LEGISLATIVE FISCAL DIVISION
2021 BIENNIUM REVENUE ESTIMATE
AND COMPARISON TO THE EXECUTIVE

A Report Prepared for the
Revenue & Transportation Interim Committee

By
LFD Revenue Team

November 19, 2018

LFD
MONTANA LEGISLATIVE FISCAL DIVISION

INTRODUCTION

This report provides a summary of the Legislative Fiscal Division (LFD) revenue estimate recommendations for the upcoming 2021 biennium. Full detail on each of the general fund revenue sources and selected non-general fund revenue sources will soon be available online in the LFD's 2021 Biennium Budget Analysis: Volume 2. The revenue estimates for each source reflect a combination of changes in base year data, revised assumptions, modeling adjustments, and new IHS Markit forecasts since the production of the current official revenue estimate contained in HJ 2. The body of this report is organized into the following sections:
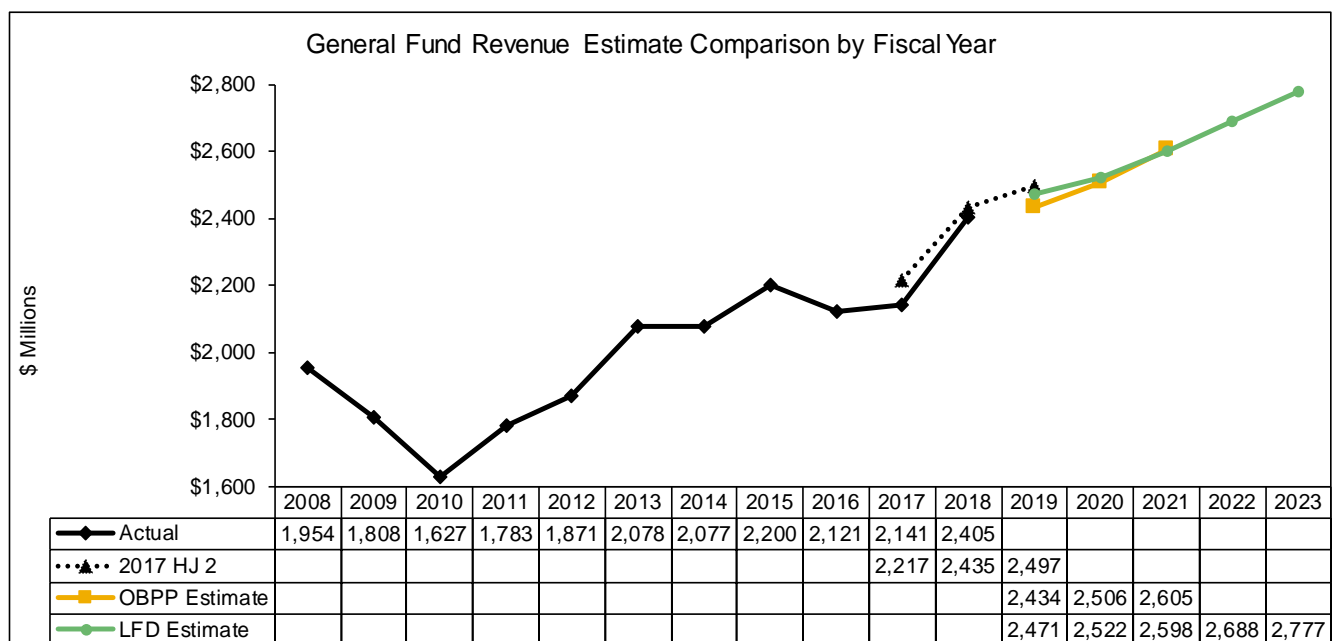
- 2021 Biennium Revenue Overview
- 2021 Biennium Revenue Estimate Recommendations
- 2021 Biennium Guarantee Fund Estimate Recommendation
- Appendix

The new data available since the adoption of HJ 2 includes the following sources:

- FY 2017 and FY 2018 revenue collections
- Two additional years of individual and corporate income tax return data, and property valuation data
- Two additional years of oil and natural gas production data
- Updated IHS Markit forecasts

