liquor License Tax	\$5,320,577	\$5,464,778	\$5,568,403	\$5,815,465
Liquor Excise Tax	\$24,662,621	\$25,419,643	\$26,457,699	\$27,631,589
Non DPHHS Liquor Tax Revenue	\$29,983,198	\$30,884,421	\$32,026,101	\$33,447,053
Less Tribal Share	\$817,408	\$804,489	\$837,341	\$874,493
General Fund Revenue	\$29,165,790	\$30,079,933	\$31,188,760	\$32,572,560

Data Sources

Data is from the Department of Revenue monthly cost of sales report, the Department of Revenue Liquor Distribution annual financial schedules, and SABHRS. S&P Global provided historical and projected Montana population data.

Revenue Description

Title 16, chapters 1 through 6, MCA, directs the Department of Revenue to administer liquor laws relating to alcoholic beverage control, sale, distribution, and the licensing of alcoholic beverage manufacturers, wholesalers, and retailers. Agency franchisees purchase liquor products from the state liquor warehouse. A 40.5% markup on the state’s base costs covers the operating costs of the state liquor system and provides a net profit. All liquor profit net revenue is transferred to the general fund at fiscal year end.



The state privatized liquor retailing operations in FY 1996. The decreased general fund transfer in FY 2009 is attributable to a one-time transfer of \$1.75 million for renovation of the State Liquor Warehouse, approved in HB 5 by the 2009 Legislature. The 2015 Legislature passed SB 193, which increased the state markup from 40.0% to 40.5%, and created a new methodology for calculating agency liquor store discount rates.

During the 2021 Session the Supplemental Appropriations Bill, HB 3, transferred \$5.819 million from the liquor enterprise fund to settle a lawsuit. Revenue in excess of the costs of operating the liquor warehouse and program is normally transferred to the general fund. The diversion of funds to pay for lawsuits directly reduced the general fund transfer in FY 2021.

Risks and Significant Factors

- Liquor sales grew by 4.5% per year from FY 2012 through FY 2019. From FY 2020 through FY 2022, sales grew by 10.6%. The recent high growth is believed to be a short-term phenomenon and, as a result, the forecast period growth rates are more in line with historic trends.
- Store owners pay a discounted rate for liquor based on the agency liquor store’s prior calendar year liquor purchases. The new rate for an agency liquor store will fall into one of ten commissions ranging from 16% for stores that purchased less than \$250,000, to 12.15% for those stores that purchased more than \$7 million. The purchase thresholds will be adjusted annually based on the consumer price index for the prior calendar year.

Forecast Methodology

The liquor profit transfer to the general fund is based on the net income from liquor operations for the fiscal year.

Step 1. Net income from liquor operations is calculated as gross liquor sales less the cost of goods sold, liquor taxes (liquor excise tax and liquor license tax), combined commissions/discounts, and liquor operating expenses.

Step 2. The calculations for gross liquor sales, cost of goods sold, and liquor taxes are ascertained through the process of forecasting Liquor Excise and License Tax general fund revenue.

Distributions

Table 2 shows the actual liquor profit transfer for FY 2022 and projections for FY 2023 through FY 2025. Gross liquor sales are added to a small amount of other revenue. The profits are then adjusted for the changes to the net assets of the Liquor Control Division and the remainder is transferred to the general fund.

Fiscal Year	Gross Sales	License Fees/Other Revenue	Discounts	Cost of Goods Sold	Liquor Taxes	Operating Expenses	Profit	Change in Net Assets	Transfer to General Fund	Percent Change
A 2022	\$203.720	+ \$1.161	- \$26.514	- \$115.332	- \$40.074	- \$3.531	▶ \$19.431	- \$0.931	= \$18.500	65.34%
F 2023	\$211.679	+ \$1.216	- \$27.822	- \$120.309	- \$41.869	- \$3.664	▶ \$19.231	- \$0.433	= \$19.000	2.70%
F 2024	\$227.647	+ \$1.274	- \$29.194	- \$125.501	- \$43.745	- \$3.802	▶ \$26.679	- \$0.379	= \$20.500	7.89%
F 2025	\$237.747	+ \$1.334	- \$30.633	- \$130.917	- \$45.704	- \$3.945	▶ \$27.881	- \$0.361	= \$22.000	7.32%

Data Sources

Gross liquor sales data and other related data comes from the Department of Revenue Liquor Services Division Annual Financial Report. Other data is from SABHRS and IBARS.

Revenue Description

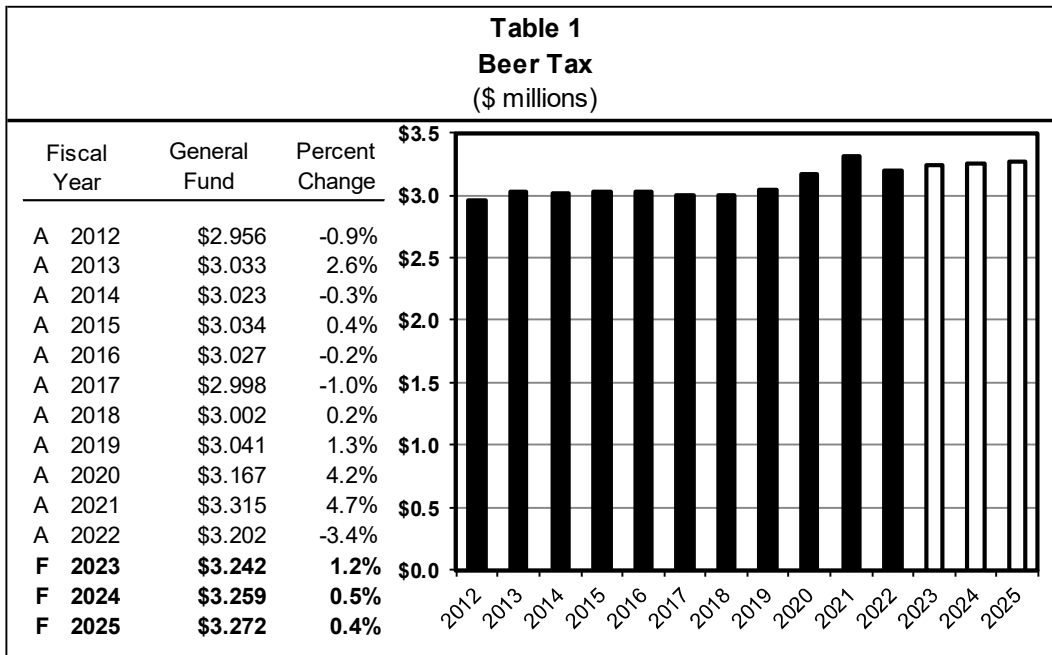
According to 16-1-406, MCA, the Department of Revenue is directed to collect a tax on each barrel (31 gallons) of beer sold in Montana by a wholesaler at the following rates:

Brewer Production*	Tax Per Barrel
Up to 5,000 Barrels	\$1.30
5,001 to 10,000 Barrels	\$2.30
Over 10,000 Barrels	\$4.30

*1 Barrel = 31 Gallons

HB 541, from the 2017 session, increased the tax from \$3.30 to \$4.30 per barrel for brewers producing more than 10,000 barrels of beer.

From total beer tax revenue, 76.74% is distributed to the state general fund and 23.26% is distributed to the Department of Public Health and Human Services (DPHHS) to fund alcohol treatment programs. A small portion of the beer tax revenue allocated to the general fund (approximately 2.0%) is remitted to the Blackfeet, Fort Belknap, Fort Peck, and Confederated Salish and Kootenai tribes in compliance with revenue sharing agreements.



Risks and Significant Factors

- Per capita beer consumption increased on average by 1.9% per year from FY 2018 through FY 2021, with the largest increase in FY 2021 of 3.3%. In FY 2022, however, consumption declined by 4.0%. The large decrease in consumption in FY 2022 is viewed as a one-time correction, not heavily factored into the forecast.
- Montana population age 20 and over was used for this forecast because, according to a statistical analysis, this demographic tracked total beer consumption over time better than changes in other age demographics such as total population, the population between 30 and 60 years old, etc. From FY 2010 through FY 2022, the cohort of beer consumers used in this model has experienced a growth rate of 1.3% per year. While per capita consumption of beer is expected to remain flat, the population growth for this group is slightly below the ten-year average, at 1.2%.

Forecast Methodology

The general fund share of the beer tax is prepared in three steps:

Step 1. Calculate per capita consumption of beer.

Step 2. Total revenue is projected by multiplying the number of barrels sold by the average tax rate per barrel.

Step 3. Total revenue is allocated to the general fund, DPHHS, and the tribes, per the revenue sharing agreements.

Distribution

Table 2 shows the actual allocation for FY 2022 and the projected allocation of beer tax revenue to the general fund, DPHHS, and the tribes for FY 2023 through FY 2025. DPHHS revenue allocation is subtracted from total beer tax revenue to obtain total general fund and tribe share. Tribe share is then calculated and subtracted to obtain estimated beer tax revenue for the general fund.

Description	FY 2022	FY 2023	FY 2024	FY 2025
Total Revenue	\$ 4.293	\$ 4.340	\$4.363	\$4.380
Less DPHHS Share (23.26%)	\$ 0.999	\$ 1.010	\$1.015	\$1.019
General Fund and Tribes' Share	\$ 3.295	\$ 3.331	\$3.348	\$3.362
Less Tribes' Share (2.0%)	\$ 0.092	\$ 0.089	\$0.089	\$0.090
General Fund	\$ 3.202	\$ 3.242	\$3.259	\$3.272

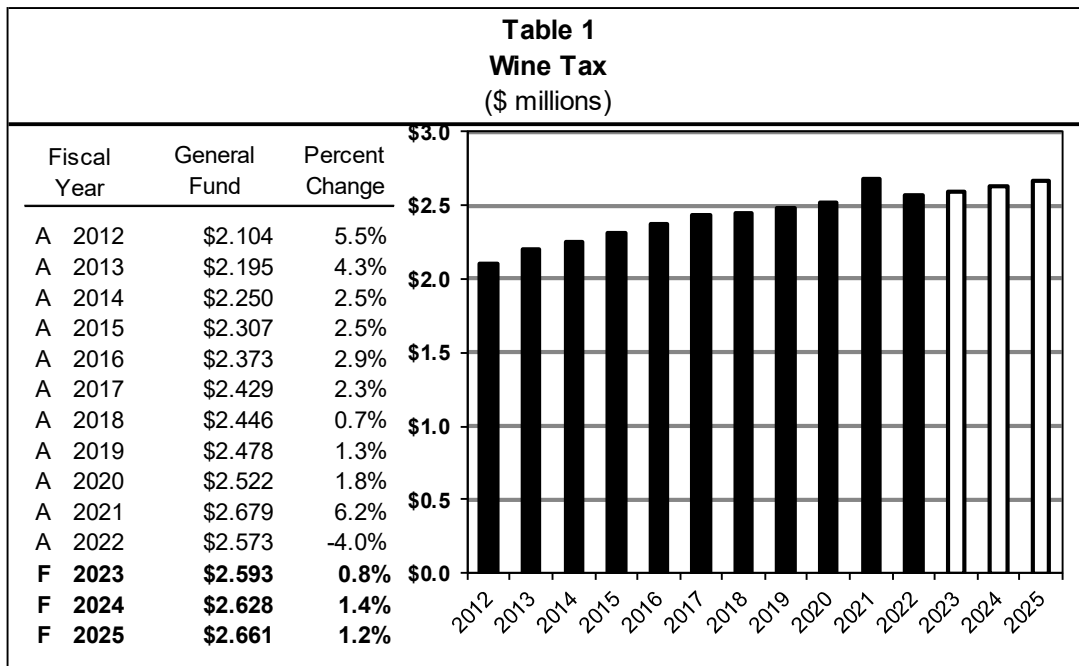
Data Sources

Department of Revenue GENTAX reports provided historical information on the number of total production by producer type. SABHRS provided historical beer tax revenue and allocation information. S&P Global provided historical and projected Montana population data.

Revenue Description

According to 16-1-411, MCA, the Department of Revenue is directed to collect a tax of 27 cents on each liter of table wine and 3.7 cents on each liter of hard cider imported by a distributor or the department. Additionally, a tax of 1 cent per liter of wine is levied on table wine sold by a table wine dealer to an agent pursuant to 16-2-301, MCA.

Wine tax revenues are distributed 69% to the state general fund and 31% to the Department of Public Health and Human Services (DPHHS) for the treatment, rehabilitation, and prevention of alcoholism and chemical dependency. Approximately 2.5% of the wine tax revenue allocated to the general fund is remitted to the Blackfeet, Fort Belknap, Fort Peck, and Confederated Salish and Kootenai tribes in compliance with revenue sharing agreements.



Risks and Significant Factors

- Per capita consumption decreased by 4.8% in FY 2022, offsetting a similar growth in FY 2021. Per capita consumption is expected to remain flat for the forecast period.
- Montana population age 20 and over was used for this forecast because, according to a statistical analysis, this demographic tracked total wine consumption over time better than changes in other age demographics such as total population or the population between 30 and 60 years old. From FY 2010 through FY 2022, the cohort of wine consumers used in this model has experienced a growth rate above 1.2% per year. While per capita consumption of wine is expected to increase, the population growth for this group is decreasing, but supports a relative flat growth rate for the 2025 biennium.

Forecast Methodology

The general fund share of the wine tax is prepared in three steps:

Step 1. Estimate liters of per capita wine consumption for FY 2023 through FY 2025 using average per capita consumption growth.

Step 2. Multiply the estimates of per capita consumption by population and the tax rate (\$0.27/liter) to obtain estimates of total tax revenue through FY 2025.

Step 3. Determine the wine tax allocation to the general fund.

Distribution

Table 2 shows the actual allocation for FY 2022 and the projected allocation for FY 2023 through FY 2025. Of the total revenue, 31% is first distributed to the DPHHS. The tribal revenue allocation payment (2.53%) is then subtracted from the remaining revenue for FY 2023 through FY 2025. All revenue which remains after DPHHS and tribal payments have been subtracted is deposited to the general fund.

Description	FY 2022	FY 2023	FY 2024	FY 2025
Total Revenue	\$3.834	\$3.853	\$3.905	\$3.954
Less DPHHS Share (31%)	\$1.188	\$1.195	\$1.211	\$1.226
General Fund and Tribes' Share	\$2.646	\$2.659	\$2.695	\$2.728
Less Tribes' Share (2.53%)	\$0.073	\$0.066	\$0.067	\$0.067
General Fund	\$2.573	\$2.593	\$2.628	\$2.661

Data Sources

Department of Revenue GENTAX reports provided historical information on the number of wine liters sold. SABHRS provided historical wine tax revenue and allocation information. S&P Global provided historical and projected Montana population data.



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TOBACCO REVENUE SECTION 7

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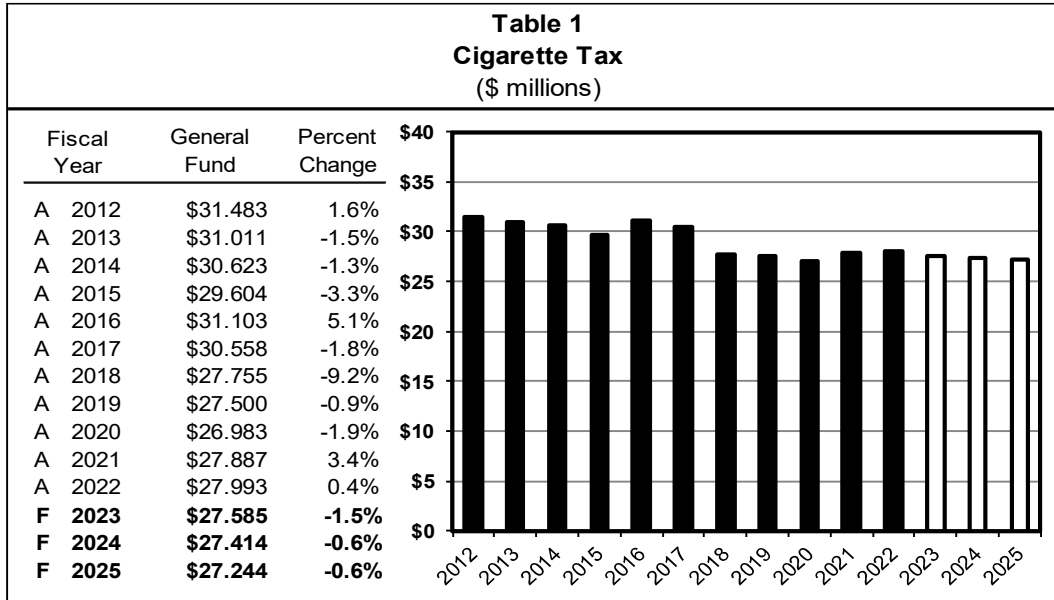
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GOVERNOR'S OFFICE OF
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Revenue Description

According to 16-11-111, MCA, a specific tax of \$1.70 is imposed on each pack of 20 cigarettes. If a pack contains more than 20 cigarettes, the tax is pro-rated by 1/20th of the \$1.70 tax for each cigarette exceeding 20 cigarettes. Currently, revenue generated from the cigarette tax is distributed as follows: 45.1% to the general fund; 44.0% to the health and Medicaid initiatives account; 2.6% to the long-range building account; and the greater of 8.3% or \$4.0 million for operation of state veterans’ nursing homes.



Beginning May 1, 2003, SB 407 (2003 session) increased the tax on cigarettes from \$0.18 to \$0.70 per pack. SB 407 also changed the distribution of cigarette taxes, increasing the general fund portion to 87.4%, the long-range building account to 4.3%, and the DPHHS portion to the greater of 8.3% or \$2.0 million.

Initiative 149 (I-149) further increased the tax on each pack of cigarettes to \$1.70 as of January 1, 2005. I-149 also changed the allocation of total collections as follows: 45.1% to the general fund; 44.0% to the health and Medicaid initiatives account; 2.6% to the long-range building account; and the greater of 8.3% or \$2.0 million for operation of state veterans’ nursing homes.

For FY 2010 through FY 2015, the general fund portion was reduced to 43.9% and 1.2% was designated for the Southwest Montana Veterans’ Home. In FY 2016, the general fund distribution returned to 45.1%.

During the 2021 session, HB 667 passed and changed the distribution of cigarette tax revenue allocation to state veterans’ homes from the greater of 8.3% or \$2.0 million, to the greater of 8.3% or \$4.0 million. This statute change, however, did not change the disbursement to the veterans’ homes as the present law distribution was already over \$5.0 million annually.

Risks and Significant Factors

- Montana population age 15 and over was used for this forecast because, according to statistical analysis, this demographic tracked total cigarette consumption over time better than changes in other age demographics such as total population, the population between 30 and 60 years old, etc.
- According to the Center for Disease Control, the national prevalence of cigarette smoking has resumed a slow decline after stalling for several years. This model assumes a 1.8% annual decrease in per capita consumption during the forecast period.

- There are three types of arrangements for cigarette taxes with the seven Indian reservations in Montana:
 1. Currently, no Indian reservations have a tax-free quota agreement with the state.
 2. The Flathead Reservation abides by the tax-free quota law with no specific agreement with the state.
 3. The Blackfeet, Fort Belknap, Rocky Boy, Fort Peck, Crow, and Northern Cheyenne Reservations have a revenue sharing agreement with the state.
- Tribes in categories 1 and 2 receive cigarettes tax free for the enrolled tribal members residing on the reservation. Under the revenue sharing agreements, the tribe and state cigarette tax rates are the same. The tribe's share of the tax revenue is 150% of the per capita cigarette tax collected for each of the tribes' enrolled members residing on the reservation.

Forecast Methodology

The general fund share of the cigarette tax is prepared in four steps:

Step 1. Estimate taxable per capita cigarette consumption.

Step 2. Estimate cigarette tax revenue.

Step 3. Calculate tribal revenue sharing agreement payments.

Step 4. Calculate distributable state cigarette tax revenue and allocation.

Distributions

Table 2 shows the actual allocation for FY 2022 and projected state cigarette tax revenue/allocation for FY 2023 through FY 2025. The tribes' revenue allocations are subtracted from the gross cigarette tax revenue to yield total state cigarette tax revenue. Revenue is allocated to each fund by multiplying state cigarette tax revenue by the fund's share.

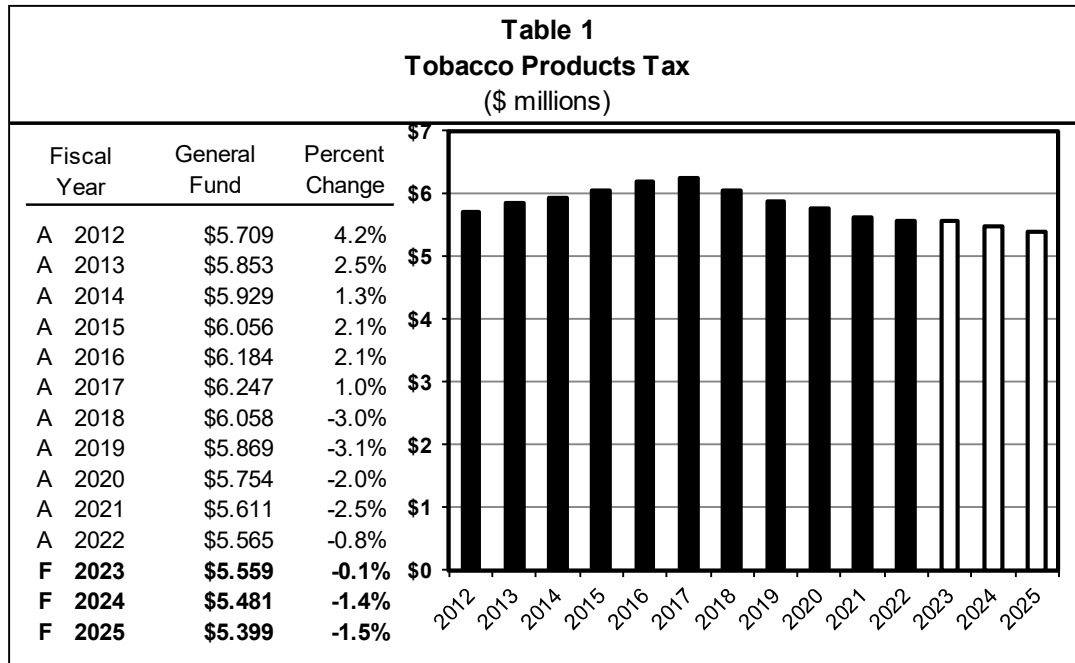
Table 2				
Distribution of Cigarette Tax Revenue				
(\$ million)				
<u>Calculation</u>	FY 2022	FY 2023	FY 2024	FY 2025
Gross Cigarette Tax Revenue	\$65.508	\$64.778	\$64.378	\$63.980
Subtract Tribal Payments	\$3.405	\$3.581	\$3.559	\$3.537
Subtract Cigarette Tax Stamps	\$0.033	\$0.034	\$0.035	\$0.036
Total Distributable State Cigarette Tax Revenue	<u>\$62.070</u>	<u>\$61.163</u>	<u>\$60.784</u>	<u>\$60.407</u>
<u>Allocation</u>				
Health and Medicaid (44.0%)	\$27.311	\$26.912	\$26.745	\$26.579
Long Range Building Fund (2.6%)	\$1.614	\$1.590	\$1.580	\$1.571
State Veterans' Nursing Homes (8.3%)	\$5.152	\$5.077	\$5.045	\$5.014
General Fund (45.1%)	\$27.993	\$27.585	\$27.414	\$27.244

Data Sources

Department of Revenue GENTAX reports provided historical information on the number of cigarette packs sold. The general fund revenue data was obtained from SABHRS. Current tribal payments are provided by DOR Revenue Sharing Agreement Quarterly Reports. Population data forecasts are by S&P Global.

Revenue Description

According to 16-11-111, MCA, the Department of Revenue (DOR) is directed to collect a tax of 85 cents per ounce of moist snuff and 50% of the wholesale price of all other tobacco products (OTP), excluding cigarettes. Tobacco products destined for retail sale and consumption outside Montana are not subject to this tax. The general fund and the health and Medicaid initiatives account each receive 50% of the tobacco products tax revenue after payments are made as per tribal revenue sharing agreements.



In FY 2004, tobacco tax revenue increased by 54.5% due to changes made by SB 407 from the 2003 Session. On May 1, 2003, SB 407 changed the tax on moist snuff from 12.5% of the wholesale price to 35 cents per ounce, an effective increase of 7 cents per ounce. SB 407 also increased the tax on all other tobacco from 12.5% of the wholesale price to 25% of the wholesale price. On January 1, 2005, Initiative 149 (I-149) changed the tax on moist snuff to 85 cents per ounce and increased the tax on all other tobacco products to 50% of the wholesale price.

Risks and Significant Factors

- Montana population age 15 and over, which experienced an average annual increase of 1.4% between FY 2018 and FY 2022, was used for this forecast because, according to statistical analysis, this demographic tracked total cigarette consumption over time better than changes in other age demographics such as total population, the population between 30 and 60 years old, etc. Moist snuff per capita consumption has experienced an average annual decrease of 3.8% from FY 2018 to FY 2022. Per capita OTP consumption is projected to decrease 0.2% per year.
- The excise tax on tobacco products is imposed on retail consumers, but the tax is collected by wholesalers. In accordance with 16-11-112, MCA, wholesalers are allowed a discount to defray collection and administrative costs. The discount is equal to 1.5% of total tax collections.
- Tobacco product sellers can obtain a refund credit for tobacco products that could not be sold due to defect. The average percentage of defective product credits of total collections in FY 2022 was 2.1% and is used to forecast refund credits for FY 2023 through FY 2025.
- Six Indian reservations in Montana have a tobacco revenue sharing agreement with the state: Blackfeet, Fort Belknap, Rocky Boy, Fort Peck, Crow, and Northern Cheyenne Reservations. Under the revenue sharing agreements, the tribe tobacco tax and the state tobacco tax are the same. The tribe's share of the tax revenue is

150% of the per capita state tobacco tax collected for each of the tribes' enrolled members residing on the reservation.

Forecast Methodology

The tobacco tax revenue is comprised of two taxes: (1) moist snuff tax of 85 cents per ounce; and (2) other tobacco products tax of 50% of the wholesale price. The six steps in estimating tobacco tax revenues are:

- Step 1.** Estimate per capita moist snuff consumption and the per capita consumption of other tobacco products.
- Step 2.** Estimate projected gross tobacco tax revenue by multiplying the per capita consumption times the population over 15 times the tax rate.
- Step 3.** Calculate wholesaler discounts at 1.5% of total tobacco tax revenue.
- Step 4.** Calculate refunds for unsalable product.
- Step 5.** Calculate tribes' revenue allocation.
- Step 6.** Calculate state tobacco tax revenue and allocation.

