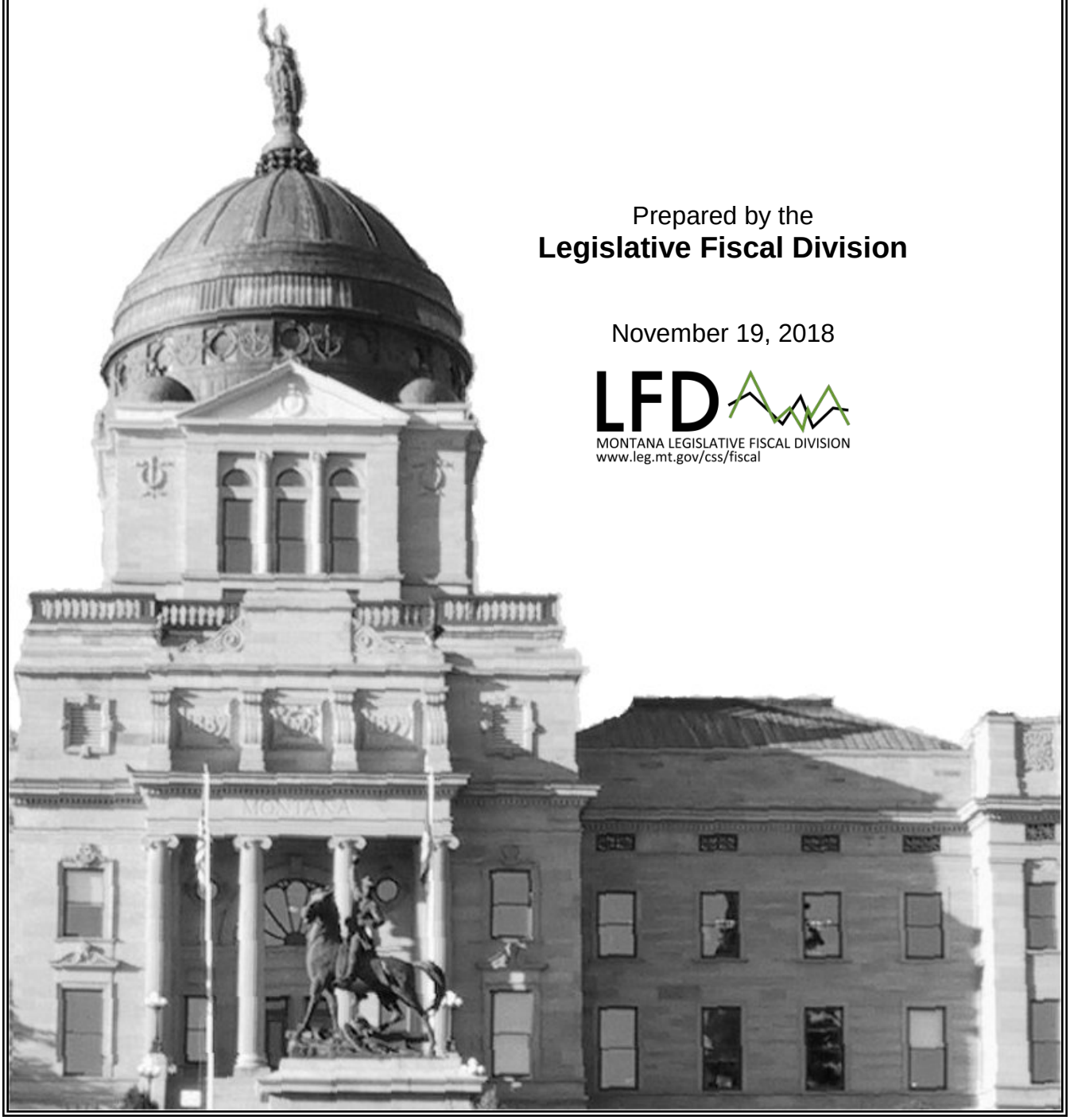
Revenue Estimate Recommendations

Fiscal Years 2019, 2020 and 2021



Prepared by the
Legislative Fiscal Division

November 19, 2018

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Director
AMY CARLSON

November 19, 2018

Members of the Revenue and Transportation Interim Committee (RTIC):

In accordance with the provisions of 5-12-302, MCA, I am submitting electronically the Legislative Fiscal Division revenue estimate recommendations for the fiscal years 2019, 2020, and 2021. I am providing this information in advance of the November 19th RTIC meeting to provide an opportunity for committee members to study the estimates and assumptions used in developing the estimates.

This report provides a profile of each major general fund revenue source, with specific detail on the methodology and assumptions used to develop these recommendations. Please note that in addition to the general fund components, the LFD report also contains recommendations for some specific non-general fund revenue sources that are significant in the development of the state budget for the 2021 biennium.

We believe this document and the process outlined above will serve as an effective tool as you carry out your statutory responsibility to develop revenue estimates for the 2019 legislative session. My staff and I look forward to assisting in this task.

Respectfully submitted,

Amy Carlson
Legislative Fiscal Analyst

Attachments

Revenue Estimates

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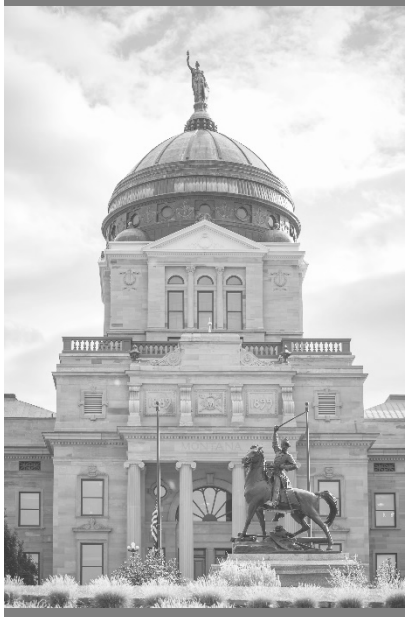


LFD

MONTANA LEGISLATIVE FISCAL DIVISION

Overview

Purpose of the Report

As delineated in 5-5-227(2)(a), MCA, the Revenue and Transportation Interim Committee (RTIC) is required to prepare an estimate of the amount of revenue projected to be available for legislative appropriation. In addition, 5-12-302, MCA specifically requires the Legislative Fiscal Analyst (LFA) to estimate revenue from existing and proposed taxes and requires the LFA to assist RTIC in performing its revenue estimating duties.

The purpose of this report is to document the Legislative Fiscal Division (LFD) recommendations for anticipated revenues for FY 2019 through 2021. In almost all cases, estimates are based on current federal and state laws and do not include estimates for revenues due to litigation or any other pending legal issues. This position is consistent with past recommendations to RTIC.

History

In 1989, the Montana Legislature established a process for the Legislature to develop revenue estimates for legislative appropriation. SB 341 (1989 Session) directed the then-Revenue Oversight Committee to prepare the revenue estimates. The legislation also provided that the revenue estimating resolution introduced by the Committee and subsequent periodic reports issued by the Committee constitute the Legislature's current revenue estimate until final adoption of the resolution by both houses of the Legislature.

In 1991, the Legislature revised the procedures of estimating revenue by inserting the language that is now contained in 5-5-227(2)(a) and (3), MCA, including the language that the Committee's revenue estimates and underlying assumptions should be used by state agencies in the preparation of fiscal notes (Chapter 603, Laws 1991).

Because of disparities in the revenue estimates between the LFD and the Department of Revenue (DOR) during the 1997 session, House leadership requested that the Revenue Oversight Committee work with LFD and DOR to develop a process to resolve differences in revenue estimates before the 1999 legislative session.

Recent Process

In 1999, the Legislature revised the structure of interim committees and assigned the revenue estimating responsibilities to RTIC (Chapter 19, Laws 1999). Since then, the RTIC has adopted the revenue estimates in November of the year proceeding the next regular session. As a practical matter, the Committee cannot adopt the estimates much earlier than mid-November because the DOR income tax data is not available until November 1 (October 15 is the general deadline for taxpayers who requested an extension of time for filing an income tax return).

Staff of the LFD and the Governor's Office of Budget and Program Planning (OBPP) each present assumptions and corresponding revenue estimates for the Committee's consideration. In the past, the Committee has initially adopted the revenue estimates of the LFD and may make changes to those estimates based on information presented by OBPP, economists from the Montana university system, and other experts.

Finally, the resolution containing the Committee's revenue estimates must be pre-introduced by December 15th (see Rules of the Montana Legislature, Joint Rules 40-40(5)(a)). The Committee's estimate, as introduced in the Legislature, constitutes the Legislature's current revenue estimate until amended or until final adoption of the estimate by both houses.

Path through the Legislature

In the 1999 through 2003 legislative sessions, both houses of the Legislature adopted the resolution, and it was filed with the Secretary of State.

Overview

In 2005, the House of Representatives did not concur in the Senate amendments to the resolution, and the resolution died in the process. As such, the Senate estimates were the Legislature's current revenue estimates.

In 2007, the resolution died in the House Taxation Committee. Therefore, the RTIC estimates were the Legislature's current revenue estimates.

In February 2009, the House Taxation Committee amended HJR 2 and adopted a committee report. The resolution was referred to the Committee. In March, the Committee again amended the resolution and adopted a committee report. In each instance, the House Taxation Committee estimates became the Legislature's current revenue estimate. The resolution died in the process.

In March 2011, the House Taxation Committee amended HJR 2 and adopted a committee report. The resolution was referred to the Committee, where it died in process.

In November 2012, RTIC met to review and adopt a revenue estimate recommendation but were unable to agree on the estimate. Therefore, the committee did not introduce a resolution with the Committee's estimate. The Rules Committee subsequently met and adopted rules for the 63rd Legislative Session, including a requirement that the chair of the Senate Taxation Committee prepare a revenue estimate to be introduced in the Senate. The estimate contained in SJR 2, along with an initial set of amendments passed both houses by early February 2013. A revised estimate contained in SJR 27 was introduced in early April; however, due to missing the transmittal deadline for revenue bills, it ultimately failed to pass both houses.

In November 2014, RTIC met to review and adopt a revenue estimate recommendation. The OBPP recommendation was $295.4 million above the LFD recommendation. The committee ultimately adopted the LFD recommendations, with total adjustments in individual income tax and oil & natural gas tax equal to half of the total difference between the OBPP and LFD recommendations for individual income tax, corporation income tax, and oil & natural gas tax.

In January 2015, OBPP and LFD presented updated revenue estimates to a joint meeting of the House and Senate Tax Committees. At this time, the OBPP estimate was above the LFD estimate by $358.6 million. The two tax committees formed a joint subcommittee to understand the revenue estimates and the corresponding differences in more detail and make a recommendation to the House Tax Committee. The joint subcommittee met weekly throughout February and March, and ultimately made a recommendation to the House Tax Committee based on the LFD estimate, with a variety of alternative assumptions that increased the three-year estimate to $232 million above the LFD estimate.

OBPP presented a revenue estimate recommendation to the November 2016 meeting of RTIC that was below the LFD recommendation by $40.6 million to the three-year forecast. The committee adopted LFD assumptions, but included a general fund adjustment to each source so that the overall amount was equal to the OBPP estimate. In April, the House Taxation Committee amended HJR 2 based on the LFD March updated recommendation and adopted a committee report. The resolution was rereferred to the Committee, where it died in process.

In November 2018, RTIC heard the revenue estimate recommendations from OBPP and LFD, which were quite close: the OBPP recommendation was $46.3 million or 0.6% below LFD over the three-year forecast. The committee adopted the LFD estimate and corresponding assumptions, with an adjustment in corporate tax that essentially resulted in an average of the two estimate recommendations.

Overview

General Fund Revenue Estimate Recommendations

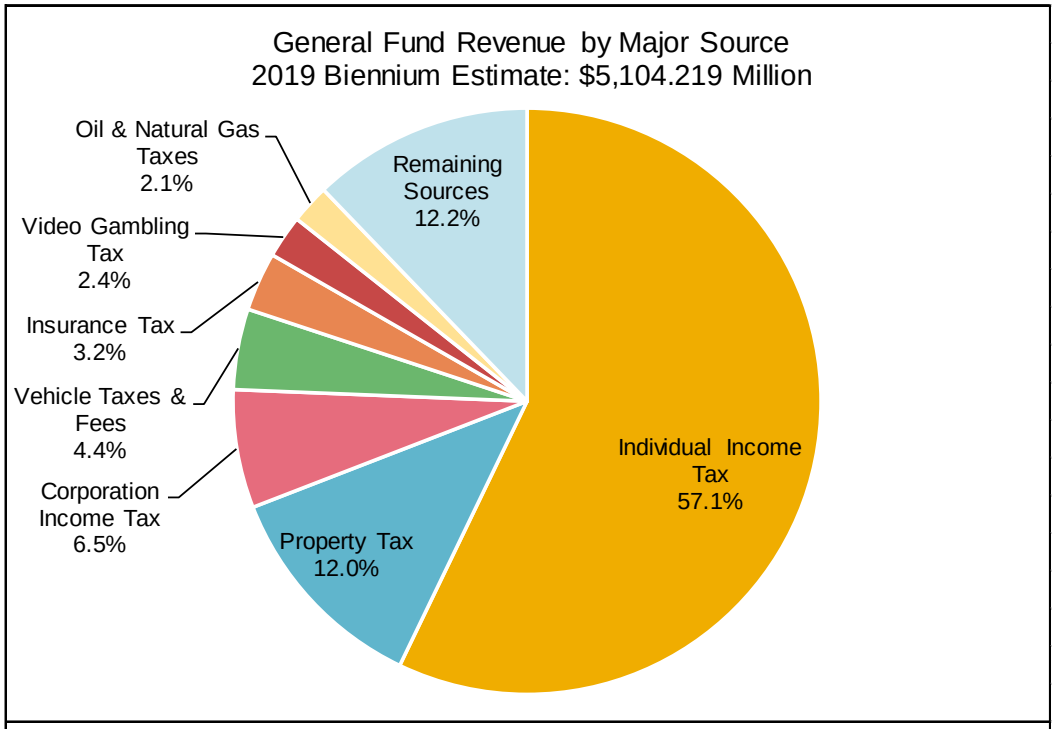
The table below shows the LFD general fund estimate recommendations by revenue category. Actual FY 2018 collections are shown, along with projections for FY 2019 through 2021.

LFD General Fund Revenue Estimate Recommendation
($ Millions)

Source of Revenue	Actual FY 2018	Estimated FY 2019	Estimated FY 2020	Estimated FY 2021	Estimated 2019 Bien	Estimated 2021 Bien
Largest Seven Sources						
Individual Income Tax	$1,297.777	$1,359.066	$1,425.943	$1,490.046	$2,656.842	$2,915.989
Property Tax	276.414	283.225	302.470	309.103	559.639	611.573
Corporation Income Tax	167.100	160.824	165.898	167.214	327.924	333.112
Vehicle Taxes & Fees	109.540	111.525	112.979	114.156	221.065	227.134
Oil & Natural Gas Production Tax	54.508	60.049	56.652	53.062	114.557	109.715
Insurance Tax & License Fees	75.273	77.475	81.158	83.915	152.749	165.073
Video Gambling Tax	60.324	60.158	60.248	60.172	120.482	120.420
Other Business Taxes						
Driver's License Fee	4.581	4.342	4.370	4.394	8.923	8.763
Investment License Fee	7.683	7.963	8.282	8.504	15.647	16.786
Lodging Taxes	24.091	25.218	26.380	27.287	49.309	53.667
Public Contractors Tax	4.267	3.503	3.579	3.655	7.769	7.234
Railroad Car Tax	3.649	3.492	3.878	4.196	7.141	8.074
Rental Car Sales Tax	3.719	3.730	4.039	4.258	7.449	8.297
Telecommunications Excise Tax	13.726	12.889	11.927	11.370	26.615	23.298
Other Natural Resource Taxes						
Coal Severance Tax	14.107	13.555	15.385	15.413	27.663	30.798
Electrical Energy Tax	4.302	4.547	4.416	4.497	8.848	8.913
Metalliferous Mines Tax	6.291	6.749	6.767	6.761	13.040	13.528
US Mineral Royalty	20.139	20.934	20.891	20.547	41.074	41.438
Wholesale Energy Tax	3.628	3.516	3.464	3.485	7.144	6.949
Other Interest Earnings						
Coal Trust Interest	17.938	17.088	17.333	17.504	35.026	34.837
Treasury Cash Account Interest	10.888	21.514	27.318	29.643	32.402	56.961
Other Consumption Taxes						
Beer Tax	3.002	3.074	3.074	3.075	6.076	6.149
Cigarette Tax	27.755	27.313	26.687	26.057	55.069	52.744
Liquor Excise & License Tax	21.007	22.884	23.893	25.044	43.890	48.937
Liquor Profits	12.200	12.900	13.500	14.200	25.100	27.700
Lottery Profits	10.699	11.510	11.337	11.136	22.209	22.473
Tobacco Tax	6.058	6.273	6.279	6.268	12.330	12.546
Wine Tax	2.446	2.461	2.554	2.644	4.906	5.197
Other Sources						
All Other Revenue	117.645	90.686	40.911	41.446	208.331	82.357
Highway Patrol Fines	3.754	3.907	3.862	3.841	7.661	7.703
Nursing Facilities Fee	4.405	4.275	4.087	3.990	8.680	8.077
Public Institution Reimbursements	13.754	13.887	11.396	11.197	27.641	22.593
Tobacco Settlement	2.778	2.996	2.603	2.581	5.773	5.184
Total General Fund	$2,405.447	$2,463.527	$2,513.558	$2,590.661	$4,868.974	$5,104.219
General Fund Growth		2.4%	2.0%	3.1%		4.8%

Overview

General fund revenue for the 2021 biennium is projected to increase 4.8% over the 2019 biennium projection. As shown in the pie chart below, the largest seven revenue sources are anticipated to account for nearly 88% of general fund revenue in the 2021 biennium; since 2004, these sources have on average accounted for 84% of general fund revenue.

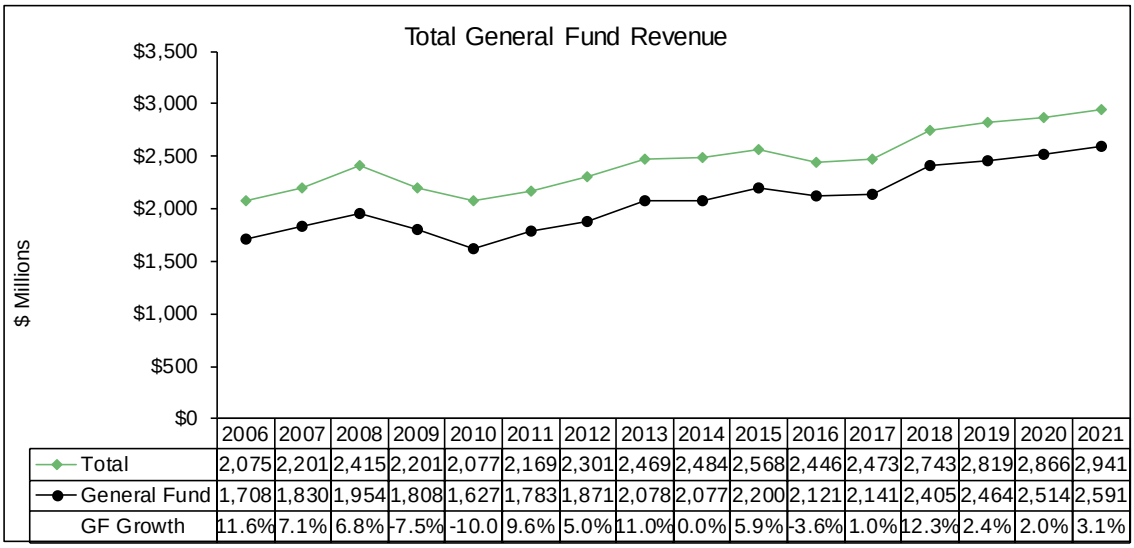


Source	2019 Bien. Estimate $ Millions	2021 Bien. Estimate $ Millions	% Change	Share of 2021 Biennium
Individual Income Tax	$2,656.842	$2,915.989	9.8%	57.1%
Property Tax	559.639	611.573	9.3%	12.0%
Corporation Income Tax	327.924	333.112	1.6%	6.5%
Vehicle Taxes & Fees	221.065	227.134	2.7%	4.5%
Insurance Tax	152.749	165.073	8.1%	3.2%
Video Gambling Tax	120.482	120.420	-0.1%	2.4%
Oil & Natural Gas Taxes	114.557	109.715	-4.2%	2.2%
Remaining Sources	715.716	621.204	-13.2%	12.2%
Total General Fund	$4,868.974	$5,104.219	4.8%	100.0%

Overview

General Fund History and Estimate Recommendation

The graph below shows actual total general fund collections from FY 2006 to FY 2018 and includes LFD estimate recommendations for FY 2019 through FY 2021.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	2,075	2,201	2,415	2,201	2,077	2,169	2,301	2,469	2,484	2,568	2,446	2,473	2,743	2,819	2,866	2,941
General Fund	1,708	1,830	1,954	1,808	1,627	1,783	1,871	2,078	2,077	2,200	2,121	2,141	2,405	2,464	2,514	2,591
GF Growth	11.6%	7.1%	6.8%	-7.5%	-10.0	9.6%	5.0%	11.0%	0.0%	5.9%	-3.6%	1.0%	12.3%	2.4%	2.0%	3.1%

Select Non-General Fund Revenue Estimates Recommendations

The LFD estimate recommendations for selected non-general fund revenue sources are shown in the table below. These estimates are included because of their importance in the budgeting process.

Selected Non-General Revenue Estimates Summary
($ Millions)

Source of Revenue	Actual FY 2018	Actual FY 2019	Actual FY 2020	Estimated FY 2021	Estimated 2019 Bien	Estimated 2021 Bien
Property Tax: 6 Mill	$17.835	$18.457	$19.823	$20.270	$32.104	$33.702
Natural Resource Taxes						
Federal Forest Receipts	15.120	14.364	2.168	2.168	36.507	18.221
Resource Indemnity Tax	2.531	2.541	2.670	2.712	5.582	4.958
Interest Earnings						
Capital Land Grant Interest and Income	2.496	1.914	1.878	1.909	1.638	3.014
Common School Interest and Income	41.848	41.701	43.868	44.205	98.080	90.072
Cultural Trust Interest	0.476	0.467	0.483	0.497	1.010	0.874
Deaf & Blind Interest and Income	0.259	0.276	0.298	0.310	0.590	0.620
Economic Development Trust	3.387	3.588	3.858	4.090	5.843	6.498
Parks Trust Interest	0.853	0.895	0.932	0.962	1.826	1.785
Pine Hills Interest and Income	0.339	0.412	0.448	0.464	0.702	0.780
Regional Water Trust Interest	3.246	3.302	3.382	3.446	6.674	6.686
RIT Trust Interest	3.618	3.356	3.411	3.466	8.472	7.791
TSE Trust Interest	9.483	9.408	9.640	9.816	19.009	19.619
Tobacco Trust Interest	7.259	7.757	8.413	9.066	13.508	14.225
Consumption Taxes						
Diesel Tax	85.994	83.427	85.793	87.195	155.082	154.170
Gasoline Tax	175.061	174.003	177.623	177.847	285.755	298.295
GVW and Other Fees	34.844	33.948	33.789	33.630	72.458	68.806
Total Selected Non-General Fund	$404.648	$399.815	$398.477	$402.053	$744.840	$730.115

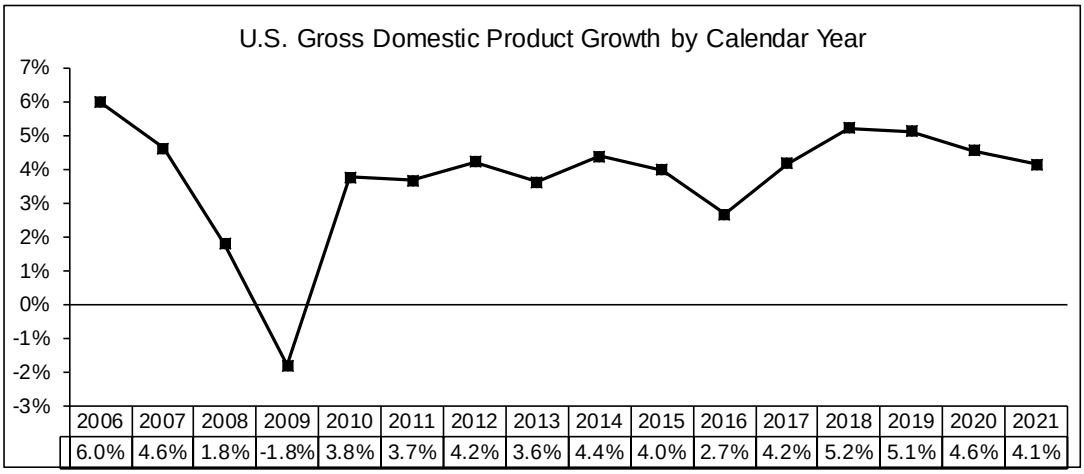
Economic Outlook for Montana

This section highlights a few of the key national and state-specific economic variables that are used in the revenue estimate. The forecasts for each of these economic indicators—and many others that are also used in the revenue estimate—are provided by IHS Markit.

U.S. Economic Indicators

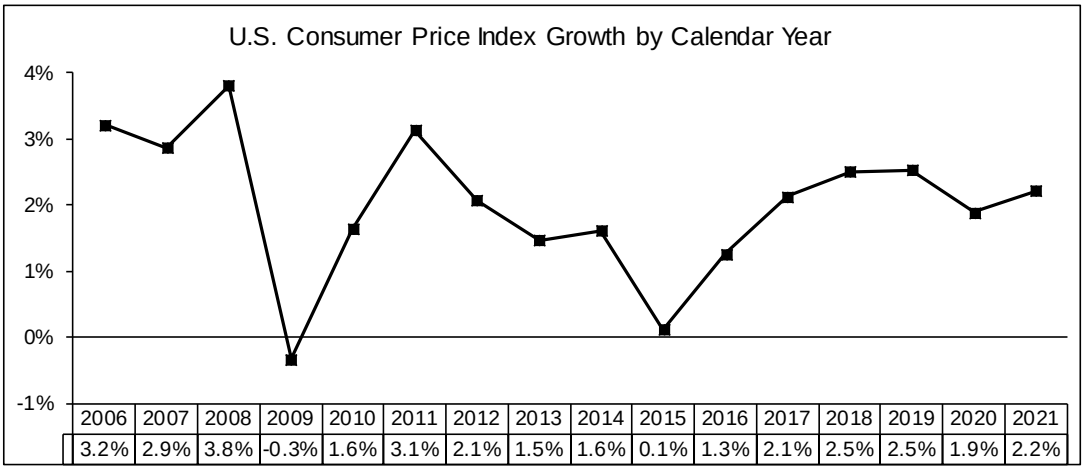
Gross Domestic Product (GDP)

GDP is one of the most comprehensive national economic statistics. As noted by the Bureau of Economic Analysis (BEA), GDP is used by the White House and Congress to prepare the Federal budget, by the Federal Reserve to formulate monetary policy, by Wall Street as an indicator of economic activity, and by the business community to prepare forecasts of economic performance that provide the basis for production, investment, and employment planning.



Consumer Price Index (CPI)

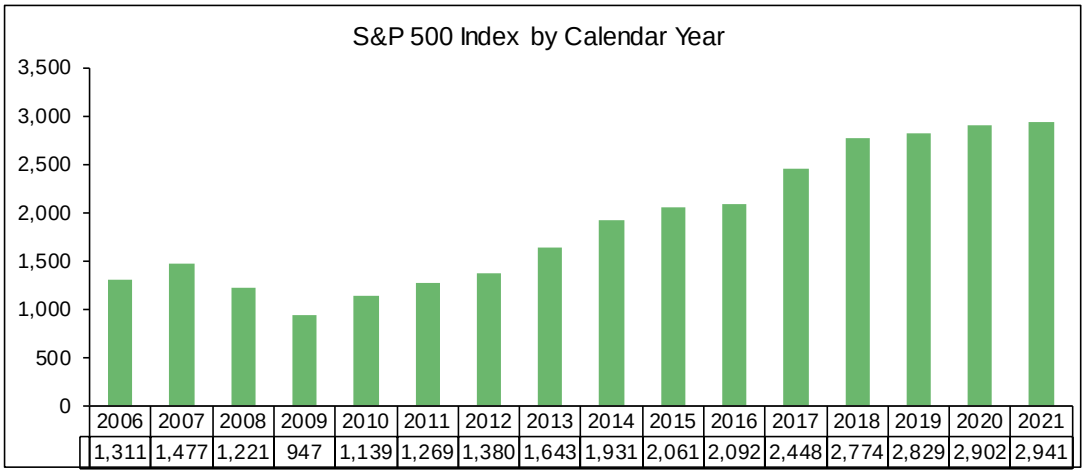
The inflation rate is measured by the price change of the CPI “shopping basket” of goods and services. Inflation is noted to have both good and bad effects. As prices rise, businesses increase prices and tend to become more profitable. At the same time, the consumer realizes a reduction in disposable income and spends less.

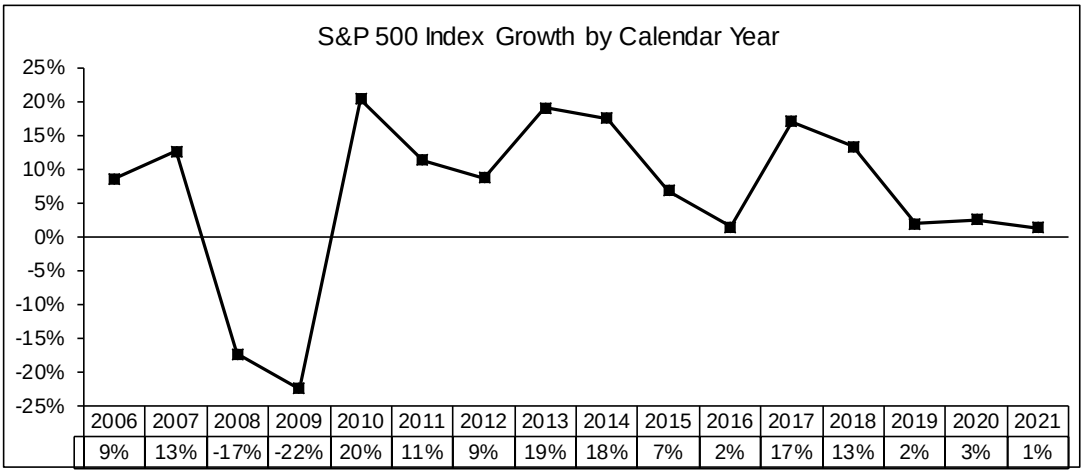


Overview

S&P 500 Stock Market Index

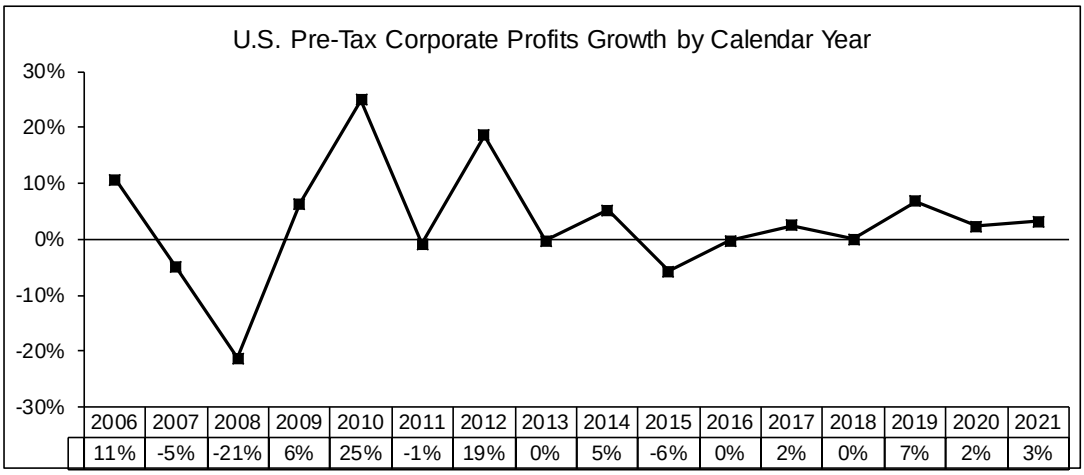
The S&P 500 is a stock market index based on the market capitalizations of 500 large companies. Due to the diversity of companies, it is a broad representation of the U.S. stock market and is a good indicator for investment income.





U.S. Corporate Profits

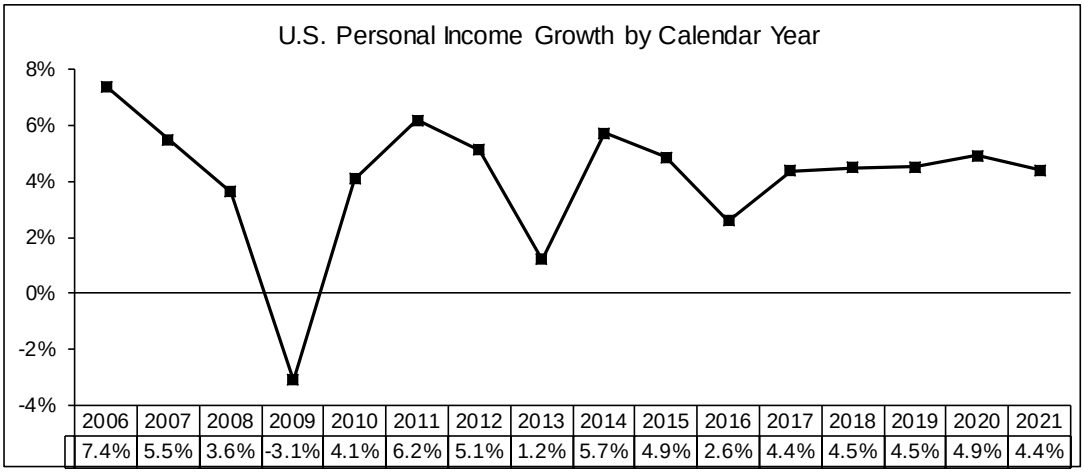
Corporate profitability affects corporate and individual income tax estimates. When corporations are profitable nationally, there is an expectation that corporations will be profitable in Montana. Additionally, greater corporate profitability is largely responsible for the amount of dividends corporations pay to stockholders as well as the value of equity investments.



Overview

U.S. Personal Income

Growth in Montana's tourism industry is related to growth in U.S. personal income. In addition, the outlook for U.S. personal income likely impacts the outlook for Montana personal income.

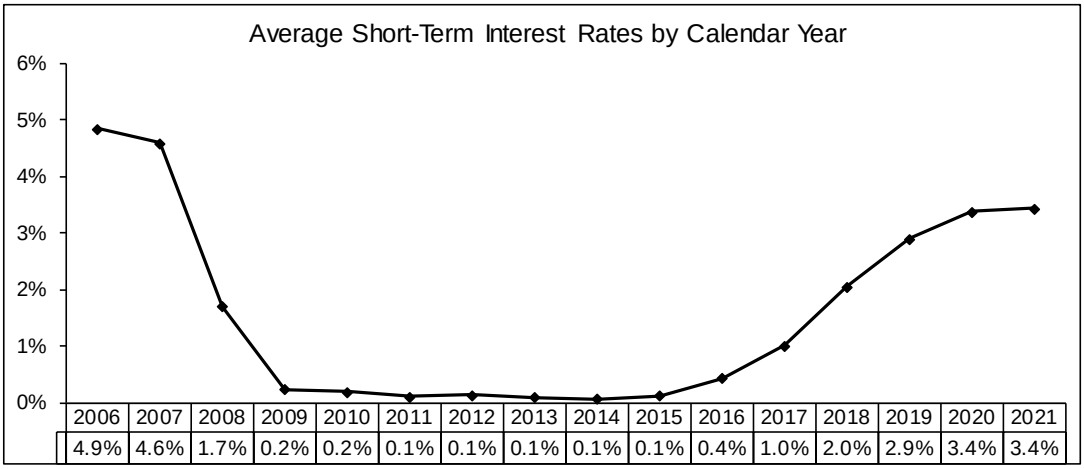


2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
7.4%	5.5%	3.6%	-3.1%	4.1%	6.2%	5.1%	1.2%	5.7%	4.9%	2.6%	4.4%	4.5%	4.5%	4.9%	4.4%

Long & Short-Term Interest Rates

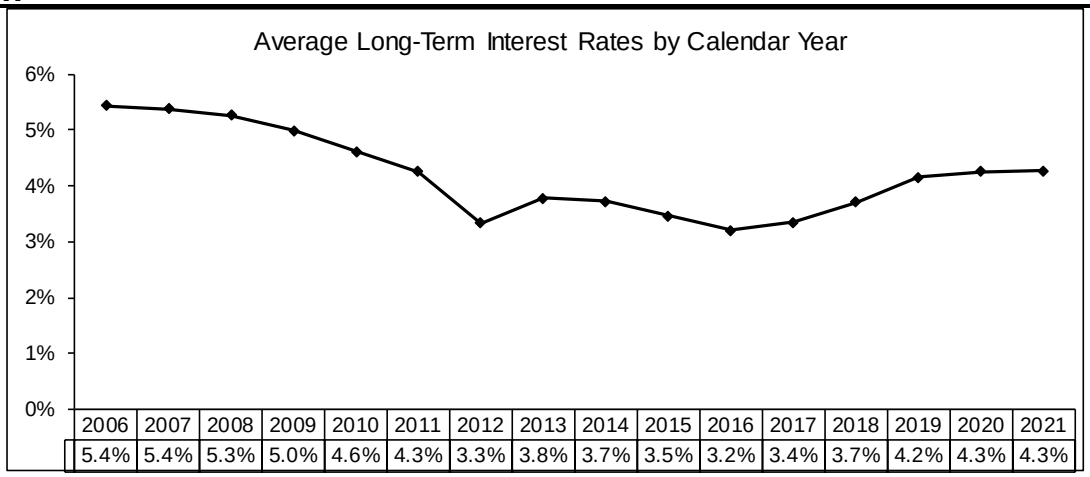
A large portion of Montana's revenues is derived from investment earnings from trust accounts and daily invested cash. Interest rates also affect the amount of investment income that is reported on individual income tax returns. In addition to the state revenue impact, interest rates impact the climate in which consumers and businesses are likely to make investments and large purchases. While low interest rates produce less revenue for Montana's trust and interest holdings, higher income tax earnings might be expected as construction and sales activities increase.

Short-term rates are an average of 3-month corporate paper and 3 and 6-month Treasury bills. Long-term rates are an average of Corporate Aaa and Baa bonds, 10-year Treasury bonds, and 30-year Treasury bonds.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
4.9%	4.6%	1.7%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.4%	1.0%	2.0%	2.9%	3.4%	3.4%

Overview

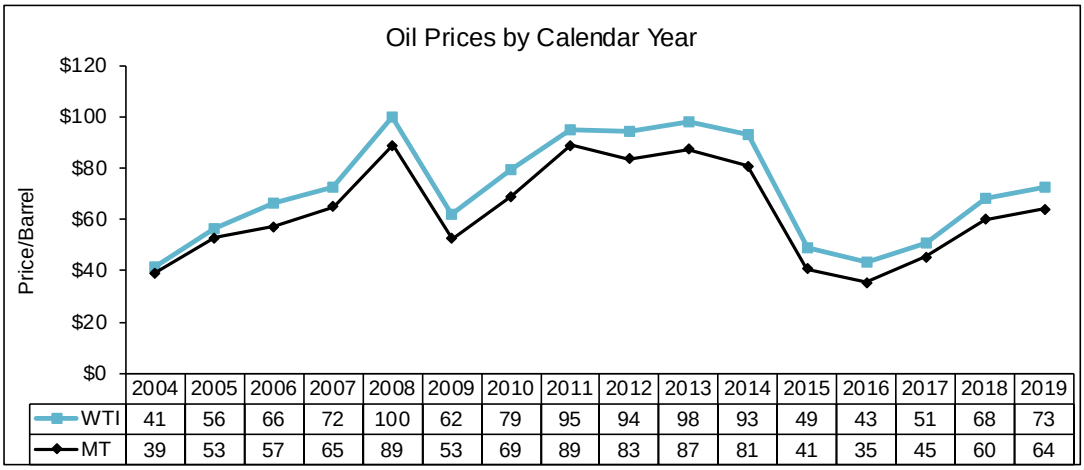


2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5.4%	5.4%	5.3%	5.0%	4.6%	4.3%	3.3%	3.8%	3.7%	3.5%	3.2%	3.4%	3.7%	4.2%	4.3%	4.3%

Oil Price: West Texas Intermediate (WTI)

At the national level, lower oil prices tend to correspond with a better economic outlook; manufacturing and transportation costs are lower, and consumers have more income to spend on goods and services. The impact on Montana revenue is more nuanced, however—although overall consumer activity may increase with lower prices, natural resource extraction and related industry activity may also decline, resulting in lower individual, corporation and natural resource tax collections.

Montana oil price tracks closely with WTI, with an approximate 18% reduction to account for transportation costs.

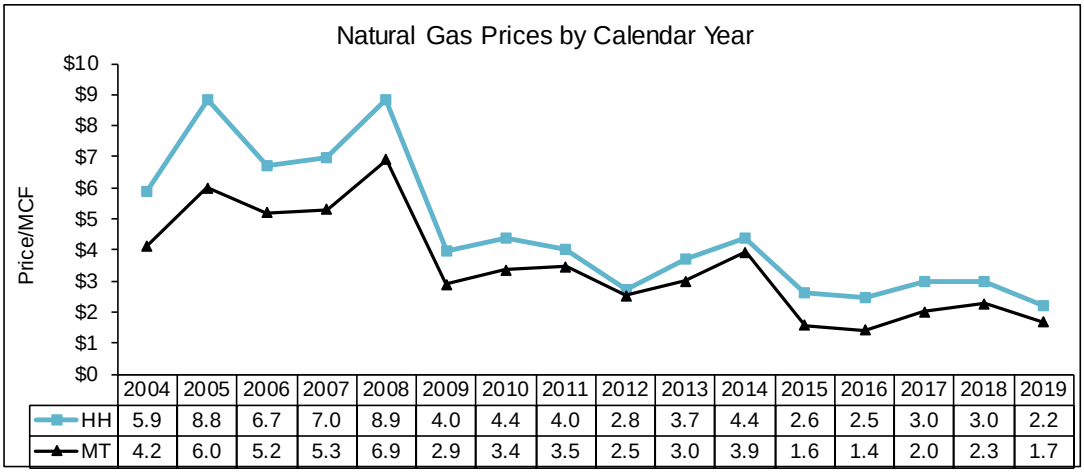


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WTI	41	56	66	72	100	62	79	95	94	98	93	49	43	51	68	73
MT	39	53	57	65	89	53	69	89	83	87	81	41	35	45	60	64

Overview

Natural Gas Price: Henry Hub

Montana natural gas price tracks the national Henry Hub price, with an average 24% deduction for transportation costs.

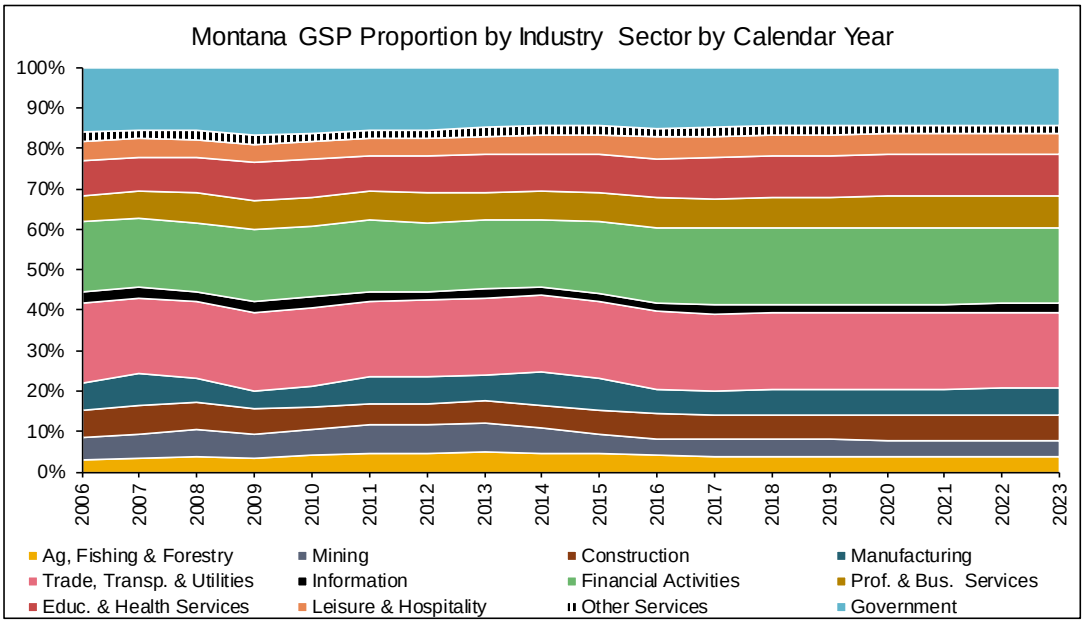


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
HH	5.9	8.8	6.7	7.0	8.9	4.0	4.4	4.0	2.8	3.7	4.4	2.6	2.5	3.0	3.0	2.2
MT	4.2	6.0	5.2	5.3	6.9	2.9	3.4	3.5	2.5	3.0	3.9	1.6	1.4	2.0	2.3	1.7

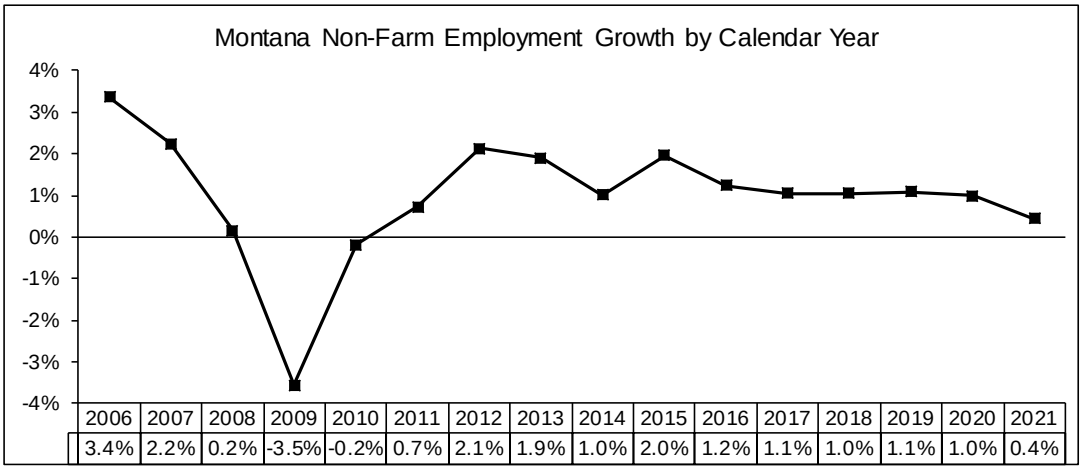
Montana Economic Indicators

Gross State Product (GSP)

All broad industry categories as measured by GSP grew between CY 2000 and CY 2015, the last year of actual data, although most didn't change significantly as a share of the total, as indicated in the next graph. Just over half of GSP is due to three industry super sectors: trade, transportation & utilities; financial activities (which includes real estate); and government. Mining, including oil extraction and related activities, grew as a share of total GSP after CY 2004, but is expected to return to a pre-2004 share of GSP in the forecast period.



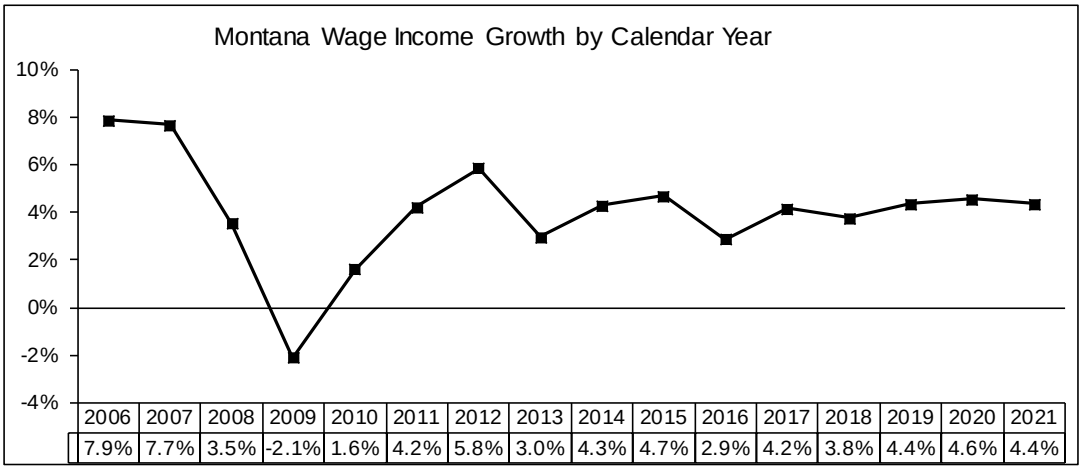
Employment



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
3.4%	2.2%	0.2%	-3.5%	-0.2%	0.7%	2.1%	1.9%	1.0%	2.0%	1.2%	1.1%	1.0%	1.1%	1.0%	0.4%

Wages

Wage income accounts for nearly two-thirds of individual income, and individual income tax accounts for over half of general fund revenue. Although wage income is not as volatile as several other income or revenue sources, even small changes in the outlook for wage income and produce large swings in the revenue estimate. The IHS Markit wage disbursements variable for Montana is probably the single most important underlying indicator in the entire general fund revenue estimate.

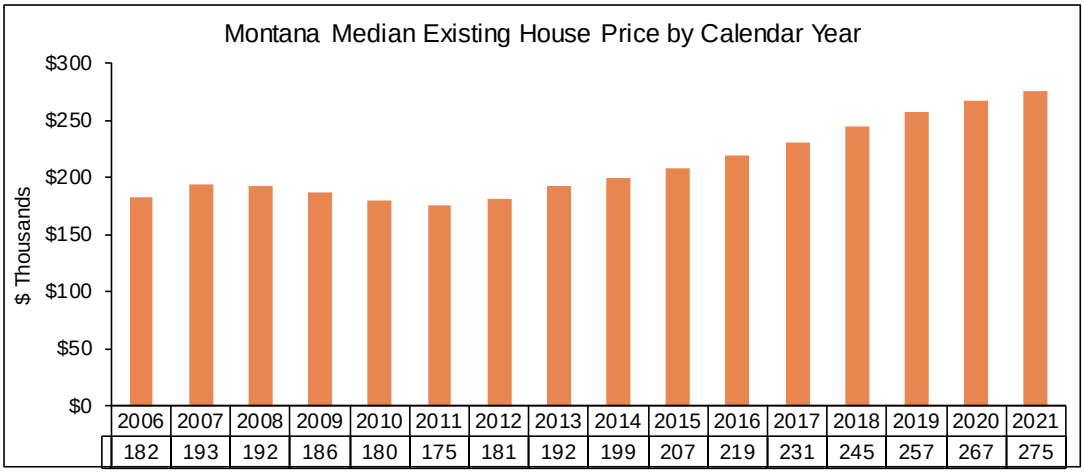


2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
7.9%	7.7%	3.5%	-2.1%	1.6%	4.2%	5.8%	3.0%	4.3%	4.7%	2.9%	4.2%	3.8%	4.4%	4.6%	4.4%

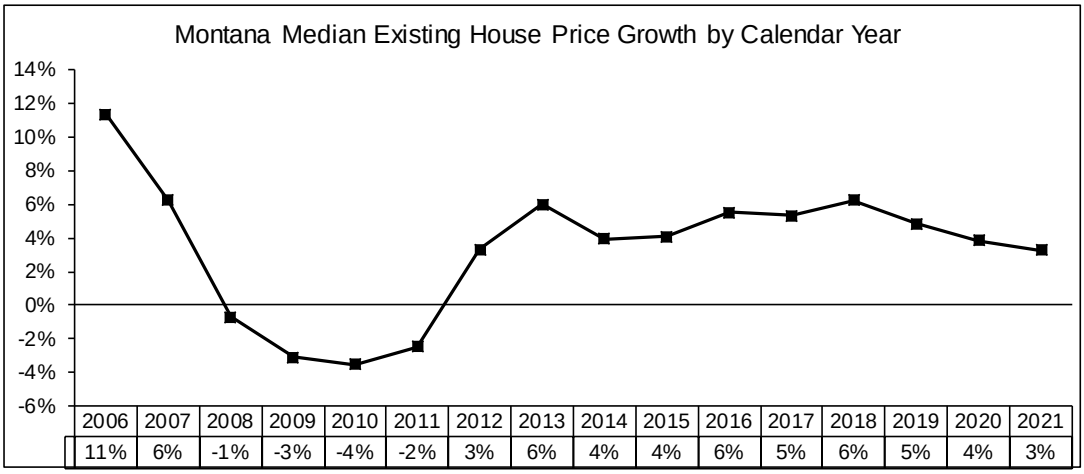
Overview

Housing

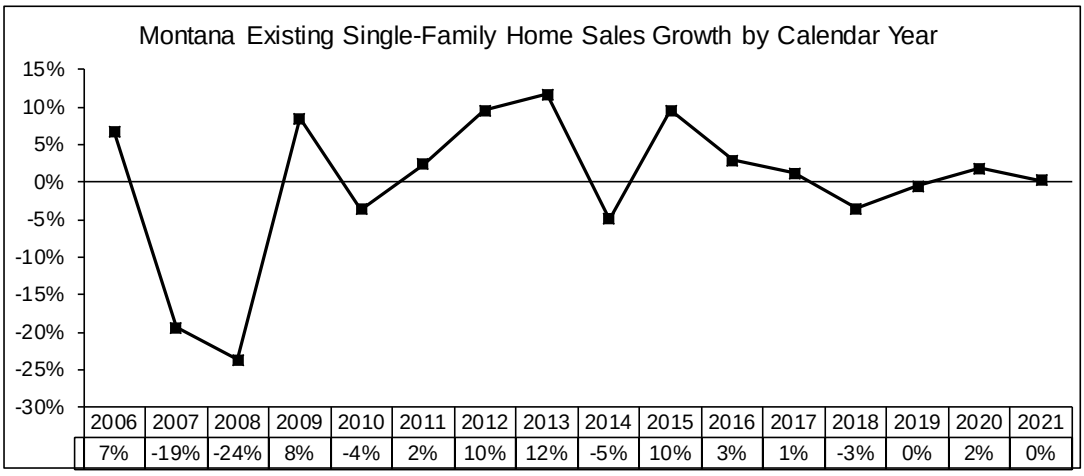
The health of the housing market can be measured by median house price and annual sales. Housing is an important—and leading—measure of economic activity: it drives construction and related industry growth and reflects household formation and asset accumulation. Housing indicators are used in the individual and corporation income tax estimates.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
182	193	192	186	180	175	181	192	199	207	219	231	245	257	267	275



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
11%	6%	-1%	-3%	-4%	-2%	3%	6%	4%	4%	6%	5%	6%	5%	4%	3%

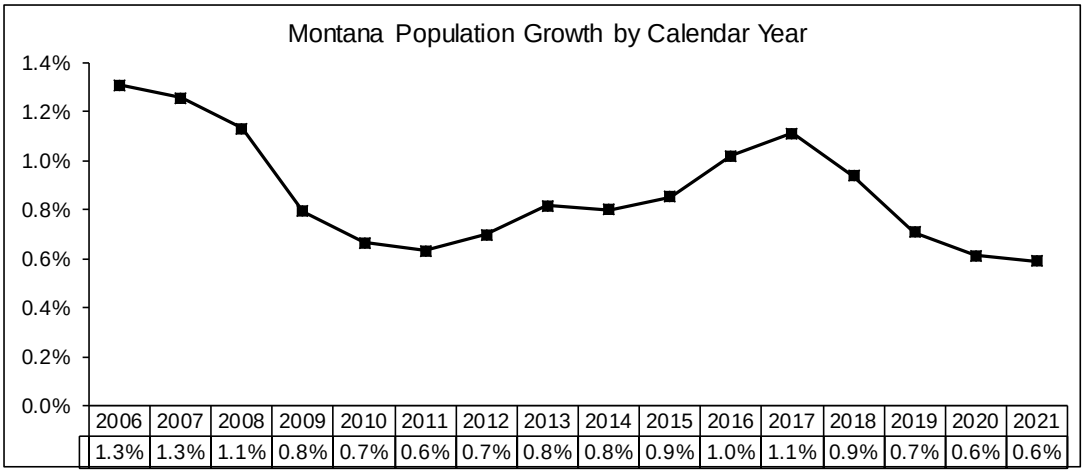


2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
7%	-19%	-24%	8%	-4%	2%	10%	12%	-5%	10%	3%	1%	-3%	0%	2%	0%

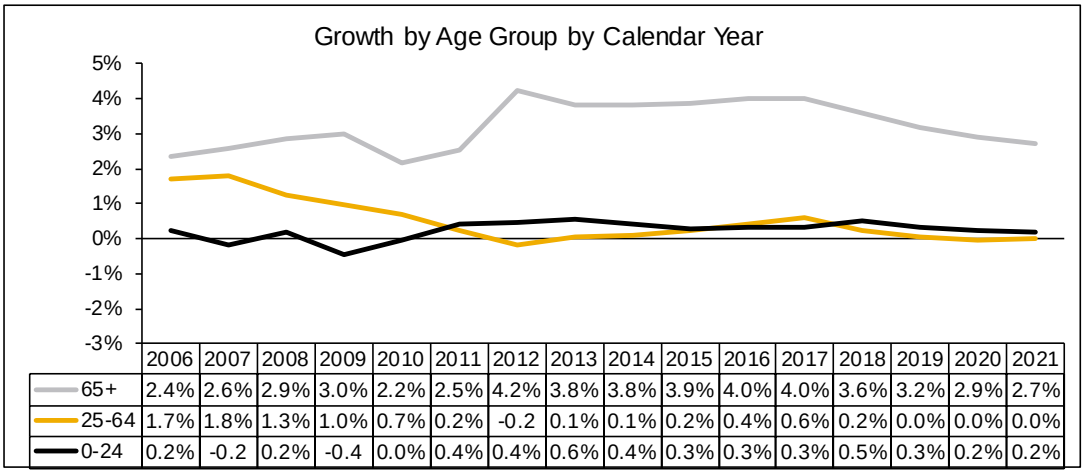
Overview

Population

Population statistics are used to develop estimates for many of the revenue sources including beer, wine, liquor, and cigarette taxes. In addition to those sources where population has a direct effect, the size of the population indirectly affects the profitability of all businesses and the employment levels statewide.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1.3%	1.3%	1.1%	0.8%	0.7%	0.6%	0.7%	0.8%	0.8%	0.9%	1.0%	1.1%	0.9%	0.7%	0.6%	0.6%



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
65+	2.4%	2.6%	2.9%	3.0%	2.2%	2.5%	4.2%	3.8%	3.8%	3.9%	4.0%	4.0%	3.6%	3.2%	2.9%	2.7%
25-64	1.7%	1.8%	1.3%	1.0%	0.7%	0.2%	-0.2	0.1%	0.1%	0.2%	0.4%	0.6%	0.2%	0.0%	0.0%	0.0%
0-24	0.2%	-0.2	0.2%	-0.4	0.0%	0.4%	0.4%	0.6%	0.4%	0.3%	0.3%	0.3%	0.5%	0.3%	0.2%	0.2%

Summary

A summary of each general fund and selected non-general fund revenue sources is provided in this report. Each summary provides information on the source of revenue including a description, the applicable tax or fee rates, and distribution mechanisms. Throughout the document, the state accounting system—Statewide Accounting, Budgeting and Human Resources System—is referred to only by its acronym, SABHRS. Likewise, the Department of Revenue is simply referred to as DOR and the Revenue and Transportation Interim Committee as RTIC.

BUSINESS AND PERSONAL TAXES

- Corporation Income Tax
- Driver's License Fees
- Individual Income Tax
- Insurance Tax & License Fees
- Investment License Fees
- Lodging Taxes
- Motor Vehicle Fees
- Public Contractors Tax
- Railroad Car Tax
- Rental Car Sales Tax
- Telecommunications Excise Tax
- Vehicle Tax

LFD

MONTANA LEGISLATIVE FISCAL DIVISION

Corporation Income Tax

Revenue Description
The corporation income tax is levied against a corporation's net income earned in or attributable to Montana, adjusted for allowable credits.

Statutory Reference
Tax Rate – 15-31-121, MCA
Tax Distribution – 15-31-121, MCA
Date Due – 15th day of the fifth month following the close of the corporation fiscal year (15-31-111, MCA and 15-31-502, MCA). Estimated taxes due April 15th, June 15th, September 15th, and December 15th (15-31-502, MCA).

Applicable Tax Rates
The tax rate is 6.75%, except for corporations making a "water's edge" election (15-31-322, MCA), who pay a 7.0% tax on their net income.

Collection Frequency: Monthly, quarterly and annually

Distribution: All proceeds are deposited into the general fund.

Forecast Risks
- Stock market activity
- Oil price
- Housing market outlook

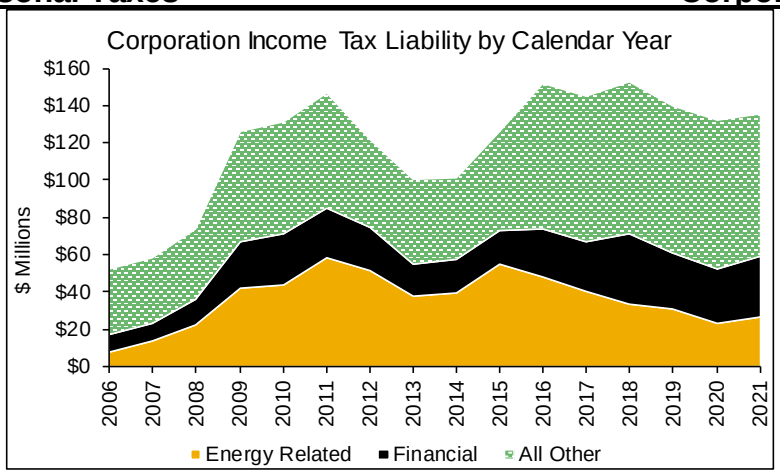
Revenue Estimate Methodology
Data

The estimate for this source is based on collection data from SABHRS, corporation income tax return data from DOR, and various historical and forecast economic indicators from IHS Markit. The return data is lagged by nearly two years for two main reasons: each tax year includes all returns from corporations whose fiscal year began in that particular tax year; and corporations are allowed up to 10.5 months after the end of the tax year to file a return.

Analysis

Montana corporation tax liability is forecast using a variety of IHS Markit economic variables as predictors. These variables are used to forecast calendar year tax liability by sector. Major sectors include manufacturing, financial services, retail trade, and mining. Once estimates have been produced individually for all relevant sectors, they are combined to form a total estimate of calendar year liability. The calendar year estimate is converted to a fiscal year estimate, with adjustments made to account for refunds, audits, penalties, and credit reimbursements.

As shown in the following figure, energy related sectors have historically accounted for a significant portion of total tax liability. The underlying volatility of the energy industry is a large contributor to the overall volatility of this tax source.



Corporation income tax revenues are quite volatile from year to year, resulting in a revenue stream that is difficult to predict. The volatility can be attributed to many factors: sensitivity of corporation income to business cycles, industry composition in the state, reliance on a limited number of large taxpayers, and federal and state tax policy. For example, Montana law allows corporations to carry back current year losses for three years, and carry forward losses for up to ten years HB 550 (2017 session). The carry back provision may result in magnifying a downturn to the extent that corporations file amended prior year tax returns that include current year losses, and are thereby owed a refund of taxes paid in those previous years.

Forecasting error is produced through three main channels: timing of data, in the inherent error of IHS Markit forecast economic variables, and in the model itself as past collections are not predicted perfectly by selected IHS Markit variables. Combined with the uncertainty involved in predicting audit and refund amounts, these sources of error can lead to revenues that may significantly deviate from forecast values and prior year collections.

While corporations' tax behavior introduces forecasting error that is difficult to predict, research by the LFD explores methods to minimize the errors associated with the IHS Markit forecasts of underlying economic variables and compares the relative accuracy of various model types. The research suggests that using a sector-based modeling approach consistently performs better than models that used a single variable as a predictor. While corporation income tax will likely continue to be a volatile source, the methods utilized by this research should direct modeling choices that will minimize the error introduced by IHS Markit forecast error.

Assumptions

Each of the eleven sectors are listed below, followed by the five-year-average share of tax liability, a brief description of the sector, and the underlying economic variables used to develop the projection. The variables used to develop most of the projections are the average price of West Texas Intermediate (WTI) oil price, Montana retail sales, and Montana median home prices.

- Manufacturing (25%): the manufacturing industry in Montana is highly correlated with energy prices and is therefore relatively variable with respect to its aggregate tax liability. This sector is modeled using IHS Markit forecast of WTI price.

- Financial services (19%): this sector includes banks, bank holding corporations, and companies involved in investment activities. Financial sector tax liability is modeled on median existing home prices in Montana as well as Montana wholesale employment.

- Wholesale and retail trade (17%): this combined sector trends well with Montana retail sales and therefore uses retail sales to predict future sector revenues.

- Mining (5%): the mining industry in Montana is heavily dependent on energy prices; it is modeled on gold and copper prices.

- Professional and business services (6%): the professional service sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. The business service sector comprises establishments performing routine support activities for the day-to-day operations of other organizations. This sector is modeled using a five-year moving average.

- Transportation and warehousing (12%): the transportation and warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Its tax liability is modeled on forecast WTI price and Montana population.

- Information (5%): the main components of this sector are the publishing industries, the motion picture and sound recording industries, the broadcasting industries, the telecommunications industries, and the information services industries. Its tax liability is modeled on 3-month commercial paper.

- Utilities (1%): the utilities sector includes establishments engaged in the provision of electric power, natural gas, steam supply, water supply, and sewage removal. The tax liability of this sector is modeled on the average number of housing starts per year. This sector is modeled using a five-year moving average.

- Agriculture (4%): the tax liability of the agriculture sector is modeled on forecast cattle prices.

- Social and educational services (3%): this is a broad grouping of educational and health services, and arts, entertainment and recreation. The tax liability is modeled on GDP. This sector is modeled using a five-year moving average.

- Construction (2%): next to the utility sector, the construction industry is the smallest contributor to corporation tax liability, likely because most construction companies are organized as S-corps or limited liability companies. Its tax liability is modeled on WTI price and wholesale employment.

Calendar year corporation income tax liabilities are modeled by sectors as described above and summed by year to produce a total calendar year estimate of tax liabilities. The calendar year estimates are converted to fiscal year using historical trends.

Adjustments

After the estimate for the fiscal year gross corporation tax liability is complete, several adjustments are required. The adjustments and the corresponding estimate process for each is described below.

- Refunds − Projected on a historical average ratio of current fiscal year liability.
- Audits, penalties & interest − Projected on a historical average ratio of prior fiscal year liability.

RTIC Adjustment

The November 2018 RTIC adopted the LFD corporate tax estimate and corresponding assumptions, with an adjustment for potential downside risk due to the federal tax changes in the Tax Cuts & Jobs Act.