2021 BIENNIUM REVENUE OVERVIEW

The estimate recommendation for annual growth in general fund revenue for FY 2019 is 2.7%, for FY 2020 is 2.1% and for FY 2021 is 3.0%. The three-year estimate is very close to the projection contained in the 2021 Biennium Outlook. Comparison of actual collections since FY 2008, estimates contained in HJ 2 (2017 Session), the LFD 2021 biennium estimate recommendation, and the executive estimate recommendation are shown in the chart below.
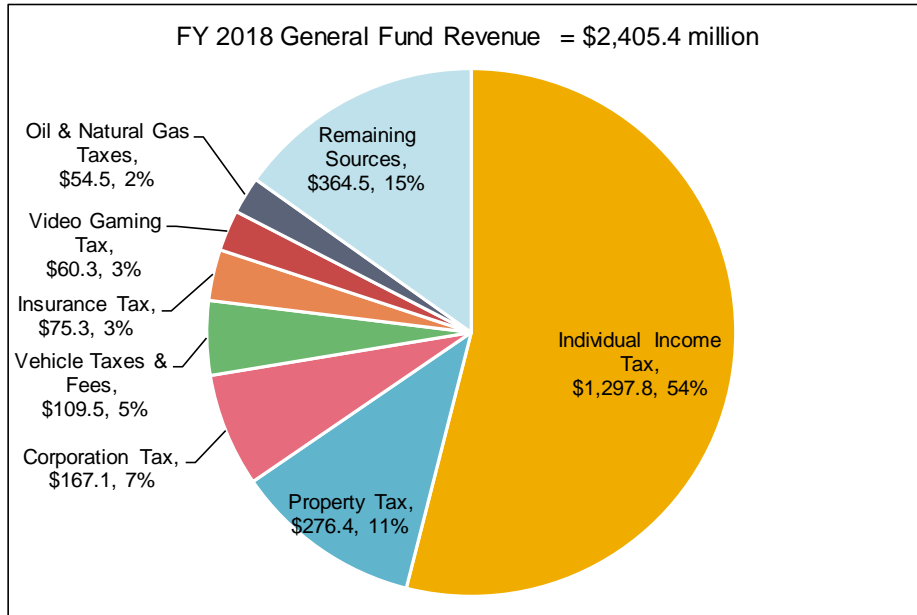
General Fund Revenue Estimate Comparison by Fiscal Year

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Actual	1,954	1,808	1,627	1,783	1,871	2,078	2,077	2,200	2,121	2,141	2,405					
2017 HJ 2										2,217	2,435	2,497				
OBPP Estimate												2,434	2,506	2,605		
LFD Estimate												2,471	2,522	2,598	2,688	2,777

The 2021 biennium revenue estimates produced by the LFD and corresponding year-over-year growth rates are detailed in the following table:

| Revenue Source	Actual FY 2018	LFD FY 2019	LFD FY 2020	LFD FY 2021	% Growth FY 2019	% Growth FY 2020	% Growth FY 2021
LFD General Fund Revenue Estimate Recommendation ($ Millions)							
Largest Seven Sources							
Individual Income Tax	$1,297.777	$1,359.066	$1,425.943	$1,490.046	4.7%	4.9%	4.5%
Property Tax	276.414	283.225	302.470	309.103	2.5%	6.8%	2.2%
Corporation Tax	167.100	167.854	174.678	174.864	0.5%	4.1%	0.1%
Vehicle Taxes & Fees	109.540	111.525	112.979	114.156	1.8%	1.3%	1.0%
Oil & Natural Gas Production Tax	54.508	60.049	56.652	53.062	10.2%	-5.7%	-6.3%
Insurance Tax	75.273	77.475	81.158	83.915	2.9%	4.8%	3.4%
Video Gaming Tax	60.324	60.158	60.248	60.172	-0.3%	0.1%	-0.1%
Other Business Taxes							
Drivers License Fee	4.581	4.342	4.370	4.394	-5.2%	0.6%	0.6%
Investment Licenses	7.683	7.963	8.282	8.504	3.6%	4.0%	2.7%
Lodging Facilities Sales Tax	24.091	25.218	26.380	27.287	4.7%	4.6%	3.4%
Public Contractor's Tax	4.267	3.503	3.579	3.655	-17.9%	2.2%	2.1%
Railroad Car Tax	3.649	3.492	3.878	4.196	-4.3%	11.0%	8.2%
Rental Car Sales Tax	3.719	3.730	4.039	4.258	0.3%	8.3%	5.4%
Retail Telecom Excise Tax	13.726	12.889	11.927	11.370	-6.1%	-7.5%	-4.7%
Other Natural Resource Taxes							
Coal Severance Tax	14.107	13.555	15.385	15.413	-3.9%	13.5%	0.2%
Electrical Energy Tax	4.302	4.547	4.416	4.497	5.7%	-2.9%	1.8%
Metal Mines Tax	6.291	6.749	6.767	6.761	7.3%	0.3%	-0.1%
U.S. Mineral Royalties	20.139	20.934	20.891	20.547	3.9%	-0.2%	-1.6%
Wholesale Energy Trans Tax	3.628	3.516	3.464	3.485	-3.1%	-1.5%	0.6%
Other Interest Earnings							
Coal Trust Interest Earnings	17.938	17.088	17.333	17.504	-4.7%	1.4%	1.0%
TCA Interest Earnings	10.888	21.514	27.318	29.643	97.6%	27.0%	8.5%
Other Consumption Taxes							
Beer Tax	3.002	3.074	3.074	3.075	2.4%	0.0%	0.0%
Cigarette Tax	27.755	27.313	26.687	26.057	-1.6%	-2.3%	-2.4%
Liquor Excise Tax	21.007	22.884	23.893	25.044	8.9%	4.4%	4.8%
Liquor Profits	12.200	12.900	13.500	14.200	5.7%	4.7%	5.2%
Lottery Profits	10.699	11.510	11.337	11.136	7.6%	-1.5%	-1.8%
Tobacco Tax	6.058	6.273	6.279	6.268	3.6%	0.1%	-0.2%
Wine Tax	2.446	2.461	2.554	2.644	0.6%	3.8%	3.5%
Other Sources							
All Other Revenue	117.645	90.686	40.911	41.446	-22.9%	-54.9%	1.3%
Highway Patrol Fines	3.754	3.907	3.862	3.841	4.1%	-1.2%	-0.5%
Nursing Facilities Fee	4.405	4.275	4.087	3.990	-3.0%	-4.4%	-2.4%
Public Institution Reimb.	13.754	13.887	11.396	11.197	1.0%	-17.9%	-1.7%
Tobacco Settlement	2.778	2.996	2.603	2.581	7.9%	-13.1%	-0.8%
Ongoing Revenue Subtotal	2,333.618	2,419.533	2,522.338	2,598.311	3.7%	4.2%	3.0%
OTO Revenue & Transfers Subtotal	71.829	51.024			-29.0%	-100.0%	
Total General Fund	$2,405.447	$2,470.557	$2,522.338	$2,598.311	2.7%	2.1%	3.0%
Guarantee Account	47.103	43.384	45.551	45.888	-7.9%	5.0%	0.7%
Total General Fund & Guarantee	$2,452.550	$2,513.941	$2,567.889	$2,644.199	2.5%	2.1%	3.0%