Distribution

Wholesaler discounts and refund credits are subtracted from total tobacco tax revenue and tribal allocation payments are subtracted from net revenue to determine total state other tobacco tax revenue. Fifty percent of the state tobacco tax revenue goes to the general fund and 50% goes to the health and Medicaid initiatives account.

Table 2				
Distribution of Tobacco Products Tax				
(\$ million)				
<u>Calculation</u>	FY 2022	FY 2023	FY 2024	FY 2025
Total Tobacco Tax Revenue	\$12.214	\$12.193	\$12.021	\$11.841
Subtract Discounts/Refund Credits	\$0.445	\$0.439	\$0.433	\$0.427
Subtract Tribal Payments	\$0.639	\$0.635	\$0.626	\$0.617
Total State Tobacco Tax Revenue	\$11.130	\$11.119	\$10.961	\$10.797
<u>Allocation</u>				
Total to Health and Medicaid (50%)	\$5.565	\$5.559	\$5.481	\$5.399
Total to General Fund (50%)	\$5.565	\$5.559	\$5.481	\$5.399

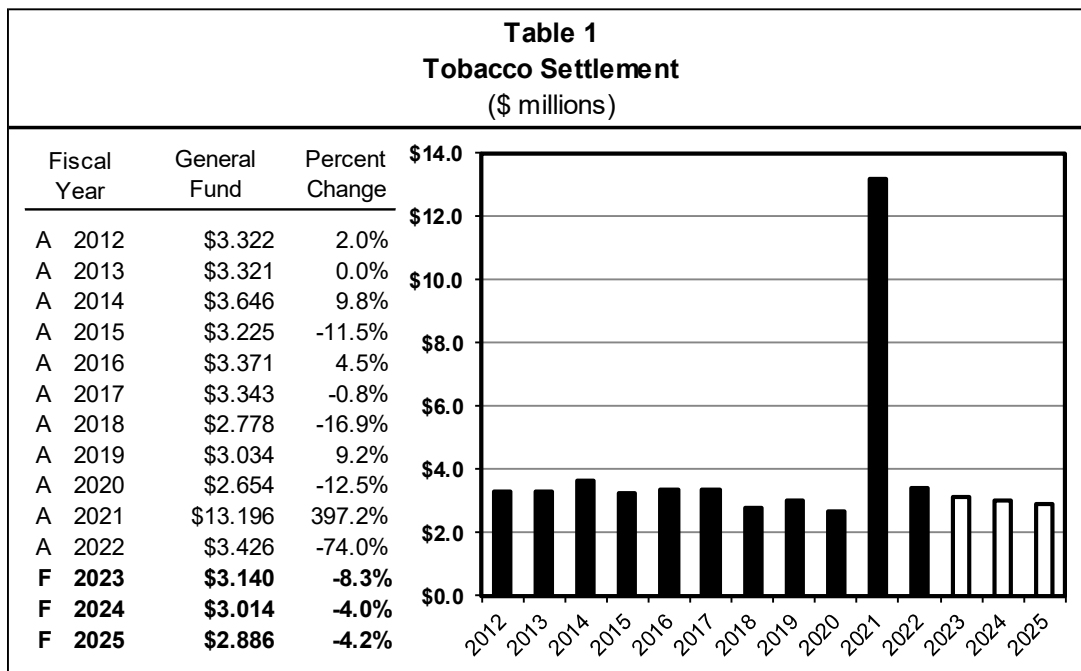
Data Sources

Department of Revenue GENTAX reports provide product sales information. General fund revenue data is from SABHRS. Other data provided by DOR includes the discounts and credits applied to distributors of other tobacco products. Population data is provided by S&P Global.

Revenue Description

In 1998, Montana, along with 45 other states, signed a settlement agreement with major tobacco companies. Pursuant to the agreement, Montana will receive approximately \$832 million by the year 2025. Payments are made annually beginning in FY 2000. The schedule of payments provided for under the settlement agreement is subject to change depending on adjustment criteria specified in the agreement.

Table 1 shows the actual general fund revenue from the tobacco settlement agreement from FY 2012 through FY 2022 and the forecast revenue for FY 2023 through FY 2025.



In FY 2008, the base payment paid to states increased from \$8 billion to \$9 billion. This accounts for the large percentage increase from FY 2007 to FY 2008. However, the forecast payments, when adjusted for inflation, are decreasing or flat because cigarette consumption per capita (nationwide) has slightly decreased. Further, additional adjustments to the annual payments have been made since FY 2005 to compensate for changes in market share among the participating and non-participating manufacturers. These market share adjustments are forecast to continue through FY 2025.

Two major arrangements in the allocation of the tobacco settlement revenue have existed since the first payment was received in FY 2000. First, in November 2000, Montana’s electorate passed Constitutional Amendment 35. The amendment required no less than 40% of tobacco settlement revenue to be deposited in a trust fund, with the remaining money deposited in the state general fund. The trust fund was established to provide a permanent source of revenue to fund the costs associated with programs for tobacco disease prevention and healthcare benefits, services, or coverage. The amendment further stated that 90% of the interest income from the trust fund could be appropriated; with 10% of the interest income from the trust fund to be deposited in the trust fund on or after January 1, 2001. The principal of the trust fund and 10% of the interest income was to be deposited in the trust fund and remain forever inviolate unless appropriated by a vote of two-thirds of the members of each house of the legislature.

Second, in the November 2002 election, Initiative 146 (I-146) was passed. I-146 required the tobacco settlement payments received after June 30, 2003, be deposited as follows: 32% in a state special revenue account for tobacco prevention; 17% in a state special revenue account for health insurance benefits; 40% in the trust fund; and 11% in the state general fund.

In July of 2018, the State of Montana and the Participating Manufacturers entered into a consent decree that resolved the 2004 Non-Participating Manufacturer's (NPM) adjustment dispute between Montana and the PMs. As a result, the independent auditor released Montana's share of disputed payments related to the 2004 NPM adjustment.

In December 2020, the State of Montana entered into a consent decree that resolved a dispute between the State and the participating manufacturers. As a result of the consent decree, Montana received a lump sum payment of \$53.5 million from disputed payments held in escrow since the 2005. In addition, the tobacco manufacturers agreed that no additional disputed payments would be withheld through 2030.

Risks and Significant Factors

If Original Participating Manufacturers (OPMs) and Subsequent Participating Manufacturers (SPMs) lose market share to NPMs, then OPMs and SPMs may be entitled to pay less by means of an NPM adjustment. The NPM adjustment is conditional upon two factors: (1) whether there has been a loss in market share by participating manufacturers to NPMs; and (2) whether that loss is attributable to disadvantages resultant from the tobacco settlement.

A specific provision of the Master Settlement Agreement (MSA), referred to as the safe harbor provision, is relevant to this adjustment. Under the safe harbor provision, a state can avoid a payment reduction due to the NPM adjustment if a qualifying statute is enacted and "diligently enforced". The qualifying statute provides for an amount to be paid into an escrow account for each cigarette sold by NPMs in the state that is equivalent to the amount that would have been paid had the NPMs participated in the settlement.

An independent auditor determined that, beginning in 2003, participating manufacturers started losing market share to NPMs. Pursuant to this finding, OPMs and SPMs can pay a portion of their tobacco settlement payments into a disputed payment account (DPA) and have routinely done so beginning in FY 2006. Withheld disputed amounts are not to be distributed to the states until the dispute is resolved. Based on the consent decree in December of 2020, neither OPMs nor SPMs will withhold any payments in the DPA through 2030.

There are numerous possible outcomes to the dispute over the NPM adjustment. The following is a short list of possible outcomes over this disputed money.

- Litigation/arbitration may continue in 2030. If this is the case, then it is likely that OPMs and SPMs will continue to place the disputed money in the separate dispute account.

Beginning in FY 2018 (tobacco sales year 2017), the strategic payment to the settling states ended, while the non-strategic payment increased by a like amount. As Montana's share of the non-strategic payment is lower than the strategic payment portion, 0.4248% vs 1.0446%, the gross payment to the state is expected to decrease. Additionally, the Previously Settled States Reduction decreases from 12.237% to 11.0667%, which results in a small increase in revenue. Accounting for additional adjustments for changes in inflation and market share, the net effect on collections is difficult to estimate.

Forecast Methodology

The MSA provides for complex methods and formulas to calculate annual payments made by the settling tobacco companies to each state. Several clauses in the tobacco settlement set forth the precise calculations for the adjustments to the payments due from the two categories of settling companies: (1) OPMs and (2) SPMs.

Seven major steps are used to calculate the annual amount due to Montana from tobacco companies which are parties to the MSA. These calculations are completed for both the non-strategic and strategic payments and are summarized in Table 2:

Step 1. The inflation adjustment;

Step 2. The volume adjustment to the base payment;

Step 3. The volume adjustment to the base operating income (This adjustment has not taken place since 2000);

Step 4. Previously settled states' reduction;

Step 5. SPM payments;

Step 6. Montana's share of the total payment; and

Step 7. Adjustments for NPM and other payment disputes.

Description	FY 2022	FY 2023	FY 2024	FY 2025
<i>Non-Strategic Base Payment</i>	\$9,000.000	\$9,000.000	\$9,000.000	\$9,000.000
Inflation Adjustment	\$7,328.495	\$7,239.681	\$7,280.814	\$7,282.997
Net Volume Adjustment	(\$10,250.034)	(\$10,456.355)	(\$10,733.540)	(\$10,974.226)
Previously Settled States Reduction	(\$672.683)	(\$640.021)	(\$613.898)	(\$587.504)
Adjusted OPM Base Payment	\$5,405.777	\$5,143.305	\$4,933.376	\$4,721.267
Adjusted SPM Base Payment	\$575.887	\$551.228	\$531.916	\$512.115
Adjustments	\$0.000	\$0.000	\$0.000	\$0.000
Sub-total Adjusted Base Payment	\$5,981.664	\$5,694.533	\$5,465.292	\$5,233.382
Montana's Percentage	0.5206610%	0.5013559%	0.5013559%	0.5013559%
Total Adjusted Non-Strategic Payment (IX)(c)(1)	\$31.144	\$28.550	\$27.401	\$26.238
Total MT Payment	\$31.144	\$28.550	\$27.401	\$26.238

Distributions

Table 3 shows the actual allocation for FY 2022 and the projected distribution of Montana's share of the Tobacco Master Settlement Agreement for FY 2023 through FY 2025.

Table 3				
Tobacco Settlement Payment Distributions				
(\$ millions)				
	FY 2022	FY 2023	FY 2024	FY 2025
Tobacco Trust Fund (40%)	12.458	11.420	10.960	10.495
Tobacco Prevention Account (32%)	9.966	9.136	8.768	8.396
Health Insurance Benefits Acc. (17%)	5.295	4.853	4.658	4.460
General Fund (11%)	3.426	3.140	3.014	2.886
Total MT Payment	31.144	28.550	27.401	26.238

Data Sources

Tobacco Settlement data was obtained from SABHRS, Price Waterhouse Coopers Litigation Master Settlement extranet and the Tobacco Master Settlement Agreement (MSA). Historical inflation data was obtained from the Bureau of Labor Statistics and forecast inflation was derived from S&P Global.



GOVERNOR
GREG GIANFORTE

STATE OF MONTANA

SALES REVENUE SECTION 8

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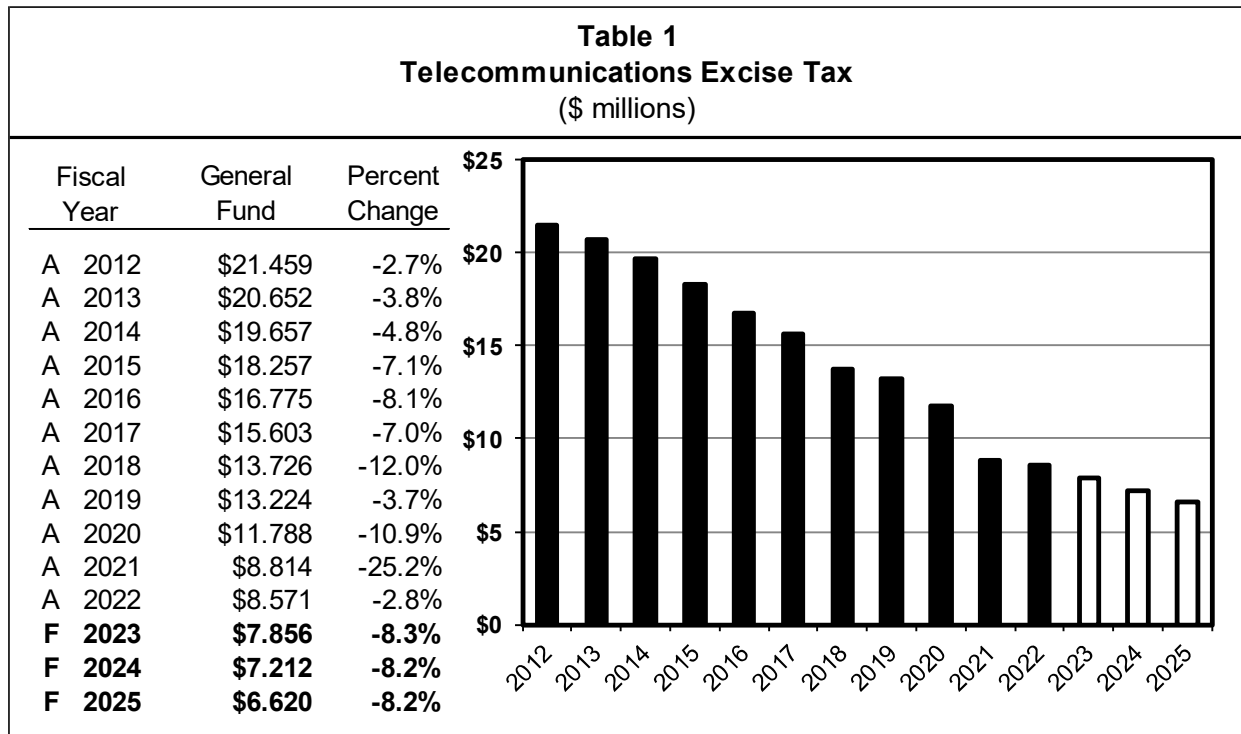


GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Revenue Description

Under 15-53-130, MCA, a 3.75% excise tax is assessed on retail telecommunications services. Telecommunications services are defined as two-way transmission of information over a telecommunications network that originates or terminates in the state and is billed to a customer with a Montana service address. Telecommunications service providers are required to collect the tax and make quarterly payments within 60 days after the end of each quarter.

Table 1 shows actual general fund revenue from retail telecommunications excise tax collections for FY 2012 through FY 2022 and the revenue forecast for FY 2023 through FY 2025.



Risks and Significant Factors

- The general trend of households and businesses eliminating wire-line services reduces the tax base as internet communications applications and services offered are free of tax.
- In the past, audit assessments created timing variations as audit attribution did not match the year tax was incurred.
- Montana Tax Appeal Board (MTAB) rulings in July 2011 narrowed the tax's base, excluding certain mobile telecommunications services paid with prepaid calling cards.
- The *Internet Tax Freedom Act* became permanent with the signing of the *Trade Facilitation and Trade Enforcement Act of 2016*. The Act bans taxes on internet access services. While the Act does not ban taxes on products and services over the internet, however, to the extent that these services can be delivered over the internet and classified as internet access, this reduces retail telecommunications excise tax collections.
- Increased broadband access could accelerate this revenue sources' decline.

Forecast Methodology

The estimate is a simple projection of the long run trend since FY 2011 when the current decline in collections appears to have started. Base collections are taxes due before audit, penalty and interest assessments. The non-compounding annual growth rate between FY 2011 to FY 2022 was negative 8.22%. In the past, audit revenues were excluded from this calculation to reduce the effect of misallocating significant audit revenue to fiscal years. However, MTAB decisions on the non-taxable status of certain pre-paid resellers and court decisions on the applicability of *Internet Tax Freedom*

Act have resolved many issues of interpretation that had generated audit assessments. Annual audit revenues are assumed to be equal to rounded prior four-year average audit collections (\$14,000).

Table 2 illustrates actual revenue collections for the excise tax, as well as audit and penalty collections for FY 2012 through FY 2022. The forecast for FY 2023, FY 2024, and FY 2025 with the associated audit revenue and the implied growth rate of the tax.

Table 2						
Total Collections						
(\$ millions)						
Fiscal Year	Excise Tax		Audits, Penalties & Interest		General Fund	Percent Change
A 2012	\$21.199	+	\$0.148	=	\$21.347	-3.19%
A 2013	\$20.586	+	\$0.049	=	\$20.635	-3.33%
A 2014	\$19.636	+	\$0.020	=	\$19.657	-4.74%
A 2015	\$18.245	+	\$0.027	=	\$18.272	-7.05%
A 2016	\$16.766	+	\$0.009	=	\$16.775	-8.19%
A 2017	\$15.592	+	\$0.011	=	\$15.603	-6.99%
A 2018	\$13.707	+	\$0.002	=	\$13.708	-12.14%
A 2019	\$13.204	+	\$0.020	=	\$13.224	-3.53%
A 2020	\$11.782	+	\$0.006	=	\$11.788	-10.86%
A 2021	\$8.812	+	\$0.002	=	\$8.814	-25.23%
A 2022	\$8.544	+	\$0.026	=	\$8.570	-2.76%
F 2023	\$7.842	+	\$0.014	=	\$7.856	-8.33%
F 2024	\$7.198	+	\$0.014	=	\$7.212	-8.20%
F 2025	\$6.606	+	\$0.014	=	\$6.620	-8.20%

Distribution

All telecommunications excise tax collections are allocated to the general fund pursuant to 15-53-156, MCA.

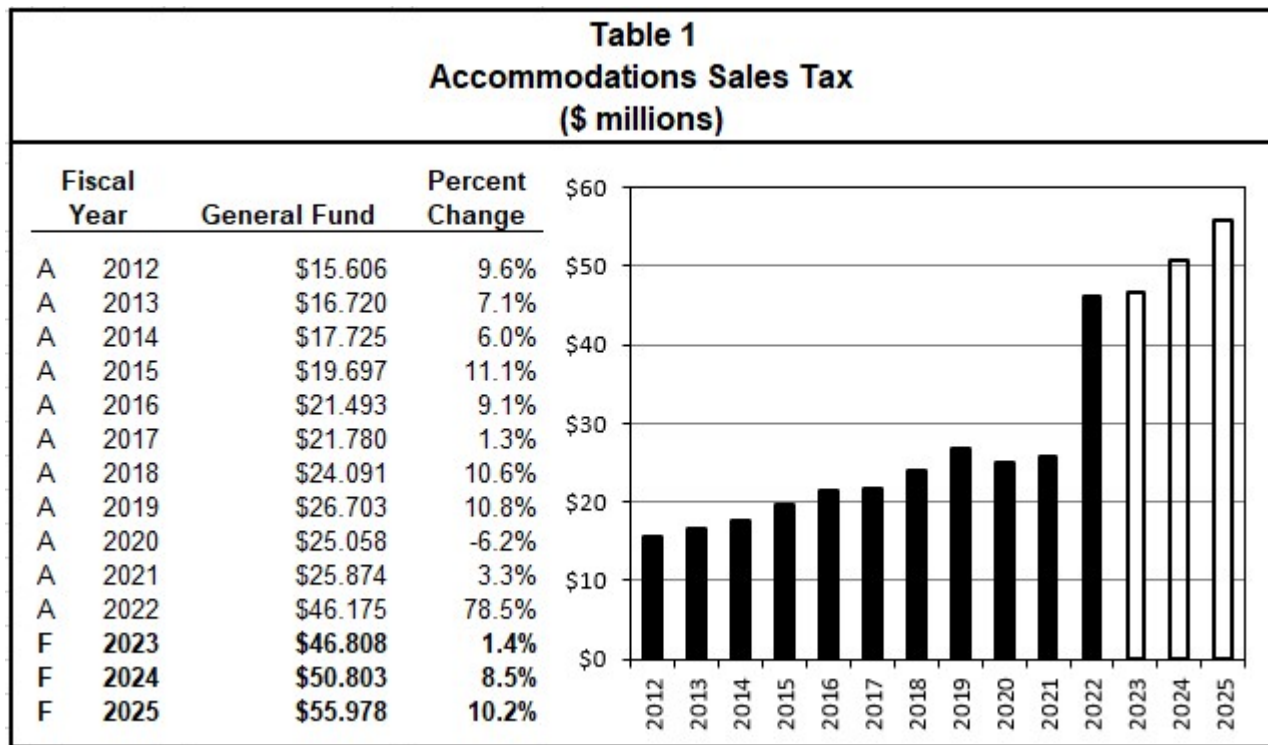
Data Sources

Revenue data is drawn from SABHRS.

Revenue Description

In accordance with 15-68-102, MCA, a 4% accommodations **sales** tax is levied on all charges for accommodations at lodging facilities and campgrounds in the state. In accordance with 15-65-111, MCA, Montana charges a lodging facility **use** tax of 4% on all accommodations. A portion of the **sales** tax and a portion of the **use** tax is distributed to the general fund. The majority of the **use** tax is distributed to other funds.

Table 1 shows actual revenue for the accommodations **sales** and **use** tax distributed to the general fund for FY 2012 through FY 2022 and forecast values for FY 2023 through FY 2025.



The accommodations **sales** tax was enacted in the 2003 session in SB 407 and was only collected for one month in FY 2003. The first full year of collections was FY 2004. As disposable income fell in FY 2009 and FY 2010, both in Montana and in the U.S., people spent less on accommodations and as a result, tax revenue declined during those years.

In November 2015, a \$1.1 million settlement from the online travel companies for accommodations **sales** tax and interest was received for prior years FY 2010 through the first two quarters of FY 2015. All of this is included in FY 2016 **sales** tax collections. Ongoing revenue from online travel companies grows at the same rate other accommodations **sales** taxes increase.

HB 111, 2011 session, revised the allocation of the lodging facility **use** taxes collected from state agencies. Formerly, these taxes were distributed back to the agency that paid for the in-state lodging expenditures. HB 111 allocated 30% of these collections to the general fund, with the balance returned to the agency that made the in-state lodging expenditure. Any lodging **use** tax collected from state agencies paying with federal funds, is held by the Department of Revenue to be returned to the federal government. The remainder of the funds paid by state agencies for lodging facility **use** taxes is distributed to the funds in 15-65-121, MCA.

HB 477 in the 2011 session changed the distribution of the lodging facility **use** tax, reducing the amount distributed to the Department of Commerce by 2.6% and allocating 2.6% to Montana Historical Interpretation.

HB 32, 2013 session, revised statute to allow the lodging **use** tax paid by state agencies with federal funding to be returned to the state agency that paid the in-state lodging **use** tax.

In the 2017 regular session, SB 309, made a small change to the **use** tax distribution reducing the allocation to Commerce by 0.5% down to 64.4% and created a new fund for state tribal economic development with the 0.5%.

The 2019 Legislature passed SB 338, the Montana Museums Act of 2020, to provide funding for the construction of the Montana Heritage Center and created the Historic Preservation Grant Program. This legislation revised the sales tax on accommodations and campgrounds from 3% to 4% and directed the additional 1% sales tax funding to the two new programs, 75% of the additional 1% collected for the Montana Heritage Center construction and 25% for the grant program until December 30, 2024 (Table 2). Starting January 1, 2025, that 1% collections will be distributed: 6% to the Montana Heritage Center for operation and maintenance; 6% to the Department of Fish, Wildlife, and Parks for state parks facilities maintenance, the Department of Commerce for tourism promotion, and the state-tribal economic development commission for regional Indian tourism activities; 6% to the Historic Preservation Grants program; and 7% to the capital development long range building program. (See Table 3)

Risks and Significant Factors

- During the COVID-19 pandemic, travel to Montana increased significantly as a place to vacation and social distance, driving sales and use tax collections to record highs. Collections in FY 2021 were 20% higher than projected and FY 2022 collections were 63% higher than anticipated.
- The interest in single home vacation rentals, (Airbnb, Vacation Rental By Owner (Vrbo), etc.) has become enticing for both homeowners and vacationers in Montana. Increased numbers of these types of rentals have noticeably increased sales and use tax collections. This revenue could decline if homeowners were to decide the upkeep on such properties were not worth the time or there could be increased properties coming online, which would drive up collections.
- Montana properties were in high demand during the pandemic closures driving prices of accommodations up thus increased sales and use tax revenues. Now that other vacation locations around the world have or are opening again, demand for Montana properties as vacation locations could go down driving rental costs down resulting in a decline in sales and use tax collections.
- Over the past few years, there has been an increase in available accommodations across the state with new motels and other guest accommodations being built. Increased accommodations mean more rooms available, thus increased tax collections.
- Montana fire seasons can have a significant impact on accommodations tax revenues dependent on where the fires occur and the time of year. In years with many fires and heavy smoke, travel in those areas decreases, reducing tax collections.
- Oil and gas production in eastern Montana ebbs and flows. During the boom, accommodations were at maximum capacity with new facilities built and room rates at a premium. Now prices are down and facilities are no longer at capacity.

Forecast Methodology

There are three steps used when forecasting the accommodations **sales** and **use** taxes:

Step 1: Estimate lodging receipts.

Step 2: Estimate vendor allowances. A 5% vendor allowance is permitted only on accommodations sales tax unless the filer return or payment is after the due date.

Step 3: Calculate the lodging facility **use** tax (4%) of the taxable value of lodging receipts plus the **sales** tax (3%) minus the vendor allowance. The additional 1% **sales** tax for the Heritage Center construction and the Historic Preservation Grant Program are deposited into other funds at the time of receipt.

Distribution of taxes 15-68-820, MCA.

The 4% **sales** tax is distributed 75% to the general fund and 25% to the Heritage Center construction and to the Historic Preservation Grant Program until December 31, 2024, as shown in Table 2. Beginning January 1, 2025, distributions of the non general fund 25% are redirected as shown in Table 3.

Distribution to December 31, 2024	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Heritage Ctr Construction	\$2.442	\$6.900	\$12.085	\$12.700	\$13.784	\$8.201
Heritage Preservation Grants	\$0.610	\$1.725	\$3.157	\$3.175	\$3.446	\$2.050
TOTAL	\$3.052	\$8.625	\$15.242	\$15.875	\$17.230	\$10.252

Distribution	FY 2025
6.0% O&M for Heritage Center	\$2.096
6.0% Department of Commerce	
7.0% Fish, Wildlife & Parks	\$0.147
68.5% Department of Commerce	\$1.436
24.0% Department of Commerce - regional tourism	\$0.503
0.5% State Tribal Economic Development Commission	\$0.010
6.0% Historic Pres Grants (Comm)	\$2.096
7.0% Capital Dev LRBP 17-7-209	\$2.445
25.0%	\$8.733

After the DOR administration, state agency, and general fund distributions are made from the 4% **use** tax collected, the remainder is distributed as follows (15-65-121, MCA):

1. 30% of the use tax revenue generated by state employees goes to the general fund.
2. The Montana heritage preservation and development account receives \$400,000.
3. The remainder is distributed as follows:
 - a. 2.7% or \$1 million to the MT Heritage Preservation Society
 - b. 1.0% to the Montana Historical Society for roadside historic sites and signs;
 - c. 2.5% to the university system for tourism research;
 - d. 6.5% to the Department of Fish, Wildlife and Parks for parks maintenance;
 - e. 1.4% to the Department of Fish, Wildlife, & Parks (invasive species)
 - f. 60.3% to the Department of Commerce for statewide tourism promotion;
 - g. 22.5% to regional tourism promotion agencies;
 - h. 0.5% to be used by the state-tribal economic development commission for activities in the Indian tourism region; and
 - i. 2.6% for Montana historical interpretation.