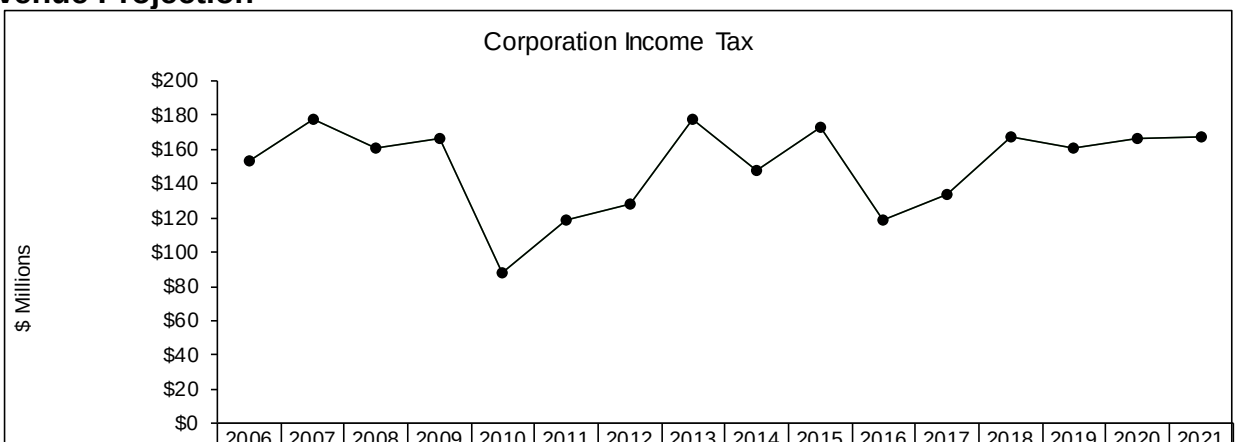
Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Total FY Liability $ Millions	Refunds $ Millions	Audit, P&I Payments $ Millions	TCJA Adjustment $ Millions
A 2008	$160.342	$160.342	$171.368	($27.900)	$16.874	
A 2009	166.355	166.355	155.199	(19.881)	31.036	
A 2010	87.901	87.901	109.642	(37.121)	15.380	
A 2011	119.044	119.044	122.727	(29.800)	26.116	
A 2012	127.771	127.771	138.643	(38.757)	27.885	
A 2013	177.497	177.497	171.685	(10.999)	16.811	
A 2014	147.548	147.548	158.489	(21.707)	10.765	
A 2015	172.729	172.729	161.927	(17.973)	28.775	
A 2016	118.387	118.387	140.283	(31.391)	9.495	
A 2017	133.992	133.992	147.687	(25.852)	12.157	
A 2018	167.100	167.100	165.466	(24.228)	25.862	
F 2019	160.824	160.824	163.779	(24.820)	21.511	($7.030)
F 2020	165.898	165.898	169.680	(24.567)	21.291	(8.780)
F 2021	167.214	167.214	170.068	(25.452)	22.058	(7.650)
F 2022	177.191	177.191	172.109	(25.510)	22.109	
F 2023	179.224	179.224	174.163	(25.816)	22.374	

CY	Agriculture $ Millions	Mining $ Millions	Utilities $ Millions	Construction $ Millions	Manufacture $ Millions	Trade $ Millions	Transport $ Millions
A 2008	$3.269	$11.744	$2.527	$2.670	$39.658	$13.710	$11.719
A 2009	3.320	13.050	2.434	2.634	24.502	17.541	6.845
A 2010	3.373	10.116	1.425	1.593	29.737	15.716	7.432
A 2011	4.394	16.177	0.717	2.102	38.345	20.111	10.052
A 2012	4.993	7.805	0.751	3.643	40.489	24.484	19.955
A 2013	4.929	4.251	0.973	2.246	35.990	25.559	20.219
A 2014	5.922	4.000	1.549	1.751	29.754	24.924	18.839
A 2015	4.334	1.972	0.790	2.086	28.907	25.628	18.077
A 2016	4.071	2.213	0.365	1.399	20.618	25.606	17.674
F 2017	4.202	5.104	0.578	2.695	21.451	26.379	18.197
F 2018	4.137	6.411	0.472	2.831	28.399	28.045	17.982
F 2019	4.170	6.608	0.525	2.955	30.278	29.233	17.951
F 2020	4.153	6.806	0.498	3.048	28.403	30.302	18.043
F 2021	4.161	7.003	0.511	3.120	28.550	31.255	17.992
F 2022	4.157	7.184	0.505	3.195	29.224	32.178	17.996
F 2023	4.159	7.373	0.508	3.269	29.501	33.151	18.010

CY	Information $ Millions	Professional $ Millions	Large Banks $ Millions	Social $ Millions	Unknown $ Millions	Total CY Liability $ Millions
A 2008	$3.403	$5.353	$22.945	$1.794	$1.099	$119.891
A 2009	1.944	7.213	17.195	1.850	0.171	98.699
A 2010	2.720	7.263	17.392	2.034	0.192	98.991
A 2011	4.618	6.641	18.824	2.182	0.003	124.165
A 2012	7.363	9.286	25.323	3.696	0.007	147.799
A 2013	9.538	8.142	26.923	3.238	0.026	142.867
A 2014	6.494	11.197	37.203	5.026	0.657	147.315
A 2015	8.701	9.358	29.829	4.330	1.159	135.173
A 2016	10.288	13.140	29.682	3.266	0.319	128.640
F 2017	5.189	10.225	32.892	3.911	0.711	131.534
F 2018	5.020	10.412	34.531	3.954	0.730	142.925
F 2019	4.886	10.867	36.572	4.098	0.587	148.728
F 2020	4.792	10.800	37.676	3.912	0.676	149.109
F 2021	4.784	11.089	38.158	3.828	0.664	151.116
F 2022	4.782	10.679	38.653	3.941	0.642	153.135
F 2023	4.806	10.769	38.986	3.947	0.661	155.142

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	154	178	160	166	88	119	128	177	148	173	118	134	167	161	166	167
General Fund	154	178	160	166	88	119	128	177	148	173	118	134	167	161	166	167
GF Growth	56%	16%	-10%	4%	-47%	35%	7%	39%	-17%	17%	-31%	13%	25%	-4%	3%	1%

Driver's License Fees

Revenue Description

A resident of Montana must have a valid driver's license to operate a motor vehicle on any highway in the state. A driver's license is issued only if the applicant passes specified examinations and pays fees. The fees are collected by Department of Justice, Motor Vehicle Division staff or county treasurers and are forwarded to the state treasurer for deposit. If collected by the county treasurers, a portion is retained by the county. The estimates shown in this source are net of revenue retained by the counties. The fees included in this source are from regular driver's licenses, commercial driver's licenses, motorcycle endorsements, duplicate driver's licenses, and renewal notices.

Statutory Reference

Tax Rates – Duplicate licenses: 61-5-114, MCA; all others: 61-5-111(6), MCA
Tax Distribution – 61-5-121, MCA
Date Due – Upon application

Applicable Tax Rates

- Driver's license, except a commercial driver's license: $5.00 per year or fraction of a year
- Motorcycle endorsement: $0.50 per year or fraction of a year
- Commercial driver's licenses (includes the basic license fee of $5.00)
    - Interstate: $10.00 per year or fraction of a year
    - Intrastate: $8.50 per year or fraction of a year
- Duplicate license: $10.00
- Renewal notice: $0.50

Collection Frequency: Monthly

Distribution

The distribution of license fee revenue varies by the type of license and who collects the fee. The table below shows the current statutory distribution. Note that the portion allocated to counties applies only when the county collects the fee. Otherwise, the county allocation is added to the general fund distribution.

Distribution of Driver's License Fees

Allocation	Driver's License	Replacement License	Motorcycle Endorsement	Commercial Driver's License	Renewal Notice
County or State General Fund	2.5%	3.75%	3.34%	2.50%	
Motorcycle Safety Account			63.46%		
Traffic Education Account	20.7%	8.75%		16.94%	
State General Fund	76.8%	87.50%	33.20%	80.56%	100%
Total	100%	100%	100%	100%	100%

Forecast Risks

- Growth of population over age 16
- Potential impact from youth driving habits

Revenue Estimate Methodology

The driver's license revenue estimate is based on the number of the six various licenses and fees, multiplied by the applicable fee. The number of licenses is modeled on Montana driving age population.

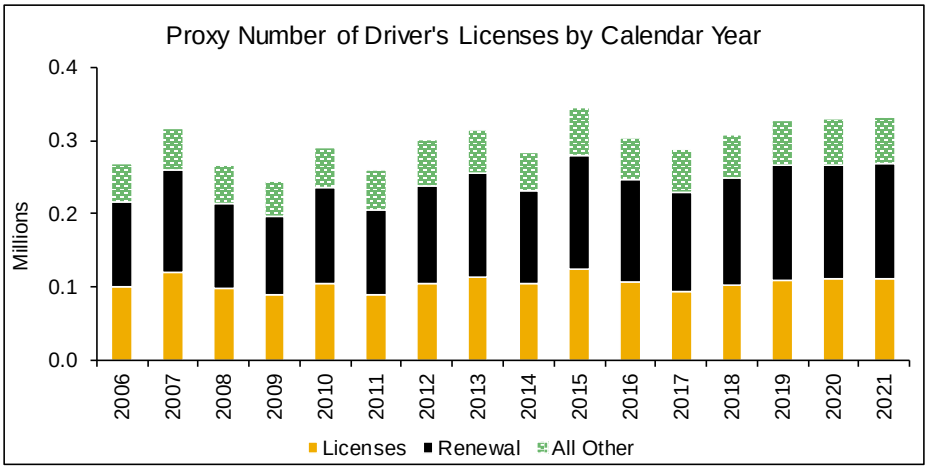
Data

There are six different sources of revenue—five different driver's licenses and the renewal notice. The best source of data for the number of licenses and the renewal notice is contained in the history of revenue collections for each of these six items from SABHRS.

Analysis

The methodology used to determine the number of each license or fee differs slightly:

1. The proxy numbers for driver's and motorcycle licenses are obtained by multiplying the driving age population estimate for each year by the last known actual ratio of driver's licenses to driving age population. This ratio differs between odd and even years, and is applied accordingly.
2. For duplicate licenses, the proxy number is derived by multiplying the number of driver's licenses by the previous year's ratio between the number of duplicates and drivers licenses. Because the driver's license proxy includes the effects of population change, these effects are also included in the proxy for duplicate licenses.
3. The proxies for the number of interstate and intrastate licenses are the amounts from the last known fiscal year.
4. To approximate the number of renewal notices, the ratio between the previous years' number of notices to the proxy number of licenses is multiplied by the estimated number of licenses. Since the license proxy includes the effects of population change, these effects are also included in the proxy for renewal notices.
5. Based on historical percentages, amounts retained by the counties are calculated and subtracted from the total revenue to derive the state's portion.



Adjustments and Distribution

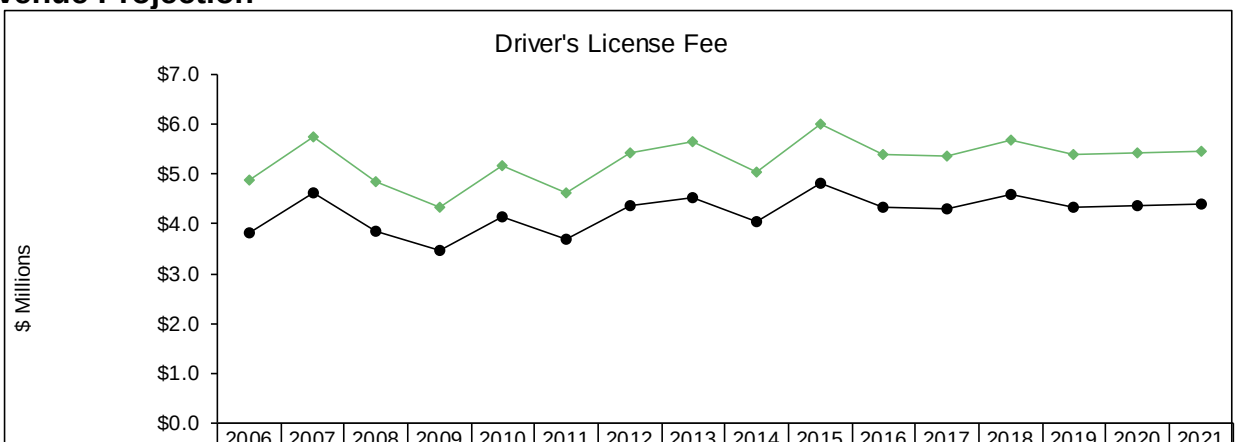
Once the proxy number for each license has been estimated, adjustments, if any, are made. After any adjustments, the applicable distribution percentage of the revenue for each license fee is applied (see the "Distribution" section).

Revenue Estimate Assumptions

FY	Total Fee $ Millions	GF Fee $ Millions	GF Fee Licenses $ Millions	GF Fee Duplicates $ Millions	GF Fee Cycle $ Millions	GF Fee Commercial $ Millions	GF Fee Renewal $ Millions
A 2008	$4.845	$3.866	3.037	0.285	0.013	0.377	0.058
A 2009	4.326	3.478	2.778	0.288	0.012	0.314	0.054
A 2010	5.166	4.156	3.315	0.278	0.018	0.430	0.065
A 2011	4.614	3.711	2.808	0.285	0.014	0.515	0.058
A 2012	5.432	4.369	3.259	0.295	0.018	0.689	0.068
A 2013	5.638	4.527	3.526	0.298	0.018	0.573	0.071
A 2014	5.043	4.051	3.255	0.308	0.014	0.374	0.064
A 2015	5.998	4.811	3.887	0.324	0.019	0.666	0.078
A 2016	5.402	4.345	3.371	0.305	0.016	0.512	0.070
A 2017	5.347	4.308	2.954	0.330	0.014	0.494	0.067
A 2018	5.693	4.581	3.215	0.343	0.016	0.440	0.073
F 2019	5.401	4.342	3.442	0.367	0.014	0.440	0.078
F 2020	5.438	4.370	3.465	0.370	0.016	0.440	0.079
F 2021	5.466	4.394	3.487	0.372	0.015	0.440	0.079
F 2022	5.500	4.420	3.509	0.374	0.016	0.440	0.080
F 2023	5.526	4.442	3.530	0.377	0.015	0.440	0.080

FY	Proxy Licenses Millions	Proxy Duplicates Millions	Proxy Cycle Millions	Proxy Interstate Millions	Proxy Intrastate Millions	Proxy Renewal Millions
A 2008	0.099	0.033	0.010	0.008	0.001	0.116
A 2009	0.088	0.032	0.009	0.007	0.001	0.108
A 2010	0.105	0.031	0.012	0.009	0.001	0.130
A 2011	0.089	0.032	0.010	0.011	0.001	0.116
A 2012	0.104	0.033	0.013	0.015	0.002	0.136
A 2013	0.112	0.033	0.013	0.013	0.001	0.143
A 2014	0.104	0.034	0.010	0.008	0.001	0.127
A 2015	0.124	0.036	0.014	0.015	0.001	0.157
A 2016	0.107	0.034	0.011	0.012	0.001	0.140
A 2017	0.094	0.037	0.010	0.011	0.001	0.135
A 2018	0.102	0.038	0.011	0.010	0.001	0.146
F 2019	0.110	0.041	0.010	0.010	0.001	0.156
F 2020	0.110	0.041	0.011	0.010	0.001	0.157
F 2021	0.111	0.041	0.010	0.010	0.001	0.158
F 2022	0.112	0.042	0.011	0.010	0.001	0.159
F 2023	0.112	0.042	0.010	0.010	0.001	0.160

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	4.9	5.7	4.8	4.3	5.2	4.6	5.4	5.6	5.0	6.0	5.4	5.3	5.7	5.4	5.4	5.5
General Fund	3.8	4.6	3.9	3.5	4.2	3.7	4.4	4.5	4.1	4.8	4.3	4.3	4.6	4.3	4.4	4.4
GF Growth	13%	20%	-16%	-10%	19%	-11%	18%	4%	-11%	19%	-10%	-1%	6%	-5%	1%	1%

Individual Income Tax

Revenue Description

The tax is levied against taxable income, which is defined as Montana adjusted gross income less exemptions and deductions. Once tax liability is determined, the amount of tax due is computed by subtracting allowable credits.

Statutory Reference

Tax Rate – 15-30-2103, MCA through 15-30-2105, MCA
Tax Distribution – 17-2-124(2), MCA
Date Due – 15th day of the fourth month of the filer's fiscal year (15-30-2604, MCA). Withholding taxes are due monthly, quarterly, or on an accelerated schedule depending on income (15-30-2504, MCA). Estimated taxes are due on the 15th day of the 4th, 6th, and 9th month and the month following the close of the tax year (15-30-2512, MCA).

Applicable Tax Rates

Tax rates vary from 1.0% to 6.9%, depending on the level of taxable income. Tax brackets, personal exemption amounts, and the standard deduction are adjusted for inflation each year. Due to the capital gains income tax credit, the effective tax rate on capital gains income is less than the tax rate on ordinary income by 2%.

Collection Frequency: Quarterly, monthly, bi-weekly and weekly

Distribution: All proceeds are deposited into the general fund.

Forecast Risks

- Changes to the national economic growth outlook
- Changes to Montana's economic growth outlook
- Changes to the outlook for Montana wages
- Oil price
- Stock market activity
- Housing prices and sales

Revenue Estimate Methodology

Data

The estimate for this source is based on collection data from SABHRS, individual income tax return data supplied by DOR, state and national historical and forecast data on income, inflation, employment, and other economic variables from IHS Markit.

Analysis

Overview

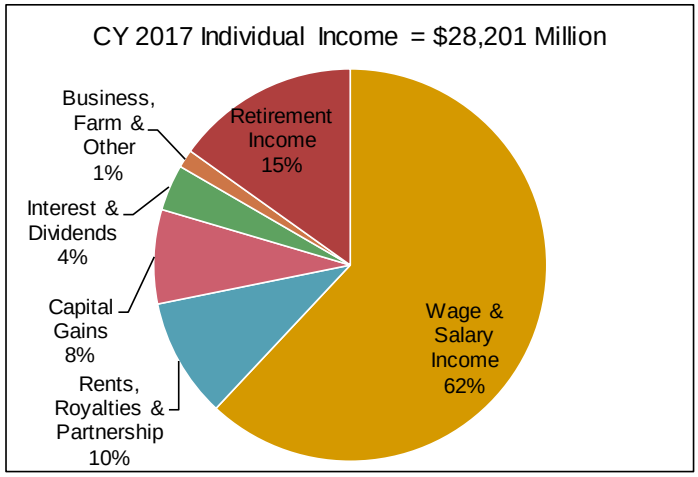
An individual income tax simulation model is used to forecast Montana calendar year individual income tax liability for all residents. The calendar year state tax liability forecast is developed by applying modeled growth rates to each resident taxpayer's income and deduction items. The result is a forecast of calendar year state individual income tax liability for each resident, the sum of which produces a statewide forecast of individual income tax liability for each year.

The statewide forecast of resident liability is adjusted for the growth in resident taxpayers, and multiplied by an all-filers percentage to include the tax liability for nonresidents and partial-year residents. This results in a forecast of total calendar year individual income tax liability before credits.

Fiscal year collections before audit, penalty, and interest income are modeled on total calendar year liability before credits, and forecast fiscal year collections are then augmented by expected future audit, penalty and interest collections to produce the total individual income tax revenue estimate.

Growth Rates

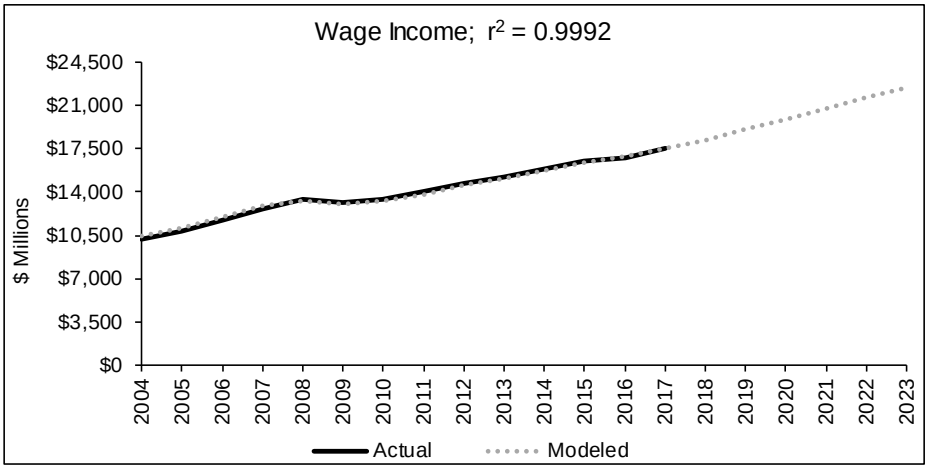
Growth rates are modeled for each of the income, adjustment, addition, reduction and deduction line items. The models for most of the income line items are highlighted in this section, along with corresponding forecast risks. Nearly two-thirds of all income reported is from wages and salaries; the broad revenue categories are shown in the adjacent chart.



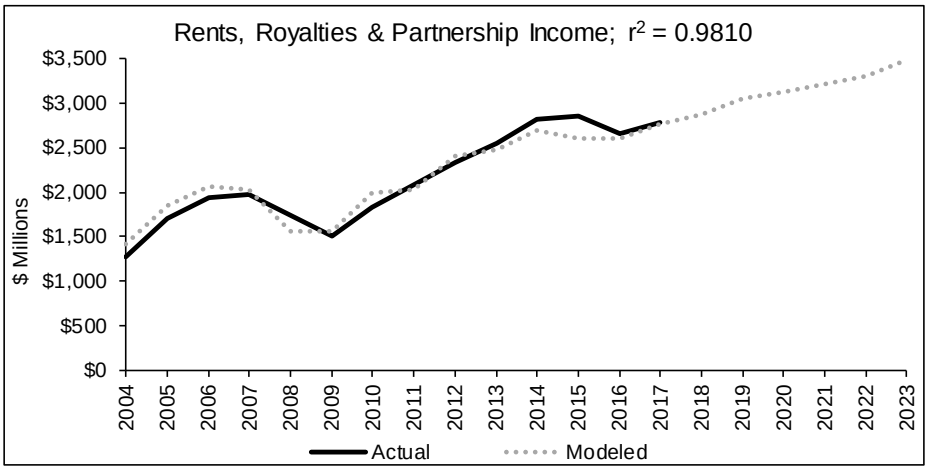
The table below summarizes the growth rates used for returns, inflation and income items. Growth estimates for all other line items—adjustments, additions, reductions and itemized deductions—are included in the revenue estimate assumptions section, which is available online.

Individual Income Growth Rates						
	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
FYR Returns (Annual)	0.8%	0.9%	0.8%	0.4%	0.1%	0.0%
FYR Returns (Cumulativ	100.8%	101.7%	102.5%	102.9%	103.0%	103.0%
Inflation State	2.9%	2.6%	2.6%	1.8%	2.2%	2.3%
Inflation Federal	2.0%	2.4%	2.0%	2.2%	2.1%	2.0%
Wages and salaries	3.7%	4.3%	4.5%	4.3%	4.1%	4.0%
Interest income	4.2%	5.3%	29.0%	15.8%	4.2%	3.2%
Dividend income	2.0%	0.0%	5.7%	1.9%	2.7%	2.7%
Taxable refunds	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
Alimony received	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
Net business income	-1.0%	4.9%	3.2%	5.1%	3.4%	1.6%
Capital gains	10.5%	0.5%	-7.4%	-6.7%	2.0%	2.1%
Supplemental gains	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
IRA distributions	8.6%	6.5%	5.9%	5.2%	4.9%	4.6%
Taxable pensions	5.6%	6.2%	5.4%	5.0%	4.7%	4.3%
Rents, royalties, etc.	3.8%	5.9%	2.5%	2.9%	3.0%	5.1%
Farm income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Unemp. compensation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taxable social security	8.1%	6.5%	5.9%	5.5%	5.1%	4.9%
Other income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

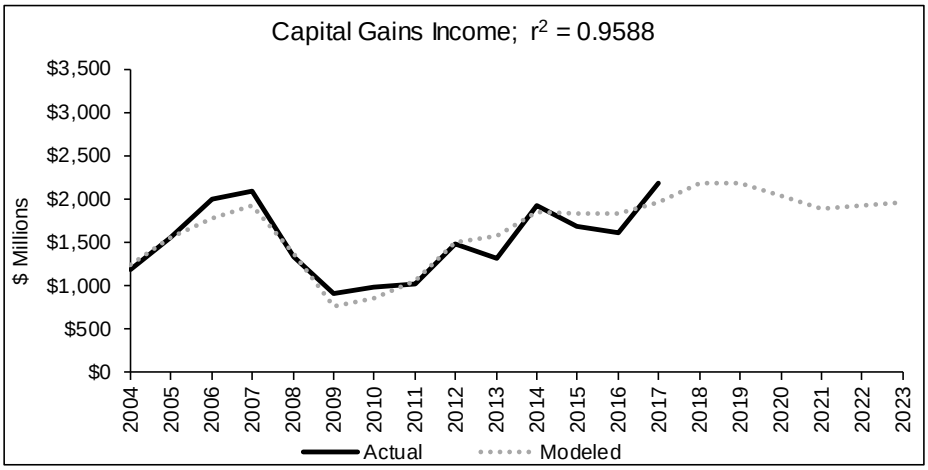
Wage and salary income is the largest source of individual income and is modeled on the IHS Markit series for Montana wage and salary distributions.



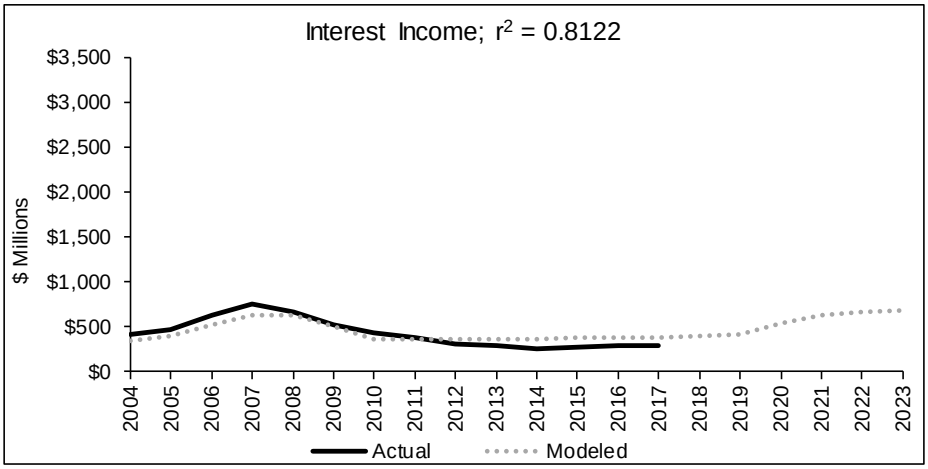
Rent, royalty & partnership (schedule E) income is modeled on S&P 500 and before tax corporate profits.



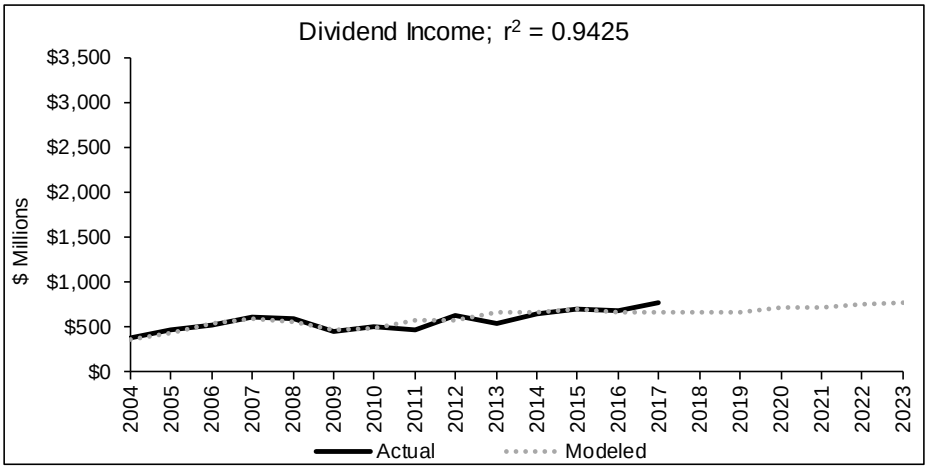
Capital gains income is modeled on a three-year difference of the S&P 500 stock market index, Montana median house price, and the annual number of Montana home sales.



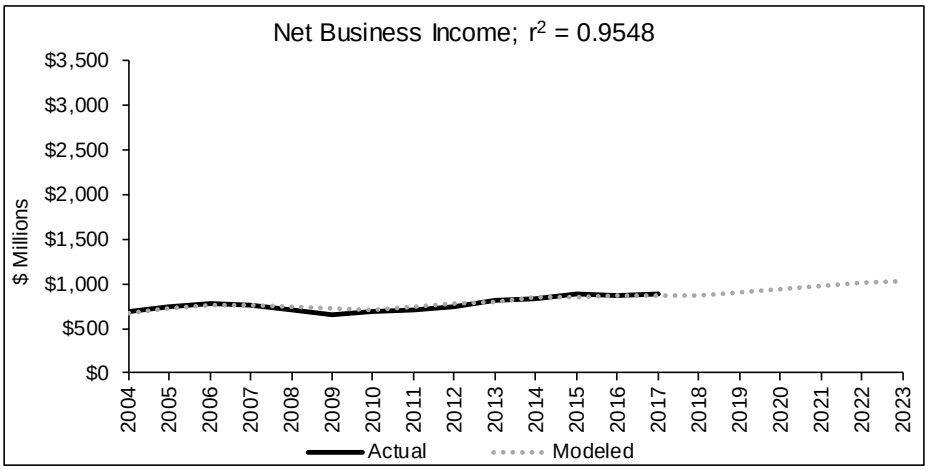
Interest income is modeled on the rate of 3-month negotiable CDs and national personal interest income.



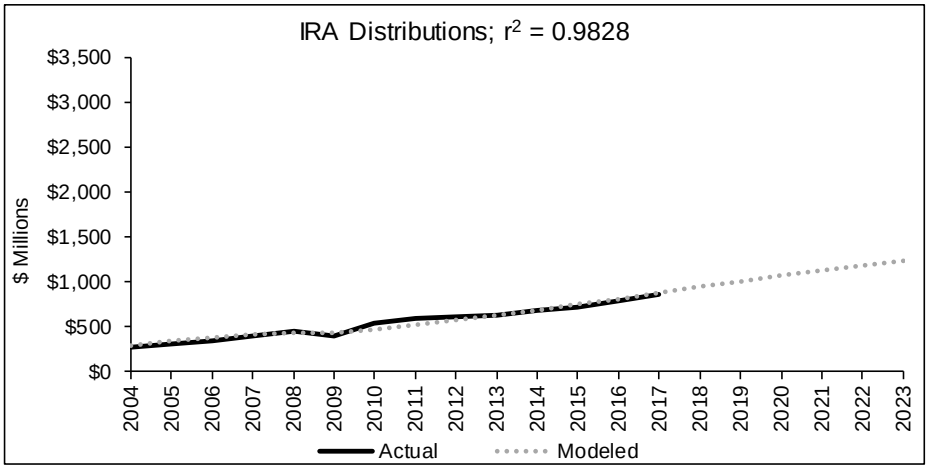
Dividend income is modeled on before-tax corporate profits.

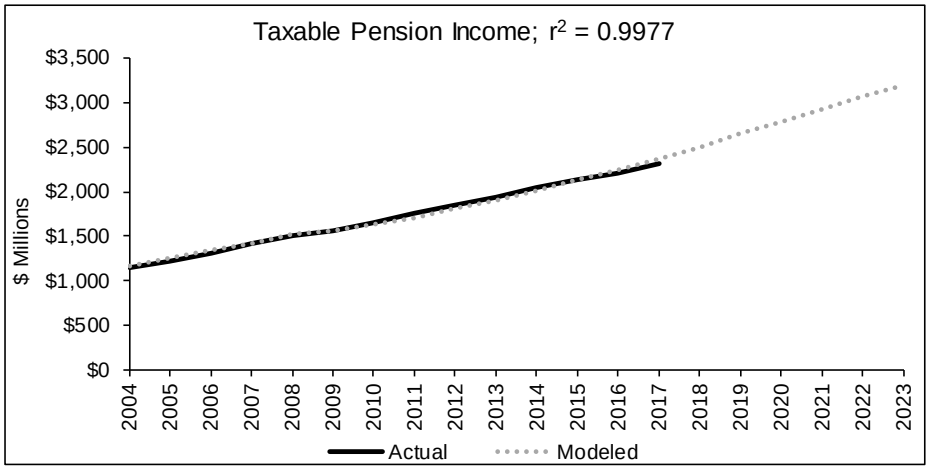


Net business income is modeled on national non-farm proprietor's income, Montana farm proprietor's income, and gross state product for the construction industry.

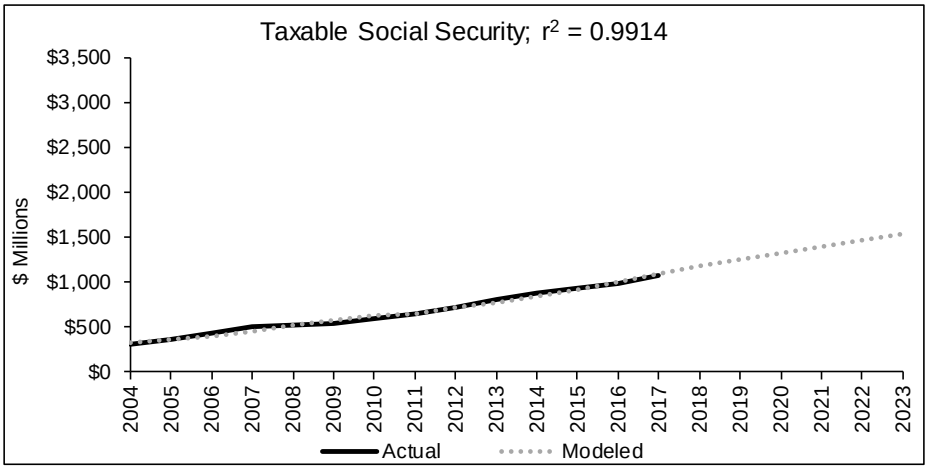


The two of the three retirement income sources—IRA distributions and pension income—are modeled on the S&P 500 stock market index, gross domestic product and the number of Montanans age 65 and older.





Taxable social security is modeled on federal transfer payments to Montana and Montana population age 65 or older.



All remaining income sources, including farm income, sum to a negative amount. These sources are forecast individually but are generally anticipated to remain at about the same as the level as the last known year.

Audits and Other Assumptions

Fiscal year audit, penalty and interest revenue is assumed to remain at a recent historical average of the prior calendar year tax liability before credits. Audit, and penalty and interest revenue are added to the modeled fiscal liability, resulting in total fiscal year collections.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Audit, P&I $ Millions	Earned Income Tax Credit $ Millions
A 2008	$866.659	$866.659	$30.637	
A 2009	815.138	815.138	34.743	
A 2010	717.834	717.834	35.293	
A 2011	816.090	816.090	33.468	
A 2012	898.851	898.851	28.307	
A 2013	1,047.790	1,047.790	31.828	
A 2014	1,063.284	1,063.284	41.010	
A 2015	1,175.745	1,175.745	43.475	
A 2016	1,184.828	1,184.828	51.724	
A 2017	1,168.225	1,168.225	40.762	
A 2018	1,297.777	1,297.777	47.403	
F 2019	1,359.066	1,359.066	50.088	
F 2020	1,425.943	1,425.943	52.895	($5.247)
F 2021	1,490.046	1,490.046	55.313	(5.268)
F 2022	1,557.087	1,557.087	57.788	(5.301)
F 2023	1,631.496	1,631.496	60.604	(5.306)

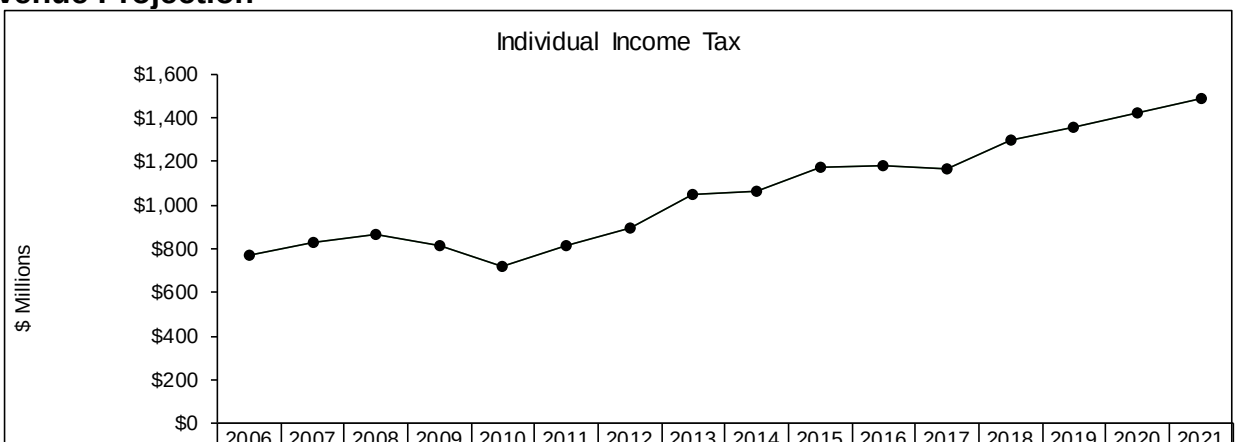
CY	Modeled FYR Liability $ Millions	Population Adjustment Percent	FYR Liability $ Millions	Non-Resident Factor Percent	Total Liability Before Credits $ Millions	Elderly H/R Credit $ Millions	All Other Credits $ Millions
A 2008	$741.689	100.0%	$741.689	109.7%	$813.725	$10.396	$38.219
A 2009	687.751	100.0%	687.751	105.4%	724.649	10.316	37.626
A 2010	739.846	100.0%	739.846	106.8%	790.464	11.355	43.461
A 2011	776.522	100.0%	776.522	106.8%	829.435	10.786	35.901
A 2012	874.595	100.0%	874.595	107.4%	939.072	9.638	39.356
A 2013	903.847	100.0%	903.847	107.2%	969.219	8.484	43.459
A 2014	997.892	100.0%	997.892	107.2%	1,069.590	7.836	48.085
A 2015	1,034.358	100.0%	1,034.358	106.9%	1,106.240	7.743	50.352
A 2016	1,022.467	100.0%	1,022.467	107.3%	1,096.673	7.936	46.443
A 2017	1,105.452	100.0%	1,105.452	107.0%	1,183.292	8.293	52.109
F 2018	1,158.017	100.8%	1,167.738	107.2%	1,252.194	7.985	53.688
F 2019	1,212.282	101.7%	1,233.176	107.2%	1,322.364	7.676	56.034
F 2020	1,257.622	102.5%	1,289.550	107.2%	1,382.816	7.368	57.300
F 2021	1,309.212	102.9%	1,347.251	107.2%	1,444.690	7.059	58.728
F 2022	1,371.354	103.0%	1,412.922	107.2%	1,515.110	6.751	60.216
F 2023	1,435.240	103.0%	1,478.829	107.2%	1,585.783	6.442	62.575

CY	Wage Income $ Millions	Rent, Royalty & Part. Inc. $ Millions	Capital Gains Income $ Millions	Interest Income $ Millions	Dividend Income $ Millions	Net Business Income $ Millions	IRA Distributions $ Millions
A 2008	$13,352.105	$1,735.147	$1,337.810	$674.053	$592.113	$701.307	$451.709
A 2009	13,136.979	1,508.400	912.041	519.760	462.423	648.187	396.729
A 2010	13,389.962	1,823.263	992.632	442.983	504.422	690.830	548.648
A 2011	13,995.864	2,075.865	1,015.745	376.777	465.230	702.187	592.390
A 2012	14,686.234	2,340.911	1,491.198	313.117	627.612	740.894	618.964
A 2013	15,189.766	2,554.830	1,314.178	294.150	550.135	820.125	623.888
A 2014	15,912.285	2,812.599	1,925.151	265.414	641.446	834.812	678.718
A 2015	16,521.665	2,855.278	1,676.972	279.892	702.495	886.486	728.904
A 2016	16,791.933	2,650.879	1,616.570	295.853	690.232	862.602	782.898
A 2017	17,474.822	2,777.538	2,188.181	297.882	774.330	886.399	870.507
F 2018	18,127.033	2,882.524	2,418.692	310.516	789.991	877.213	944.961
F 2019	18,912.922	3,051.956	2,431.621	326.859	790.315	920.211	1,006.802
F 2020	19,768.961	3,129.627	2,252.463	421.641	835.166	949.421	1,065.774
F 2021	20,623.990	3,220.819	2,101.243	488.128	851.289	998.232	1,121.111
F 2022	21,470.924	3,316.882	2,142.348	508.495	874.566	1,032.659	1,175.905
F 2023	22,322.358	3,486.629	2,188.341	524.783	897.953	1,049.437	1,229.582

CY	Pension Income $ Millions	Social Security $ Millions	Farm Income $ Millions	Other Income $ Millions	Adjustments to Income $ Millions	Additions to Income $ Millions	Reductions to Income $ Millions
A 2008	$1,509.033	$527.626	($210.131)	$2.641	$417.744	$532.558	$1,084.834
A 2009	1,567.181	540.620	(183.602)	(24.918)	378.735	610.638	1,271.487
A 2010	1,658.178	603.827	(145.068)	(23.266)	417.143	736.051	1,487.627
A 2011	1,752.608	651.771	(127.273)	(210.837)	434.745	802.123	1,577.371
A 2012	1,840.957	721.661	(135.869)	(290.953)	445.516	834.573	1,518.641
A 2013	1,945.506	803.831	(138.640)	(289.325)	487.773	803.607	1,404.220
A 2014	2,050.104	882.266	(115.194)	(305.545)	499.660	783.984	1,399.342
A 2015	2,139.286	941.299	(150.769)	(303.144)	522.819	788.052	1,446.849
A 2016	2,215.681	981.545	(230.849)	(322.424)	536.806	797.821	1,477.005
A 2017	2,322.604	1,072.023	(231.615)	(339.057)	546.814	830.803	1,581.653
F 2018	2,451.736	1,159.177	(231.615)	(335.414)	571.473	857.081	1,667.368
F 2019	2,603.828	1,234.767	(231.615)	(331.664)	594.208	881.494	1,757.743
F 2020	2,744.687	1,307.276	(231.615)	(327.804)	618.183	914.155	1,850.687
F 2021	2,882.372	1,379.291	(231.615)	(323.832)	643.482	950.843	1,948.820
F 2022	3,017.030	1,450.317	(231.615)	(319.743)	670.194	989.842	2,053.505
F 2023	3,146.312	1,521.140	(231.615)	(315.535)	698.415	1,030.867	2,165.528

CY	Itemized Deductions $ Millions	Montana Adj. Gross Income $ Millions	Capital Gains Credit $ Millions	FYR Returns Annual Gr. Percent	Federal Inflation Percent	State Inflation Percent
A 2008	$4,088.399	$19,579.234	$26.152	-7.6%	2.3%	5.0%
A 2009	4,072.245	18,286.742	17.974	-1.0%	4.3%	-1.4%
A 2010	4,086.676	19,177.163	19.642	1.0%	0.2%	1.1%
A 2011	4,197.183	19,934.727	19.622	0.8%	1.5%	3.6%
A 2012	4,137.027	21,690.849	31.235	7.9%	2.4%	1.7%
A 2013	4,241.199	22,477.954	27.523	2.0%	2.6%	1.8%
A 2014	4,274.492	24,390.092	39.533	0.9%	1.7%	2.1%
A 2015	4,488.435	25,025.551	34.639	1.6%	1.6%	0.1%
A 2016	4,591.664	25,198.944	33.576	0.3%	0.5%	1.0%
A 2017	4,706.078	26,903.031	44.759	0.8%	0.8%	1.6%
F 2018				0.8%	2.0%	2.9%
F 2019				0.9%	2.4%	2.6%
F 2020				0.8%	2.0%	2.6%
F 2021				0.4%	2.2%	1.8%
F 2022				0.1%	2.1%	2.2%
F 2023				0.0%	2.0%	2.3%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	769	827	867	815	718	816	899	1,048	1,063	1,176	1,185	1,168	1,298	1,359	1,426	1,490
General Fund	769	827	867	815	718	816	899	1,048	1,063	1,176	1,185	1,168	1,298	1,359	1,426	1,490
GF Growth	8.9%	7.6%	4.8%	-5.9%	-11.9%	13.7%	10.1%	16.6%	1.5%	10.6%	0.8%	-1.4%	11.1%	4.7%	4.9%	4.5%

Insurance Tax & License Fees

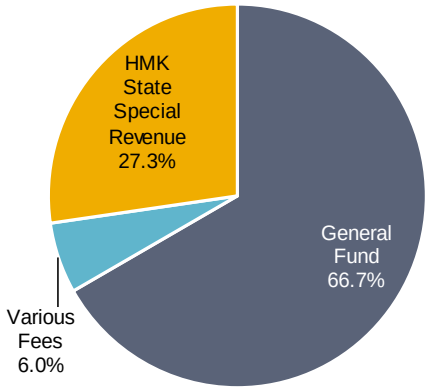
Revenue Description
An insurance premiums tax is levied on the net premiums or gross underwriting profit for each insurance company operating in Montana. Various insurance and license fees are also collected.

Statutory Reference
Tax Rate – 33-2-705(2), MCA; 33-2-311, MCA; 33-28-201(1&2), MCA; 50-3-109(1), MCA
Fee Rate – Many of the fees are contained in 33-2-708(1&2), MCA; all other fees are listed in various chapters of Title 33, MCA
Tax Distribution – 33-2-708(3), MCA; 33-2-712, MCA; 50-3-109(1), MCA; 33-28-120, MCA
Date Due – March 1st each year (33-2-705(1), MCA; 33-2-712, MCA; 33-28-201(1&2), MCA). Quarterly payments due the 15th of April, June, September and December (Administrative Rules 6.6.2704 and 6.6.2705)

Applicable Tax Rates
- 2.75% of net premiums on policies sold in Montana
- An additional 2.5% tax on the fire portion of net premiums for selected risks
- 0.4% on the first $20 million of net direct premiums and 0.3% on each subsequent dollar collected by captive insurance companies

Collection Frequency: Quarterly and annually

Distribution
Insurance tax and license fee revenue is distributed primarily between the general fund and the Healthy Montana Kids state special revenue fund. Exceptions include fire insurance premiums which are deposited fully to the general fund, captive insurance company premiums which are deposited 95% to the general fund and 5% (along with any fees and assessments to captive companies) to a fund for administration of such companies, the genetics fee which is deposited into a state special fund for genetic testing, and the remaining fees which are deposited in a state special fund for use by the State Auditor. The following chart shows the FY 2018 distribution of insurance tax and license fee revenue.

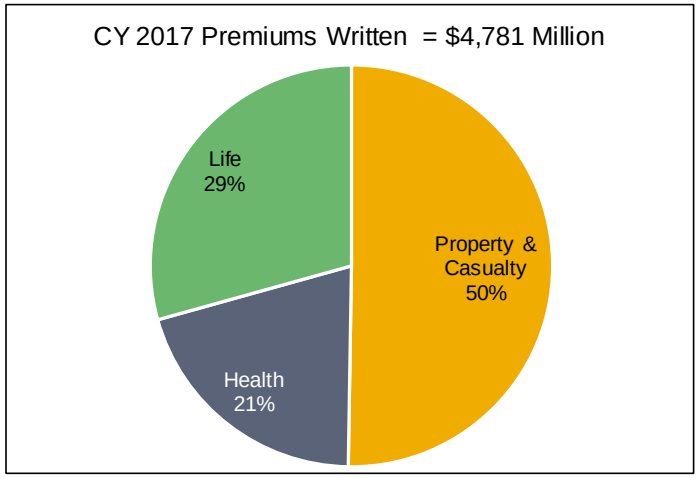


Forecast Risks
- Changes in the forecast for personal consumption expenditures for the finance and insurance services sector
- Changes in health insurance premium costs
- Changes in health insurance purchases on the exchange

Revenue Estimate Methodology

Data

The insurance tax and license fee estimate is based on data obtained from SABHRS, the State Auditor's Office (SAO) and IHS Markit. Fiscal year collections come from SABHRS; detailed historical data and future estimates for offsets and refunds are from the SAO; forecasts for independent economic variables are produced by IHS Markit.



Analysis

Total taxes and fees are calculated by summing the forecasts for premium taxes and all other fees as estimated individually. Premium taxes are forecast with a regression model using the independent, IHS Markit-provided values for the Montana personal consumption expenditure (PCE) series for finance and insurance. Changes in health insurance spending due to the Affordable Care Act are assumed to be captured in the IHS Markit forecast of Montana PCE for finance and insurance. Estimates for the various fees are based on time trends or an assumption of no growth.

Revenue Estimate Assumptions

FY	Total Revenue $ Millions	GF Tax $ Millions	Proxy Insurance Tax $ Millions	MT PCE Fin. & Ins. $ Millions	GF Insurance Fees $ Millions	Non-GF Ins. Fees $ Millions
A 2008	$69.258	$64.004	$65.358	$1,944.272	$7.540	$5.254
A 2009	71.105	50.038	68.980	1,930.463	3.958	6.444
A 2010	69.851	54.892	65.698	1,964.169	6.601	5.298
A 2011	73.825	57.964	69.866	2,120.605	6.935	5.902
A 2012	75.012	58.951	72.406	2,255.425	6.981	5.661
A 2013	78.390	61.678	75.530	2,318.249	7.744	5.916
A 2014	93.052	60.873	78.654	2,421.456	8.336	6.062
A 2015	101.938	66.582	86.888	2,583.966	8.795	6.255
A 2016	104.562	69.255	87.200	2,721.116	11.005	6.357
A 2017	112.124	75.558	91.066	2,897.327	14.756	6.302
A 2018	112.776	75.273	92.285	3,103.553	13.748	6.743
F 2019	116.042	77.475	96.284	3,291.795	12.965	6.793
F 2020	121.376	81.158	100.842	3,506.350	13.593	6.940
F 2021	125.330	83.915	104.020	3,655.901	14.222	7.088
F 2022	129.969	87.132	107.883	3,837.734	14.851	7.235
F 2023	134.527	90.295	111.664	4,015.734	15.480	7.383

Revenue Projection

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	64.4	66.3	69.3	71.1	69.9	73.8	75.0	78.4	93.1	101.9	104.6	112.1	112.8	116.0	121.4	125.3
General Fund	58.8	61.1	64.0	50.0	54.9	58.0	59.0	61.7	60.9	66.6	69.3	75.6	75.3	77.5	81.2	83.9
GF Growth	2.6%	3.9%	4.8%	-21.8%	9.7%	5.6%	1.7%	4.6%	-1.3%	9.4%	4.0%	9.1%	-0.4%	2.9%	4.8%	3.4%

Investment License Fee

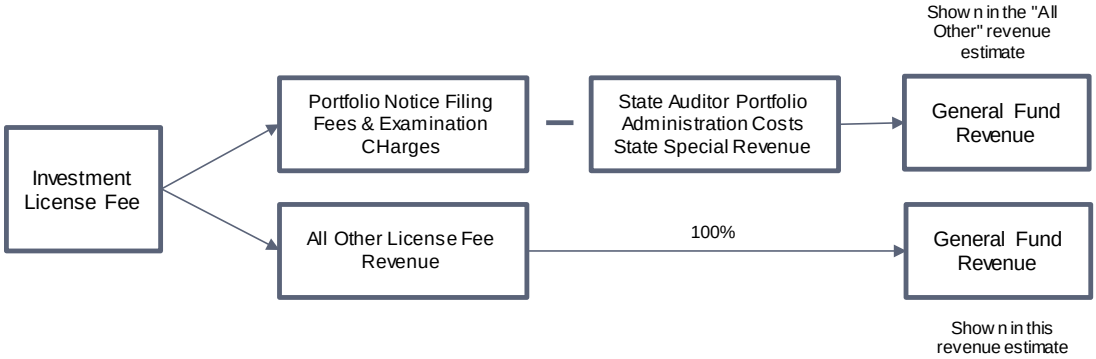
Revenue Description
Investment advisors and investment companies pay fees to the state for registration of securities and agents, registration of securities by notification, notice of a federal filing of a federally secured security, and name changes.

Statutory Reference
Fee Rate – 30-10-209, MCA and 30-10-904, MCA
Fee Distribution – Excess to general fund: 30-10-115, MCA and 30-10-209(6), MCA; portfolio notice fee: 30-10-209(1d), MCA, 30-10-210(2), MCA and 30-10-907, MCA
Date Due – Dealers: upon registration and annually before December 31st thereafter (30-10-201 (9&11), MCA); securities: upon registration (30-10-206, MCA) and renewal (30-10-209(1b)

Applicable Tax Rate
Initial and annual security registration fees vary based on the offering price of securities, but cannot be less than $200 or more than $1,000. Initial and annual registration fees for a broker-dealer, investment adviser, and federal covered adviser are $200. Initial and annual registration fees for a salesperson or investment adviser are $50. The fee for name changes to series, portfolio, or a subdivision of an investment company is $50.

Collection Frequency: Varies

Distribution
All fees except portfolio notice filing fees and examination charges are deposited to the general fund. Portfolio notice filing fees and examination charges are deposited in a state special revenue account from which the State Auditor pays for expenses associated with the regulation of portfolio activities. The excess in this account is transferred to the general fund throughout the year as a non-budgeted transfer and is shown under the "All Other" revenue category.



Forecast Risks
- Changes in the forecast for personal consumption expenditures for the finance and insurance services sector

Revenue Estimate Methodology

Investment license fee revenue is obtained from two major sources: portfolio notice filing and examination fees, and various other fees. The portfolio notice filing fees, examination fees, and other permit revenue are estimated separately and then summed.

Data

The estimate for this source is based on historical collection data from SABHRS, historical license purchases by type from the State Auditor's Office (SAO), and actual and forecast Montana personal consumption expenditures series for finance and insurance services from IHS Markit.

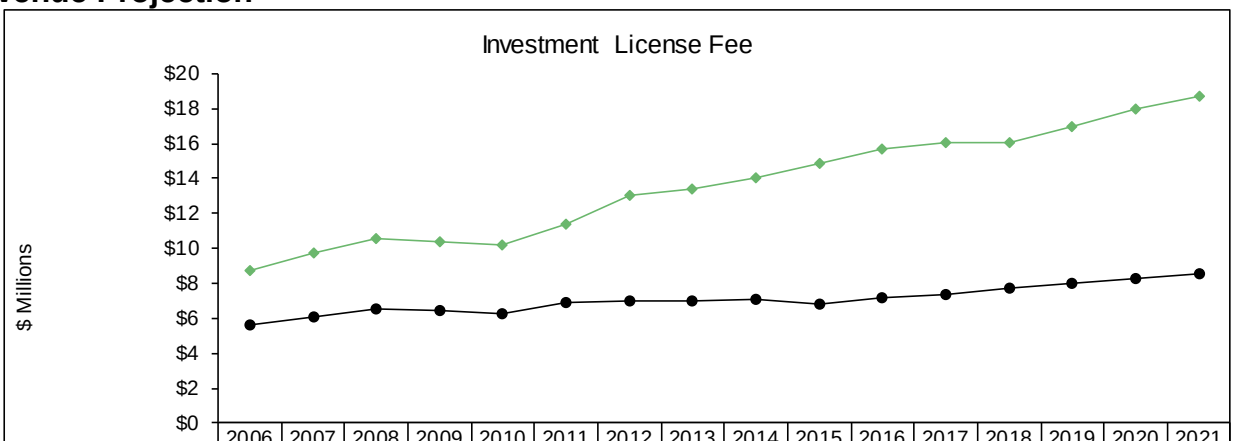
Analysis

Licenses and permits receipts, and portfolio notice filing fees are modeled separately on the Montana personal consumption expenditures series for finance and insurance services.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Licenses & Permits $ Millions	Portfolio Registration $ Millions	Exam Fee $ Millions	Portfolio Expenses $ Millions	MT PCE Fin. & Ins. $ Millions
A 2008	$10.582	$6.514	$6.514	$4.042	$0.026	$0.674	$1,944.272
A 2009	10.349	6.461	6.461	3.872	0.015	0.684	1,930.463
A 2010	10.219	6.225	6.225	3.970	0.024	1.048	1,964.169
A 2011	11.348	6.922	6.922	4.420	0.006	1.169	2,120.605
A 2012	13.026	6.961	6.961	6.055	0.010	1.128	2,255.425
A 2013	13.423	6.951	6.951	6.441	0.030	1.237	2,318.249
A 2014	14.047	7.115	7.115	6.911	0.021	1.389	2,421.456
A 2015	14.821	6.773	6.773	8.048	-	1.442	2,583.966
A 2016	15.661	7.212	7.212	8.449	-	1.490	2,721.116
A 2017	16.071	7.327	7.327	8.702	0.042	1.464	2,897.327
A 2018	16.015	7.683	7.683	8.292	0.039	1.418	3,103.553
F 2019	16.920	7.963	7.963	8.918	0.039	1.618	3,291.795
F 2020	17.953	8.282	8.282	9.632	0.039	1.734	3,506.350
F 2021	18.672	8.504	8.504	10.129	0.039	1.816	3,655.901
F 2022	19.547	8.774	8.774	10.734	0.039	1.914	3,837.734
F 2023	20.403	9.039	9.039	11.326	0.039	2.011	4,015.734

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	8.8	9.7	10.6	10.3	10.2	11.3	13.0	13.4	14.0	14.8	15.7	16.1	16.0	16.9	18.0	18.7
General Fund	5.6	6.1	6.5	6.5	6.2	6.9	7.0	7.0	7.1	6.8	7.2	7.3	7.7	8.0	8.3	8.5
GF Growth	7.5%	9.1%	6.9%	-0.8%	-3.7%	11.2%	0.6%	-0.1%	2.4%	-4.8%	6.5%	1.6%	4.9%	3.6%	4.0%	2.7%

Lodging Taxes

Revenue Description

The state imposes two taxes on room charges collected by lodging facilities and campgrounds: a lodging sales tax and a lodging facility use tax. The taxes only apply for rooms used for lodging which includes hotels, motels, campgrounds, resorts, dormitories, condominium inns, dude ranches, guest ranches, hostels, public lodging houses, and bed and breakfast facilities. Exempt are facilities for health care, facilities owned by non-profit corporations for use by youth for camping, facilities whose average daily charge is less than 60% of the amount the state of Montana reimburses for lodging, and facilities rented for 30 days or more.

The 3% lodging sales tax also applies to online travel agencies, and exempts sales to the U.S. government.

Statutory Reference

Tax Rate – 15-65-111, MCA (4% lodging facility use tax); 15-68-102, MCA (3% lodging sales tax)
Tax Distribution – 15-65-121, MCA (4% lodging facility use tax), 15-68-820, MCA (3% lodging sales tax)
Date Due – The 4% lodging facility use tax is due before the end of calendar quarter (15-65-112, MCA). The 3% lodging sales tax is due the last day of the month following the calendar quarter (15-68-502(1), MCA).

Applicable Tax Rates

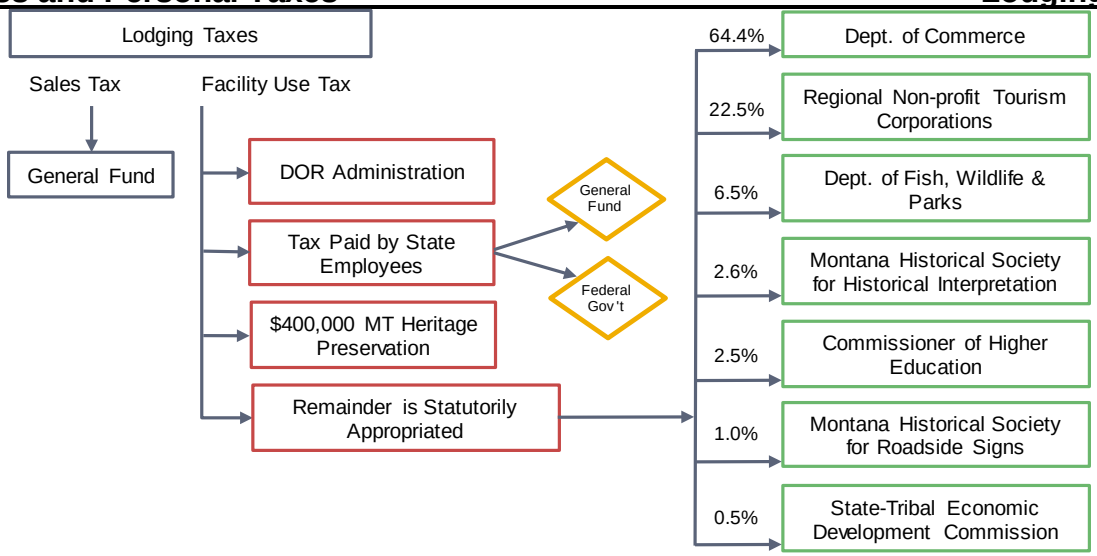
The lodging sales tax is 3.0% of the sales price. The lodging facility use tax is 4.0% of room charges.

Collection Frequency: Quarterly

Distribution

Sales tax: All proceeds are deposited into the general fund.
Facility use tax: The revenue is first distributed to DOR in the amount appropriated for collection and disbursement costs; 30% of the taxes paid by state employees to the general fund (taxes paid with federal funds are reimbursed to the federal government from the general fund); $400,000 to the Montana heritage preservation and development fund; and 2.6% to the historical interpretation account. After these distributions, the remainder is distributed and statutorily appropriated:

- 64.4% to the Department of Commerce for tourism promotion and promotion of the state as a location for the production of motion pictures and television commercials
- 22.5% to regional nonprofit tourism corporations
- 6.5% to the Department of Fish, Wildlife and Parks for maintenance of state park facilities
- 2.6% to the Montana Historical Society for Montana historical interpretation
- 2.5% to the university system for the establishment and maintenance of a Montana travel research program
- 1.0% to the Montana Historical Society to install and maintain roadside historical signs and historic sites
- 0.5% for the state-tribal economic development commission



Forecast Risks

- Change in outlook for U.S. consumer spending on accommodations

Revenue Estimate Methodology

Data

The estimate for this source is based on historical collection data from SABHRS, and actual and forecast U.S. consumer spending on accommodations from IHS Markit.

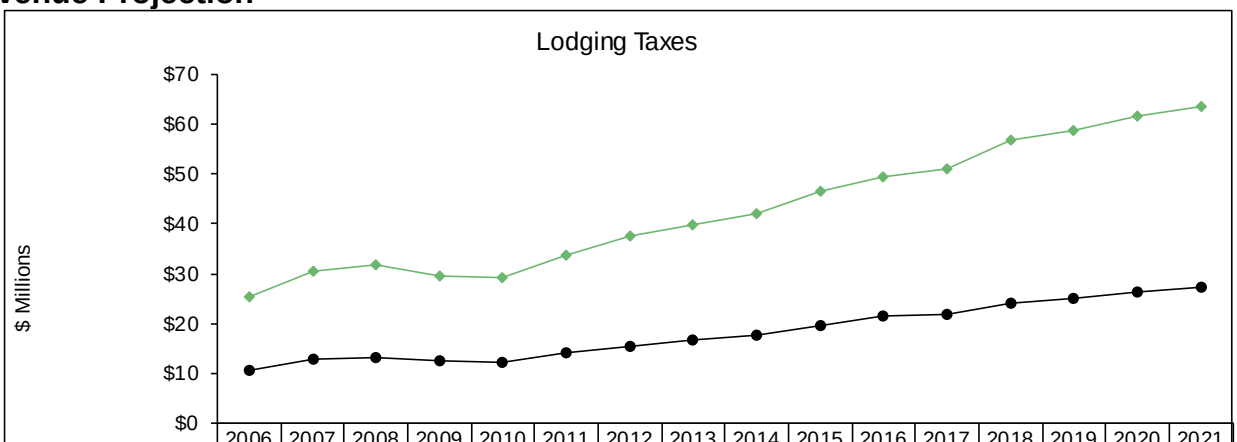
Analysis

Total lodging taxes are made up of two separate taxes, the lodging facility use tax and the lodging sales tax; a proxy for taxable room charges—tax collections divided by the appropriate tax rate—is used as the starting point both sources. This proxy is modeled on U.S. consumer spending on accommodations to produce a forecast of taxable room charges. Estimates of taxable room charges are multiplied by the corresponding tax rate and summed to produce the total lodging tax estimate.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Proxy Gross Sales $ Millions	US Consumer Spending Acc. $ Billions	Calculated Gross Sales $ Millions
A 2008	$31.744	$13.390	$458.861	$94.945	$481.892
A 2009	29.581	12.477	427.591	93.954	477.130
A 2010	29.265	12.331	423.349	95.230	483.263
A 2011	33.809	14.241	489.219	101.898	515.301
A 2012	37.724	15.606	552.942	109.588	552.250
A 2013	39.919	16.720	579.980	116.536	585.632
A 2014	42.059	17.725	608.358	123.218	617.736
A 2015	46.696	19.697	674.999	132.592	662.773
A 2016	49.290	21.493	694.923	138.881	692.991
A 2017	51.169	21.780	734.717	143.104	713.280
A 2018	56.751	24.091	816.510	146.813	731.103
F 2019	58.841	25.218	840.585	151.300	752.659
F 2020	61.553	26.380	879.335	158.521	787.356
F 2021	63.671	27.287	909.580	164.157	814.437
F 2022	65.588	28.109	936.975	169.263	838.967
F 2023	67.331	28.856	961.878	173.904	861.265

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	25.5	30.6	31.7	29.6	29.3	33.8	37.7	39.9	42.1	46.7	49.3	51.2	56.8	58.8	61.6	63.7
General Fund	10.7	12.9	13.4	12.5	12.3	14.2	15.6	16.7	17.7	19.7	21.5	21.8	24.1	25.2	26.4	27.3
GF Growth	4.7%	20.9%	3.7%	-6.8%	-1.2%	15.5%	9.6%	7.1%	6.0%	11.1%	9.1%	1.3%	10.6%	4.7%	4.6%	3.4%

Motor Vehicle Fee

Revenue Description

The state assesses a variety of motor vehicle fees, including fees for the filing of motor vehicle liens, fees for new license plates, title fees, and annual and permanent registration fees. The fees vary according to the type of vehicle and the type of license plate. There are also Gross Vehicle Weight (GVW) fees on trucks and pickups, special fees for senior citizen transportation, veteran services, the highway patrol pension fund, salaries for the highway patrol, motorcycle safety, electronic commerce applications, and an optional registration fee on light vehicles for state parks and fishing access sites.

All fees on motorcycles and quadricycles, trailers, travel trailers, snowmobiles, off-highway vehicles, and watercraft are one-time only and permanent, except upon change of ownership. Fees on other vehicles are annual. Light vehicles older than ten years old may be licensed permanently, at the option of the owner.