2021 BIENNIUM REVENUE ESTIMATE RECOMMENDATIONS

Large Revenue Sources

In FY 2018, the largest seven revenue sources accounted for 85% of total general fund revenue. Due to the relative importance of these sources, particular attention is given to important underlying economic indicators for each source.

FY 2018 General Fund Revenue = $2,405.4 million

- Oil & Natural Gas Taxes, $54.5, 2%
- Video Gaming Tax, $60.3, 3%
- Insurance Tax, $75.3, 3%
- Vehicle Taxes & Fees, $109.5, 5%
- Corporation Tax, $167.1, 7%
- Property Tax, $276.4, 11%
- Individual Income Tax, $1,297.8, 54%
- Remaining Sources, $364.5, 15%

Individual Income Tax

Individual income tax came in below the official estimate in FY 2017 and below it in FY 2018, with the difference decreasing over time. The 2021 biennium estimate based on the new data and revised modeling is below the estimate contained in HJ 2 for FY 2019, with moderate growth thereafter.

Individual Income Tax

($ Millions, x-axis years 2004–2023)

Legend: Actual — HJ 2 ······ LFD Estimate - - -
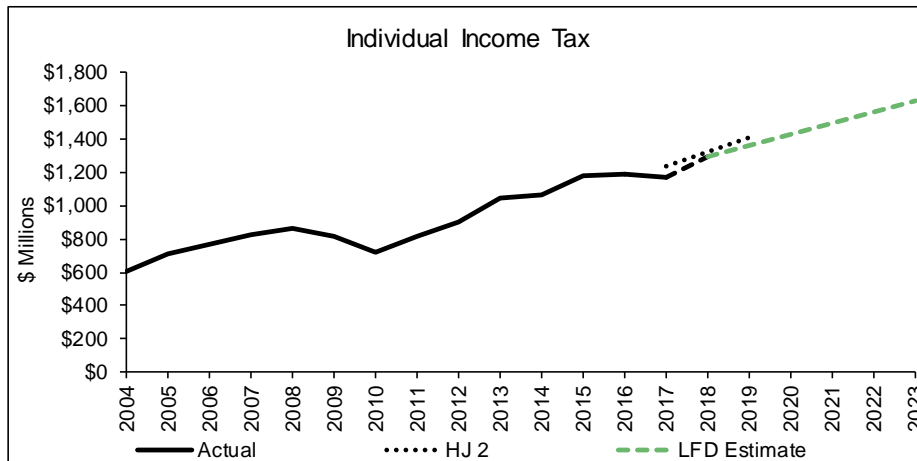
An individual income tax simulation model is used to forecast Montana calendar year individual income tax liability for all full year residents (FYR). The model is updated each year by the Department of Revenue (DOR) to incorporate the changes in federal and state tax law. The accuracy of the model in applying the tax laws correctly can be measured in the most recent year by comparing the output of the model for that year with the line item totals provided by DOR—and for CY 2017, the model is only 0.1% different than the DOR total.

The calendar year state tax liability forecast is developed by applying modeled growth rates to each FYR 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 FYR individual income tax liability for each year. The table below shows the actual income contained on FYR 2017 tax returns and forecast growth rates through the forecast period.

CY 2017 Income Levels & Estimate Growth Rates					
($ Millions)					
	2017	2018	2019	2020	2021	10-Year Avg.
Wage Income	$17,474.8	3.7%	4.3%	4.5%	4.3%	3.3%
Interest Income	297.9	3.9%	9.6%	29.1%	11.9%	-8.4%
Dividend Income	774.3	2.0%	0.1%	4.0%	2.2%	3.4%
Net Business	886.4	-1.0%	4.8%	2.9%	5.0%	1.7%
Cap. Gains	2,188.2	11.6%	4.5%	-8.4%	-8.4%	4.4%
Sup. Gains	107.1	0.0%	0.0%	0.0%	0.0%	16.9%
Rents & Royalties	2,777.5	4.2%	5.7%	2.3%	2.0%	4.1%
IRA Income	870.5	8.7%	7.1%	5.7%	5.1%	8.8%
Taxable Pensions	2,322.6	5.4%	5.8%	5.6%	5.1%	5.1%
Taxable Soc. Sec.	1,072.0	8.1%	6.5%	5.9%	5.5%	7.8%
Farm Income	(231.6)	0.0%	0.0%	0.0%	0.0%	6.5%
Other Income	(339.1)	-1.1%	-1.1%	-1.2%	-1.2%	-28.4%
Total	$28,200.7	3.5%	4.1%	5.2%	5.2%	4.4%

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, with forecast fiscal year collections then augmented by expected future audit, penalty and interest collections to produce the total individual income tax revenue estimate.