Table 4 summarizes the distribution of the lodging facility **use** tax showing actual distributions for FY 2022 and projected distributions for FY 2023 through FY 2025.

Table 4
Lodging Use Tax Distribution
(\$ millions)

	FY 2022	FY 2023	FY 2024	FY 2025
General Fund	\$0.256	\$0.018	\$0.018	\$0.018
DOR Tax Administration	\$0.131	\$0.131	\$0.131	\$0.131
MT Heritage Preservation Society	\$1.000	\$1.000	\$1.000	\$1.000
Montana Historical Society	\$0.613	\$0.613	\$0.666	\$0.735
University System	\$1.532	\$1.532	\$1.665	\$1.838
Fish, Wildlife, & Park	\$3.983	\$3.983	\$4.330	\$4.778
Fish, Wildlife, & Park (Invasive Species)	\$0.858	\$0.858	\$0.933	\$1.029
Commerce	\$36.955	\$36.954	\$40.166	\$44.327
Regional Travel Promotion	\$13.789	\$13.789	\$14.987	\$16.540
Tribal Economic Development	\$0.315	\$0.306	\$0.333	\$0.368
Montana Historical Interpretation	\$1.593	\$1.593	\$1.732	\$1.911
Total Use Tax Revenue	\$62.626	\$62.432	\$67.758	\$74.659

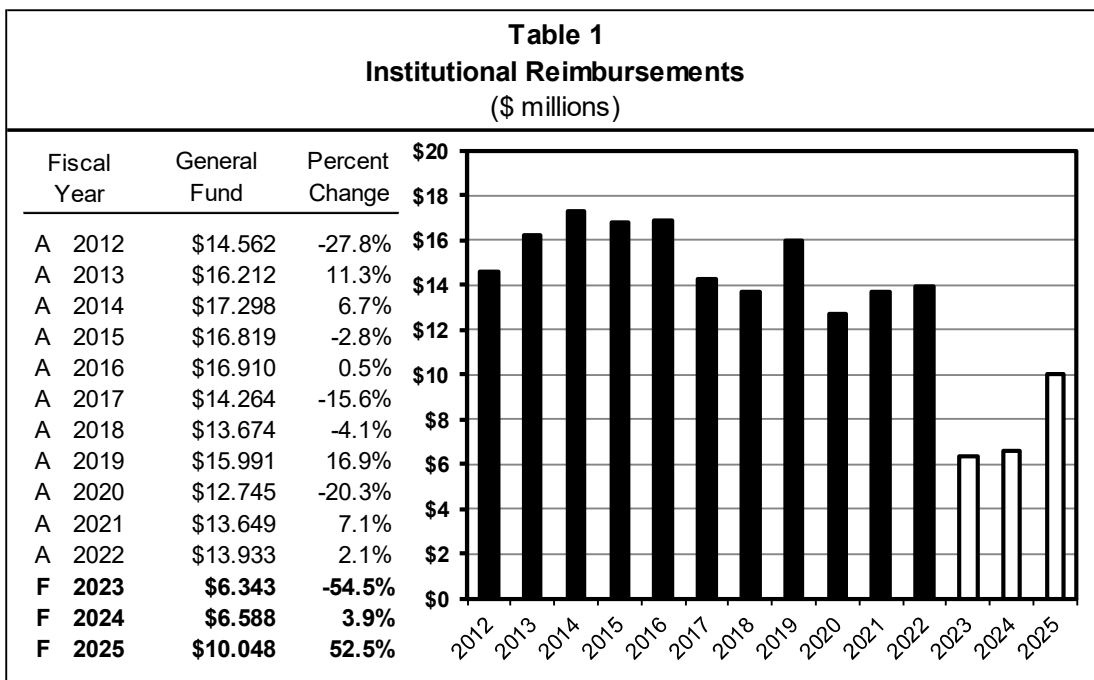
Data Sources

Fiscal year end revenues are from SABHRS MTGL0109 report. Additional data were provided by DOR's GENTAX system. Wage and national spending on accommodations from the S&P Global, October 2022, U.S. forecast.

Revenue Description

The Montana Department of Public Health and Human Services (DPHHS) operates facilities to treat persons with developmental disabilities and mental illnesses. The Intensive Behavior Center (IBC) in Boulder, Montana serves persons with developmental disabilities. The Montana State Hospital in Warm Springs (MSH) and the Montana Mental Health Nursing Care Center in Lewistown (MMHNCC) treat persons with severe mental illnesses.

The department charges patients for treatment based on cost and on their ability to pay (53-1-405, MCA). Patients and their families, patients’ insurance, Medicare, and Medicaid pay these charges. Payments go first to repay the MDC (Montana Developmental Center – through FY 2016) and MSH debt service obligations associated with the institutions’ mortgages (90-7-220 and 221, MCA). After the debt service obligations are met, payments for care at the institutions are deposited in the general fund.



Risks and Significant Factors

- SB 411, passed by the 2015 Legislature, directed the closure of the Montana Developmental Center (MDC) by July 1, 2017. HB 387 passed by the 2017 Legislature allowed the MDC to remain open until June 30, 2019.
- Actions taken by a future legislature to open a facility to serve individuals with developmental disabilities, similar to the former MDC campus, could increase revenue collections.
- In April 2022, the Centers for Medicare and Medicaid Services (CMS) terminated its provider agreement with the State of Montana for all services at the Montana State Hospital (MSH). The result of the termination is the loss of certification and ability for the State to receive reimbursement from CMS for eligible services provided to patients at the MSH. At time of publication, the Department of Public Health and Human Services estimated that the MSH would be recertified, in approximately years. For the forecast period, the MSH is not expected to achieve recertification until January 2025. The actual date the MSH is recertified will impact the actual collections for the forecast period.

Forecast Methodology

There are four steps to estimating general fund receipts:

Step 1. Estimate daily reimbursement rates for each type of reimbursement at each institution.

- The primary reimbursement sources are payments from patients and their families, insurance, Medicare, and Medicaid. Residents and their families are billed by DPHHS based on cost and their ability to pay. For adults in long-term care, the primary resource for these payments is Supplemental Security Income (SSI) disability payments. Private and SSI reimbursement rates are based on estimates provided by DPHHS.
- Insurance rates are insurance reimbursements for a few covered residents divided by the total number of care days for all residents, most of whom have no applicable coverage.
- Medicare provides coverage for medical costs for the aged and disabled. Medicare rates are set for each fiscal year by the Centers for Medicare and Medicaid Services using a formula that depends on medical cost inflation, past payments, growth in the number of persons covered, the type of health care service received and the state and county where it is received. Medicare payments per day are based upon information provided by DPHHS.
- Medicaid pays costs that residents cannot. Therefore, the Medicaid daily rate is equal to the full cost rate less the patient/family and SSI reimbursements per day. Medicaid is a joint federal-state program so only the federal portion comes to the state as net reimbursement. Medicaid also pays some ancillary service costs that are not on a daily basis, such as medications and laboratory work. Historically, the variability in Medicaid payment rates can be attributed to, in part, changes in the FMAP rates.

Step 2. Estimate the average daily population and the number of care days for which each institution will be reimbursed.

Step 3. Multiply the reimbursement rates by the number of care days to obtain reimbursement revenue.

- Private reimbursement for a fiscal year is the average daily reimbursement times the number of care days. Medicaid reimbursement for a fiscal year is the average daily reimbursement times the number of Medicaid eligible residents times the number of days.

Step 4. Subtract the institution's debt service payments to derive the general fund revenue.

- General fund revenue is total reimbursements for IBC, MSH, and MMHNCC, plus other receipts, minus debt service payments for the MSH. Debt service payments are provided by DPHHS and are shown in Table 2.

Distributions

Table 2 shows the actual reimbursements for FY 2022 and the projection of general fund revenue from institutional reimbursements in FY 2023 through FY 2025.

Fiscal Year	Reimbursements				Debt Service		General Fund						
	IBC	MSH	MMHNCC	Other Receipts	IBC	MSH							
A 2022	\$0.074	+	\$8.839	+	\$6.062	+	\$0.089	-	\$0.000	-	\$1.131	=	\$13.933
F 2023	\$0.069	+	\$1.648	+	\$4.627	+	\$0.064	-	\$0.000	-	\$0.000	=	\$6.343
F 2024	\$0.078	+	\$1.668	+	\$4.841	+	\$0.077	-	\$0.000	-	\$0.000	=	\$6.588
F 2025	\$0.078	+	\$5.277	+	\$4.692	+	\$0.070	-	\$0.000	-	\$0.000	=	\$10.048

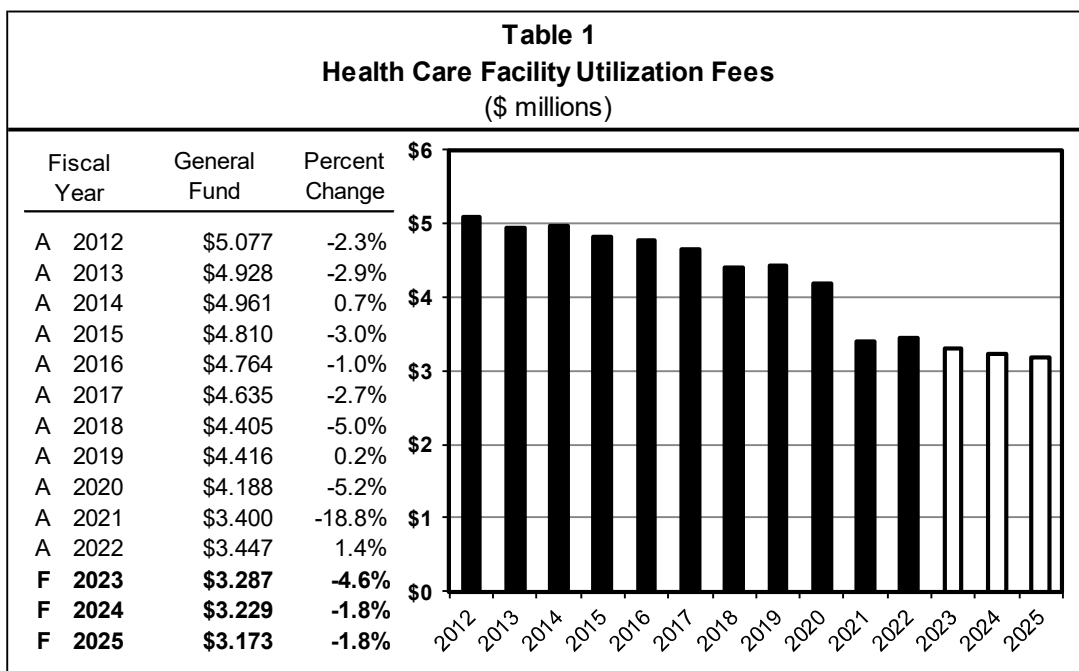
Data Sources

DPHHS provided actual and projected per day reimbursement rates and care days, as well as information regarding debt service for the facilities. FMAP percentages are based on OBPP estimates.

Revenue Description

Per 15-60-102, MCA, Montana imposes a per bed day fee on nursing facilities and intermediate care facilities for the developmentally disabled. The fee for nursing facilities was \$2.80 per bed day through FY 2003. The fee was raised to \$4.50 in FY 2004, to \$5.30 in FY 2005, to \$7.05 in FY 2006, and to \$8.30 in FY 2007. The fee increased again to \$11.30 in FY 2018 and to \$15.30 in FY 2019 (15-60-102, MCA). Through FY 2002, all fees were allocated to the general fund. Currently, \$2.80 of the fee is allocated to the general fund and the remaining \$12.50 is allocated to the nursing facility utilization fee special revenue account.

The fee for intermediate care facilities for the developmentally disabled is 6% of revenue (15-67-102, MCA). The only facility in Montana currently meeting this definition is the Intensive Behavior Center, formerly the Assessment and Stabilization Unit at the Montana Developmental Center (MDC). Fees collected from the facilities operated by the Department of Public Health and Human Services (DPHHS) are allocated 30% to the general fund and 70% to the prevention and stabilization state special revenue account.



The 2003 Legislature passed three bills that changed health care facility fees. HB 705 set the nursing facilities fee at \$4.50 in FY 2004 and \$5.30 beginning in FY 2005 and allocated the additional revenue to the nursing facility utilization fee account. HB 743 made the Montana Mental Health Nursing Care Center (MMHNCC) subject to the nursing facility utilization fee and allocated 30% of fees from this facility to the general fund and 70% to a new prevention and stabilization state special revenue account. HB 722 created a new fee equal to 5% of charges for care that applied only to the MDC. The revenue from the new fee is allocated 30% to the general fund and 70% to the prevention and stabilization state special revenue account.

In 2005, the legislature passed two bills, HB 749 and SB 82, which changed health care facility fees. HB 749 increased the facility bed tax to \$7.05 per day in FY 2006 and to \$8.30 per day in FY 2007. The increased revenue from fees collected from non-state facilities is allocated to the nursing facility utilization fee account. SB 82 increased the bed tax on intermediate facilities for the developmentally disabled from 5% to 6% and amended the definition of facilities to which the 6% bed tax applies to include intermediate care facilities for the intellectually disabled. SB 82 was effective immediately on passage and was retroactive to the beginning of tax year (TY) 2005.

In 2017, the legislature passed HB 618, which increased the facility bed tax to \$11.30 per day in FY 2018 and to \$15.30 for FY 2019. A portion of the increased revenue is allocated to the nursing facility utilization account to increase the average price paid for Medicaid nursing facility services, as well as provide increased wages for certified nursing assistants working in nursing facilities by \$0.25 per hour every six months throughout the 2019 biennium.

Risks and Significant Factors

- Taxable bed days at non-state facilities declined at an average rate of 6.5% between FY 2018 and FY 2022, driven by a significant decrease in FY 2021. Revenue from non-state facilities is expected to continue to decline over the forecast period.
- SB 411, passed by the 2015 Legislature, directed the closure of the Montana Developmental Center (MDC) by July 1, 2017. The 2017 Legislature passed HB 387 to extend the closure date for a portion of the MDC campus for two years, while also allowing the 12-bed secure unit to remain open permanently.
- Actions taken by a future legislature to open a facility to serve individuals with developmental disabilities, similar to the former Montana Developmental Center (MDC) campus, could increase revenue collections.
-

Forecast Methodology

Revenue is estimated separately for fees from private nursing homes, the MMHNCC, and the MDC. The estimate is based on forecast bed days for the MMHNCC and budget estimates for the MDC. Forecast bed days for non-state-owned facilities are based on the historic trend.

- Bed days for FY 2023 through FY 2025 for the MMHNCC are forecast based on projected usage of nursing homes. Total collections equal the number of bed days multiplied by the fee per bed day. Thirty percent of collections are allocated to the general fund and 70% are allocated to the prevention and stabilization state special revenue account. Estimated bed days for MMHNCC are estimated to increase by 0.5% per year for the period FY 2023 through FY 2025.
- The Intensive Behavior Center, formerly the Montana Developmental Center, is the only facility in Montana subject to the intermediate care facility utilization fee. The fee is 6% of the cost of care billed to residents and third parties. The cost of care for FY 2023 through FY 2025 is estimated by DPHHS, which operates the facility, and is based on planned numbers of residents and expected costs. Thirty percent of collections are allocated to the general fund and 70% are allocated to the prevention and stabilization account.

Distributions

Total collections for each fund are calculated by summing the collections from non-state facilities and collections from the two state facilities. Table 2 shows the actual allocation for FY 2022 and the projected allocation for FY 2023 through FY 2025.

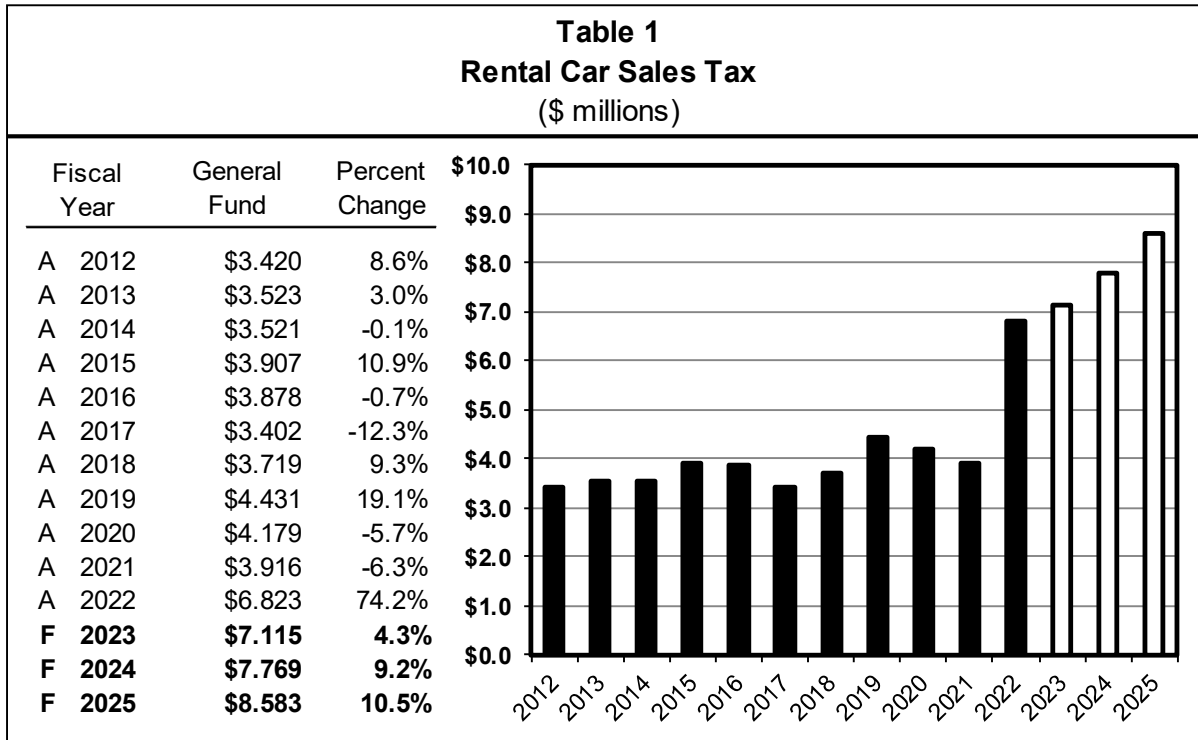
Table 2				
Health Care Facilities Utilization Fee				
Collections and Distribution				
(\$ millions)				
	FY 2022	FY 2023	FY 2024	FY 2025
Nursing Facility Utilization Fee Account	14.424	13.769	13.528	13.291
Prevention and Stabilization Account	0.504	0.473	0.464	0.456
General Fund	3.447	3.287	3.229	3.173
Total Collections	18.375	17.528	17.221	16.920

Data Sources

Department of Revenue GENTAX reports provided historical information on the number of taxable bed days. SABHRS provided historical tax revenue and allocation information.

Revenue Description

Montana levies a 4% tax on base rental charges on rental vehicle sales per 15-68-102(1b), MCA. The rental vehicle sales tax collections began in FY 2004. Table 1 shows actual general fund revenue for the rental car sales tax for FY 2012 through FY 2022 and projected revenue for FY 2023 through FY 2025.



The COVID-19 pandemic bottled up travel in 2020. The seal on this pent-up demand began to break in the spring of 2021 and the flood of travelers was fully flowing during summer months. Visitation numbers have remained strong so far in 2022. The influx of visitors conflated with the supply-side shock to vehicle prices, sending rental vehicle prices soaring. The market dynamics of rising demand and tightening supply produced incredible growth in rental vehicle sales tax revenue in FY 2022. Tax revenue growth is expected to slow considerably in FY 2023 and then turn to more robust increases throughout the 2025 biennium. Continued growth in tax receipts is supported partially by a step-up in the price level for rental cars brought about by the inflationary environment of the past 12-18 months.

Risks and Significant Factors

- Rental car sales tax revenue is a function of the volume of rental vehicle sales and the value of those sales because the tax is applied to the rental price.
- The combination of slowing economic growth and persistently elevated consumer price inflation is likely to bring some slowdown to travel demand in the near-term. While an increasing price level puts constraints on consumer spending, it also contributes positively to sales tax receipts via higher rental prices. The net effect is nuanced and depends on the distribution of price increases across the economy.

Forecast Methodology

Step 1: Forecast quarterly values of taxable rental car sales using a seasonal exponential smoothing model. Information of past levels, trends, and seasonal variations of the series are all captured by this method of data estimation.

Step 2: Sum quarterly estimates to fiscal year totals and apply the nominal rental car tax rate of 4% to taxable sales to obtain total tax revenue.

Step 3: Allocate 75% of total tax revenue to the general fund.

Distribution

This tax is distributed 75% to the general fund and 25% to the state special revenue senior citizen and persons with disabilities transportation services account provided for in 7-14-112, MCA. The change to the distribution of rental car sales tax revenue is a result of SB 180 from the 2015 legislative session (prior to this the revenue was distributed 100% to the general fund).

Table 2 Distribution of Rental Car Sales Tax (\$ millions)				
Fiscal Year	General Fund	Transportation Aid Fund	Total	Percent Change
A 2016	\$3.878	\$0.392	\$4.269	9.28%
A 2017	\$3.402	\$1.134	\$4.536	6.25%
A 2018	\$3.719	\$1.240	\$4.959	9.31%
A 2019	\$4.431	\$1.477	\$5.908	19.14%
A 2020	\$4.179	\$1.393	\$5.572	-5.67%
A 2021	\$3.916	\$1.305	\$5.221	-6.31%
A 2022	\$6.823	\$2.274	\$9.097	74.25%
F 2023	\$7.115	\$2.372	\$9.487	4.29%
F 2024	\$7.769	\$2.590	\$10.359	9.19%
F 2025	\$8.583	\$2.861	\$11.445	10.48%

Data Sources

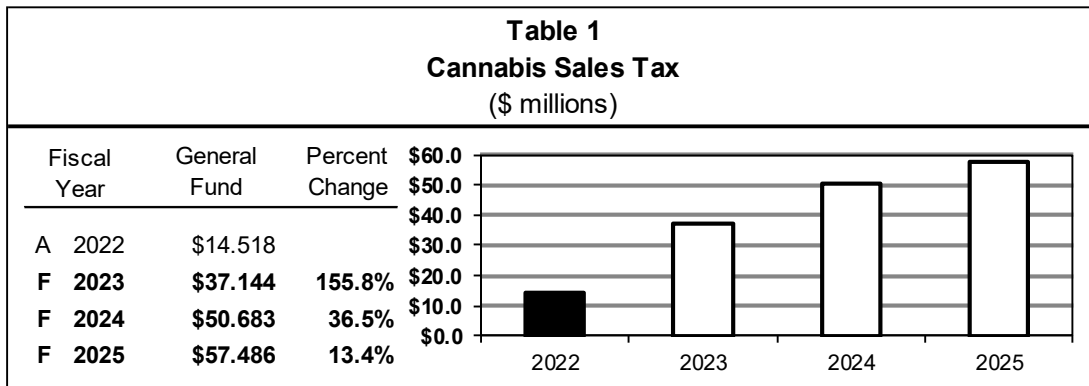
Historical rental car sales tax data are from the Department of Revenue. Tourism data are from the University of Montana Institute for Tourism and Recreation Research.

Revenue Description

In 2020, the voters in Montana passed Initiative 190 (I-190) which allowed the legal sale and taxation of recreational cannabis to persons aged 21 years and older. The 2021 Legislature passed HB 701 which implemented many of the provisions of I-190. According to 15-64-102, MCA, the marijuana dispensaries are required to collect a 4% tax on medical cannabis and a 20% tax on adult use cannabis. The sales tax along with all license fees, and penalties are deposited into a state special revenue account from which all disbursements, are made.

After reimbursing the Department of Revenue Cannabis Control Division for operating costs and transferring \$6 million to the Helping End Addiction through Recovery and Treatment (HEART) fund, the remaining funds are disbursed according to 16-12-111, MCA to the Department of Fish, Wildlife and Parks(FWP), the Department of Military Affairs (DMA), the Department of Justice (DOJ), and the general fund. See the table below for the disbursement amounts and percentages:

Gross Collections	Amount
DOR Operating Costs	Reimbursed
DPHHS - HEART Fund	\$6,000,000
Remaining Funds	Amount
FWP - Wildlife Habitat	20%
FWP - State Parks	4%
FWP - Trails & Recreation	4%
FWP - NonGame Wildlife	4%
Dept. Military Affairs	\$200,000
Dept. of Justice (2023B only)	\$150,000
Board of Crime Control	\$150,000
General Fund	Balance of Funds



Risks and Significant Factors

- Annualized per capita cannabis sales were \$362 for the last six months of FY 2022. Per capita sales are expected to grow by 33% in FY 2023, 24% in FY 2024, and 9% in FY 2025
- Cannabis is a Schedule I drug according to the U.S. Drug Enforcement Administration. Any action the federal government takes that changes cannabis' legal status in Montana could impact sales and tax collections.
- Estimated sales growth rates are based on actual cannabis sales growth in Washington, Oregon, California, Colorado, Nevada, and Alaska. Montana's actual sales history is extremely limited, making forecasts challenging and subject to larger margins of error.

Forecast Methodology

The general fund share of the cannabis tax is prepared in three steps:

Step 1. Calculate the per capita sales of cannabis.

Step 2. Total revenue is projected by multiplying the prior year sales by the per capita growth rate, the year over year sales growth, and the effective tax rate.

Step 3. Total revenue is allocated to the general fund, DPHHS, FWP, DMA, and the DOJ per statute.

Distribution

Table 2 shows the actual allocation for FY 2022 and the projected allocation of cannabis tax revenue to the general fund, DPHHS, FWP, DMA, and the DOJ for FY 2023 through FY 2025. DPHHS revenue allocation is subtracted from total cannabis tax revenue to obtain total general fund and other agencies' share.