Statutory Reference

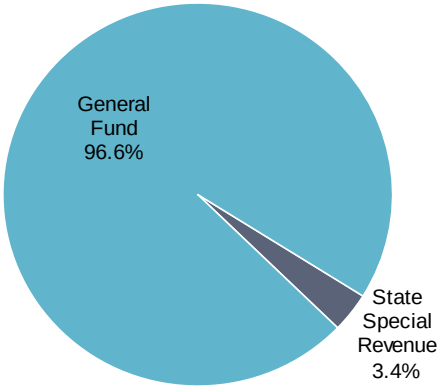
Fee Rate – multiple, but generally in Title 61, Chapter 3, MCA; permanent registration: 61-3-562, MCA
Tax Distribution – 61-3-108, MCA

Applicable Tax Rates: Various

Collection Frequency: Monthly

Distribution

Most motor vehicle fees are allocated to the general fund. Some fees or a portion of them are distributed to the specific state special revenue accounts, or to the county general fund.



Forecast Risks

- Changes in forecast growth of Montana vehicle stock
- Changes to forecast growth of new vehicle sales

Revenue Estimate Methodology

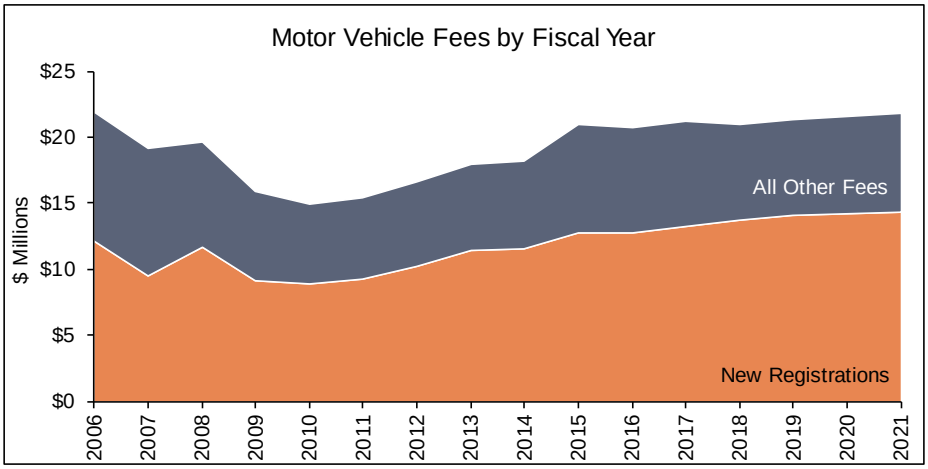
Data

The data used to estimate the motor vehicle (MV) fees are obtained from SABHRS and IHS Markit.

Analysis

MV fees are currently imposed at different rates on eight major categories. Included in the fees assessed on motor vehicles in Montana are registration fees, two types of record liens, title fees, personal and new plate fees, senior transit fees, and veteran's administration fees. The ninth category is made up of other miscellaneous fees assessed on motor vehicles.

With constant fees, the future change in MV fees results from change in the vehicle stock in Montana. Growth rates for the stock of Montana vehicles are modeled on IHS Markit estimates for the national and Montana-specific vehicle stock and new car sales nationwide. The growth rate is applied to the base year revenues of each fee category and projected forward at the same rate for all estimated fiscal years. The estimated tax collections of each category are then combined to create the total estimates for the MV fees.

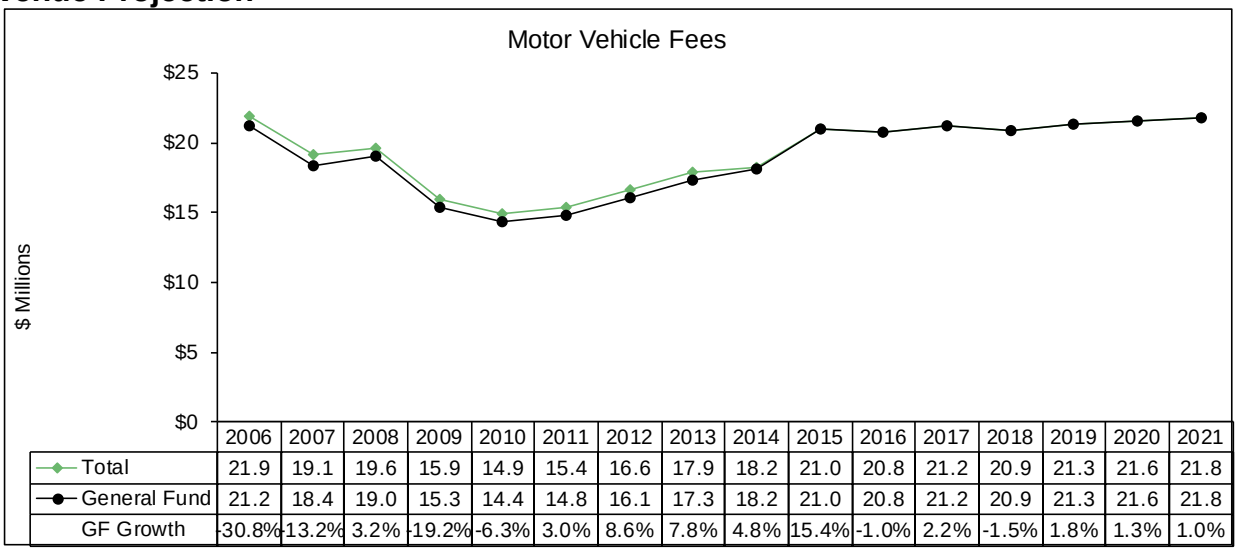


Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	GF Fee Registration $ Millions	GF Fee Record $ Millions	GF Fee Titles $ Millions	GF Fee Personal $ Millions	GF Fee VA Cemetery $ Millions
A 2008	$19.616	$18.995	$11.677	$0.719	$2.464	$1.336	$0.193
A 2009	15.905	15.345	9.114	0.526	2.126	1.219	0.183
A 2010	14.917	14.377	8.826	0.545	2.156	1.233	0.185
A 2011	15.353	14.814	9.283	0.538	2.286	1.230	0.189
A 2012	16.643	16.084	10.242	0.559	2.387	1.246	0.195
A 2013	17.921	17.334	11.418	0.588	2.444	1.250	0.196
A 2014	18.208	18.162	11.494	0.593	2.457	1.240	0.201
A 2015	20.961	20.961	12.783	0.610	2.749	1.267	0.208
A 2016	20.751	20.751	12.791	0.641	2.794	1.259	0.211
A 2017	21.216	21.216	13.204	0.603	2.750	1.252	0.216
A 2018	20.903	20.903	13.769	0.614	2.742	1.239	0.218
F 2019	21.282	21.282	14.019	0.625	2.791	1.262	0.222
F 2020	21.559	21.559	14.201	0.634	2.828	1.278	0.224
F 2021	21.784	21.784	14.349	0.640	2.857	1.292	0.227
F 2022	22.002	22.002	14.493	0.647	2.886	1.304	0.229
F 2023	22.222	22.222	14.638	0.653	2.915	1.317	0.231

FY	GF Fee New Plate $ Millions	GF Fee Other $ Millions	Non GF Fee Lien $ Millions
A 2008	$1.493	$1.113	$0.621
A 2009	1.278	0.899	0.560
A 2010	0.660	0.772	0.540
A 2011	0.529	0.759	0.538
A 2012	0.554	0.900	0.559
A 2013	0.535	0.903	0.588
A 2014	0.850	1.374	-
A 2015	1.953	1.391	-
A 2016	1.481	1.574	-
A 2017	1.538	1.654	-
A 2018	0.598	1.723	-
F 2019	0.609	1.754	-
F 2020	0.617	1.777	-
F 2021	0.624	1.795	-
F 2022	0.630	1.813	-
F 2023	0.636	1.831	-

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	21.9	19.1	19.6	15.9	14.9	15.4	16.6	17.9	18.2	21.0	20.8	21.2	20.9	21.3	21.6	21.8
General Fund	21.2	18.4	19.0	15.3	14.4	14.8	16.1	17.3	18.2	21.0	20.8	21.2	20.9	21.3	21.6	21.8
GF Growth	-30.8%	-13.2%	3.2%	-19.2%	-6.3%	3.0%	8.6%	7.8%	4.8%	15.4%	-1.0%	2.2%	-1.5%	1.8%	1.3%	1.0%

Public Contractors Tax

Revenue Description
A license fee is applied to the gross receipts of each separate project let by any of the listed public entities. Part or all of a contractor's fee may be refunded through class 8 business equipment property or vehicle taxes, or claimed as a credit on individual or corporation income tax returns.

Statutory Reference
Tax Rate – 15-50-205, MCA
Tax Distribution – 15-50-311, MCA
Date Due – within 30 days after payment to the contractor (15-50-309, MCA)

Applicable Tax Rates
A 1.0% license fee is applied to all public contracts over $5,000.

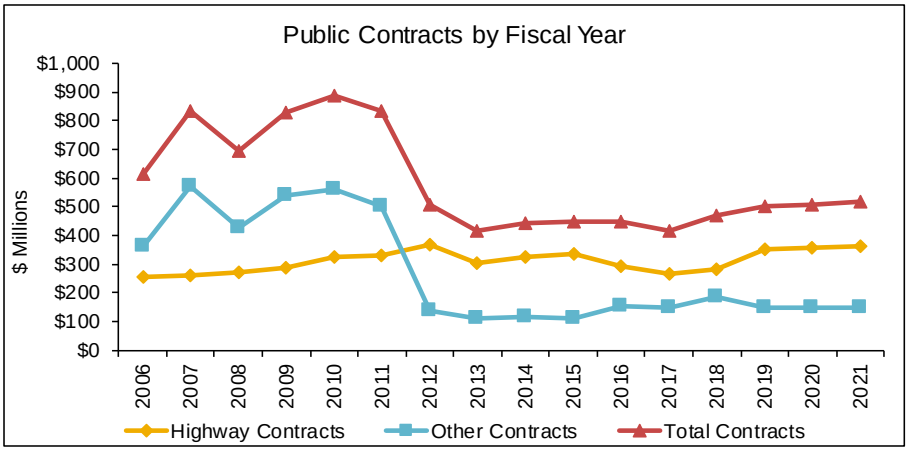
Collection Frequency: Monthly

Distribution: All proceeds are deposited into the general fund.

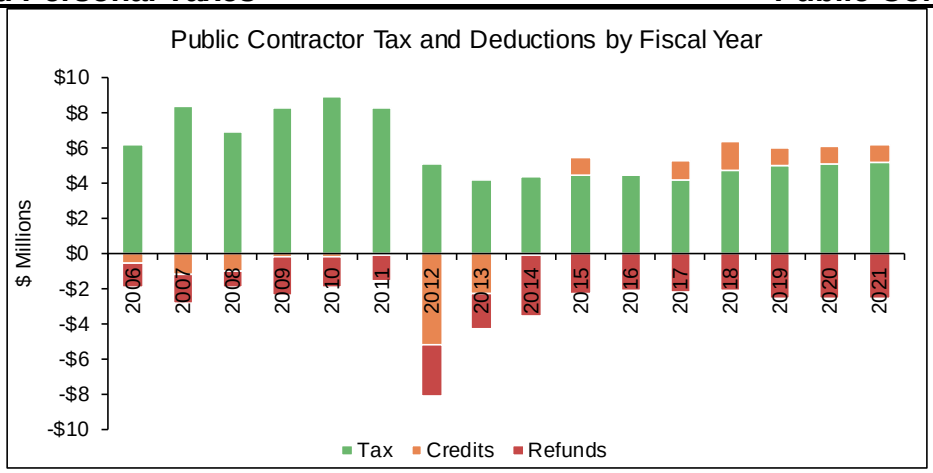
Forecast Risks
- Federal highway trust fund status
- State legislative funding of infrastructure projects

Revenue Estimate Methodology
Data

The estimate for this source is based on historical revenue collection and highway expenditure data from SABHRS. A proxy for gross tax collections is developed by adjusting the SABHRS total collection data to account for refunds and credits. The gross proxy is disaggregated into two contract classifications, highway payments and all other contracts.



Public contractor's tax revenue has been highly variable due to inconsistencies in processing payment of refunds and credits; in addition, there has been recent volatility as a result of the increased number of public projects funded through the American Recovery & Reinvestment Act (ARRA) in 2009 and 2010, followed by higher levels of credits and refunds in subsequent years.



Refunds are made up primarily of refund claims against the class 8-business property tax. Credits are authorized for both individual income tax and the corporation license tax. There is a significant time lag between the date of the contract and the reimbursement of the tax through credits or refunds, so large fluctuations in public construction projects may continue to produce unusual future collection patterns.

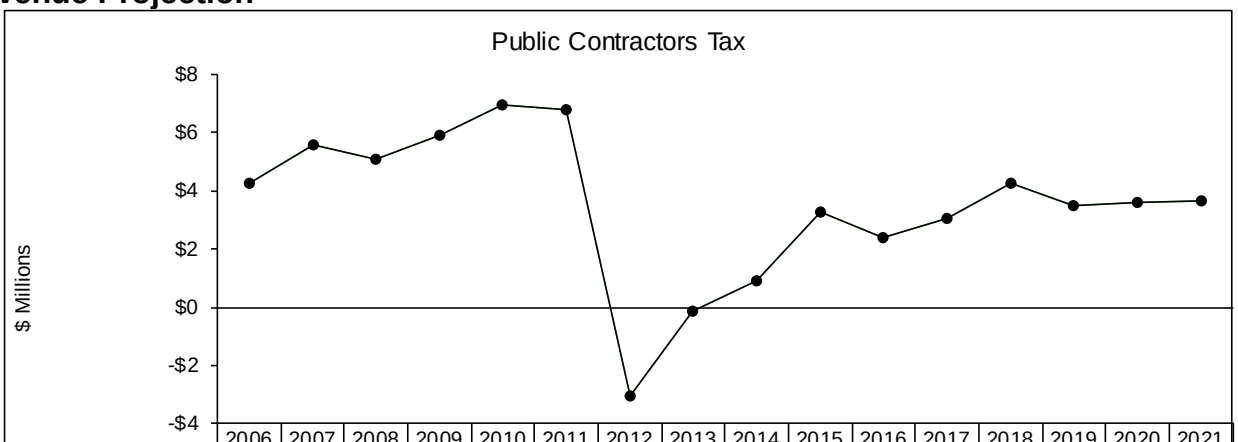
Analysis

Highway payments are forecast on a time trend; all other contracts are forecast as an approximate historical average. This sum of these two categories is multiplied by 1% to obtain the gross tax revenue. Gross taxes are reduced by an aggregate forecast of refunds and credits to produce net tax collections.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Gross Tax $ Millions	Credits & Refunds $ Millions	Highway Payments $ Millions	Other Contracts $ Millions
A 2008	$5.063	$5.063	$6.964	$1.902	$271.911	$424.512
A 2009	5.930	5.930	8.287	2.357	290.142	538.592
A 2010	6.969	6.969	8.882	1.913	327.226	561.023
A 2011	6.803	6.803	8.329	1.525	329.808	503.052
A 2012	(3.042)	(3.042)	5.068	8.110	368.229	138.576
A 2013	(0.138)	(0.138)	4.162	4.299	306.053	110.109
A 2014	0.887	0.887	4.407	3.520	324.791	115.932
A 2015	3.257	3.257	4.481	1.224	335.646	112.452
A 2016	2.397	2.397	4.481	2.084	295.287	152.845
A 2017	3.078	3.078	4.188	1.110	266.975	151.813
A 2018	4.267	4.267	4.703	0.436	284.639	185.642
F 2019	3.503	3.503	5.003	1.500	350.269	150.000
F 2020	3.579	3.579	5.079	1.500	357.905	150.000
F 2021	3.655	3.655	5.155	1.500	365.541	150.000
F 2022	3.732	3.732	5.232	1.500	373.177	150.000
F 2023	3.808	3.808	5.308	1.500	380.812	150.000

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	4.3	5.6	5.1	5.9	7.0	6.8	-3.0	-0.1	0.9	3.3	2.4	3.1	4.3	3.5	3.6	3.7
General Fund	4.3	5.6	5.1	5.9	7.0	6.8	-3.0	-0.1	0.9	3.3	2.4	3.1	4.3	3.5	3.6	3.7
GF Growth	203%	30%	-9%	17%	18%	-2%	-145%	-95%	-745%	267%	-26%	28%	39%	-18%	2%	2%

Railroad Car Tax

Revenue Description

The railroad car tax applies to the rolling stock owned by railroad companies, and the tax rate is equal to the average property tax rate for commercial and industrial property. Railroad car companies, which operate in several states, pay taxes on the portion of the property value allocated to Montana, based on the ratio of the car miles traveled within Montana to the total number of car miles traveled in all states, as well as time spent in the state relative to time spent in other states.

Statutory Reference

Tax Rate – 15-23-214(1), MCA
Tax Distribution – 15-23-215, MCA
Date Due – Report due to the Department of Revenue (DOR) by April 15th of each year for the previous calendar year (15-23-103(2), MCA; 15-23-212, MCA). The department calculates the tax due by the third Monday in October (15-23-214(1), MCA). Half of the tax is due by November 30th and half is due by May 31st (15-23-214(3), MCA; 15-16-102(1), MCA).

Applicable Tax Rates

The tax rate is equal to the previous year's average statewide tax rate for commercial and industrial property; in recent years, the rate has been about 3.0%. The rate is multiplied by the statewide average mill levy for commercial and industrial property.

Collection Frequency: Semi-annually

Distribution: All proceeds are deposited into the general fund.

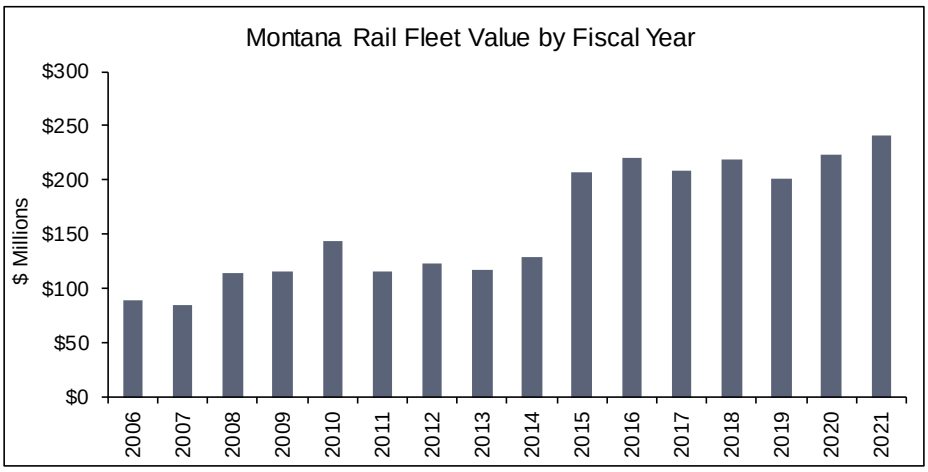
Forecast Risks

- Changing outlook for Montana retail sales

Revenue Estimate Methodology

Data

Data from DOR provides the value of national railroad car fleet, Montana's rolling stock, railroad car tax assessed by company, the average mill levy and applicable tax rate. SABHRS data are used to check the estimates against the historic values.



Analysis

Although the railcar tax appears somewhat volatile, most of the volatility is caused by shifts in average mill levies and tax rates, both of which are controlled in large part by factors outside of the growth in rail shipments. The volatility can also be traced to litigation brought by rail companies and settled in federal

legislation. In 1993, some rail companies protested tax rates, which reduced tax payments for four years. In 1997, the litigation was settled, and the companies were required to make both past and current payments.

Railroad properties are taxed as class 12 properties. To calculate total railroad car tax collections, the market value of the Montana fleet is multiplied by the average mill levy and tax rate. The market value of the rail fleet in Montana is based on a relationship with market value of the U.S. fleet. An estimate for the value of the national fleet is developed using the average rate of growth in the U.S. fleet value, based on a four-year pattern of growth. Montana's average share of the total fleet value is applied to the national estimate. Since 2004, the market value of Montana's rail fleet has been ranged between 0.41% and 0.60% of the nation's fleet. Growth in Montana-allocated value is expected to grow with the national fleet value.

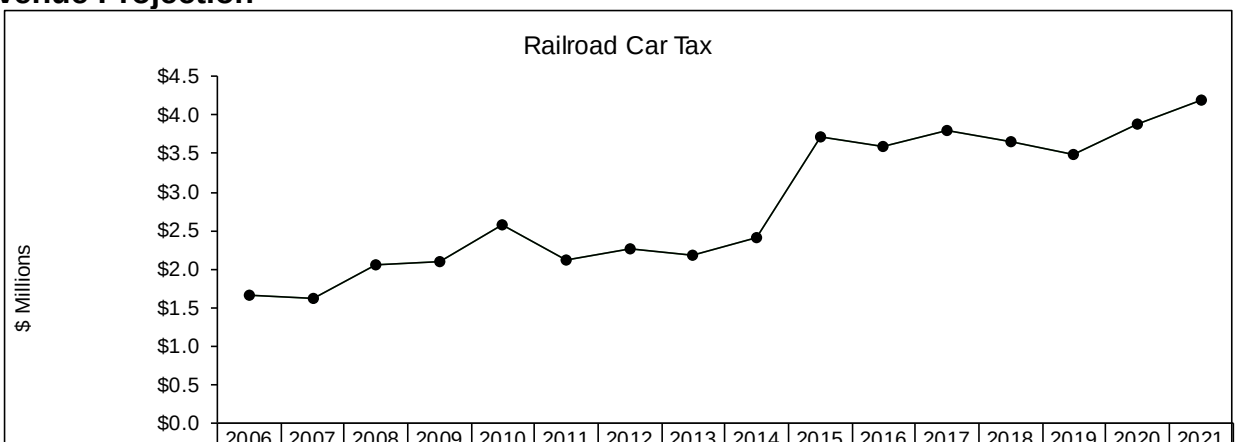
After the Montana market fleet value is determined, the average commercial and industrial mill levy and tax rate must be calculated. The rate of the mill levy is calculated from the average of statewide commercial and industrial mill levies. The average mill levy is expected to increase because counties are able to raise levies at a rate equal to half of the annual rate of inflation. Furthermore, the increasing costs of school budgets will further force the average mill levy to increase.

The tax rate for the railroad property is created from a weighted average of six property classes containing commercial and industrial property: class 4, 7, 8, 9, 13 and 14. Class 4 property tax, which contains commercial real estate, is weighted more heavily than the other classes due to its higher market value. The estimated tax rate is shown for forecast years in the revenue estimate assumptions table below. The rail car tax estimates are completed by multiplying the Montana market value by the average mills and the tax rate.

Revenue Estimate Assumptions

	FY	Total Tax $ Millions	GF Tax $ Millions	Total MV of Fleet $ Millions	MT Allocation Percent	Tax Rate	Mills	Montana Retail Sales $ Millions
A	2008	$2.064	$2.064	$13,405	7.91%	52.03%	113.859	$0
A	2009	2.099	2.099	14,395	7.05%	52.48%	116.184	-
A	2010	2.579	2.579	15,425	6.84%	52.48%	144.031	-
A	2011	2.130	2.130	14,090	-8.30%	51.73%	115.455	-
A	2012	2.273	2.273	14,117	0.18%	53.29%	123.766	-
A	2013	2.179	2.179	14,861	5.04%	53.04%	117.899	-
A	2014	2.418	2.418	15,602	4.78%	53.75%	129.494	-
A	2015	3.706	3.706	16,272	14.50%	53.63%	206.979	-
A	2016	3.594	3.594	17,092	9.24%	54.49%	221.101	-
A	2017	3.790	3.790	17,713	6.41%	53.81%	209.408	-
A	2018	3.649	3.649	17,930	5.74%	54.59%	218.644	-
F	2019	3.492	3.492	18,669	10.56%	55.74%	200.806	-
F	2020	3.878	3.878	19,787	11.04%	55.74%	222.984	-
F	2021	4.196	4.196	20,709	8.21%	55.74%	241.282	-
F	2022	4.428	4.428	21,382	5.53%	55.74%	254.626	-
F	2023	4.643	4.643	22,005	4.86%	55.74%	266.990	-

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	1.7	1.6	2.1	2.1	2.6	2.1	2.3	2.2	2.4	3.7	3.6	3.8	3.6	3.5	3.9	4.2
General Fund	1.7	1.6	2.1	2.1	2.6	2.1	2.3	2.2	2.4	3.7	3.6	3.8	3.6	3.5	3.9	4.2
GF Growth	4%	-3%	28%	2%	23%	-17%	7%	-4%	11%	53%	-3%	5%	-4%	-4%	11%	8%

Rental Car Sales Tax

Revenue Description

The 4% sales tax is imposed on the base rental charge for rental vehicles. The base rental charge includes use charges for time and mileage, insurance, accessory equipment, and charges for additional or underage drivers. It does not include price discounts, charges for operating an airport concession, motor fuel, intercity drop charges, and government taxes. Rental vehicles include light vehicles, motorcycles, motor-driven cycles, quadricycles, motorboats and sailboats, and off-highway vehicles. Sales to the U.S. government are exempt from the sales tax. Vendors can claim 5% of the tax as an allowance, up to $1,000 per quarter.

Statutory Reference

Tax Rate – 15-68-102(1b), MCA
Tax Distribution – 15-68-820, MCA
Date Due – Before the last day of the month following the calendar quarter (15-68-502(1), MCA)

Applicable Tax Rates: A 4% sales tax is imposed on the base rental charge for rental vehicles.

Collection Frequency: Quarterly

Distribution

Rental car sales tax revenue is distributed 75% to the general fund and 25% to the senior citizen and persons with disabilities transportation services state special revenue account.

Forecast Risks

- Changing outlook for Montana personal consumption expenditures for transportation services

Revenue Estimate Methodology

Data

The estimate for this source is based on historical collection data from SABHRS, and historical and forecast Montana personal consumption expenditures for transportation services from IHS Markit.

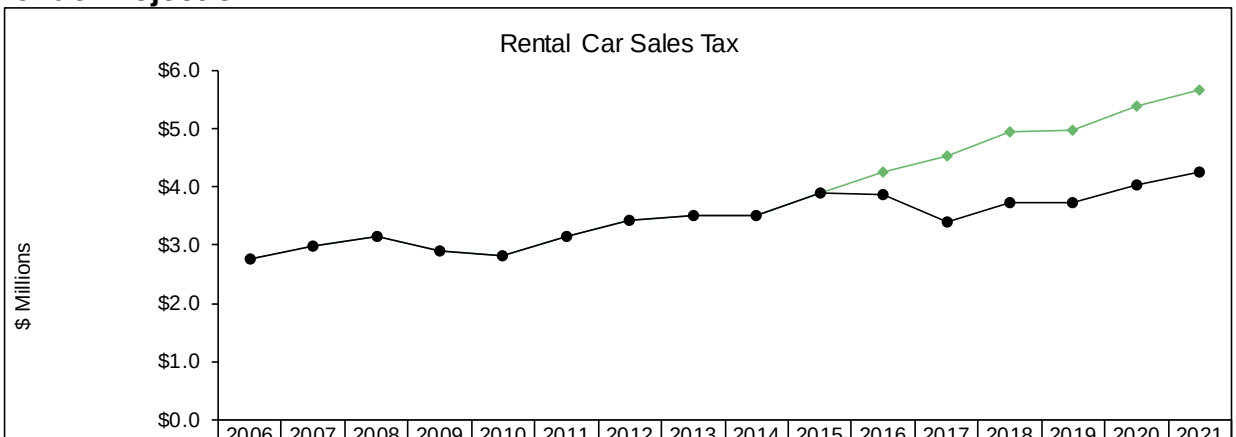
Analysis

A proxy of rental car receipts is made by dividing historic tax receipts by the current tax rate. Future proxy values are modeled on Montana personal consumption expenditures for transportation services and then multiplied by the applicable tax rate to obtain projected tax revenues.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Proxy Sales $ Millions	MT PCE Transportation $ Millions
A 2008	$3.157	$3.157	$78.931	$769.027
A 2009	2.904	2.904	72.609	735.373
A 2010	2.807	2.807	70.185	716.114
A 2011	3.149	3.149	78.730	751.680
A 2012	3.420	3.420	85.494	811.067
A 2013	3.523	3.523	88.080	844.121
A 2014	3.521	3.521	88.033	906.287
A 2015	3.907	3.907	97.669	974.331
A 2016	4.269	3.878	106.736	1,004.860
A 2017	4.536	3.402	113.406	1,049.752
A 2018	4.959	3.719	123.965	1,118.433
F 2019	4.973	3.730	124.330	1,121.391
F 2020	5.385	4.039	134.627	1,204.802
F 2021	5.677	4.258	141.931	1,263.966
F 2022	5.839	4.379	145.978	1,296.747
F 2023	5.986	4.489	149.639	1,326.402

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	2.8	3.0	3.2	2.9	2.8	3.1	3.4	3.5	3.5	3.9	4.3	4.5	5.0	5.0	5.4	5.7
General Fund	2.8	3.0	3.2	2.9	2.8	3.1	3.4	3.5	3.5	3.9	3.9	3.4	3.7	3.7	4.0	4.3
GF Growth	7%	8%	6%	-8%	-3%	12%	9%	3%	0%	11%	-1%	-12%	9%	0%	8%	5%

Telecommunications Excise Tax

Revenue Description
The retail telecommunications excise tax is levied on the sales price of retail telecommunications services originating or terminating in the state. It is paid by the retail purchaser and collected by the provider.

Statutory Reference
Tax Rate – 15-53-130, MCA
Tax Distribution – 15-53-156, MCA
Date Due – 60 days after the end of the calendar quarter (15-53-139, MCA)

Applicable Tax Rates
A tax of 3.75% is applied to the sales price of retail telecommunications services. Sales price includes payment for services such as distribution, supply, transmission, and delivery, but excludes federal taxes, relocation of service, equipment repair, prepaid calling cards, and other items. Gross receipts from pre-paid wireless sales by third parties and internet services are also exempt.

Collection Frequency: Quarterly

Distribution: After retaining an allowance for refunds, all proceeds are deposited into the general fund.

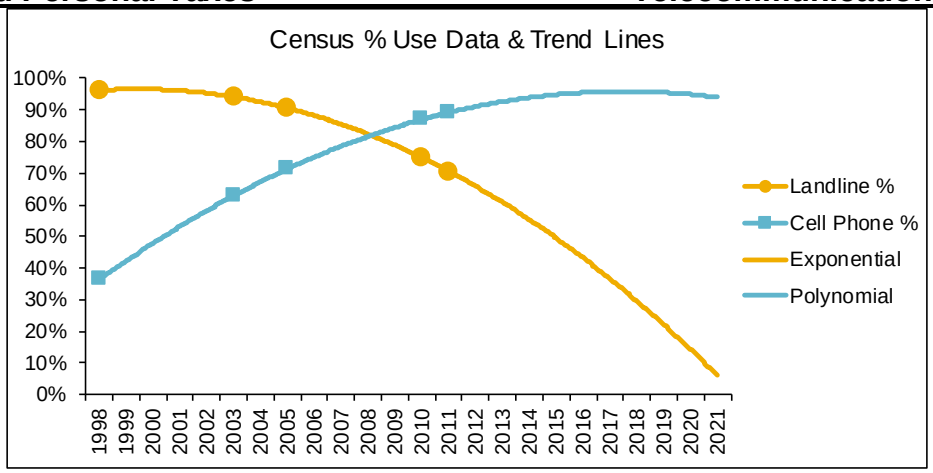
Forecast Risks
- Changing rate of landline usage
- Changing market share of prepaid smartphones, which are not taxable

Revenue Estimate Methodology
Data

The estimate for this source is based on historical revenue data from SABHRS, U.S. Census Bureau data for landline use decline and cell phone use growth, IDC Mobile Phone Tracker statistics, Google smartphone statistics, and the IHS Markit forecast of Montana population.

Analysis

Telecommunication services have changed with users—especially younger users and those in higher populated area—trending toward exclusive reliance on cell phones. Data collected by the U.S. Census Bureau on consumer trends suggests that many users had both landline and cell services as the cell phones increased in popularity, but now that cell service reliability is well established, users are dropping their land line service. The graph below shows the national trends, which are applied to the Montana forecast.



Total revenue has been declining since FY 2011 in part due to the DOR's loss of the pre-paid wireless case in 2011. The impact of the case was initially estimated to be an annual reduction in revenue of about $1.0 million. However, the growth in the market share of prepaid smartphones was likely underestimated, resulting in an underestimate of the revenue reduction.

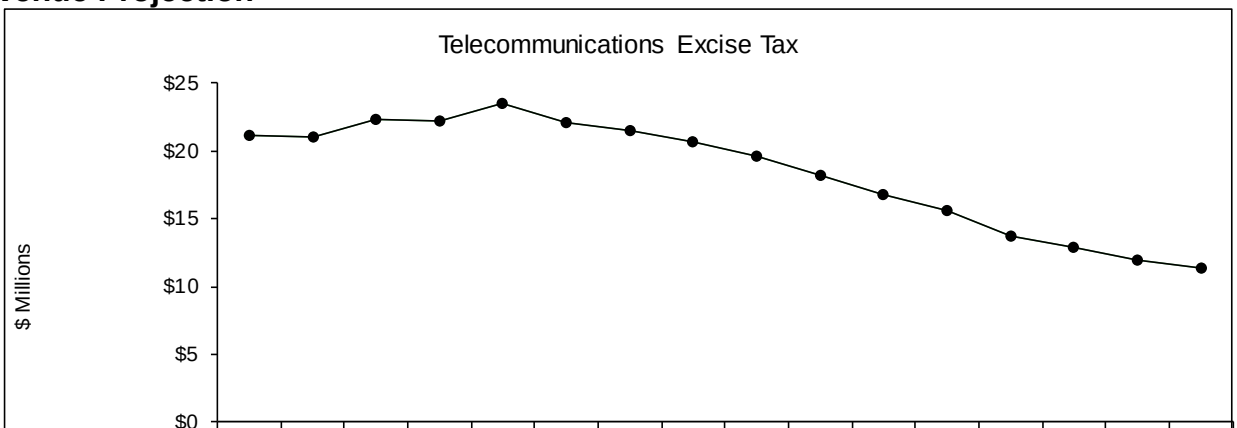
The current estimate assumes the prepaid wireless market share plateaus at 40% of all wireless service; however, if trends follow that of European countries, the prepaid market share could go above 80%, which would result in lower revenue.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Proxy Sales $ Millions	Calculated Landline % Calendar	Calculated Cell Phone % Calendar	Prepaid Smartphone % Calendar	Taxable Cell Phone % Calendar
A 2008	$22.350	$22.350	$563.408	86%	79%	2%	79%
A 2009	22.250	22.250	584.146	83%	82%	4%	82%
A 2010	23.523	23.523	563.234	79%	84%	8%	84%
A 2011	22.050	22.050	585.333	76%	87%	13%	87%
A 2012	21.459	21.459	568.306	72%	89%	18%	73%
A 2013	20.652	20.652	548.968	67%	91%	21%	72%
A 2014	19.657	19.657	523.635	62%	93%	26%	69%
A 2015	18.257	18.257	486.114	57%	94%	30%	66%
A 2016	16.775	16.775	447.095	52%	95%	35%	62%
A 2017	15.603	15.603	415.784	46%	95%	40%	57%
A 2018	13.726	13.726	299.306	39%	96%	40%	57%
F 2019	12.889	12.889		33%	96%	40%	58%
F 2020	11.927	11.927		26%	96%	40%	57%
F 2021	11.370	11.370		25%	95%	40%	57%
F 2022	11.364	11.364		25%	95%	40%	57%
F 2023	11.442	11.442		25%	95%	40%	57%

FY	Calculated Total % Calendar	Calculated Total % Fiscal	MT Pop. Age >=16 Millions	Calculated Tax. Phones Millions	Trend Taxable Sales $ Millions
A 2008	164%	164%	0.776	1.272	$587.815
A 2009	164%	164%	0.784	1.289	596.157
A 2010	164%	164%	0.791	1.298	600.664
A 2011	163%	163%	0.797	1.301	602.072
A 2012	145%	154%	0.803	1.234	569.160
A 2013	139%	142%	0.810	1.149	527.227
A 2014	131%	135%	0.817	1.103	504.270
A 2015	123%	127%	0.825	1.046	476.131
A 2016	113%	118%	0.833	0.983	445.127
A 2017	103%	108%	0.843	0.911	409.365
A 2018	97%	100%	0.852	0.852	379.998
F 2019	90%	94%	0.860	0.805	356.816
F 2020	83%	87%	0.866	0.751	330.201
F 2021	82%	83%	0.872	0.720	314.785
F 2022	82%	82%	0.877	0.719	314.596
F 2023	82%	82%	0.883	0.724	316.765

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	21.2	21.1	22.4	22.3	23.5	22.0	21.5	20.7	19.7	18.3	16.8	15.6	13.7	12.9	11.9	11.4
General Fund	21.2	21.1	22.4	22.3	23.5	22.0	21.5	20.7	19.7	18.3	16.8	15.6	13.7	12.9	11.9	11.4
GF Growth	0.3%	-0.7%	6.1%	-0.4%	5.7%	-6.3%	-2.7%	-3.8%	-4.8%	-7.1%	-8.1%	-7.0%	-12.0%	-6.1%	-7.5%	-4.7%

Vehicle Tax

Revenue Description
Light vehicles, motorcycles and quadricycles, snowmobiles, buses, trucks, truck tractors having a manufacturer's rated capacity of more than 1 ton, motor homes, and certain trailers and travel trailers are taxed under a fee schedule that varies by age and weight.

Statutory Reference
Tax Rate – Watercraft, snowmobiles, off-highway vehicles (OHV), and light vehicles registrations: 61-3-321, MCA; vehicles greater than 1 ton: 61-3-529, MCA
Tax Distribution – 61-3-509, MCA
Date Due – Revenue for prior month is due on or before the 20th of the month (15-1-504, MCA; 61-3-509, MCA).

Applicable Tax Rates: Varies

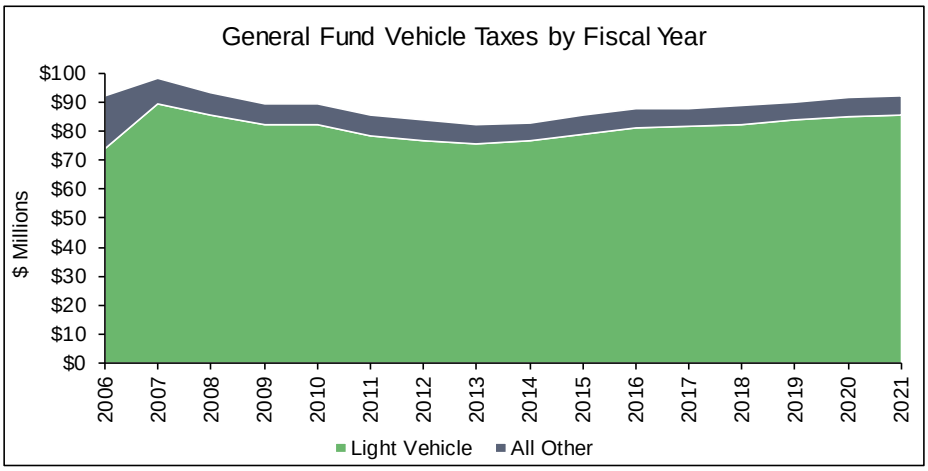
Collection Frequency: Monthly

Distribution
Most fees-in-lieu-of-tax are deposited into the general fund. Exceptions are:
- Fees for luxury motor homes and vehicles is deposited in the motor vehicle division administration account
- Administration fee of 3% is deposited in the motor vehicle division administration account
- Fee of $10 that is collected to partially fund highway patrol officers' salaries

Forecast Risks
- Changing outlook for Montana total vehicle stock
- Changing outlook for new vehicle sales

Revenue Estimate Methodology
Data
The data used to estimate the motor vehicle tax are obtained from SABHRS and IHS Markit.

Analysis
Vehicle taxes are currently imposed at different rates on five categories of vehicles (tax schedule varies by age and weight) including light vehicles, large trucks, motor homes, motor cycles (including tri-cycles), and boats and snowmobiles.

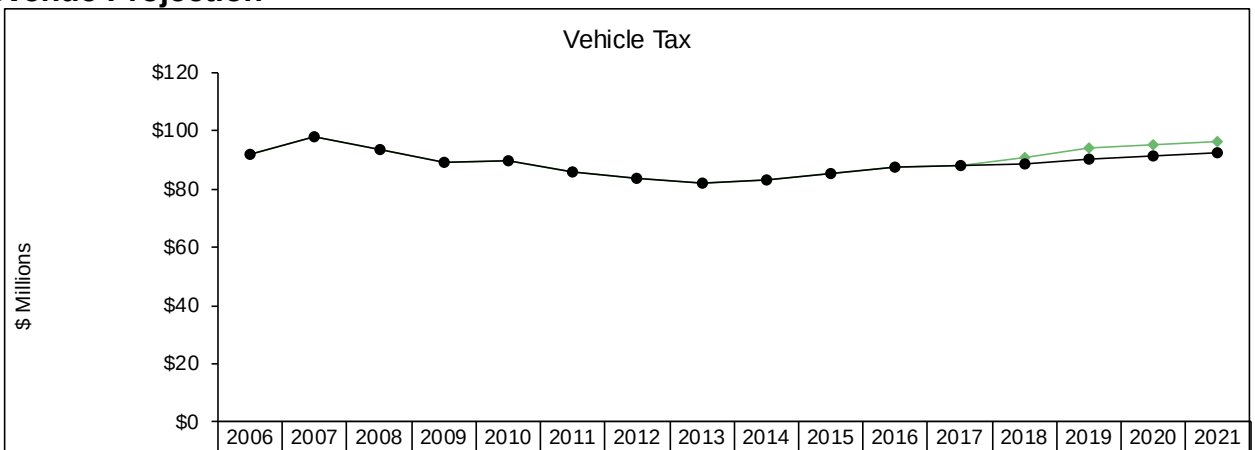


With constant fees, the future change in vehicle tax revenue results from change in the vehicle stock in Montana. Growth rates for the stock of Montana vehicles are modeled on IHS Markit estimates for the national and Montana-specific vehicle stock and new car sales nationwide. The growth rate is applied to the base year revenues and projected forward at the same rate for the forecast period.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Large Truck Millions	Motor Home Millions	Light Vehicle Millions	Boats/ Snow Millions	MVD Funding Ferrari Tax Millions
A 2008	$93.493	$93.493	$2.779	$3.743	$85.624	$1.347	-
A 2009	89.335	89.335	2.668	3.216	82.259	1.191	-
A 2010	89.485	89.485	2.584	3.489	82.212	1.199	-
A 2011	85.762	85.762	2.726	3.460	78.443	1.133	-
A 2012	83.871	83.871	2.745	3.035	76.880	1.211	-
A 2013	82.018	82.018	2.783	2.373	75.585	1.277	-
A 2014	82.927	82.927	2.768	2.249	76.534	1.377	-
A 2015	85.420	85.420	2.768	2.249	78.982	1.494	-
A 2016	87.729	87.729	2.785	2.133	81.361	1.450	-
A 2017	87.982	87.982	2.702	2.181	81.598	1.500	-
A 2018	90.670	88.637	2.738	2.179	82.277	1.443	$2.033
F 2019	94.243	90.243	2.787	2.218	83.768	1.469	4.000
F 2020	95.420	91.420	2.824	2.247	84.860	1.488	4.000
F 2021	96.372	92.372	2.853	2.271	85.744	1.504	4.000
F 2022	97.300	93.300	2.882	2.294	86.605	1.519	4.000
F 2023	98.230	94.230	2.910	2.317	87.469	1.534	4.000

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	92.1	98.1	93.5	89.3	89.5	85.8	83.9	82.0	82.9	85.4	87.7	88.0	90.7	94.2	95.4	96.4
General Fund	92.1	98.1	93.5	89.3	89.5	85.8	83.9	82.0	82.9	85.4	87.7	88.0	88.6	90.2	91.4	92.4
GF Growth	14.9%	6.5%	-4.7%	-4.4%	0.2%	-4.2%	-2.2%	-2.2%	1.1%	3.0%	2.7%	0.3%	0.7%	1.8%	1.3%	1.0%

NATURAL RESOURCE TAXES

- Coal Severance Tax
- Electrical Energy Tax
- Federal Forest Receipts
- Metalliferous Mines Tax
- Oil & Natural Gas Production Tax
- Resource Indemnity Tax
- US Mineral Royalty
- Wholesale Energy

LFD

MONTANA LEGISLATIVE FISCAL DIVISION

Coal Severance Tax

Revenue Description

For large producers, the coal severance tax is imposed on all coal production, except that on reservations, in excess of 20,000 tons per company per calendar year. Producers of 50,000 tons or less in any calendar year are exempt from the tax.

Statutory Reference

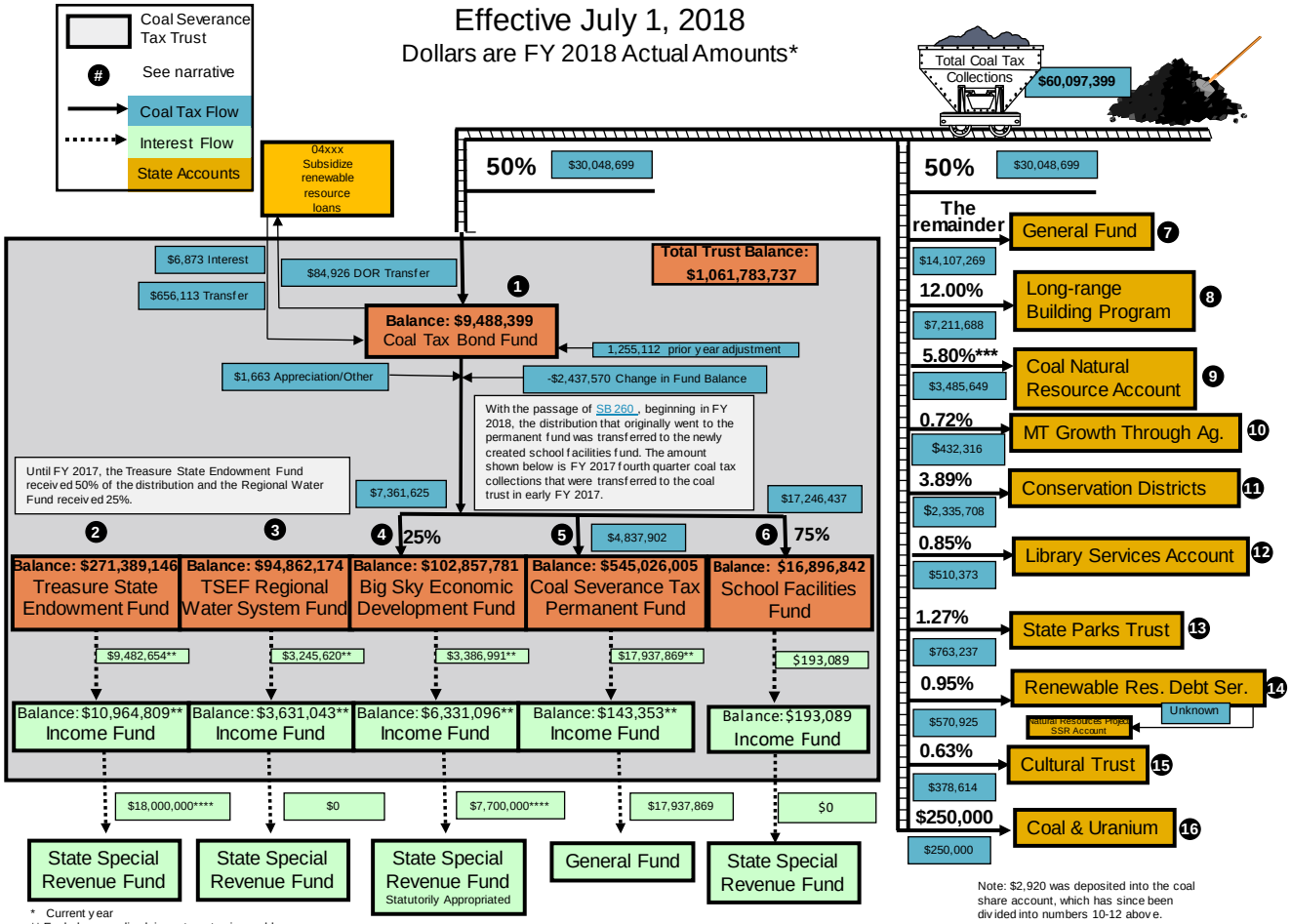
Tax Rate – 15-35-103, MCA
Tax Distribution – Montana Constitution, Article IX, Section 5; 15-35-108, MCA; 17-5-703, MCA
Date Due – Thirty days following the close of the quarter (15-35-104, MCA)

Applicable Tax Rates

10% on the value of surfaced mined coal with a heating quality < 7,000 BTU
15% on the value surfaced mined coal with a heating quality ≥ 7,000 BTU
3% on the value underground mined coal with a heating quality < 7,000 BTU
4% on the value underground mined coal with a heating quality ≥ 7,000 BTU
3.75% on the value of auger mined coal with a heating quality < 7,000 BTU
5% on the value of auger mined coal with a heating quality ≥ 7,000 BTU

Collection Frequency: Quarterly

Distribution



* Current year
** Excludes unrealized investment gains and losses
*** Set to decrease from 5.80% to 2.90% in FY 2020
****The 2017 Special Session transferred $7.5 million from the Treasure State Endowment Fund and $2.0 million from the Big Sky Economic Development Fund to the General Fund

As directed by Article IX, Section 5 of the Montana Constitution, the coal severance tax trust fund receives 50% of total coal severance tax collections. The money flows through sub-trust funds within the trust. These sub-trusts are:

❶ Coal Tax Bond Fund (Title 17, Chapter 5, Part 7) – The legislature authorizes the sale of coal severance tax bonds to finance renewable resource projects (Title 85, Chapter 1, Part 6) and local government infrastructure projects (Title 90, Chapter 6, Part 7). A maximum of $250 million in bonds is authorized as loans for renewable resource projects (17-5-719, MCA) to provide:

- a healthy economy;
- alleviation of social and economic impacts created by coal development; and
- a clean and healthful environment

The total amount of outstanding principal of renewable resource bonds at any time cannot exceed $30 million (85-1-624, MCA). An amount equal to the following year's principal and interest payments is maintained in the fund. Money in the fund is pledged to pay the debt service on the bonds if interest and principal payments by the loan recipients are insufficient to fully pay the debt service. Bonds are authorized, projects approved, loan rates established, and bond proceeds are appropriated by the legislature to the Department of Natural Resources and Conservation (DNRC) in HB 8.

❷ Treasure State Endowment Fund (Title 90, Chapter 6, Part 7) – In June 1992, the voters approved a legislative referendum establishing the treasure state endowment program. Initially funded with $10 million from the permanent fund, the fund received 75% (37.5% of the total) of the remaining coal severance tax revenue after deposits (if any) to the coal tax bond fund and the school bond contingency loan fund (HB 44 in the 2007 session eliminated this fund) through the 2003 biennium. From then through FY 2016, the fund received 50% (25% of the total). Projects are approved and interest earnings from the fund are appropriated to the Department of Commerce by the legislature in House Bill 11 as grants for local government infrastructure projects. The deposit of coal severance tax revenue into this fund terminated at the end of FY 2016.

❸ Treasure State Endowment Regional Water System Fund – The treasure state endowment program was established in SB 220 (1999 Session) to fund regional water system projects. Projects are restricted to drinking water systems that provide water for domestic, industrial, and stock water use for communities and rural residences that lie in specific north central and northeastern geographic areas. Projects are approved and interest earnings from the fund are appropriated to the Department of Commerce by the legislature in HB 11 as grants for local government infrastructure projects. Until the end of FY 2016, the fund received 25% (12.5% of the total) of the remaining coal severance tax revenue after deposits in the coal tax bond fund. The deposit of coal severance tax revenue into this fund terminated at the end of FY 2016, and the fund terminates at the end of FY 2031.

❹ Big Sky Economic Development Fund – The big sky economic development program was established by HB 249 (2005 Session) to fund qualified economic development projects. The fund receives 25% (12.5% of the total) of the remaining coal severance tax revenue after deposits in the coal tax bond fund. The deposit of coal severance tax revenue to this fund terminates the end of FY 2025. Grants and loans are available to local governments for economic development projects and to certified regional development corporations for the purposes of:

1) creating good-paying jobs for Montana residents;
2) promoting long-term, stable economic growth;
3) encouraging local economic development organizations; and
4) retaining or expanding existing businesses

Interest earnings are deposited to a state special revenue fund and are statutorily appropriated to the Department of Commerce to pay administrative expenses with the remainder for:

- 75% to local governments to be used for job creation; and
- 25% to certified regional development corporations and economic development organizations

❺ Permanent Fund – Prior to the establishment of the previous four funds, all the coal severance tax revenue distributed to the trust fund was deposited to the permanent fund. From FY 2006 to FY 2016 no coal severance tax revenue was deposited to the fund. In FY 2017, the permanent fund received 75% of the remaining coal severance tax revenue after deposits in the coal tax bond fund. Interest earnings from the fund, audit revenue, and interest and penalties are deposited to the general fund. After a $1.275 million general fund transfer to the research and commercialization account created in 90-3-1002, the remaining interest income from the permanent fund deposited into the general fund is statutorily appropriated as follows:

- $65,000 to the cooperative development center;
- $625,000 for the growth through agriculture program provided for in Title 90, chapter 9;
- to the Department of Commerce for specific projects:
  - $125,000 for a small business development center;
  - $50,000 for a small business innovative research program;
  - $425,000 for certified regional development corporations;
  - $200,000 for the Montana manufacturing extension center at MSU-Bozeman; and
  - $300,000 for export trade enhancement
- After the above payments, the remainder is deposited into the state general fund.

❻ School Facilities Fund –The school facilities fund was created with the passage of SB 260 (2017 Session). Interest from the fund may be used only for school facility projects authorized by the legislature. Beginning in FY 2018, the school facilities fund will receive 75% of the coal tax allocation to the coal trust fund.

Coal Severance Tax Related Funds:

The other 50% of the coal severance tax revenue is distributed to the following eight funds outside of the coal severance tax trust fund (15-35-108, MCA):

❼ General Fund (the remainder after all other allocations) –After allocations are made to the coal trust and state special funds, the remaining coal severance tax collections are distributed to the state general fund.

❽ Long-range Building Program Account (12.00%) – Coal severance tax revenue in this account can be used for long-range building projects or for general obligation bond debt service. The legislature appropriates the money in HB 5 to finance building projects at universities, vocational education institutions, state buildings and state institutions. Debt service payments are statutorily appropriated and are currently servicing debt for capitol restoration, the UM pharmacy and psychology, and chemistry buildings, MSU central heating plant and underground utilities, Montana state prison expansion, and regional correctional facilities.

❾ Coal Natural Resource Account (2.90% increased to 5.8% in FY 2016 and FY 2017) – Created in HB 758 (2005 Session) and amended by SB 23 (2009 Session), the account receives a portion of the coal severance tax revenue. Money in the account is appropriated to the coal board in HB 2 for local impact grants and administrative costs. Due to SB 100 (2009 Session), the coal tax allocation was doubled to 5.80% beginning FY 2010. After September 2013, the allocation decreased to 2.9%. The allocation was increased to 5.8% for FY 2016 and FY 2017, and again for FY 2018 and FY 2019 with the passage of HB 209 (2017 Session).

❿ Conservation Districts Fund (3.89%) – The money is distributed to the conservation districts program within the Department of Natural Resources and Conservation on the basis of need.

⓫ Basic Library Services Fund (0.85%) – The money is distributed by the commission to public library federations.

⓬ Growth through Agriculture Fund (0.72%) – Money is granted or loaned by the Agriculture Development Council to businesses for agricultural development projects that stimulate agriculture.

⓭ State Parks Trust (1.27%) – The distribution to this trust is for the purpose of parks acquisition or management. Interest earnings from the trust is appropriated to the Department of Fish, Wildlife, and Parks (FWP) by the legislature in HB 2 and HB 5 for the acquisition, development, operation, and maintenance of state parks, recreational areas, public camping grounds, historic sites, and monuments.

⓮ Renewable Resource Debt Service Fund (0.95%) – Money in this fund is used to service debt on coal severance tax bonds used to finance renewable resource projects. This is in addition to any coal tax paid from the Coal Tax Bond Fund (❶ above). Bonds are authorized, projects approved, loan rates established, and bond proceeds are appropriated by the legislature to DNRC in HB 8.

⓯ Cultural Trust (0.63%) – The distribution to this trust is for the purpose of protecting works of art in the capitol and for other cultural and aesthetic projects. Interest earnings from the trust are appropriated to the Montana Arts Council by the legislature in HB 9 for these purposes.

⓰ Coal and Uranium Mine Permitting and Reclamation Program ($250,000) – Enacted by HB 688 (2007 Session), coal severance tax revenue is deposited to the state special revenue account and appropriated in HB 2 to the Department of Environmental Quality (DEQ) to administer and enforce coal and uranium mine reclamation (82-4-244, MCA).

Forecast Risks

- Energy prices
- Production and shipping costs
- Type of coal (BTU)
- Length of company contracts
- Federal Environmental regulation changes

Revenue Estimate Methodology

Data

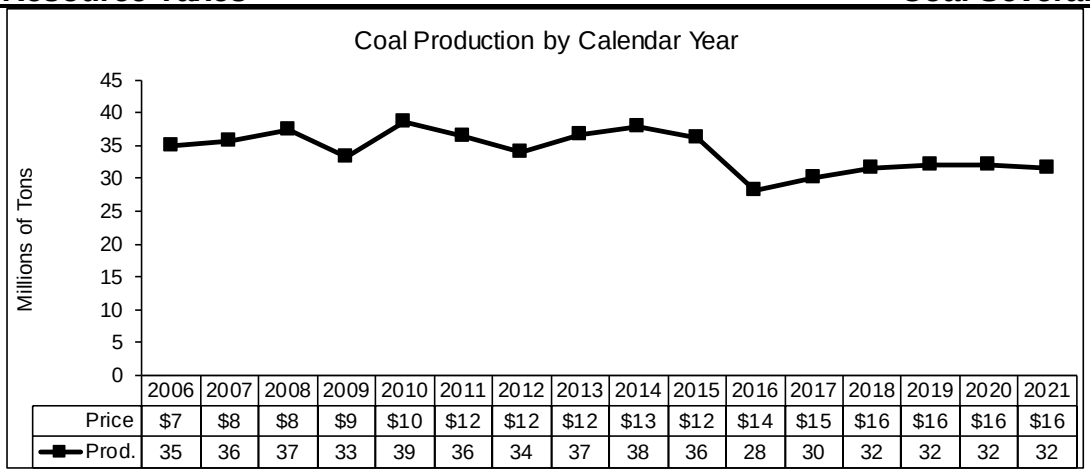
The estimate for this revenue source is based on collection data from SABHRS, historical price and production data from DOR, and anticipated production from surveys of major coal companies.

Analysis

The taxable value of coal is determined in a three-step process:

1. The future coal production for each company, as reported on the survey, is reduced by the exempt amount of 20,000 tons to get taxable tons.
2. To determine the future price for each company's coal, the company's average contract sales price for the last year is increased by an average price. The average contract sales price for all companies is shown in the figure below.
3. The estimated production and price for each company are multiplied together and the product for all companies summed to obtain the total taxable value.

The calendar year taxable value is multiplied by the applicable tax rate to determine total coal severance tax revenue and converted to fiscal year basis.

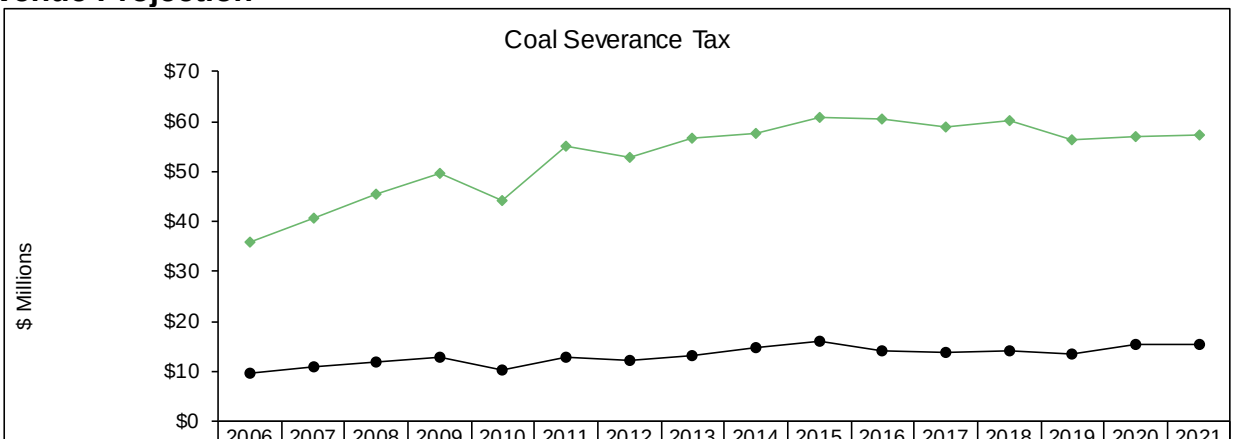


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Price	$7	$8	$8	$9	$10	$12	$12	$12	$13	$12	$14	$15	$16	$16	$16	$16
Prod.	35	36	37	33	39	36	34	37	38	36	28	30	32	32	32	32

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Tons (CY) Millions	CSP (CY) $/Ton
A 2008	$45.332	$11.894	37.373	8.33
A 2009	49.564	13.028	33.153	9.44
A 2010	44.177	10.322	38.690	10.22
A 2011	54.971	12.883	36.321	11.64
A 2012	52.743	12.350	33.870	12.15
A 2013	56.574	13.265	36.540	12.30
A 2014	57.676	14.745	37.810	12.56
A 2015	60.891	16.063	36.075	12.38
A 2016	60.359	14.236	28.089	14.02
A 2017	58.808	13.799	30.143	15.18
A 2018	60.097	14.107	31.616	15.72
F 2019	56.234	13.555	32.119	16.06
F 2020	57.043	15.385	32.018	16.19
F 2021	57.147	15.413	31.561	16.48
F 2022	56.086	15.128	30.037	16.92
F 2023	53.135	14.338	28.217	17.17

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	35.8	40.8	45.3	49.6	44.2	55.0	52.7	56.6	57.7	60.9	60.4	58.8	60.1	56.2	57.0	57.1
General Fund	9.6	10.9	11.9	13.0	10.3	12.9	12.4	13.3	14.7	16.1	14.2	13.8	14.1	13.6	15.4	15.4
GF Growth	-7%	14%	9%	10%	-21%	25%	-4%	7%	11%	9%	-11%	-3%	2%	-4%	13%	0%

Electrical Energy Tax

Revenue Description
The electrical energy license tax is imposed on each person or organization engaged in generating, manufacturing, or producing electrical energy in Montana. This tax is in addition to the wholesale energy transaction tax.

Statutory Reference
Tax Rate – 15-51-101, MCA
Tax Distribution – 17-2-124(2), MCA; 15-51-103, MCA
Date Due – Thirty days after the end of the calendar quarter (15-51-101, MCA; 15-51-102, MCA)

Applicable Tax Rates
A tax of $0.0002 per kilowatt-hour is levied against all electrical energy produced within the state. A deduction is allowed for energy use by the plant for the production of the energy.

Collection Frequency: Quarterly

Distribution: All proceeds are deposited into the general fund.

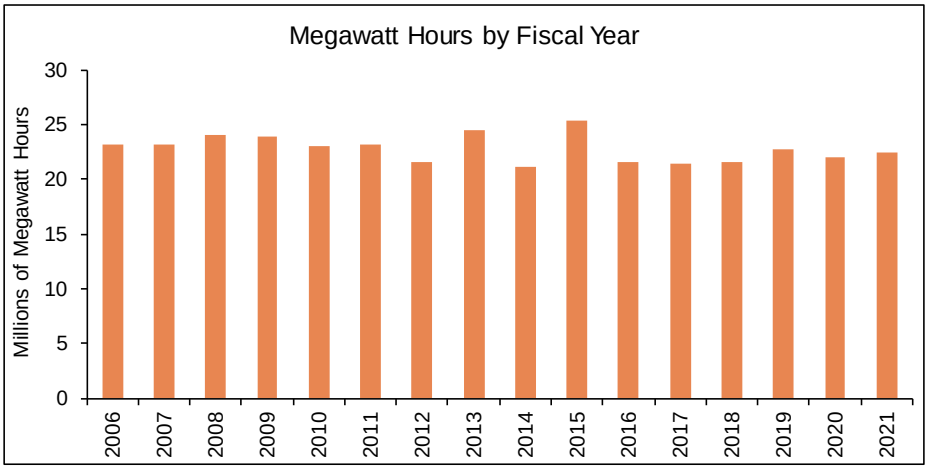
Forecast Risks
- Generation variability

Revenue Estimate Methodology
Data

Data from quarterly reports produced by DOR provide a history of kilowatt hours produced for each individual company.

Analysis

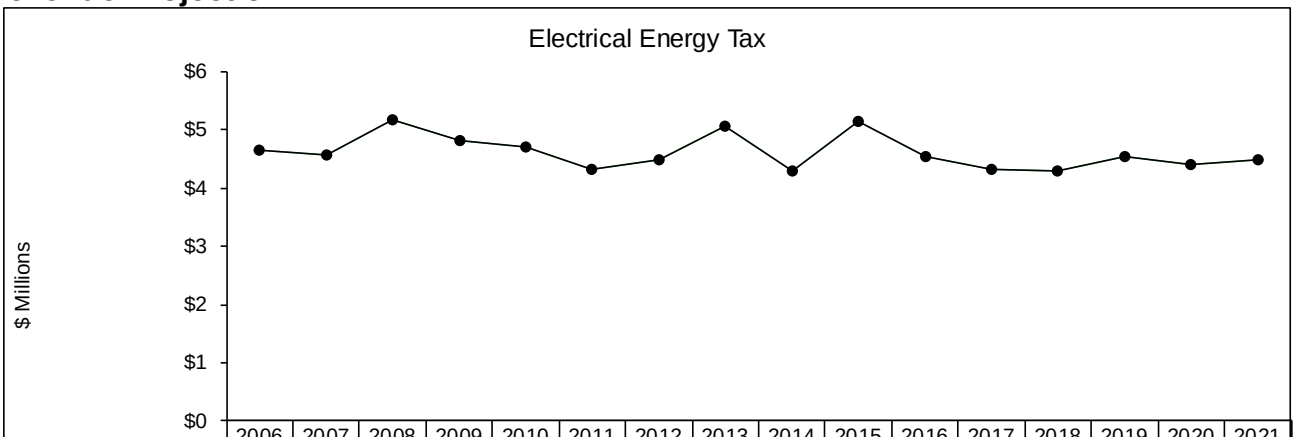
Historic data of kilowatt hours are used to trend forecast future kilowatt hours by year. Taxable kilowatt hours are then multiplied by the tax rate to produce total revenue from this source.



Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	KWH Millions
A 2008	$5.179	$5.179	24,081
A 2009	4.825	4.825	23,872
A 2010	4.713	4.713	23,079
A 2011	4.332	4.332	23,222
A 2012	4.481	4.481	21,624
A 2013	5.067	5.067	24,519
A 2014	4.280	4.280	21,139
A 2015	5.133	5.133	25,358
A 2016	4.536	4.536	21,541
A 2017	4.314	4.314	21,391
A 2018	4.302	4.302	21,617
F 2019	4.547	4.547	22,733
F 2020	4.416	4.416	22,079
F 2021	4.497	4.497	22,485
F 2022	4.303	4.303	21,514
F 2023	4.340	4.340	21,702

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	4.6	4.6	5.2	4.8	4.7	4.3	4.5	5.1	4.3	5.1	4.5	4.3	4.3	4.5	4.4	4.5
General Fund	4.6	4.6	5.2	4.8	4.7	4.3	4.5	5.1	4.3	5.1	4.5	4.3	4.3	4.5	4.4	4.5
GF Growth	14%	-2%	13%	-7%	-2%	-8%	3%	13%	-16%	20%	-12%	-5%	0%	6%	-3%	2%

Federal Forest Receipts

Revenue Description

Federal forest receipts are payments from the federal government in lieu of revenues from the sale of forest products of federal land. The federal government authorizes logging operations on forest lands located within the borders of Montana. The sale of timber generates revenue that the federal government shares with the state in the following year. FY 2017 has a significant drop in revenue as Secure Rural Schools was not extended at the federal level and payments reverted to the formula described below.

Statutory Reference

Tax Distribution – 17-3-211, MCA; 17-3-212, MCA
Date Due – The state treasurer distributes the funds within thirty days of receiving full payment.

Applicable Tax Rates: N/A

Collection Frequency: Twice annually (usually October and December)

Distribution

The county treasurer apportions federal forest receipts as follows:

- 66.7% to the road fund of the county
- 33.3% to the following county wide accounts, based on the mill ratios of each to total mills in the current year:
  - The county equalization accounts (55 mills)
  - The county transportation account
  - The county retirement accounts

This revenue source represents one component used to calculate total non-levy property tax revenue; this is the 55 mills portion.

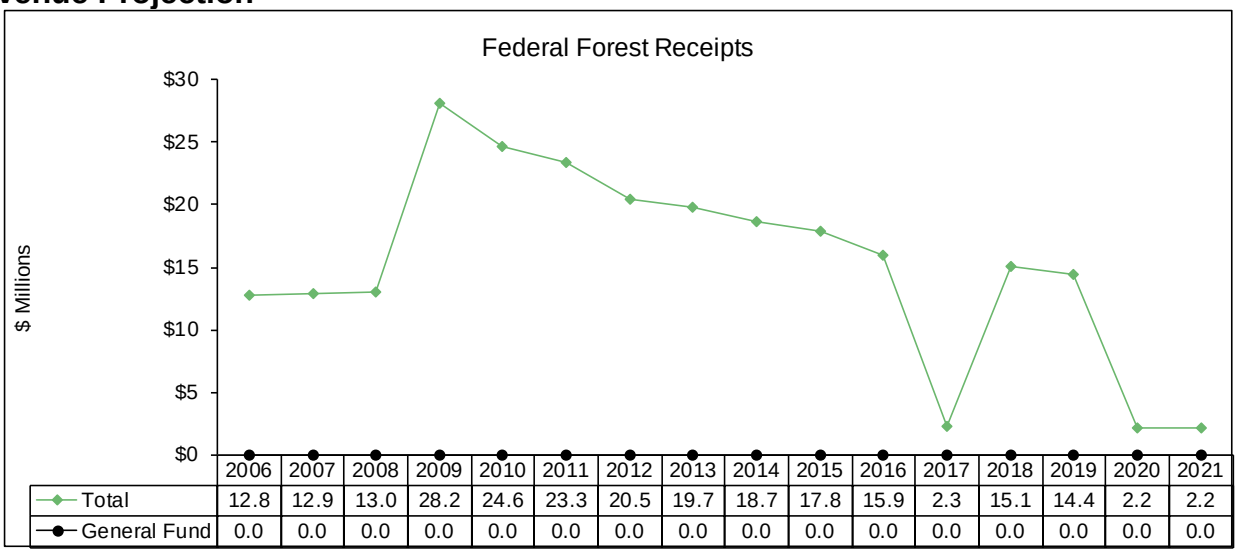
Forecast Risks

- Timber harvests
- Federal policy on reauthorizing Secure Rural Schools

Revenue Estimate Methodology

Counties receives 25% of the seven-year rolling average value of timber sold, lagged due to timing of production and payments. The estimate is based on average historical collections. The average state 55 mill share is applied to this and added to non-levy property revenue.

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	12.8	12.9	13.0	28.2	24.6	23.3	20.5	19.7	18.7	17.8	15.9	2.3	15.1	14.4	2.2	2.2
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Metalliferous Mines Tax

Revenue Description
The metalliferous mines license tax is imposed on the production of metals, gems or stones in the state. The tax rate is applied to the gross value of the product, which is defined as the market value of the commodity multiplied by the quantity produced. The first $250,000 of value is exempt from taxation. A company taxed at both rates can claim both exemptions.

Statutory Reference
Tax Rate – 15-37-103, MCA
Tax Distribution – 15-37-117, MCA; 17-2-124(2), MCA
Date Due – August 15th for the period January through June, March 31st for the period July through December (15-37-105, MCA)

Applicable Tax Rates
There are two tax rates which depend on the extraction type:
- 1.60% for dore, bullion or matte that is sent to a refinery
- 1.81% for concentrate sent to a smelter, mill or reduction work

The appropriate tax rate is applied to the gross value less allowable deductions and the $250,000 exemption.

Collection Frequency: Biannually

Distribution
Nearly half of metal mine tax is allocated to the general fund, with impacted counties receiving most of the remaining amount:
- 47% to the general fund
- 8.5% to the hard-rock mining reclamation debt service fund
- 7% to the natural resources operations state special revenue account
- 2.5% to the hard rock mining impact trust account
- 35% impacted counties

Forecast Risks
- Commodity prices
- Changes to production outlook
- Environmental regulations

Revenue Estimate Methodology
Data

The estimate for this source is based on historical prices from the U.S. Geological Survey, historical revenue collections from SABHRS, and historical price and production data from DOR. Forecast prices are based on World Bank's Commodity Market Outlook.

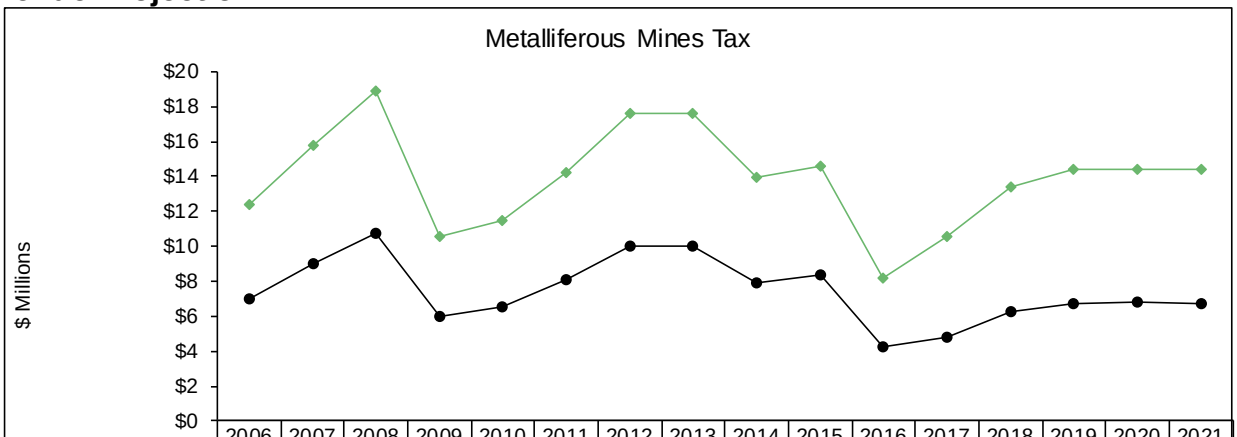
Analysis

Production for each metal type is forecast as a five-year rolling average. Production multiplied by price results in the total gross value for each metal type. Total taxable value is obtained by reducing the total gross value by a time trended value of refining and other costs. The calendar year estimate is obtained by multiplying the total taxable value by the effective tax rate. Since a company's taxable value could be subject to two tax rates—1.81% for concentrates shipped to a smelter, mill or reduction work and 1.6% for dore, bullion, or matte that is shipped to a refinery—an effective tax rate is used to capture both these rates. Calendar year estimates are converted to fiscal year estimates by an equal allocation.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Net Value CY $ Millions	Effective CY Rate
A 2008	$18.902	$10.774	$972.186	1.3%
A 2009	10.514	5.993	638.821	1.6%
A 2010	11.476	6.541	793.644	1.5%
A 2011	14.204	8.097	1,061.914	1.6%
A 2012	17.562	10.010	1,114.512	1.8%
A 2013	17.630	10.049	871.153	1.6%
A 2014	13.943	7.948	899.995	1.9%
A 2015	14.597	8.320	660.993	1.3%
A 2016	8.164	4.221	609.557	1.5%
A 2017	10.516	4.839	755.910	1.7%
A 2018	13.386	6.291	850.598	1.7%
F 2019	14.360	6.749	853.052	1.7%
F 2020	14.398	6.767	852.165	1.7%
F 2021	14.384	6.761	855.451	1.7%
F 2022	14.436	6.785	863.116	1.7%
F 2023	14.557	6.842	863.204	1.7%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	12.4	15.8	18.9	10.5	11.5	14.2	17.6	17.6	13.9	14.6	8.2	10.5	13.4	14.4	14.4	14.4
General Fund	7.0	9.0	10.8	6.0	6.5	8.1	10.0	10.0	7.9	8.3	4.2	4.8	6.3	6.7	6.8	6.8
GF Growth	34%	28%	20%	-44%	9%	24%	24%	0%	-21%	5%	-49%	15%	30%	7%	0%	0%

Oil & Natural Gas Production Tax

Revenue Description

The oil and natural gas production tax is imposed on the production of oil and natural gas in the state. Gross taxable value of oil and natural gas production is based on the type of well and type of production. A portion of the revenue from the tax may be returned to Indian tribes per agreements between DOR and the tribes.

Statutory Reference

Tax Rate – 15-36-304, MCA; Privilege & license tax – 82-11-131, MCA; Administrative Rules 36.72.1242
Tax Distribution – 15-36-331(4), MCA; 15-36-332(2&3), MCA
Date Due – within 60 days after the end of the calendar quarter (15-36-311(1), MCA)

Applicable Tax Rates

The oil and natural gas production tax has numerous tax rates depending on several factors. The following table shows tax rate percentages for each type of pre- and post-1999 oil, excluding the Privilege & License (P & L) tax and the local impact tax. The P & L and local impact taxes account for less than 0.3% and are shown on the distribution diagram.

Oil Tax Rates	
Working Interest	
Primary recovery production	
First 12 months of qualifying production	0.5%
After 12 months for pre-1999 wells	12.5%
After 12 months for post-1999 wells	9.0%
Stripper oil production (>3 and < 15 barrels/day if oil<$30)	
1 through 10 barrels a day production	5.5%
>10 through 14 barrels a day production	9.0%
Stripper oil production (>3 and < 15 barrels/day if oil>=$30)	Primary Recovery Rates
Stripper wells (3 barrels or less/day)	
Stripper well exemption production (if oil <$38)	0.5%
Stripper well bonus production (if oil >=$38)	6.0%
Horizontally completed well production	
First 18 months of qualifying production	0.5%
After 18 months for pre-1999 wells	12.5%
After 18 months for post-1999 wells	9.0%
Incremental production (if oil <$30/barrel)	
New or expanded secondary recovery production	8.5%
New or expanded tertiary production	5.8%
Incremental production (if oil >=$30/barrel)	
Pre-1999 wells	12.5%
Post-1999 wells	9.0%
Horizontally recompleted well	
First 18 months	5.5%
After 18 months for pre-1999 wells	12.5%
After 18 months for post-1999 wells	9.0%
Nonworking Interest	14.8%
Board of Oil & Gas	0.3%

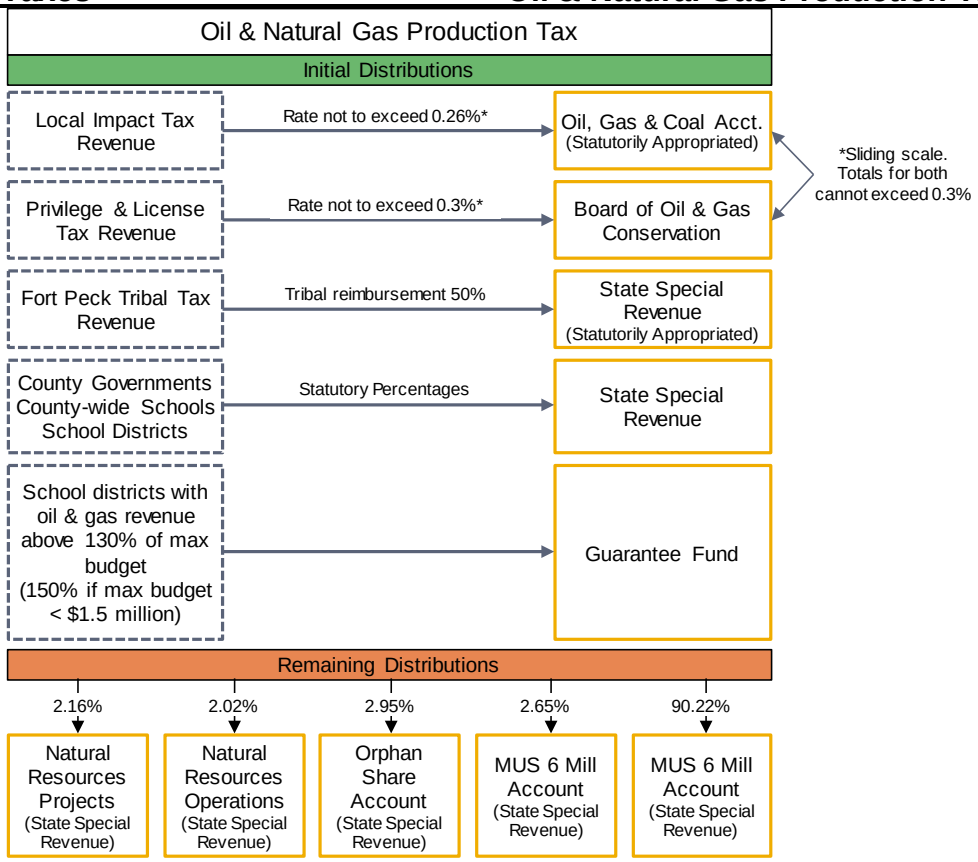
Natural Gas Tax Rates	
Working Interest	
Qualified production	
First 12 months	0.5%
After 12 months for pre-1999 wells	14.8%
After 12 months for post-1999 wells	9.0%
Stripper natural gas pre-1999 wells	11.0%
Horizontally completed well production	
First 18 months of qualifying production	0.5%
After 18 months	9.0%
Nonworking Interest	14.8%
Board of Oil & Gas	0.3%

Collection Frequency: Quarterly

Distribution

After the oil and natural gas production taxes have been collected, the revenue is distributed based on the amounts collected from the P & L and local impact taxes. The P & L tax is distributed to the Board of Oil and Gas Conservation. The amounts from the Local Impact tax are distributed to the oil and gas natural resource state special revenue account. The amounts received by the Board and the oil and gas natural resource account vary based on a sliding tax scale based on the P & L tax set by the Board. Counties producing oil and natural gas receive the next share of total revenue with each county having its own statutory distribution percentage of total revenue, including the revenue generated by the P & L and Local Impact taxes.

A portion of the revenue may be returned to Indian tribes per agreements between the DOR and the tribes. The remainder of the revenue is distributed to other state accounts, shown in the distribution chart below. The distributions of county shares and the amount of oil and natural gas production tax revenue deposited in the oil and gas natural resource account are statutorily appropriated and are based on the statutorily set percentages for each county.



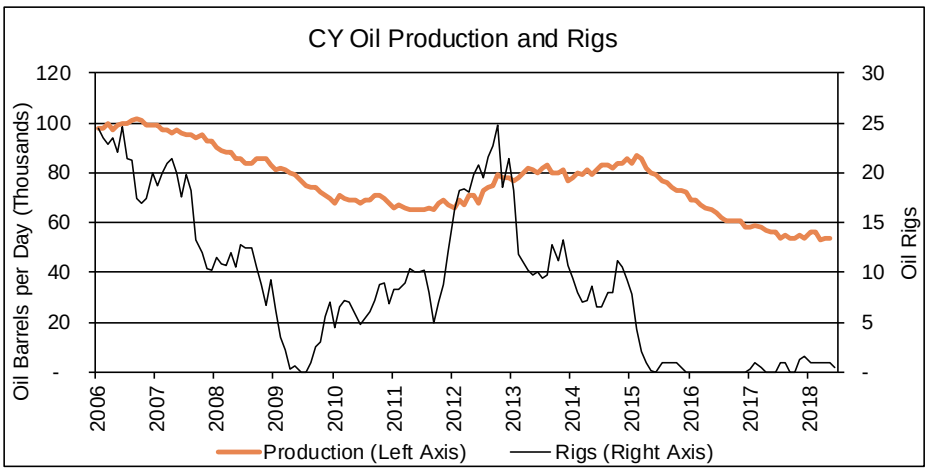
Forecast Risks

- Price
- Production
- New drilling

Revenue Estimate Methodology

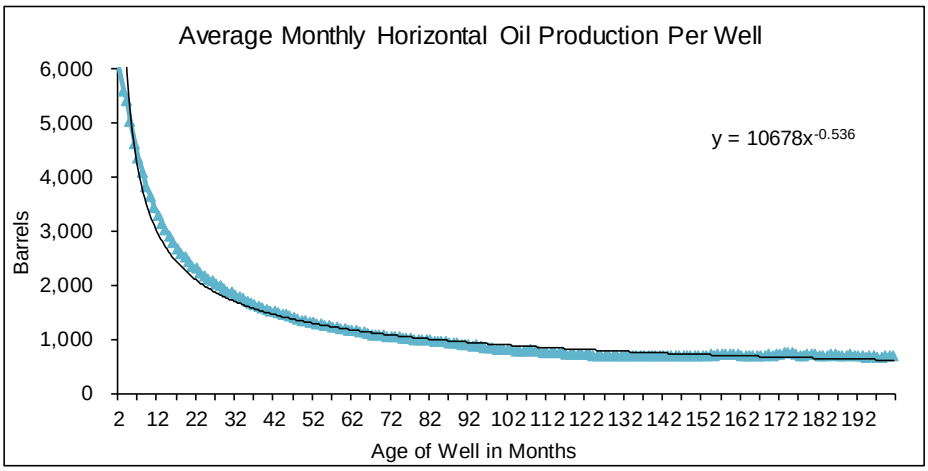
Data

Data from the Board of Oil and Gas Conservation are used extensively to isolate monthly historical production of oil and natural gas by field and by individual well. IHS Markit provides future estimates of West Texas Intermediate oil and national well head natural gas prices. Production, price, value, and revenue collections, by oil type, are provided on a quarterly basis by DOR. Drilling rigs from Baker Hughes along with production numbers from the U.S. Energy Information Administration are shown below.

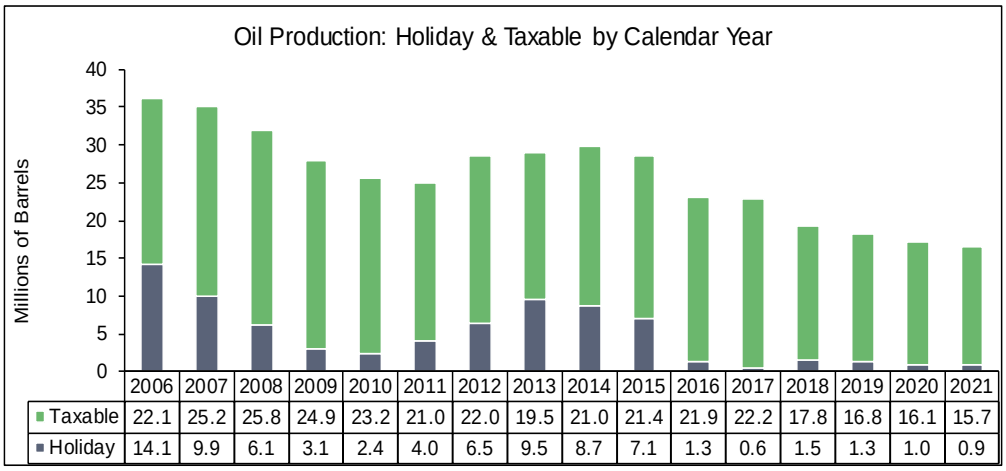


Analysis

Production is estimated independently for oil and natural gas. The estimate is developed on a quarterly basis with production from horizontal wells separate from all other production. Existing horizontal wells follow a production decline curve unique to the characteristics of those wells. Future production from completed wells can be estimated by developing a normalized production decline curve from the producing wells. In doing so, the difficulty of having different starting time for each well can be eliminated by averaging each well's production from a common time point. The result is a curve that represents the average production of horizontal wells by month of production.



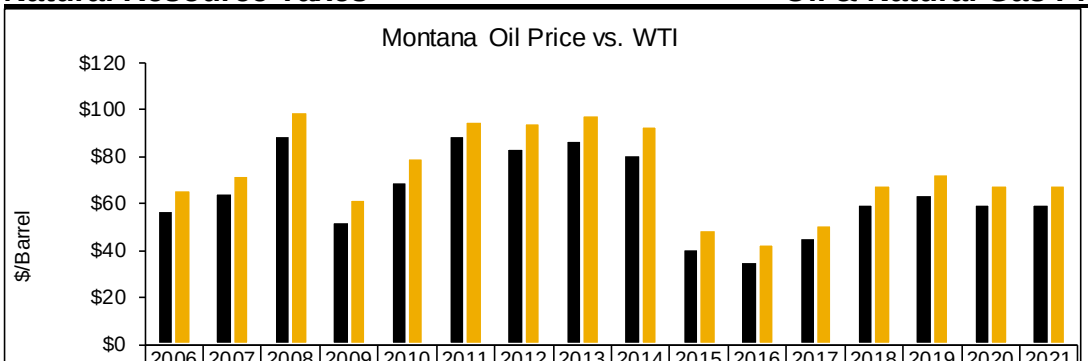
Production from future wells can be estimated by applying the production curve coefficients to an estimate of future spudded wells. Knowing monthly production from each well and the date it was placed into production is essential for estimating oil tax revenue because tax rates vary based on the length of time a well has been in production. The dynamics in the timing of when wells enter and fall out of the various tax rates and the changes in production at the various stages are complex but need to be modeled to create more accurate estimates given future price variability.



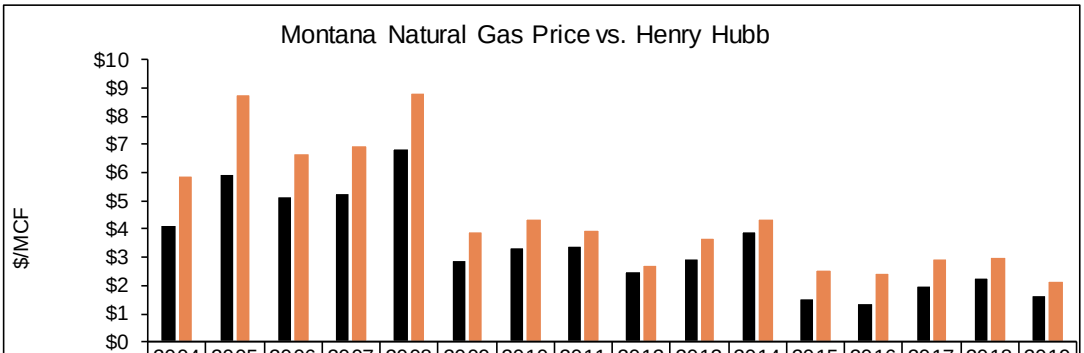
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Taxable	22.1	25.2	25.8	24.9	23.2	21.0	22.0	19.5	21.0	21.4	21.9	22.2	17.8	16.8	16.1	15.7
Holiday	14.1	9.9	6.1	3.1	2.4	4.0	6.5	9.5	8.7	7.1	1.3	0.6	1.5	1.3	1.0	0.9

Production from all other wells is also estimated on an annual basis and by the different taxation types. For each year, the estimate is produced by multiplying the previous year by the ratio of the results of a regression analysis for the current and the previous year. The results for each tax type are then summed by year.

The price for each quarter is estimated by adjusting the IHS Markit West Texas Intermediate oil price estimate or Henry Hub natural gas price estimate by a Montana-specific ratio. The Montana price is lower than the national price primarily due to transportation costs.



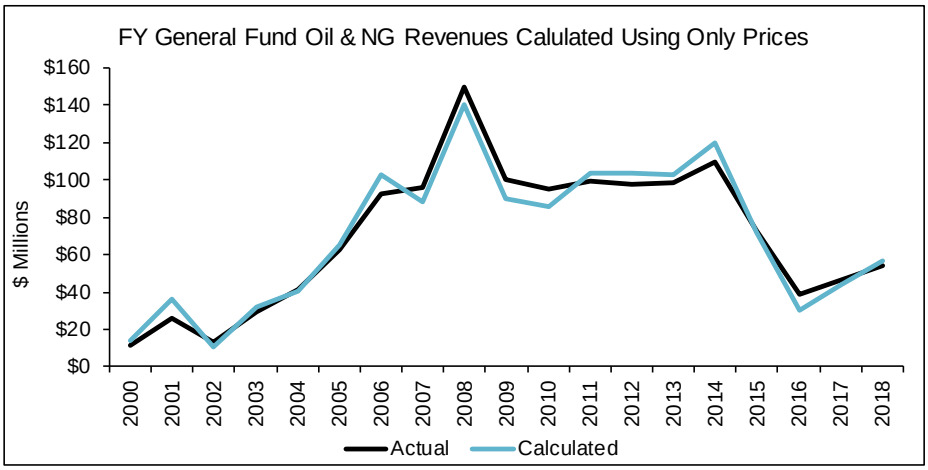
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MT Price	$57	$65	$89	$53	$69	$89	$83	$87	$81	$41	$35	$45	$60	$64	$60	$60
WTI	$66	$72	$100	$62	$79	$95	$94	$98	$93	$49	$43	$51	$68	$73	$68	$68
Ratio	86%	90%	89%	85%	87%	93%	89%	89%	87%	83%	82%	89%	88%	88%	88%	88%



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MT Price	$4.2	$6.0	$5.2	$5.3	$6.9	$2.9	$3.4	$3.5	$2.5	$3.0	$3.9	$1.6	$1.4	$2.0	$2.3	$1.7
HH	$5.9	$8.8	$6.7	$7.0	$8.9	$4.0	$4.4	$4.0	$2.8	$3.7	$4.4	$2.6	$2.5	$3.0	$3.0	$2.2
Ratio	70%	68%	77%	76%	78%	73%	77%	86%	92%	81%	90%	60%	57%	68%	76%	76%

Once production and prices have been estimated, the value can be calculated by the product of the two. The quarterly value of each tax type is then multiplied by the applicable tax rate to obtain the estimate. The sum of the revenue from all tax types for each fiscal year determines the oil and natural gas production revenue estimate.

Price—not production—is the larger driver of the overall estimate. Modeling on only WTI oil prices and HH gas prices, predicted revenues are extremely close to actuals, although this relies on already known prices. As prices are never known with such accuracy, the oil and gas model uses historical production data from each well in the state to model forecast production based on an average decline curve. The additional production modeling essentially acts as a buffer against price forecast volatility.

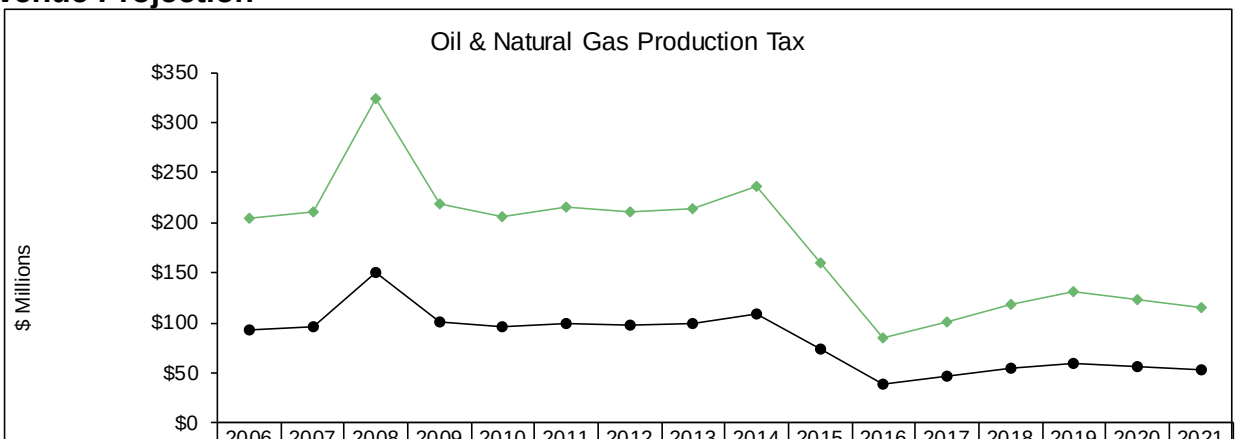


Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	CY WTI Price $/Barrel	CY Montana Price $/Barrel	CY WTI / MT Oil Price Ratio	CY Total Production Million Barrels	CY Holiday Production Million Barrels
A 2008	$324.311	$149.994	$99.56	88.84	0.89	31.890	6.127
A 2009	218.425	100.491	61.69	52.62	0.85	27.967	3.070
A 2010	206.286	95.491	79.44	69.05	0.87	25.631	2.442
A 2011	215.130	99.764	95.08	88.76	0.93	25.019	3.985
A 2012	210.644	97.560	94.20	83.45	0.89	28.469	6.454
A 2013	213.229	98.683	97.94	87.22	0.89	29.054	9.536
A 2014	236.497	109.606	93.26	80.67	0.87	29.764	8.725
A 2015	159.107	73.184	48.69	40.60	0.83	28.493	7.074
A 2016	84.972	39.083	43.21	35.47	0.82	23.144	1.256
A 2017	100.769	46.334	50.96	45.34	0.89	22.811	0.570
A 2018	119.130	54.508	67.93	59.78	0.88	19.253	1.458
F 2019	131.247	60.049	72.52	63.82	0.88	18.128	1.288
F 2020	123.823	56.652	67.94	59.79	0.88	17.100	0.950
F 2021	115.977	53.062	68.30	60.11	0.88	16.606	0.940
F 2022	113.917	52.120	69.95	61.56	0.88	16.112	0.930
F 2023	112.603	51.519	70.63	62.15	0.88	15.619	0.919

CY	Henry Hub Price $/MCF	Montana NG Price $/MCF	HH/MT NG Price Ratio	Total Production Million MCFs	Holiday Production Million MCFs
A 2008	$8.85	$6.90	0.78	116.157	19.045
A 2009	3.95	2.90	0.73	101.611	10.155
A 2010	4.39	3.37	0.77	94.334	7.364
A 2011	4.00	3.46	0.86	76.784	4.997
A 2012	2.75	2.52	0.92	62.449	3.298
A 2013	3.73	3.01	0.81	63.354	5.415
A 2014	4.37	3.93	0.90	66.228	4.938
A 2015	2.61	1.58	0.60	78.718	4.384
A 2016	2.49	1.42	0.57	80.088	0.665
A 2017	2.97	2.02	0.68	81.297	0.418
F 2018	3.01	2.29	0.76	63.136	0.779
F 2019	2.21	1.68	0.76	63.414	0.696
F 2020	2.42	1.83	0.76	57.823	0.725
F 2021	2.63	2.00	0.76	53.177	0.705
F 2022	2.70	2.05	0.76	52.348	0.702
F 2023	2.98	2.26	0.76	51.749	0.699

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	204	210	324	218	206	215	211	213	236	159	85	100.8	119.1	131.2	123.8	116.0
General Fund	93	96	150	100	95	100	98	99	110	73	39	46.3	54.5	60.0	56.7	53.1
GF Growth	48%	4%	56%	-33%	-5%	4%	-2%	1%	11%	-33%	-47%	19%	18%	10%	-6%	-6%

Resource Indemnity Tax

Revenue Description

The state imposes a resource indemnity and ground water assessment (RIGWA) tax on the gross value of coal (based on the contract sales price), as well as most minerals, but not gravel, metals, oil, or natural gas.

Statutory Reference

Tax Rate – 15-38-104, MCA
Tax Distribution – 15-38-106, MCA
Date Due (metal producers) – March 31st following the end of the calendar year (15-38-105, MCA; 15-38-106(1), MCA)
Date Due (mineral producers) – 60 days following the end of the calendar year (15-38-105, MCA; 15-38-106(1), MCA)

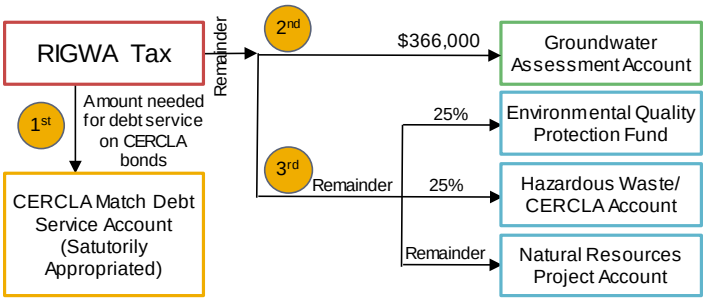
Applicable Tax Rates

Coal: $25 plus 0.4% of the gross value of coal produced in the preceding year in excess of $6,250
Minerals: $25 plus 0.5% of the gross value of minerals (excluding gravel and metals, and excluding oil and natural gas since the resource indemnity trust has reached $100 million) produced in the preceding year in excess of $5,000
Talc: $25 plus 0.4% of the gross value of talc produced in the preceding year in excess of $625
Vermiculite: $25 plus 2.0% of the gross value of vermiculite produced in the preceding year in excess of $1,250
Limestone: $25 plus 10.0% of the gross value of limestone produced in the preceding year in excess of $250
Garnets: $25 plus 1.0% of the gross value of garnets produced in the preceding year in excess of $2,500

Collection Frequency: Annually

Distribution

Beginning FY 2004, the amount needed to cover debt service on Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) bonds (after amounts transferred from the CERCLA cost recovery account) is deposited first to the CERCLA match debt service account. Money is then apportioned in steps 2-3 as shown in the distribution chart.



Forecast Risks

- Coal and mineral prices
- Production

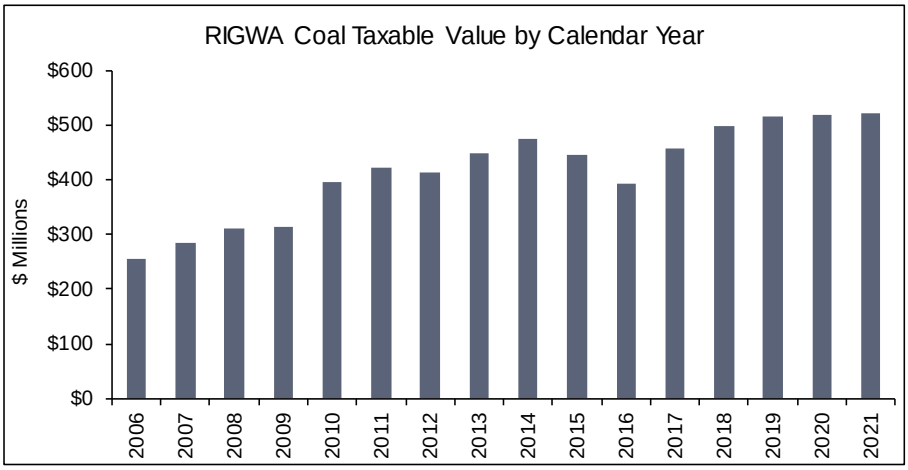
Revenue Estimate Methodology

Data

The data used to estimate the resource indemnity and groundwater assessment (RIGWA) tax are obtained from the coal severance tax estimate and SABHRS.

Analysis

The gross value estimates prepared for the coal severance tax are used in the estimate for the RIGWA tax. The future taxable value of coal, produced by all mines, is estimated in the coal severance tax source. The future taxable value of other mineral production is estimated at the amount of the last known year.



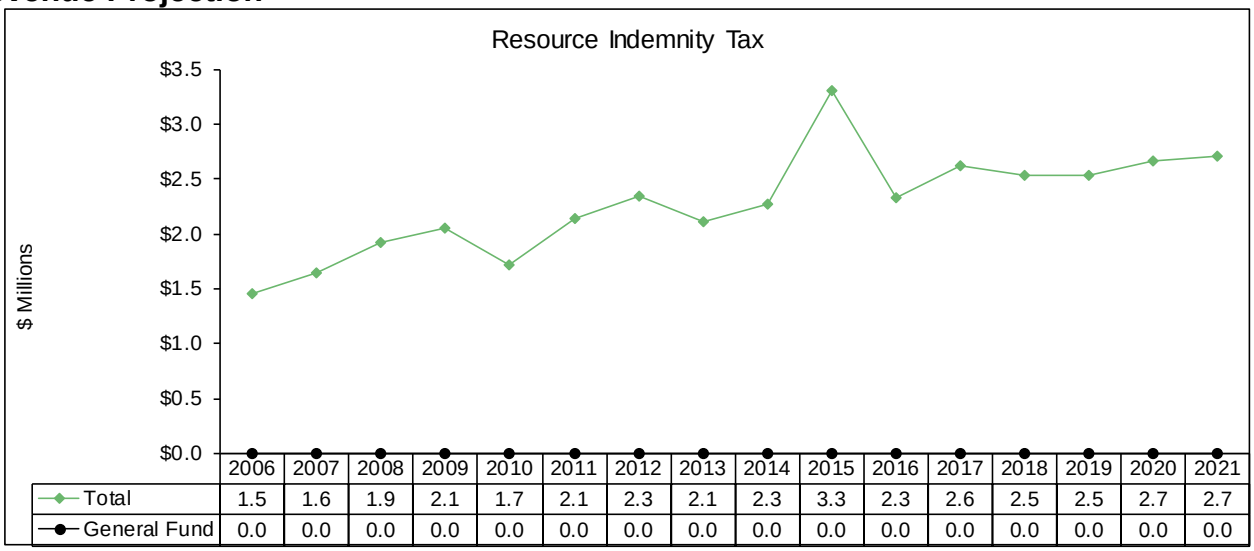
The tax rates are applied to the production value of each of the components, coal and other minerals. The tax estimates for the two components are summed to produce the total estimate of the RIGWA tax.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Oil & NG $ Millions	Coal $ Millions	Other $ Millions
A 2008	$1.926	-	-	$1.346	$0.580
A 2009	2.054	-	-	1.465	0.589
A 2010	1.712	-	-	1.459	0.253
A 2011	2.147	-	-	1.785	0.362
A 2012	2.344	-	-	1.914	0.429
A 2013	2.112	-	-	1.759	0.353
A 2014	2.279	-	-	1.962	0.317
A 2015	3.303	-	-	2.224	1.079
A 2016	2.335	-	-	2.090	0.245
A 2017	2.623	-	-	1.801	0.822
A 2018	2.531	-	-	2.090	0.441
F 2019	2.541	-	-	2.100	0.441
F 2020	2.670	-	-	2.228	0.441
F 2021	2.712	-	-	2.270	0.441
F 2022	2.725	-	-	2.284	0.441
F 2023	2.708	-	-	2.267	0.441

FY	Debt Service $ Millions	Water Storage $ Millions	Protection Fund $ Millions	Ground $ Millions	CERCLA Account $ Millions	Projects Account $ Millions
A 2008	$0.273	$0.150	$0.284	$0.366	$0.284	$0.568
A 2009	0.272	-	0.354	0.366	0.354	0.708
A 2010	0.272	0.150	0.231	0.366	0.231	0.462
A 2011	0.274	-	0.377	0.366	0.377	0.753
A 2012	0.267	0.150	0.390	0.366	0.390	0.780
A 2013	0.270	-	0.369	0.366	0.369	0.738
A 2014	0.272	0.150	0.373	0.366	0.373	0.745
A 2015	0.268	-	0.667	0.366	0.667	1.334
A 2016	0.270	0.150	0.387	0.366	0.387	0.774
A 2017	0.148	-	0.527	0.366	0.527	1.054
A 2018	0.144	0.150	0.468	0.366	0.468	0.936
F 2019	0.270	-	0.476	0.366	0.476	0.953
F 2020	0.270	0.150	0.471	0.366	0.471	0.942
F 2021	0.270	-	0.519	0.366	0.519	1.038
F 2022	0.270	0.150	0.485	0.366	0.485	0.970
F 2023	0.270	-	0.518	0.366	0.518	1.036

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	1.5	1.6	1.9	2.1	1.7	2.1	2.3	2.1	2.3	3.3	2.3	2.6	2.5	2.5	2.7	2.7
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

U.S. Mineral Royalties

Revenue Description

Under the federal Mineral Lands Leasing Act (30 USC, Section 191), 50% of all sales, bonuses, royalties, and rentals received from federal lands in Montana must be paid to the state; however, that rate is currently at 48%. The money is to be used as the legislature may direct, giving priority to those subdivisions of the state socially or economically impacted by development of minerals leased under the federal act. The revenue produced on federal public lands includes royalties and bonuses from oil, gas, coal, and other mineral exploration and extraction.

Statutory Reference

Distribution – 17-3-240, MCA

Collection Frequency: Monthly

Distribution

Receipts are deposited 75% to the general fund and 25% to the state special revenue mineral impact account. Money in the mineral impact account is statutorily appropriated for distribution to eligible counties in which the minerals were extracted.

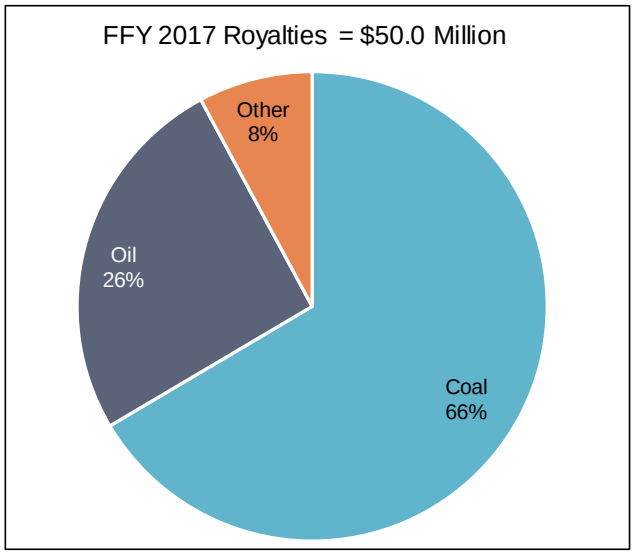
Forecast Risks

- Coal, oil, and other mineral prices
- The amount of production on federal lands
- Federal legislative impacts

Revenue Estimate Methodology

Data

Federal fiscal year data on receipts by mineral type as well as royalty, bonus, rents, and other categories are combined with growth and distribution data from the coal and oil & natural gas analysis.



Analysis

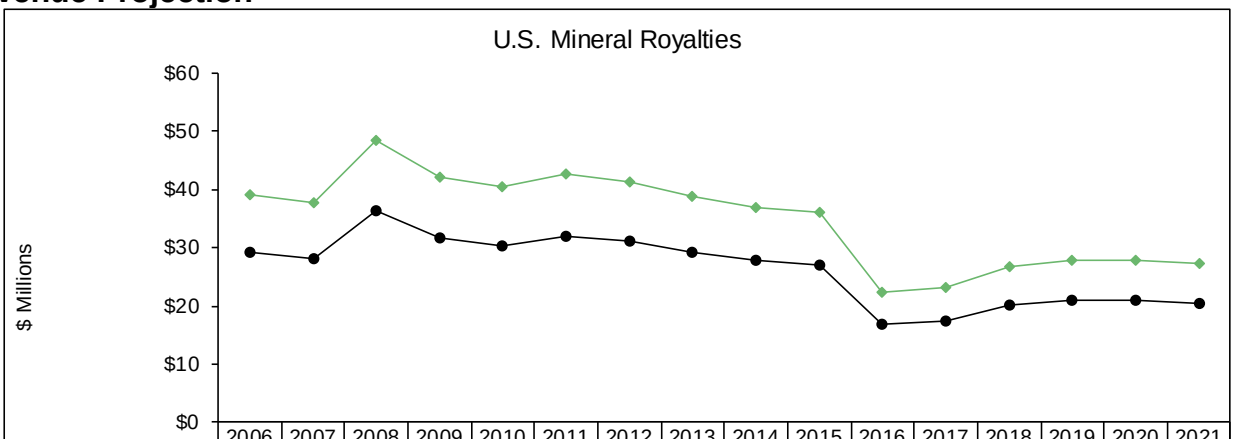
The estimate for mineral royalties is obtained by multiplying together estimates for production & price (based on data from other natural resource analysis), the applicable royalty rate, and Montana's percentage share for coal, oil, natural gas, natural gas liquids, and methane. Rents, bonuses and other revenues are then simply trended as they are much more volatile than royalties. The estimates are based on the federal fiscal year, so a 25/75 split is used to convert to a state fiscal year. The adjacent chart shows royalties by source.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	FFY Total Rents $ Millions	FFY Total Bonuses $ Millions	FFY Total Royalties $ Millions	FFY Total Other $ Millions
A 2008	$48.518	$36.389	$1.343	$2.585	$46.087	($0.261)
A 2009	42.098	31.573	1.231	2.787	31.012	(0.231)
A 2010	40.384	30.288	1.221	5.546	36.668	0.074
A 2011	42.564	31.923	1.062	4.689	37.791	3.041
A 2012	41.409	31.057	1.154	9.053	37.059	0.113
A 2013	38.940	29.205	1.079	1.508	34.789	0.885
A 2014	36.992	27.744	0.810	0.701	37.031	0.096
A 2015	35.947	26.960	0.657	0.067	33.043	0.071
A 2016	22.345	16.759	0.454	0.018	20.978	(0.116)
A 2017	23.096	17.322	0.417	0.366	22.907	0.322
A 2018	26.852	20.139	0.762	0.366	26.440	0.252
F 2019	27.913	20.934	0.762	0.366	26.564	0.252
F 2020	27.855	20.891	0.762	0.366	26.445	0.252
F 2021	27.396	20.547	0.762	0.366	25.874	0.252
F 2022	26.023	19.517	0.762	0.366	24.233	0.252
F 2023	24.482	18.361	0.762	0.366	22.725	0.252

FFY	Oil Royalties Millions	Coal Royalties Millions	Natural Gas Royalties Millions
A 2008	37.685	34.201	20.414
A 2009	19.648	31.366	11.171
A 2010	23.657	41.675	8.773
A 2011	26.520	43.867	6.574
A 2012	27.471	44.508	4.133
A 2013	25.158	42.946	3.956
A 2014	26.606	43.107	7.435
A 2015	21.680	43.148	3.905
A 2016	10.622	31.549	1.486
A 2017	12.832	33.265	1.496
F 2018	12.442	41.120	1.391
F 2019	11.925	42.046	1.247
F 2020	11.409	42.455	1.103
F 2021	10.892	41.926	0.959
F 2022	10.375	39.170	0.815
F 2023	9.8578	36.687	0.671

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	39.1	37.6	48.5	42.1	40.4	42.6	41.4	38.9	37.0	35.9	22.3	23.1	26.9	27.9	27.9	27.4
General Fund	29.3	28.2	36.4	31.6	30.3	31.9	31.1	29.2	27.7	27.0	16.8	17.3	20.1	20.9	20.9	20.5
GF Growth	7%	-4%	29%	-13%	-4%	5%	-3%	-6%	-5%	-3%	-38%	3%	16%	4%	0%	-2%

Wholesale Energy Tax

Revenue Description
The wholesale energy transaction tax is imposed on the amount of electricity transmitted by a transmission services provider in the state.

Statutory Reference
Tax Rate – 15-72-104(1), MCA
Tax Distribution – 15-72-106(3), MCA
Date Due – 30th day of the month following the end of the calendar quarter (15-72-110, MCA)

Applicable Tax Rates
The tax rate of $0.15 per megawatt is applied to the number of megawatt hours transmitted. If the electricity is produced in-state and sold out-of-state, the taxpayer is the owner of the electrical generation property, and the tax is collected by the transmission services provider. If the electricity is produced in-state for delivery in-state or is produced outside the state for delivery in-state, the taxpayer is the distribution services provider, and the tax is collected by the transmission services provider.

The tax does not apply to the following:
- Electricity that is transmitted through the state that is neither produced nor consumed in the state;
- Electricity generated in the state by an agency of the federal government for delivery outside the state;
- Electricity delivered to a distribution services provider that is a municipal utility or a rural electric cooperative which opts out of competition;
- Electricity delivered to a purchaser that received its power directly from a transmission or distribution facility owned by an entity of the U.S. government;
- Electricity meeting certain contractual requirements that is delivered by a distribution services provider that was first served by a public utility after December 31, 1996;
- Electricity that has been subject to the transmission tax in another state; and
- A 5% line loss exemption for transmission of electricity produced in the state for delivery outside of the state

Collection Frequency: Quarterly

Distribution: All proceeds are deposited into the general fund.

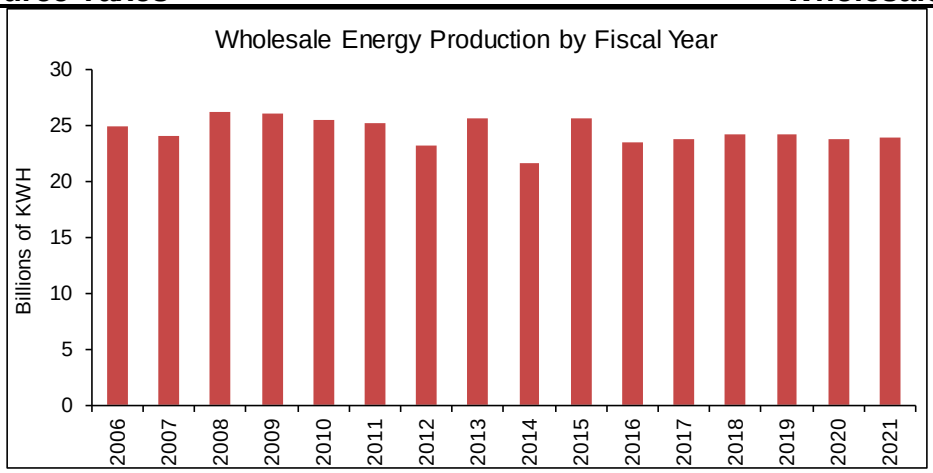
Forecast Risks
- Electricity prices
- Generation and transmission capacity
- Production outages

Revenue Estimate Methodology
Data

Data from quarterly reports produced by DOR provide a history of in-state and out-of-state kilowatt hours transmitted by each company.

Analysis

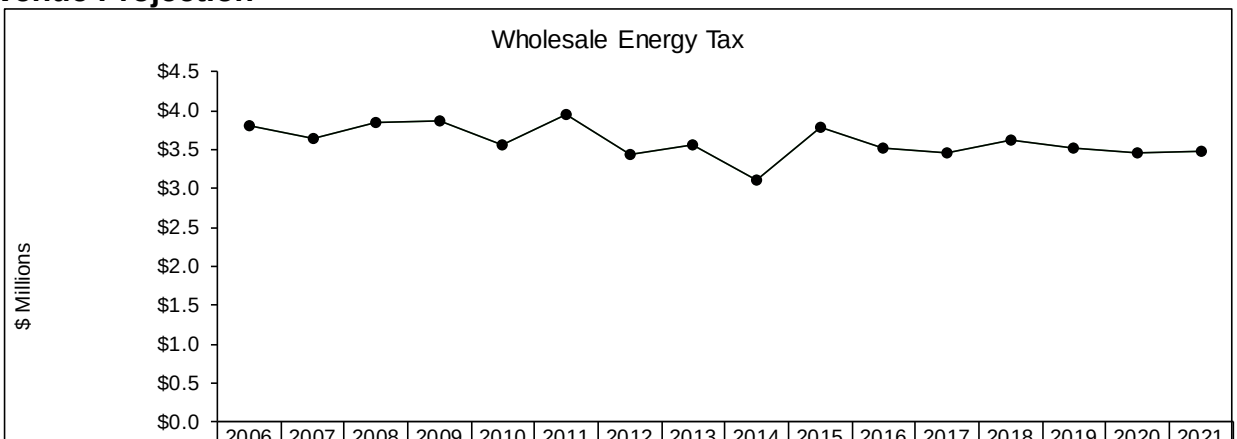
A trend of historical in and out-of-state kilowatt hour data is applied to the previous gross production amount and line loss is subtracted. Net taxable kilowatt hours are multiplied by the tax rate to produce total revenue from this source.



Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	KWH Millions	Line Loss KWH Millions
A 2008	$3.856	$3.856	26,193	797
A 2009	3.865	3.865	26,005	783
A 2010	3.556	3.556	25,546	774
A 2011	3.946	3.946	25,241	759
A 2012	3.427	3.427	23,183	663
A 2013	3.558	3.558	25,620	781
A 2014	3.112	3.112	21,557	595
A 2015	3.795	3.795	25,661	783
A 2016	3.516	3.516	23,534	659
A 2017	3.464	3.464	23,799	670
A 2018	3.628	3.628	24,239	680
F 2019	3.516	3.516	24,139	697
F 2020	3.464	3.464	23,769	677
F 2021	3.485	3.485	23,915	681
F 2022	3.477	3.477	23,859	677
F 2023	3.481	3.481	23,887	679

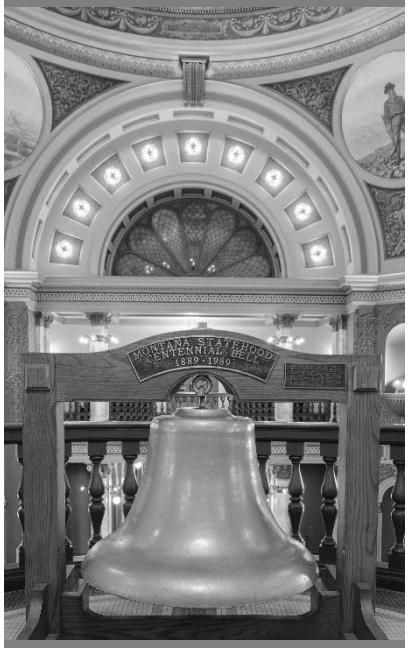
Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	3.8	3.7	3.9	3.9	3.6	3.9	3.4	3.6	3.1	3.8	3.5	3.5	3.6	3.5	3.5	3.5
General Fund	3.8	3.7	3.9	3.9	3.6	3.9	3.4	3.6	3.1	3.8	3.5	3.5	3.6	3.5	3.5	3.5
GF Growth	13%	-4%	6%	0%	-8%	11%	-13%	4%	-13%	22%	-7%	-1%	5%	-3%	-1%	1%

INTEREST EARNINGS

- Capital Land Grant
- Coal Trust Interest
- Common School Interest & Income
- Cultural & Aesthetics Trust Interest
- Deaf & Blind Trust Interest
- Economic Development Trust Interest
- Parks Trust Interest
- Pine Hills Trust Interest
- Regional Water Trust Interest
- Resource Indemnity Trust Interest
- School Facilities Trust Interest
- Tobacco Settlement Trust Interest
- Treasure State Endowment Trust Interest
- Treasury Cash Account Interest



LFD
MONTANA LEGISLATIVE FISCAL DIVISION

Capital Land Grant Interest and Income

Revenue Description

The capital land grant fund is a fund set up for public buildings at the state capital for construction, repair, renovation, and other permanent improvements of state building. Capital land grant funds can also be used for the acquisition of land for such buildings, as well as the payment of principal and interest on bonds issued for any of these purposes. The funds for this come from lands granted by the federal government to the state, which generate income from a variety of sources, as well as interest from principal in the account. Section 12 of the *Enabling Act* requires that income generated on certain sections of federally granted land be used for this purpose.

Statutory Reference

Distribution – 18-2-107, MCA
Enabling Act, Sections 10, 12 & 17
Other – Department of Natural Resources & Conservation (DNRC) trust land administration diversion (77-1-108, MCA & 77-1-109, MCA); DNRC land bank administration diversion (77-2-362, MCA)

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

After diversions for DNRC administration, all remaining capital land grant income is deposited into a capital projects fund to be used for projects on the state capital complex in accordance with the provisions of Section 12 of the *Enabling Act*.

Forecast Risks

- Prices and rental charges set by the Board of Land Commissioners
- Commodity prices and production
- Administration costs

Revenue Estimate Methodology

The estimate for interest and income from the capital land grant trust determines the net amount of revenue that will be distributed to the trust beneficiary. Since all the trust income is distributed, the trust has no monetary corpus.

Data

Data from SABHRS provide a history of each individual interest and income revenue component. Department of Natural Resources and Conservation (DNRC) annual reports and other data provide additional information such as mineral prices and production. Budget submissions on the state budgeting system (IBARS) provide anticipated diversions.

Analysis

The estimate is produced by estimating the revenue components and then subtracting estimated diversion amount. The revenue components for this source are made up of timber, grazing, and agricultural fees, oil and gas bonuses, leases and penalties, mineral royalties and miscellaneous rentals. They are typically estimated using a moving average of recently completed fiscal years' collections. DNRC's estimated operational costs are used for the forecast of diversion amounts.

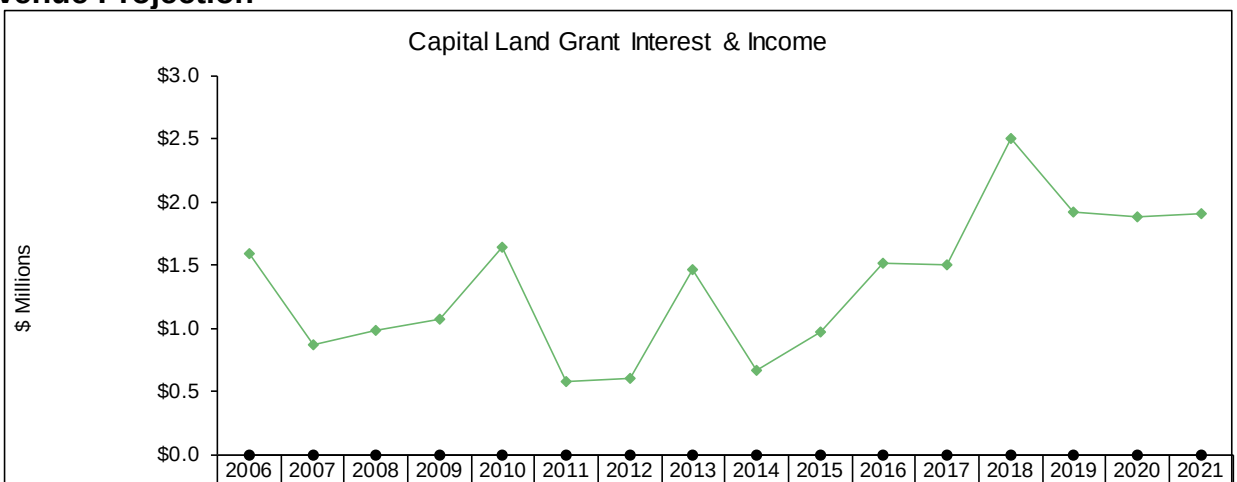
Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	Grazing $ Millions	Agriculture $ Millions	O&G Lease $ Millions	O&G Bonus $ Millions	O&G Penalty $ Millions
A 2008	$0.983	-	$0.206	$0.067	$0.021	$0.000	$0.018
A 2009	1.078	-	0.208	0.115	0.023	0.021	0.014
A 2010	1.635	-	0.185	0.087	0.027	0.032	0.014
A 2011	0.581	-	0.190	0.143	0.028	0.076	0.013
A 2012	0.610	-	0.240	0.103	0.032	0.109	0.011
A 2013	1.470	-	0.293	0.137	0.030	-	0.013
A 2014	0.666	-	0.328	0.098	0.033	0.002	0.019
A 2015	0.972	-	0.413	0.095	0.027	0.007	0.023
A 2016	1.510	-	0.559	0.072	0.004	0.000	0.004
A 2017	1.504	-	0.400	0.096	0.001	-	0.000
A 2018	2.496	-	0.323	0.100	0.003	0.006	(0.002)
F 2019	1.914	-	0.323	0.096	0.021	0.006	(0.001)
F 2020	1.878	-	0.349	0.098	0.021	0.006	(0.001)
F 2021	1.909	-	0.332	0.097	0.020	0.006	(0.001)
F 2022	1.882	-	0.334	0.098	0.018	0.006	(0.001)
F 2023	1.907	-	0.338	0.097	0.016	0.006	(0.001)

FY	Misc. Rentals $ Millions	Res. Dev. $ Millions	Timber Cost $ Millions	Oil Roy. $ Millions	Gas Roy. $ Millions	Timber $ Millions	Misc. $ Millions
A 2008	$0.115	($0.013)	($0.457)	$0.008	$0.023	$1.072	$0.006
A 2009	0.152	(0.015)	(0.709)	0.007	0.030	1.333	0.007
A 2010	0.157	-	-	0.017	0.024	1.990	0.017
A 2011	0.165	-	-	0.006	0.006	0.701	0.009
A 2012	0.267	-	-	0.006	0.005	0.742	0.016
A 2013	0.276	-	-	0.006	0.004	1.597	0.109
A 2014	0.374	-	-	0.007	0.005	0.670	0.016
A 2015	0.721	-	-	0.005	0.043	0.410	0.013
A 2016	0.174	-	-	0.003	0.003	1.796	0.014
A 2017	0.186	-	-	0.000	0.001	1.988	0.014
A 2018	0.180	-	-	0.489	0.062	2.247	0.029
F 2019	0.315	-	-	0.007	0.018	2.010	0.017
F 2020	0.214	-	-	0.007	0.016	2.082	0.019
F 2021	0.223	-	-	0.007	0.016	2.113	0.020
F 2022	0.233	-	-	0.007	0.016	2.068	0.021
F 2023	0.246	-	-	0.007	0.014	2.087	0.019

FY	Trust Land Admin. $ Millions
A 2008	($0.085)
A 2009	(0.104)
A 2010	(0.915)
A 2011	(0.769)
A 2012	(0.905)
A 2013	(0.815)
A 2014	(0.887)
A 2015	(0.786)
A 2016	(0.802)
A 2017	(0.954)
A 2018	(0.941)
F 2019	(0.899)
F 2020	(0.931)
F 2021	(0.923)
F 2022	(0.918)
F 2023	(0.924)

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	1.59	0.87	0.98	1.08	1.64	0.58	0.61	1.47	0.67	0.97	1.51	1.50	2.50	1.91	1.88	1.91
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Coal Trust Interest

Revenue Description

The coal trust is one of several trusts set up with money from the Coal Severance Tax. The interest money from this fund is for a variety of purposes with the majority going to fund the Public Employees Retirement System.

Article IX, Section 5 of the Montana Constitution requires that 50% of all coal severance tax revenue be deposited in a permanent coal trust fund in which appropriation of the principal requires a three-fourths vote of each house of the legislature. Coal severance tax funds flowing into the trust fund are first used to secure and subsidize state bonds issued to finance water resource and renewable resource development projects and activities. The remaining funds are then split 25% (12.5% of total revenue) to the Big Sky Economic Development trust fund and the remaining 75% (37.5% of total revenue) to the School Facilities Fund.

For more information on the coal permanent trust earnings and distributions, see the chart in the Coal Severance Tax section.

Statutory Reference

Distribution – Montana Constitution, Article IX, Section 5; 17-5-704, MCA; 15-35-108, MCA

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

Interest earned on the coal severance tax permanent trust fund that is deposited to the general fund is statutorily appropriated as follows:

- $65,000 to the cooperative development center;
- $625,000 for the growth through agriculture program provided for in Title 90, chapter 9;
- $1.275 million general fund transfer to the research and commercialization account created in 90-3-1002;
- to the Department of Commerce for specific projects:
  - $125,000 for a small business development center;
  - $50,000 for a small business innovative research program;
  - $425,000 for certified regional development corporations;
  - $200,000 for the Montana manufacturing extension center at MSU-Bozeman; and
  - $300,000 for export trade enhancement
- After the above payments, the remaining funds are distributed to the state general fund

Forecast Risks

- Short- and long-term interest rates
- Bond rates

Revenue Estimate Methodology

Data

The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future long-term interest rates are provided by the BOI and short-term rates are provided by IHS Markit.

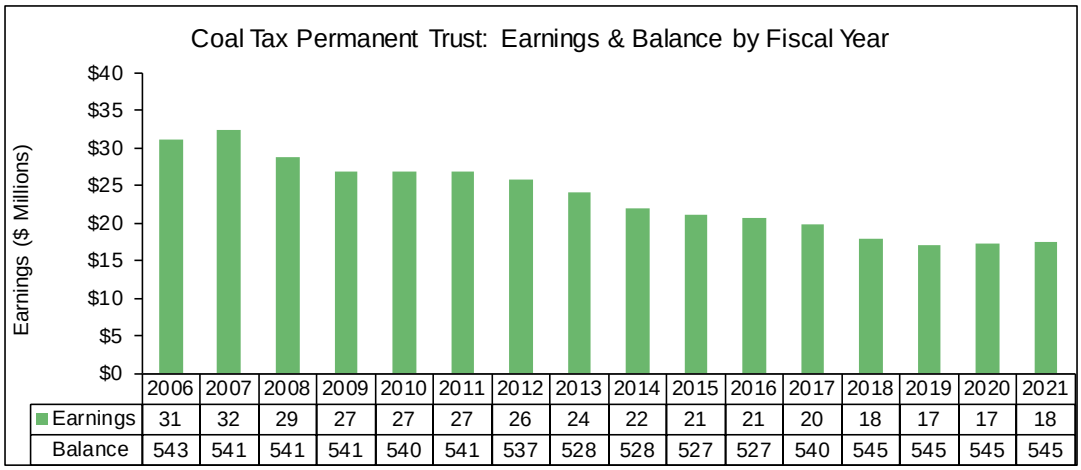
Analysis

The coal trust was created from distributions of the coal severance tax. The Constitution requires that 50% of the coal severance tax collections be distributed into the coal trust; currently, the required coal tax revenue flows into two of the sub-trusts and none of the tax revenue is deposited into the permanent coal trust.

Each of the following interest or income components are estimated independently and combined to produce the estimate:

- Trust funds bond pool (TFBP)
- In-state investments
- Short-term investment pool (STIP)

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. Yearly return rate estimates provided by the BOI are applied to the current and estimated future trust balance to produce a TFBP earnings estimate.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	31	32	29	27	27	27	26	24	22	21	21	20	18	17	17	18
Balance	543	541	541	541	540	541	537	528	528	527	527	540	545	545	545	545

The BOI is required by statute to invest 25% of the coal tax trust in the Montana economy. In-state investments primarily consist of loans to Montana business entities and earnings are equal to the interest charged on the loans.