Potential Upside Risks
Individual income tax collections grew very slowly in FY 2016 and declined slightly in FY 2017—in contrast to the tight labor market and growing economy. Much of the discussion regarding this discrepancy has focused on taxpayer behavior following the 2016 national elections and potential taxpayer anticipation of lower federal tax rates.

Based on accounting and taxpayer data, it appears that there may have been about $230 million in bonus income shifted from the end of CY 2016 to the beginning of CY 2017. Because the federal Tax Cuts & Jobs Act was passed late in CY 2017 and primarily was effective for tax years beginning January 2018, taxpayers would likely have shifted bonus income from the usual end-of the-year payments in December 2017 to January 2018 as well. In addition, taxpayers may have sought to minimize capital gains realizations and business profits in CY 2017, shifting them to CY 2018 and later years to take advantage of lower federal tax rates.

The LFD revenue estimate is based on CY 2017 taxpayer return data. Given that CY 2017 is potentially unusually low, and no adjustments were made to capture the possible doubling up of bonus payments in CY 2018 or realization of pent-up business profits, there may be upside revenue risk in FY 2019 because of taxpayer choices. However, there is no data on which to estimate the potential additional revenue, which is likely to be one-time rather than on-going; therefore, additional revenue above the economic baseline is not included in the LFD recommendation. Higher estimated payments in CY 2018 may reflect taxpayers' higher income anticipation and have been incorporated in the LFD estimate; however, they have been tempered with historical collection patterns.

Property Tax

Property taxes came in less than $1 million below the HJ 2 estimate in both FY 2017 and FY 2018. Actual collections influence the updated forecast for FY 2019, but have less of an impact than the additional data for the two-year reappraisal impacts on class 4 residential and commercial property. The updated forecast for FY 2019 remains very close to the HJ 2 estimate, with moderate growth thereafter.

Property Tax
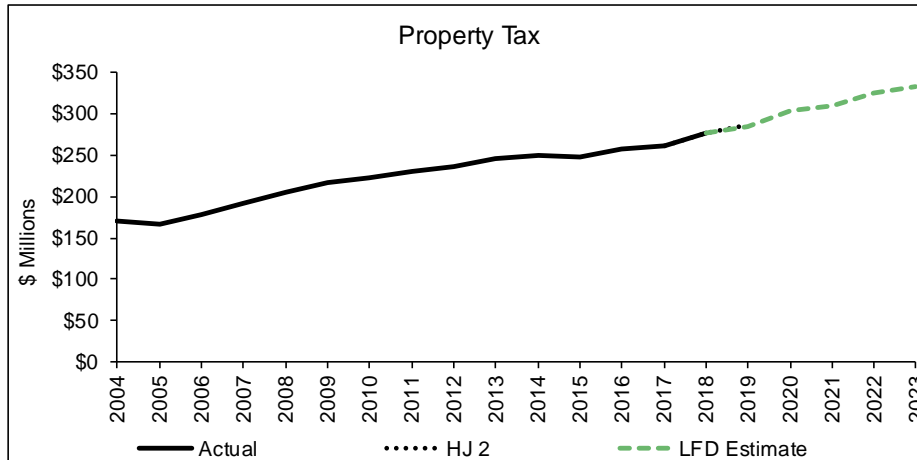
Corporate Income Tax

Corporate income tax collections were nearly identical to HJ 2 in FY 2017 and FY 2018. Growth was experienced across estimated payments, audits, and lower refunds. Modest growth from this source is expected into the next biennium.

Corporate Income Tax

The LFD estimate recommendation incorporates a slowly growing tax liability produced using the LFD sector-based approach with a model bias adjustment included per the research detailed in the LFD's Standard Error Analysis. In addition, audit, penalty & interest revenue as well as refunds are anticipated to reflect historical levels.

Potential Risks – Up & Down

Corporate income tax changes as a result of the federal Tax Cuts and Jobs Act is likely to have an impact on collections at the state level, but the timing is uncertain. Both upside and downside risks come with the new federal provisions. Corporations' abilities to further accelerate expensing could reduce collections. However, a larger taxable base at the state level could increase collections. The

LFD is using its traditional corporate model for this estimate and will incorporate the effects of the federal tax law as more information becomes available.

The CY 2016 tax liability by sector is shown in the adjacent table. This is the most readily available detailed tax liability data and is used as the base year of the current forecast. Calendar year data is forecast by industry sector then converted to a fiscal year estimate using historical trends. As the table shows, the actual CY 2016 liability was 3.3% higher than the estimated liability contained in HJ 2.