Description	FY 2022	FY 2023	FY 2024	FY 2025
Gross Revenue	\$ 28.306	\$61.138	\$81.049	\$ 91.052
DPHHS HEART Fund (\$6M)	\$ 6.000	\$ 6.000	\$ 6.000	\$ 6.000
Available for Distribution	\$ 22.306	\$55.138	\$75.049	\$ 85.052
FWP - Wildlife Habitat (20%)	\$ 4.461	\$11.028	\$15.010	\$ 17.010
FWP - State Parks (4%)	\$ 0.892	\$ 2.206	\$ 3.002	\$ 3.402
FWP - Trails & Recreation (4%)	\$ 0.892	\$ 2.206	\$ 3.002	\$ 3.402
FWP - NonGame Wildlife (4%)	\$ 0.892	\$ 2.206	\$ 3.002	\$ 3.402
Dept. Military Affairs (\$200K)	\$ 0.200	\$ 0.200	\$ 0.200	\$ 0.200
Dept. of Justice (\$300K 2023B Only)	\$ 0.300	\$ -	\$ -	\$ -
Board of Crime Control (\$150K)	\$ 0.150	\$ 0.150	\$ 0.150	\$ 0.150
General Fund	\$ 14.518	\$37.144	\$50.683	\$ 57.486

Data Sources

Department of Revenue GENTAX reports provided historical information on the gross sales, taxes due, and penalties by produce. SABHRS provided cannabis tax revenue and allocation information. The Department of Revenue cannabis sales report website provides monthly sales and tax estimates by county.



GOVERNOR
GREG GIANFORTE

STATE OF MONTANA

OTHER GENERAL FUND
REVENUE
SECTION 9

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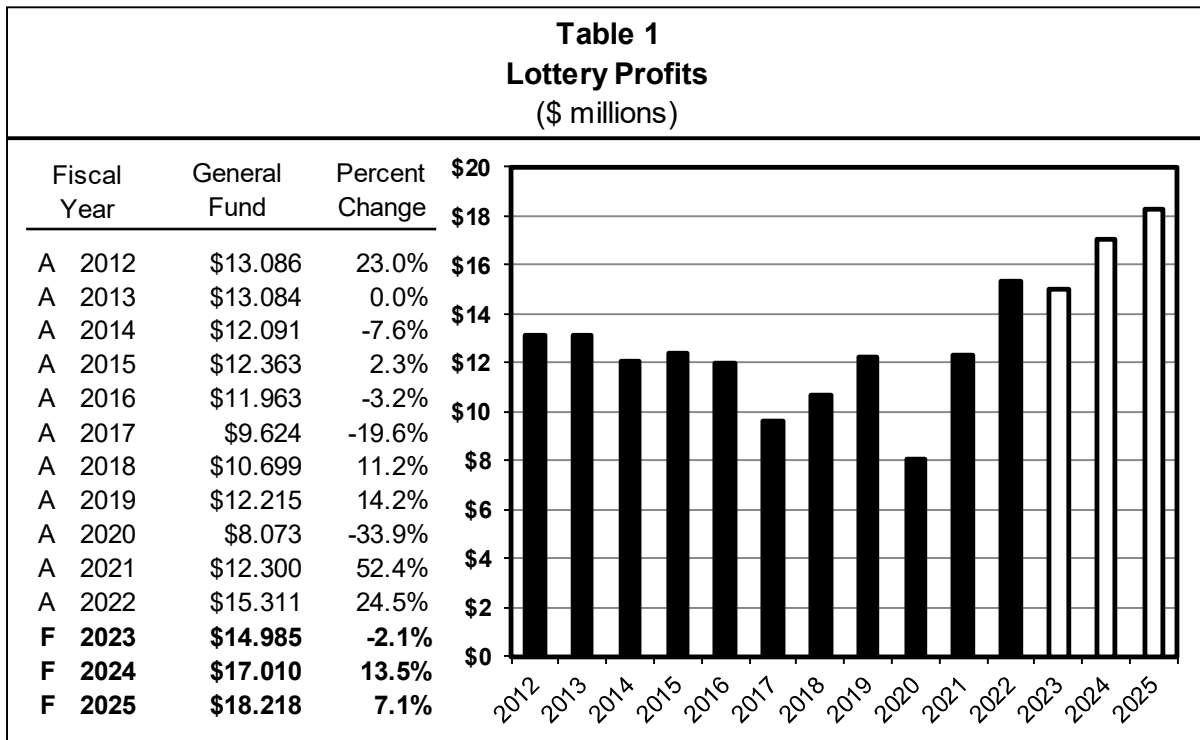


GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Revenue Description

In accordance with 23-7-402, MCA, a portion of net revenue from the operation of the lottery is to be deposited quarterly into the state general fund. Net revenue is equivalent to the difference between gross revenue from ticket sales, sports wagering, license fees, interest earnings, and miscellaneous sources and expenses associated with prize payouts, vendor fees, commissions, and operating costs. Net revenue less the statutory transfer to the STEM scholarship fund is transferred to the general fund at the end of the fiscal year.

Table 1 shows actual lottery revenue transferred to the general fund for FY 2012 through FY 2022 and forecast revenues for FY 2023 through FY 2025.



Variability in general fund lottery collections over the past decade has been concentrated in the most recent five-year window spanning FY 2017 – FY 2022. Renegotiation of the Montana Lottery’s vendor contract and the hangover from the prior year’s large Powerball jackpot resulted in depressed revenue in FY 2017 through the channels of higher costs and lower sales. Sales revenue rose steadily in FYs 2018 and 2019, leading to general fund revenue growth in each of those years. Lower sales linked to pandemic disruptions, higher costs, and the advent of a new funding mechanism for the STEM scholarship program combined to significantly lower the amount of net revenue transferred to the general fund in FY 2020. Rising disposable incomes coupled with the rollout of newly legalized sports wagering produced strong revenue growth in both FY 2021 and FY 2022.

A new era for the Montana Lottery began following the 2019 legislative session. HB 725 and SB 60 from the 2019 session ushered in significant changes to the operation of the Lottery. HB 725 legalized sports wagering statewide, and SB 60 changed the way Lottery net revenue is allocated to the STEM scholarship fund.

Since FY 2016, there has been a structure in place for the Montana Lottery to distribute revenue to a STEM scholarship fund. Prior to SB 60, any excess lottery profit revenue over an established general fund cap would be transferred to the STEM scholarship fund. Beginning in FY 2020, the provisions of SB 60 prescribe a fixed distribution to the STEM

scholarship fund before any lottery revenue is transferred to the general fund. The amount of the statutory distribution rises from \$0.5 million in FY 2020 to \$2.25 million in FY 2024 where it remains for all subsequent fiscal years.

The larger change for the Montana Lottery came from the passage of HB 725, which legalized sports wagering on the premises of licensed establishments in Montana. At the same time sports wagering was being rolled out in Montana, the arrival of the COVID-19 virus put a halt to most sports leagues across the nation. Not only were there a sparse number of sporting events to bet on, but the establishments licensed to offer the sports wagering product in Montana were temporarily shuttered to help prevent the spread of the virus. Consequently, the inaugural run of sports wagering in FY 2020 was lackluster at best. Sports leagues resumed play in early FY 2021 and sports wagering activity picked up rapidly. Sports wagering added \$41 million to gross revenue in FY 2021 and \$45 million in FY 2022. Montana's sports wagering market is still maturing as public awareness and the number of licensed establishments continue to grow.

Risks and Significant Factors

- Fluctuations in the share of disposable income that lottery participants allocate to the purchase of lottery games impacts gross receipts. Disposable incomes have been strong recently, supported by federal fiscal stimulus and economic recovery from the pandemic shock, but a slowdown could be on the horizon. High inflation and weakening economic growth have hammered consumer sentiment in 2022 and recession fears are becoming more acute. Consumers may pull back on discretionary spending if expectations of future prosperity become sufficiently gloomy.
- The size of lottery jackpots influences spending on lottery games. Large jackpots attract more players and encourage existing players to participate at a higher rate.
- Historical gross receipts data suggests that consumers prefer to maintain a consistent level of average annual lottery expenditures across years. This behavior is evident when comparing years with large Powerball jackpots to the years immediately following. Consumers appear to reduce lottery expenditures after a large Powerball jackpot has been won to mitigate their higher outlays when trying to win the jackpot. The result of such behavior is increased volatility in lottery gross receipts surrounding big Powerball years.
- Sports wagering, the newest addition to the lottery suite of offerings, is still in its early stages. Montanans' consumption preferences for the sports wagering product are still coming into focus. Limited historical data creates wide error bands around forecast values, but these bands should narrow as the historical data series grows with each additional year of observation.

Forecast Methodology

Lottery revenue is forecast using four main steps:

Step 1. Estimate gross receipts from lottery games. A linear regression model is used to predict gross receipts from lottery games, which are modeled as a function of disposable income in Montana and a dummy variable to account for Powerball changes and the addition of machines at new locations that occurred in FY 2012. Disposable income is defined as the income individuals possess after income tax obligations have been removed. Income influences individuals' willingness to pay for lottery games, and gross lottery receipts are predicted to respond positively to changes in disposable income. The dummy variable that accounts for the increase in Powerball jackpots and the addition of new machines is predicted to have a positive effect on lottery gross receipts in future years. More machines increase the accessibility of lottery games, which is assumed to lead to increased participation. Additionally, larger jackpots may increase participation if individuals change their lottery risk preferences due to the possibility of a larger payout.

The results of the linear regression model show that both disposable income and Powerball changes/new machines are statistically significant predictors of lottery gross receipts. Both variables have positive coefficients, meaning increases in disposable income lead to increases in lottery revenue and that the change to Powerball jackpots and new machine placements contributed to positive lottery revenue growth in FY 2012 and beyond. The forecast values of gross receipts are adjusted for past model error.

Step 2. Estimate revenue from sports wagering. The short historical series (8 quarterly observations) prevents effective modelling of the observable data. Thus, sports wagering revenue is simply projected to rise at a constant 10% rate each year from FY 2023 – FY 2025. This pace is slightly higher than the 9% mark recorded in FY 2022.

Step 3. Estimate direct game costs associated with prize payouts, commissions and vendor fees. Direct game costs are expected to equal about 80% of gross receipts for each year in the forecast.

Step 4. Add other income to gross receipts and then subtract direct game costs as well as operating expenses to determine net revenue. Include adjustments made to net revenue (historically, these adjustments have been comprised of equipment depreciation and post-employment benefit costs) and subtract the STEM scholarship fund distribution to arrive at the amount due to be transferred to the general fund. Other income comes primarily from license fees and short-term interest earnings on money held in the enterprise fund before it is transferred to the general fund. A five-year historical average is used to estimate other income. Projected operating expenses are estimated based on a historical average of the ratio of operating expenses to gross receipts.

Table 2 shows the breakdown of income and expenditures that are used in the calculation of lottery net revenue and final general fund revenue.

Fiscal Year	Gross Receipts	Other Income	Direct Game Costs	Operating Expenses	Net Revenue	Other Adjustments	STEM Distribution	General Fund Revenue
A 2012	\$52.616	+ \$0.013	- \$35.733	- \$4.069	= \$12.826	+ \$0.259		= \$13.086
A 2013	\$56.821	+ \$0.010	- \$39.869	- \$4.153	= \$12.810	+ \$0.274		= \$13.084
A 2014	\$53.108	+ \$0.020	- \$36.635	- \$4.675	= \$11.819	+ \$0.271		= \$12.091
A 2015	\$52.342	+ \$0.041	- \$36.377	- \$4.604	= \$11.401	+ \$0.962		= \$12.363
A 2016	\$59.727	+ \$0.051	- \$42.019	- \$4.948	= \$12.812	+ -\$0.848		= \$11.963
A 2017	\$52.460	+ \$0.047	- \$38.949	- \$4.426	= \$9.132	+ \$0.492		= \$9.624
A 2018	\$56.402	+ \$0.055	- \$41.561	- \$4.465	= \$10.430	+ \$0.269		= \$10.699
A 2019	\$60.273	+ \$0.037	- \$44.070	- \$3.809	= \$12.431	+ -\$0.217		= \$12.215
A 2020	\$59.891	+ \$0.027	- \$46.797	- \$3.899	= \$9.222	+ -\$0.649	- \$0.500	= \$8.073
A 2021	\$112.328	+ \$0.004	- \$94.691	- \$4.522	= \$13.119	+ \$0.181	- \$1.000	= \$12.300
A 2022	\$116.053	+ \$0.002	- \$93.766	- \$4.948	= \$17.341	+ -\$0.530	- \$1.500	= \$15.311
F 2023	\$122.004	+ \$0.011	- \$99.793	- \$5.047	= \$17.174	+ -\$0.189	- \$2.000	= \$14.985
F 2024	\$128.525	+ \$0.006	- \$103.836	- \$5.154	= \$19.541	+ -\$0.281	- \$2.250	= \$17.010
F 2025	\$135.375	+ \$0.006	- \$109.370	- \$5.249	= \$20.762	+ -\$0.294	- \$2.250	= \$18.218

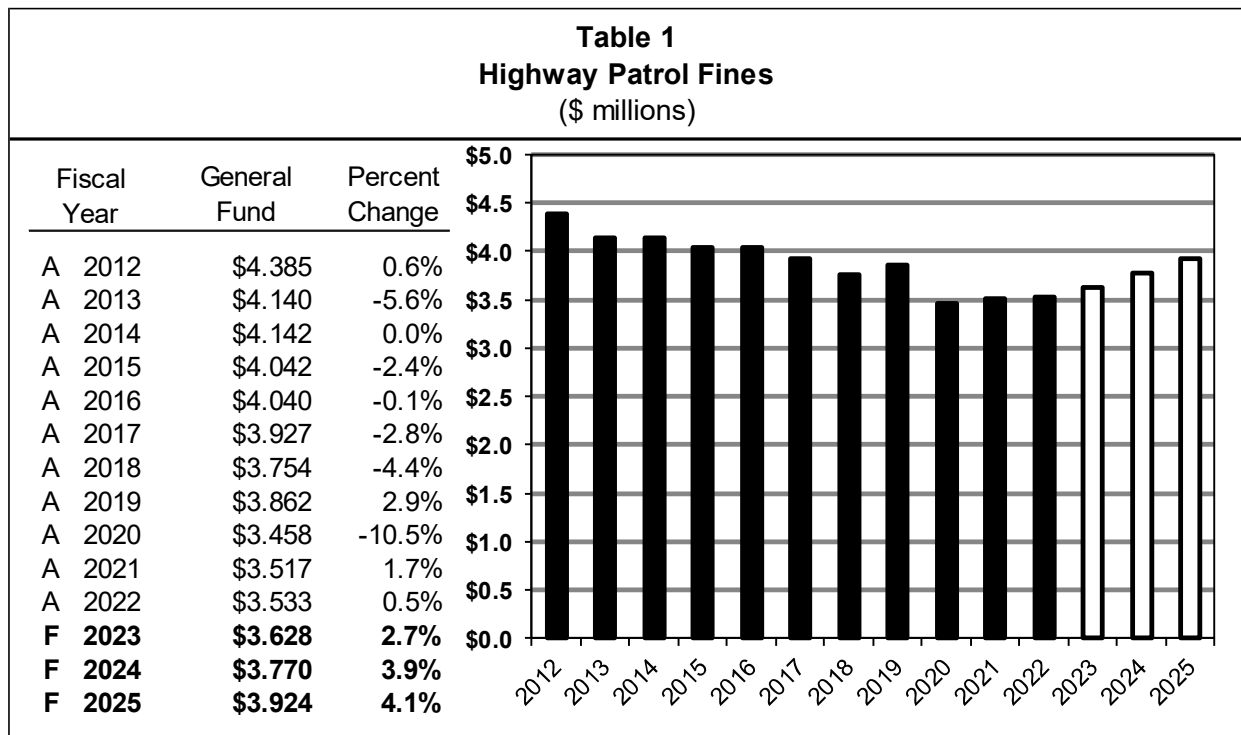
Data Sources

Revenue and expenditure data are obtained from SABHRS and the Montana State Lottery. Montana disposable income data are sourced from S&P Global.

Revenue Description

Highway patrol fines are provided for in Title 61, Chapter 8, Parts 3 and 7, MCA. Fines for citations are collected in Justice Courts. Highway patrol fines are distributed 50% to the county general fund and 50% to the state general fund, pursuant to 3-10-601, MCA. One-hundred percent of fines resulting from convictions due to highway patrol officer stops for highway use or vehicle violations, processed in any other court, are deposited in the state general fund (61-12-701, MCA).

Table 1 shows actual general fund revenue from highway patrol fines for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



The table shows that fine revenues occasionally increase (FY 2010) followed by modest annual declines. Declines are assumed to be attributable to increases in gasoline prices and to changes in policy stance (e.g., emphasis on safety and visible presence), management changes (SB 264 (2005) prohibiting citation quotas) and more recently HB 375 (2015) allowing higher interstate highway speed limits (albeit with increased fine levels). Higher speed limits appear to have led to modest annual declines in total collections. Highway patrol fine collections are forecast to begin to recover after the pandemic and forecast lower fuel prices.

Risks and Significant Factors

- Changes in patrol operations and the economy can typically change collections by around \$100,000 per year.
- Changes in traffic laws generally produce only small changes in collections as new violations can crowd out other citations.
- SB 375 (2015) increased speed limits on interstate highways and increased penalties. Revenue was assumed to increase by nearly \$100,000 per year, however, the increases did not materialize. Higher fines may have led to more contested citations and drivers may speed less often with the higher limits.
- Drivers may become accustomed to the new limits and citations may increase.
- Declining gasoline prices generally lead to increased highway patrol fine revenue. A 10-cent decrease in average annual gasoline prices historically leads to about a \$45,000 increase in fines.

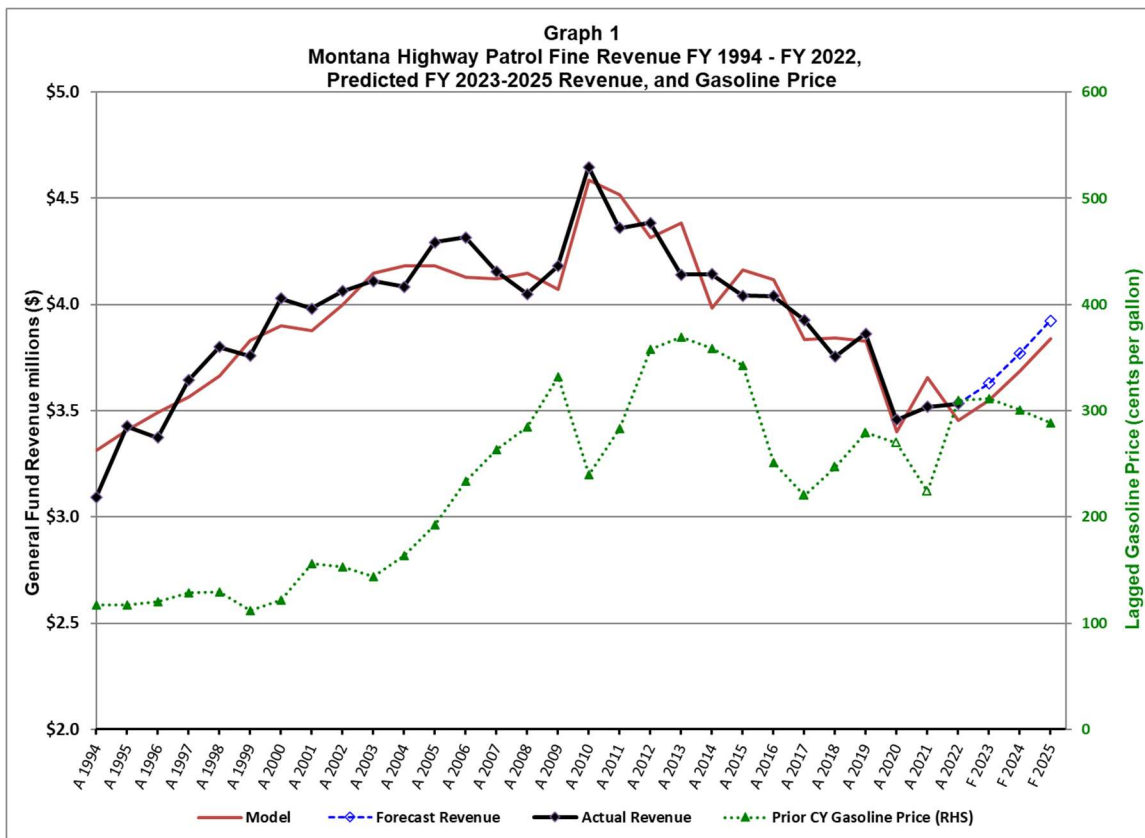
Forecast Methodology

The estimate is based on a model of revenue as a function of time-trend and prior calendar year average gasoline prices. Law and policy changes appear to have offset the effects of the basic model of time and gasoline price. Adding variables

to account for the effects of eliminating the use of citation quotas and speed limit changes restored model fit. The level of gasoline price may serve as an indicator of the change (relative to trend) in traffic volume and possibly vehicle velocity. Increases in fuel prices above seasonal trend are believed to have a negative effect on discretionary travel. Structurally, collections lag citations as adjudication and revenue recording have natural lags.

The COVID-19 pandemic changed driving behavior, highway patrol operations and the functioning of the Courts. The closure of the northern border to non-commercial travel also shifted traffic flows. These restrictions have been released. Tourism and travel has surged with the relaxation of pandemic restrictions, the model adjusted for this apparent change in post-pandemic behavior.

The model fit and forecast are presented in Graph 1.



Distribution:

All highway patrol fines received by the state are directed to the general fund.

Data Sources

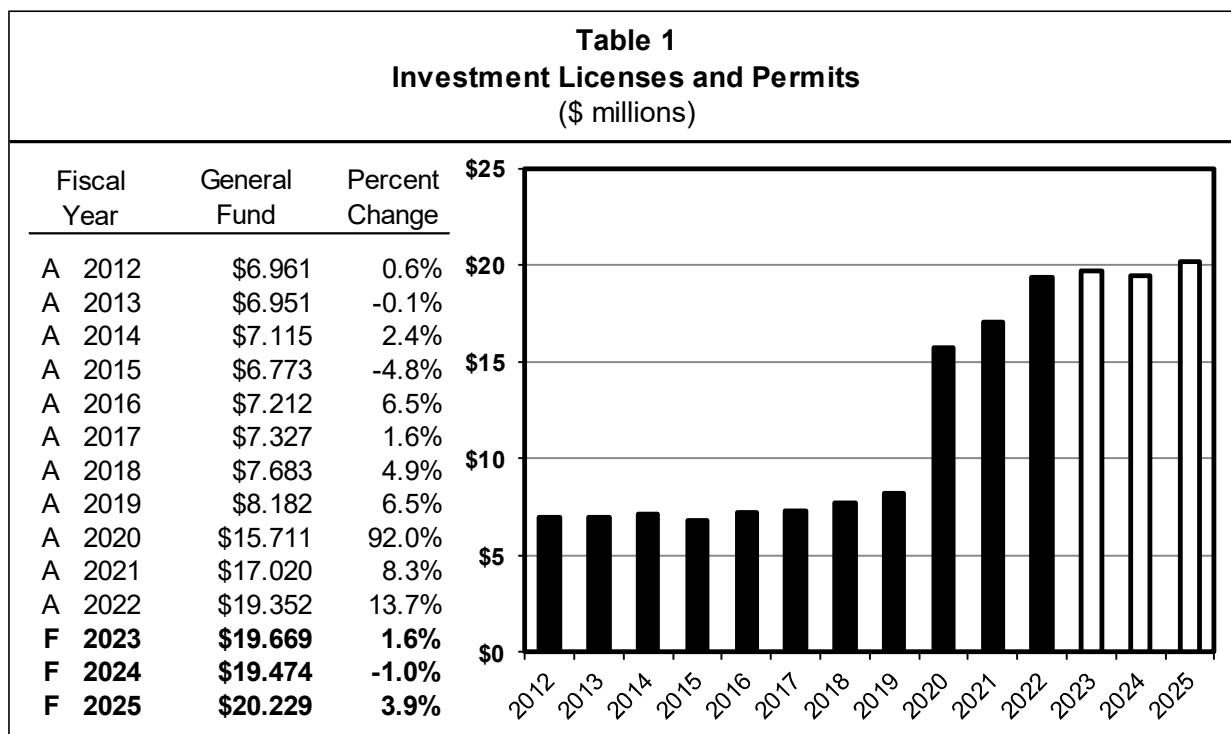
Historical tax revenue is from the state accounting system (SABHRS). The Highway Patrol provided fiscal year operations reports. Gasoline prices and the gasoline price forecasts are from S&P Global national forecast (October 2022).

Revenue Description

Individuals and firms who plan to sell securities in Montana must register with the Commissioner of Securities and Insurance (CSI) and pay fees as specified in 30-10-209, MCA. The fee to register as a broker-dealer or investment advisor is \$400 a year.

Newly issued securities not regulated at the federal level, or traded on official exchanges, or otherwise exempt from state regulation, must be registered with CSI. The first year registration fees are \$200 plus 0.1% of the issue value over \$100,000, up to a maximum fee of \$1,000. In succeeding years, the registration may be renewed for a fee of 0.1% of the value of securities offered with a minimum of \$200 and a maximum of \$1,000.

Table 1 shows that investment licenses and permits revenue has trended steadily upward with variation due to financial sector performance.



Risks and Significant Factors

- Revenue tends to move with financial markets. Recent market declines are anticipated to lead to slow to slightly negative growth in FY 2023 and FY 2024 with recovery in FY 2025. Despite market volatility, securities brokers-dealers and sales representatives register in increasing numbers. Registration is linked to the firm, when individuals change firms, they are required to re-register.
- Approximately 1% of all Montana registered broker-dealer salespeople and investment advisor representatives are physically located in Montana (around 1,250 of 141,000).
- All investment advisors, broker-dealers, and their representatives and firm’s register and pay their fees through the (national) Financial Industry Regulatory Authority (FINRA) electronic clearinghouse. This has been mandatory since 2003. In 2021, there were 612,500 FINRA-registered representatives working for 3,400 firms. Approximately 21.5% of registered representatives were licensed to do business in Montana at the end of 2021.
- The 2019 Legislature in HB 694 doubled the fees for non-resident investment advisors and representatives, as well as for broker-dealers and their salespersons.
- Related to investment licenses and permits, securities portfolio fee collections (about \$8 million) fund CSI securities activities with excess collections transferred to the general fund (and recorded as “Other Revenue”) at fiscal year-end. HB 81 (2011) created a temporary state special revenue fund for securities fraud restitution.