STIP interest (including other interest) is earned on cash, prior to investment in long-term investments. Funds are acquired from new deposits and maturing securities in the forecast period. Funds are held in STIP until the BOI determines that conditions are favorable for investment in the TFBP. STIP earnings are modeled on an average short-term interest rate based on IHS Markit projections of three short-term investments

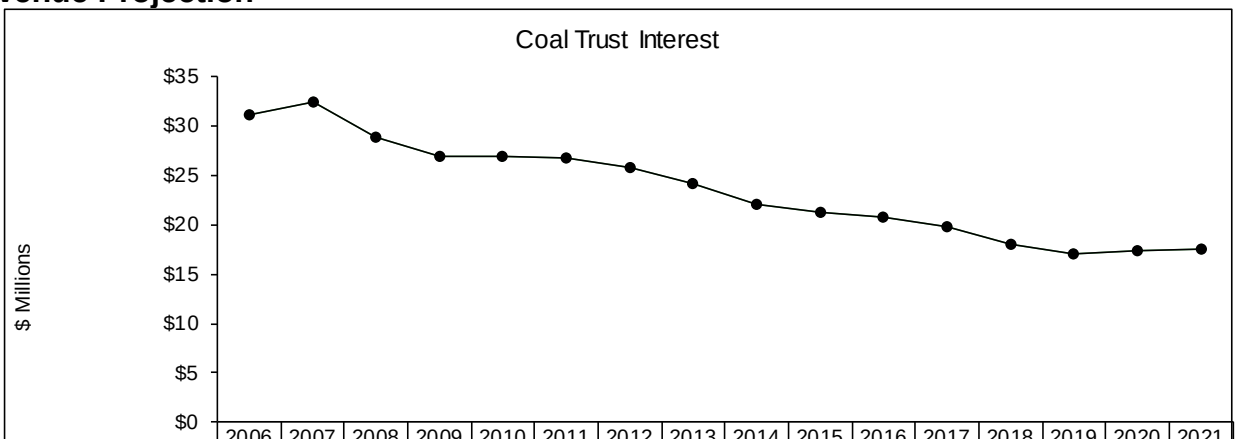
After the estimates are calculated, the projected earnings the sources are combined to reach total coal trust interest revenue, and the revenues are distributed as described above.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	In_State Interest $ Millions	Other Interest $ Millions	STIP Interest $ Millions
A 2008	$28.855	$28.855	$17.570	$9.346	$0.154	$1.501
A 2009	26.958	26.958	16.071	11.264	0.572	0.229
A 2010	26.914	26.914	16.102	11.454	0.119	0.060
A 2011	26.783	26.783	16.687	10.416	0.585	0.053
A 2012	25.840	25.840	17.618	8.701	0.128	0.041
A 2013	24.153	24.153	16.664	7.083	0.453	0.032
A 2014	21.996	21.996	16.058	5.114	0.112	0.013
A 2015	21.168	21.168	15.360	4.585	0.149	0.019
A 2016	20.722	20.722	14.171	4.109	(0.091)	0.064
A 2017	19.799	19.799	12.838	4.216	(0.299)	0.219
A 2018	17.938	17.938	12.417	4.094	(0.366)	0.219
F 2019	17.088	17.088	11.836	4.399	0.529	0.324
F 2020	17.333	17.333	11.979	4.399	0.544	0.412
F 2021	17.504	17.504	12.124	4.399	0.535	0.447
F 2022	17.654	17.654	12.267	4.399	0.541	0.448
F 2023	18.205	18.205	12.833	4.399	0.537	0.436

FY	TFBP Long Term Rate	Non Pool STIP Rate	Non Pool In State Rate	Non Pool STIP Bal $ Millions	Non Pool In-State Bal $ Millions	Invested TFBP Bal. $ Millions
A 2008	5.7%	6.1%	4.9%	$15.911	$182.302	$328.895
A 2009	5.1%	1.3%	5.9%	20.176	201.284	307.515
A 2010	5.1%	0.3%	5.8%	17.745	194.937	324.357
A 2011	5.0%	0.3%	5.7%	16.065	168.605	343.015
A 2012	4.9%	0.3%	5.6%	13.821	139.779	369.515
A 2013	4.5%	0.2%	5.5%	20.572	116.898	373.829
A 2014	4.3%	0.1%	4.6%	9.237	105.821	380.291
A 2015	4.1%	0.1%	4.5%	21.037	97.101	375.332
A 2016	3.9%	0.3%	3.9%	20.335	111.765	355.021
A 2017	3.6%	0.9%	3.7%	27.613	115.705	354.760
A 2018	3.5%	1.1%	3.3%	13.117	134.292	353.459
F 2019	3.4%	2.5%	3.3%	13.117	134.292	352.163
F 2020	3.4%	3.1%	3.3%	13.117	134.292	350.871
F 2021	3.5%	3.4%	3.3%	13.117	134.292	349.584
F 2022	3.5%	3.4%	3.3%	13.117	134.292	348.302
F 2023	3.7%	3.3%	3.3%	13.117	134.292	347.025

Revenue Projection

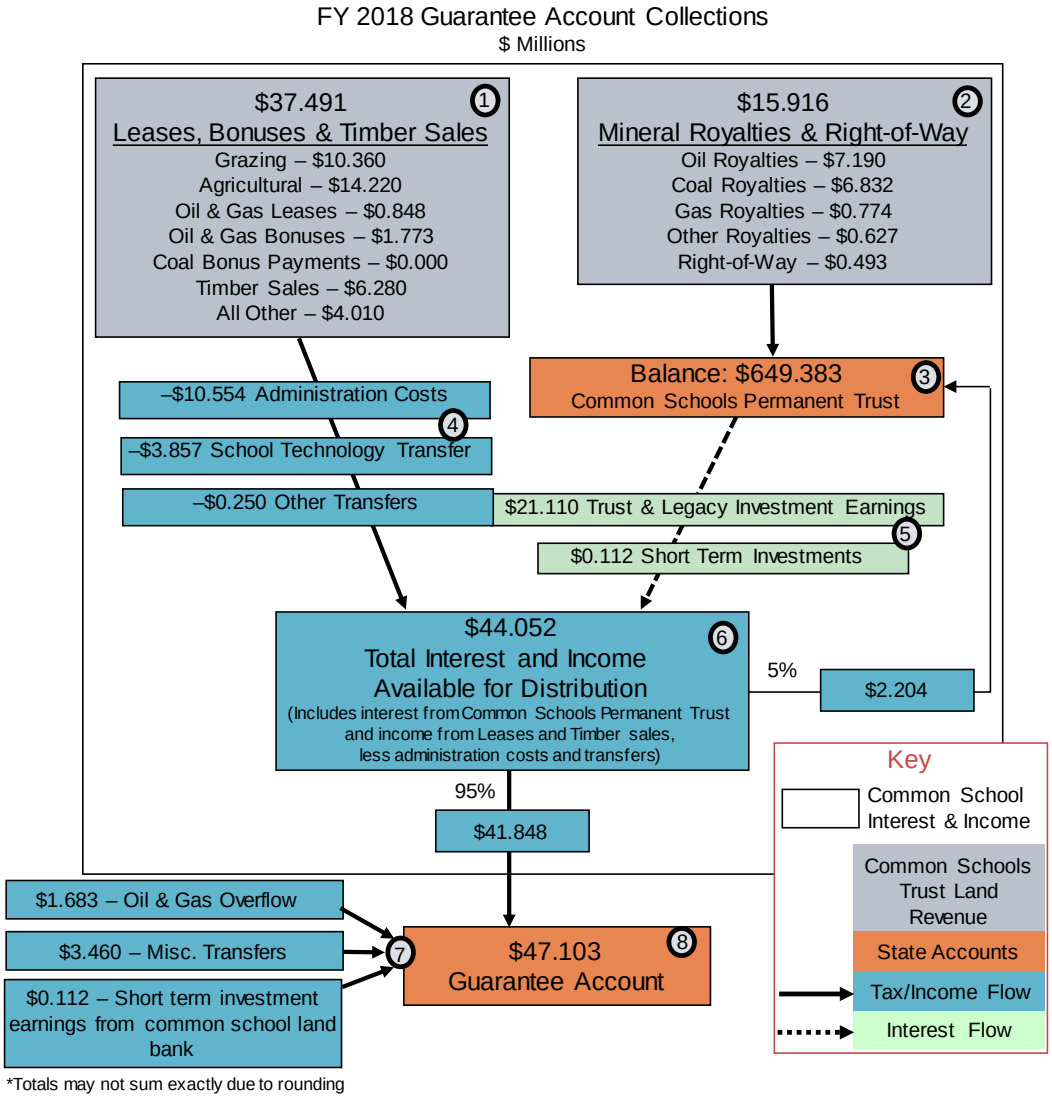


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	31.1	32.3	28.9	27.0	26.9	26.8	25.8	24.2	22.0	21.2	20.7	19.8	17.9	17.1	17.3	17.5
General Fund	31.1	32.3	28.9	27.0	26.9	26.8	25.8	24.2	22.0	21.2	20.7	19.8	17.9	17.1	17.3	17.5
GF Growth	-15%	4%	-11%	-7%	0%	0%	-4%	-7%	-9%	-4%	-2%	-4%	-9%	-5%	1%	1%

Common School Interest and Income

Revenue Description

The Common School Trust is a fund set up for the support of public schools using income generated from state common school trust land and the subsequent interest on the account. Lands granted by the federal government to the state for the benefit of public schools and various state institutions generate income through rents or crop shares for agricultural purposes, royalties from the sale of mineral rights, and sales of timber. The revenue estimate is net of administration costs for the Department of Natural Resources and Conservation (DNRC) and any other school-related transfers. The chart below shows the FY 2016 earnings and distribution, with subsequent descriptions of each numbered box.



*Totals may not sum exactly due to rounding

❶ Leases, Bonuses & Timber Sales: Lands granted by the federal government to the state for the benefit of public schools generate income. Common school lands produce two kinds of revenue: 1) distributable income such as interest earnings, agricultural rents or crop shares, and timber sale revenue; and 2) permanent income that is returned to the trust as income from the sale of minerals, land, and easements.

Box 1 is the distributable income. This common school land revenue includes leases, bonuses and timber sales under 18 million board feet. Revenue from timber sales over 18 million board feet is transferred to the school facility and technology account (20-9-516, MCA).

❷ Mineral Royalties & Right-of-Way: This portion is deposited directly into the common schools permanent trust and includes sales of part of all of a piece of common schools trust land including extractable resources such as oil, natural gas, and coal.

❸ Common Schools Permanent Trust: The Enabling Act states that "proceeds from the sale and other permanent disposition of any of the said lands and from every part thereof, shall constitute permanent funds for the support and maintenance of the public schools and the various State institutions for which the lands have been granted." The Common Schools Permanent Trust is the permanent trust account in which school dedicated funds are held.

❹ Costs & Transfer: The amount of revenue deposited to the guarantee account is net of amounts diverted for DNRC administration costs and those deposited directly to the school facility and technology account shown in Box 4. The administration costs diversion funds operational costs in DNRC for common school lands. The school facility and technology account receives timber revenue in excess of 18 million board feet (77-1-218, MCA). This reduces the amount of revenue distributable to the Guarantee Account.

❺ Investment Earnings: Funds in the Common Schools Permanent Trust are invested by the Montana Board of Investments, with the interest earned available for distribution. Most of the revenue, the Trust & Legacy Investment Earnings, comes from fixed-income investments. A small amount comes from short-term investments which is interest on the cash when it comes into the Montana Board of Investments and before it is invested in the longer-term Trust Funds Investment Pool.

❻ Common School Trust Land Interest and Income: This amount is commonly referred to as common school interest and income. It is comprised of the income from leases, bonuses, and timber (Box 1) less costs and transfers (Box 4), plus interest from the Common Schools Permanent Trust (Box 5). The money is distributed as follows:

- 95% is transferred to the state special revenue guarantee account which is statutorily appropriated for schools
- 5% is reinvested in the Common Schools Permanent Trust

❼ Additional transfers which are not shown here, but are included in the Guarantee Account section.

❽ Guarantee Account: This is the state special revenue fund (20-9-104, MCA) which is statutorily appropriated to schools in the form of BASE aid. It is comprised of common school interest and income and other appropriations and is the first source of state school funding (used before general fund).

Note that the common school revenue is not the only source of guarantee account revenue; see the Guarantee Account section for more information on total revenue transferred to that account.

Statutory Reference

Distribution – Montana Constitution Article X, Section 5; 20-9-342, MCA; 20-9-622, MCA
Enabling Act, Section 10
Other – DNRC trust land administration diversion (77-1-108, MCA & 77-1-109, MCA)
DNRC land bank administration diversion (77-2-362, MCA)
Date Due – Last business day of February following the calendar year in which the money was received (20-9-342, MCA).

Applicable Tax Rates: N/A

Collection Frequency

Revenue is received monthly; distribution to the state special revenue fund occurs three times per year.

Distribution

As described above, 95% of interest and income from the common school permanent trust fund (excluding a portion of timber sale revenue and after amounts diverted for DNRC administration) is distributed to the state special revenue guarantee account and is statutorily appropriated for schools. The remaining 5% is deposited to the permanent trust fund. The amount of timber sale revenue over 18 million board feet is deposited to the school facility and technology account. The amounts deposited to the guarantee account are shown in this revenue source.

Forecast Risks

- Commodity prices and production
- Bond rates

Revenue Estimate Methodology

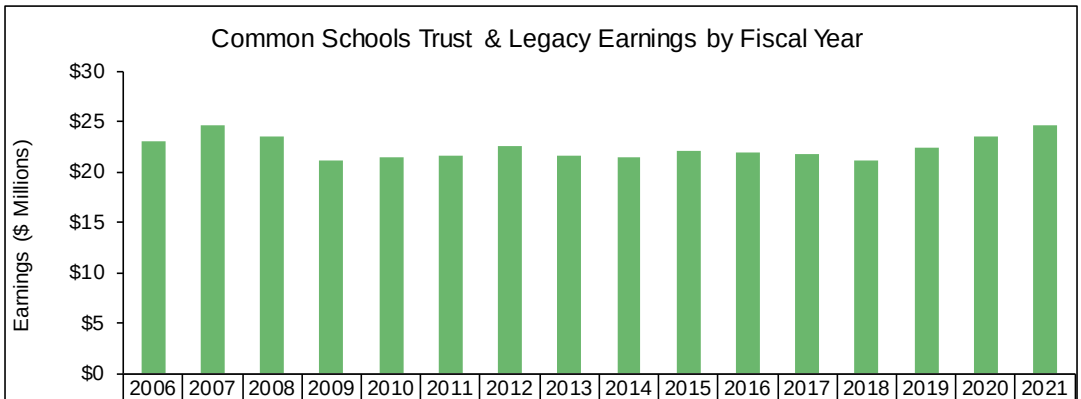
Data

Data from SABHRS provides a history of each individual interest and income revenue component from which estimates can be made. DNRC annual reports and other data provide additional information such as mineral prices and production. DNRC provided data for easement sales and timber harvest volumes. IHS Markit provides future estimates of West Texas Intermediate oil and national well head natural gas prices.

Analysis

In addition to interest earnings, the revenue components for this source are made up of timber, grazing, and agricultural fees, oil and gas bonuses, leases and penalties, mineral royalties and miscellaneous rentals. They are typically estimated using a moving average of recently completed fiscal years' collections

The monetary assets of the common school trust are pooled with monetary assets of other land trusts (termed "Trust and Legacy") and invested by the Board of Investments (BOI) in the trust funds bond pool (TFBP). To forecast the total interest earned, estimated rates of return provided by the BOI are applied to the current and forecast invested balance. Money not invested in the TFBP earns interest at a short-term rate which is forecast by IHS Markit.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	23.0	24.5	23.4	21.1	21.4	21.6	22.5	21.6	21.5	22.1	22.0	21.7	21.1	22.3	23.5	24.7
Balance	423	428	439	441	445	465	498	531	578	613	635	651	668	690	712	733

Diversions fund operational costs in DNRC but reduce the amount of permanent and distributable revenue that would have been deposited to the common school trust or distributed to the trust beneficiaries. The cost estimates are provided by DNRC.

The estimate assumes that distributable revenue is used to fund DNRC costs. The total expenditures requested to be made from the Trust Land Administration Account can be funded from distributable revenue, permanent revenue, or a combination of the two. It is up to the DNRC to decide. If permanent revenue is chosen, the corpus of the trust will not grow as rapidly as it would have and interest earnings

from the trust will be less. If distributable revenue is chosen, the amount deposited to the guarantee account to fund public schools will be less, thus requiring more funding from the general fund.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Common School Share T&L	Trust Land Admin
A 2008	$83.026	-	$25.160	$0.129	92.6%	($4.053)
A 2009	61.821	-	22.711	0.066	92.6%	(9.991)
A 2010	133.315	-	22.916	0.018	93.2%	(8.674)
A 2011	60.144	-	23.194	0.033	92.9%	(8.837)
A 2012	102.391	-	24.175	0.028	93.0%	(8.717)
A 2013	61.098	-	23.189	0.022	92.9%	(9.200)
A 2014	49.735	-	23.042	0.007	93.3%	(9.031)
A 2015	48.346	-	24.044	0.003	92.0%	(9.551)
A 2016	47.010	-	23.894	0.004	91.9%	(10.419)
A 2017	43.062	-	23.612	0.013	92.0%	(10.873)
A 2018	41.848	-	22.923	0.033	92.0%	(10.804)
F 2019	41.701	-	22.915	0.186	92.0%	(11.200)
F 2020	43.868	-	24.078	0.236	92.0%	(11.200)
F 2021	44.205	-	25.259	0.256	92.0%	(11.200)
F 2022	45.423	-	26.469	0.257	92.0%	(11.200)
F 2023	47.350	-	28.583	0.250	92.0%	(11.200)

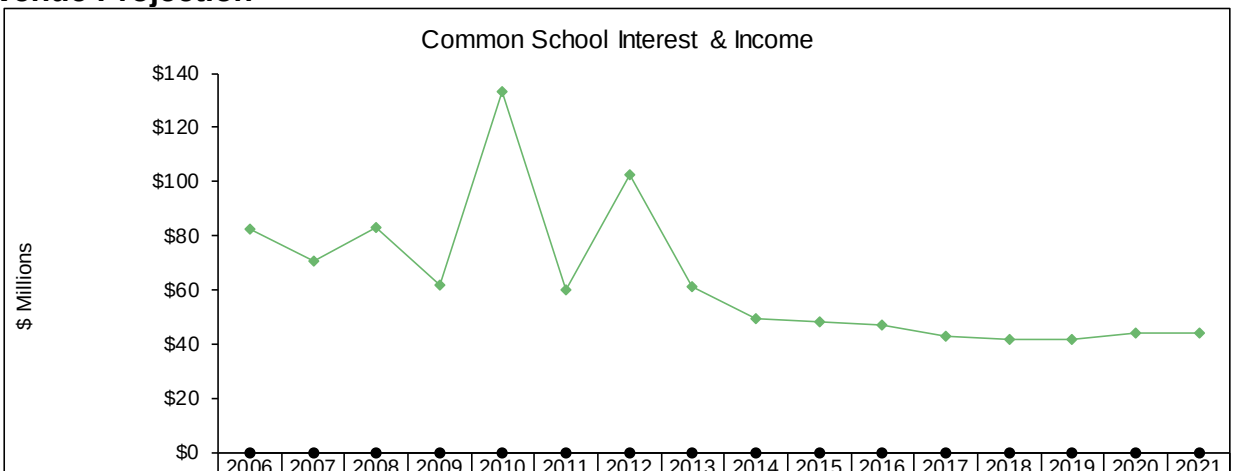
FY	Trust Income New Deposit $ Millions	T&L Balance $ Millions	TFBP Long Term Rate	STIP Balance $ Millions	STIP Rate
A 2008	$3.102	$439.153	5.8%	$2.461	1.5%
A 2009	4.126	441.153	5.2%	4.161	2.0%
A 2010	10.710	444.653	5.2%	11.340	0.2%
A 2011	22.233	464.553	5.1%	15.565	0.2%
A 2012	31.633	498.053	5.0%	11.492	0.2%
A 2013	35.482	531.053	4.5%	13.436	0.2%
A 2014	35.440	578.053	4.2%	2.546	0.1%
A 2015	26.197	612.524	4.0%	2.927	0.1%
A 2016	20.343	634.528	3.8%	2.585	0.2%
A 2017	16.456	650.603	3.7%	5.141	0.3%
A 2018	17.678	667.803	3.5%	7.514	0.5%
F 2019	24.658	689.808	3.3%	7.514	2.5%
F 2020	24.178	711.517	3.4%	7.514	3.1%
F 2021	23.691	732.773	3.4%	7.514	3.4%
F 2022	24.063	754.319	3.5%	7.514	3.4%
F 2023	23.933	775.783	3.7%	7.514	3.3%

Interest Earnings — Common School Interest and Income

FY	Grazing $ Millions	Agriculture $ Millions	Oil & Gas Lease $ Millions	Oil & Gas Bonus $ Millions	Oil & Gas Penalty $ Millions	Misc./Other Rentals $ Millions	Avista Lease $ Millions
A 2008	$6.408	$12.282	$2.701	$2.154	$0.812	$6.418	
A 2009	6.470	14.081	2.760	11.828	0.541	6.795	
A 2010	5.861	10.985	2.873	7.243	0.615	85.247	
A 2011	5.984	13.464	2.937	13.234	1.008	2.840	
A 2012	7.471	15.009	3.672	15.104	1.411	3.162	
A 2013	9.271	16.925	3.420	2.022	1.300	2.950	$4.504
A 2014	10.518	16.260	2.816	3.077	1.254	3.142	$4.573
A 2015	13.125	13.762	1.894	1.888	1.124	3.378	-
A 2016	17.629	11.942	0.948	0.012	0.482	3.476	-
A 2017	12.848	13.163	0.830	0.330	0.428	3.632	-
A 2018	10.360	14.220	0.848	1.773	0.439	3.571	-
F 2019	10.360	13.691	1.025	0.705	0.531	3.560	-
F 2020	11.189	13.956	0.965	0.705	0.500	3.588	-
F 2021	10.636	13.824	0.901	0.705	0.467	3.573	-
F 2022	10.728	13.890	0.885	0.705	0.458	3.573	-
F 2023	10.851	13.857	0.874	0.705	0.453	3.578	-

FY	Int. STIP $ Millions	Int. Trust $ Millions	Timber $ Millions	Oil Royalties $ Millions	Gas Royalties $ Millions	Coal Royalties $ Millions	Other Royalties $ Millions
A 2008	$0.606	$23.428	$2.251	$19.367	$5.660	$5.865	$0.156
A 2009	0.293	21.094	1.855	14.809	4.738	7.841	0.485
A 2010	0.063	21.370	2.990	12.478	2.841	4.984	0.488
A 2011	0.042	21.570	2.713	12.621	2.329	8.497	0.285
A 2012	0.053	22.515	1.886	14.371	1.468	7.400	0.894
A 2013	0.032	21.564	3.206	17.133	1.202	6.803	0.825
A 2014	0.012	21.501	2.804	17.611	1.588	8.131	1.070
A 2015	0.008	22.131	3.132	12.577	1.220	7.863	0.525
A 2016	0.046	21.972	3.394	6.802	0.534	9.125	0.254
A 2017	0.084	21.724	3.163	6.301	0.538	6.802	0.329
A 2018	0.112	21.110	2.423	7.190	0.774	6.832	0.627
F 2019	0.186	22.347	2.692	12.667	0.953	7.757	0.627
F 2020	0.236	23.547	2.692	12.722	0.466	7.895	0.627
F 2021	0.256	24.677	2.692	11.920	0.796	7.912	0.627
F 2022	0.257	25.825	2.692	12.336	0.852	7.732	0.627
F 2023	0.250	27.782	2.692	12.525	1.083	7.229	0.627

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	82.6	70.4	83.0	61.8	133.3	60.1	102.4	61.1	49.7	48.3	47.0	43.1	41.8	41.7	43.9	44.2
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Cultural Trust Interest

Revenue Description
The Cultural Trust is one of several trusts set up with money from the coal severance tax. The interest money from this fund is used primarily for works of art in the capitol and for other cultural and aesthetic projects. For more information on the coal permanent trust earnings and distributions, see the chart in the Coal Severance Tax section.

Statutory Reference
Distribution – 15-35-108(6), MCA; 22-2-305, MCA

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution
All income from the trust is deposited in a state special revenue fund to be appropriated for protection of art in the state capitol and for other cultural and aesthetic projects.

Forecast Risks
- Short and long-term interest rates
- Bond rates
- Coal price and production

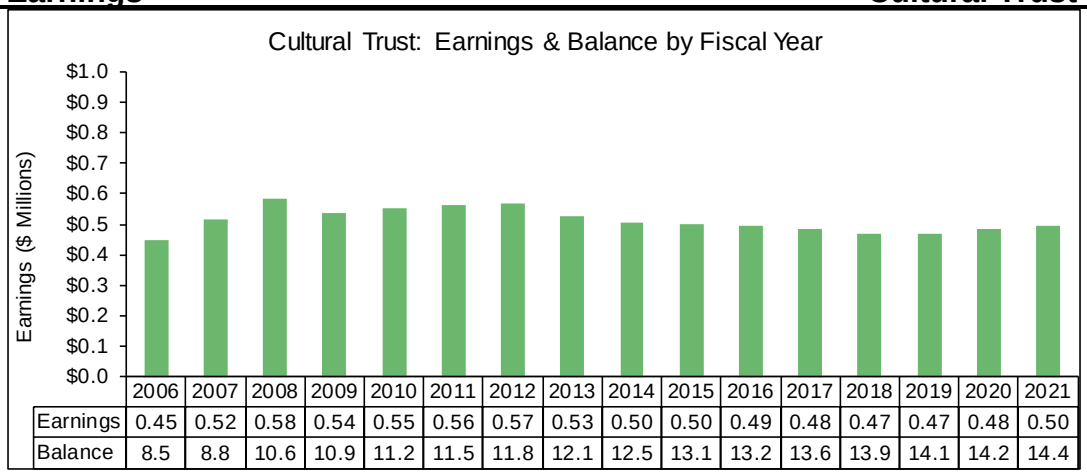
Revenue Estimate Methodology
Data

The Board of Investments (BOI) provides historic interest earnings from the trust as well as the gains and losses from the sale of investment instruments. Projections of interest rates are provided by the BOI, and historic earnings are provided from SABHRS.

Analysis

Each of the following interest or income components are estimated independently and combined to produce the estimate:
- Trust fund bond pool (TFBP)
- Short-term investment pool (STIP)
- New trust deposits

TFBP earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	0.45	0.52	0.58	0.54	0.55	0.56	0.57	0.53	0.50	0.50	0.49	0.48	0.47	0.47	0.48	0.50
Balance	8.5	8.8	10.6	10.9	11.2	11.5	11.8	12.1	12.5	13.1	13.2	13.6	13.9	14.1	14.2	14.4

STIP interest is earned on the temporary investment of trust funds. Funds are acquired from activities such as new deposits and investment sales. Funds are held in STIP until the BOI determines that conditions are favorable for deposit in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

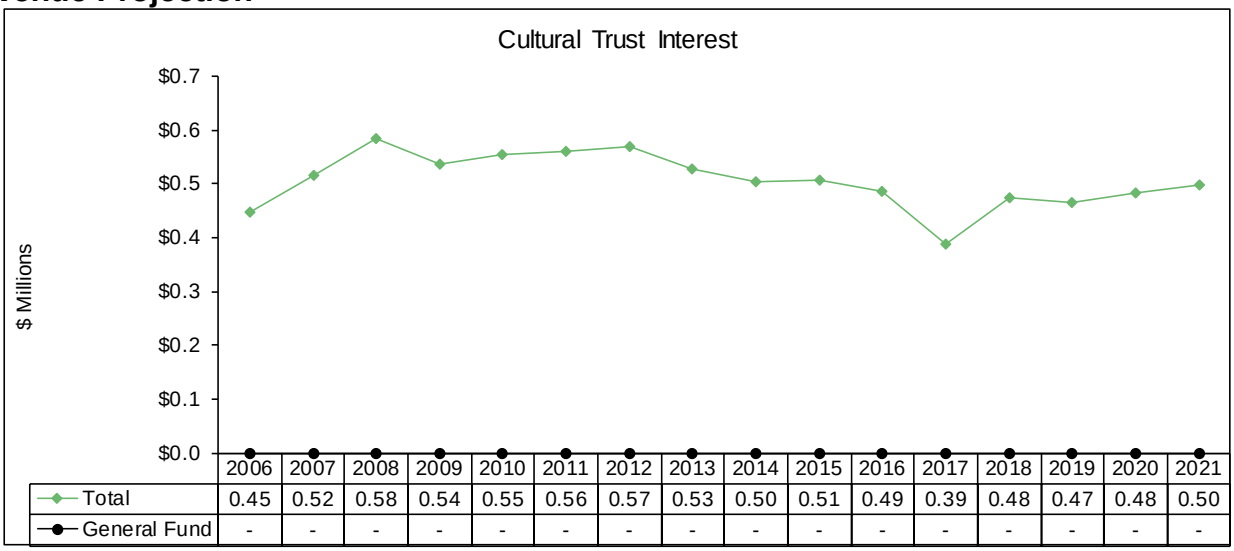
The 0.63% coal severance tax distribution to the cultural trust is considered new deposits. New deposits are transferred to the trust on a quarterly basis. These new trust deposits are forecast using estimates of coal severance tax collections.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Invested Balance $ Millions	TFBP Long Term Rate
A 2008	$0.584	-	$0.573	$0.011	$10.404	6.0%
A 2009	0.535	-	0.534	0.001	10.724	5.1%
A 2010	0.553	-	0.553	0.000	11.024	5.1%
A 2011	0.561	-	0.559	0.000	11.430	5.0%
A 2012	0.568	-	0.567	0.001	11.710	4.9%
A 2013	0.527	-	0.527	0.001	11.930	4.5%
A 2014	0.504	-	0.504	0.000	12.230	4.2%
A 2015	0.506	-	0.501	0.000	12.880	4.0%
A 2016	0.485	-	0.492	0.001	13.059	3.8%
A 2017	0.389	-	0.482	0.002	13.309	3.7%
A 2018	0.476	-	0.466	0.004	13.559	3.5%
F 2019	0.467	-	0.457	0.010	13.713	3.3%
F 2020	0.483	-	0.471	0.012	13.867	3.4%
F 2021	0.497	-	0.484	0.013	14.022	3.5%
F 2022	0.511	-	0.498	0.013	14.173	3.5%
F 2023	0.541	-	0.528	0.013	14.315	3.7%

FY	Net Coal Tax New Deposit $ Millions	Non Pool STIP Bal $ Millions	Non Pool STIP Rate
A 2008	$0.286	$0.191	8.9%
A 2009	0.312	0.137	0.6%
A 2010	0.278	0.071	0.5%
A 2011	0.346	0.006	1.0%
A 2012	0.332	0.076	1.5%
A 2013	0.356	0.201	0.4%
A 2014	0.363	0.258	0.2%
A 2015	0.384	0.171	0.2%
A 2016	0.380	0.132	0.8%
A 2017	0.370	0.327	0.9%
A 2018	0.379	0.360	1.3%
F 2019	0.307	0.360	2.5%
F 2020	0.310	0.360	3.1%
F 2021	0.309	0.360	3.4%
F 2022	0.302	0.360	3.4%
F 2023	0.283	0.360	3.3%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	0.45	0.52	0.58	0.54	0.55	0.56	0.57	0.53	0.50	0.51	0.49	0.39	0.48	0.47	0.48	0.50
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Deaf and Blind Trust Interest and Income

Revenue Description
The Deaf and Blind Trust is a fund set up for the support of the School for the Deaf and Blind using income generated from state land and the subsequent interest on the account. Lands granted by the federal government to the state for the benefit of public schools and various state institutions generate income through rents or crop shares for agricultural purposes, royalties from the sale of mineral rights, and sales of timber. Up to 25% of distributable revenue may be diverted to the trust land administration account to fund the Department of Natural Resources & Conservation (DNRC) administrative costs.

Statutory Reference
Distribution – 20-8-110, MCA
Enabling Act, Sections 11 & 17
Other – DNRC trust land administration diversion (77-1-108, MCA & 77-1-109, MCA)
DNRC land bank administration diversion (77-2-362, MCA)

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution
Interest and income from the trust, net of amounts to fund DNRC administration costs, are allocated to the School for the Deaf and Blind.

Forecast Risks
- Short and long-term interest rates
- Bond rates

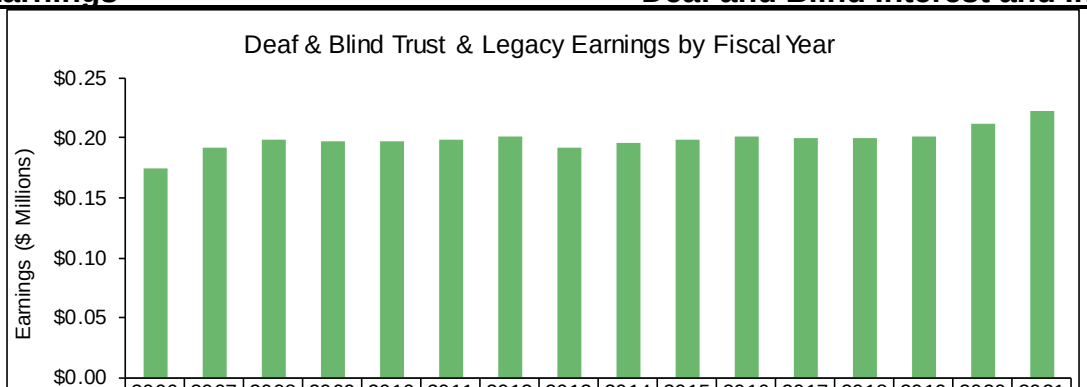
Revenue Estimate Methodology
Data

SABHRS data provide a history of each individual interest and income revenue component; DNRC annual reports and other data provide additional information such as mineral production and timber estimates; and DNRC estimates for operating costs are used for the forecast diversion amounts.

Analysis

Trust and Legacy Earnings: The monetary assets of the trust are pooled with monetary assets of other land trusts in the T & L and invested by the Board of Investment in the trust funds bond pool. Based on the number of share each trust owns, a share of the earnings is deposited in each trust. The Deaf and Blind trust share is 0.8%. The total pool earnings is a sum of the following:
- Earnings from new deposits – New deposits in the pool initially earn interest at the short-term rate before it is invested in a longer-term investment. IHS Markit forecasts for short-term interest rates are used to project these interest earnings.
- Earnings from existing balance – Most of these funds have been invested in bonds purchased over the past several years. Estimated return rates from the BOI are applied to the current and forecast trust balance to calculate the estimate.
- Non-portfolio earnings – Money not invested in the trust funds bond pool earns interest at the short-term rate.

Once the total amount of the pool earnings has been estimated by summing the above three items, it is multiplied by the Deaf and Blind trust share of 0.8%.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	0.17	0.19	0.20	0.20	0.20	0.20	0.20	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.22
Balance	423	428	439	441	445	465	498	531	578	613	635	651	668	690	712	733

Remaining revenue sources such as grazing and agricultural fees, as well as mineral royalties and oil and gas leases are typically estimated using a time series or assuming no growth from the previous fiscal year.

Future diversion amounts are based on estimates from the DNRC and are assumed to be funded with distributable revenue.

Revenue Estimate Assumptions

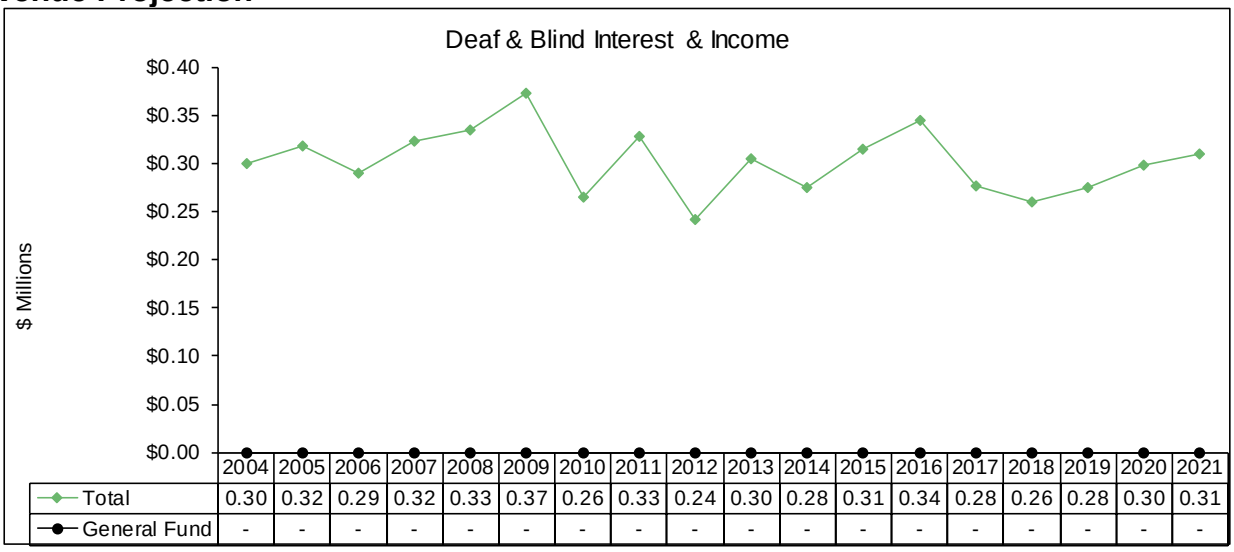
FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Deaf & Blind Share T&L	D&B T&L Interest $ Millions
A 2008	$0.334	-	$25.160	$0.129	0.8%	$0.199
A 2009	0.373	-	22.711	0.066	0.9%	0.197
A 2010	0.265	-	22.916	0.018	0.9%	0.198
A 2011	0.327	-	23.194	0.033	0.9%	0.198
A 2012	0.242	-	24.175	0.028	0.8%	0.201
A 2013	0.304	-	23.189	0.022	0.8%	0.192
A 2014	0.275	-	23.042	0.007	0.8%	0.196
A 2015	0.315	-	24.044	0.003	0.8%	0.199
A 2016	0.344	-	23.894	0.004	0.8%	0.201
A 2017	0.277	-	23.612	0.013	0.8%	0.200
A 2018	0.259	-	22.923	0.033	0.8%	0.200
F 2019	0.276	-	22.915	0.186	0.8%	0.201
F 2020	0.298	-	24.078	0.236	0.8%	0.212
F 2021	0.310	-	25.259	0.256	0.8%	0.222
F 2022	0.328	-	26.469	0.257	0.8%	0.233
F 2023	0.354	-	28.583	0.250	0.8%	0.250

Interest Earnings — Deaf and Blind Interest and Income

FY	Trust Income New Deposit $ Millions	TFBP Long Term Rate	Non Pool STIP Rate	Non Pool STIP Bal $ Millions	T&L Balance $ Millions
A 2008	$3.102	5.8%	3.1%	$2.461	$439.153
A 2009	4.126	5.2%	1.0%	4.161	441.153
A 2010	10.710	5.2%	0.2%	11.340	444.653
A 2011	22.233	5.1%	0.1%	15.565	464.553
A 2012	31.633	5.0%	0.1%	11.492	498.053
A 2013	35.482	4.5%	0.1%	13.436	531.053
A 2014	35.440	4.2%	0.1%	2.546	578.053
A 2015	26.197	4.0%	0.1%	2.927	612.524
A 2016	20.343	3.8%	0.3%	2.585	634.528
A 2017	16.456	3.7%	0.7%	5.141	650.603
A 2018	17.678	3.5%	1.5%	7.514	667.803
F 2019	24.658	3.3%	2.5%	7.514	689.808
F 2020	24.178	3.4%	3.1%	7.514	711.517
F 2021	23.691	3.4%	3.4%	7.514	732.773
F 2022	24.063	3.5%	3.4%	7.514	754.319
F 2023	23.933	3.7%	3.3%	7.514	775.783

FY	Grazing $ Millions	Agriculture $ Millions	Oil & Gas Lease $ Millions	Oil & Gas Bonus $ Millions	Oil & Gas Penalty $ Millions	Misc. $ Millions	TLMD Adm. $ Millions
A 2008	$0.056	$0.036	$0.002	-	$0.003	$0.043	-
A 2009	0.062	0.042	0.009	$0.008	0.003	0.060	-
A 2010	0.056	0.027	0.009	-	0.003	0.057	($0.085)
A 2011	0.057	0.042	0.008	-	0.001	0.091	(0.207)
A 2012	0.066	0.043	0.010	0.042	-	0.092	(0.142)
A 2013	0.078	0.042	0.010	-	-	0.100	(0.118)
A 2014	0.088	0.027	0.006	-	0.003	0.106	(0.143)
A 2015	0.108	0.055	0.005	-	0.003	0.110	(0.150)
A 2016	0.146	0.048	-	-	-	0.105	(0.134)
A 2017	0.105	0.035	-	-	-	0.085	(0.139)
A 2018	0.084	0.032	-	-	-	0.092	(0.141)
F 2019	0.084	0.031	-	-	-	0.097	(0.138)
F 2020	0.091	0.031	-	-	-	0.103	(0.139)
F 2021	0.086	0.031	-	-	-	0.109	(0.139)
F 2022	0.087	0.031	-	-	-	0.116	(0.139)
F 2023	0.088	0.031	-	-	-	0.123	(0.139)

Revenue Projection



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	0.30	0.32	0.29	0.32	0.33	0.37	0.26	0.33	0.24	0.30	0.28	0.31	0.34	0.28	0.26	0.28	0.30	0.31
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Economic Development Trust Interest

Revenue Description

The Economic Development trust is one of several trusts set up with money from the coal severance tax. The interest money from this fund is used primarily for economic development by local governments and certified regional and economic development organizations. The deposits of coal severance tax revenue to this fund terminate at the end of FY 2025. For more information on the coal permanent trust earnings and distributions, see the chart in the Coal Severance Tax section.

Article IX, Section 5 of the Montana Constitution requires that 50% of all coal severance tax revenue be deposited in a permanent coal trust fund in which appropriation of the principal requires a three-fourths vote of each house of the legislature. Coal severance tax funds flowing into the trust fund are first used to secure and subsidize state bonds issued to finance water resource and renewable resource development projects and activities. The remaining funds are then split 25% (12.5% of total revenue) to the Big Sky Economic Development trust fund and the remaining 75% (37.5% of total revenue) to the School Facilities Fund under passage of SB 260 (2017 Session).

Statutory Reference

Distribution – Montana Constitution, Article IX, Section 5; 17-5-703 (5b), MCA; 90-1-205, MCA
Date Due – Monthly (17-5-703(5b), MCA)

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

Interest earnings are deposited to a state special revenue fund and are statutorily appropriated to the Department of Commerce to pay administrative expenses with the remainder for:

- 75% to local governments to be used for job creation; and
- 25% to certified regional development corporations and economic development organizations

Forecast Risks

- Short and long-term interest rates
- Bond rates
- Coal price and production

Revenue Estimate Methodology

Data

The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future interest rates are provided by the BOI and historic interest collections are obtained from SABHRS.

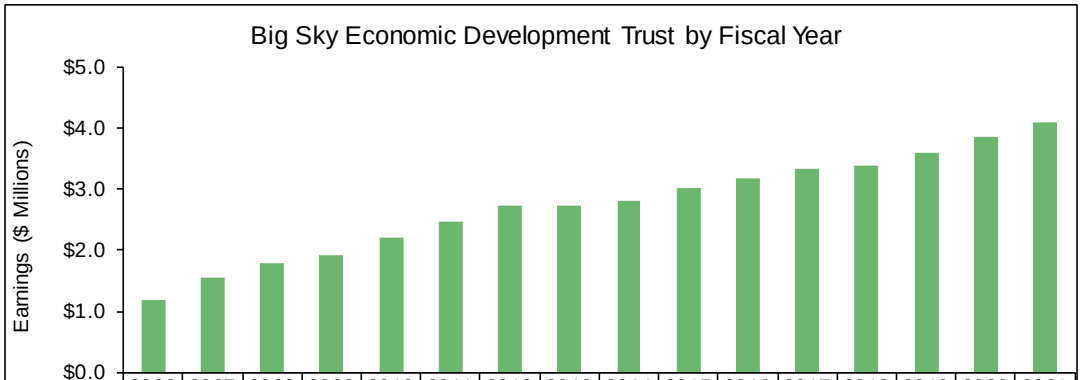
Analysis

Each of the following interest or income components are estimated independently and combined to produce the overall estimate:

- Trust funds bond pool (TFBP)
- Short-term investment pool (STIP)
- New trust deposits

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. TFBP earnings are the largest source of earnings for the trust, as shown in the figure below. TFBP

earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	1.2	1.6	1.8	1.9	2.2	2.5	2.7	2.7	2.8	3.0	3.2	3.3	3.4	3.6	3.9	4.1
Balance	25	29	38	43	50	60	71	76	83	93	99	106	109	112	116	119

STIP interest is earned on the temporary investment of trust funds. Funds are acquired from activities such as new deposits and investment sales. Funds are held in STIP until the BOI determines that conditions are favorable for deposit in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

Coal severance tax distributions to the trust are considered new deposits. New deposits are transferred to the trust on a quarterly basis. When the BOI receives the coal tax transfer, the funds are immediately invested in STIP. Funds are expected to remain in STIP for one month before being invested in the TFBP. These new trust deposits are forecast using estimates of coal severance tax collections.

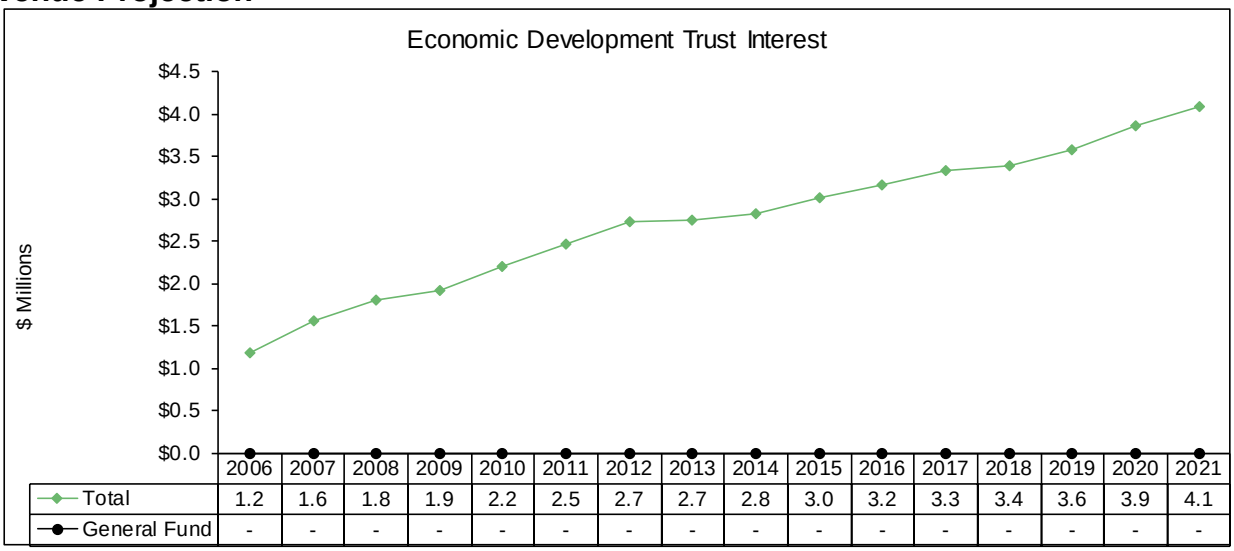
Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Invested Balance $ Millions	TFBP Long Term Rate
A 2008	$1.801	-	$1.738	$0.063	$34.469	5.0%
A 2009	1.925	-	1.867	0.059	41.019	4.6%
A 2010	2.196	-	2.185	0.011	46.779	4.7%
A 2011	2.472	-	2.459	0.013	53.499	4.6%
A 2012	2.731	-	2.711	0.020	58.549	4.6%
A 2013	2.745	-	2.722	0.023	65.999	4.1%
A 2014	2.822	-	2.807	0.015	72.749	3.9%
A 2015	3.022	-	3.009	0.014	82.292	3.7%
A 2016	3.171	-	3.126	0.045	87.999	3.6%
A 2017	3.326	-	3.227	0.099	94.349	3.4%
A 2018	3.387	-	3.229	0.158	98.849	3.3%
F 2019	3.588	-	3.326	0.248	102.331	3.3%
F 2020	3.858	-	3.524	0.315	105.863	3.3%
F 2021	4.090	-	3.727	0.342	109.402	3.4%
F 2022	4.298	-	3.935	0.343	112.875	3.5%
F 2023	4.604	-	4.252	0.334	116.163	3.7%

Interest Earnings — Economic Development Trust Interest

FY	Net Coal Tax New Deposit $ Millions	STIP Balance $ Millions	Non Pool STIP Rate
A 2008	$5.666	$3.215	2.0%
A 2009	6.196	2.172	2.7%
A 2010	5.522	2.976	0.4%
A 2011	6.871	4.462	0.3%
A 2012	6.593	8.401	0.2%
A 2013	7.072	9.834	0.2%
A 2014	7.210	10.158	0.1%
A 2015	7.611	10.604	0.1%
A 2016	7.545	10.815	0.4%
A 2017	7.351	11.655	0.9%
A 2018	7.512	10.044	1.6%
F 2019	6.964	10.044	2.5%
F 2020	7.065	10.044	3.1%
F 2021	7.078	10.044	3.4%
F 2022	6.945	10.044	3.4%
F 2023	6.576	10.044	3.3%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	1.2	1.6	1.8	1.9	2.2	2.5	2.7	2.7	2.8	3.0	3.2	3.3	3.4	3.6	3.9	4.1
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parks Trust Interest

Revenue Description
The Parks Trust is one of several trusts set up with money from the coal severance tax. Income from the parks trust must be appropriated for the acquisition, development, operation, and maintenance of state parks, state recreational areas, state monuments, and state historical sites under control of the Department of Fish, Wildlife and Parks (FWP). For more information on the coal permanent trust earnings and distributions, see the chart in the Coal Severance Tax section.

Statutory Reference
Distribution – 15-35-108(4), MCA

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution
Interest earnings on the parks trust are allocated to FWP and deposited to a state special revenue fund.

Forecast Risks
- Short- and long-term interest rates
- Bond rates
- Coal price and production

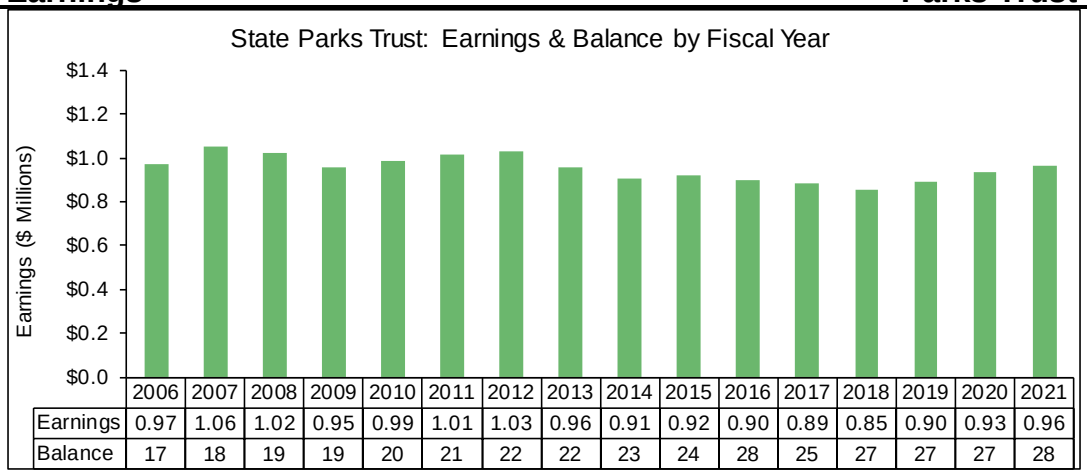
Revenue Estimate Methodology
Data

The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future interest rates are provided by the BOI and historic interest collections are obtained from SABHRS.

Analysis

Each of the following interest or income components are estimated independently and combined to produce the overall estimate:
- Trust funds bond pool (TFBP)
- Short-term investment pool (STIP)
- New trust deposits

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. TFBP earnings are the largest source of earnings for the trust, as shown in the figure below. TFBP earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.



STIP interest is earned on the temporary investment of trust funds. Funds are acquired from activities such as new deposits and investment sales. Funds are held in STIP until the BOI determines that conditions are favorable for deposit in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

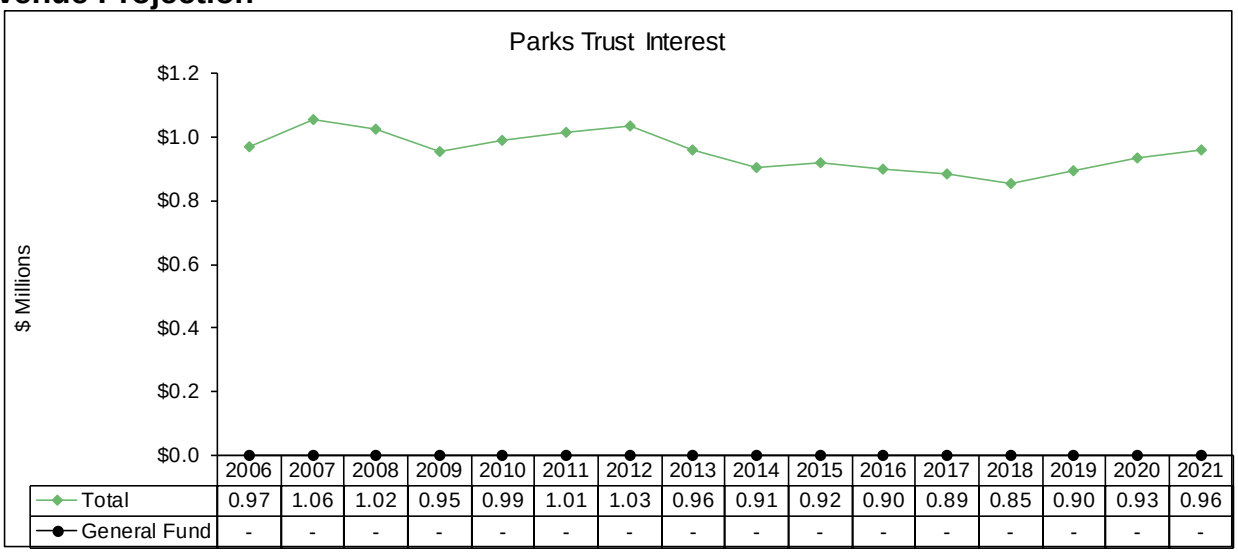
The 1.27% coal severance tax distribution to the parks trust is considered new deposits. New deposits are transferred to the trust on a quarterly basis. When the BOI receives the coal tax transfer, the funds are immediately invested in STIP. These new trust deposits are based on estimates of coal severance tax collections.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Invested Balance $ Millions	TFBP Long Term Rate
A 2008	$1.025	-	$1.008	$0.017	$18.436	5.6%
A 2009	0.954	-	0.951	0.003	19.146	5.1%
A 2010	0.989	-	0.989	0.001	19.711	5.1%
A 2011	1.014	-	1.013	0.001	20.551	5.0%
A 2012	1.034	-	1.033	0.001	21.301	4.9%
A 2013	0.959	-	0.958	0.001	22.001	4.4%
A 2014	0.906	-	0.905	0.001	22.159	4.1%
A 2015	0.919	-	0.919	0.001	23.676	4.0%
A 2016	0.900	-	0.897	0.003	23.676	3.8%
A 2017	0.885	-	0.872	0.003	23.986	3.7%
A 2018	0.853	-	0.840	0.012	24.986	3.4%
F 2019	0.895	-	0.849	0.046	25.295	3.4%
F 2020	0.932	-	0.873	0.059	25.607	3.4%
F 2021	0.962	-	0.898	0.064	25.918	3.5%
F 2022	0.987	-	0.923	0.064	26.223	3.5%
F 2023	1.042	-	0.980	0.062	26.508	3.7%

	FY	Net Coal Tax New Deposit $ Millions	STIP Balance $ Millions	Non Pool STIP Rate
A	2008	$0.576	$0.133	5.3%
A	2009	0.629	0.138	2.0%
A	2010	0.561	0.242	0.3%
A	2011	0.698	0.252	0.3%
A	2012	0.670	0.289	0.3%
A	2013	0.718	0.551	0.3%
A	2014	0.732	0.994	0.2%
A	2015	0.773	0.499	0.1%
A	2016	0.767	0.937	0.4%
A	2017	0.747	1.265	0.3%
A	2018	0.763	1.822	0.8%
F	2019	0.618	1.822	2.5%
F	2020	0.624	1.822	3.1%
F	2021	0.623	1.822	3.4%
F	2022	0.609	1.822	3.4%
F	2023	0.571	1.822	3.3%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	0.97	1.06	1.02	0.95	0.99	1.01	1.03	0.96	0.91	0.92	0.90	0.89	0.85	0.90	0.93	0.96
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Pine Hills Interest and Income

Revenue Description

The Pine Hills trust is a fund set up for the support of the Pine Hills youth correctional facility using income generated from state land and the subsequent interest on the account. Lands granted by the federal government to the state for the benefit of public schools and various state institutions generate income through rents or crop shares for agricultural purposes, royalties from the sale of mineral rights, and sales of timber. Up to 25% of distributable revenue may be diverted to the trust land administration account to fund the Department of Natural Resources & Conservation (DNRC) administrative costs.

Statutory Reference

Distribution – 17-3-1003, MCA
Enabling Act, Sections 11 & 17
Other – DNRC trust land administration diversion (77-1-108, MCA & 77-1-109, MCA)
DNRC land bank administration diversion (77-2-362, MCA)

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

Interest and income from the trust, net of amounts to fund DNRC administration, is allocated to the Department of Corrections for support of the Pine Hills youth correctional facility.

Forecast Risks

- Short- and long-term interest rates
- Bond rates

Revenue Estimate Methodology

Data

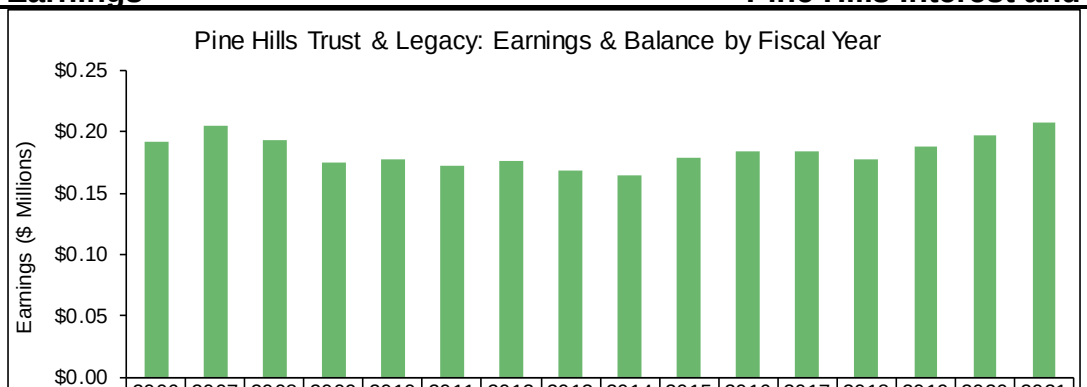
SABHRS data provide a history of each individual interest and income revenue component; DNRC annual reports and other data provide additional information such as mineral production and timber estimates; and DNRC estimates for operating costs are used for the forecast diversion amounts.

Analysis

Trust and Legacy Earnings: The monetary assets of the trust are pooled with monetary assets of other land trusts in the T & L and invested by the Board of Investments in the trust funds bond pool. Based on the number of share each trust owns, a share of the earnings is deposited in each trust. The Pine Hills trust share is 0.8%. The total pool earnings is a sum of the following:

- Earnings from new deposits – New deposits in the pool initially earn interest at the short-term rate before it is invested in a longer-term investment. IHS Markit forecasts for short-term interest rates are used to project these interest earnings.
- Earnings from existing balance – The majority of these funds have been invested in bonds purchased over the past several years. Estimated return rates from the BOI are applied to the current and forecast trust balance to calculate the estimate.
- Non-portfolio earnings – Money not invested in the trust funds bond pool earns interest at the short-term rate.

Once the total amount of the pool earnings has been estimated by summing the above three items, it is multiplied by the Pine Hills trust share of 0.8%.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	0.19	0.20	0.19	0.17	0.18	0.17	0.18	0.17	0.16	0.18	0.18	0.18	0.18	0.19	0.20	0.21
Balance	423	428	439	441	445	465	498	531	578	613	635	651	668	690	712	733

Remaining revenue sources such as grazing and agricultural fees, as well as mineral royalties and oil and gas leases are typically estimated using a time series or assuming no growth from the previous fiscal year.

Future diversion amounts are based on estimates from the DNRC and are assumed to be funded with distributable revenue.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Pine Hills Share T&L	Pine Hills T&L Interest $ Millions
A 2008	$0.435	-	$25.160	$0.129	0.8%	$0.194
A 2009	0.437	-	22.711	0.066	0.8%	0.175
A 2010	0.263	-	22.916	0.018	0.8%	0.177
A 2011	0.326	-	23.194	0.033	0.7%	0.173
A 2012	0.393	-	24.175	0.028	0.7%	0.176
A 2013	0.305	-	23.189	0.022	0.7%	0.168
A 2014	0.345	-	23.042	0.007	0.7%	0.164
A 2015	0.357	-	24.044	0.003	0.7%	0.178
A 2016	0.392	-	23.894	0.004	0.8%	0.184
A 2017	0.387	-	23.612	0.013	0.8%	0.184
A 2018	0.339	-	22.923	0.033	0.8%	0.177
F 2019	0.412	-	22.915	0.186	0.8%	0.187
F 2020	0.448	-	24.078	0.236	0.8%	0.198
F 2021	0.464	-	25.259	0.256	0.8%	0.207
F 2022	0.491	-	26.469	0.257	0.8%	0.217
F 2023	0.526	-	28.583	0.250	0.8%	0.233

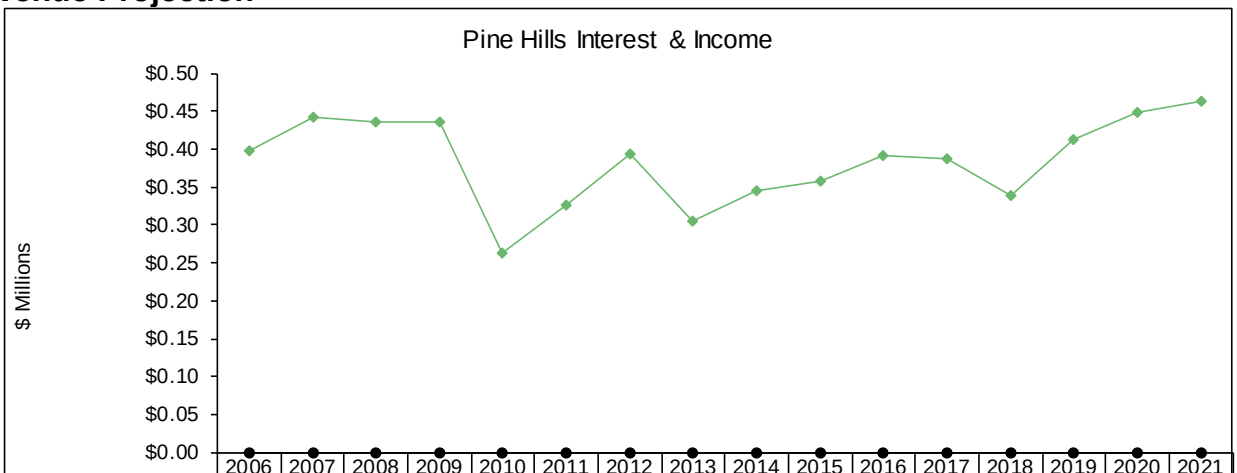
Interest Earnings

Pine Hills Interest and Income

FY	Trust Income New Deposit $ Millions	TFBP Long Term Rate	Non Pool STIP Rate	Non Pool STIP Bal $ Millions	T&L Balance $ Millions
A 2008	$3.102	5.8%	3.1%	$2.461	$439.153
A 2009	4.126	5.2%	1.0%	4.161	441.153
A 2010	10.710	5.2%	0.2%	11.340	444.653
A 2011	22.233	5.1%	0.1%	15.565	464.553
A 2012	31.633	5.0%	0.1%	11.492	498.053
A 2013	35.482	4.5%	0.1%	13.436	531.053
A 2014	35.440	4.2%	0.1%	2.546	578.053
A 2015	26.197	4.0%	0.1%	2.927	612.524
A 2016	20.343	3.8%	0.3%	2.585	634.528
A 2017	16.456	3.7%	0.7%	5.141	650.603
A 2018	17.678	3.5%	1.5%	7.514	667.803
F 2019	24.658	3.3%	2.5%	7.514	689.808
F 2020	24.178	3.4%	3.1%	7.514	711.517
F 2021	23.691	3.4%	3.4%	7.514	732.773
F 2022	24.063	3.5%	3.4%	7.514	754.319
F 2023	23.933	3.7%	3.3%	7.514	775.783

FY	Grazing $ Millions	Agriculture $ Millions	Misc. Fees $ Millions	Oil & Gas Lease $ Millions	Oil & Gas Bonus $ Millions	Oil & Gas Penalty $ Millions	TLMD Adm. $ Millions
A 2004	$0.093	$0.039	$0.097	$0.012	-	$0.008	-
A 2005	0.093	0.021	0.092	0.022	-	0.010	-
A 2006	0.084	0.024	0.106	0.025	-	0.005	($0.158)
A 2007	0.080	0.023	0.135	0.024	$0.000	0.002	(0.112)
A 2008	0.100	0.030	0.147	0.033	0.047	0.005	(0.115)
A 2009	0.124	0.017	0.151	0.031	-	0.009	(0.195)
A 2010	0.142	0.025	0.149	0.029	-	0.016	(0.178)
A 2011	0.178	0.018	0.157	0.015	0.002	0.013	(0.188)
A 2012	0.238	0.027	0.158	0.001	0.002	0.002	(0.191)
A 2013	0.174	0.018	0.169	-	-	-	(0.143)
A 2014	0.138	0.037	0.196	-	-	-	(0.158)
A 2015	0.138	0.036	0.209	-	-	-	(0.158)
A 2016	0.149	0.036	0.223	-	-	-	(0.158)
F 2017	0.142	0.036	0.238	-	-	-	(0.158)
F 2018	0.143	0.036	0.254	-	-	-	(0.158)
F 2019	0.145	0.036	0.271	-	-	-	(0.158)

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	0.40	0.44	0.43	0.44	0.26	0.33	0.39	0.30	0.34	0.36	0.39	0.39	0.34	0.41	0.45	0.46
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Regional Water Trust Interest

Revenue Description

The Regional Water trust is one of several trusts set up with money from the coal severance tax. Interest earned on the fund is used to provide matching funds to plan and construct regional drinking water systems in Montana and fund state and local entity administrative expenses. Except for administrative expenses, state funds must be matched equally by local funds. The funds in the account are further restricted to finance regional drinking water systems from the waters of the Tiber reservoir and the Missouri River within specific geographic areas.

The fund previously received 25% of the coal severance tax distribution to the coal trust fund. The deposit of coal severance tax revenue to this fund terminated at the end of FY 2016. For more information on the coal permanent trust earnings and distributions, see the chart in the Coal Severance Tax section.

Statutory Reference

Distribution – Montana Constitution, Article IX, Section 5; 17-5-703 (4b), MCA; 90-6-715, MCA
Date Due – Monthly (17-5-703(4d), MCA)

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

Interest earnings are deposited to a state special revenue fund and appropriated to the Department of Natural Resources and Conservation to fund eligible projects and pay administrative expenses.