CY 2016 Tax Liability				
($ Millions)				
Sector	Actual	HJ 2	$ Diff	% Diff
Agriculture	$4.1	$6.5	($2.4)	-37.3%
Mining	2.2	0.8	1.4	190.2%
Utilities	0.4	1.0	(0.6)	-64.0%
Construction	1.4	3.2	(1.8)	-55.8%
Manufacturing	20.6	17.7	2.9	16.4%
Wholesale & Retail Trade	25.6	24.3	1.4	5.6%
Transportation	17.7	17.0	0.7	4.0%
Information	10.3	4.4	5.9	134.4%
Professional	13.1	10.6	2.6	24.5%
Large Banks & Holding Companies	29.7	35.4	(5.7)	-16.1%
Social	3.3	3.5	(0.2)	-6.1%
Unknown	0.3	0.3	0.0	4.6%
Total	$128.6	$124.5	$4.1	3.3%

Alternative Assumption on Federal Tax Reform, Primarily Bonus Depreciation

Given the uncertainty surrounding corporate taxpayers' response to the federal tax law changes, the LFD has provided alternative assumptions based on the DOR estimated corporate tax impacts from the federal law changes. The alternative assumptions show the DOR baseline impacts as well as a mid-range and low estimate.

The mid-range estimate assumes that the bonus depreciation impact is phased in slower than the baseline, at two-thirds the baseline rate. The low range estimate assumes that it is phased in at one-third the rate of the baseline. Finally, the front-loaded estimate assumes that most corporations take advantage of the new provisions as soon as possible, and by the third year there is no expensing left and other provisions in the bill yield net positive revenue to the state. The table below summarizes the choices and shows the three-year total as well as the corporate tax revenue estimate including each of the alternatives.

| Corporate Tax Estimate & Alternative Assumptions				
($ Millions)				
	FY 2019	FY 2020	FY 2021	3-Year Total
Baseline LFD Recommendation	$167.854	$174.678	$174.864	$517.395
Federal Tax Reform Impact Relative to Baseline				
Department of Revenue Estimate	(17.400)	(17.000)	(9.400)	(43.800)
Mid-Range Estimate (2/3-Phase-in of Bonus Depreciation)	(13.250)	(15.229)	(11.913)	(40.392)
Low Estimate (1/3-Phase-in of Bonus Depreciation)	(7.030)	(8.780)	(7.650)	(23.460)
Baseline with Federal Tax Reform Impacts				
Department of Revenue Estimate	150.454	157.678	165.464	473.595
Mid-Range Estimate	154.604	159.449	162.950	477.003
Low Estimate	160.824	165.898	167.214	493.935

Vehicle Taxes & Fees

Vehicle taxes and fees collections were lower than expected in HJ 2 in FY 2018. Revenue from this source is forecast to be lower than HJ 2 in FY 2019, while experiencing slow growth through the 2021 biennium.

Vehicle Taxes & Fees

$ Millions (y-axis: $0 to $140)

X-axis: 2004 to 2023

Legend: Actual — HJ 2 — LFD Estimate
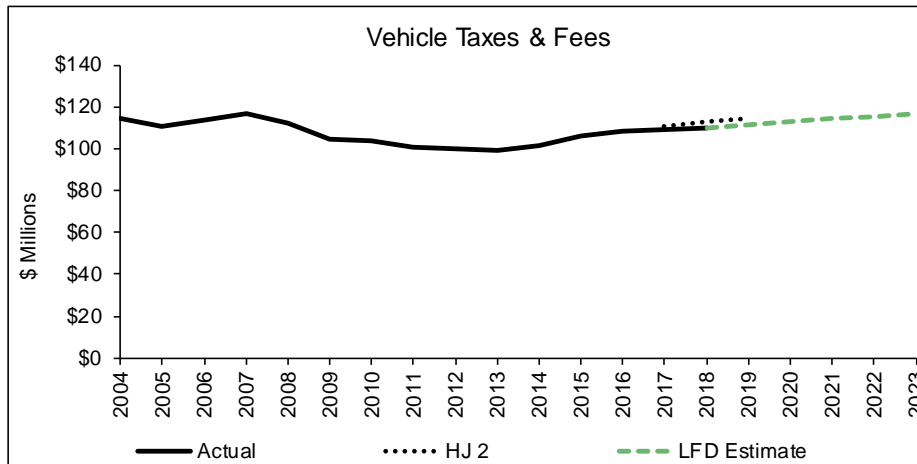
Oil & Natural Gas Production Tax

Oil and natural gas production tax collections were above projections in HJ 2 in FY 2018 by 9.8%. The increase above the forecast was driven by larger-than-expected prices, which more than offset a slow decline in production. The forecast for this source is based on the IHS projection of West Texas Intermediate oil price and LFD modeled future production.