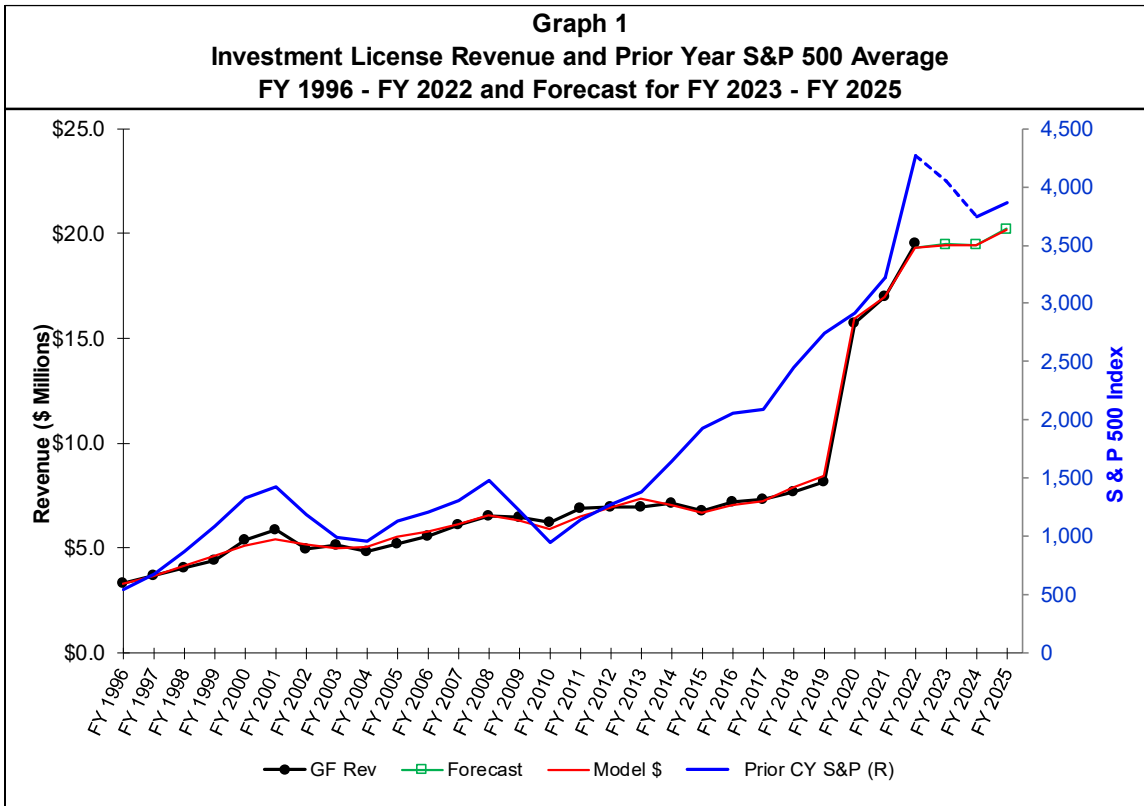
Restitution is paid to victims of securities fraud subject to application, a cap, and review by a CSI panel. HB 81 (2013) directed 4.5% of portfolio fee collections to the fund (about \$360,000 per year), with a FY 2017 sunset. HB 137 (2017) changed the sunset to after FY 2021 and suspended the transfer for FY 2018 and FY 2019. HB 66 (2021) reauthorized the fund through FY 2027 and lowered the transfer to 3% of portfolio fee collections.

Forecast Methodology

Insurance license and permit revenue is forecast using a regression model of time, and the natural log of prior fiscal year level of the S&P 500. A dummy variable has been added to account for the reclassification of certain fees by CSI in January 2014. The accounting reclassification reduced investment license fee collections. A dummy variable was added to account for HB 684 fee rates changes starting in FY 2020.

The model produces a strong fit with narrow confidence bounds. Though HB 694 rate changes widened the confidence intervals (a standard error of \$796,000 instead of \$270,000). A 100 point change in the S&P 500 index shifts collections by approximately \$172,000. The model reflects the time trend and the change in the S&P 500 index forecast. With the doubling of nonresident fees in May 2019, there are only three fiscal years of data with the new rates, however, the HB 694 adjustment variable appears to be performing well. January 2023 registrations will provide an opportunity to evaluate the model as FINRA requires annual registrations by December each year.

The model fit and forecast are presented in Graph 1. The graph shows that revenues move in with time and financial markets after accounting for the change in fee rates (HB 694) in May 2019.



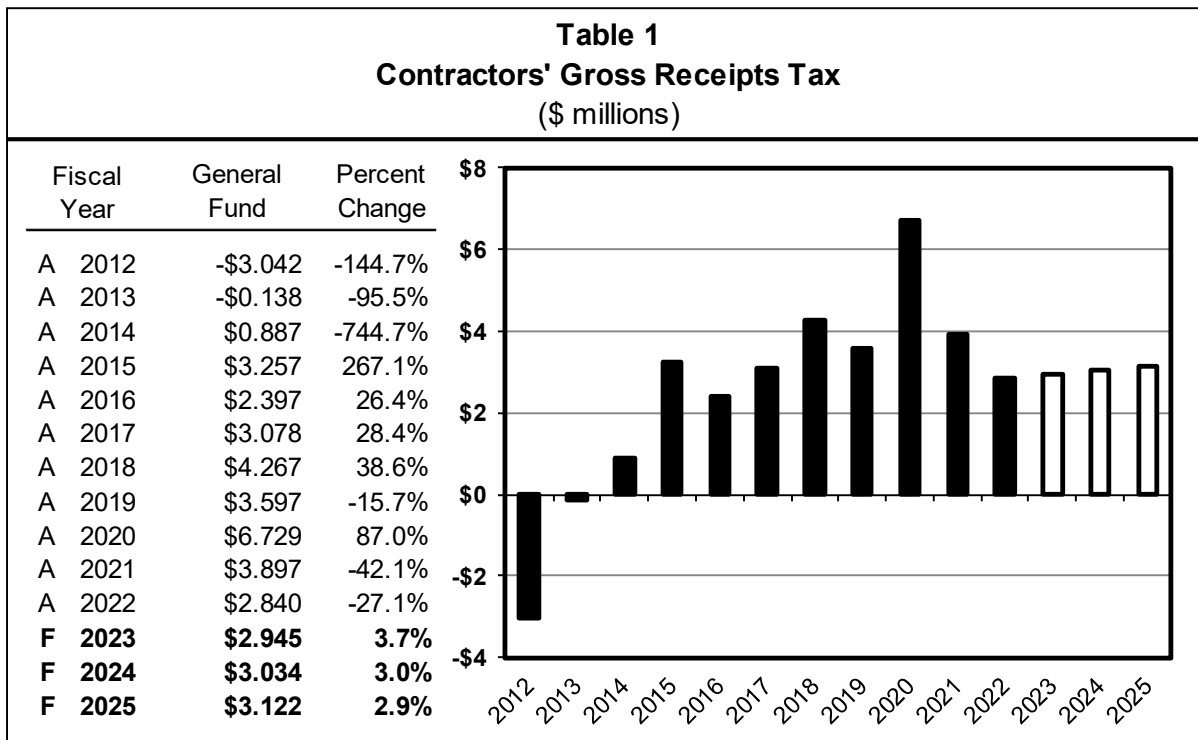
Data Sources

Collections are from SABHRS. CSI provides counts of Montana registrations. National registrations are from FINRA (<https://www.finra.org/media-center/statistics#key>). The S&P 500 and forecast are from S&P Global (October 2022).

Revenue Description

In accordance with 15-50-205, MCA, a 1% tax is assessed on the gross receipts contractors receive for construction work within Montana for federal, state, or local government projects. Contractors may use the amount of gross receipts tax paid as an offset or credit against either their corporation income tax or their individual income tax. In addition, any personal property taxes paid on property located within Montana and used in the contractor's business may be used to obtain a refund of contractors' gross receipts taxes paid. Any tax not credited or refunded is allocated to the general fund.

Table 1 shows actual general fund revenue from the contractors' gross receipts tax for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



Risks and Significant Factors

- The level of contractors' gross receipts tax is dependent on the amount of public construction contracts available from federal, state, and local government. Federal and state contracts provide the bulk of work for public contractors. Growth in public infrastructure investment in Montana increases the size and number of public contracts and leads to higher tax collections.
- Pandemic-era federal stimulus spending, primarily from the CARES Act and ARP Act, juiced demand for public construction services in Montana. The long tail on the administration and distribution of the state and local aid received from the ARP Act is expected to keep public contract activity elevated through the 2025 biennium.
- The balance between the value of the public contract and the amount of property taxes and vehicle taxes paid on the equipment used for the construction work influences the amount of gross receipts tax due to the general fund. If a lot of equipment is used for a relatively small value contract, it is possible for the contractor to receive a refund instead of owing tax, which is a negative draw on general fund revenue.
- Economic conditions and public policy influence the amount of spending governments allocate to public infrastructure. Spending can increase in both good economic times and bad economic times, and public policy is often dictated by the political makeup of governing bodies.

Forecast Methodology

There are three steps used when calculating public contractors' gross receipts tax revenue:

Step 1. Estimate gross tax receipts based on the expected value of public contracts. The total value of public contracts is divided into two categories: contracts supplied by the Montana Department of Transportation (MDT), and contracts supplied by other entities such as the federal government. Other contract payments historically have fluctuated more than MDT contract payments over the years. Large increases in other contract payments appear to be linked to federal stimulus spending.

MDT contract payments are forecast using a linear exponential smoothing model and are estimated to grow at a consistent rate over the forecast period. Other contract payments are projected forward using a simple exponential smoothing model and are expected to remain steady throughout the forecast period at an elevated level as state and local governments continue to spend their federal ARPA dollars on projects in the public domain.

Step 2. Forecast total tax credits and refunds as a consistent share of the value of non-MDT contracts.

Step 3. Calculate the tax liability for the fiscal year and add the amount of credits and refunds to obtain general fund revenue.

Table 2 shows actual gross receipts from MDT and other contractors' payments, total credits and refunds, and general fund revenue for FY 2012 through FY 2022. Forecast values are shown for FY 2023 through FY 2025.

Fiscal Year	MDT	Other	Credits and Refunds	General Fund
A 2012	\$368.23	\$138.58	(\$8.11)	(\$3.04)
A 2013	\$306.05	\$110.11	(\$4.30)	(\$0.14)
A 2014	\$324.84	\$115.88	(\$3.52)	\$0.89
A 2015	\$335.65	\$112.45	(\$1.22)	\$3.26
A 2016	\$295.29	\$152.84	(\$2.08)	\$2.40
A 2017	\$266.98	\$151.81	(\$1.11)	\$3.08
A 2018	\$284.64	\$185.64	(\$0.44)	\$4.27
A 2019	\$351.28	\$97.28	(\$0.89)	\$3.60
A 2020	\$400.38	\$253.61	\$0.19	\$6.73
A 2021	\$372.42	\$501.85	(\$4.85)	\$3.90
A 2022	\$327.28	\$922.32	(\$9.66)	\$2.84
F 2023	\$336.16	\$888.27	(\$9.30)	\$2.94
F 2024	\$345.04	\$888.27	(\$9.30)	\$3.03
F 2025	\$353.92	\$888.27	(\$9.30)	\$3.12

Data Sources

Gross tax receipts, tax credits, refunds, and net general fund collections are obtained from SABHRS.

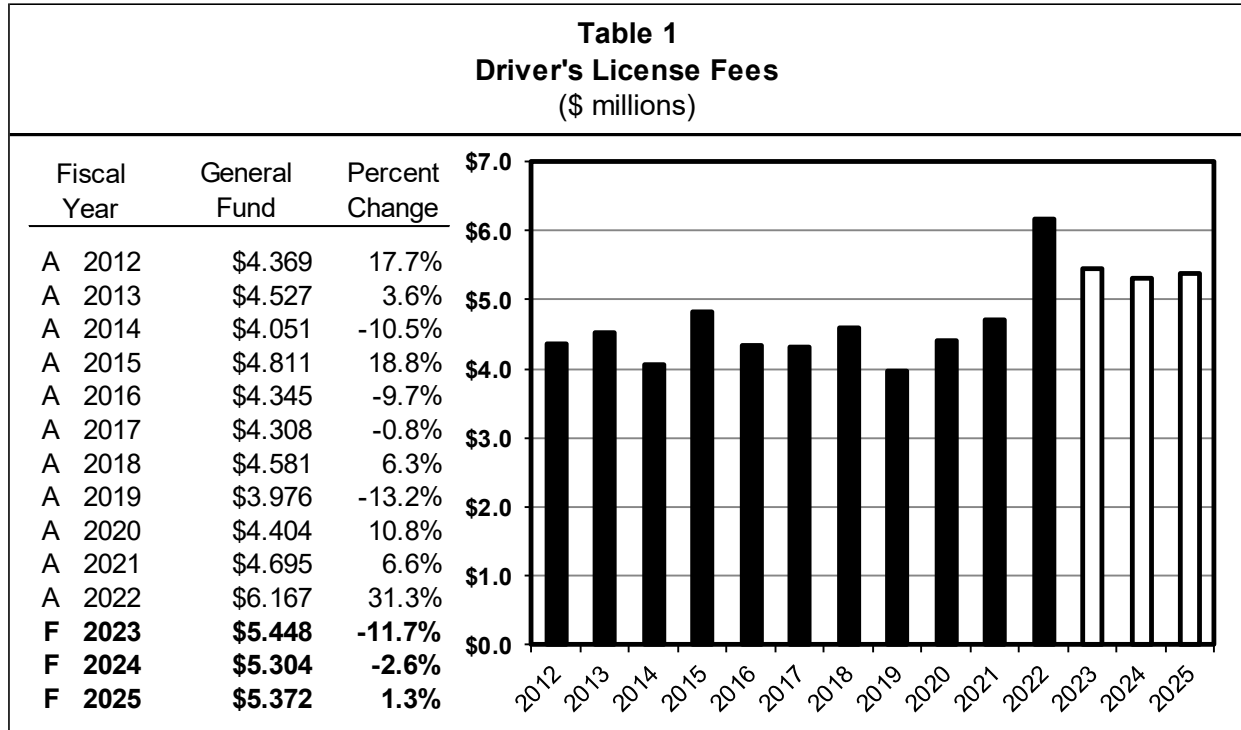
Drivers' License Fees

2025 Biennium

Revenue Description

Fees for driver's licenses, commercial driver's licenses, and motorcycle endorsements are set in 61-5-111, MCA. The fee for replacing a lost or destroyed license is set in 61-5-114, MCA. The distribution of revenue from driver's license fees is set in 61-5-121, MCA. County treasurer's offices in the ten least populated counties that have limited-service driver license exam stations, retain a small percentage of the fees they collect on behalf of the Motor Vehicle Division (MVD).

Table 1 shows general fund revenue from driver's license fees for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



Basic fees for driver's licenses are \$5 per year of validity. Additional fees are charged for motorcycle endorsements (\$0.50 per year). Commercial driver's licenses (\$10 per year for inter-state and \$8.50 per year for intra-state licenses) are valid for a four-year period and include basic driving privileges that run concurrently with the commercial license. Reduced fees are available to active military personnel for basic driver's licenses and motorcycle endorsements. Replacement licenses are \$10, and a \$0.50 renewal notice fee is charged at issue of a license. All Title 61, MCA, fees also receive a 3% administrative surcharge as of January 1, 2018, per HB 650 and HB 473 of the 2017 Session. The 3% fee is directed to the MVD administration state special revenue fund.

Most license fees were revised by the 2003 Legislature. During the 2005 session the validity of commercial drivers' licenses was reduced to four years in conformity with federal regulations and HB 192 revised fee distributions. There was a correction to the distribution of fees in HB 23 (2007). SB 393 (2015) created the option for a web-based drivers' licensing renewal system and also expanded eligibility for mail renewals. These changes had no revenue effect as online and mail renewals offset exam station renewals.

In 2017, SB 366 provided for federal REAL ID licensure as current Montana drivers' licenses were anticipated to meet the Transportation Security Administration requirements as of October 2021. That TSA requirement was postponed to October 2023. REAL ID compliant IDs carry the standard license fee (generally \$5 per year of validity) plus an additional \$25 charge. The REAL ID fees are state special revenue collections.

During the 2019 session, HB 515 expanded the ability to acquire a replacement driver's license online or by mail if a digital photo is on file with the MVD.

SB 336 (2021) allows drivers of qualifying age to obtain a standard drivers' license (without REAL ID) with up to 12 years of validity, extending the prior eight-year limitation.

Risks and Significant Factors

- Revenue swings between fiscal years are principally due to renewal patterns that developed during the transition from four-year to eight-year licensing. The amplitude of these shifts grew with fee changes in FY 2003. These effects have persisted in an attenuated manner.
- New twelve-year standard licensing appears to have extended the average term of Montana licenses from around six years to just over seven years. To the extent that licensed drivers are not constrained by REAL ID (maximum eight-year licenses) and CDL licenses (four-year limitation) terms may result in additional variation.
- Pandemic renewal waivers may have shifted some renewals into FY 2021 and FY 2022.
- First year restrictions for drivers 18 years of age and under, which began in FY 2006, have lengthened the transition to full licensure and reduced the number of drivers aged 16 and under.
- Generally the average driver's age in Montana is rising and the growth of licensed drivers is slowing.
- As current eight-year licenses expire and are replaced with 12-year licenses, collections will be higher. Starting in FY 2029 fewer drivers will need to relicense, lowering revenue.
- REAL ID requirements and the October 2023 could result in more replacement licensing and crowded-out some other licensing. The transition to REAL ID over the past biennium and increasing use of online renewals lowers those risks.

Forecast Methodology

Forecasting general fund driver's license fee revenue:

Step 1: Calculate the average effective licensing fee for basic licenses by dividing the number of renewal notices by the basic license collections. The estimate of the number of driver's licenses issued in any given year, is proxied by the renewal notices issued each fiscal year starting in FY 2006.

Step2: Forecast the number of licenses to be issued. The estimate of fiscal year drivers' licenses' to be issued is calculated by taking the average of the prior fifth, sixth, and seventh year of the licensing cycle and growing the number by the six-year percent change in population.

Step 3: Project the effective average licensing fees for basic drivers' licenses. This is done using the rounded FY 2022 average fee as it is the first full year of 12-year licensing.

Step 4: Project total basic driver's license revenue by multiplying projected driver's licenses by expected fees.

The results of Steps 1 through 4 are summarized in Table 2:

Fiscal Year	Standard Driver's License Fees	Effective Average Fee	Renewal Notices	Forecast Std. License Total Revenue
A 2016	\$4,292,889	÷ \$31.61 =	135,801	
A 2017	\$4,154,439	÷ \$30.81 =	134,841	
A 2018	\$4,548,243	÷ \$31.19 =	145,826	
A 2019	\$3,930,353	÷ \$31.50 =	124,792	
A 2020	\$4,292,062	÷ \$30.65 =	140,051	
A 2021	\$4,800,984	÷ \$30.68 =	156,485	
A 2022	\$6,643,240	÷ \$36.92 =	179,955	= \$6,643,240
F 2023		\$37.00 x	147,152	= \$5,444,621
F 2024		\$37.00 x	143,262	= \$5,300,697
F 2025		\$37.00 x	145,103	= \$5,368,803

Notable in Table 2 is the change in the effective average fee in FY 2022, suggesting that the average license term was extended by 1.2 years relative to the November 2021, FY 2022, forecast made before SB 336 and the introduction of the 12-year licensing. FY 2021 standard license revenue exceeded forecast by 20% but the average fee did not change relative to forecast, this suggests a shift of FY 2020 licensing into FY 2021 and not the early effects of SB 366.

Step 5: Estimate revenue from other licenses. Commercial driver's license, motorcycle endorsement, and replacement license revenues are projected based on their respective five-year olympic average proportions relative to basic driver's license revenue. These estimates are reported in Table 3.

In the ten lowest population counties which do not have a full MVD exam station, a portion of the driver's license fee is retained for the county general fund, this retention is not reported in SABHRS. The amount is estimated and added back into the calculation of total license and fee revenue based on the FY 2022 county retention proportion.

Table 3							
Driver's License Total Revenue by Fee Type							
(\$ millions)							
Fiscal Year	Basic Driver's Licenses	Commercial Licenses	Motorcycle Endorsements	Replacement Licenses	Renewal Fee	Total Revenue	Estimate of county retention
A 2018	\$4.548	\$0.617	\$0.049	\$0.406	\$0.073	\$5.693	\$0.015
A 2019	\$3.930	\$0.461	\$0.038	\$0.438	\$0.062	\$4.929	\$0.013
A 2020	\$4.292	\$0.548	\$0.045	\$0.503	\$0.070	\$5.457	\$0.011
A 2021	\$4.801	\$0.509	\$0.047	\$0.405	\$0.078	\$5.841	\$0.009
A 2022	\$6.643	\$0.579	\$0.057	\$0.337	\$0.090	\$7.706	\$0.010
Relative Proportion							
A 2018	1.000	0.136	0.0107	0.089	0.016	1.252	0.0032
A 2019	1.000	0.117	0.0096	0.111	0.016	1.254	0.0033
A 2020	1.000	0.128	0.0104	0.117	0.016	1.272	0.0026
A 2021	1.000	0.106	0.0099	0.084	0.016	1.217	0.0020
A 2022	1.000	0.087	0.0086	0.051	0.014	1.160	0.0015
Olympic Avg. Proportion		0.126	0.010	0.093	0.016	1.246	0.0029
All Fund Revenue by License Type							
A 2022	\$6.643	\$0.839	\$0.068	\$0.619	\$0.107	\$8.276	\$0.011
F 2023	\$5.445	\$0.688	\$0.055	\$0.507	\$0.087	\$6.782	\$0.011
F 2024	\$5.301	\$0.670	\$0.054	\$0.494	\$0.085	\$6.603	\$0.011
F 2025	\$5.369	\$0.678	\$0.055	\$0.500	\$0.086	\$6.688	\$0.011

Step 6: Allocate statutory distributions of revenue to the state traffic education and state motorcycle safety accounts, by type of licensing revenue. The remainder is distributed to county or state general funds. The basis for distributing fees for each license is set in 61-5-121, MCA, and shown in Table 4.

Table 4				
Driver's License Fee Allocation				
	Basic Driver's License	Commercial Licenses	Motorcycle Endorsement	Replacement License
State General Fund (remainder)	76.80%	80.56%	33.20%	87.50%
State or County General Fund ¹	2.50%	2.50%	3.34%	3.75%
Traffic Safety Education	20.70%	16.94%	0.00%	8.75%
Motorcycle Safety Training	0.00%	0.00%	63.46%	0.00%
	100.00%	100.00%	100.00%	100.00%

¹ County general fund receives the distribution if the license is issued at a county office (vs. a MVD office).

The estimates from the bottom of Table 3 are multiplied by the corresponding distribution percentage listed in Table 4 to estimate driver's license receipts allocated to each state special revenue account and to the state general fund. Counties only receive a distribution if they issue the license. The county retention is estimated to be less than \$11,500.

Table 5					
Allocation of Driver's License Fee Revenue					
(\$ millions)					
Fiscal Year	General Fund	Traffic Safety Education	Motorcycle Safety Training	County Retention	Total
A 2019	\$3.976	\$0.929	\$0.025	\$0.013	\$4.929
A 2020	\$4.404	\$1.025	\$0.028	\$0.011	\$5.457
A 2021	\$4.803	\$1.136	\$0.031	\$0.011	\$5.981
A 2022	\$6.650	\$1.571	\$0.043	\$0.011	\$8.276
F 2023	\$5.448	\$1.288	\$0.035	\$0.011	\$6.782
F 2024	\$5.304	\$1.254	\$0.034	\$0.011	\$6.603
F 2025	\$5.372	\$1.270	\$0.035	\$0.011	\$6.688

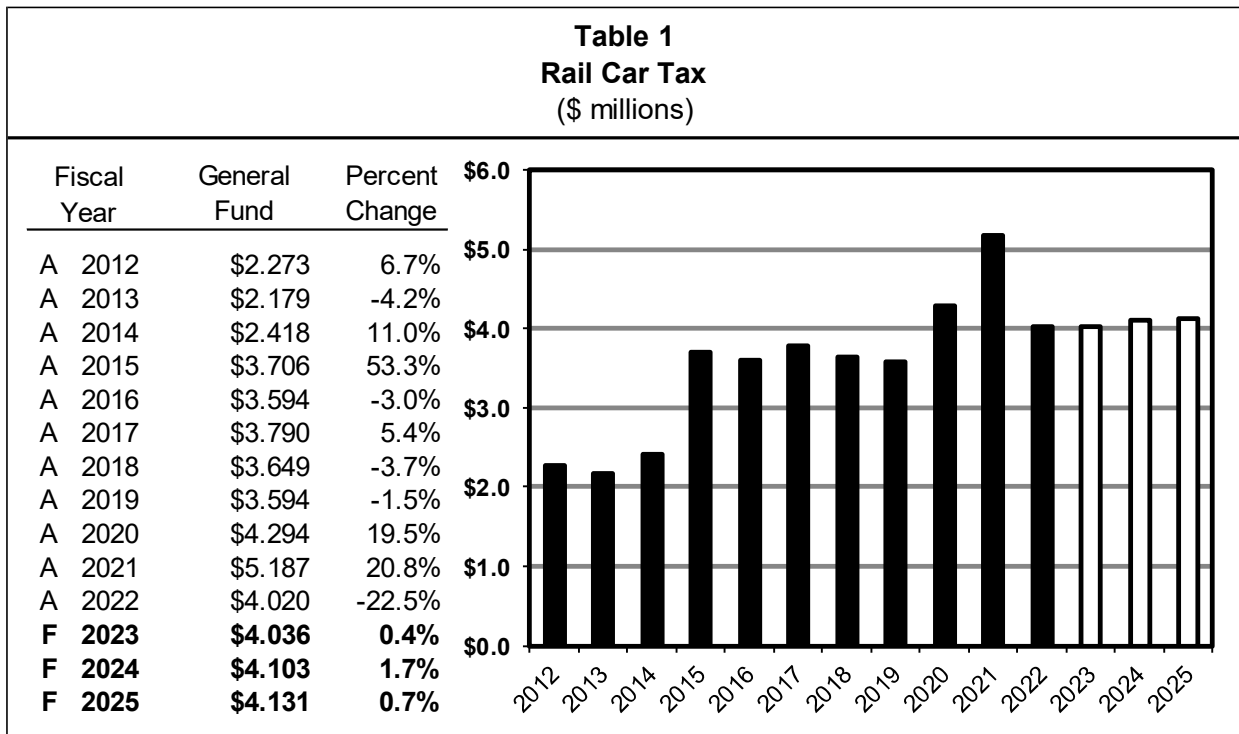
Data Sources

Historical revenue data by license type is from SABHRS. Montana population estimates are from the October 2022 S&P Global state forecast.

Revenue Description

Title 15, Chapter 23, Part 2, MCA, provides for the central assessment of rail car companies' operating properties and their taxation. The tax is computed by multiplying the assessed value of the allocated Montana share of the national rail car fleet by the class 12 tax rate and the statewide average mill levy for commercial and industrial property.

Table 1 presents actual general fund revenue from the rail car tax for FY 2012 through FY 2022 and forecast for FY 2023 through FY 2025. (FY 2023 revenues are essentially known since the tax bills were issued in October 2022).