Forecast Risks

- Short and long-term interest rates
- Bond rates
- Coal price and production

Revenue Estimate Methodology

Data

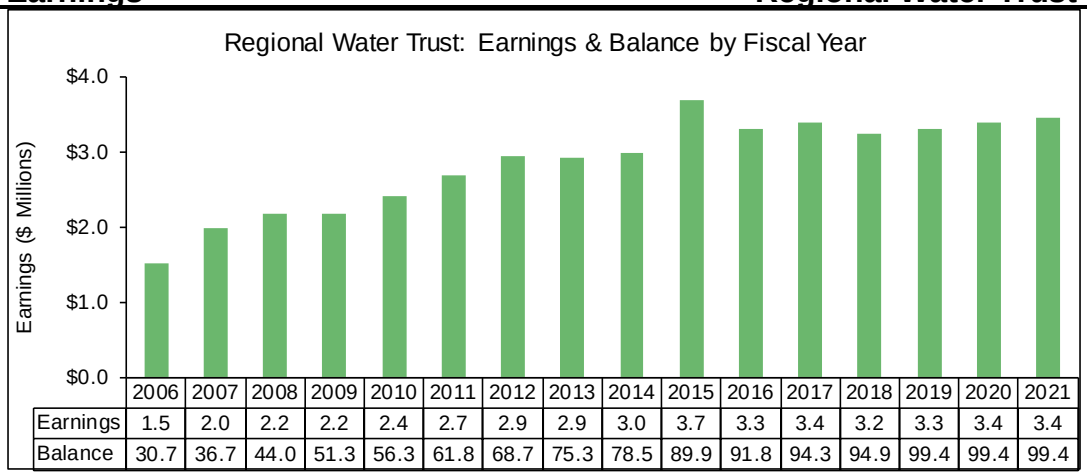
The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future interest rates are provided by the BOI and historic interest collections are obtained from SABHRS.

Analysis

Each of the following interest or income components are estimated independently and combined:

- Trust fund bond pool (TFBP)
- Short-term investment pool (STIP)
- New trust deposits

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. TFBP earnings are the largest source of earnings for the trust, as shown in the figure below. TFBP earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.



The regional water trust was projected to sunset at the end of FY 2016. However, HB 180 (2015 Session) extended the sunset of the trust until the end of FY 2031.

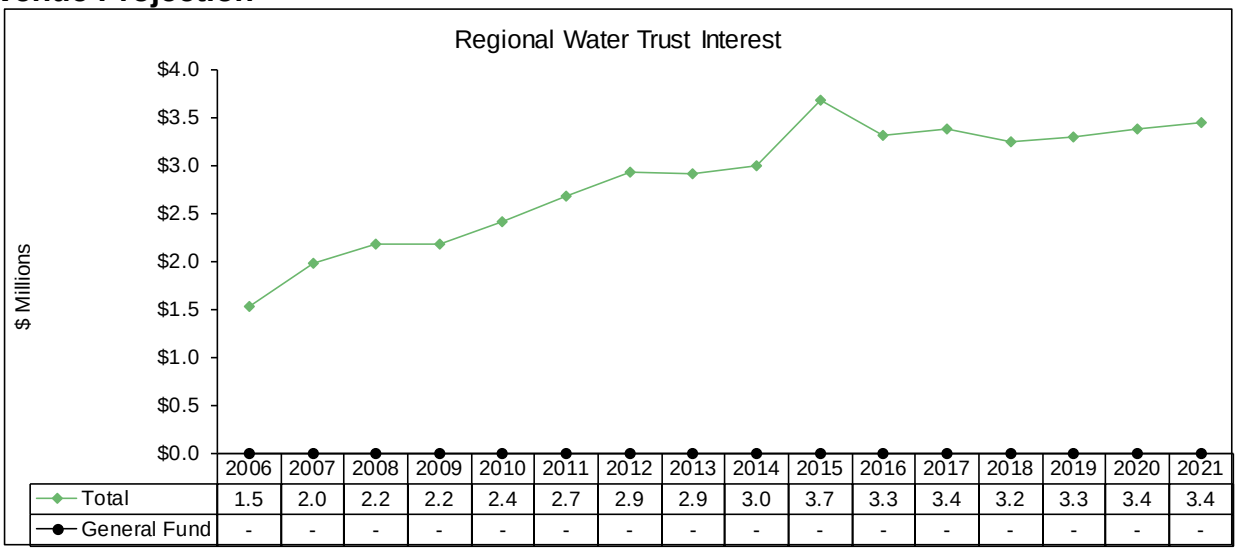
STIP interest is earned on the temporary investment of trust funds. Funds are acquired from activities such as new deposits and investment sales. Funds are held in STIP until the BOI determines that conditions are favorable for deposit in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Invested Balance $ Millions	TFBP Long Term Rate
A 2008	$2.175	-	$1.970	$0.205	$38.247	5.6%
A 2009	2.179	-	2.073	0.105	44.807	5.0%
A 2010	2.419	-	2.393	0.025	50.572	5.0%
A 2011	2.685	-	2.664	0.021	57.292	4.9%
A 2012	2.937	-	2.913	0.023	62.342	4.9%
A 2013	2.912	-	2.896	0.016	70.292	4.4%
A 2014	2.993	-	2.988	0.006	76.542	4.1%
A 2015	3.680	-	3.176	0.003	84.792	3.9%
A 2016	3.307	-	3.285	0.022	91.792	3.7%
A 2017	3.379	-	3.341	0.038	94.292	3.6%
A 2018	3.246	-	3.173	0.044	94.862	3.4%
F 2019	3.302	-	3.189	0.113	94.862	3.4%
F 2020	3.382	-	3.240	0.143	94.862	3.4%
F 2021	3.446	-	3.291	0.155	94.862	3.5%
F 2022	3.496	-	3.341	0.155	94.862	3.5%
F 2023	3.659	-	3.508	0.151	94.862	3.7%

FY	Net Coal Tax New Deposit $ Millions	STIP Balance $ Millions	Non Pool STIP Rate
A 2008	$5.666	$5.611	4.3%
A 2009	6.196	6.786	1.7%
A 2010	5.522	5.488	0.4%
A 2011	6.871	7.188	0.3%
A 2012	6.593	7.198	0.3%
A 2013	7.072	4.646	0.3%
A 2014	7.210	1.958	0.2%
A 2015	7.611	3.094	0.1%
A 2016	7.545	6.143	0.5%
A 2017	-	0.709	1.1%
A 2018	-	4.550	1.7%
F 2019	-	4.550	2.5%
F 2020	-	4.550	3.1%
F 2021	-	4.550	3.4%
F 2022	-	4.550	3.4%
F 2023	-	4.550	3.3%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	1.5	2.0	2.2	2.2	2.4	2.7	2.9	2.9	3.0	3.7	3.3	3.4	3.2	3.3	3.4	3.4
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Resource Indemnity Trust Interest

Revenue Description

The Resource Indemnity Trust was set up from resource extraction taxes. The interest money from this fund is used for a variety of purposes focusing on natural resource and environmental projects. For more information, see the LFD brochure.

Article IX, Section 2 of the Montana Constitution and Title 15, Chapter 38, MCA, requires that certain resource extraction taxes, as determined by the legislature, be placed in a trust. The principal of the Resource Indemnity Trust (RIT), up to $100 million, cannot be appropriated and is guaranteed by the state against loss or diversion. The principal of the trust reached $100 million in FY 2003, and subsequently no longer receives additional tax deposits. Interest earnings on the RIT are spent to improve the total environment and rectify damage to the environment. It was also the legislature's intent that the use of interest earnings for operations of state government be minimized.

Statutory Reference

Distribution – Montana Constitution, Article IX, Section 2; 15-38-202(2), MCA; 15-38-203, MCA

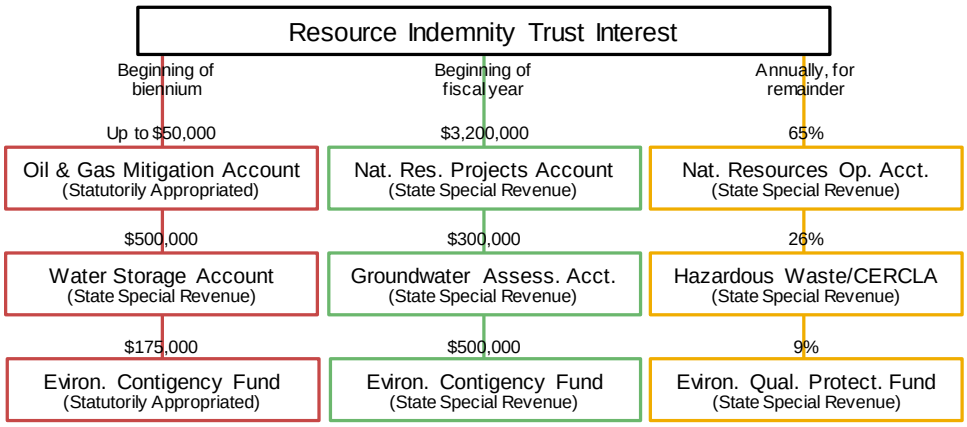
Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

Statute allocates RIT interest earnings in the following manner:

1) At the beginning of the biennium, an amount not to exceed $50,000 to the oil and gas mitigation account to bring the balance up to $200,000
2) At the beginning of the biennium, $500,000 to the water storage state special revenue account
3) At the beginning of the biennium, $175,000 to the environmental contingency fund
4) $3.2 million annually to the natural resources projects state special revenue account
5) $300,000 annually to the ground water assessment account
6) $500,000 annually to the future fisheries program for bull trout and cutthroat trout recovery
7) Of the remaining RIT interest earnings:
    a) 65% to the natural resources operations state special revenue account
    b) 26% to the hazardous waste/CERCLA state special revenue account
    c) 9% to the environmental quality protection state special revenue fund



Forecast Risks

- Short and long-term interest rates

Revenue Estimate Methodology

Data

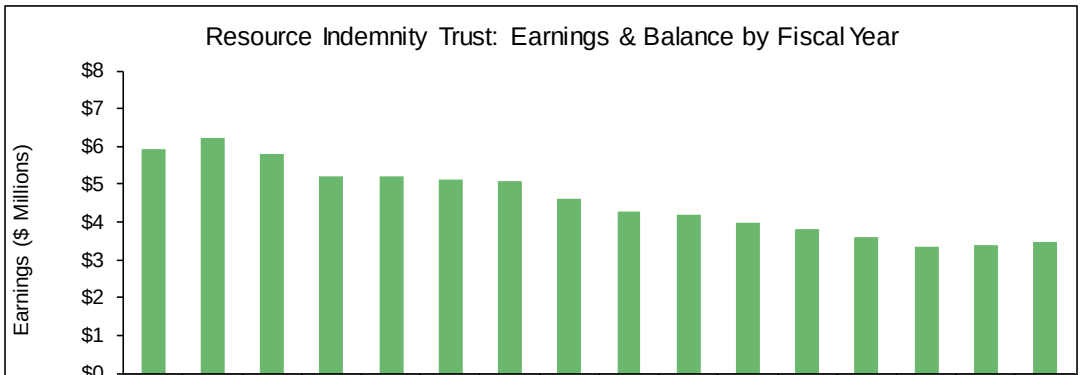
The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future interest rates are provided by the BOI and IHS Markit, and historic interest collections are obtained from SABHRS.

Analysis

Each of the following interest or income components are estimated independently and combined:

- Trust funds bond pool (TFBP)
- Short-term investment pool (STIP)

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. TFBP earnings are the largest source of earnings for the trust, as shown in the figure below. TFBP earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	5.9	6.2	5.8	5.2	5.2	5.1	5.1	4.6	4.3	4.2	4.0	3.8	3.6	3.4	3.4	3.5
Balance	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

STIP interest (including other interest) is earned on cash, prior to investment in long-term investments. Funds are acquired from new deposits and/or maturing securities in the forecast period. Funds are held in STIP until the BOI determines that conditions are favorable for investment in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Invested Balance $ Millions	TFBP Long Term Rate	Net Tax New Deposit $ Millions
A 2008	$5.801	-	$5.786	$0.015	$100.000	5.8%	-
A 2009	5.197	-	5.191	0.006	100.000	5.2%	-
A 2010	5.213	-	5.212	0.001	100.000	5.2%	-
A 2011	5.135	-	5.133	0.001	100.000	5.1%	-
A 2012	5.064	-	5.062	0.001	100.000	5.1%	-
A 2013	4.602	-	4.601	0.001	100.000	4.6%	-
A 2014	4.296	-	4.296	0.000	100.000	4.3%	-
A 2015	4.175	-	4.176	0.000	100.000	4.2%	-
A 2016	3.973	-	3.972	0.001	100.000	4.0%	-
A 2017	3.818	-	3.817	0.000	100.000	3.8%	-
A 2018	3.618	-	3.617	0.001	100.000	3.6%	-
F 2019	3.356	-	3.355	0.001	100.000	3.4%	-
F 2020	3.411	-	3.410	0.001	100.000	3.4%	-
F 2021	3.466	-	3.465	0.001	100.000	3.5%	-
F 2022	3.521	-	3.520	0.001	100.000	3.5%	-
F 2023	3.697	-	3.696	0.001	100.000	3.7%	-

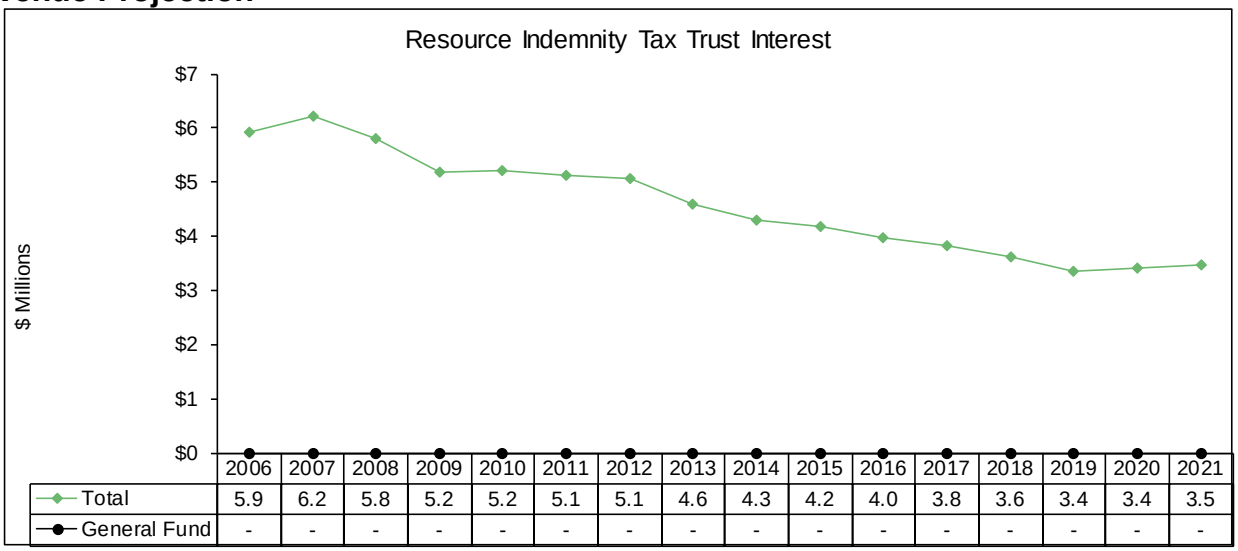
FY	STIP Balance $ Millions	Non Pool STIP Rate	Hazardous Waste $ Millions	Environmental Quality $ Millions	Renewable Resource $ Millions	Reclamation Development $ Millions
A 2008	$0.504	2.5%	$0.202	$0.070	$0.000	$0.000
A 2009	0.484	1.2%	0.188	0.065	-	-
A 2010	0.434	0.3%	0.049	0.017	-	-
A 2011	0.442	0.3%	0.217	0.075	-	-
A 2012	0.420	0.3%	0.048	0.017	-	-
A 2013	0.366	0.2%	0.078	0.027	-	-
A 2014	0.023	0.2%	-	-	-	-
A 2015	0.023	1.7%	-	-	-	-
A 2016	0.023	5.0%	-	-	-	-
A 2017	0.023	0.8%	-	-	-	-
A 2018	0.023	1.5%	-	-	-	-
F 2019	0.023	2.5%	-	-	-	-
F 2020	0.023	3.1%	-	-	-	-
F 2021	0.023	3.4%	-	-	-	-
F 2022	0.023	3.4%	-	-	-	-
F 2023	0.023	3.3%	-	-	-	-

Interest Earnings

Resource Indemnity Trust Interest

FY	Environmental Contingency $ Millions	Water Storage $ Millions	Oil & Gas Receipts $ Millions	FWP Receipts $ Millions	Groundwater Receipts $ Millions	NR Operation Receipts $ Millions	NR Projects Receipts $ Millions
A 2008	$0.175	$0.500	$0.050	$0.500	$0.300	$0.504	$3.500
A 2009	0.175	-	-	0.500	0.300	0.469	3.500
A 2010	0.175	0.500	0.050	0.500	0.300	0.122	3.500
A 2011	-	-	-	0.500	0.300	0.542	3.500
A 2012	0.028	0.500	0.050	0.500	0.300	0.121	3.500
A 2013	-	-	-	0.500	0.300	0.196	3.500
A 2014	0.151	0.432	-	0.432	0.259	-	3.022
A 2015	-	-	-	0.486	0.291	-	3.399
A 2016	0.085	0.377	0.491	0.377	0.226	-	2.416
A 2017	-	-	-	0.477	0.286	-	3.054
A 2018	0.131	0.373	0.131	0.373	0.224	-	2.387
F 2019	-	-	-	0.419	0.252	-	2.684
F 2020	0.112	0.320	0.416	0.320	0.192	-	2.050
F 2021	-	-	-	0.433	0.260	-	2.773
F 2022	0.116	0.331	0.416	0.331	0.198	-	2.116
F 2023	-	-	-	0.462	0.277	-	2.957

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	5.9	6.2	5.8	5.2	5.2	5.1	5.1	4.6	4.3	4.2	4.0	3.8	3.6	3.4	3.4	3.5
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

School Facilities Trust Interest

Revenue Description

The School Facilities trust is one of several trusts set up with money from the coal severance tax. The interest money from this fund is used for school facility projects authorized by the legislature. The deposits of coal severance tax revenue to this fund terminate when the size of the balance of the fund reaches $200 million, at which point the distribution reverts to the permanent fund. For more information on the coal permanent trust earnings and distributions, see the chart in the Coal Severance Tax section.

Article IX, Section 5 of the Montana Constitution requires that 50% of all coal severance tax revenue be deposited in a permanent coal trust fund in which appropriation of the principal requires a three-fourths vote of each house of the legislature. Coal severance tax funds flowing into the trust fund are first used to secure and subsidize state bonds issued to finance water resource and renewable resource development projects and activities. The remaining funds are then split 25% (12.5% of total revenue) to the Big Sky Economic Development trust fund and the remaining 75% (37.5% of total revenue) to the School Facilities Fund under passage of SB 260 (2017 Session).

Statutory Reference

Distribution – Montana Constitution, Article IX, Section 5; 17-5-703 (5b), MCA; 20-9-380, MCA
Date Due – Monthly (17-5-703(5b), MCA)

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

Interest earnings are deposited in the school major maintenance aid account. The purpose of the account is to provide funding for basic school facility projects.

Forecast Risks

- Short and long-term interest rates
- Bond rates
- Coal price and production

Revenue Estimate Methodology

Data

The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future interest rates are provided by the BOI and historic interest collections are obtained from SABHRS.

Analysis

Each of the following interest or income components are estimated independently and combined to produce the overall estimate:

- Trust funds bond pool (TFBP)
- Short-term investment pool (STIP)
- New trust deposits

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. TFBP earnings are the largest source of earnings for the trust. TFBP earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.

STIP interest is earned on the temporary investment of trust funds. Funds are acquired from activities such as new deposits and investment sales. Funds are held in STIP until the BOI determines that conditions are favorable for deposit in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

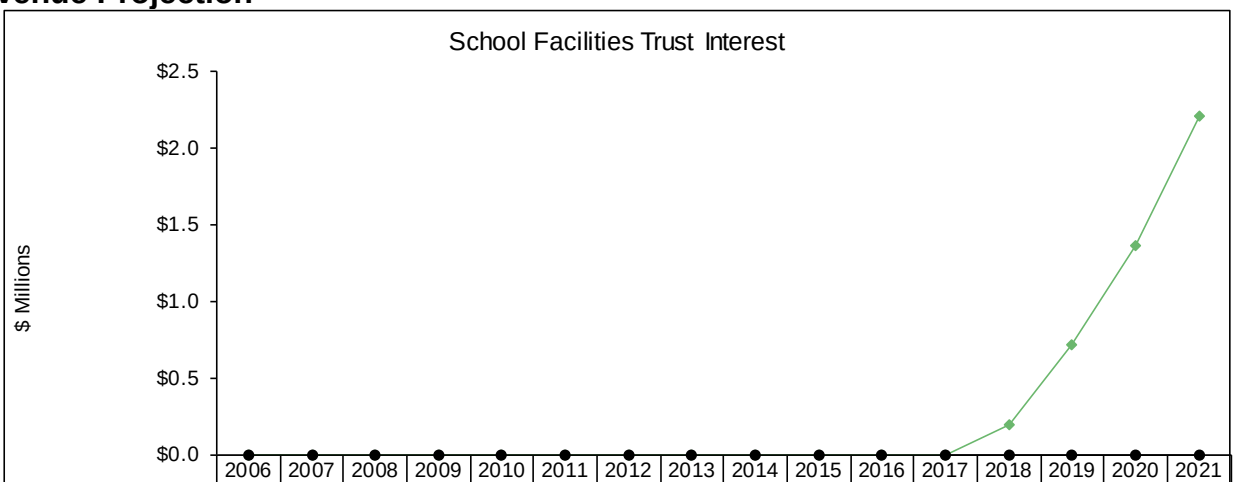
Coal severance tax distributions to the trust are considered new deposits. New deposits are transferred to the trust on a quarterly basis. When the BOI receives the coal tax transfer, the funds are immediately invested in STIP. Funds are expected to remain in STIP for one month before being invested in the TFBP. These new trust deposits are forecast using estimates of coal severance tax collections.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Loan Interest $ Millions	Invested Balance $ Millions	TFBP Long Term Rate
A 2008							
A 2009							
A 2010							
A 2011							
A 2012							
A 2013							
A 2014							
A 2015							
A 2016							
A 2017							
A 2018	$0.193	-	$0.173	$0.020	-	$22.537	3.3%
F 2019	0.720	-	0.598	0.122	-	43.428	1.4%
F 2020	1.367	-	1.212	0.156	-	64.622	1.9%
F 2021	2.207	-	2.038	0.169	-	85.855	2.4%
F 2022	3.233	-	3.064	0.169	-	106.690	2.9%
F 2023	3.973	-	3.812	0.161	-	126.419	3.0%

FY	Net Coal Tax New Deposit $ Millions	Non Pool STIP Bal $ Millions	Non Pool STIP Rate
A 2008			
A 2009			
A 2010			
A 2011			
A 2012			
A 2013			
A 2014			
A 2015			
A 2016			
A 2017			
A 2018	22.537	3.196	1.5%
F 2019	20.891	3.196	2.5%
F 2020	21.194	3.196	3.1%
F 2021	21.233	3.196	3.4%
F 2022	20.835	3.196	3.4%
F 2023	19.729	3.196	3.3%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.7	1.4	2.2
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tobacco Trust Interest

Revenue Description

The tobacco trust fund is set up with money from the tobacco settlement which included 46 states and various United States territories. In 2000, as required by constitutional amendment, the state began depositing 40% of the tobacco settlement funds into a trust. As required in statute, 10% of the trust earnings must be deposited in the trust.

This revenue source is only the interest resulting from that account (highlighted in the distribution chart); revenue from continued payments from the tobacco settlement is explained in the Tobacco Settlement section under the Other General Funds section.

Statutory Reference

Distribution – Montana Constitution Article XII, Section 4; 17-6-601, MCA; 17-6-603, MCA
Date Due – Interest deposits are mostly made monthly, but none in July and two in June

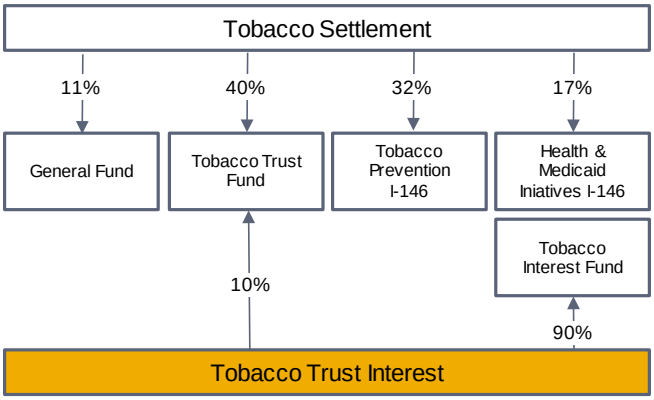
Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution

Interest earnings from the trust fund are distributed as follows

1. 90% to a state special revenue account for appropriation by the legislature for disease prevention programs (includes chronic disease programs) and state programs providing benefits, services, or coverage that are related to the health care needs of the people of Montana; and
2. 10% to the tobacco settlement trust fund



Forecast Risks

- Short and long-term interest rates

Revenue Estimate Methodology

Data

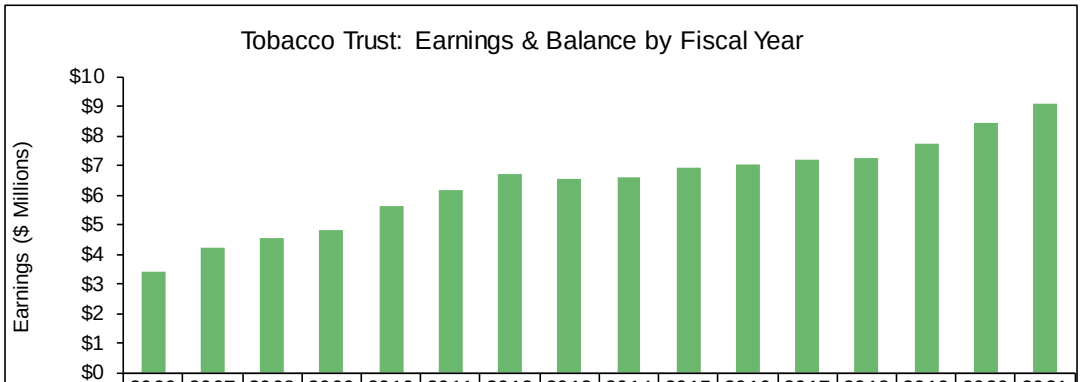
The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future interest rates are provided by the BOI and historic interest collections are obtained from SABHRS.

Analysis

Each of the following interest or income components are estimated independently and combined:

- Trust funds bond pool (TFBP)
- Short-term investment pool (STIP)
- New trust deposits

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. TFBP earnings are the largest source of earnings for the trust, as shown in the figure below. TFBP earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Earnings	3.4	4.2	4.5	4.8	5.6	6.2	6.7	6.5	6.6	6.9	7.0	7.2	7.3	7.8	8.4	9.1
Balance	68	79	93	109	122	134	147	160	174	186	198	206	217	229	239	249

STIP interest (including other interest) is earned on cash, prior to investment in long-term investments. Funds are acquired from new deposits and/or maturing securities in the forecast period. Funds are held in STIP until the BOI determines that conditions are favorable for investment in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

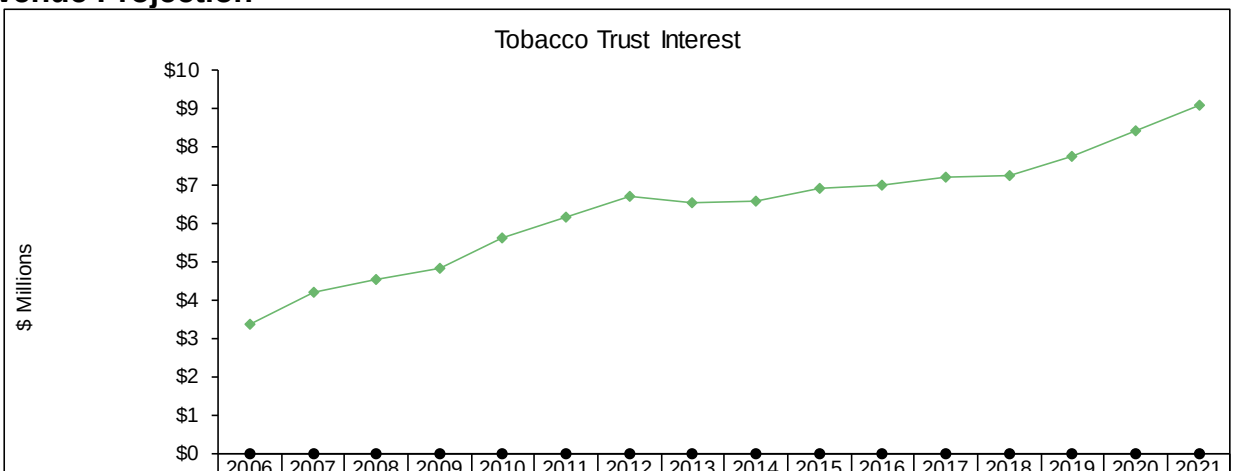
The 40% distribution of tobacco settlement funds and 10% of retained interest earnings are considered new deposits in the tobacco settlement trust. New deposits are transferred to the trust on a quarterly basis. When the BOI receives the tobacco settlement funds, they are immediately invested in STIP. Funds are expected to remain in STIP for one month before being invested in the TFBP. The interest earned on new deposits is estimated by summing STIP earnings for one month with TFBP earnings for the remainder of the year.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	90 Percent Interest $ Millions	10 Percent Interest $ Millions
A 2008	$4.546	-	$4.525	$0.021	$4.091	$0.455
A 2009	4.825	-	4.817	0.008	4.343	0.483
A 2010	5.599	-	5.597	0.002	5.039	0.560
A 2011	6.173	-	6.148	0.001	5.556	0.617
A 2012	6.701	-	6.615	0.003	6.031	0.670
A 2013	6.526	-	6.523	0.002	5.873	0.653
A 2014	6.592	-	6.591	0.001	5.933	0.659
A 2015	6.916	-	6.916	0.001	6.224	0.692
A 2016	7.009	-	7.003	0.006	6.308	0.701
A 2017	7.217	-	7.199	0.018	6.495	0.722
A 2018	7.259	-	7.100	0.064	6.533	0.726
F 2019	7.757	-	7.590	0.166	6.981	0.776
F 2020	8.413	-	8.205	0.208	7.571	0.841
F 2021	9.066	-	8.841	0.225	8.159	0.907
F 2022	9.723	-	9.498	0.225	8.751	0.972
F 2023	10.655	-	10.436	0.219	9.589	1.065

FY	Tobacco New Deposit $ Millions	TFBP Long Term Rate	Non Pool STIP Rate	Non Pool STIP Bal $ Millions	Invested Balance $ Millions
A 2008	$13.846	5.3%	4.1%	$0.537	$92.758
A 2009	15.009	4.8%	2.5%	0.098	108.678
A 2010	12.613	4.9%	1.9%	0.064	121.893
A 2011	11.850	4.8%	1.7%	0.105	134.317
A 2012	12.081	4.7%	0.3%	2.109	145.059
A 2013	12.078	4.3%	0.2%	0.294	159.609
A 2014	13.257	4.0%	0.2%	0.609	173.209
A 2015	11.727	3.9%	0.2%	0.277	185.959
A 2016	12.260	3.6%	1.1%	0.823	198.409
A 2017	12.157	3.6%	0.5%	6.507	205.604
A 2018	10.101	3.2%	1.0%	5.825	217.104
F 2019	10.894	3.2%	2.5%	5.825	234.991
F 2020	9.466	3.3%	3.1%	5.825	247.663
F 2021	9.386	3.4%	3.4%	5.825	260.335
F 2022	9.308	3.5%	3.4%	5.825	273.007
F 2023	9.231	3.7%	3.3%	5.825	285.679

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	3.4	4.2	4.5	4.8	5.6	6.2	6.7	6.5	6.6	6.9	7.0	7.2	7.3	7.8	8.4	9.1
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Treasure State Endowment Trust Interest

Revenue Description

The Treasure State Endowment Trust is one of several trusts set up with money from the coal severance tax. Interest earned on the fund is used to finance local infrastructure projects, as prioritized by the Departments of Commerce and Natural Resources and Conservation (DNRC) and authorized by the legislature via the Treasure State Endowment Program (TSEP).

This fund previously received 50% of the coal severance tax distribution to the coal trust fund. The deposit of coal severance tax revenue to this fund terminated at the end of FY 2016. For more information on the coal permanent trust earnings and distributions, see the chart in the Coal Severance Tax section.

Statutory Reference

Distribution – 17-5-703 (4c), MCA; 90-6-701(2), MCA
Date Due – Monthly (17-5-703 (4c), MCA)

Applicable Tax Rates: N/A

Collection Frequency: Monthly

Distribution: Interest earnings are allocated to the Department of Commerce to fund TSEP.

Forecast Risks

- Short and long-term interest rates
- Bond rates
- Coal price and production

Revenue Estimate Methodology

Data

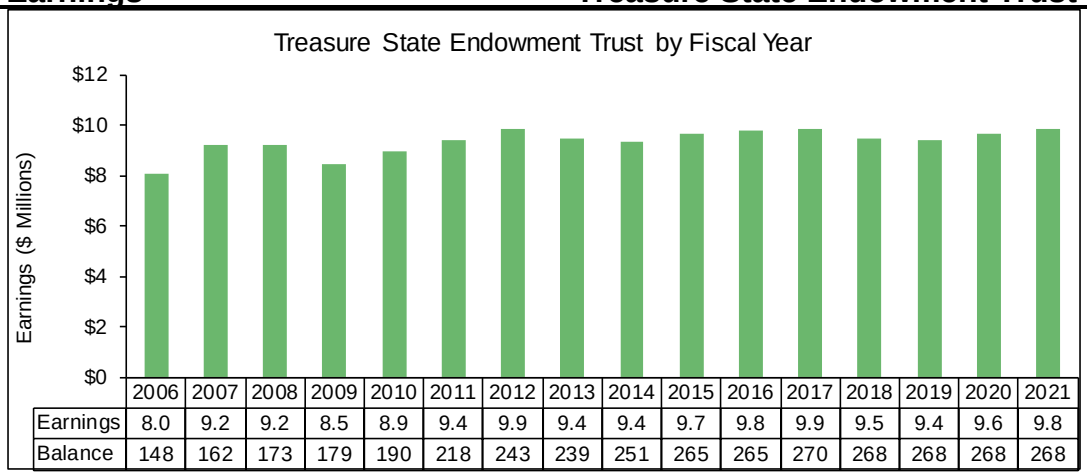
The Board of Investments (BOI) provides information on historic interest rates as well as the gains and losses from the sale of securities. Projections of future interest rates are provided by the BOI and historic interest collections are obtained from SABHRS.

Analysis

Each of the following interest or income components are estimated independently and combined:

- Trust funds bond pool (TFBP)
- In-state investments
- Short-term investment pool (STIP)
- New trust deposits

The TFBP was formed in 1995 to manage the fixed investments held in the state's major trust funds. Each trust owns "shares" of the pool and interest earnings are paid to each trust on a per-share basis. TFBP earnings are the largest source of earnings for the trust, as shown in the figure below. TFBP earnings are forecast by applying estimated return rates, provided by the BOI, to the current and forecast trust balance.



Earnings from in-state investments have historically been the second largest source of income to the TSE trust. The BOI is required by statute to invest 25% of coal tax trust in the Montana economy. In-state investments primarily consist of loans to Montana business entities and earnings are equal to the interest charged on the loans.

STIP interest (including other interest) is earned on cash, prior to investment in long-term investments. Funds are acquired from new deposits and/or maturing securities in the forecast period. Funds are held in STIP until the BOI determines that conditions are favorable for investment in the TFBP. Short-term interest forecasts from IHS Markit are applied to money not invested in the TFBP to calculate future STIP earnings.

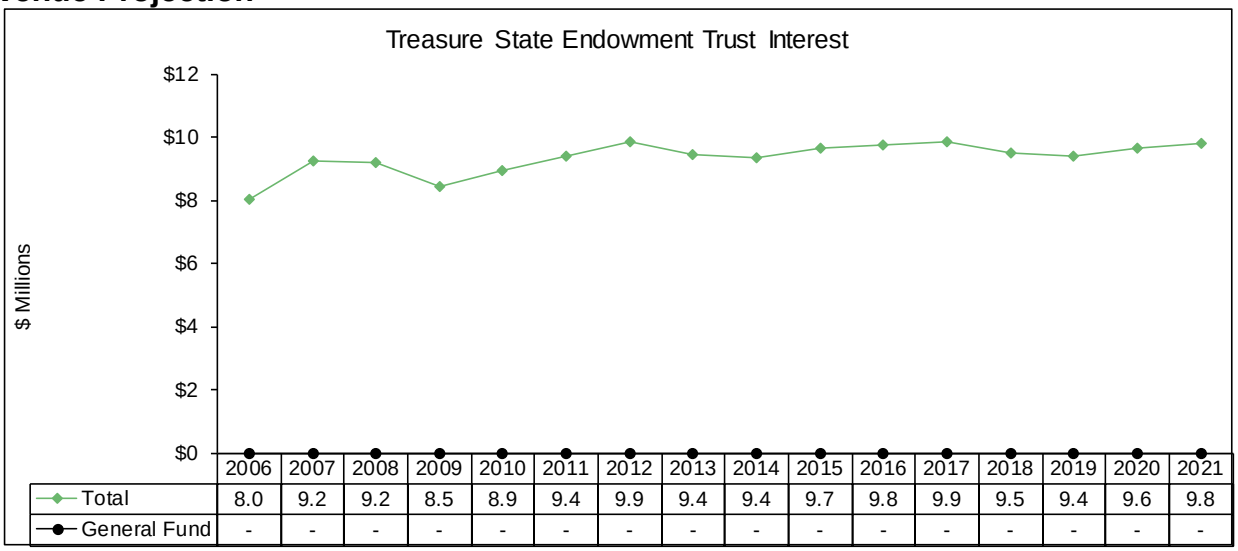
Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	TFBP Interest $ Millions	STIP Interest $ Millions	Loan Interest $ Millions	Invested Balance $ Millions	TFBP Long Term Rate
A 2008	$9.194	-	$8.296	$0.639	$0.259	$156.152	5.6%
A 2009	8.450	-	8.131	0.182	0.141	169.552	5.1%
A 2010	8.940	-	8.799	0.026	0.118	181.247	5.1%
A 2011	9.416	-	9.287	0.029	0.104	194.848	5.0%
A 2012	9.866	-	9.742	0.049	0.079	205.133	4.9%
A 2013	9.448	-	9.344	0.053	0.054	219.433	4.4%
A 2014	9.356	-	9.297	0.029	0.003	233.933	4.1%
A 2015	9.654	-	9.616	0.018	0.023	251.183	4.0%
A 2016	9.766	-	9.668	0.078	0.021	266.273	3.7%
A 2017	9.853	-	9.660	0.180	0.013	269.683	3.6%
A 2018	9.483	-	9.158	0.227	0.009	269.683	3.4%
F 2019	9.408	-	9.064	0.330	0.016	269.683	3.4%
F 2020	9.640	-	9.210	0.419	0.014	269.683	3.4%
F 2021	9.816	-	9.353	0.455	0.011	269.683	3.5%
F 2022	9.963	-	9.498	0.456	0.011	269.683	3.5%
F 2023	10.427	-	9.973	0.444	0.012	269.683	3.7%

Interest Earnings — Treasure State Endowment Trust Interest

FY	Net Coal Tax New Deposit $ Millions	Non Pool STIP Bal $ Millions	Non Pool STIP Rate	Non Pool Loan Rate	Non Pool Loan Bal $ Millions
A 2008	$11.333	$14.042	4.4%	7.5%	$2.115
A 2009	12.391	6.445	1.8%	7.3%	1.727
A 2010	11.044	5.990	0.4%	7.1%	1.561
A 2011	13.743	11.411	0.3%	6.9%	1.427
A 2012	13.186	19.140	0.3%	6.6%	0.990
A 2013	14.143	20.036	0.3%	6.8%	0.601
A 2014	14.419	19.250	0.1%	0.5%	0.461
A 2015	15.223	12.369	0.1%	5.2%	0.405
A 2016	15.090	22.190	0.5%	5.5%	0.345
A 2017	-	20.253	0.8%	4.7%	0.211
A 2018	-	13.344	1.4%	4.6%	0.177
F 2019	-	13.344	2.5%	4.4%	0.366
F 2020	-	13.344	3.1%	4.3%	0.324
F 2021	-	13.344	3.4%	4.2%	0.261
F 2022	-	13.344	3.4%	4.0%	0.263
F 2023	-	13.344	3.3%	3.9%	0.314

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	8.0	9.2	9.2	8.5	8.9	9.4	9.9	9.4	9.4	9.7	9.8	9.9	9.5	9.4	9.6	9.8
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Treasury Cash Account Interest

Revenue Description
Interest is generated by excess treasury cash being invested in short and medium-term investments. The Board of Investments (BOI) is responsible for investing all state funds. Title 17, Chapter 6, MCA, provides guidelines under which the funds must be invested. Unless specifically stated by statute, all interest earned on these investments is deposited in the general fund.

Statutory Reference
Distribution – 17-6-202(2), MCA
Date Due – Interest deposits are mostly made monthly, with two in June and none in July

Applicable Tax Rates: N/A

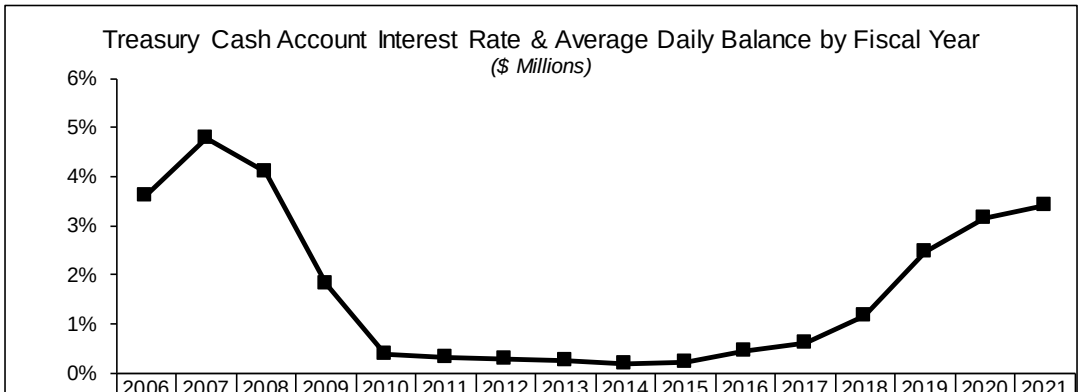
Collection Frequency: Ongoing

Distribution: All proceeds are deposited into the general fund.

Forecast Risks
- Short-term interest rates
- Average daily balance

Revenue Estimate Methodology
Data
The BOI provides monthly reports on the treasury cash account balance. Projections of future interest rates are provided by IHS Markit and historic interest collections are obtained from SABHRS.

Analysis
The average balance of the TCA is modeled off the forecast general fund ending fund balance. When cash flow is insufficient, tax revenue anticipation notes (TRANS) are issued to meet short-term cash flow needs. The term of the loan and amount borrowed are used to determine the amount to be added to the average balance calculations.



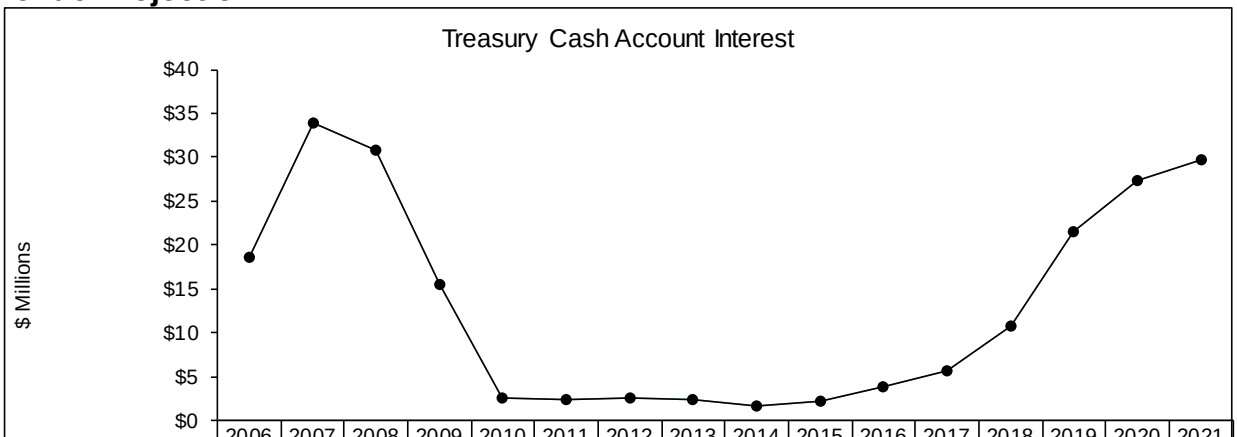
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Rate	3.6%	4.8%	4.1%	1.8%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.4%	0.6%	1.2%	2.5%	3.1%	3.4%
Balance	$311	$419	$542	$710	$751	$849	$725	$782	$880	$986	$900	$979	$905	$930	$940	$931

Short-term interest rates are estimated by based on a composite rate of IHS Markit forecasts for the 3-month commercial paper, 3-month Treasury bill, and 6-month Treasury bill rates. The average TCA balance multiplied by the composite interest rate produces total fiscal year revenue.

Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	Avg. Bal. Millions	Short-Term Interest Rate
A 2008	$30.783	$30.783	$750.831	4.1%
A 2009	15.507	15.507	849.208	1.8%
A 2010	2.692	2.692	725.341	0.4%
A 2011	2.519	2.519	781.879	0.3%
A 2012	2.654	2.654	880.340	0.3%
A 2013	2.465	2.465	986.184	0.2%
A 2014	1.756	1.756	900.464	0.3%
A 2015	2.164	2.164	978.597	0.3%
A 2016	3.961	3.961	905.493	0.5%
A 2017	5.734	5.734	930.216	0.9%
A 2018	10.888	10.888	940.191	1.7%
F 2019	21.514	21.514	930.992	2.7%
F 2020	27.318	27.318	937.098	3.3%
F 2021	29.643	29.643	928.798	3.6%
F 2022	29.722	29.722	933.459	3.6%
F 2023	28.920	28.920	934.107	3.5%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	18.6	34.0	30.8	15.5	2.7	2.5	2.7	2.5	1.8	2.2	4.0	5.7	10.9	21.5	27.3	29.6
General Fund	18.6	34.0	30.8	15.5	2.7	2.5	2.7	2.5	1.8	2.2	4.0	5.7	10.9	21.5	27.3	29.6
GF Growth	85%	82%	-9%	-50%	-83%	-6%	5%	-7%	-29%	23%	83%	45%	90%	98%	27%	9%

CONSUMPTION TAXES

- Beer Tax
- Cigarette Tax
- Diesel Tax
- Gasoline Tax
- GVW & Other Fees
- Liquor Excise & License Tax
- Liquor Profits
- Lottery Profits
- Tobacco Tax
- Video Gambling Tax
- Wine Tax

LFD
MONTANA LEGISLATIVE FISCAL DIVISION

Beer Tax

Revenue Description
A tax is levied on each barrel (31 gallons) of beer produced in or imported into Montana according to the number of barrels produced annually by a given brewer.

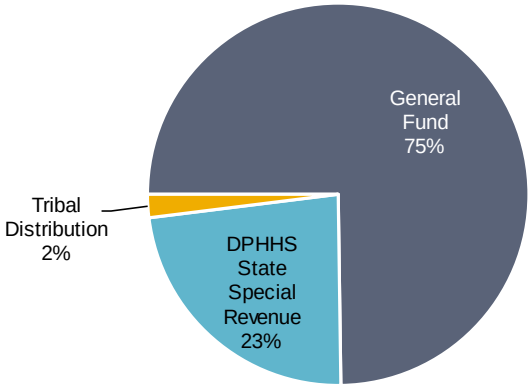
Statutory Reference
Tax Rate – 16-1-406, MCA
Distribution – 16-1-406, MCA
Date Due – end of the month and collected in the next month (16-1-406(2), MCA)

Applicable Tax Rates
The per-barrel tax varies according to number of barrels produced:

- Up to 5,000 barrels – $1.30
- 5,001 to 10,000 barrels – $2.30
- Over 10,000 barrels – $4.30

Collection Frequency: Monthly

Distribution
Beer tax revenue is distributed between the general fund, the Department of Public Health and Human Services (DPHHS) state special revenue alcohol account, and four tribal governments according to intergovernmental agreements between DOR and the tribes. Beer tax dollars are distributed to Blackfeet, Fort Belknap, Fort Peck, and Flathead according to the following formula: (per capita beer consumption) x (tribal membership) x (Montana tax rate). The following chart shows the FY 2018 distribution of beer tax revenue.



Forecasting Risks
- Change in Montana population
- Change in Montana personal consumption patterns
- Change in effective tax rate

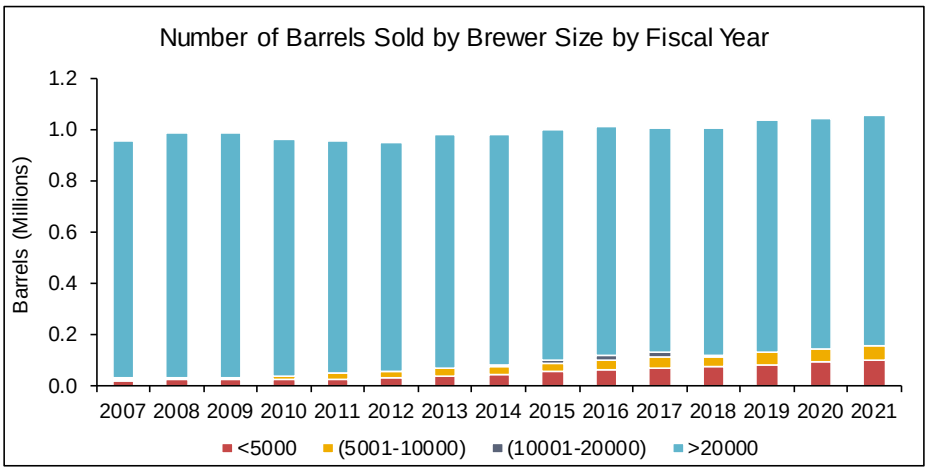
Revenue Estimate Methodology
Data

The beer tax estimate is based on data obtained from DOR, SABHRS, and IHS Markit. Details on tax collections by rate and tribal distributions are provided by DOR; fiscal year tax collections are from SABHRS; forecasts for independent economic variables are produced by IHS Markit.

Analysis

Per capita consumption—the number of proxy barrels divided by Montana population age 21 and older—is modeled on the Montana personal consumption series from IHS Markit. Future barrels are estimated by multiplying the forecast per capita consumption by forecast population. Total tax collections are calculated by multiplying the number of barrels sold in each year by the effective tax rate in that year.

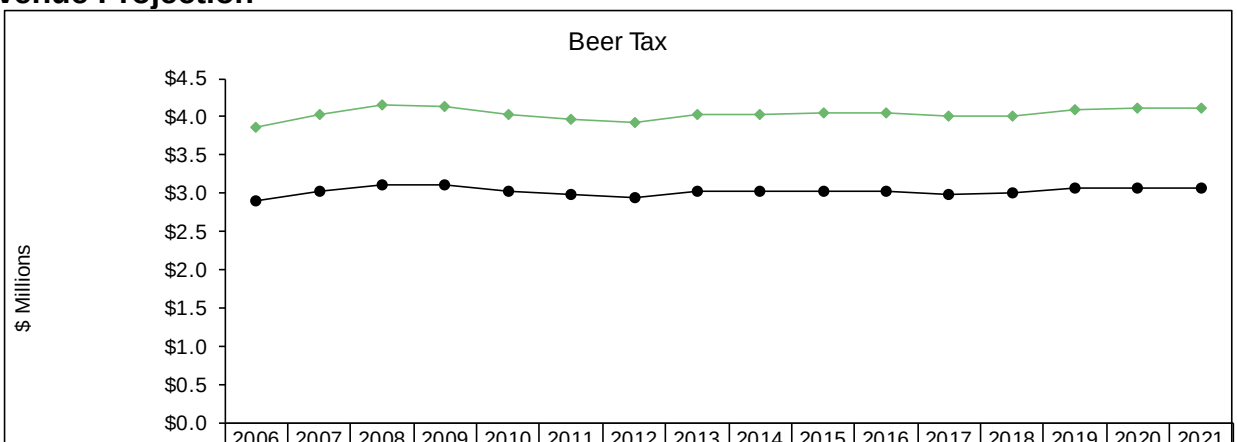
The effective tax rate is on a consistent downward trend; as the number of small brewers increases, there are more barrels being sold in the lower tax brackets. In the chart below, the number of barrels sold in each bracket is stacked to illustrate the changing composition of the beer market. The beer tax estimate assumes that the decrease in the effective rate continues through the biennium.



Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Effective Tax Rate $/Barrel	Proxy Barrels Millions	Montana Pop. >=21 Millions	Montana PCE Food $ Millions	Montana Per Capita Consumption
A 2008	$4.151	$3.124	$4.20	0.988	0.712	$2,999.108	1.388
A 2009	4.141	3.115	4.20	0.985	0.720	3,089.279	1.368
A 2010	4.032	3.032	4.19	0.962	0.727	3,173.509	1.323
A 2011	3.963	2.982	4.17	0.951	0.733	3,470.815	1.297
A 2012	3.935	2.956	4.14	0.950	0.741	3,730.703	1.283
A 2013	4.034	3.033	4.12	0.978	0.748	3,968.273	1.308
A 2014	4.021	3.023	4.10	0.981	0.755	4,185.749	1.299
A 2015	4.059	3.034	4.06	1.001	0.763	4,387.294	1.311
A 2016	4.049	3.027	4.01	1.008	0.772	4,591.746	1.306
A 2017	4.009	2.998	3.99	1.005	0.782	4,785.079	1.284
A 2018	4.015	3.002	3.99	1.006	0.791	4,986.246	1.300
F 2019	4.103	3.074	3.96	1.036	0.797	5,214.406	1.300
F 2020	4.105	3.074	3.93	1.044	0.803	5,458.645	1.301
F 2021	4.106	3.075	3.90	1.052	0.808	5,730.816	1.301
F 2022	4.105	3.075	3.88	1.059	0.813	6,004.118	1.302
F 2023	4.103	3.074	3.85	1.066	0.818	6,272.921	1.302

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	3.9	4.0	4.2	4.1	4.0	4.0	3.9	4.0	4.0	4.1	4.0	4.0	4.0	4.1	4.1	4.1
General Fund	2.9	3.0	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1
GF Growth	-1.0%	4.4%	3.0%	-0.3%	-2.7%	-1.7%	-0.9%	2.6%	-0.3%	0.4%	-0.2%	-1.0%	0.2%	2.4%	0.0%	0.0%

Cigarette Tax

Revenue Description

An excise tax is levied on all cigarettes sold in Montana. The tax is collected from the wholesaler through sale of insignia and passed down to the retail consumer. The insignia are purchased from the state and affixed to each package of cigarettes. The state has agreements with six of the tribes in Montana (Blackfeet, Fort Belknap, Rocky Boy, Fort Peck, Crow, and Northern Cheyenne) wherein the sale of cigarettes on a reservation, up to a set quota, are untaxed and state cigarette tax revenues are shared with the tribes.

Statutory Reference

Tax Rate – 16-11-111, MCA
Tax Distribution – 16-11-119, MCA
Date Due – Within 30 days after purchase of the insignia (16-11-117, MCA)

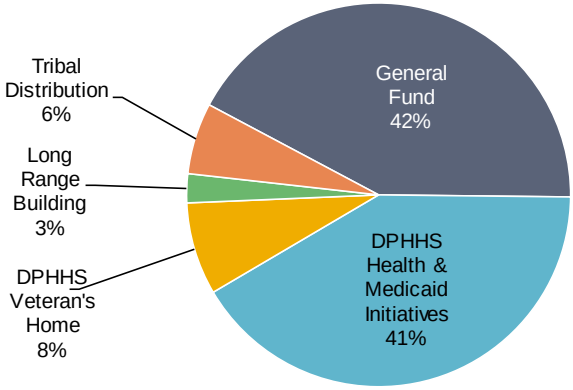
Applicable Tax Rates

$1.70 per package of 20 cigarettes, prorated by cigarette for packages that differ from 20 cigarettes

Collection Frequency: Monthly

Distribution

Cigarette tax revenue is distributed between the general fund, various state special revenue accounts administrated by the Department of Public Health and Human Services (DPHHS), the long range building fund, and six tribal governments according to intergovernmental agreements DOR and the tribes. Cigarette tax dollars are distributed to the tribes according to the following formula: (1.5) x (Montana per capita cigarette tax revenue) x (enrolled tribal population). This formula may be superseded by another agreed upon amount. The following chart shows the FY 2018 distribution of cigarette tax revenue.



Forecast Risks

- Changes in tobacco CPI
- Changes in consumer spending
- Rate of change in effective tax rate

Revenue Estimate Methodology

Data

The cigarette tax estimate is based on data obtained from DOR, SABHRS, and IHS Markit. Details on tax collections by month and refunds for quota sales are provided by DOR; fiscal year tax collections are from SABHRS; forecasts for independent economic variables are produced by IHS Markit.

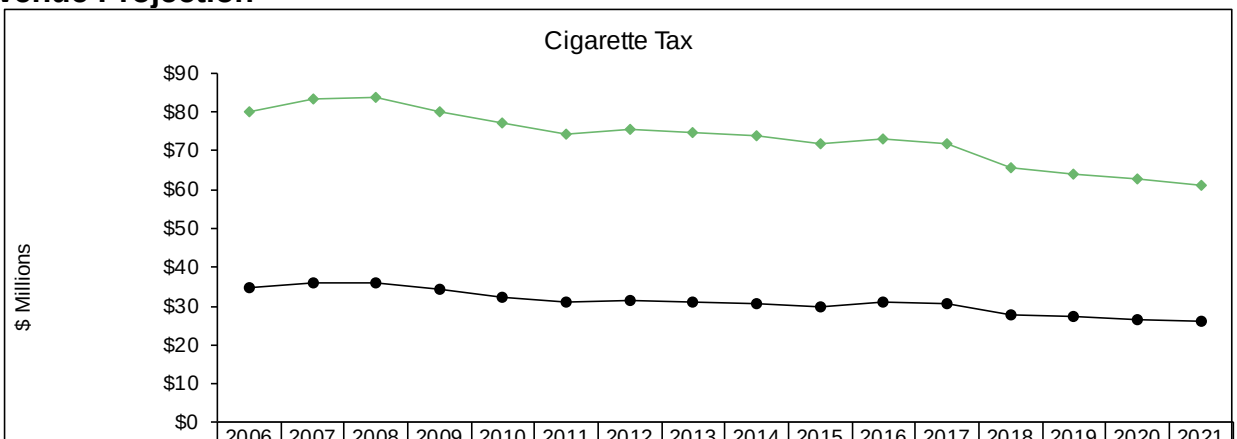
Analysis

Per capita consumption is modeled on a ratio of CPI for tobacco to consumer spending on tobacco products. Forecast per capita consumption is multiplied by forecast Montana population over age 18 to produce an estimate of packs sold. Total tax collections are calculated by multiplying the number of packs sold in each year by the effective tax rate in that year.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Effective Tax Rate $/Pack	Approximate Packs Sold Millions	CPI Tobacco	Cons. Spend. Tobacco $ Millions	Monana Pop >= 18 Millions
A 2008	$83.883	$36.004	$1.67	50.285	67	$83.917	0.753
A 2009	79.906	34.320	1.66	48.134	75	88.479	0.761
A 2010	77.071	32.218	1.67	46.159	92	97.328	0.767
A 2011	74.091	30.992	1.65	44.947	97	98.341	0.773
A 2012	75.533	31.483	1.63	46.347	99	96.044	0.781
A 2013	74.790	31.011	1.68	44.553	101	93.804	0.788
A 2014	73.840	30.623	1.69	43.650	105	90.958	0.796
A 2015	71.844	29.604	1.67	43.123	107	93.077	0.803
A 2016	73.219	31.103	1.68	43.676	111	94.684	0.812
A 2017	71.872	30.558	1.68	42.768	116	92.983	0.822
A 2018	65.471	27.755	1.68	39.102	123	91.279	0.831
F 2019	64.146	27.313	1.68	38.170	126	93.868	0.837
F 2020	62.659	26.687	1.68	37.285	132	96.544	0.843
F 2021	61.162	26.057	1.68	36.395	140	99.092	0.848
F 2022	59.486	25.347	1.68	35.397	148	98.978	0.854
F 2023	57.515	24.506	1.68	34.224	155	97.211	0.859

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	80.2	83.4	83.9	79.9	77.1	74.1	75.5	74.8	73.8	71.8	73.2	71.9	65.5	64.1	62.7	61.2
General Fund	34.6	35.8	36.0	34.3	32.2	31.0	31.5	31.0	30.6	29.6	31.1	30.6	27.8	27.3	26.7	26.1
GF Growth	-1.5%	3.6%	0.5%	-4.7%	-6.1%	-3.8%	1.6%	-1.5%	-1.3%	-3.3%	5.1%	-1.8%	-9.2%	-1.6%	-2.3%	-2.4%

Diesel Tax

Revenue Description

There are two sources of revenue associated with the taxation of special fuels (primarily diesel): the diesel tax paid to the Montana Department of Transportation (MDT) for every gallon of diesel sold or used in the state; and a tax assessed on each gallon of diesel fuel for funding petroleum storage tank cleanup.

Distributors can withhold 1.0% of the diesel tax as an allowance for collecting the tax. To prevent the possibility of dual taxation of motor fuels purchased by Montana citizens and businesses on Indian reservations, MDT and Indian tribes may enter into a cooperative agreement. Refunds of the tax paid is provided for commercial vehicle use other than for use on public highways and streets, governmental use, and nonpublic school use for the transportation of pupils.

Article VIII, Section 6 of the Montana Constitution provides that money from taxes on vehicle fuel be used solely for: payment of obligations incurred for construction, reconstruction, repair, operation, and maintenance of public highways, streets, roads, and bridges; payment of county, city, and town obligations on streets roads, and bridges; and enforcement of highway safety, driver education, tourist promotion, and administrative collection costs. Appropriation of the money for any other use requires a three-fifth vote of each house of the legislature.

Statutory Reference

Tax Rate – 15-70-321(2), MCA; 75-11-313, MCA (storage tank cleanup)
Tax Distribution – 15-70-101(1), MCA; 75-11-314, MCA (storage tank cleanup)
Date Due – 25th of the following month (15-70-344(1), MCA)

Applicable Tax Rates

- Diesel (Special) Fuel Tax: $0.2925 per gallon, increases to $0.2975 per gallon by FY 2023 under HB 473 (2017 Session)
- Petroleum Storage Tank Cleanup Tax: $0.0075 per gallon

Collection Frequency: Monthly

Distribution

The first $0.2775 per gallon of diesel tax proceeds are distributed to MDT after the following deductions:

- 1.0% withheld by distributors;
- Administrative expenses and refunds under the tribal agreements;
- Diesel tax refunds; and
- Refunds through the international fuel tax agreement.
- $0.04 to the highway patrol administration state special revenue account

Of the amount distributed to MDT, 1/4 of $0.01 per gallon is allocated specifically to the funding of highway system maintenance. All collections exceeding the first $0.2775 per gallon are allocated to the bridge and road safety and accountability restricted account.

Forecast Risks

- Fuel price significantly different from historical prices

Revenue Estimate Methodology

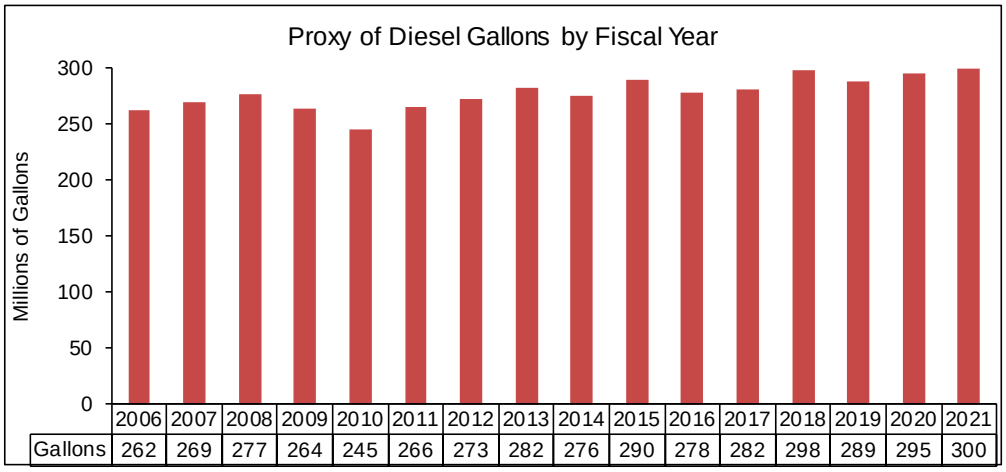
Data

Diesel tax collections data from SABHRS is used to produce a proxy amount for taxable gallons of diesel sold in Montana.

Analysis

Diesel fuel taxes are estimated as separate taxes. First, the diesel tax is imposed on each gallon of diesel sold in the state. A second tax is imposed on all diesel fuel distributed in the state for diesel storage tank clean-up costs (storage tank tax). The two taxes are applied to different bases, because the diesel fuel tax provides credits against the cost of the tax to consumers who use the diesel "off highway."