Oil & Natural Gas Production Tax

$ Millions (y-axis: $0 to $160)

X-axis: 2004 to 2023

Legend: Actual — HJ 2 — LFD Estimate
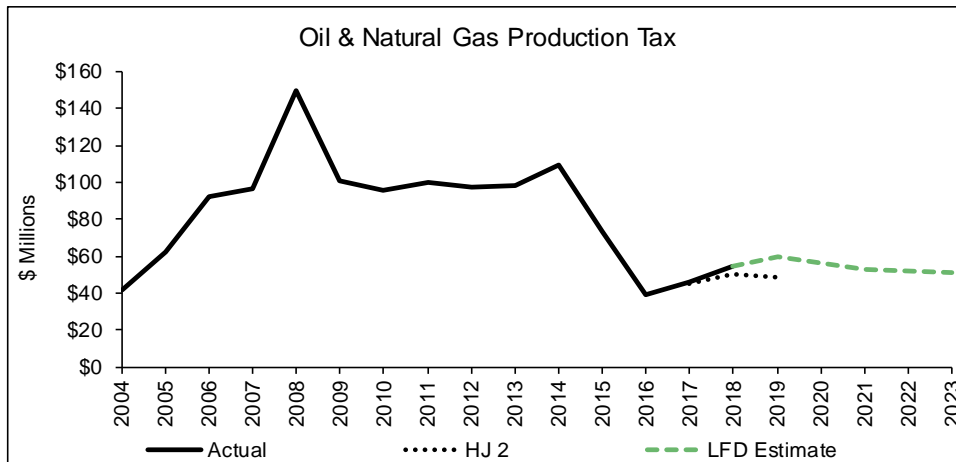
Since the beginning of FY 2016, there has been at most two drilling rigs operating in the state, as shown in the chart at the top of the next page. The reduction in the number of active rigs is having an effect on production, as it has been declining for nearly three years; however, the rate of decline has slowed in the past year.

CY Oil Production and Rigs
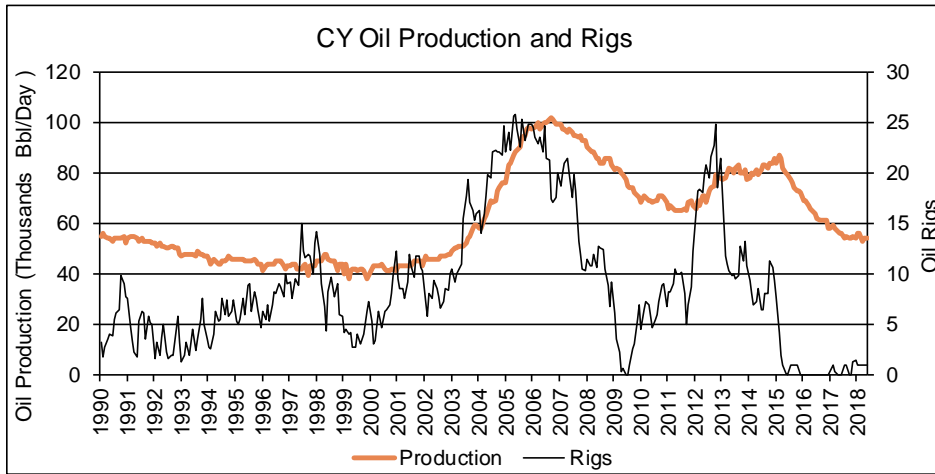
In FY 2019, revenue from this source is anticipated to be above HJ 2 in FY 2019. This increase is due to an increase in the price assumption. This source is expected to flatten over the 2021 biennium, as slight increases in the price will be offset by continued slow declines in production.

CY MT Oil Price Projection

CY Oil Production
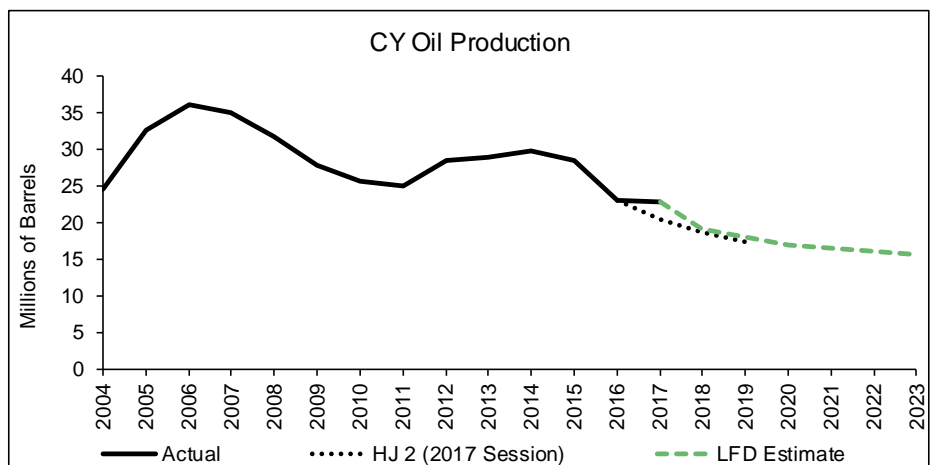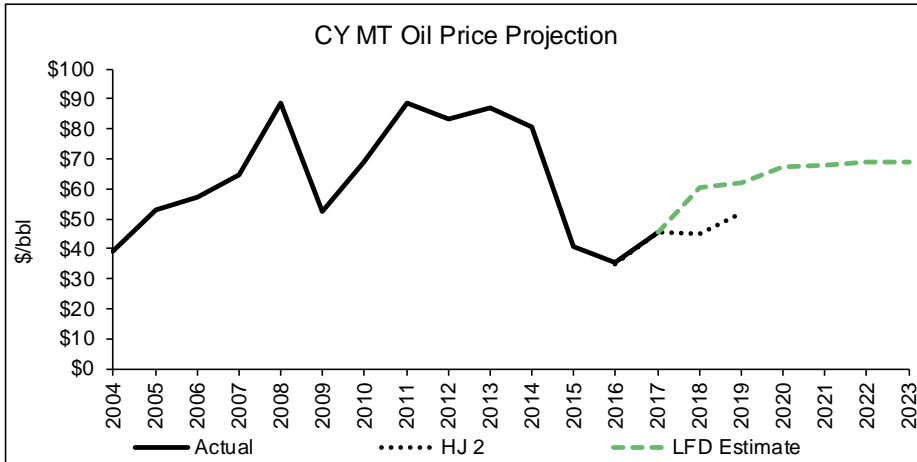
Insurance Tax