Risks and Significant Factors

- Increasing the national rail car fleet and traffic with trade, grain, coal, and oil haulage expands collections. Falling commodity prices, coal demand, and oil pipeline expansion can reduce traffic.
- The class 12 tax rate is the effective weighted average rate that applies to all commercial and industrial property in the state. The rate is affected by commercial and industrial property tax reductions.
- Property tax base reductions may also raise statewide average commercial and industrial mill rates. The trend, statewide commercial and industrial average mill levy growth rate is used in this estimate. If mill levies rise (fall) more than anticipated, they would increase (decrease) state general fund rail car tax revenue.
- Because tax year (TY) 2022 rail car tax bills are mailed in October, the tax liability for FY 2023 is essentially known but subject to protests, penalties, audits, and rail car company reporting errors.

Forecast Methodology

Step 1. Forecast the allocated market value of rail car companies operating in Montana. The (outlier adjusted) trend growth adds about \$2 million per year to national rail car fleet value allocated to Montana. These were reduced by 7.5% for FY 2022 and reduced 10% for FY 2023 based on weekly carload tracking for calendar year (CY) 2018 through September 2020.

Step 2. Apply the estimates of class 12 tax rates. These are estimated based on the recent biennial rate changes. This decouples the estimate from the property tax class 12 tax rate estimate. The class 12 tax rate incorporates the effective weighted average of the tax rates that apply to all commercial and industrial property statewide after correcting for the biennial reappraisal of class 4 commercial property. For this estimate the rate is assumed to stay at 3.20%.

Step 3. Estimate the average statewide mill levy for commercial and industrial property. Mills are expected to grow at trend rates in the future.

Step 4. Calculate general fund revenue. Table 2 presents the forecast of allocated market value, class 12 tax rate, the estimated statewide average commercial and industrial property mill levy and the resulting general fund tax revenue forecast. Rail car tax collections show a recent surge for FY 2021 (which may be a billing error given a large prior year revenue adjustment) but are assumed to stay at long-term trend at the end of the forecast period.

Table 2					
Calculation of Rail Car Tax Revenue					
(\$ millions)					
Description	FY 2021 Actual	FY 2022 Actual	FY 2023 Billed	FY 2024 Projected	FY 2025 Projected
Total Montana Allocated Value	\$258.190	\$220.309	\$224.715	\$229.209	\$233.793
Multiplied by Class 12 Tax Rate	3.20%	3.12%	3.06%	3.06%	3.00%
Taxable Value	\$8.262	\$6.874	\$6.876	\$7.014	\$7.014
Multiplied by Mill Levy	579.850	583.320	586.878	585.000	589.000
Calculated Tax	\$4.791	\$4.010	\$4.036	\$4.103	\$4.131
General Fund Revenue	\$4.803	\$4.020	\$4.036	\$4.103	\$4.131

Distribution

The general fund receives 100% of rail car tax revenue.

Data Sources

Historical tax revenue is from SABHRS. The summary rail car tax database (TY 2003 – TY 2022), class 12 tax rates for TY 2003 – TY 2022, and statewide average commercial and industrial mill levies for TY 2003 – TY 2022 were provided by the Department of Revenue.

Revenue Description

Other revenue represents the sources of general fund revenue that do not have an individual line item in the revenue estimating resolution. The FY 2018 one-time revenue includes \$38.4 million of 2017 regular session transfers and \$22.4 million 2017 special session transfers to the general fund. One-time revenue in FY 2019 includes \$10.24 million from HB 6, (2017 special session) transfers; \$15 million receipts from Core Civic; \$15.08 million from State Fund management fees; and \$1.64 million from tourism transfers. FY 2020 revenues include \$4.1 million from Core Civic, and \$750,000 from HB 715, 2019 session transfers. The Compound Annual Growth Rate (CAGR) transfers of \$116.2 million in FY 2022 and \$260.8 million in FY 2023 are included in other revenue. An average of \$2.5 million per year is used to forecast one-time revenue going forward.

Table 1 shows actual general fund revenue from FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.

Fiscal Year	General Fund	Percent Change
A 2012	\$47.486	-5.8%
A 2013	\$36.785	-22.5%
A 2014	\$37.321	1.5%
A 2015	\$40.822	9.4%
A 2016	\$41.444	1.5%
A 2017	\$57.338	38.4%
¹ A 2018	\$117.813	105.5%
² A 2019	\$98.896	-16.1%
³ A 2020	\$50.484	-49.0%
A 2021	\$47.860	-0.052
⁴ A 2022	\$183.058	2.82482
⁵ F 2023	\$312.063	70.5%
F 2024	\$53.392	-82.9%
F 2025	\$53.708	0.6%

¹FY 2018 includes \$38.4M 2017 Reg Session transfers; \$22.4M 2017 Special Session transfers
²FY 2019 includes \$16.4M 2017 Reg Session transfers; \$10.24M 2017 Special Session transfers; \$15M Core Civic; \$15.084M State Fund Mgmt Fee
³FY 2020 includes \$4.1M Core Civic; \$750k HB 715 transfers
⁴FY 2022 includes CAGR transfer \$116.2M
⁵FY 2023 includes CAGR transfer \$260.79M

Risks and Significant Factors

- State legislative and national congressional action may have a significant impact on “other revenue”.
- Many small variances over a large number of revenue categories may have a significant aggregate effect.

Forecast Methodology

The general fund “other revenue” is forecast in four steps:

Step 1. Estimate future one-time revenue.

Step 2: Isolate and estimate large sources of other revenue.

- The sale of abandoned property is from financial accounts that have gone dormant and are forwarded to the state.

Step 3: Isolate and estimate smaller sources of revenue.

- There are many small sources of revenue that are forecast individually. These sources are projected like the larger sources of revenue; they are assessed for law changes and forecast based on trends or discussions within agencies.

Step 4: Estimate the remaining revenue as a group and sum the four categories. The general fund revenue that is not classified in one of the three previous groups is estimated as a single group.

Table 2 shows revenue to the general fund that is categorized as one-time revenue which is projected to be \$2.5 million each year for FY 2023 through FY 2025.

Table 2		
One Time General Fund Revenue		
(\$ millions)		
Fiscal Year	One Time Revenue	Percent Change
A 2012	\$3.450	-78.9%
A 2013	\$2.030	-41.2%
A 2014	\$0.649	-68.0%
A 2015	\$0.588	-9.3%
A 2016	\$1.330	126.2%
A 2017	\$1.384	4.0%
A 2018	\$69.628	4932.6%
A 2019	\$46.630	-33.0%
A 2020	\$7.384	-84.2%
A 2021	\$2.429	-67.1%
A 2022	\$139.489	5641.9%
F 2023	\$263.265	88.7%
F 2024	\$2.475	-99.1%
F 2025	\$2.475	0.0%

Table 3 shows additional large sources of ongoing other revenue. Collections are projected by examining historical deposits to determine whether there is a trend or other pattern in receipts.

Table 3				
Large Individual Sources of Ongoing Other Revenue				
(\$ millions)				
Source of Revenue	FY 2022	FY 2023	FY 2024	FY 2025
Abandoned Property	\$15.284	\$15.284	\$15.284	\$15.284
Clerk of Court Fees	\$3.927	\$3.927	\$3.927	\$3.927
Portfolio Transfer	\$6.516	\$7.109	\$7.653	\$7.930
Vehicle and Driving Records	\$2.931	\$2.931	\$2.931	\$2.931
SWCAP	\$4.000	\$4.000	\$4.500	\$4.500
HB 536 Criminal Surcharge	\$1.122	\$1.122	\$1.122	\$1.122
Liquor License Sales	\$3.379	\$3.542	\$4.081	\$4.099
Bentonite Production	\$0.164	\$0.164	\$0.164	\$0.164
Driver's License Reinstatement	\$0.784	\$0.784	\$0.784	\$0.784
Total	\$38.107	\$38.863	\$40.446	\$40.741

Table 4 shows the four different revenue categories that make up general fund other revenue for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.

Table 4					
All Other Revenue Sources					
(\$ millions)					
Fiscal Year	One Time	Large Sources	Smaller Sources	Estimated as a group	Total
A 2012	\$3.450	\$29.693	\$4.840	\$1.677	\$39.660
A 2013	\$2.030	\$26.449	\$4.585	\$3.797	\$36.861
A 2014	\$0.649	\$31.291	\$4.431	\$0.973	\$37.344
A 2015	\$0.588	\$32.039	\$4.003	\$4.225	\$40.855
A 2016	\$1.330	\$30.468	\$5.148	\$4.583	\$41.529
A 2017	\$1.384	\$32.464	\$12.830	\$10.704	\$57.381
A 2018	\$69.628	\$33.789	\$3.502	\$10.893	\$117.813
A 2019	\$46.630	\$32.015	\$10.175	\$11.165	\$99.985
A 2020	\$7.384	\$35.668	\$4.650	\$7.182	\$54.884
A 2021	\$2.429	\$37.531	\$2.774	\$7.431	\$50.165
A 2022	\$139.489	\$38.107	\$3.406	\$2.056	\$183.058
F 2023	\$263.265	\$38.863	\$6.353	\$3.581	\$312.063
F 2024	\$2.475	\$40.446	\$6.889	\$3.581	\$53.392
F 2025	\$2.475	\$40.741	\$6.911	\$3.581	\$53.708

Data Sources

SABHRS MTGL0109 report for fiscal year end and SABHRS Data Mine provided historical revenue.



GOVERNOR
GREG GIANFORTE

STATE OF MONTANA

NON-GENERAL FUND
REVENUE
SECTION 10

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GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

School Trust Land Interest and Income

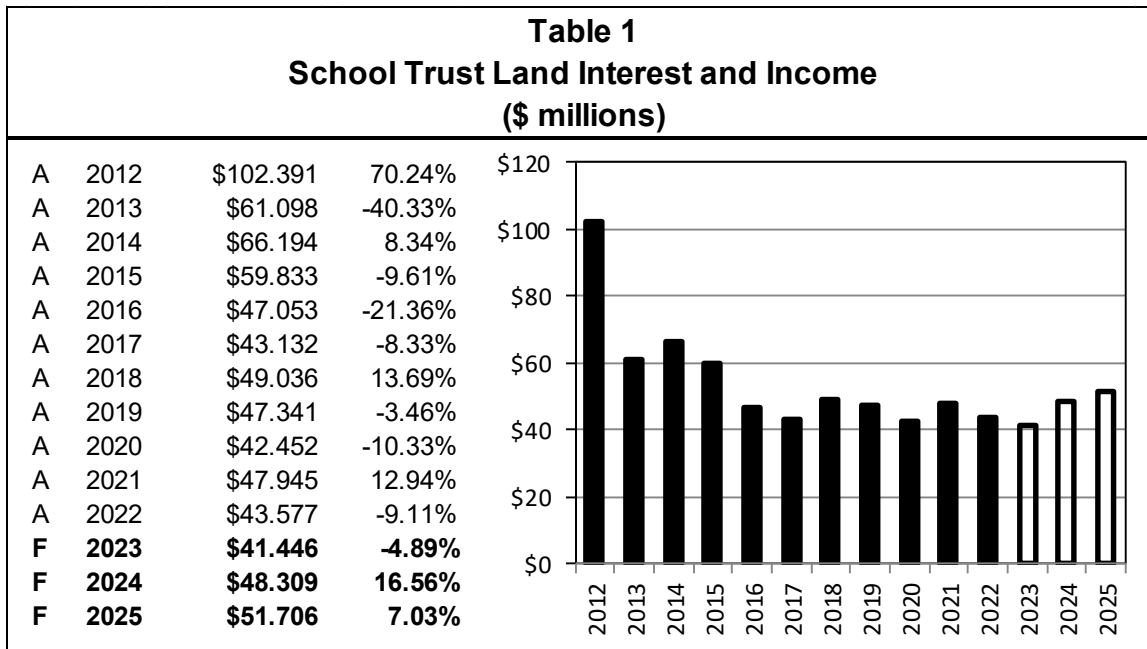
2025 Biennium

Revenue Description

The United States Congress granted public lands to the State of Montana by the Enabling Act in 1889 to provide income to support public schools. The Enabling Act also granted smaller amounts of land to other state institutions (School for the Deaf and Blind, colleges, and universities). The land grants have been supplemented over time through gifts to the state, reversions of unclaimed property, and subsequent acts.

Proceeds from property sales of the granted land are deposited into an inviolate trust fund; thus, the proceeds are non-distributable. The trust fund is invested, almost exclusively, in the Trust Fund Investment Pool (TFIP). Of the interest income and other income from the trust lands, 5% percent is retained by the trust fund corpus and 95% of the interest earned by the trust fund is considered distributable. The distributable income from the common school trust land is deposited in the state special revenue guarantee account as the first source of revenue to spend on public schools. The distributable income from the other trust lands goes to state special revenue accounts for those entities. Costs of administering state lands are deducted from allocations of the income. An amount is also deducted and put into a reserve fund in the event revenues do not meet anticipated administration expenses in any given fiscal year, but will be greater than the costs, given a longer time-period.

Table 1 shows actual distributable income from the Common School Trust plus additional revenue directed to the account for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



Oil and gas revenues remained higher in 2012 than in years that followed due to mineral leases of state lands. Funding deposited in the state special revenue guarantee account in addition to the state lands revenues included: SB 175, 2013 session, transferred \$22.95 million general fund at the end of FY 2013 to the state special revenue Montana support for schools account to be equally distributed to the state special revenue guarantee account at the beginning of each fiscal year FY 2014 and FY 2015. The 2017 special legislative session transferred \$3.4 million in FY 2018 and \$4.8 million in FY 2019 via HB 6 from the state special revenue school facility and technology account to the guarantee account.

School interest and income was deposited in the general fund through FY 2001. A new state special revenue account, the guarantee account, was created in SB 495 (2001 Session) and amended in HB 7 (2002 special session) to be statutorily appropriated. Beginning in FY 2002, school trust interest and income has been deposited in the guarantee account rather than to the general fund.

SB 65 (2009 session) consolidated four accounts that were used to pay for the administration of the trust fund into a single account. It also allowed the diversion of up to 25% of the prior year's distributable revenue to be deposited into the trust administration account (TAC) for the Department of Natural Resources and Conservation (DNRC) administrative costs. In the event costs were less than what was distributed to the TAC, then up to one-third of the excess would be deposited into a newly created reserve account. Money in the reserve account would then be used to cover administrative costs in the event there were inadequate funds in the TAC account to cover all costs. The remaining revenue would be deposited in the trust fund corpus to generate interest. The balance in the earnings reserve fund may not exceed 200% of the appropriation to the TAC account from the prior fiscal year.

Risks and Significant Factors

- Trust revenue is net of DNRC administration costs. If DNRC's costs vary from expectations, then common school revenue could also be greater or less than anticipated.
- Revenue to the account can vary depending on legislative action depositing more or less revenue to the account.
- Mineral management revenue varies according to mineral prices and changes in mineral leases.
- The price of timber, along with decisions about the amount of land to be harvested, could have an effect on trust land revenue.
- Excess oil and gas revenue from schools that would receive more than 130% of their maximum district general fund budget in oil and gas tax revenue is deposited into the state special revenue guarantee account. This amount varies greatly depending on the prices of oil and natural gas and on well drilling activity.

Forecast Methodology

Step 1. Total interest earnings from the trust and legacy fund are based on interest rate forecasts described in the *Interest Rate Introduction* section.

Step 2. The Common School portion of the total trust fund is then estimated and applied to yield interest income.

Step 3. Agricultural and grazing rentals are determined based on projections provided by the DNRC and historical projection patterns.

Step 4. School trust non-royalty mineral income is based on projections provided by the DNRC and historical projection patterns.

Step 5. Timber revenue is based on projections by DNRC, long-term trends, and executive budget recommendations.

Step 6. Mineral revenue is calculated based on projections provided by the DNRC and historical projection patterns.

Step 7. All other revenue to the common school trust is forecast based on communication with DNRC, long-term trends, and legislative actions.

Step 8. All components are added together and distributed appropriately.

Table 2 shows actual revenue for FY 2022 and forecast gross revenue, estimated administrative expenses, common schools distribution, other anticipated revenue, and net revenue to schools for FY 2023 through FY 2025.

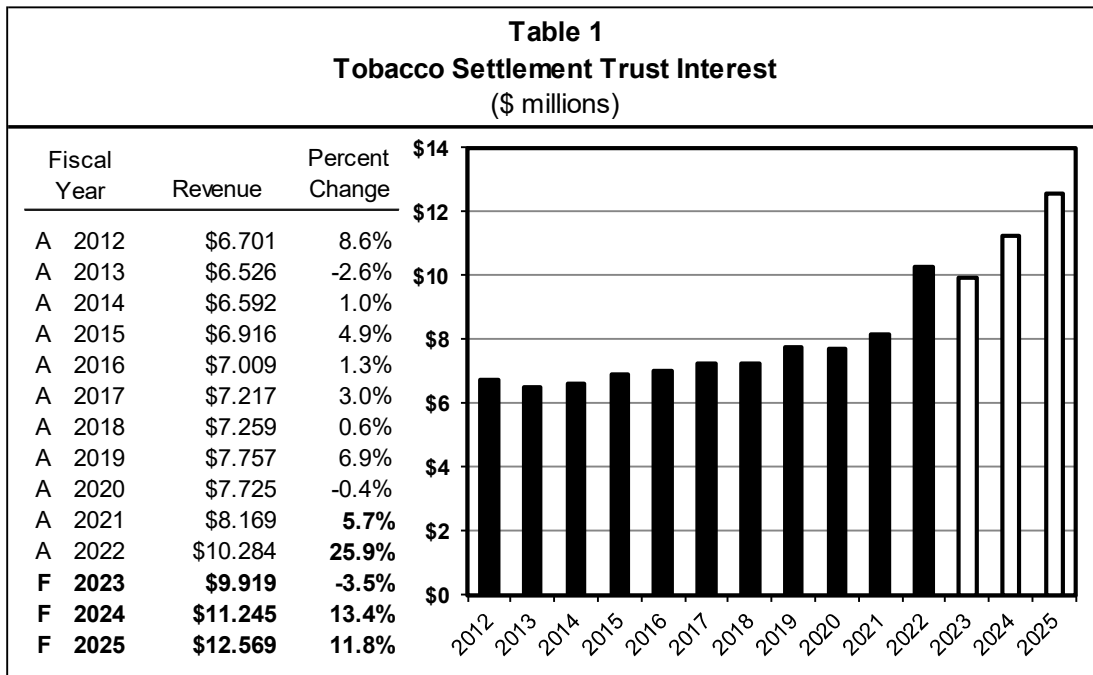
Table 2				
School Trust Income Allocation and Distribution				
(\$ millions)				
<u>Fiscal Year</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>
Investment Income	\$20.400	\$20.000	\$30.540	\$34.280
Agriculture and Grazing Rents	\$25.400	\$25.500	\$24.000	\$24.000
Mineral Management	\$2.000	\$2.000	\$1.000	\$1.000
Forest Management	\$3.060	\$3.340	\$2.403	\$2.196
Licenses and Other Income	\$2.783	\$2.914	\$3.643	\$3.665
Subtotal	\$53.643	\$53.754	\$61.587	\$65.141
Expenses				
Trust Land Administration Account	\$11.900	\$11.900	\$12.381	\$12.381
Subtotal	\$41.743	\$41.854	\$49.205	\$52.760
Permanent Fund				
5% to permanent fund	\$2.087	\$2.042	\$2.460	\$2.638
Total Common Schools Distribution	\$39.656	\$39.812	\$46.745	\$50.122
Other Revenue to Guarantee Account				
Excess Oil and Gas (HB 647)	\$1.559	\$1.634	\$1.544	\$1.564
Excess school funding remitted (SB 175)	\$0.000	\$0.000	\$0.020	\$0.020
Total Revenue to Guarantee Account	\$41.216	\$41.446	\$48.309	\$51.706

Data Sources

Interest income information was collected from SABHRS and other projections were obtained from DNRC.

Revenue Description

Montana receives payments from a multi-state settlement with tobacco companies. Forty percent of the receipts from this settlement are deposited in the tobacco settlement trust. Ten percent of interest earnings from this trust fund are retained in the trust and 90% are deposited in a state special revenue account and may be appropriated by the legislature for tobacco prevention and health care programs (17-6-603, MCA).



The tobacco settlement trust was established in January 2001 following passage of Constitutional Amendment 35 in the November 2000 election. Distributable interest is the portion of tobacco trust interest that is not retained by the trust. The growth of tobacco trust interest revenue depends on the interest rates as well as the settlement payments each year.

Forecast Methodology and Significant Factors

Strategic contribution payments to states from participating manufacturers ended after the 2017 sales year. Historically, the strategic payment has amounted to about \$12 million per year transferred to the corpus of the trust.

There are three steps to forecasting interest revenue from the tobacco trust fund:

- Step 1.** The annual average balance of the fund is projected. The fund balance increases yearly as 40% of the tobacco settlement payments and 10% of the interest earned on the fund balance are deposited into the trust fund.
- Step 2.** The annual average balance by investment type is projected. The fund balance is invested in the short-term investment pool (STIP) and the trust fund investment pool (TFIP). STIP and TFIP are managed by the Board of Investments (BOI) and forecasts of annual rates of return for STIP and TFIP are explained in the *Interest Rates Introduction*.
- Step 3.** Interest earnings are forecast by multiplying the tobacco trust fund balance by the projected average interest rate. The STIP and TFIP interest rates are expected to change throughout the 2025 biennium, as described in the *Interest Rates Introduction*. To the extent that increasing interest rates are realized, total tobacco trust fund income will continue to increase each year.

Distributions

Table 2 summarizes actual and projected interest earnings and the allocation of interest earnings from FY 2012 through FY 2025. Ten percent of tobacco trust earnings are retained by the trust and 90% are allocated to a state special revenue account.

Table 2					
Tobacco Trust Interest Revenue Distribution					
(\$ millions)					
Fiscal Year	Reinvested Revenue (10%)	+	Remaining Revenue (90%)	=	Total Interest Revenue
A 2012	\$0.670	+	\$6.031	=	\$6.701
A 2013	\$0.653	+	\$5.873	=	\$6.526
A 2014	\$0.659	+	\$5.933	=	\$6.592
A 2015	\$0.692	+	\$6.224	=	\$6.916
A 2016	\$0.701	+	\$6.308	=	\$7.009
A 2017	\$0.722	+	\$6.495	=	\$7.217
A 2018	\$0.726	+	\$6.533	=	\$7.259
A 2019	\$0.776	+	\$6.981	=	\$7.757
A 2020	\$0.772	+	\$6.952	=	\$7.725
A 2021	\$0.817	+	\$7.352	=	\$8.169
A 2022	\$1.028	+	\$9.256	=	\$10.284
F 2023	\$0.992	+	\$8.927	=	\$9.919
F 2024	\$1.124	+	\$10.120	=	\$11.245
F 2025	\$1.257	+	\$11.312	=	\$12.569

Data Sources

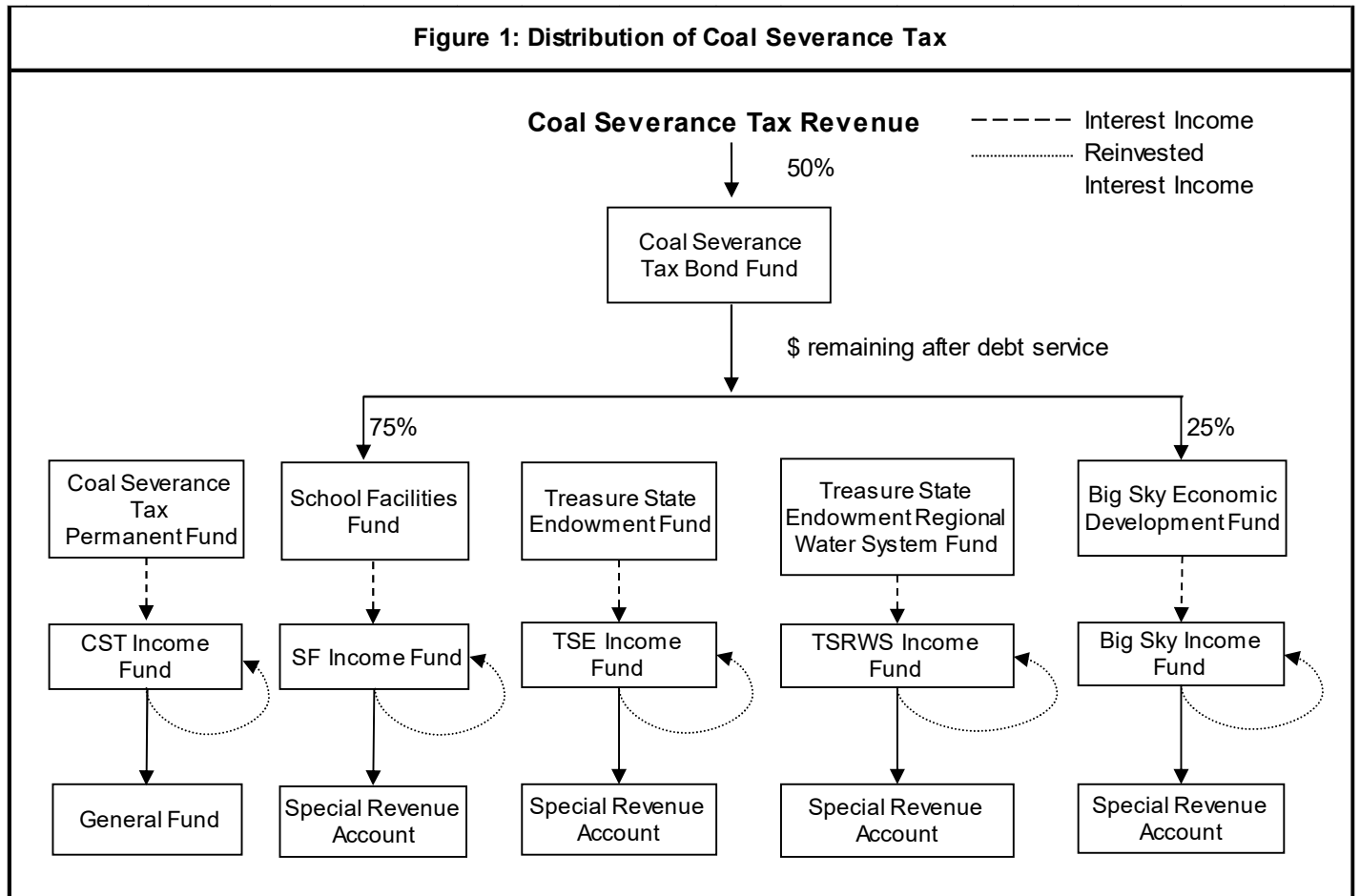
Tobacco trust balances and earnings are obtained from the BOI and SABHRS. Projections of tobacco settlement deposits are from the *Tobacco Settlement* revenue estimate. Projections of the STIP and TFIP interest rates are from *Interest Rates Introduction*.