Future growth in diesel consumption is calculated using an autoregressive moving average time series. The storage tank tax is expected to follow the same patterns as the diesel fuel tax. The effective gasoline tax rates—created to adjust for the statutory credit provided to diesel distributors—are applied to the estimates to produce the estimate for gross tax revenues.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Gallons	262	269	277	264	245	266	273	282	276	290	278	282	298	289	295	300

Adjustments

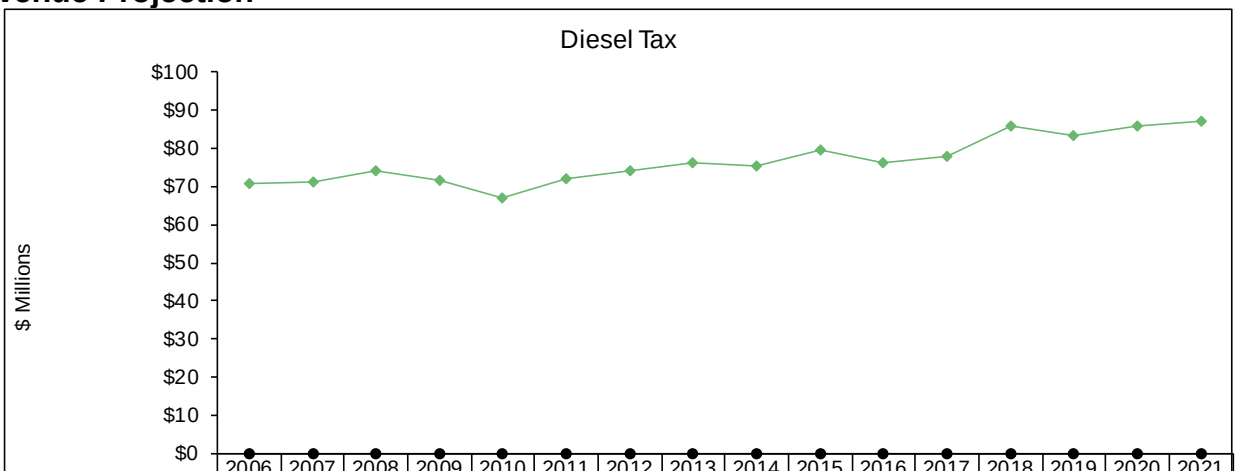
Several adjustments are made to the expected gross diesel fuel tax revenues. Gross tax revenues are reduced by refunds, incentives, MDT administrative costs, and tribal agreements, resulting in the estimate for net diesel fuel tax revenue. No adjustments are required for the storage tank tax. The net tax revenues of the two taxes are combined to determine the estimate for total diesel fuel tax revenue.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Gross $ Millions	Diesel Tax $ Millions	Tank Tax $ Millions	Refunds $ Millions	DOT Diesel Tax
A 2008	$74.302	-	$79.004	$71.488	$2.814	($4.702)	$71.488
A 2009	71.791	-	75.135	69.159	2.632	(3.344)	69.159
A 2010	66.896	-	70.016	64.313	2.583	(3.120)	64.313
A 2011	71.994	-	75.820	69.181	2.813	(3.826)	69.181
A 2012	74.292	-	77.922	71.350	2.943	(3.629)	71.350
A 2013	76.071	-	80.430	73.093	2.979	(4.359)	73.093
A 2014	75.560	-	78.753	72.609	2.951	(3.193)	72.609
A 2015	79.522	-	82.726	76.518	3.004	(3.204)	76.518
A 2016	76.213	-	79.292	73.415	2.798	(3.079)	73.415
A 2017	77.957	-	80.433	74.880	3.077	(2.475)	74.880
A 2018	85.994	-	89.293	83.090	2.904	(3.300)	64.344
F 2019	83.427	-	86.620	80.393	3.034	(3.192)	61.895
F 2020	85.793	-	89.076	82.687	3.106	(3.284)	63.325
F 2021	87.195	-	90.532	84.035	3.160	(3.337)	64.412
F 2022	89.331	-	92.750	86.098	3.233	(3.419)	65.852
F 2023	91.647	-	95.155	88.347	3.300	(3.508)	67.205

FY	Diesel Effect. Tax Rate $/gal	Tank Effect. Tax Rate $/gal	Diesel Gallons Millions	Tank Gallons Millions	MT Highway Patrol Adm. Account	Diesel BARSA Account	Refunds FTA Suspense
A 2008	0.2747	0.0075	277.333	375.173			
A 2009	0.2747	0.0075	263.909	350.994			
A 2010	0.2747	0.0075	245.455	344.436			
A 2011	0.2747	0.0075	265.744	375.099			
A 2012	0.2747	0.0075	272.924	392.360			
A 2013	0.2747	0.0075	281.925	397.148			
A 2014	0.2747	0.0075	275.919	393.446			
A 2015	0.2747	0.0075	290.187	400.565			
A 2016	0.2747	0.0075	278.440	373.070			
A 2017	0.2747	0.0075	281.575	410.262			
A 2018	0.2896	0.0075	298.331	387.215	$10.605	$3.977	$4.164
F 2019	0.2896	0.0075	288.648	404.590	10.424	3.909	4.164
F 2020	0.2916	0.0075	294.870	414.070	10.665	4.533	4.164
F 2021	0.2916	0.0075	299.674	421.390	10.848	4.611	4.164
F 2022	0.2925	0.0075	305.995	431.020	11.091	4.991	4.164
F 2023	0.2945	0.0075	311.875	439.980	11.319	5.659	4.164

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	71	71	74	72	67	72	74	76	76	80	76	78	86	83	86	87
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Gasoline Tax

Revenue Description

There are two sources of revenue associated with the taxation of gasoline: a gasoline license tax paid to the Montana Department of Transportation (MDT) by every distributor for the privilege of selling gasoline; and a tax assessed on each gallon of gasoline for the purpose of funding petroleum storage tank cleanup.

Distributors can withhold 1.0% of the gasoline tax as an allowance for collecting the tax. To prevent the possibility of dual taxation of motor fuels purchased by Montana citizens and businesses on Indian reservations, MDT and Indian tribes may enter into a cooperative agreement. Refunds of the tax paid is provided for denaturing alcohol used in gasohol, stationary gasoline engines used off public highways and streets, and commercial vehicle use other than for use on public highways and streets.

Article VIII, Section 6 of the Montana Constitution provides that money from taxes on vehicle fuel be used solely for: payment of obligations incurred for construction, reconstruction, repair, operation, and maintenance of public highways, streets, roads, and bridges; payment of county, city, and town obligations on streets roads, and bridges; and enforcement of highway safety, driver education, tourist promotion, and administrative collection costs. Appropriation of the money for any other use requires a three-fifth vote of each house of the legislature.

Statutory Reference

Tax Rate – 15-70-204(1), MCA; 75-11-314, MCA (storage tank cleanup)
Distribution – 15-70-101(1), MCA; 60-3-201(1), MCA; 75-11-313, MCA (storage tank cleanup)
Date Due – 25th of the following month (15-70-205(1), MCA)

Applicable Tax Rates

Gasoline License Tax: $0.315 per gallon, increases to $0.33 per gallon by FY 2023 under HB 473 (2017 Session)
Petroleum Storage Tank Cleanup Tax: $0.0075 per gallon

Collection Frequency: Monthly

Distribution

After four reductions—the 1.0% withheld by distributors, administrative expenses and refunds under tribal agreements, refunds, and refunds through the international fuel tax agreement—the first $0.27 per gallon of gasoline tax is allocated as follows:

- 9/10 of 1.0% to the state park account
- 15/28 of 1.0% to a snowmobile account, which is further allocated 86.0% for general use, 4.33% for enforcement, 8.67% for safety and education, and 1.0% to the noxious weed trust
- 1/8 of 1.0% to an off-highway vehicle account, which is further allocated 90% for general use and 10% for safety
- 1/25 of 1.0% to the aeronautics revenue fund of the Department of Transportation
- 4 cents to the highway patrol administration state special revenue account
- The remainder to MDT to be used for highway-related purposes, primarily construction projects and administrative costs. One-fourth of $0.01 per gallon is allocated specifically to the funding of highway system maintenance.

All collections exceeding the first $0.27 per gallon less the allocations provided for in 60-3-201(1)(a) through (1)(d) are allocated to the bridge and road safety and accountability restricted account.

Forecast Risks

- Fuel prices significantly different from historical prices

Revenue Estimate Methodology

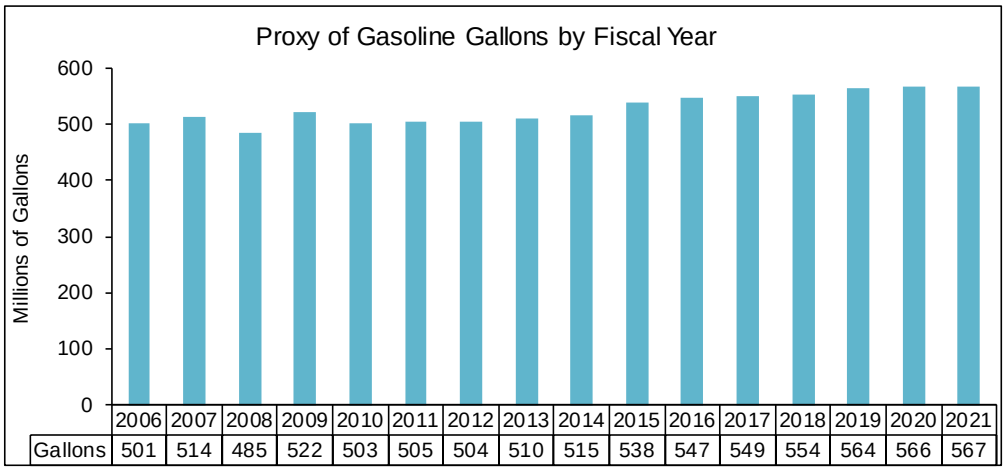
Data

Gasoline tax collections data from SABHRS is used to produce a proxy amount for taxable gallons of gasoline sold in Montana.

Analysis

The gasoline tax and the gasoline petroleum storage tank cleanup tax are estimated separately. First, the gasoline tax is imposed on each gallon of gasoline sold in the state. A second tax is imposed on all gasoline distributed in the state for gasoline storage tank clean-up costs (storage tank tax). The two taxes are applied to different bases, because the gasoline tax provides credits against the cost of the tax to consumers who use the gasoline "off highway."

Future growth in gasoline consumption is calculated using an autoregressive moving average time series. The storage tank tax is expected to follow the same patterns as the gasoline tax. The effective gasoline tax rates—created to adjust for the statutory credit provided to gasoline distributors—are applied to the estimates to produce the estimate for gross tax revenues.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Gallons	501	514	485	522	503	505	504	510	515	538	547	549	554	564	566	567

Adjustments

Several adjustments are made to the expected gross gasoline tax revenues. Gross tax revenues are reduced by refunds, incentives, MDT administrative costs, and tribal agreements, resulting in the estimate for net gasoline tax revenue. No adjustments are required for the storage tank tax. Next, the net tax revenues of the two taxes are combined to determine the estimate for total gasoline tax revenue.

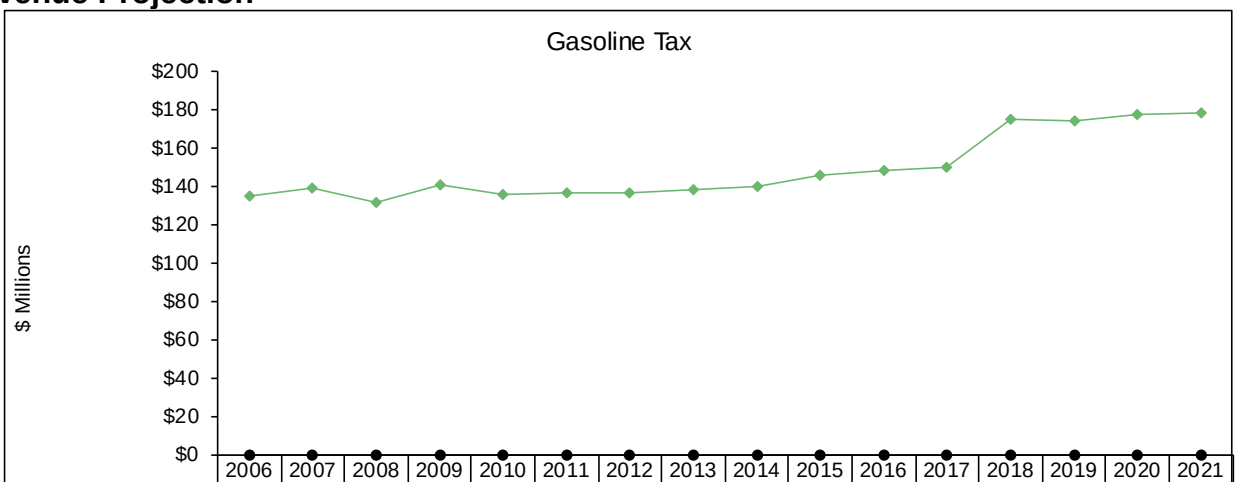
Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Gross Tax $ Millions	Gas Tax $ Millions	Tank Tax $ Millions	Refunds $ Millions
A 2008	$131.147	-	$133.429	$127.433	$3.714	($2.282)
A 2009	141.120	-	143.215	137.510	3.610	(2.095)
A 2010	136.036	-	138.041	132.351	3.685	(2.006)
A 2011	136.514	-	138.635	132.774	3.740	(2.121)
A 2012	136.661	-	138.497	132.911	3.750	(1.836)
A 2013	138.443	-	140.179	134.647	3.797	(1.736)
A 2014	139.645	-	141.439	135.809	3.836	(1.794)
A 2015	146.110	-	147.732	142.152	3.958	(1.622)
A 2016	148.603	-	150.248	144.544	4.059	(1.645)
A 2017	149.691	-	151.324	145.196	4.495	(1.633)
A 2018	175.061	-	176.771	170.939	4.122	(1.710)
F 2019	174.003	-	175.765	169.776	4.227	(1.762)
F 2020	177.623	-	179.340	173.378	4.246	(1.717)
F 2021	177.847	-	179.550	173.597	4.251	(1.702)
F 2022	181.828	-	183.526	177.550	4.278	(1.698)
F 2023	185.778	-	187.464	181.474	4.304	(1.686)

FY	Gas Effect. Tax Rate $/gal	Tank Effect. Tax Rate $/gal	Gas Gallons Millions	Tank Gallons Millions	DOT $ Millions	FWP Snow $ Millions	FWP Boat $ Millions
A 2008	0.2673	0.0075	485.278	495.246	$125.352	$0.587	$1.147
A 2009	0.2673	0.0075	522.279	481.336	135.295	0.631	1.237
A 2010	0.2673	0.0075	502.644	491.267	130.226	0.617	1.191
A 2011	0.2673	0.0075	504.656	498.668	130.642	0.619	1.195
A 2012	0.2673	0.0075	504.105	500.016	130.784	0.612	1.196
A 2013	0.2673	0.0075	510.222	506.247	132.491	0.620	1.212
A 2014	0.2673	0.0075	514.789	511.419	133.642	0.626	1.222
A 2015	0.2673	0.0075	537.875	527.710	139.883	0.655	1.279
A 2016	0.2673	0.0075	546.909	541.197	142.238	0.666	1.301
A 2017	0.2673	0.0075	549.305	549.305	142.877	0.675	1.318
A 2018	0.3119	0.0075	553.629	549.592	100.753	0.752	1.469
F 2019	0.3119	0.0075	563.620	563.620	99.149	0.696	1.360
F 2020	0.3168	0.0075	566.100	566.100	99.838	0.712	1.391
F 2021	0.3168	0.0075	566.760	566.760	99.992	0.713	1.392
F 2022	0.3218	0.0075	570.400	570.400	100.899	0.730	1.426
F 2023	0.3267	0.0075	573.810	573.810	101.756	0.747	1.458

FY	Aeronautics $ Millions	Off Highway $ Millions	Weed Gasoline $ Millions	Snow Enforce. Gasoline $ Millions	Snow Con-Ed. Gasoline $ Millions	OHV Con-Ed. Gasoline $ Millions
A 2008	$0.051	$0.141	$0.013	$0.026	$0.064	$0.013
A 2009	0.055	0.150	0.014	0.027	0.067	0.014
A 2010	0.053	0.149	0.007	0.031	0.061	0.017
A 2011	0.053	0.149	0.007	0.031	0.062	0.017
A 2012	0.053	0.150	0.007	0.031	0.062	0.017
A 2013	0.054	0.151	0.007	0.031	0.063	0.017
A 2014	0.054	0.153	-	0.032	0.063	0.017
A 2015	0.057	0.161	-	0.034	0.065	0.018
A 2016	0.058	0.163	-	0.034	0.067	0.018
A 2017	0.059	0.165	-	0.034	0.068	0.002
A 2018	0.065	0.184	-	0.038	0.076	0.020
F 2019	0.060	0.170	-	0.026	0.051	0.014
F 2020	0.062	0.174	-	0.026	0.052	0.014
F 2021	0.062	0.174	-	0.026	0.052	0.014
F 2022	0.063	0.178	-	0.026	0.052	0.014
F 2023	0.065	0.182	-	0.026	0.052	0.014

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	135	139	131	141	136	137	137	138	140	146	149	150	175	174	178	178
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

GVW and Other Fees

Revenue Description

There are two types of revenue derived from over 20 different sources: fee revenue and permit revenue. The majority of revenue is derived from a variety of gross vehicle weight (GVW) fees, including those fees collected by counties when vehicles are registered. Miscellaneous permits comprise the second income component under this source.

Statutory Reference

Tax Rate – Title 61, Chapter 10, MCA; Administrative Rules 18.8.202
Tax Distribution (MCA) – Multiple

Applicable Tax Rates: Title 61, Chapter 10, MCA

Collection Frequency: Various

Distribution: GVW revenue is allocated to the Montana Department of Transportation (MDT).

Forecast Risks

- Vehicle sales
- Gas prices

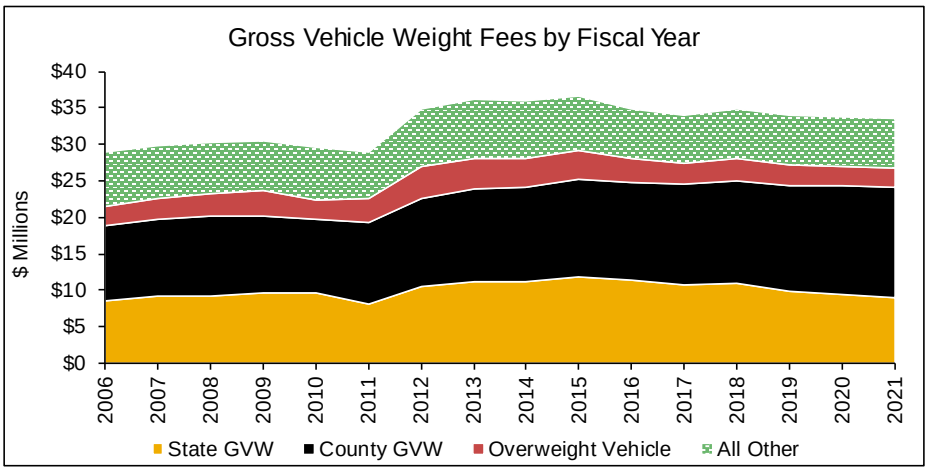
Revenue Estimate Methodology

Data

The SABHRS data provide the historic collection data for the 13 different types of fees and permits. MDT provides statistics on the number of gross weight vehicle licenses for use in Montana.

Analysis

The state of Montana imposes many fees and requires several types of permits based on the gross weight of commercial and large privately-owned vehicles. The largest sources of revenue in the GVW are the gross vehicle weight fees collected by both counties and the state. The figure below demonstrates the relative importance of these two sources to the overall GVW collections.



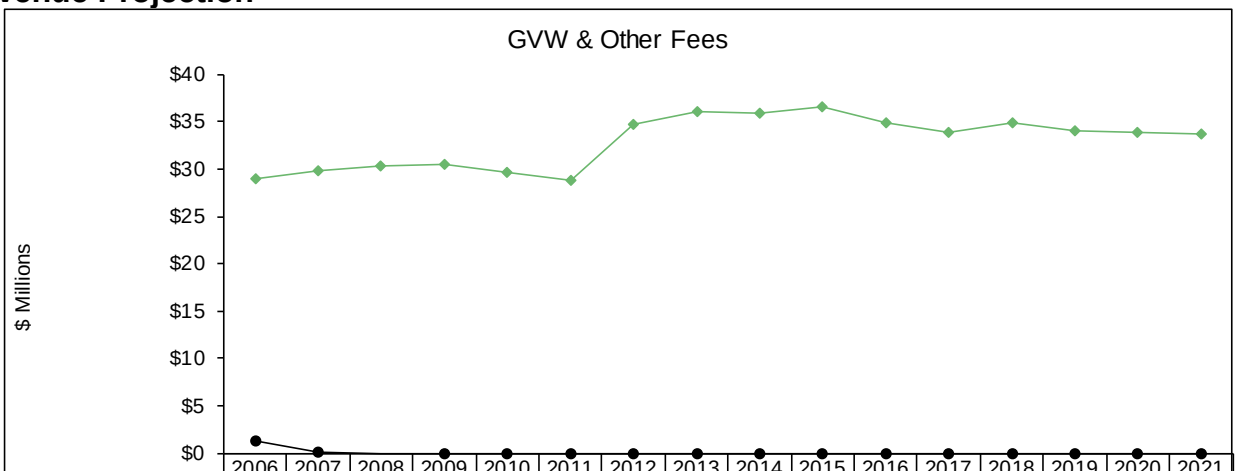
Both county and state GVW fees are forecast by applying an estimated growth in Montana's vehicle stock to the previous year's collections. This same methodology is applied to the remaining smaller fees associated with this revenue source.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	GVW $ Millions	SSRS $ Millions	Form 3 $ Millions	Trip $ Millions	County $ Millions
A 2008	$30.238	($0.035)	$9.266	($0.035)	$1.137	$0.642	$10.827
A 2009	30.565	0.001	9.676	0.001	0.961	0.589	10.572
A 2010	29.630	0.019	9.618	0.019	1.023	0.565	10.120
A 2011	28.869	-	8.073	-	1.028	0.658	11.305
A 2012	34.748	-	10.489	-	1.102	0.865	12.086
A 2013	36.084	-	11.206	-	1.048	0.726	12.601
A 2014	35.856	-	11.179	-	1.031	0.676	12.939
A 2015	36.602	-	11.791	-	1.007	0.708	13.492
A 2016	34.914	-	11.363	-	1.026	0.538	13.494
A 2017	33.892	-	10.830	-	0.903	0.483	13.694
A 2018	34.844	-	10.968	-	0.991	0.524	14.005
F 2019	33.948	-	9.886	-	0.991	0.524	14.500
F 2020	33.789	-	9.405	-	0.991	0.524	14.822
F 2021	33.630	-	8.924	-	0.991	0.524	15.144
F 2022	33.471	-	8.444	-	0.991	0.524	15.466
F 2023	33.313	-	7.963	-	0.991	0.524	15.788

FY	Overweight $ Millions	Special $ Millions	Fuel $ Millions	Other $ Millions
A 2008	$3.185	$1.229	$0.151	$3.834
A 2009	3.382	1.129	0.150	4.106
A 2010	2.730	1.081	0.142	4.332
A 2011	3.305	1.182	0.185	3.133
A 2012	4.353	1.422	0.254	4.177
A 2013	4.339	1.464	0.231	4.469
A 2014	3.885	1.413	0.247	4.487
A 2015	3.864	1.352	0.292	4.096
A 2016	3.123	1.256	0.243	3.870
A 2017	2.836	1.232	0.231	3.682
A 2018	3.091	1.283	0.223	3.759
F 2019	2.782	1.283	0.223	3.759
F 2020	2.782	1.283	0.223	3.759
F 2021	2.782	1.283	0.223	3.759
F 2022	2.782	1.283	0.223	3.759
F 2023	2.782	1.283	0.223	3.759

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	28.9	29.8	30.2	30.6	29.6	28.9	34.7	36.1	35.9	36.6	34.9	33.9	34.8	33.9	33.8	33.6
General Fund	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Liquor Excise and License Tax

Revenue Description

DOR is the only liquor wholesaler in the state of Montana. An excise tax and a license tax are collected both on liquor sold by DOR and liquor purchased outside the state (by airlines and passenger rail) for consumption within the state.

Statutory Reference

Tax Rate – Excise tax: 16-1-401, MCA; License tax: 16-1-404, MCA
Tax Distribution – Excise tax: 16-1-401, MCA & 16-2-108, MCA; License tax: 16-1-404, MCA
Date Due – Excise tax is collected at the time of sale and distributed by the 10th day of each month. License tax is collected at the time of sale.

Applicable Tax Rates

All liquor sold and delivered in the state by a company that manufactured, distilled, rectified, bottled, or processed the liquor is taxed a percentage rate on the retail selling price based on the following number of proof gallons of liquor handled nationwide by that company in the calendar year preceding imposition of the tax:

Excise Tax Rate

- 3.0% – Less than 20,000 proof gallons
- 8.0% – 20,000 to 50,000 proof gallons
- 13.8% – 50,001 to 200,000 proof gallons
- 16.0% – More than 200,000 proof gallons

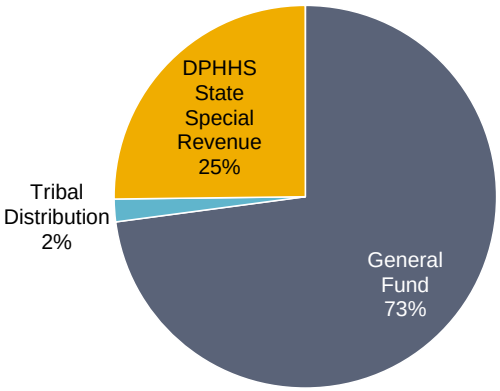
License Tax Rate

- 10.0% – More than 200,000 proof gallons
- 8.6% – Not more than 200,000 proof gallons

Collection Frequency: Both the liquor excise tax and the license tax on liquor are collected at the time of the sale and delivery of liquor. Deposits to the general fund are made monthly.

Distribution

Liquor excise and license tax revenue is distributed between the general fund, the Department of Public Health and Human Services (DPHHS) state special revenue alcohol account, and tribal governments according to intergovernmental agreements between DOR and the tribes. Liquor tax dollars are distributed to Blackfeet, Fort Belknap, Fort Peck, and Flathead according to the following formula: (per capita liquor consumption) x (tribal membership) x (Montana tax rate). The following chart shows the FY 2018 distribution of liquor tax revenue.



Forecasting Risks

- Change in Montana consumption patterns
- Departure of sales growth from historic trends

Revenue Estimate Methodology

Data

The liquor profits estimate is based on data obtained from DOR, SABHRS, and IHS Markit. Details on number of units sold, and average cost per unit are provided by DOR; fiscal year tax collections are from SABHRS; forecasts for independent economic variables are produced by IHS Markit.

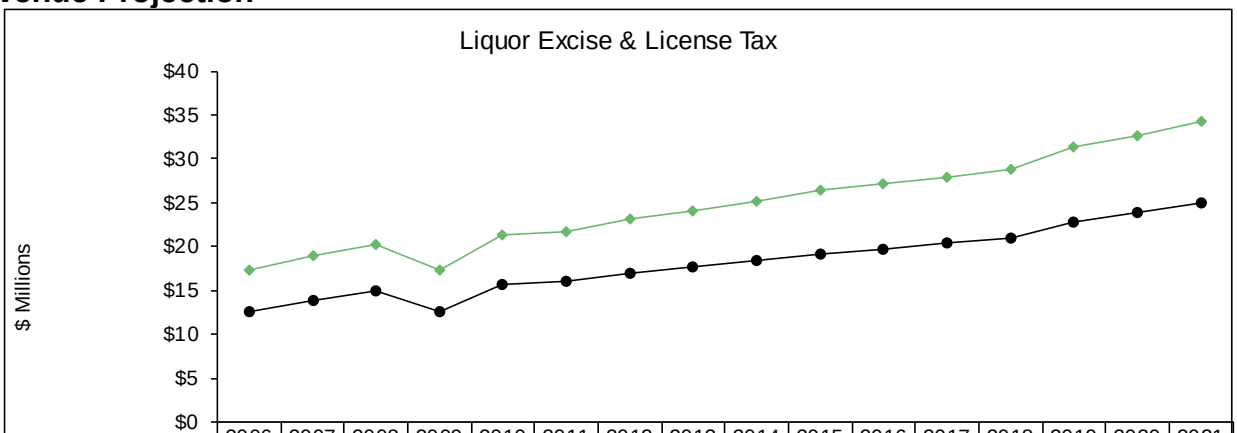
Analysis

Gross liquor sales are modeled on the Montana personal consumption expenditure series for food, and the forecast growth rate is applied to the most recent year of actual sales. Liquor taxes are calculated by applying the tax rates to the retail sales price of liquor sold. The tax rate is lower for companies that produce less than 200,000 gallons; however, at this time the lower tax rates are not considered.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Gross Sales $ Millions	Montana PCE Food $ Millions	Excise Tax $ Millions	License Tax $ Millions
A 2008	$20.335	$14.925	$78.261	$0.100	$12.513	$7.821
A 2009	17.325	12.651	66.659	0.100	12.989	8.118
A 2010	21.308	15.626	66.691	0.100	13.021	8.138
A 2011	21.792	15.989	84.277	0.100	13.411	8.381
A 2012	23.222	17.037	90.180	0.100	14.291	8.932
A 2013	24.161	17.724	94.872	0.100	14.870	9.292
A 2014	25.123	18.418	99.209	0.100	15.460	9.662
A 2015	26.420	19.257	104.799	0.100	16.256	10.164
A 2016	27.130	19.776	107.725	0.100	16.691	10.439
A 2017	27.932	20.366	111.502	0.100	17.187	10.745
A 2018	28.806	21.007	115.292	0.100	17.725	11.081
F 2019	31.290	22.884	120.345	0.100	19.255	12.035
F 2020	32.696	23.893	125.755	0.100	20.121	12.575
F 2021	34.263	25.044	131.783	0.100	21.085	13.178
F 2022	35.837	26.197	137.836	0.100	22.054	13.784
F 2023	37.385	27.330	143.789	0.100	23.006	14.379

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	17.3	19.0	20.3	17.3	21.3	21.8	23.2	24.2	25.1	26.4	27.1	27.9	28.8	31.3	32.7	34.3
General Fund	12.7	14.0	14.9	12.7	15.6	16.0	17.0	17.7	18.4	19.3	19.8	20.4	21.0	22.9	23.9	25.0
GF Growth	11%	10%	7%	-15%	24%	2%	7%	4%	4%	5%	3%	3%	3%	9%	4%	5%

Liquor Profits

Revenue Description
DOR is the only liquor wholesaler in the state of Montana. The profits from sales to retail establishments are deposited in the general fund.

Statutory Reference
Tax Rate – Authority to markup 16-1-404(2), MCA and rate of markup ARM 42.11.104
Tax Distribution – 16-2-108(4), MCA
Date Due – N/A

Applicable Tax Rates
Liquor profits received by the state are primarily generated by a mark-up on the sale of liquor and fortified wine, less costs such as commissions and discounts. A 40% mark-up is added to the state's base cost for liquor. The state's mark-up percentage on the base cost of fortified wine (more than 16% but no greater than 24% alcohol by volume) is 51%. The state's mark-up on sacramental wine (more than 16% but no greater than 24% alcohol by volume) is 20%. A reduced markup of 20%is available to some distilleries that produce less than 25,000 proof gallons annually.

Collection Frequency: Payment for liquor purchases is due within 60 days of the invoice date and revenue is deposited into an enterprise fund.

Distribution: Liquor profits are deposited in the general fund annually.

Forecast Risks
- Change in Montana consumption patterns
- Departure of sales growth from historic trends

Revenue Estimate Methodology
Data

The liquor profits estimate is based on data obtained from DOR, SABHRS, and IHS Markit. Details on number of units sold, and average cost per unit are provided by DOR, fiscal year tax collections are from SABHRS, and forecasts for independent economic variables are produced by IHS Markit.

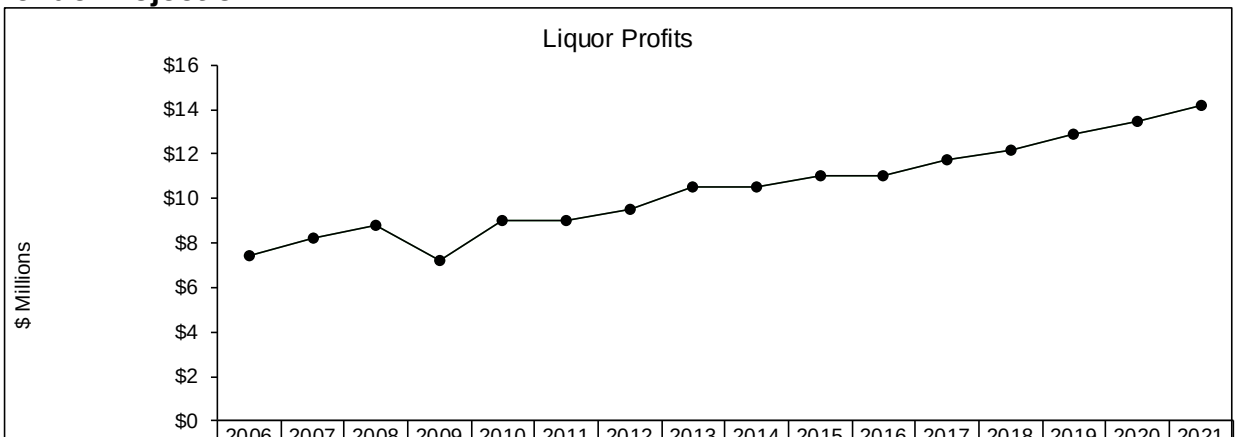
Analysis

Gross liquor sales are modeled on the Montana personal consumption expenditure (PCE) series for food, and the forecast growth rate is applied to the most recent year of actual sales. Net profits are calculated by reducing the gross sales by excise and license tax amounts, discounts, cost of goods sold, and a trended estimate of the division's operating budget. The amount transferred to the general fund is typically rounded to the nearest $0.5 million, so the forecast is rounded accordingly.

Revenue Estimate Assumptions

FY	GF Profit $ Millions	Gross Revenue $ Millions	Business Costs $ Millions	License & Excise Taxes $ Millions	Liquor License Auction	Montana PCE Food $ Millions	Gross Sales $ Millions
A 2008	$8.775	$78.256	$69.774	$20.333		$2,999.108	78.261
A 2009	7.250	66.671	70.176	21.107		3,089.279	66.659
A 2010	9.000	66.702	72.804	21.159		3,173.509	66.691
A 2011	9.000	84.284	75.196	21.792		3,470.815	84.277
A 2012	9.500	90.189	80.766	24.603		3,730.703	90.180
A 2013	10.500	94.885	84.329	25.564		3,968.273	94.872
A 2014	10.500	99.226	88.792	25.123		4,185.749	99.209
A 2015	11.000	104.817	93.748	26.420		4,387.294	104.799
A 2016	11.000	107.744	96.696	27.130		4,591.746	107.725
A 2017	11.750	111.521	99.799	27.932		4,785.079	111.502
A 2018	12.200	115.312	103.070	28.806	-	4,986.246	115.292
F 2019	12.900	120.865	107.968	31.290	$0.500	5,214.406	120.345
F 2020	13.500	126.275	112.783	32.696	0.500	5,458.645	125.755
F 2021	14.200	132.303	118.138	34.263	0.500	5,730.816	131.783
F 2022	14.800	138.356	123.515	35.837	0.500	6,004.118	137.836
F 2023	15.500	144.309	128.804	37.385	0.500	6,272.921	143.789

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	7.5	8.2	8.8	7.3	9.0	9.0	9.5	10.5	10.5	11.0	11.0	11.8	12.2	12.9	13.5	14.2
General Fund	7.5	8.2	8.8	7.3	9.0	9.0	9.5	10.5	10.5	11.0	11.0	11.8	12.2	12.9	13.5	14.2
GF Growth	12%	10%	7%	-17%	24%	0%	6%	11%	0%	5%	0%	7%	4%	6%	5%	5%

Lottery Profits

Revenue Description

Lottery revenue is derived from ticket sales, sales agents license fees, and unclaimed prizes. These funds are deposited into the lottery enterprise fund. After paying prizes, ticket costs, commissions, and other operating costs from the enterprise fund, profits are transferred to the general fund.

Statutory Reference

Tax Rate – N/A
Distribution – 23-7-402(3), MCA
Date Due – Quarterly (23-7-402(3), MCA)

Applicable Tax Rates: N/A

Collection Frequency: Lottery revenues are collected on an on-going basis. Transfers to the general fund are made quarterly.

Distribution: Net proceeds are deposited into the general fund, up to the amount transferred in FY 2015 ($12.4 million). Any additional revenue is to be diverted into a state special revenue fund for science, technology, engineering, and mathematics (STEM) scholarships.

Forecast Risks

- Fluctuating short-term interest rates
- Changing Montana population
- Unexpected number of jackpots won

Revenue Estimate Methodology

Data

The lottery revenue estimate is based on data obtained from SABHRS, IHS Markit, and the annual Montana Lottery Commission report. Monthly accounting information for the enterprise fund come from SABHRS; forecasts for independent economic variables are produced by IHS Markit; interest earnings, daily fund balance and other more detailed information come from the Lottery Commission report.

Analysis

Revenue for the enterprise fund comes primarily from a combination of ticket sales, interest earnings, and license sales. Expenditures from the fund cover prizes, commissions, and operation costs. The difference between the forecast revenues and expenditures is the anticipated general fund transfer of lottery profits.

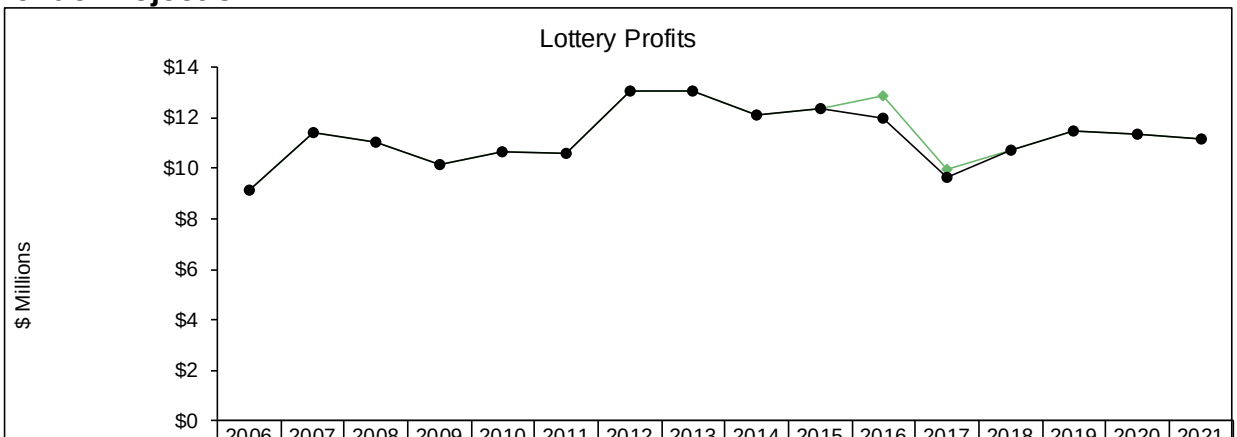
Per capita ticket sales are time trended. Forecast per capita ticket sales are multiplied by Montana population age 18 and older to produce future ticket sales. Interest earnings are calculated by multiplying the IHS Markit forecast for short-term interest by the projected average daily balance of the enterprise fund. The projection for the average daily balance is assumed to increase to a historical average of $6 million. License sales are assumed to be comparable to those in the last known fiscal year.

Prizes and commissions are forecast by applying an average prize-to-ticket sales ratio to the ticket sales forecast. Operational costs are based on a time trend. The final general fund transfer is equal to the amount received in FY 2015 unless the forecast is for net revenue lower than that amount ($12.4 million).

Revenue Estimate Assumptions

FY	Total Profit $ Millions	GF Profits $ Millions	Gross Revenue $ Millions	Business Costs $ Millions	Short-Term Interest Percent	MT Pop. >=18 Millions	STEM Scholarships $ Millions
A 2008	$11.029	$11.029	$44.007	$32.978	0.1%	0.753	-
A 2009	10.136	10.136	43.911	33.775	0.1%	0.761	-
A 2010	10.631	10.631	45.231	34.600	0.2%	0.767	-
A 2011	10.611	10.611	47.683	37.071	0.1%	0.773	-
A 2012	13.061	13.061	52.628	39.568	0.2%	0.781	-
A 2013	13.084	13.084	56.831	43.748	0.2%	0.788	-
A 2014	12.091	12.091	53.129	41.038	0.2%	0.796	-
A 2015	12.363	12.363	52.383	40.019	0.2%	0.803	-
A 2016	12.845	11.963	59.779	46.934	0.2%	0.812	$0.881
A 2017	9.982	9.624	52.507	42.525	0.2%	0.822	0.358
A 2018	10.699	10.699	56.425	45.726	0.2%	0.831	-
F 2019	11.510	11.510	56.152	44.642	0.2%	0.837	-
F 2020	11.337	11.337	56.315	44.978	0.2%	0.843	-
F 2021	11.136	11.136	56.441	45.305	0.2%	0.848	-
F 2022	10.917	10.917	56.538	45.621	0.2%	0.854	-
F 2023	10.687	10.687	56.611	45.924	0.2%	0.859	-

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	9.1	11.4	11.0	10.1	10.6	10.6	13.1	13.1	12.1	12.4	12.8	10.0	10.7	11.5	11.3	11.1
General Fund	9.1	11.4	11.0	10.1	10.6	10.6	13.1	13.1	12.1	12.4	12.0	9.6	10.7	11.5	11.3	11.1
GF Growth	46%	25%	-3%	-8%	5%	0%	23%	0%	-8%	2%	-3%	-20%	11%	8%	-2%	-2%

Tobacco Tax

Revenue Description
Taxes are levied on all non-cigarette tobacco products sold in Montana. A tax is assessed on the number of ounces of moist snuff sold, and a tax is assessed on the wholesale value of all other non-cigarette tobacco products sold. Tobacco products shipped from Montana to be sold and consumed elsewhere are not subject to the tax.

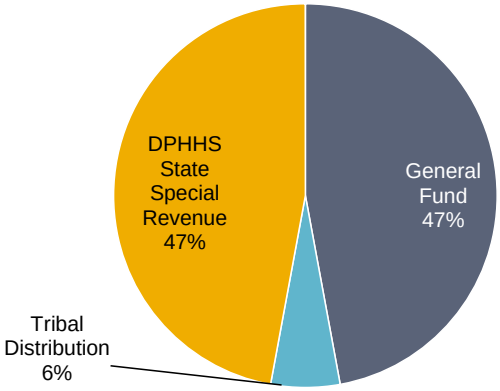
Statutory Reference
Tax Rate – 16-11-111(7), MCA
Tax Distribution – 16-11-114(2), MCA; 16-11-119(3), MCA
Date Due – 16-11-111(8), MCA

Applicable Tax Rates
Tobacco products – 50% of the wholesale price
Moist snuff – $0.85 per ounce

Collection Frequency: Monthly

Distribution
Tobacco tax revenue is first distributed to Blackfeet, Fort Belknap, Rocky Boy, Fort Peck, Northern Cheyenne, and Crow tribes according to intergovernmental agreements between the tribes and DOR. The distribution formula is as follows: (1.5) x (Montana per capita tobacco product consumption) x (enrolled tribal population) x (tax rate).

Following the distribution to the tribes the remaining tobacco tax revenue is split evenly between the general fund and the Department of Public Health and Human Services (DPHHS) Health and Medicaid Initiatives state special revenue fund. The following chart shows the FY 2018 distribution of tobacco tax revenue.



Forecast Risks
- Changing Montana population
- Value of Montana retail sales

Revenue Estimate Methodology
Data

The tobacco tax estimate is based on data obtained from DOR, SABHRS, and IHS Markit. Details on tax collections by month, distributor, product type, and tribal distributions are provided by DOR; fiscal year tax collections are from SABHRS; forecasts for independent economic variables are produced by IHS Markit.

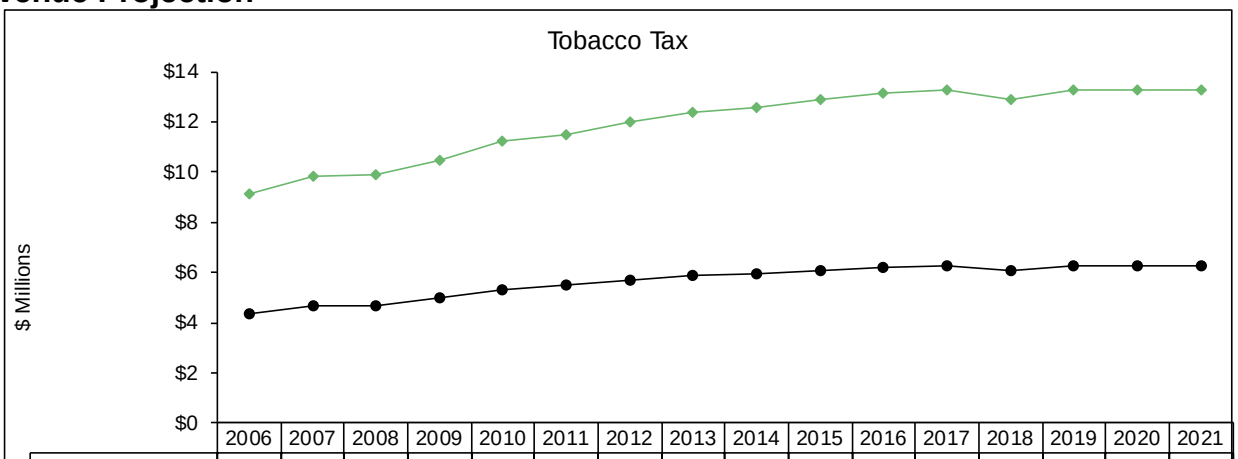
Analysis

Per capita snuff and other tobacco products are separately modeled on Montana population age 18 and older and Montana personal consumption expenditures (PCE). The per capita forecasts are multiplied by Montana population age 18 and older to produce individual forecasts for snuff and other tobacco products. After applying the appropriate tax rate to each value to determine gross taxes, forecasts for credits and discounts are subtracted to find the net revenue. Credits and discounts are assumed to remain at the same percentage of total tobacco taxes as the most recent completed year.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Moist Snuff Sales $ Millions	Value Other Products $ Millions	Business Costs $ Millions	Montana Pop >= 18 Millions	Montana PCE $ Millions
A 2008	$9.872	$4.699	$8.759	$5.508	$0.353	0.753	$40,033
A 2009	10.479	4.990	8.950	6.339	0.369	0.761	41,917
A 2010	11.210	5.334	9.453	6.991	0.277	0.767	44,123
A 2011	11.492	5.477	9.924	6.699	0.274	0.773	46,511
A 2012	12.024	5.709	10.412	6.689	0.308	0.781	48,796
A 2013	12.387	5.853	11.120	6.419	0.349	0.788	50,852
A 2014	12.563	5.929	11.512	6.359	0.358	0.796	52,915
A 2015	12.894	6.056	11.899	6.423	0.391	0.803	54,911
A 2016	13.131	6.184	12.267	6.260	0.375	0.812	56,932
A 2017	13.269	6.247	12.270	6.289	0.340	0.822	58,925
A 2018	12.865	6.058	11.946	6.018	0.440	0.831	60,970
F 2019	13.250	6.273	12.339	5.970	0.370	0.837	63,217
F 2020	13.278	6.279	12.467	5.810	0.370	0.843	65,719
F 2021	13.252	6.268	12.544	5.628	0.370	0.848	68,437
F 2022	13.180	6.234	12.569	5.440	0.368	0.854	71,183
F 2023	13.106	6.201	12.610	5.245	0.379	0.859	73,953

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	9.1	9.8	9.9	10.5	11.2	11.5	12.0	12.4	12.6	12.9	13.1	13.3	12.9	13.2	13.3	13.3
General Fund	4.4	4.7	4.7	5.0	5.3	5.5	5.7	5.9	5.9	6.1	6.2	6.2	6.1	6.3	6.3	6.3
GF Growth	8.3%	7.1%	0.6%	6.2%	6.9%	2.7%	4.2%	2.5%	1.3%	2.1%	2.1%	1.0%	-3.0%	3.6%	0.1%	-0.2%

Video Gambling Tax

Revenue Description

Video gambling income is derived from two sources: license fees and video gambling taxes. There are three types of license fees: fees paid by operators for video gambling machines, fees paid by operators for non-video games such as poker, and annual fees for the right to assemble, produce, or manufacture video gambling machines or associated equipment. The video gambling tax is paid by licensed video gambling machine operators. License holders are charged a tax of 15% of the gross income (defined as net of payouts) from each licensed video gambling machine. The Department of Justice (DOJ) issues video gambling licenses and permits and collects the fees and taxes.

Statutory Reference

Tax Rate – Route operator license: 23-5-129, MCA; gambling establishment operator license: 23-5-177, MCA; card table fee: 23-5-306(2), MCA; bingo/keno permit: 23-5-407, MCA; sports tab tax: 23-5-502, MCA; video tax: 23-5-610(1), MCA; machine permit fee: 23-5-612(2), MCA
Tax Distribution – Card table fee: 23-5-306(3&4), MCA; bingo and keno tax: 23-5-409, MCA; sports tab tax: 23-5-502, MCA; video: 23-5-610(6), MCA; machine permit fee: 23-5-612(3), MCA
Date Due – Card table fees due annually and distributed quarterly to local governments: 23-5-306(1&4), MCA; video tax due 15 and 25 days after the end of the quarter: 23-5-610(5), MCA; machine permit fees due annually prorated on a quarterly basis: 23-5-612(2a), MCA; bingo and keno taxes due July 31.

Applicable Tax Rates

License Fees

- Video gambling machine permit – $220 annually
- Video gambling manufacturer license – $1,000 annually
- Video gambling machine examination fee – Actual DOJ costs of examining the electronic equipment
- Distributor license – $1,000 annually
- Route operator license – $1,000 annually
- Bingo/keno manufacture license – $1,000 annually
- Gambling establishment operator license – Actual DOJ costs of determining licensure qualifications
- Antique slot machine seller permit – $50 annually
- Live card game table – $250 annually for the first table and $500 for each additional table
- Card game dealer license – $75 for the first year, $25 for each subsequent year
- Pinochle tournament permit – $25
- Card room contractor license – $150 annually
- Bingo/keno permit – $250 annually
- Bingo/keno examination fee – Actual DOJ costs of examining the electronic equipment
- Sports tab game seller license – $100 annually
- Casino night permit – $25
- Associated business – $100

Gambling Taxes

- Video – 15% of gross income (defined as net of payouts) per video gambling machine
- Bingo/keno – 1% of gross proceeds
- Sport tabs – $1.00 for each 100 sport tabs sold

Collection Frequency: Video tax – quarterly, machine permit fees – quarterly, other fees – annually

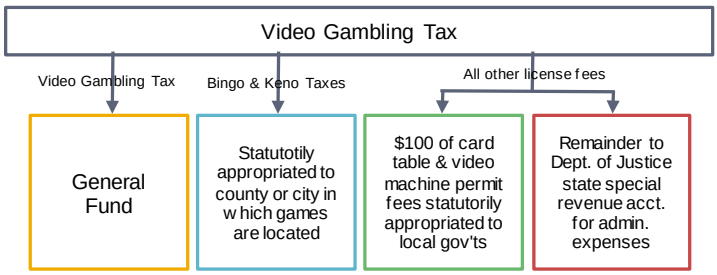
Distribution

License Fees

- $100 of the live card game table fee and $100 of the video gambling machine permit fee (prorated basis) are statutorily appropriated for distribution to local governments.
- All other license fee revenue is retained by DOJ to cover administrative costs.

Gambling Taxes

- Video – All of video gambling tax receipts are deposited into the general fund.
- Bingo/Keno – All collections are statutorily appropriated for distribution to the municipality or county in which the game is located.
- Sport Tabs – All collections are retained by DOJ for administration purposes.



Forecast Risks

- Personal income changes
- Population changes
- Potential impact due to legalization of sports betting

Revenue Estimate Methodology

The components of video gambling revenue have separate distributions, so each component is estimated separately.

Data

DOJ provides data upon request and limited applicable data is available from the department's website. Historic and current revenue collections are obtained from SABHRS. IHS Markit forecasts of Montana population coupled with a moving-average modeled growth rate are used to forecast the video tax collections.

Analysis

Revenue from the tax on video gambling machine gross income (defined as net of payouts) is the largest component of this revenue source and all revenue from this tax is distributed to the general fund. To determine total gross income, gross income for poker, keno, and multiple-game machines are calculated from revenue collections. The amount from the most recently completed fiscal year and subsequent estimates for succeeding fiscal years are adjusted based on prior years' collections.

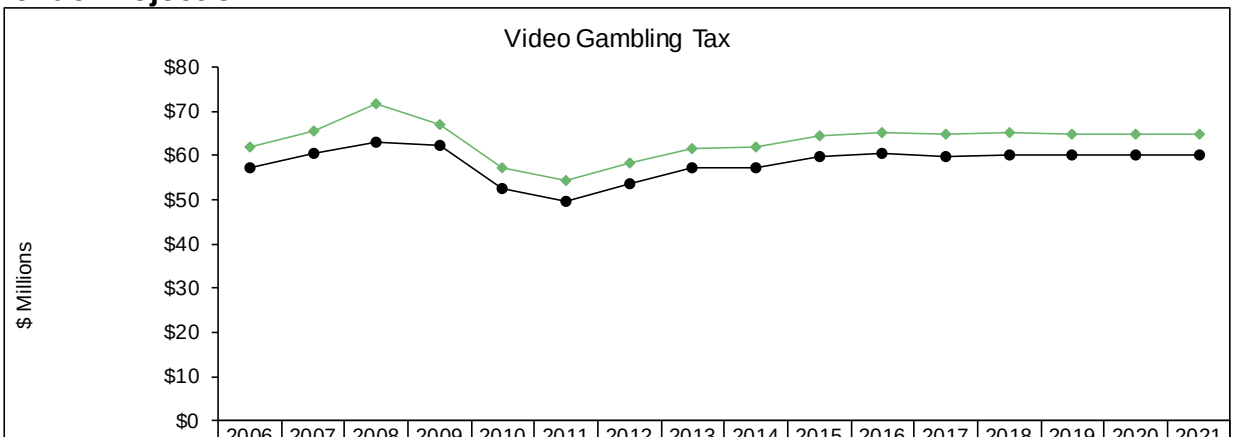
Permit and license fees are the second component to this revenue source, the revenue from which is deposited to the state special revenue fund and distributed to the DOJ to pay administrative costs and to local governments. There are three separate estimates for permit and license fees.

- Video gambling manufacturing license – The number of licenses are estimated using a linear regression model that uses the prior fiscal year's license amount as the predictor variable.
- Live game permit/license fees – The amounts of "first" poker tables, "additional" poker tables, bingo/keno, and card dealers are estimated using the most recently completed fiscal years.
- Video gambling machine permit fees – The number of video, bingo/multi game, and keno machine permits is estimated using a five-year moving average

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Non GF Fee $ Millions
A 2008	$71.607	$63.134	$8.459
A 2009	67.198	62.458	4.713
A 2010	57.207	52.396	4.799
A 2011	54.205	49.824	4.370
A 2012	58.259	53.824	4.427
A 2013	61.776	57.261	4.505
A 2014	62.009	57.147	4.854
A 2015	64.405	59.799	4.599
A 2016	65.310	60.554	4.751
A 2017	64.730	59.956	4.768
A 2018	65.077	60.324	4.740
F 2019	64.761	60.158	4.603
F 2020	64.832	60.248	4.584
F 2021	64.759	60.172	4.588
F 2022	64.814	60.225	4.588
F 2023	64.790	60.201	4.590

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	62.1	65.7	71.6	67.2	57.2	54.2	58.3	61.8	62.0	64.4	65.3	64.7	65.1	64.8	64.8	64.8
General Fund	57.3	60.6	63.1	62.5	52.4	49.8	53.8	57.3	57.1	59.8	60.6	60.0	60.3	60.2	60.2	60.2
GF Growth	7%	6%	4%	-1%	-16%	-5%	8%	6%	0%	5%	1%	-1%	1%	0%	0%	0%

Wine Tax

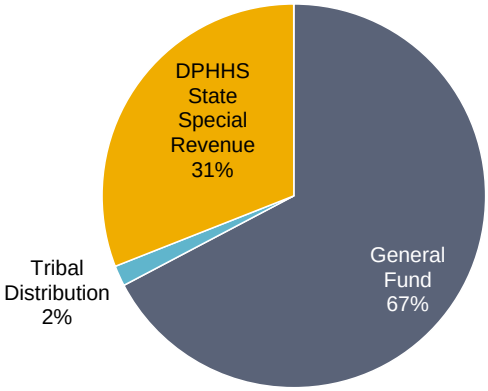
Revenue Description
A tax is levied on table wines and hard ciders imported into Montana by wine distributors or by DOR, as a liquor wholesaler.

Statutory Reference
Tax Rate – 16-1-411(1), MCA; 16-2-301(2), MCA
Tax Distribution – 16-1-411(3), MCA; 16-2-301(2), MCA
Date Due – 15th day of the month following the sale from the distributor's warehouse (16-1-411(2), MCA)

Applicable Tax Rates
- $0.27 per liter of wine
- $0.28 per liter of wine sold to agency liquor stores
- $0.037 per liter of hard cider

Collection Frequency: Monthly

Distribution
Wine tax revenue is distributed between the general fund, the Department of Public Health and Human Services (DPHHS) state special revenue alcohol account, and tribal governments according to intergovernmental agreements between DOR and the tribes. The additional $0.01 tax per liter tax from agency sales is deposited into the general fund. The wine tax revenues distributed to Blackfeet, Fort Belknap, Fort Peck, and Confederated Salish and Kootenai tribes come out of the general fund portion of the revenue and are distributed according to the following formula: (per capita wine consumption) x (tribal membership) x (Montana tax rate). The remaining 31% of revenue goes to DPHHS to be used for treatment, rehabilitation, and prevention of alcohol and chemical dependency. The following chart shows the FY 2016 distribution of wine tax revenue.



Forecast Risks
- Changing Montana population
- Rate of change in effective tax rate

Revenue Estimate Methodology
Data

The wine tax estimate is based on data obtained from DOR, SABHRS, and IHS Markit. Details on historic tribal distributions are provided by DOR; fiscal year tax collections are from SABHRS; forecasts for independent economic variables are produced by IHS Markit.

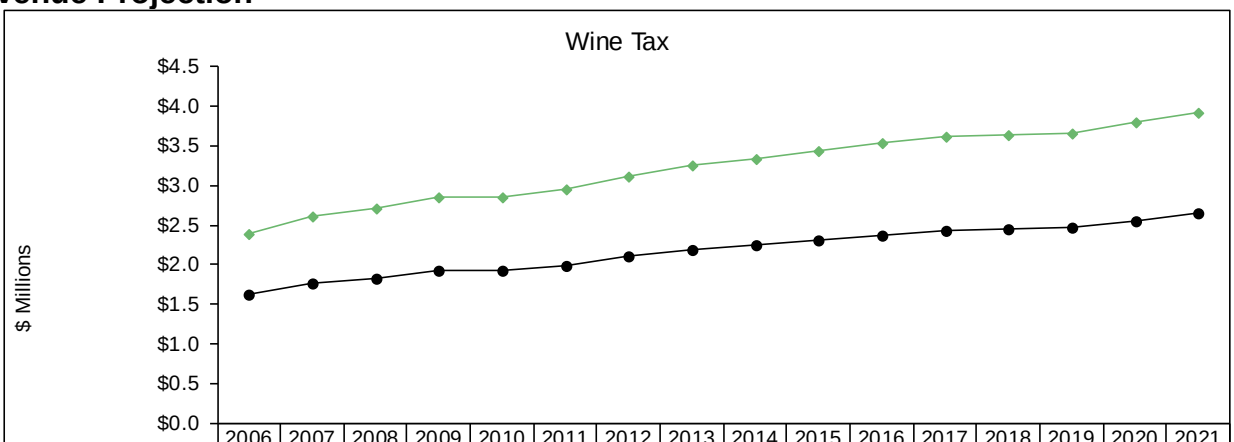
Analysis

Per capita consumption is modeled on Montana population age 18 and older and the prior year's actual consumption. Forecast per capita consumption is multiplied by forecast population to obtain an estimate of future total consumption. Total tax collections are calculated by multiplying the number of liters sold in a given year by the effective tax rate in that year. This analysis assumes that the effective tax rate remains the same as the last known fiscal year.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Effective Tax Rate	Approximate Liters Sold Millions	Montana Pop >= 21 Millions
A 2008	$2.701	$1.829	26.8%	10.097	0.712
A 2009	2.860	1.936	26.8%	10.680	0.720
A 2010	2.857	1.933	26.8%	10.673	0.727
A 2011	2.945	1.994	26.7%	11.022	0.733
A 2012	3.109	2.104	26.6%	11.690	0.741
A 2013	3.244	2.195	25.9%	12.510	0.748
A 2014	3.327	2.250	24.9%	13.337	0.755
A 2015	3.430	2.307	24.6%	13.970	0.763
A 2016	3.527	2.373	25.0%	14.136	0.772
A 2017	3.610	2.429	25.2%	14.338	0.782
A 2018	3.635	2.446	25.0%	14.537	0.791
F 2019	3.654	2.461	24.9%	14.662	0.797
F 2020	3.789	2.554	24.9%	15.203	0.803
F 2021	3.922	2.644	24.9%	15.738	0.808
F 2022	4.055	2.733	24.9%	16.270	0.813
F 2023	4.188	2.823	24.9%	16.804	0.818

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	2.4	2.6	2.7	2.9	2.9	2.9	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.7	3.8	3.9
General Fund	1.6	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.6	2.6
GF Growth	8.1%	9.3%	3.1%	5.8%	-0.2%	3.2%	5.5%	4.3%	2.5%	2.5%	2.9%	2.3%	0.7%	0.6%	3.8%	3.5%

PROPERTY TAXES

- Property Tax Overview
- 55 Mill Property Tax
- 40 Mill Property Tax
- 6 Mill Property Tax
- 1.5 Mill Property Tax

LFD

MONTANA LEGISLATIVE FISCAL DIVISION

Property Tax and Non-Levy Revenue

Revenue Description

Montana law requires counties to levy a county equalization levy of 55 mills, a state equalization levy of 40 mills (often referred to together as the 95 mills) for K-12 schools, and 6 mills for the university system against all taxable value in each county. A mill levy of 1.5 mills is also applied against all property in the five counties with a vo-tech college. Taxable value is the market value of statutorily defined property multiplied by a statutory tax rate.

In addition to the tax on property, this revenue component includes collections from "non-levy" sources that are distributed based on mills levied by taxing jurisdictions. These non-levy sources include the state share of coal gross proceeds taxes, federal forest revenues, and other smaller revenue sources.

This source also includes the state's share of protested taxes paid by centrally assessed companies. Fifty percent of taxes paid under protest by centrally assessed firms are deposited in the general fund and the rest were deposited in a state special account until the protests are resolved. Should the state fail in its defense of the taxation of these companies, the protested taxes must be returned to the taxpayer. If the state prevails in the case, the money in the special revenue account is transferred to the general fund.

Non-Levy Revenue

This source includes federal forest receipts, coal gross proceeds revenue, and other revenue which is distributed to statewide and local mills in each county. The mills to which non-levy revenue is distributed are unique for each county and each non-levy revenue source. The state's portion of non-levy revenue is remitted to the state as a portion of the appropriate property tax.

Federal Forest Receipts

Revenue Description

Federal forest receipts are payments from the federal government in lieu of revenues from the sale of forest products of federal land. The federal government authorizes logging operations on forest lands located within the borders of Montana. The sale of timber generates revenue that the federal government shares with the state in the following year. The state sends the money to the county treasurer of the county in which the receipts were generated. Within thirty days, the county treasurer distributes the money to various county and state accounts.

Statutory References

Distribution – 17-3-211, MCA; 17-3-212, MCA

Date Due – The state treasurer distributes the funds within 30 days after receiving full payment

Distribution

The county treasurer apportions federal forest receipts in the following manner. Not more than 20% and not less than 15% is distributed to county government for special projects on federal land. Of the remainder:

- 66 2/3% goes to the road fund of the county
- 33 1/3% goes to the following countywide accounts, based on the mill ratios of each to total mills in the prior year: county equalization accounts (55 mills), county transportation account, county retirement accounts

Coal Gross Proceeds Tax

Revenue Description

The state imposes a gross proceeds tax of 5% on the gross value of coal produced by all the coal mines in the state. The gross value of coal is computed as the tonnage of coal produced and sold times the contract sales price. The tax on the gross proceeds for coal is estimated in conjunction with the coal severance tax. Of the total gross proceeds revenue, a state share is distributed to the elementary and high school county equalization levies as they existed in FY 1990.

Statutory References

Tax Rate – 15-23-703(1), MCA

Tax Distribution – 15-23-703(3), MCA

Applicable Tax Rates

The amount of tax due is 5% of the value of production as measured by the contract sales price for production in the preceding calendar year. There are some exceptions, such as new underground mines which are taxed at 2.5% for the first 10 years, as well as certain county-granted tax abatements.

Distribution

The county treasurer distributes the coal gross proceeds tax based on the relative proportions of mill levies for the state, counties, and school districts as these existed in FY 1990. However, coal gross proceeds from mines started after 1988 are distributed across mill levies in the same fashion as property taxes were distributed in the previous fiscal year.

Other Revenue

The county equalization account receives other revenue in addition to the types listed elsewhere. These include penalties and interest, back taxes, investment earnings, recreational fees, tax title and property sales, various state grants and fees, district court fines, county rents and lease income, and various revenue from federal sources such as PILT, Taylor Grazing and Bankhead Jones.

Forecast Risks

- Property tax class growth rates
- Tax Increment Financing (TIF) property values
- Abated property values
- Non-levy revenue

Revenue Estimate Methodology

Data

The data required to produce forecasts of property tax received by the state are historical data on assessed and taxable value by class of property, the amount of property in tax increment financing (TIF) districts, the amount of local abatements conferred by local governments, and future growth rates for these variables. Also required are historical and estimated data on the non-levy components of property tax. These are gross proceeds revenue, federal forest revenue, and miscellaneous revenue allocated to the various state mill levies. The historical data on assessed and taxable value by property tax class, TIF taxable value, and abated taxable value are provided to the LFD and OBPP by DOR on an annual basis.

The TIF taxable value is required because state law allows a TIF district to apply the state 95 mills and 1.5 vo-tech mills to the increment in property value that occurred since the TIF was created, but allows the TIF district to keep the revenue associated with these mill levies. Thus, the taxable value of the state must be adjusted downward by the increment value of TIF property for the 95 mills and the 1.5-mill levy. The 6-mill levy revenue derived from incremental TIF property does flow to the state special account for university operations, and thus the tax base for the 6-mill levy is not adjusted for the incremental taxable value in a TIF.

Montana law allows local governments (usually counties) to temporarily reduce the tax rate applied to the assessed value of property. This is called abated property. For instance, in tax year 2010, an electrical generation plant outside Hardin and another in Silver Bow County were granted a 10-year exemption on all personal and real estate property. The abatement applies to all local mills for those jurisdictions in which the properties are located. However, the tax rate reduction and the resulting partial exemption from property taxes does not apply to state mills. For the first time in tax year 2010, abated taxable values were available by class of property and were added back to each class of taxable value to form the tax base for the state mills. Previously these values had been added back without respect to class of property.

Assessed and taxable values are measured on January 1 of the tax year. The taxes are due to the state in the following November and May, i.e. in the fiscal year following the calendar year in which the values are measured. Coal gross proceeds are due to the state in the fiscal year two years after the calendar year in which the coal was produced. Federal forest receipts are received by the federal government in December of each year, and miscellaneous non-levy revenue (primarily interest) is deposited as earned.

Analysis

The latest year for which taxable value by class is available is the base from which future taxable values are derived. Growth rates are applied to the taxable value in each class of property. For the most part, growth rates are based on historical growth and on expected changes in tax rates in upcoming fiscal years. The table below shows growth rates for each class of property, for TIF and the resulting growth rates in net taxable value. Rates reflect both reappraisal and assumed growth rates for classes 3, 4, and 10.