Insurance tax collections came in below the HJ 2 estimate in FY 2017 and slightly above HJ 2 in FY 2018, primarily due to a rule change for the collection of fire marshal taxes. This source is modeled based on the Montana personal consumption expenditure (PCE) series for finance and insurance from IHS Markit.

Insurance Tax

Actual — HJ 2 ‧‧‧‧ LFD Estimate – –
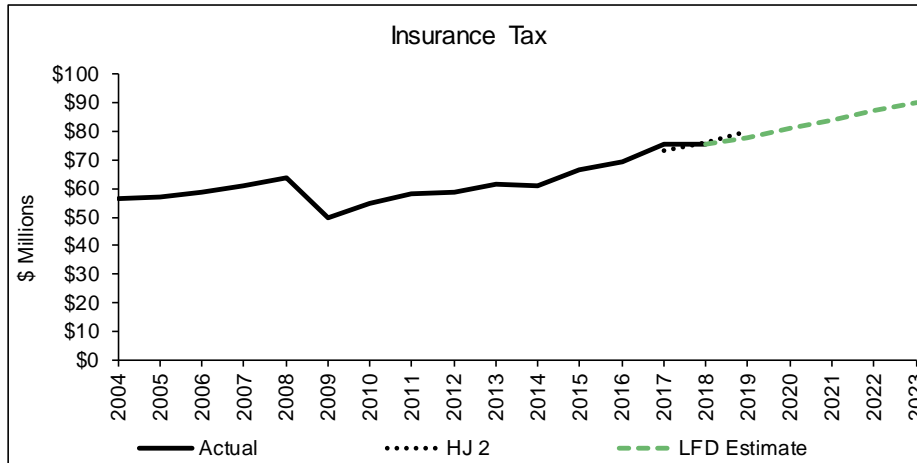
Video Gambling Tax

Combined video gambling revenue in FY 2018 was below the estimate contained in HJ 2. Revenue from this source has remained virtually unchanged for the past four years, and the forecast moving forward reflects recent trends.

Video Gambling Tax

Actual — HJ 2 ‧‧‧‧ LFD Estimate – –

OTHER BUSINESS TAXES

Driver's License Fee

Total driver's license revenue was below HJ 2 in FY 2017 and exceeded HJ 2 in FY 2018. The differences were primarily due to a change in the number of Class D (standard) driver's license purchases.

Driver's License Fee
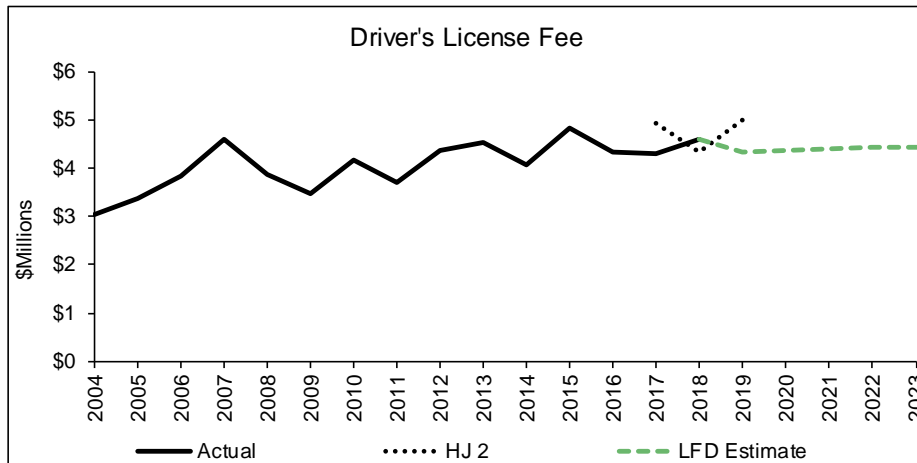
Ratios of recent revenue collections to the license-eligible MT population projection from IHS Markit are applied accordingly to forecast years to produce this estimate.

Investment License Fee

Investment license fee collections came in very close to the HJ 2 estimate in FY 2017 and FY 2018. In HJ 2, this source was modeled on the IHS Markit personal consumption expenditure series for finance & insurance, with modeled growth rates applied to the last known collections.