Revenue Description

Article IX, Section 5, of the Montana Constitution established a permanent trust fund into which at least half of coal severance tax revenue must be deposited as principal. Interest income from this principal may be appropriated, but the principal itself is inviolate unless approved by three-fourths of the members of each house in the legislature. Under current law, 50% of coal severance tax revenue is deposited in the trust fund, which is divided into the following funds described in 17-5-703, MCA.

- Coal severance tax bond fund
- Coal severance tax permanent fund
- Treasure state endowment fund (TSE)
- Treasure state endowment regional water system fund (TSRWS)
- Big sky economic development fund (BSED)
- School facilities fund

The coal severance tax revenue allocated to the trust is initially deposited in the coal severance tax bond fund, which provides for debt service on the state’s coal severance tax bonds. The amount remaining after debt service payments is distributed as shown in Figure 1.



Coal Severance Tax Bond Fund

The coal severance tax revenue deposited into the coal severance tax bond fund (bond fund) secures state issued bonds referred to as coal severance tax bonds. The tax bonds are issued to finance loans through the Department of Natural Resources and Conservation (DNRC). The Department of Revenue (DOR) administers the bond fund, and at the beginning of the fiscal year, DNRC informs DOR of the amount necessary to meet all principal and interest payments on coal severance tax bonds for the next twelve months. This amount is maintained as a reserve balance in the bond fund.

A portion of the reserve balance in the bond fund is invested in the short-term investment pool (STIP). This investment averages about \$6 million per year, and the interest earnings are deposited in the coal severance tax income fund. The coal severance tax income fund balance is transferred monthly to the general fund, but the balance is invested in STIP during the interim with the reinvested interest income returning to the fund.

The coal severance tax revenue that is not reserved in the bond fund is allocated 25% to the BSED fund and 75% to the school facilities fund. The TSE fund and TSRWS fund no longer receive distributions from the bond fund; however, these two funds retain their existing balances and continue to generate interest earnings to fund infrastructure projects around the state.

Risks and Significant Factors

- Coal trust fund balances are primarily invested in the trust fund investment pool (TFIP), so rates of return on assets held in the TFIP are a large determinant of trust fund interest earnings.
- TFIP yields are a function of both current and historical market conditions. Current yields on TFIP investments are still being impacted by the low-rate environment that prevailed during most of 2020 and 2021. However, rates have been rising in 2022 as the Fed moves aggressively to fight off persistently high inflation. This climb in medium-to-long term interest rates has provided significant lift to new securities arriving in the TFIP. Yields on TFIP holding rise in FY 2023 and remain on an upward trajectory through the 2025 biennium.
- The steep ascension of short-term interest rates has boosted yields on STIP assets significantly. Short-term market rates are expected to keep moving upward through 2022 and into 2023 as the Fed works to bring down inflation. STIP income for the small portion of coal trust fund balances invested in this asset pool will continue to grow considerably through FY 2023. Growth in STIP income will flatten in FY 2024 and move slightly downward in FY 2025.
- The future path of market interest rates will depend on how the Fed continues to conduct monetary policy, market interpretations of the central bank's actions, and whether the U.S. economy continues to flirt with recession.
- For the trust funds that receive distributions from the coal severance tax (currently the BSED fund and the school facilities fund), growth in their fund balances is linked directly to the amount of coal severance tax collected. All else equal, greater principal growth will lead to higher interest earnings. Shifts in coal markets that impact coal production and/or price in Montana will flow through to effect distributions to and interest earnings from the coal trust funds.

Forecast Methodology

Interest earnings from the TSE fund, TSRWS fund, BSED fund, and school facilities fund are forecast in two main steps.

Step 1. Estimate the investment composition of the balance in each trust fund (i.e., the allocation between STIP and TFIP assets).

Step 2. Apply the appropriate interest rate to each investment balance. Details about the STIP and TFIP are discussed in the *Interest Rate Introduction* section.

The following sections discuss the revenue outlook for each individual trust.

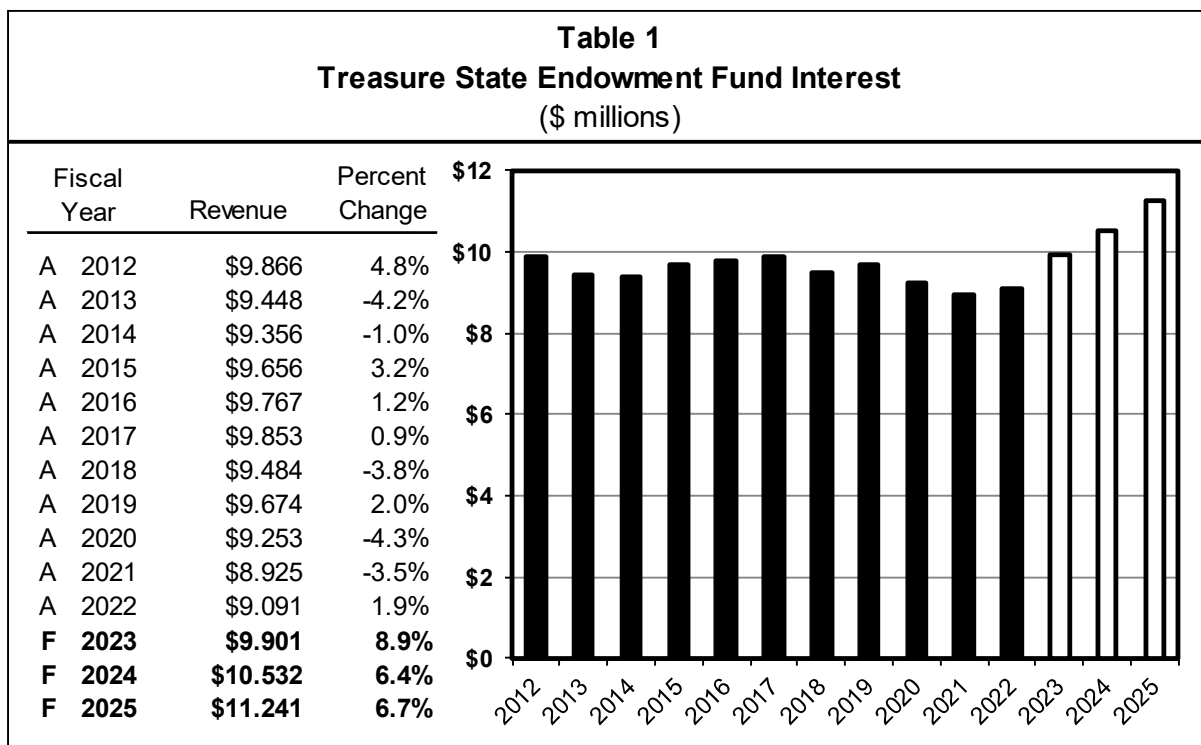
Coal Severance Tax Permanent Fund

The coal severance tax permanent fund is the original coal tax trust fund. Generally, the permanent fund is not a recipient of coal severance tax revenue, but with the elimination of the bond fund distributions to the TSE fund and TSRWS fund at the beginning of FY 2017, the permanent fund received 75% of the coal severance tax revenue allocated to the trust

fund in that year. Starting in FY 2018, the school facilities fund became the recipient of the 75% distribution that was previously allocated to the permanent fund. The average balance of the permanent fund for FY 2020 was \$498 million, and the investment composition of the fund included 26% in loans, 5% in the STIP, and the remaining 69% in the TFIP. The interest earnings from the permanent fund are deposited into the coal severance tax income fund and are ultimately transferred to the general fund. Permanent fund interest earnings allocated to the general fund are discussed in the *Coal Trust Interest Earnings* section.

Treasure State Endowment Fund

The TSE fund is used for local government projects that include improvements to drinking water systems, wastewater treatment facilities, sewer systems, solid waste disposal systems, and bridges. The coal tax contributions to the TSE have varied across years. In FY 2002 and FY 2003, the trust fund received 75% of the distribution from the coal bond fund. Deposits to the trust fund declined in FY 2004 as the TSE fund’s share of the bond fund allocation was reduced to 50% of distributable revenue (SB 10, 2003 session). From FY 2004 through FY 2016, the distribution from the coal bond fund to the TSE fund remained at 50%. The TSE fund no longer receives a piece of coal severance tax revenue.

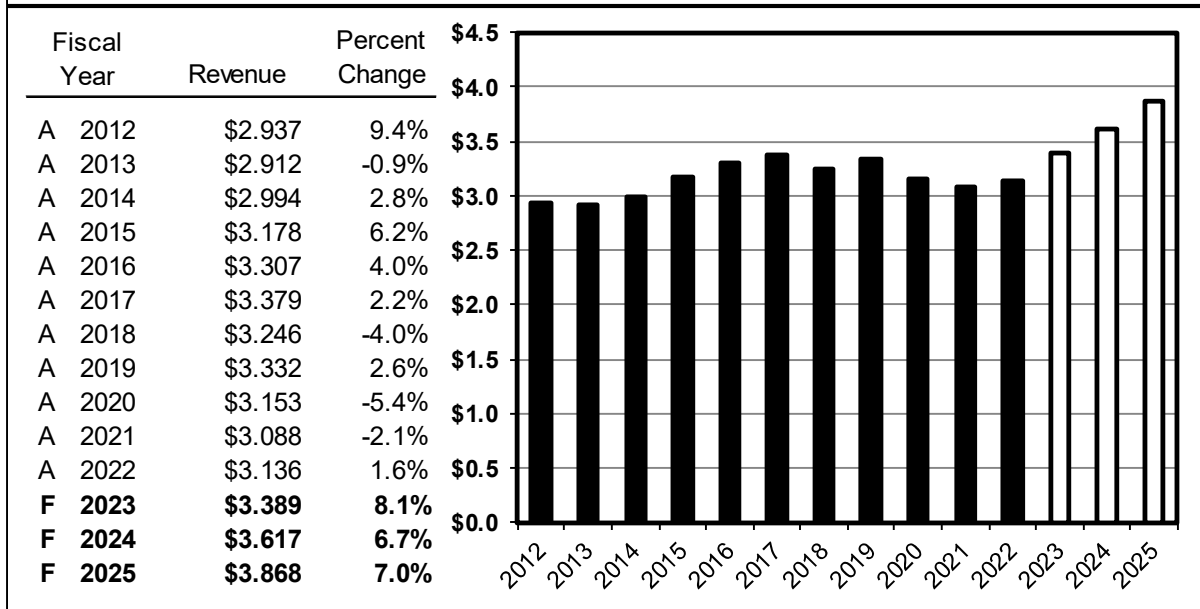


The total balance in the TSE fund at the end of FY 2022 was \$271 million. The TSE fund is invested heavily in the TFIP (over 98%). A little over 1% of the fund is invested in the STIP, and less than 0.1% is held in loans. The interest income from the TSE fund is deposited in the TSE income fund, which earns interest income from STIP investments which is then reinvested. The money needed for local government projects is transferred from the income fund to a state special revenue account for distribution. As mentioned above, the TSE fund ceased receiving coal severance tax revenue starting in FY 2017.

Treasure State Endowment Regional Water System Fund

The TSRWS fund was established by the 1999 Legislature through SB 220. The TSRWS fund provides support for regional water projects. Allocations from the TSRWS fund may be used to match funds for construction of water systems, pay debt service on water system bond obligations, pay administrative expenses of state and local entities, and provide interim funding to state or local entities pending receipt of grants or loans. Historically, the TSRWS fund received 25% of the distributable revenue from the coal bond fund. Beginning in FY 2017 the fund no longer receives revenue from the bond fund, but the principle remains in place and continues to earn interest.

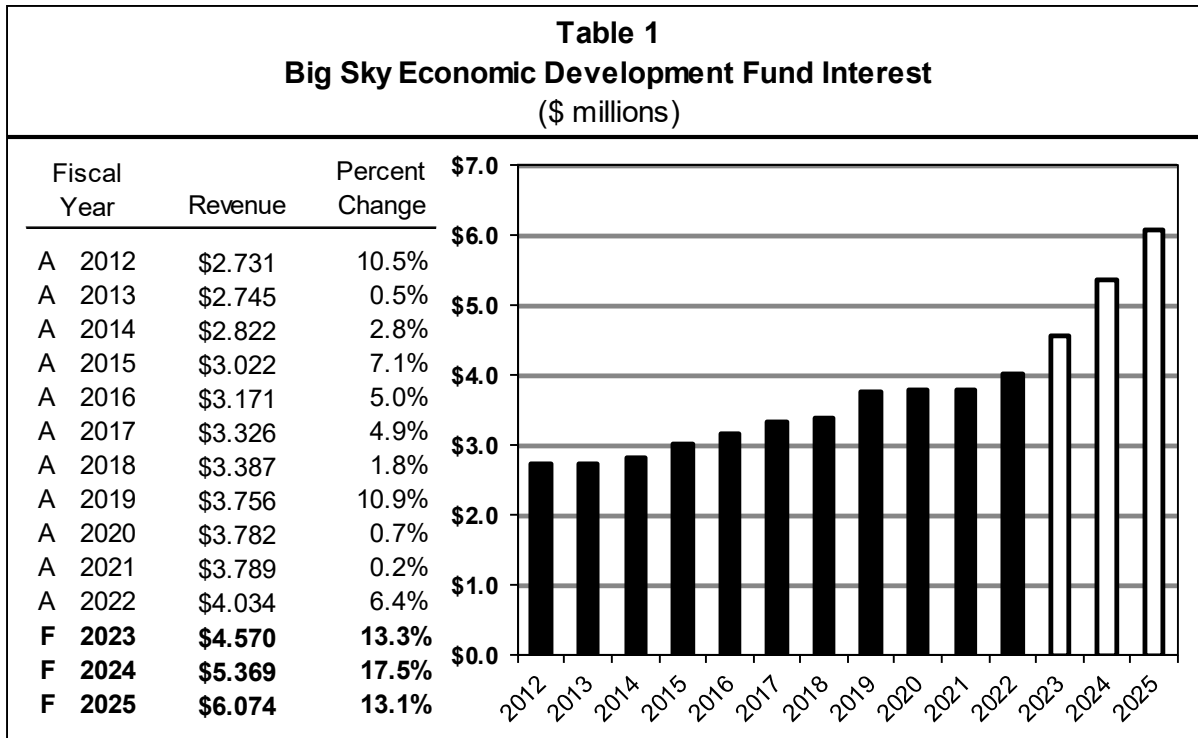
Table 1
Treasure State Endowment Regional Water System Fund Interest
(\$ millions)



The TSRWS fund balance at the end of FY 2022 was \$94.8 million. The balance is invested 99% in the TFIP and 1% in the STIP. The interest income from the TSRWS fund is deposited in the TSRWS income fund, the balance of which is invested in the STIP. Interest earnings from STIP investments in the income fund are reinvested. Funds needed for projects are transferred to a state special revenue account for distribution. Like the TSE fund, the TSRWS fund stopped receiving its coal severance tax distribution beginning in FY 2017.

Big Sky Economic Development Fund

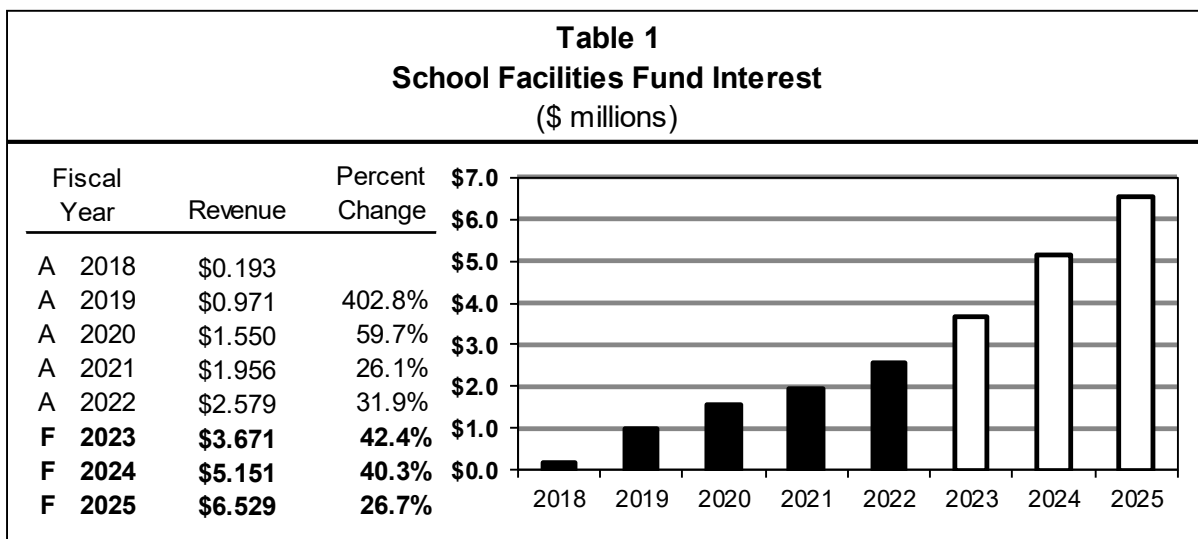
The BSED fund was created by HB 249 during the 2005 Legislature. At the beginning of FY 2006, \$20 million was taken from the permanent fund to create the BSED fund. The interest income from the BSED fund provides financial assistance to local governments and certified regional development corporations for the purposes of economic development. The BSED fund currently receives a 25% distribution from the coal bond fund and is slated to maintain this allocation through FY 2025.



The year-end balance for the BSED fund in FY 2022 was \$129.4 million. This balance is invested 98% in the TFIP and 2% in STIP. Income from the fund’s investments is transferred to a state special revenue account to fund program expenditures. Income not needed for program expenditures remains in the BSED fund and earns interest. Current law dictates that the BSED fund will continue to receive coal severance tax revenue through FY 2025.

School Facilities Fund

The school facilities fund was established by SB 260 during the 2017 regular legislative session. Beginning in FY 2018, this fund receives 75% of the distributable revenue from the coal bond fund until its balance reaches \$200 million. Once the \$200 million cap is achieved, the 75% distribution returns to the permanent fund. Interest earnings from the school facilities fund are transferred to a state special revenue account and are appropriated each year for school major maintenance projects.



At the end of FY 2022, the balance of the school facilities fund was \$92.6 million, with about 5% invested in the STIP and 95% invested in the TFIP. The investment balance is expected to become more concentrated in the TFIP moving forward.

Any interest earnings not transferred to the state special fund account for school facilities projects will remain in the trust fund.

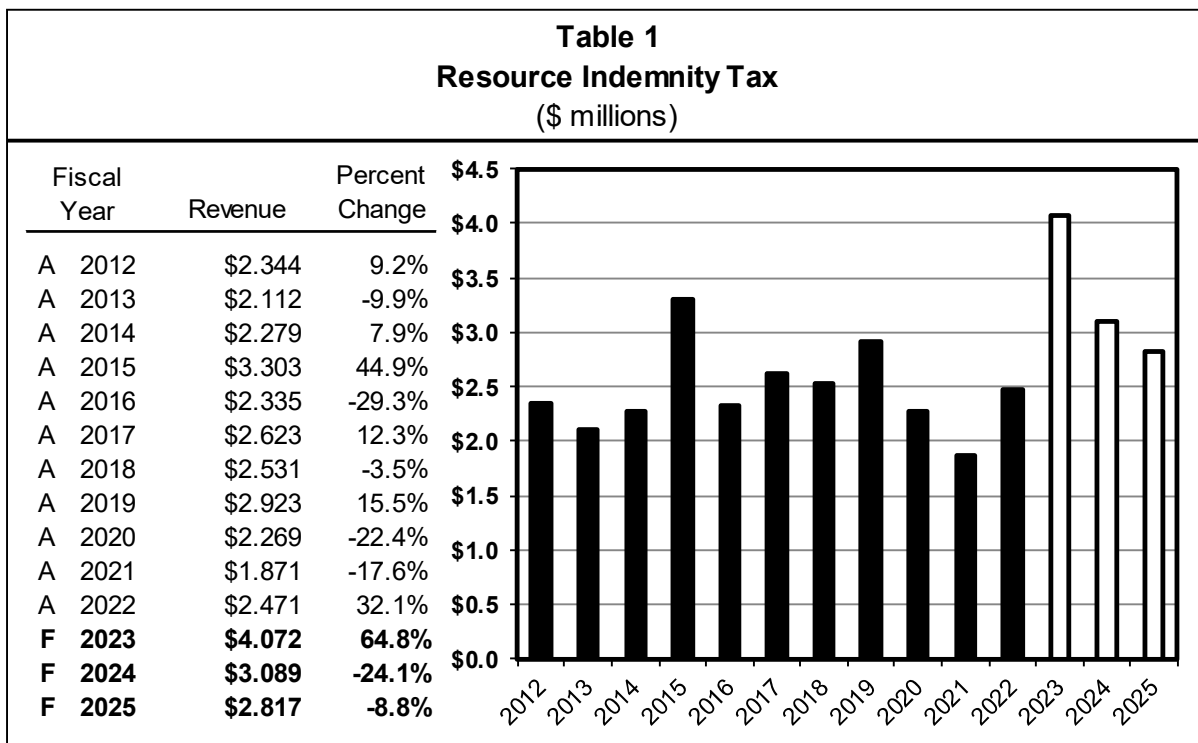
Data Sources

Trust fund balances and earnings were obtained from the Board of Investments and SABHRS. Establishment and legal description of the coal trusts is discussed in 17-5-701 through 17-5-731, MCA.

Revenue Description

Title 15, Chapter 38, MCA, created a resource indemnity and groundwater assessment tax. The resource indemnity tax (RIT) was initially enacted to provide for the creation of a resource indemnity trust fund, where 50% of the proceeds from the tax went toward building up the principle of the trust fund until it reached the cap of \$100 million. The trust fund balance eclipsed \$100 million in December 2001, and consequently the RIT distribution ceased. Currently, the tax provides revenue for groundwater assessment and resource development programs for the benefit of the state and its citizens. The purpose of the RIT is to indemnify the citizens of Montana for depletion of the state’s natural resources and for environmental damage caused by mineral development.

Table 1 shows actual RIT revenues for FY 2012 through FY 2022 and forecast revenue for FY 2023 through FY 2025.



The tax rates for RIT vary depending on the type of mineral being extracted.

- Talc’s tax rate is \$25 plus an additional 4% of the gross value of the talc produced in excess of \$625 in the prior calendar year.
- Coal’s tax rate is \$25 plus an additional 0.4% of the gross value of the coal produced in excess of \$6,250 in the prior calendar year.
- Vermiculite’s tax rate is \$25 plus an additional 2% of the gross value of the vermiculite produced in excess of \$1,250 in the prior calendar year.
- Limestone’s tax rate is \$25 plus an additional 10% of the gross value of the limestone produced in excess of \$250 in the prior calendar year.
- Industrial garnets and its associated byproducts tax rate is \$25 plus an additional 1% of the gross value of product in excess of \$2,500 in the prior calendar year.
- All other mineral’s tax rate (excluding metals, oil, and natural gas) is \$25 and an additional 0.5% of the gross value of the product in excess of \$5,000 in the prior calendar year.

Forecast Methodology

Step 1. Estimate the amount of RIT revenue from coal mines in the state.

Step 2. Estimate the amount of RIT revenue from all other mineral mines in the state.

Table 2 shows the actual and forecast RIT revenues from coal production and other mineral production.

Table 2				
Resource Indemnity Tax				
(\$ millions)				
Fiscal Year	Coal Tax Revenue		Other Minerals Tax Revenue	Total
A 2012	\$1.759	+	\$0.585	= \$2.344
A 2013	\$1.962	+	\$0.151	= \$2.112
A 2014	\$2.224	+	\$0.055	= \$2.279
A 2015	\$2.090	+	\$1.213	= \$3.303
A 2016	\$1.800	+	\$0.535	= \$2.335
A 2017	\$2.090	+	\$0.533	= \$2.623
A 2018	\$2.090	+	\$0.441	= \$2.531
A 2019	\$2.516	+	\$0.408	= \$2.923
A 2020	\$2.718	+	-\$0.449	= \$2.269
A 2021	\$1.614	+	\$0.256	= \$1.871
A 2022	\$2.135	+	\$0.336	= \$2.471
F 2023	\$3.752	+	\$0.321	= \$4.072
F 2024	\$2.781	+	\$0.308	= \$3.089
F 2025	\$2.499	+	\$0.318	= \$2.817

Distribution

RIT revenue is allocated to several state special revenue accounts. These include the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) match debt service fund (75-10-622, MCA), the ground water assessment account (85-2-905, MCA), the water storage account (85-1-631, MCA), the Hazardous Waste/CERCLA state special revenue account (75-10-621, MCA), the Environmental Quality Protection Fund (75-10-704, MCA), and the Natural Resource Projects state special revenue account (15-38-302, MCA). The allocations are made in the specific order described below.

First, the CERCLA match debt service fund must allocate the required amount to pay the principal, redemption premiums, and interest on CERCLA bonds, after transfers from the CERCLA cost recovery account (75-10-631, MCA).

Second, \$0.366 million is distributed to the groundwater assessment account.

Third, at the beginning of the biennium (even numbered years), \$0.150 million is allocated to the water storage state special revenue account.

Lastly, 25% of the remaining revenue is distributed to the Hazardous Waste /CERCLA state special revenue account, 25% is distributed to the Environmental Quality Protection Fund, and 50% to the Natural Resource Projects state special revenue account.

Table 3 shows the actual and forecast distribution of RIT revenue for FY 2020 through FY 2025.

Table 3
Resource Indemnity Tax Revenue Allocation
(\$ millions)

Fiscal Year	CERCLA Match Debt Service Fund	Groundwater Assessment	Water Storage	Environmental Quality Protection	Hazardous Waste / CERCLA	Natural Resources Projects	Total
A 2020	\$0.145	\$0.366	\$0.150	\$0.402	\$0.402	\$0.804	\$2.269
A 2021	\$0.145	\$0.366	\$0.000	\$0.340	\$0.340	\$0.680	\$1.871
A 2022	\$0.145	\$0.366	\$0.150	\$0.452	\$0.452	\$0.905	\$2.471
F 2023	\$0.145	\$0.366	\$0.000	\$0.890	\$0.890	\$1.781	\$4.072
F 2024	\$0.145	\$0.366	\$0.150	\$0.607	\$0.607	\$1.214	\$3.089
F 2025	\$0.145	\$0.366	\$0.000	\$0.576	\$0.576	\$1.153	\$2.817

Data Sources

RIT revenue and distribution amounts were obtained from the Department of Revenue and SABHRS.