Statewide Taxable Value by Fiscal Year

	Taxable Value ($ Millions)			Growth Rates		
Class of Property	2019	2020	2021	2019	2020	2021
1 Mine Net Proceeds	$4.795	$5.246	$5.704	20.4%	9.4%	8.7%
2 Gross Proceeds Metal Mines	22.274	24.871	27.505	24.5%	11.7%	10.6%
3 Ag Land	152.577	157.566	157.193	-0.2%	3.3%	-0.2%
4 Residential and Commercial Real Estate	1,743.879	1,922.018	1,954.413	1.7%	10.2%	1.7%
5 Pollution Control Equiopment	47.683	47.696	47.708	0.0%	0.0%	0.0%
7 Non Centrally Assed Utilities	1.215	1.288	1.366	6.0%	6.0%	6.0%
8 Business Personal Property	156.844	159.838	162.889	0.8%	1.9%	1.9%
9 Electrical Utilities	501.145	527.717	555.699	-0.3%	5.3%	5.3%
10 Forest Land	4.898	4.884	4.870	-0.3%	-0.3%	-0.3%
12 Railroads and Airlines	88.093	91.648	94.514	-7.3%	4.0%	3.1%
13 Telecomm and Electric Generation	172.584	173.453	174.327	-3.6%	0.5%	0.5%
14 Wind Generation	21.074	21.238	21.403	24.3%	0.8%	0.8%
15 C02/Qualifying Liquid Pipeline	2.010	2.087	2.167	-20.6%	3.8%	3.8%
16 High Voltage DC Converter	-	-	-	NA	NA	NA
Total Taxable Value	2,919.072	3,139.550	3,209.758	0.8%	7.6%	2.2%
Tax Increment Financing Values	54.927	58.690	61.459	-1.0%	6.9%	4.7%
Net Taxable Value	$2,864.145	$3,080.859	$3,148.299	0.9%	7.6%	2.2%
Net Vo-tech Taxable Value	970.194	1,043.473	1,066.807	0.4%	7.6%	2.2%
Net 6-Mill Taxable Value	$2,919.072	$3,139.550	$3,209.758	0.8%	7.6%	2.2%

FY 2019 taxable values are tax year 2018 taxable values. The property was valued on January 1, 2018, and the revenue from these values is collected by the state in November and May of the following fiscal year. FY 2019 values are known, although subject to revision.

The figure below shows the tax rates for all classes of property.

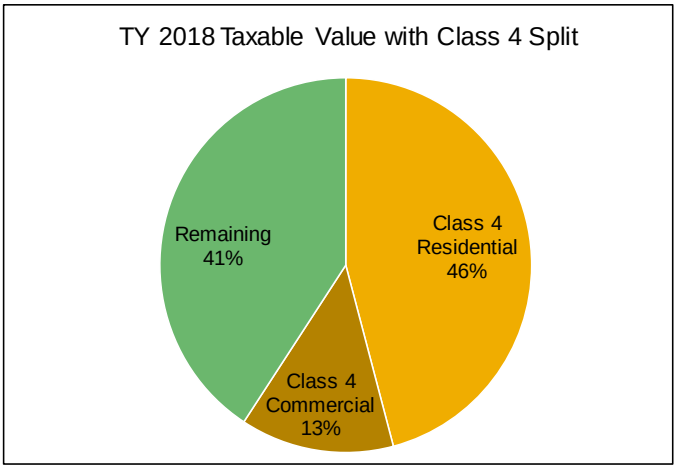
Tax Rates and Exemptions by Property Tax Class

	Tax Rates		
Class of Property	2019	2020	2021
Mine Net Proceeds	100.00%	100.00%	100.00%
Gross Proceeds Metal Mines	3.00%	3.00%	3.00%
Ag Land	2.16%	2.16%	2.16%
Residential Real Estate	1.35%	1.35%	1.35%
Commercial Real Estate*	1.89%	1.89%	1.89%
Pollution Control Equiopment	3.00%	3.00%	3.00%
Non Centrally Assed Utilities	8.00%	8.00%	8.00%
Business Personal Property, above threshold	3.00%	3.00%	3.00%
Business Personal Property, below threshold	1.50%	1.50%	1.50%
Electrical Utilities	12.00%	12.00%	12.00%
Forest Land	0.37%	0.37%	0.37%
Railroads and Airlines**	3.08%	3.03%	3.06%
Telecomm and Electric Generation	6.00%	6.00%	6.00%
Wind Generation	3.00%	3.00%	3.00%
C02/Qualifying Liquid Pipeline	3.00%	3.00%	3.00%
High Voltage DC Converter	2.25%	2.25%	2.25%

*Effective Tax Rate; Actual Rate is 1.35% multiplied by 1.4

**Estimated Rate: This rate is calcuated annually

Class 4 is the largest property tax class, representing nearly 60% of taxable value in TY 2018.



The following table shows a breakout of non-levy revenue as well as protested taxes by the 95 and 1.5 mills as well as the 6-mill university account.

Property Tax Revenue in General Fund and University Account
($ Millions)

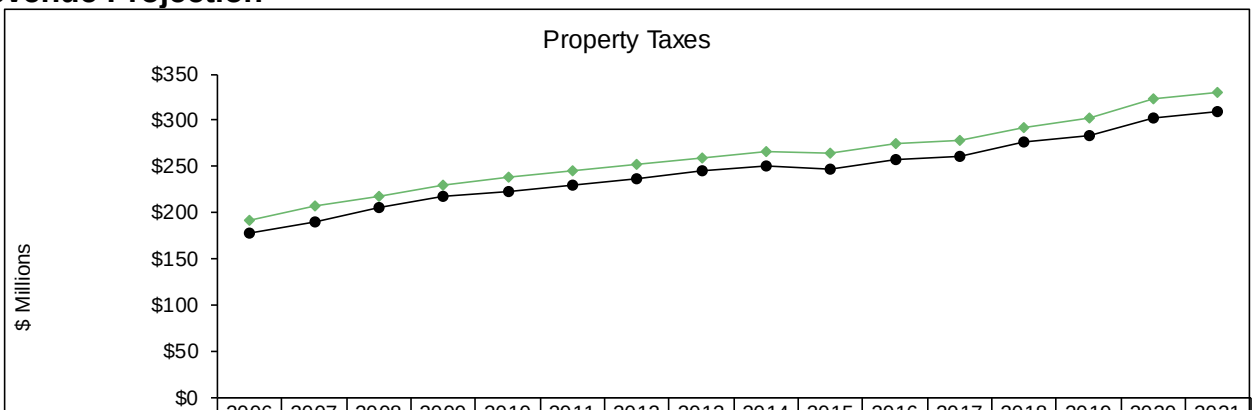
Revenue Type	2019	2020	2021
95 Mill Revenue	$260.458	$290.936	$297.343
1.5 Mill Revenue	1.394	1.500	1.531
Mill Property Tax in the General Fund	261.853	292.436	298.874
Non-Levy - Coal Gross Proceeds	7.579	7.901	8.096
Non-Levy - Federal Forest Receipts	14.364	2.168	2.168
Non-Levy - Miscellaneous Revenue	0.500	0.500	0.500
Protested Taxes	(1.071)	(0.535)	(0.535)
Property Taxes - 95 Mills and 1.5 Mills	$283.225	$302.470	$309.103
6-Mill Property Tax Revenue - University Account	$17.514	$18.837	$19.258
Nonlevy Revenue Associated with 6-Mills	1.011	1.053	1.080
Protested Taxes in Protest account	(0.068)	(0.068)	(0.068)
Property Taxes in University Account	18.457	19.823	20.270

Revenue Estimate Assumptions

FY	Class 1 $ Millions	Class 2 $ Millions	Class 3 $ Millions	Class 4 $ Millions	Class 5 $ Millions	Class 6 $ Millions	Class 7 $ Millions
A 2008	$3.840	$18.849	$141.329	$1,244.916	$35.418	-	$1.096
A 2009	4.013	24.540	142.099	1,296.595	35.155	-	1.214
A 2010	4.002	23.837	161.073	1,368.081	37.502	-	1.266
A 2011	3.181	18.291	153.566	1,396.074	38.994	-	1.298
A 2012	3.888	22.987	150.429	1,418.797	40.642	-	1.194
A 2013	4.189	31.132	147.792	1,446.304	45.673	-	1.170
A 2014	3.272	29.723	145.199	1,479.183	45.072	-	1.202
A 2015	3.791	25.555	143.467	1,519.031	43.570	-	1.182
A 2016	3.907	26.517	141.391	1,539.936	45.555	-	1.189
A 2017	4.080	19.454	142.282	1,552.031	46.795	-	1.139
A 2018	3.984	17.890	152.939	1,715.108	47.671	-	1.146
F 2019	4.795	22.274	152.577	1,743.879	47.683	-	1.215
F 2020	5.246	24.871	157.566	1,922.018	47.696	-	1.288
F 2021	5.704	27.505	157.193	1,954.413	47.708	-	1.366
F 2022	5.709	27.528	162.073	2,075.168	47.720	-	1.448
F 2023	5.717	27.564	161.689	2,110.129	47.733	-	1.535

FY	Class 8 $ Millions	Class 9 $ Millions	Class 10 $ Millions	Class 12 $ Millions	Class 13 $ Millions	Class 14 $ Millions	Class 15 $ Millions
A 2008	$138.658	$264.324	$6.822	$43.004	$152.942	$2.590	-
A 2009	151.317	260.190	6.816	43.567	154.611	2.944	-
A 2010	169.606	254.253	6.988	46.901	154.314	6.780	-
A 2011	182.310	280.633	6.519	51.836	174.430	17.889	-
A 2012	180.626	304.226	6.390	71.336	193.267	17.143	-
A 2013	175.743	322.490	6.349	72.349	197.605	15.550	-
A 2014	162.972	353.968	6.277	74.501	187.546	32.105	$0.953
A 2015	147.114	374.692	6.215	72.038	169.516	16.601	1.757
A 2016	154.457	430.457	4.922	74.354	178.178	16.881	2.352
A 2017	155.331	478.417	4.920	85.934	181.614	17.670	2.355
A 2018	155.522	502.593	4.913	95.052	179.090	16.958	2.533
F 2019	156.844	501.145	4.898	88.093	172.584	21.074	2.010
F 2020	159.838	527.717	4.884	91.648	173.453	21.238	2.087
F 2021	162.889	555.699	4.870	94.514	174.327	21.403	2.167
F 2022	165.999	585.164	4.856	100.516	175.206	21.570	2.250
F 2023	169.168	616.191	4.842	105.004	176.088	21.737	2.336

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	192	207	218	230	239	245	253	260	266	265	275	279	292	303	323	330
General Fund	178	191	205	217	223	229	237	245	250	248	257	260	276	283	302	309
GF Growth	6.2%	7.5%	7.4%	5.9%	2.5%	3.1%	3.2%	3.4%	2.3%	-1.0%	3.7%	1.2%	6.2%	2.5%	6.8%	2.2%

Property Tax 55 Mill

Statutory Reference

Tax Rate – 20-9-331(1), MCA; 20-9-333(1), MCA
Tax Distribution – 20-9-331(1), MCA; 20-9-333(1), MCA
Date Due – Half of taxes due November 30th and half are due May 31st (15-16-102(1), MCA), county treasurers must remit to the Department of Revenue within the first 20 days of each month money received in the previous month (15-1-504(1), MCA)

Applicable Tax Rates: Each property class has its own tax rate, which is applied to the assessed value to produce a taxable value. For every $1,000 in taxable value, 55 mills generate $55 in state property taxes.

Collection Frequency: Monthly, with significant state deposits in December and June.

Distribution: All property tax receipts are deposited into the general fund, except revenue associated with the 6-mill university levy.

Summary of Legislative Action: See main property page for list of legislative actions.

Forecast Risks

- Tax Increment Financing (TIF) property values
- Abated property values
- Non-levy revenue

Revenue Estimate Methodology: Explained in the methodology section under "Property Tax."

Revenue Estimate Assumptions

FY	55 Mill Total Tax $ Millions	55 Mill GF Tax $ Millions	Taxable Value $ Millions	TIF Value $ Millions	Abatments Value $ Millions
A 2008	$121.355	$121.432	$2,053.789	$30.120	$18.099
A 2009	129.080	129.949	2,123.061	25.752	20.021
A 2010	135.277	134.249	2,234.603	32.014	23.706
A 2011	137.021	136.447	2,325.021	41.946	27.058
A 2012	140.144	139.813	2,410.924	46.300	25.369
A 2013	145.264	145.603	2,466.347	46.054	20.225
A 2014	148.324	148.561	2,521.972	48.039	20.678
A 2015	147.498	147.133	2,524.531	45.187	20.697
A 2016	153.892	153.117	2,620.095	48.574	21.486
A 2017	155.282	154.262	2,692.021	50.572	22.075
A 2018	161.834	163.028	2,895.399	55.459	23.743
F 2019	168.335	167.715	2,919.072	54.927	23.937
F 2020	178.271	177.961	3,139.550	58.690	25.745
F 2021	182.175	181.866	3,209.758	61.459	26.321
F 2022	191.145	190.835	3,375.207	64.359	27.678
F 2023	195.089	194.779	3,449.734	67.395	28.289

Revenue Projection

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	109	115	121	129	135	137	140	145	148	147	154	155	162	168	178	182
General Fund	107	113	121	130	134	136	140	146	149	147	153	154	163	168	178	182
GF Growth	5.0%	5.4%	7.2%	7.0%	3.3%	1.6%	2.5%	4.1%	2.0%	-1.0%	4.1%	0.7%	5.7%	2.9%	6.1%	2.2%

Property Tax 40 Mill

Statutory Reference

Tax Rate – 20-9-360, MCA
Tax Distribution – 20-9-360, MCA
Date Due – Half of taxes due November 30th and half are due May 31st (15-16-102(1), MCA), county treasurers must remit to the Department of Revenue within the first 20 days of each month money received in the previous month (15-1-504(1), MCA)

Applicable Tax Rates: Each property class has its own tax rate, which is applied to the assessed value to produce a taxable value. For every $1,000 in taxable value, 40 mills generate $40 in state property taxes.

Collection Frequency: Monthly, with significant state deposits in December and June.

Distribution: All property tax receipts are deposited into the general fund, except revenue associated with the 6-mill university levy.

Forecast Risks

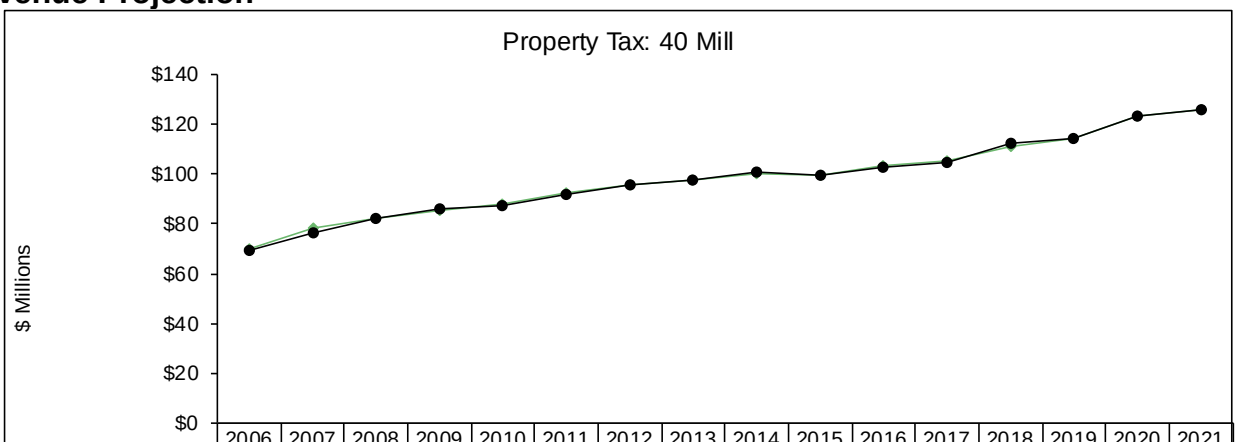
- Non-levy revenue
- Tax Increment Financing (TIF) property values
- Abated property values

Revenue Estimate Methodology: Explained in the methodology section under "Property Tax."

Revenue Estimate Assumptions

FY	40 Mill Total Tax $ Millions	40 Mill GF Tax $ Millions	Taxable Value $ Millions	TIF Value $ Millions	Abatments Value $ Millions
A 2008	$82.459	$82.518	$2,053.789	$30.120	$18.099
A 2009	85.343	85.977	2,123.061	25.752	20.021
A 2010	87.888	87.145	2,234.603	32.014	23.706
A 2011	92.171	91.749	2,325.021	41.946	27.058
A 2012	95.917	95.690	2,410.924	46.300	25.369
A 2013	97.533	97.813	2,466.347	46.054	20.225
A 2014	100.380	100.541	2,521.972	48.039	20.678
A 2015	99.804	99.528	2,524.531	45.187	20.697
A 2016	103.264	102.701	2,620.095	48.574	21.486
A 2017	105.417	104.675	2,692.021	50.572	22.075
A 2018	111.168	112.037	2,895.399	55.459	23.743
F 2019	114.566	114.115	2,919.072	54.927	23.937
F 2020	123.234	123.009	3,139.550	58.690	25.745
F 2021	125.932	125.707	3,209.758	61.459	26.321
F 2022	132.434	132.209	3,375.207	64.359	27.678
F 2023	135.294	135.068	3,449.734	67.395	28.289

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	70	78	82	85	88	92	96	98	100	100	103	105	111	115	123	126
General Fund	69	77	83	86	87	92	96	98	101	100	103	105	112	114	123	126
GF Growth	8.2%	10.9%	7.6%	4.2%	1.4%	5.3%	4.3%	2.2%	2.8%	-1.0%	3.2%	1.9%	7.0%	1.9%	7.8%	2.2%

Property Tax 6 Mill

Statutory Reference

Tax Rate – 15-10-108, MCA
Tax Distribution – 15-10-108, MCA
Date Due – Half of taxes due November 30th and half are due May 31st (15-16-102(1), MCA), county treasurers must remit to the Department of Revenue within the first 20 days of each month money received in the previous month (15-1-504(1), MCA)

Applicable Tax Rates

Each property class has its own tax rate, which is applied to the assessed value to produce a taxable value. For every $1,000 in taxable value, 6 mills generate $6 in state property taxes.

Collection Frequency: Monthly, with significant state deposits in December and June

Distribution: All proceeds are deposited into the university system 6 mill levy state special revenue account.

Forecast Risks

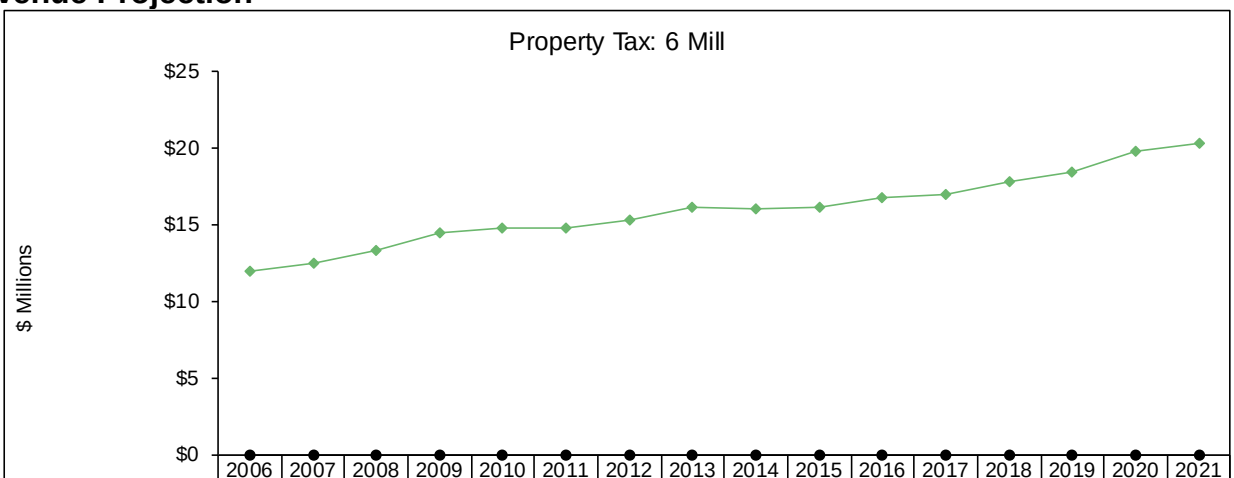
- Non-levy revenue growth
- Tax Increment Financing (TIF) property values
- Abated property values

Revenue Estimate Methodology: Explained in the methodology section under "Property Tax."

Revenue Estimate Assumptions

FY	6 Mill Total Tax $ Millions	6 Mill GF Tax $ Millions	Taxable Value $ Millions	TIF Value $ Millions	Abatments Value $ Millions
A 2008	$13.313	-	$2,053.789	$30.120	$18.099
A 2009	14.422	-	2,123.061	25.752	20.021
A 2010	14.772	-	2,234.603	32.014	23.706
A 2011	14.823	-	2,325.021	41.946	27.058
A 2012	15.324	-	2,410.924	46.300	25.369
A 2013	16.115	-	2,466.347	46.054	20.225
A 2014	16.012	-	2,521.972	48.039	20.678
A 2015	16.092	-	2,524.531	45.187	20.697
A 2016	16.755	-	2,620.095	48.574	21.486
A 2017	16.947	-	2,692.021	50.572	22.075
A 2018	17.835	-	2,895.399	55.459	23.743
F 2019	18.457	-	2,919.072	54.927	23.937
F 2020	19.823	-	3,139.550	58.690	25.745
F 2021	20.270	-	3,209.758	61.459	26.321
F 2022	21.267	-	3,375.207	64.359	27.678
F 2023	21.716	-	3,449.734	67.395	28.289

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	12.0	12.5	13.3	14.4	14.8	14.8	15.3	16.1	16.0	16.1	16.8	16.9	17.8	18.5	19.8	20.3
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Property Tax 1.5 Mill

Revenue Description
Statute requires the boards of county commissioners in the five counties where colleges of technology reside to levy 1.5 mills for deposit in the state general fund.

Statutory Reference
Tax Rate – 20-25-439(1), MCA
Tax Distribution – 20-25-439(2), MCA
Date Due – Half of taxes due November 30th and half are due May 31st (15-16-102(1), MCA), county treasurers must remit to the Department of Revenue within the first 20 days of each month money received in the previous month (15-1-504(1), MCA)

Applicable Tax Rates: Each property class has its own tax rate which is applied to assessed value to produce a taxable value. For every $1,000 in taxable value, 1.5 mills generate $1.50 in state property taxes.

Collection Frequency: Monthly, with significant state deposits in December and June

Distribution: All property tax receipts are deposited into the general fund, except revenue associated with the 6-mill university levy.

Forecast Risks
- Tax Increment Financing (TIF) property values
- Abated property values
- Nonlevy revenue growth rates

Revenue Estimate Methodology: Explained in the methodology section under "Property Tax."

Revenue Estimate Assumptions

FY	1.5 Mill Total Tax $ Millions	1.5 Mill GF Tax $ Millions	Taxable Value $ Millions	TIF Value $ Millions	Abatments Value $ Millions
A 2008	$1.097	$1.094	$2,053.789	$30.120	$18.099
A 2009	1.100	1.116	2,123.061	25.752	20.021
A 2010	1.120	1.115	2,234.603	32.014	23.706
A 2011	1.151	1.155	2,325.021	41.946	27.058
A 2012	1.173	1.160	2,410.924	46.300	25.369
A 2013	1.202	1.192	2,466.347	46.054	20.225
A 2014	1.243	1.241	2,521.972	48.039	20.678
A 2015	1.209	1.219	2,524.531	45.187	20.697
A 2016	1.292	1.283	2,620.095	48.574	21.486
A 2017	1.289	1.288	2,692.021	50.572	22.075
A 2018	1.350	1.349	2,895.399	55.459	23.743
F 2019	1.411	1.394	2,919.072	54.927	23.937
F 2020	1.517	1.500	3,139.550	58.690	25.745
F 2021	1.548	1.531	3,209.758	61.459	26.321
F 2022	1.625	1.608	3,375.207	64.359	27.678
F 2023	1.656	1.639	3,449.734	67.395	28.289

Revenue Projection

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	0.96	1.00	1.10	1.10	1.12	1.15	1.17	1.20	1.24	1.21	1.29	1.29	1.35	1.41	1.52	1.55
General Fund	0.94	0.98	1.09	1.12	1.12	1.16	1.16	1.19	1.24	1.22	1.28	1.29	1.35	1.39	1.50	1.53
GF Growth	4.6%	4.1%	11.1%	2.1%	-0.1%	3.6%	0.4%	2.7%	4.2%	-1.8%	5.2%	0.4%	4.8%	3.4%	7.6%	2.1%

OTHER GENERAL FUND REVENUE

- All Other Revenue
- Highway Patrol Fines
- Nursing Facilities Fee
- Public Institution Reimbursements
- Tobacco Settlement

LFD
MONTANA LEGISLATIVE FISCAL DIVISION

All Other Revenue

Revenue Description

There are fifteen sources of taxes, fees, or fines that historically have generated less than $2.5 million each in annual general fund revenue.

Statutory Reference: Various

Applicable Tax Rates: Various

Collection Frequency: Monthly

Distribution: All proceeds are deposited into the general fund.

Forecast Risks

- Investment license revenue and expenditures
- Liquor license revenue and expenditures
- Number of vehicles registered under the single state registration system
- Fixed costs appropriated for SWCAP/SFCAP
- District court fees
- Revenue and expenditures in the DPHHS cigarette account
- Civil fines
- State Street banking fees
- MSU-EMC debt service payments

Revenue Estimate Methodology

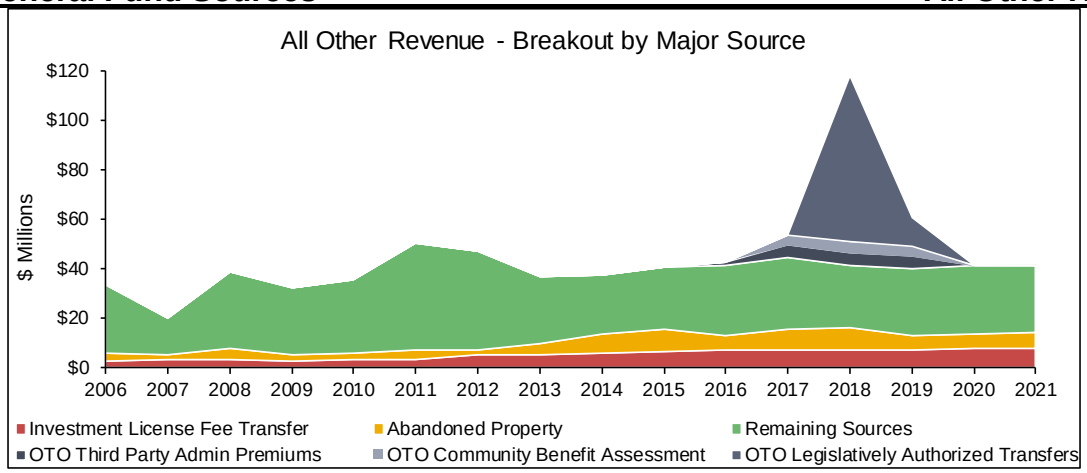
Data

Numerous data sources are consulted for each of the applicable fifteen revenue sources that are estimated individually.

Analysis

1. Abandoned property is estimated using a nine-year moving average.
2. District court fees are estimated using a five-year average.
3. Investment license fee transfer is the net between non-general fund investment fee revenue collected by the State Auditor and its expenses. These amounts are determined in the "Investment License Fee" revenue source.
4. Statewide Cost Allocation Plan: these amounts are estimated using a five-year moving average.
5. Court surcharge is estimated using a three-year moving average.
6. Veteran's cigarette account transfer: money in the account at the end of a fiscal year in excess of $2.0 million is transferred to the general fund. To estimate the excess amounts, distributions of cigarette tax revenue to the account (as determined in the "Cigarette Tax" revenue source) is reduced by budgeted present law amounts from the account for each fiscal year obtained from MBARS. Included are expenditure estimates from long range building appropriations. The $2.0 million limit is then subtracted from the net revenue.
7. Banking charges are estimated to grow by 1% per year.
8. Premiums paid under SB 405 are estimated using collections from FY 2016.
9. The remainder of "All Other" revenue, after the seven revenue sources have been estimated individually, is estimated using a three-year moving average.

The following chart illustrates the major sources of all other revenue. Note that legislatively authorized transfers were a key component of all other revenue in the 2019 biennium but are not anticipated to continue in the 2021 biennium.

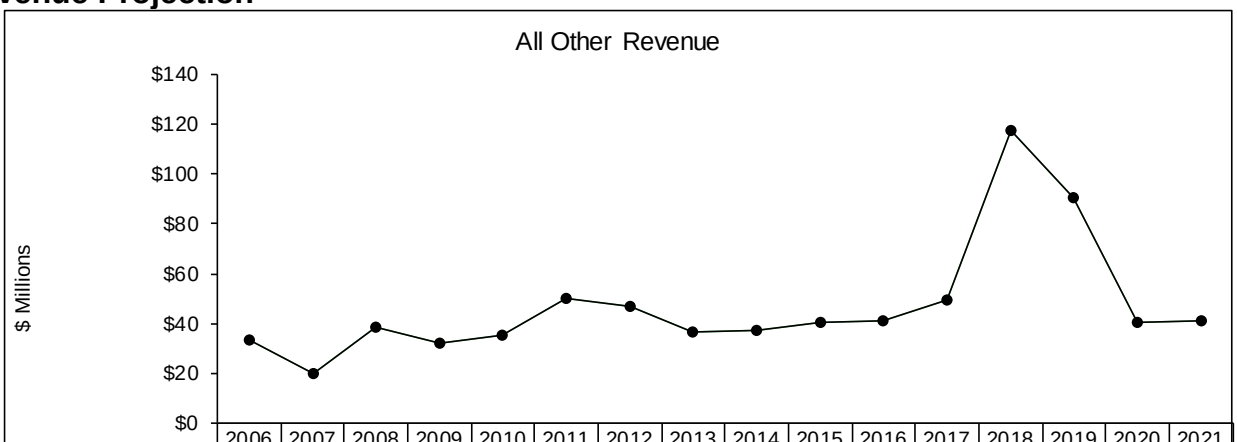


Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Investment Transfer $ Millions	SWCAP SFCAP $ Millions	District Court $ Millions	Bank Charges $ Millions	Vets. Account Transfer $ Millions
A 2008	$38.556	$38.556	$3.309	$2.399	$3.349	$1.334	$2.636
A 2009	32.139	32.139	2.636	1.715	3.450	1.556	2.650
A 2010	35.451	35.451	2.969	3.938	3.481	1.554	1.590
A 2011	50.436	50.436	3.278	3.931	3.596	1.538	3.905
A 2012	47.318	47.318	4.970	3.974	3.434	1.595	3.676
A 2013	36.578	36.578	5.240	2.332	3.386	1.616	3.379
A 2014	37.320	37.320	5.499	2.879	3.275	1.614	4.157
A 2015	40.822	40.822	6.526	2.907	3.203	1.636	3.215
A 2016	41.443	41.443	7.078	2.971	3.425	1.688	3.562
A 2017	49.294	49.294	7.315	2.384	3.325	1.695	3.154
A 2018	117.645	117.645	6.890	2.864	3.375	1.680	2.924
F 2019	90.686	90.686	6.938	2.801	3.182	1.693	3.500
F 2020	40.911	40.911	7.503	2.786	3.182	1.706	3.500
F 2021	41.446	41.446	7.897	2.761	3.182	1.719	3.500
F 2022	41.852	41.852	8.376	2.719	3.182	1.732	3.500
F 2023	43.056	43.056	8.844	2.786	3.182	1.745	3.500

FY	Abandoned Property $ Millions	Court Surcharge $ Millions	Third Party Premiums $ Millions	Remaining Sources $ Millions	Temporary Hospital Fee $ Millions	Leg. Auth. Transfers $ Millions
A 2008	$4.253	$1.616		$19.658		
A 2009	2.470	1.686		15.977		
A 2010	2.778	1.692		17.449		
A 2011	3.756	1.663		28.768		
A 2012	2.234	1.585		25.851		
A 2013	4.337	1.535		14.752		
A 2014	7.745	1.449		10.701		
A 2015	8.723	1.425		13.186		
A 2016	5.952	1.389	$1.357	15.378		
A 2017	8.025	1.392	4.990	17.013	$4.351	
A 2018	9.485	1.254	5.232	12.561	4.351	$67.029
F 2019	5.893	1.345	5.232	14.309	4.351	41.441
F 2020	6.239	1.331	-	14.665	-	-
F 2021	6.515	1.310	-	14.562	-	-
F 2022	6.991	1.329	-	14.024	-	-
F 2023	7.285	1.323	-	14.390	-	-

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	34	20	39	32	35	50	47	37	37	41	41	49	118	91	41	41
General Fund	34	20	39	32	35	50	47	37	37	41	41	49	118	91	41	41
GF Growth	-3%	-41%	93%	-17%	10%	42%	-6%	-23%	2%	9%	2%	19%	139%	-23%	-55%	1%

Highway Patrol Fines

Revenue Description

The Montana Highway Patrol issues citations for speeding, driving under the influence of alcohol or drugs, and other misdemeanors. The fines and forfeitures associated with these citations are collected by various state and local courts.

Statutory Reference

Tax Rate – General fines: 61-3-601, MCA; 61-5-307, MCA; 61-7-118, MCA; 61-8-711, MCA; 61-9-511, MCA; multiple others
Tax Distribution – 3-10-601, MCA (fines collected in justice court are included in "All Other Revenue"); 61-10-148, MCA (violations of vehicle size, weight & load); 61-12-701, MCA (fines by Highway Patrol)
Date Due – Upon conviction

Applicable Tax Rates: Variable

Collection Frequency: Monthly

Distribution: All Highway Patrol fines and forfeitures on all offenses that result from citations issued by the Highway Patrol, except those paid to a justices' court, and received by the state are deposited in the general fund.

Forecast Risks

- Significant changes in historical driving patterns

Revenue Estimate Methodology

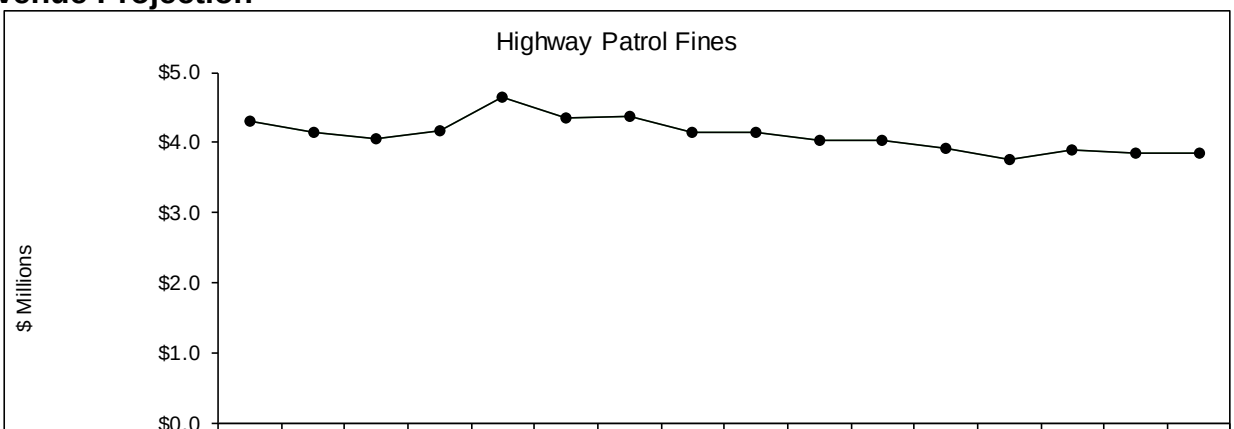
Data

SABHRS data provide a history of highway patrol fine revenue.

Analysis

Highway patrol fine revenue is forecast using an autoregressive moving average time series model.

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	4.3	4.2	4.0	4.2	4.6	4.4	4.4	4.1	4.1	4.0	4.0	3.9	3.8	3.9	3.9	3.8
General Fund	4.3	4.2	4.0	4.2	4.6	4.4	4.4	4.1	4.1	4.0	4.0	3.9	3.8	3.9	3.9	3.8
GF Growth	0.6%	-3.7%	-2.5%	3.2%	11.2%	-6.2%	0.6%	-5.6%	0.0%	-2.4%	-0.1%	-2.8%	-4.4%	4.1%	-1.2%	-0.5%

Nursing Facilities Fee

Revenue Description

Utilization fees are assessed on nursing facilities and intermediate care facilities in Montana. Nursing facilities are health care facilities licensed by the Department of Public Health and Human Services (DPHHS) and include those operated for profit or non-profit, freestanding or part of another health facility, and may be either publicly or privately owned. Nursing facilities do not include adult foster homes, retirement homes, and other alternative living arrangements.

Statutory Reference

Tax Rate – Nursing facility utilization fee: 15-60-102, MCA; intermediate care facility utilization fee: 15-67-102(2), MCA
Tax Distribution – Nursing facility utilization fee: 15-60-102, MCA & 15-60-210, MCA; intermediate care facility utilization fee: 15-67-102(3), MCA
Date Due – Nursing facility utilization fee due the last day of the month following the close of the calendar quarter (15-60-201, MCA); intermediate care facility utilization fee due the month following the close of the calendar quarter (15-67-201(1), MCA)

Applicable Tax Rates

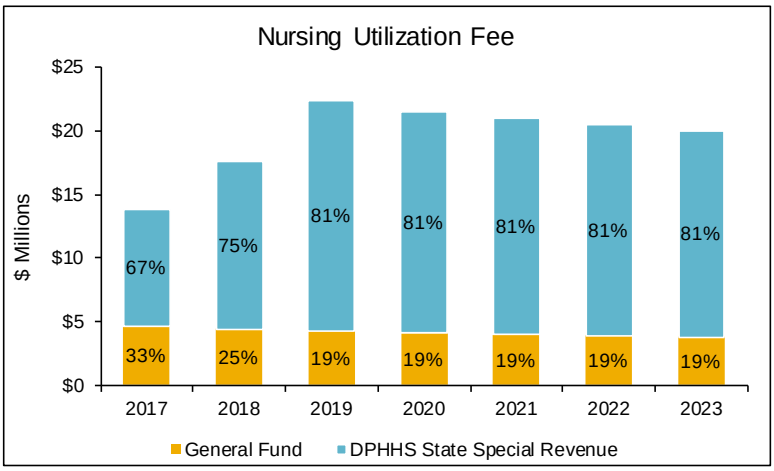
Nursing facility utilization fee: $8.30 per bed day through end of FY 2017. With the passage of HB 618 (2017 Session) the fee will increase to $11.30 per day through FY 2018, and $15.30 per day after July 31, 2018. Intermediate care facility utilization fee: 6% of a facility's quarterly revenue divided by quarterly bed days.

Bed days are defined as a 24-hour period in which a resident of a nursing facility is present in the facility or in which a bed is held for a resident while on temporary leave.

Collection Frequency: Quarterly

Distribution

Nursing facility fee revenue is distributed between the general fund and the DPHHS state special revenue prevention and stabilization fund. The following chart shows the changing distribution of nursing facility fee revenue for FY 2017 to FY 2019.



Forecast Risks

- Change in rate of facility utilization

Revenue Estimate Methodology

Data

SABHRS data provide a history of nursing facilities fee revenue.

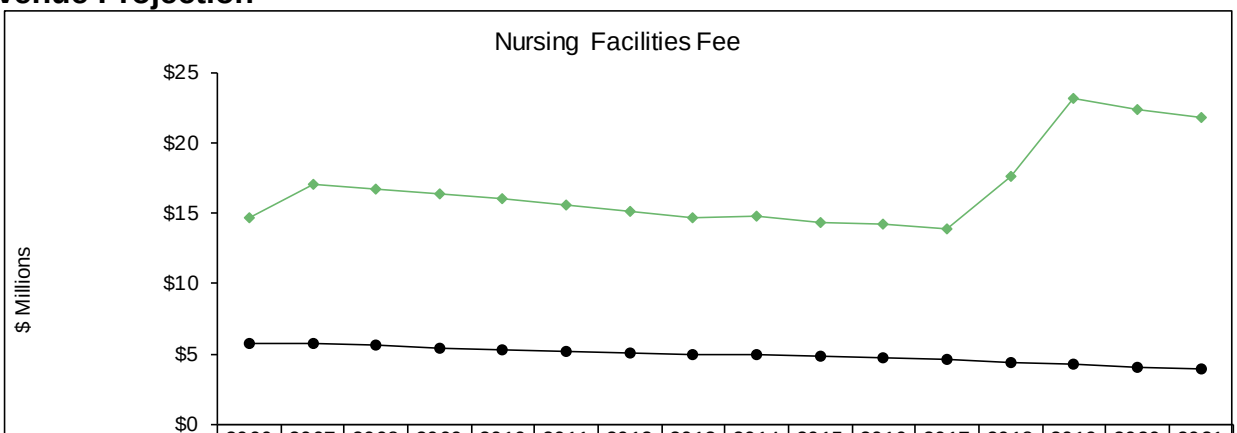
Analysis

Proxy bed days for nursing facilities are determined by dividing the difference between total nursing utilization fees and interim care fees by the nursing facilities fee daily rate per bed day. Future bed days are based on a time trend of the proxy bed days, which are then multiplied by the applicable fee rate of to obtain an estimate of future nursing facilities fees. Intermediate care revenue was anticipated to phase out by the end of FY 2017 due to SB 411 (2015 Session), however it was extended by HB 387 (2017 session) to close by the end of FY 2019. For FY 2019, total nursing facilities fees are the sum of nursing facilities fees and interim care facilities fees; in FY 2020 and beyond, nursing facilities are the only source of revenue.

Revenue Estimate Assumptions

FY	Total Tax $ Millions	GF Tax $ Millions	Nursing Home Bed Days (Millions)	MDC Revenue (Millions)
A 2008	$16.759	$5.610	1.912	$14.845
A 2009	16.348	5.469	1.860	15.129
A 2010	16.019	5.300	1.820	15.233
A 2011	15.541	5.197	1.760	15.526
A 2012	15.176	5.077	1.722	14.700
A 2013	14.671	4.928	1.653	15.863
A 2014	14.836	4.961	1.678	15.104
A 2015	14.391	4.810	1.625	15.103
A 2016	14.270	4.764	1.594	17.283
A 2017	13.853	4.635	1.579	12.394
A 2018	17.574	4.405	1.501	10.237
F 2019	23.166	4.275	1.494	5.119
F 2020	22.331	4.087	1.460	-
F 2021	21.803	3.990	1.425	-
F 2022	21.275	3.893	1.391	-
F 2023	20.748	3.797	1.356	-

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	14.6	17.1	16.8	16.3	16.0	15.5	15.2	14.7	14.8	14.4	14.3	13.9	17.6	23.2	22.3	21.8
General Fund	5.7	5.7	5.6	5.5	5.3	5.2	5.1	4.9	5.0	4.8	4.8	4.6	4.4	4.3	4.1	4.0
GF Growth	-3.4%	0.1%	-1.9%	-2.5%	-3.1%	-1.9%	-2.3%	-2.9%	0.7%	-3.0%	-1.0%	-2.7%	-5.0%	-3.0%	-4.4%	-2.4%

Public Institution Reimbursements

Revenue Description

The Department of Public Health and Human Services (DPHHS) receives reimbursement for the cost of sheltering and treating residents at the Montana Developmental Center (MDC), the Montana Mental Health Nursing Care Center (MMHNCC), Montana State Hospital (MSH), Montana Chemical Dependency Treatment Center (MCDC), and the Montana Veterans' Home (MVH).

Reimbursement comes from four sources: state and federally matched Medicaid monies, federal Medicare funds, insurance payments if available, and private payments by residents or persons legally responsible for them.

Statutory Reference

Tax Rate – 53-1-402, MCA (requirement to pay)
Tax Distribution – 53-1-413, MCA
Date Due – Monthly (53-1-405(3), MCA)

Applicable Tax Rates: Three variables determine the level of Medicaid nursing home payments: the number of patient days eligible for Medicaid reimbursement, the reimbursement rate per patient day, and the private resources of Medicaid patients.

Collection Frequency: Monthly

Distribution

Institutional reimbursements for MDC, MMHNCC, and MSH are first used for debt service with the remainder distributed to the general fund. Reimbursements for MCDC and MVH are distributed to a DPHHS state special revenue fund to be appropriated to those facilities.

Forecast Risks

- Changes in insurance, Medicaid, Medicare eligibility and payment levels
- Values of state and local medical spending
- Changing Montana per capita income

Revenue Estimate Methodology

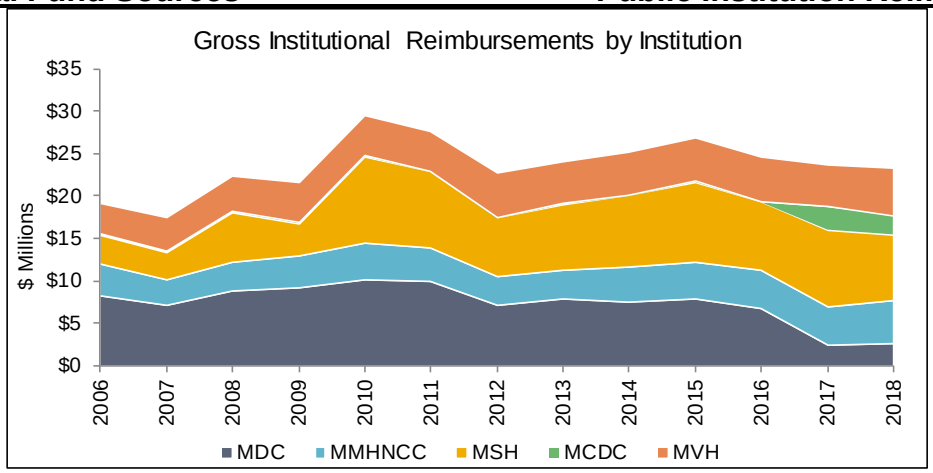
Data

The public institution reimbursement estimate is based on data obtained from SABHRS and the Kaiser Family Foundation number of Montana nursing home residents.

Analysis

Future nursing home residents are based on a time trend of total nursing home residents from the Kaiser Family Foundation. Total reimbursements are modeled on the number of nursing facility residents, with future modeled growth applied to the last year of actual collections. Debt service for MSH is subtracted from the total to produce anticipated general fund collections.

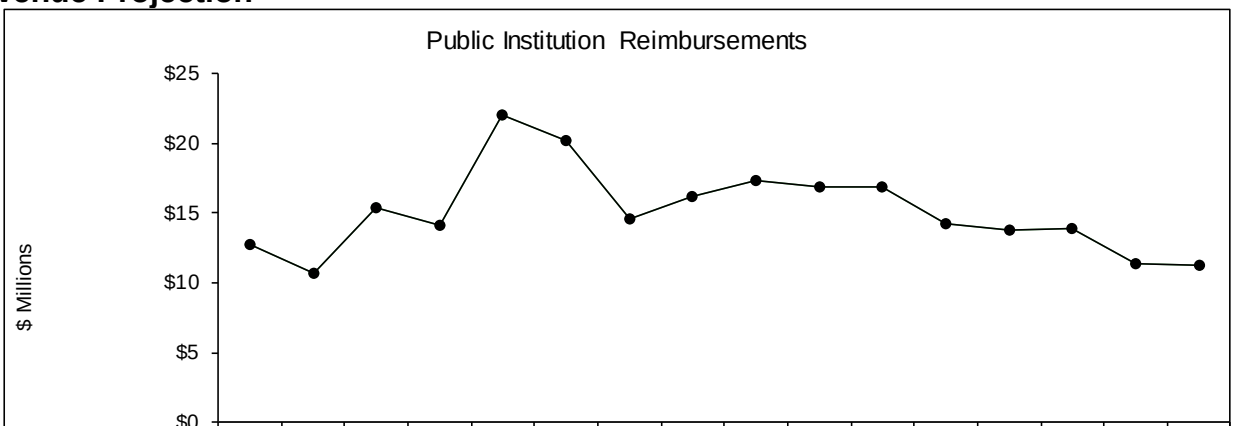
As seen in the following figure, MDC is the primary source of total reimbursements. MMHNCC and MVH are also significant contributors, while reimbursements from MCDC makes up a very small portion of total collections. As a result of SB 411 (2015 Session) MDC was expected to close at the end of FY 2017, however HB 387 (2017 Session) allowed for the facility to be kept open on a limited bases at least through the 2019 biennium.



Revenue Estimate Assumptions

FY	Total Rev. $ Millions	GF Rev. $ Millions	MT Nursing Facility Residents	Calculated Total Reim. $ Millions	Closure of MDC $ Millions	MDC Debt Service $ Millions	MSH Debt Service $ Millions
A 2008	$15.335	$15.335	5,128	$18.082		$0.982	$1.772
A 2009	14.101	14.101	4,950	18.208		0.959	1.723
A 2010	22.000	22.000	4,891	18.249		0.989	1.666
A 2011	20.158	20.158	4,734	18.359		0.980	1.729
A 2012	14.562	14.562	4,690	18.390		0.984	1.813
A 2013	16.212	16.212	4,653	18.416		0.959	1.807
A 2014	17.298	17.298	4,564	18.479		0.995	1.716
A 2015	16.819	16.819	4,431	18.572		0.964	1.718
A 2016	16.910	16.910	4,310	18.996		2.720	1.720
A 2017	14.264	14.264	4,242	17.054		-	1.734
A 2018	13.754	13.754	4,149	17.054		-	1.632
F 2019	13.887	13.887	4,057	16.836		-	1.302
F 2020	11.396	11.396	3,964	16.618	($2.400)	-	1.196
F 2021	11.197	11.197	3,871	16.400	(2.400)	-	1.199
F 2022	10.999	10.999	3,778	16.182	(2.400)	-	1.200
F 2023	12.002	12.002	3,686	15.964	(2.400)	-	-

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	12.7	10.7	15.3	14.1	22.0	20.2	14.6	16.2	17.3	16.8	16.9	14.3	13.8	13.9	11.4	11.2
General Fund	12.7	10.7	15.3	14.1	22.0	20.2	14.6	16.2	17.3	16.8	16.9	14.3	13.8	13.9	11.4	11.2
GF Growth	2%	-16%	44%	-8%	56%	-8%	-28%	11%	7%	-3%	1%	-16%	-4%	1%	-18%	-2%

Tobacco Settlement

Revenue Description

Montana receives tobacco settlement revenue per the Master Settlement Agreement (MSA) with 60 tobacco companies which concluded litigation with 46 states, Puerto Rico, American Samoa, the U.S. Virgin Islands, the North Mariana Island, Guam and the District of Columbia (52 total settling entities). The lawsuit and subsequent settlement were regarding tobacco-related health care costs. Montana currently receives an on-going annual payment and a "strategic contribution" payment that will expire after FY 2017.

Statutory Reference

Tax Rate – N/A
Tax Distribution – Montana Constitution, Article XII, Section 4; 17-6-606, MCA; 53-4-1011, MCA
Date Due – Annual payments from settling entities due April 15th (Master Settlement Agreement, Chapter IX(c)), General Tobacco annual payments through 2016 due August 30th (General Tobacco Adherence Agreement)

Applicable Tax Rates:

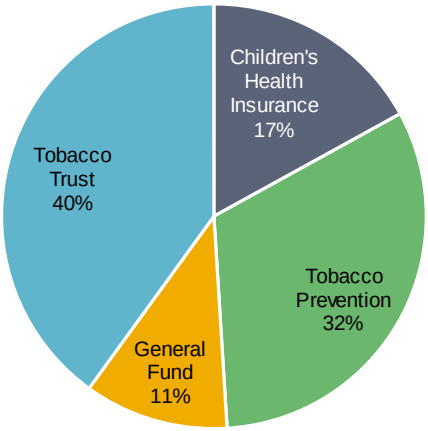
Funds received are subject to adjustments for various reasons including inflation, sales volume, loss of market share due to non-settling companies, operating income, settlements reached by the non-participating states, offsets for litigation, disputed payments, and others. Montana receives 0.4247591% of the total on-going annual payment.

Collection Frequency

Annual payments are expected each April 15th into perpetuity. General Tobacco, a subsequent participating manufacturer, is required to make annual payments every August 30th through 2016 for obligations incurred from 2000 to 2003.

Distribution

The legislature is required to dedicate no less than 40% of tobacco settlement money to a permanent trust fund. The remaining revenue is distributed between the general fund, the Children's Health Insurance Program state special revenue fund, and the Tobacco Prevention state special revenue fund. The adjacent chart shows the FY 2018 distribution of the tobacco settlement funds.



Forecast Risks

- Inflation
- Volume
- Changing market share for settling companies
- Payment disputes

Revenue Estimate Methodology

Data

PriceWaterhouseCoopers (PWC), the independent auditor to the agreement, gathers all tobacco settlement data and makes all the calculations required by the MSA for determining the amount owed and the distribution. PWC provides detailed documentation of all calculations that is used to inform the model.

Analysis

The base amount of the settlement is a set value, the analysis and relies on forecasting the adjustments made to that base amount that will result in the final revenue. The adjustments calculated in the model

are related to (1) inflation, (2) volume, (3) operating income, (4) states with prior tobacco settlements, (5) non-participating cigarette manufacturers.

1. Inflation – This adjustment cumulatively increases the amount owed by the greater of 3% or the amount of the Consumer Price Index for Urban Consumers. This is forecast using the CPI forecast provided by IHS Markit.

2. Volume – Payments are reduced as the number of cigarettes shipped nationally decreases. The current number of cigarettes is compared to the 1997 base number of 475.7 billion cigarettes. The analysis assumes that the historic trend in number of cigarettes shipped will continue through the biennium. Per the settlement agreement, the calculated adjustment is reduced by 2.0% and then applied.

3. Operating income – Payments increase if the aggregate operating income from the sales of cigarettes exceeds the 1996 base amount of $7,060.840 million, as adjusted for inflation (see above). This adjustment has not been used since 2000 and therefore is not explained in this document.

4. Previous settling states – Before the MSA, four states had settled lawsuits with certain cigarette manufacturers. The agreement recognized this by allowing reductions to the annual payments (as adjusted for inflation and volume) of 12.45% through FY 2007, 12.24% through FY 2017, and 11.07% thereafter.

5. Non-participating manufacturers (NPM) – If tobacco manufacturers who participate in the Master Settlement Agreement lose market share to those manufacturers who do not, their payments <u>may</u> be reduced, if certain criteria are met.

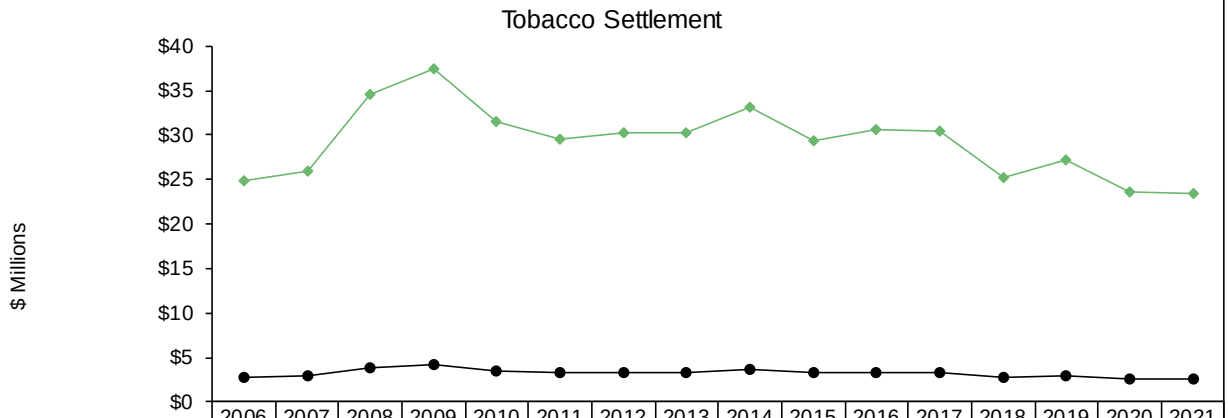
   This adjustment is three times the market share loss of the participating manufacturers. Market share loss is determined by subtracting the current year market share of the participating manufacturers from 97.5835%. If the computed market share loss exceeds 16-2/3%, adjustments are made to account for loss of market share. For this to occur, the change in market share for all PM would have to fall to 80%. It is unlikely that this will occur. While this adjustment is not included as such, the estimate is reduced slightly because the participating manufacturers generally dispute a portion of a payment. FY 2014 was the first year that any disputed payment has completed the cycle of litigation, and the state received the disputed 2003 funds.

These forecast adjustments are applied to the base amount, and the result is the total revenue estimate.

Revenue Estimate Assumptions

FY	Total Settle $ Millions	GF Settle $ Millions	Market Share	Volume (Millions)	Annual Inflation (at least 3.0%)
A 2008	$34.614	$3.808	0.946	0.312	4.1%
A 2009	37.524	4.128	0.941	0.300	3.0%
A 2010	31.533	3.469	0.937	0.269	3.0%
A 2011	29.625	3.259	0.935	0.258	3.0%
A 2012	30.203	3.322	0.941	0.250	3.0%
A 2013	30.194	3.321	0.938	0.245	3.0%
A 2014	33.142	3.646	0.936	0.235	3.0%
A 2015	29.319	3.225	0.936	0.227	3.0%
A 2016	30.650	3.371	0.934	0.226	3.0%
A 2017	30.392	3.343	0.934	0.221	3.0%
A 2018	25.252	2.778	0.933	0.210	3.0%
F 2019	27.234	2.996	0.933	0.202	3.0%
F 2020	23.665	2.603	0.933	0.194	3.0%
F 2021	23.465	2.581	0.933	0.187	3.0%
F 2022	23.269	2.560	0.933	0.179	3.0%
F 2023	23.077	2.538	0.933	0.172	3.0%

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	24.9	25.9	34.6	37.5	31.5	29.6	30.2	30.2	33.1	29.3	30.6	30.4	25.3	27.2	23.7	23.5
General Fund	2.7	2.9	3.8	4.1	3.5	3.3	3.3	3.3	3.6	3.2	3.4	3.3	2.8	3.0	2.6	2.6
GF Growth	-8%	5%	33%	8%	-16%	-6%	2%	0%	10%	-12%	5%	-1%	-17%	8%	-13%	-1%

GUARANTEE FUND REVENUE

LFD

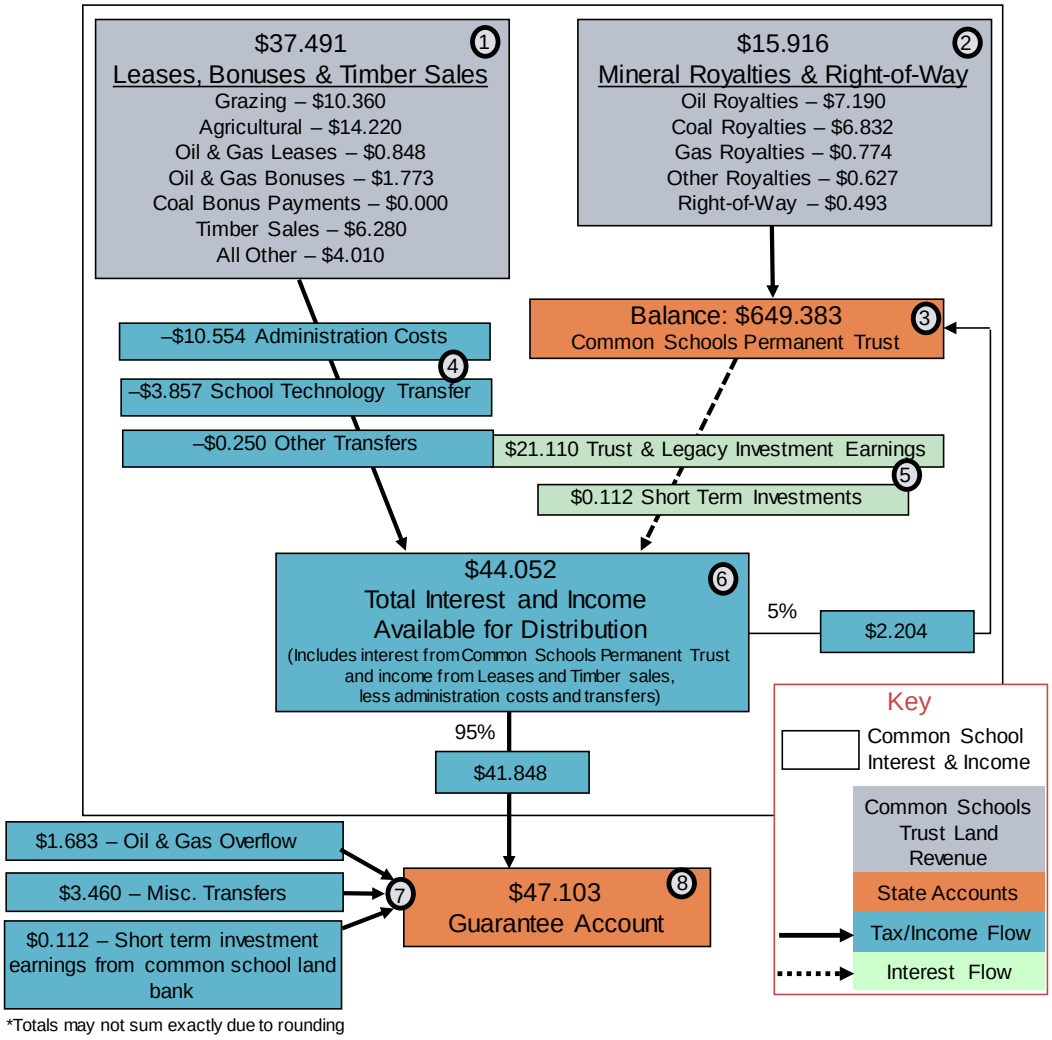
MONTANA LEGISLATIVE FISCAL DIVISION

Guarantee Fund

Revenue Description

The Guarantee Fund is a state special revenue fund dedicated as the first source of school funding. It primarily receives revenue generated from common school state land and the subsequent interest on the Common School trust fund.

FY 2018 Guarantee Account Collections
$ Millions



*Totals may not sum exactly due to rounding

❶ Leases, Bonuses & Timber Sales: Lands granted by the federal government to the state for the benefit of public schools generate income. Common school lands produce two kinds of revenue: distributable income such as interest earnings, agricultural rents or crop shares, and timber sale revenue; and permanent income that is returned to the trust as income from the sale of minerals, land, and easements.

Box 1 is the distributable income. This common school land revenue includes leases, bonuses and timber sales under 18 million board feet. Revenue from timber sales over 18 million board feet is transferred to the school facility and technology fund (20-9-516, MCA).

❷ Mineral Royalties & Right-of-Way: This portion is deposited directly into the common schools permanent trust and includes right-of-way and sales of extractable resources such as oil, natural gas, and coal.

❸ Common Schools Permanent Trust: The Enabling Act states that "proceeds from the sale and other permanent disposition of any of the said lands and from every part thereof, shall constitute permanent funds for the support and maintenance of the public schools and the various State institutions for which the lands have been granted." The Common Schools Permanent Trust holds the school dedicated funds.

❹ Costs & Transfer: The amount of revenue deposited to the guarantee fund is net of amounts diverted for DNRC administration costs and those deposited directly to the school facility and technology fund shown in Box 4. The administration costs diversion funds operational costs in the Department of Natural Resources and Conservation (DNRC) for common school lands. The school facility and technology fund receives timber revenue in excess of 18 million board feet (77-1-218, MCA). This reduces the amount of revenue distributable to the Guarantee Fund.

❺ Investment Earnings: Funds in the Common Schools Permanent Trust are invested by the Montana Board of Investments, with the interest earned available for distribution. The majority of revenue (Trust & Legacy investment earnings) comes from fixed-income investments. A small amount comes from short-term investments which is interest on the cash when it comes into the Montana Board of Investments and before it is invested in the longer-term Trust Funds Investment Pool.

❻ Common School Trust Land Interest and Income: This amount is comprised of the income from leases, bonuses, and timber (Box 1) less costs and transfers (Box 4), plus interest from the Common Schools Permanent Trust (Box 5). The money is distributed as follows:

- 95% is transferred to the state special revenue guarantee fund which is statutorily appropriated for schools
- 5% is reinvested in the Common Schools Permanent Trust

❼ Additional transfers to the Guarantee Fund: The legislature has in the past transferred additional money into the Guarantee Fund. In FY 2012 through FY 2014, navigable river revenues were redirected from the school facility and technology fund to the common schools guarantee fund as a result of HB 165 (2011 Session). SB 175 (2013 session) transferred $11.5 million from the state general fund to the Guarantee Fund to fund the ongoing costs of restructuring the K-12 funding formula. Finally, short-term investments from the common school land bank contribute to the Guarantee Fund revenues.

❽ Guarantee Fund: This is the state special revenue fund (20-9-104, MCA) which is statutorily appropriated to schools in the form of BASE aid. It is comprised of common school interest and income and other appropriations and is the first source of state school funding.

Statutory Reference: 20-9-622, MCA

Applicable Tax Rates: N/A

Collection Frequency: Revenue from DNRC is distributed to the guarantee fund in February and June. Payments from other agencies vary from month to month.

Distribution: Statutorily appropriated to schools in the form of BASE aid

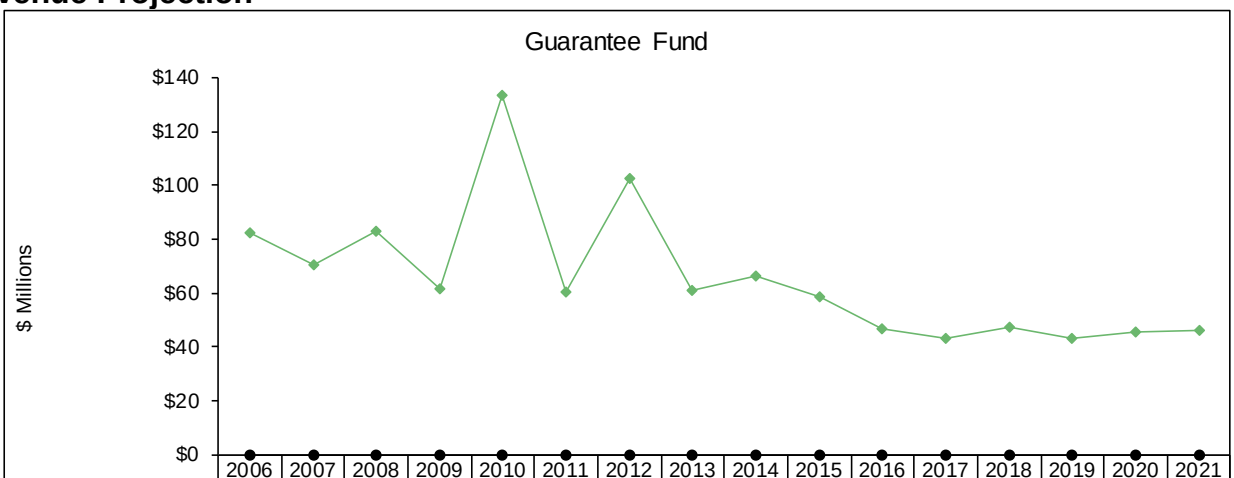
Forecast Risks

- Oil price
- Interest rates

Revenue Estimate Methodology

The revenue for this source is primarily based on the estimate for Common Schools Interest and Income. Please see that section for more information on the revenue estimate methodology. Estimates of other transfers are based on statute.

Revenue Projection



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	82.6	70.4	83.0	61.8	133.3	60.1	102.4	61.1	66.2	58.6	47.1	43.2	47.1	43.4	45.6	45.9
General Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-