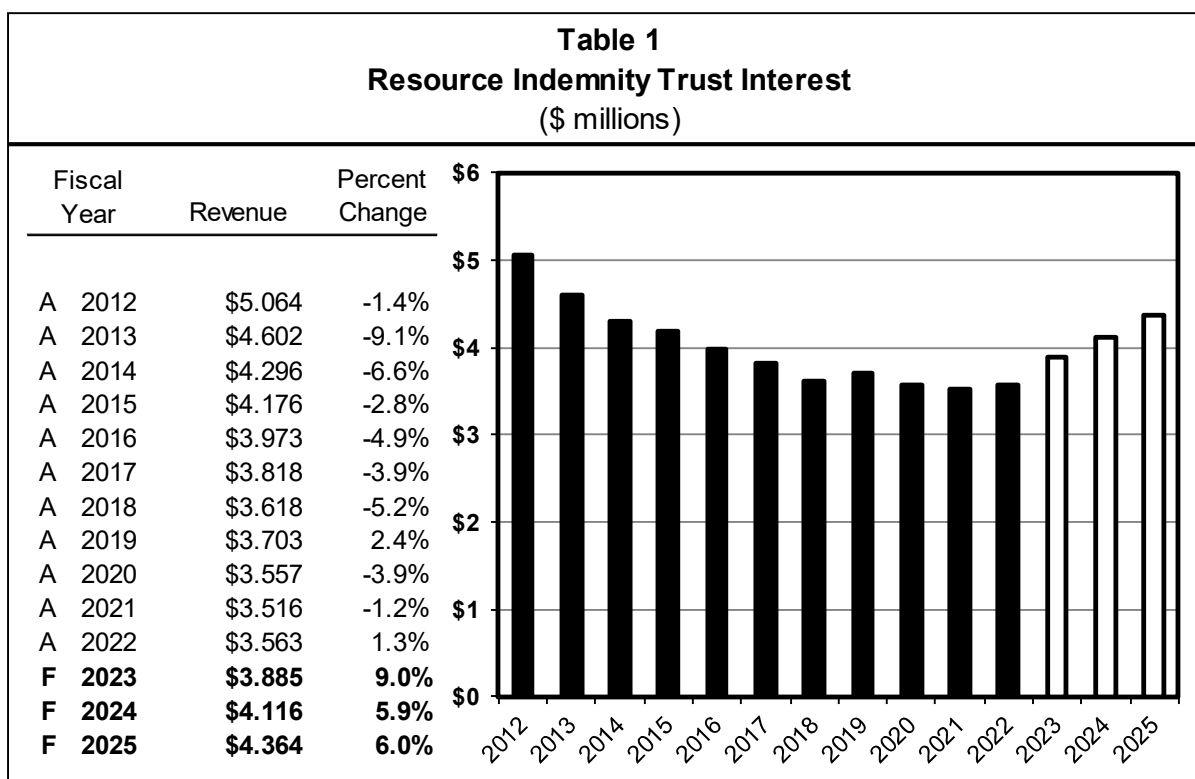
Resource Indemnity Trust Interest

2025 Biennium

Revenue Description

Title 15, Chapter 38, MCA, created a Resource Indemnity Trust (RIT) fund to indemnify the citizens of Montana for depletion of the state’s natural resources and for the environmental damage due to mineral development. The trust was funded with proceeds from the Resource Indemnity Tax until the trust balance reached \$100 million, which occurred in December 2001. Deposits from the Resource Indemnity Tax ceased at that point and the balance has remained steady at slightly over \$100 million.

Table 1 shows actual interest income from the RIT trust fund from FY 2012 through FY 2022 and forecast income for FY 2023 through FY 2025.



Since the principle of the RIT fund is fixed, interest earnings from the fund are determined solely by changes in yield of the fund’s assets. The fund is invested primarily in the trust fund investment pool (TFIP) which consists of long-term securities and is managed by the Montana Board of Investments (BOI). The financial turmoil caused by the Great Recession sent interest rates plummeting. Rates remained subdued for an extended period after the crisis, which resulted in a build-up of relatively low-yield assets in the TFIP. Over the past few years, low-yield, recession era securities have matured and have been replaced in the TFIP by higher-yield versions. This process caused overall TFIP returns to flatten and begin a slight upward trajectory in FY 2018 – FY 2019. It was a short-lived rise. The global spread of COVID-19 resulted in sharp decline in U.S. bond yields. Yields on long-term, investment-grade assets remained subdued as the U.S. economy recovered from the pandemic shock in 2020 and 2021. Not surprisingly, the yield on RIT TFIP holdings and the associated revenue fell in FYs 2020 and 2021. Ascending market yields in 2022 have lifted RIT TFIP yields. The ascension of yields is projected to continue through FY 2025.

Forecast Methodology

Step 1. Estimate the balances of short- and long-term investments in the RIT fund.

Step 2. Estimate the yields on RIT fund investments and apply these rates to the estimated RIT fund balances.

Distribution

The distribution of RIT interest earnings is defined in section 15-38-202, MCA. Some of the funds receive a fixed allocation per biennium, some funds receive a fixed allocation per fiscal year, and some funds receive a percentage each fiscal year of remaining revenue after the fixed allocations have been made. If there isn't enough interest revenue to cover the fixed allocations for all the funds, then each fund gets a percentage of the available revenue. This percentage is equal to the proportion a fund's fixed allocation is to the total revenue needed to cover the fixed allocations for all funds.

In the first year of each biennium the following funds receive these fixed allocations:

- \$650,000 to the oil and gas production damage mitigation account unless the unobligated cash balance equals or exceeds \$1 million (82-11-161, MCA).
- \$500,000 to the water storage account (85-1-631, MCA).
- \$175,000 to the environmental contingency account unless the unobligated cash balance equals or exceeds \$750,000 (75-1-1101, MCA).

Each fiscal year the following accounts receive these fixed allocations:

- \$3.2 million to the natural resource projects account for grants (15-38-302, MCA).
- \$300,000 to the groundwater assessment account (85-2-905, MCA).
- \$500,000 to the Department of Fish, Wildlife, and Parks for the trout habitat enhancement program (87-1-283, MCA).

Each fiscal year any money remaining after all fixed allocations have been made is distributed to the following accounts in these proportions:

- 65% to the natural resource operations account (15-38-301, MCA).
- 26% to the hazardous waste/CERCLA account (75-10-621, MCA).
- 9% to the environmental quality protection fund (75-10-704, MCA).

Table 2 shows the distribution of RIT interest for FY 2022 and the forecast distribution for FY 2023 through FY 2025.

Entity	FY 2022	FY 2023	FY 2024	FY 2025
Total Revenue	\$3.563	\$3.885	\$4.116	\$4.364
Biennial Fixed Allocations				
Oil & Gas Damage Mitigation	\$0.318	\$0.000	\$0.502	\$0.000
Environmental Contingency	\$0.121	\$0.000	\$0.135	\$0.000
Water Storage	\$0.347	\$0.000	\$0.386	\$0.000
Annual Fixed Allocation				
Natural Resources Projects	\$2.221	\$3.108	\$2.473	\$3.200
Ground Water Assessment	\$0.208	\$0.291	\$0.232	\$0.300
Future Fisheries	\$0.347	\$0.486	\$0.386	\$0.500
Remainder	\$0.000	\$0.000	\$0.000	\$0.364
Annual Percentage Allocations				
Natural Resource Operations (65%)	\$0.000	\$0.000	\$0.000	\$0.237
Hazardous Waste/CERCLA (26%)	\$0.000	\$0.000	\$0.000	\$0.095
Environmental Quality Protection (9%)	\$0.000	\$0.000	\$0.000	\$0.033

Data Sources

Investment balances and interest rate data were obtained from the Board of Investments and SABHRS.



GOVERNOR
GREG GIANFORTE

STATE OF MONTANA

SUMMARY OF
MAJOR ASSUMPTIONS
SECTION 11

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GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Revenue Estimate Assumptions

2025 Biennium

Summary of Revenue Assumptions by Tax Type (Fiscal Year Unless Otherwise Noted)				
General Fund Assumption Item	Actual	Forecast		
	2022	2023	2024	2025
		(Fiscal year unless otherwise stated)		
Personal Income Tax	TY 2021	TY 2022	TY 2023	TY 2024
Full Year Resident Returns (Annual)	600,961	613,227	616,683	617,872
Full Year Resident Returns (Growth)	1.0%	2.0%	0.6%	0.2%
Income Items	TY 2021	TY 2022	TY 2023	TY 2024
Wages and salaries	21,415,879,013	23,388,062,607	24,066,421,236	24,931,497,191
Interest income	306,748,053	288,340,092	454,707,619	478,439,808
Dividend income	1,093,004,054	1,174,376,036	1,198,655,545	1,233,379,891
Net business income	1,175,958,679	1,224,401,779	1,268,542,151	1,284,291,279
Capital gains	6,226,899,514	5,556,205,101	4,165,315,675	5,836,229,206
Supplemental gains	242,808,025	261,246,513	266,748,129	274,616,493
Rents, royalties, etc.	4,228,358,591	4,350,378,390	4,506,781,781	4,636,826,407
Taxable IRAs, Pensions & Annuities	4,110,373,020	4,353,543,168	4,553,882,041	4,674,150,334
Taxable Social Security sec.	1,495,527,083	1,563,893,394	1,640,489,479	1,719,291,930
Farm income	(322,808,803)	(422,095,363)	(438,519,417)	(447,965,236)
All Other Taxable Income	31,497,591	(246,877,004)	(219,235,413)	(151,525,392)
Total Income	40,004,244,000	41,491,474,000	41,463,788,000	44,469,231,000
<i>Growth</i>	16.5%	3.7%	-0.1%	7.2%
Fed. Adj. to Income:	472,457,508	544,333,351	587,997,838	634,223,793
Montana Additions	TY 2021	TY 2022	TY 2023	TY 2024
Interest on state, county, bonds	89,982,624	92,216,210	97,635,529	102,561,917
Federal income tax refunds	48,764,723	47,608,699	47,276,123	46,117,474
All Other additions	591,874,749	776,788,840	800,584,178	839,182,060
Montana Subtractions	TY 2021	TY 2022	TY 2023	TY 2024
Farm risk management account	46,804	11,998	14,186	16,335
Exclusion for savings bonds	27,050,136	24,271,532	49,384,012	52,966,287
Unemployment income	302,584,760	310,409,061	382,761,207	377,340,182
Medical savings account excl.	23,986,330	24,526,233	25,066,136	25,606,039
Family education account excl.	18,807,708	19,509,178	20,210,648	20,912,117
First-time homebuyers acct. excl.	962,219	1,018,629	1,078,347	1,141,566
Health Care Prof. Loan Pmt. excl.	1,116,534	1,027,689	983,266	961,054
All Other Subtractions	1,368,506,870	1,448,642,486	1,533,470,600	1,623,265,992
Itemized Deductions	TY 2021	TY 2022	TY 2023	TY 2024
Medical insurance premiums	565,919,725	587,261,938	609,409,017	632,391,317
Medical deduction	285,501,631	285,884,598	286,600,700	287,357,113
Long-term care insurance	29,135,526	28,871,012	28,606,499	28,341,985
Balance of federal tax	788,944,020	853,805,582	923,711,026	999,339,988
Additional federal back year tax	8,369,922	8,621,020	8,879,650	9,146,040
Property taxes	692,718,129	725,396,522	752,488,856	783,109,903
Other Deductible taxes	3,286,140	3,384,724	3,486,266	3,590,854
Home mortgage interest	921,441,130	953,691,570	987,070,774	1,021,618,252
Deductible investment interest	37,681,774	37,828,455	38,506,257	38,516,725
Contributions	812,194,014	849,601,412	888,731,691	929,664,202
Child/dependent care expenses	679,465	679,465	679,465	679,465
Casualty and theft losses	1,777,231	1,777,231	1,777,231	1,777,231
Tier I - Miscellaneous	-	-	-	-
Tier II - Miscellaneous	8,297,398	8,587,807	8,888,380	9,199,473
Gambling Losses	25,911,450	25,911,450	25,911,450	25,911,450
Credits	TY 2021	TY 2022	TY 2023	TY 2024
Total Allowable Credits	104,083,972	109,077,408	114,310,405	119,794,455

Summary of Revenue Assumptions by Tax Type
(Fiscal Year Unless Otherwise Noted)

PIT Other	2022	2023	2024	2025
Model TY Liability	\$1,879,882,194	\$1,832,608,139	\$1,925,458,593	\$1,991,072,105
Est. FY Liability (\$ million)	\$1,668.416	\$1,866.062	\$1,922.425	\$1,969.114
Audit Collections(\$ million)	\$52.8	\$52.3	\$52.3	\$55.0
Penalties and Interest (\$ million)	\$10.0	\$12.5	\$14.2	\$13.8
Prior Year Amended Returns (\$ million)	\$5.5	\$6.7	\$7.0	\$6.9
Calculated Collections (\$ million)	\$1,727.6	\$1,938.0	\$1,996.0	\$2,042.2
SABHRS/ Base Adj (\$ million)				
SABHRS/ Adjusted Collections (\$ million)	\$1,765.4	\$2,393.8	\$2,041.0	\$2,087.2
MT ARPA Adjustment	\$25.0	\$25.0	\$25.0	\$25.0
Missing Filer Adjustment (TY 2021 November 2022)	\$20.0	\$20.0	\$20.0	\$20.0
Property Tax				
Mill Levy Revenue (millions \$)				
Property Tax - 95 Mill Levy	\$298.567	\$339.752	\$430.315	\$436.054
Property Tax - 1.5 Mill Levy	\$1.645	\$1.679	\$2.138	\$2.166
Protested Property Taxes (subtraction)	\$0.011	\$0.011	\$0.011	\$0.011
<i>Total Mill Levy Revenue (millions \$)</i>	<i>\$327.849</i>	<i>\$341.421</i>	<i>\$432.442</i>	<i>\$438.210</i>
Non-Levy PT Revenue (millions \$)				
Coal Gross Proceeds	\$5.828	\$7.681	\$10.503	\$8.975
Federal Forest Reserves	\$2.792	\$2.764	\$2.591	\$0.713
All Other (by residual)	\$0.022	\$0.022	\$0.022	\$0.022
<i>Total Non-Levy PT Revenue</i>	<i>\$8.642</i>	<i>\$10.467</i>	<i>\$13.116</i>	<i>\$9.710</i>
Statewide TV by Class (millions) - Fiscal Year				
1. Net Proceeds	3.929	4.432	4.833	4.612
2. Gross Proceeds (w/o Abatements)	41.809	47.470	53.993	45.484
3. Agricultural Land	153.981	152.236	152.146	150.924
4. Res./Comm... Real Property	2,260.126	2,325.420	3,252.276	3,294.286
5. Rural Co-Op/Poll. Control	51.970	53.462	54.225	54.999
7. Non-centrally Assessed Util.	0.003	0.018	0.018	0.018
8. Business Equipment (FY adjusted)	154.790	140.938	145.249	150.187
9. Pipelines, Electrical Transmission	556.306	626.403	642.350	658.703
10. Forest Land	4.798	4.733	6.085	6.518
12. Airlines/Railroads	98.453	102.545	98.090	101.093
13. Telecomm./Elec Generation	152.980	148.486	148.932	149.379
14. Renewable Energy Prod.& Trans.	20.909	29.858	33.189	38.047
15. CO2/Qualifying Liquid Pipelines	2.148	2.858	2.858	2.858
16. High Voltage DC Converter	-	-	-	-
17. Data Server Facility	-	1.771	1.863	1.960
Statewide Taxable Value (millions)	3,502.202	3,640.629	4,596.107	4,659.069
Statewide TV Growth by Class - Fiscal Year				
1. Net Proceeds	-17.2%	12.8%	9.1%	-4.6%
2. Gross Proceeds (w/o Abatements)	31.9%	13.5%	13.7%	-15.8%
3. Agricultural Land	-2.1%	-1.1%	-0.1%	-0.8%
4. Res./Comm... Real Property	13.7%	2.9%	39.9%	1.3%
5. Rural Co-Op/Poll. Control	2.4%	2.9%	1.4%	1.4%
7. Non-centrally Assessed Util.	-6.6%	522.4%	0.1%	0.0%
8. Business Equipment (FY adjusted)	4.2%	-8.9%	3.1%	3.4%
9. Pipelines, Electrical Transmission	2.6%	12.6%	2.5%	2.5%
10. Forest Land	-1.5%	-1.4%	28.6%	7.1%
12. Airlines/Railroads	-2.5%	4.2%	-4.3%	3.1%
13. Telecomm./Elec Generation	-6.0%	-2.9%	0.3%	0.3%
14. Renewable Energy Prod.& Trans.	15.3%	42.8%	11.2%	14.6%
15. CO2/Qualifying Liquid Pipelines	-0.1%	33.1%	0.0%	0.0%
16. High Voltage DC Converter	0.0%	0.0%	0.0%	0.0%
17. Data Server Facility			5.2%	5.2%
Statewide Taxable Value Growth	9.1%	4.0%	26.2%	1.4%
Taxable Value in TIF districts (millions)	68.360	64.288	66.477	69.022
Taxable value for COT Counties	1,126.792	1,157.526	1,461.317	1,481.335
TIF Taxable Value in COY Counties	30.163	38.438	36.148	37.379
Taxable Value for 1.5 Mills	1,020.629	1,096.628	1,119.088	1,425.168
1.5 mill Revenue (\$ million)	\$1.645	\$1.679	\$2.138	\$2.166

Summary of Revenue Assumptions by Tax Type
(Fiscal Year Unless Otherwise Noted)

Vehicle Taxes and Fees	2022	2023	2024	2025
Annual Vehicle Registrations by Age Class				
0 to 4 Years	246,556	248,517	256,476	264,639
5 to 10 Years	292,676	304,962	321,672	325,204
Over 10 Years	277,187	265,126	259,923	256,159
Total Annual Registrations	816,419	818,605	838,071	846,002
Permanent Registrations	91,576	93,605	101,121	103,213
Annual Light Vehicle Revenue (million \$)	\$87.29	\$87.88	\$90.92	\$92.89
Other Vehicle Registration revenue (million \$)	\$18.74	\$18.87	\$19.52	\$19.95
All Other Fees (million \$)	\$7.08	\$7.13	\$7.38	\$7.54
Permanent Registration Revenue (million \$)	\$8.02	\$8.19	\$8.85	\$9.03
Corporate Income Tax				
FY Lagged (1) U.S. Corp Profits Bn \$	\$2,866	\$3,314	\$3,465	\$3,504
TCJA Base Expansion Dummy	1	1	1	1
FY 2003 Dummy	0	0	0	0
Insurance Premiums Tax				
Estimated Gross Insurance Premium Tax (millions)	\$145.556	\$155.731	\$163.463	\$171.579
Prior Calendar Year S&P 500 Index Average	4,267	4,151	3,946	3,875
Video Gambling				
Net machine Income (million \$)	\$519.209	\$520.264	\$526.464	\$535.890
Oil and Natural Gas				
WTI Oil Price per Barrel	\$87.81	\$86.61	\$82.44	\$84.27
MT Oil Price per Barrel	\$83.91	\$81.99	\$77.88	\$79.71
Oil Production (millions bbl)	19.44	20.06	20.74	21.05
Oil Effective Tax Rate	9.04%	8.62%	8.39%	8.38%
Henry Hub Natural Gas Price per MCF	\$5.45	\$7.56	\$4.62	\$4.35
MT Natural Gas price per MCF	\$4.94	\$7.06	\$4.11	\$3.82
Natural Gas Production (thousands of MCF)	34.66	31.66	31.85	32.26
Natural Gas Effective Tax Rate	9.75%	9.59%	9.59%	9.57%
US Mineral Royalties				
Coal Royalty Income	\$13.733	\$27.960	\$20.856	\$18.263
Oil Royalty Income	\$10.007	\$11.189	\$11.144	\$11.375
Natural Gas Royalty Income	\$1.610	\$4.321	\$2.547	\$2.469
Other US Mineral Royalty Income (Rentals & Bonuses)	\$0.602	\$0.650	\$0.478	\$0.576
Coal Severance Tax				
Tons Produced	27.616	27.556	27.727	27.063
Price Per Ton	\$34.34	\$45.80	\$34.61	\$30.93
Exemptions	\$171.21	\$266.64	\$202.73	\$176.85
Tax Rate	8.71%	9.45%	9.45%	9.45%
Metal Mines Tax				
Gross Value	\$1,473.110	\$1,426.242	\$1,452.487	\$1,420.636
Deductions	\$88.869	\$86.041	\$87.625	\$85.703
Average Tax Rate	1.65%	1.64%	1.65%	1.65%
Total Tax Revenue	22.886	22.035	22.471	21.999
World Bank FY Change in Gold Price (Wt. 0.080)	0.14%	-2.80%	-3.60%	-2.19%
World Bank FY Change in Platinum Price Change (Wt. 0.700)	2.89%	-4.48%	5.67%	-2.19%
World Bank FY Change in Copper Price (0.220)	2.45%	0.81%	-8.37%	-2.19%
Electrical Energy Producers Tax				
kWh (millions)	19,473	19,852	20,387	20,921
Wholesale Energy Tax				
Taxable kWh (million)	22,066	22,718	23,122	23,527

Summary of Revenue Assumptions by Tax Type
(Fiscal Year Unless Otherwise Noted)

	2022	2023	2024	2025
Coal Trust Interest Earnings				
Balance	\$545.1	\$545.1	\$545.1	\$545.1
Return	2.98%	3.37%	3.63%	3.83%
TCA Interest Earnings				
Balance	\$2,964.4	\$3,269.3	\$3,049.8	\$3,229.4
Return	0.39%	3.72%	4.76%	3.68%
Liquor Excise and License Tax				
FY Pre-Tax Sales (millions)	\$164.087	\$184.011	\$206.353	\$231.409
FY Tribal Distributions (millions)	\$0.754	\$0.846	\$0.948	\$1.064
Liquor Profits				
FY Gross Liquor Sales (millions)	\$204.730	\$229.588	\$257.465	\$288.727
FY Cost of Goods Sold (millions)	\$116.391	\$130.523	\$146.372	\$164.144
FY Liquor Discounts and Commissions (millions)	\$26.800	\$30.054	\$33.703	\$37.796
FY Liquor Operating Costs (millions)	\$3.725	\$3.866	\$4.012	\$4.163
Telecommunications Excise Tax				
Excise Tax	\$8.544	\$7.842	\$7.198	\$6.606
Audits, Penalties & Interest	\$0.026	\$0.014	\$0.014	\$0.014
Growth rate	-2.8%	-8.3%	-8.2%	-8.2%
Health Care Facility Utilization Fees				
FY Bed Days (millions)	1.148	1.137	1.126	1.115
FY Intermediate Care Expenditures (millions)	\$5.912	\$4.821	\$4.844	\$4.868
Beer Tax				
FY Beer Barrels (millions)	1.079	1.088	1.097	1.105
FY Tribal Distribution (millions)	\$0.092	\$0.089	\$0.089	\$0.090
FY Effective Tax Per Barrel (\$)	\$3.999	\$3.987	\$3.976	\$3.965
Wine Tax				
FY Wine Liters (millions)	14.060	14.260	14.453	14.633
FY Tribal Distribution (millions)	0.073	0.066	0.067	0.067
Cigarette Tax				
FY Cigarette Packs (millions)	34.872	34.701	34.496	34.254
FY Effective Tax Rate per Pack (dollars)	\$1.70	\$1.70	\$1.70	\$1.70
FY Tribal Distribution (millions)	\$3.405	\$3.581	\$3.559	\$3.537
Tobacco Tax				
FY Value of Other Tobacco Products (millions)	\$6.309	\$6.404	\$6.495	\$6.578
FY Snuff Ounces (millions)	10.830	10.578	10.322	10.061
FY Tribal Distribution (millions)	\$0.639	\$0.635	\$0.626	\$0.617
Tobacco Settlement				
FY CPI Change (Percent Change)	7.04%	7.33%	3.00%	3.00%
FY Cumulative CPI Change (Percent Change)	109.38%	124.73%	131.47%	138.42%
Montana NPM Adjustment (millions)	\$0.000	\$0.000	\$0.000	\$0.000
Institutional Reimbursements				
Reimbursements - MDC (millions)	\$0.074	\$0.069	\$0.078	\$0.078
Reimbursements - MSH (millions)	\$8.843	\$1.648	\$1.668	\$5.277
Reimbursements - MMHNCC (millions)	\$5.548	\$4.627	\$4.841	\$4.692
Highway Patrol Fines				
Prior CY Gasoline Price (cents per gal)	309.72	311.11	300.45	288.18
Investment License Permits				
Prior FY S&P 500 average	4,267	4,145	3,744	3,864

Summary of Revenue Assumptions by Tax Type
(Fiscal Year Unless Otherwise Noted)

	2022	2023	2024	2025
Drivers License Fees				
Effective Average Fee	\$36.92	\$37.00	\$37.00	\$37.00
Basic Drivers licenses issued	179,955	147,152	143,262	145,103
Revenue by type (million \$)				
Basic Driver's Licenses	\$6.643	\$5.445	\$5.301	\$5.369
Commercial Licenses	\$0.839	\$0.688	\$0.670	\$0.678
Motorcycle Endorsements	\$0.068	\$0.055	\$0.054	\$0.055
Replacement Licenses	\$0.619	\$0.507	\$0.494	\$0.500
Renewal Fee	\$0.107	\$0.087	\$0.085	\$0.086
License Revenue	\$8.276	\$6.782	\$6.603	\$6.688
Estimate of County retention	\$0.011	\$0.011	\$0.011	\$0.011
Rail Car Tax				
Total Montana Allocated (market) Value (million \$)	\$220.309	\$224.715	\$229.209	\$233.793
Class 12 Tax Rate	3.12%	3.06%	3.06%	3.00%
Taxable Value (million \$)	\$6.874	\$6.876	\$7.014	\$7.014
Commercial & Industrial Mill Levy	583.32	586.88	585.00	589.00
Non-General Fund Assumption Item				
Property Tax				
University 6 Mill Levy TV (millions)	3,502.202	3,640.629	4,596.107	4,659.069
University 6 Mil levy revenue (million \$)	\$21.01	\$21.84	\$27.58	\$27.95
University 6 mill non-levy revenue				
Coal Gross Proceeds (estimated)	\$0.777	\$1.024	\$1.400	\$1.197
Other Non-Levy Revenue	\$0.001	\$0.001	\$0.001	\$0.001
Protested University Mills	(\$0.001)	(\$0.001)	(\$0.001)	(\$0.001)
Total Non-Levy (million \$)	\$0.778	\$1.025	\$1.401	\$1.197
Total PT 6 mill (million \$)	\$21.79	\$22.87	\$28.98	\$29.15
Oil & Gas University Revenue (million \$)	\$2.072	\$2.303	\$2.086	\$2.146
Bentonite University Revenue (\$)	\$0.012	\$0.012	\$0.012	\$0.012



GOVERNOR
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STATE OF MONTANA

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GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

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