Investment Licence Tax
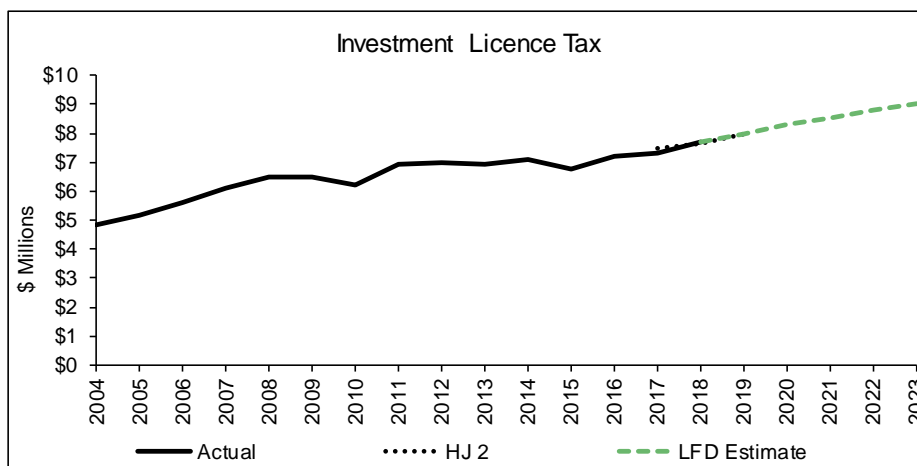
Lodging Facilities Sales Tax

Lodging facilities sales tax collections were slightly below the HJ 2 estimate in FY 2017 and above it in FY 2018. This revenue source was forecast in HJ 2 based on the IHS Markit projection of national consumer spending on accommodations. Modeling for this source has not changed but incorporates the most recent collections.

Lodging Taxes

$ Millions

Actual ⋯⋯ HJ 2 – – LFD Estimate
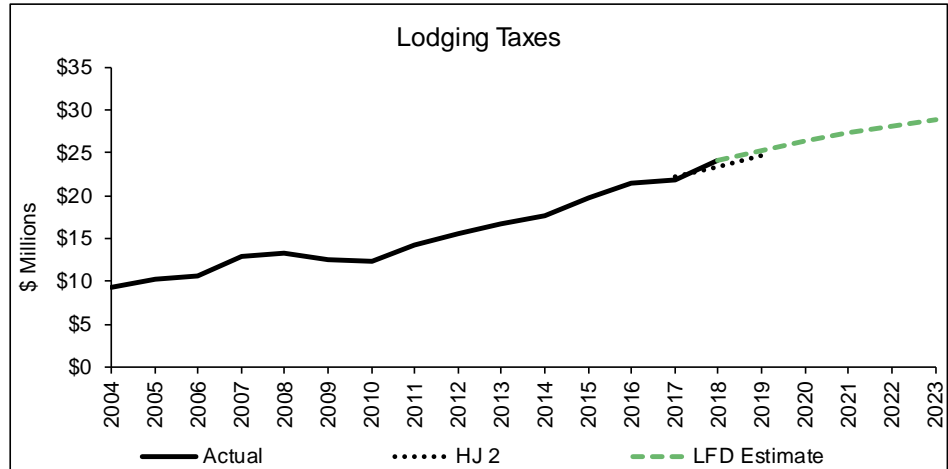
Public Contractor's Tax

Public contractors' gross receipts tax collections were above the HJ 2 estimate in FY 2017 and FY 2018. The HJ 2 forecast was based on a time trend of highway spending and an average level of all other construction in recent years. Modeling for this source has not changed.

Public Contractor's Gross Receipts Tax

$ Millions

Actual ⋯⋯ HJ 2 – – LFD Estimate
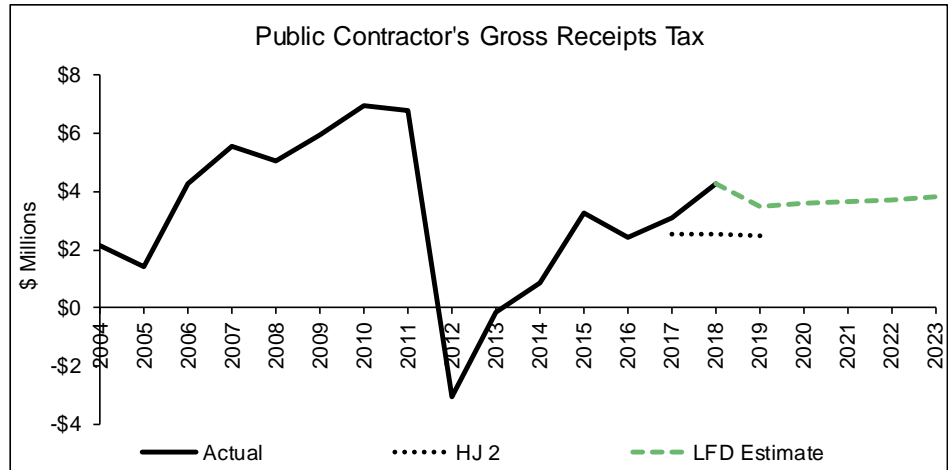
Railroad Car Tax

Railroad car tax revenue was above estimate in FY 2017 and very close to the estimate in FY 2018. Given known tax assessment data for FY 2018, it is expected that FY 2019 collections will come in below the HJ 2 estimate, after which railcar tax is expected to revert to more historical levels of growth.

Railcar Tax

$ Millions

Actual ⋯⋯ HJ 2 – – LFD Estimate
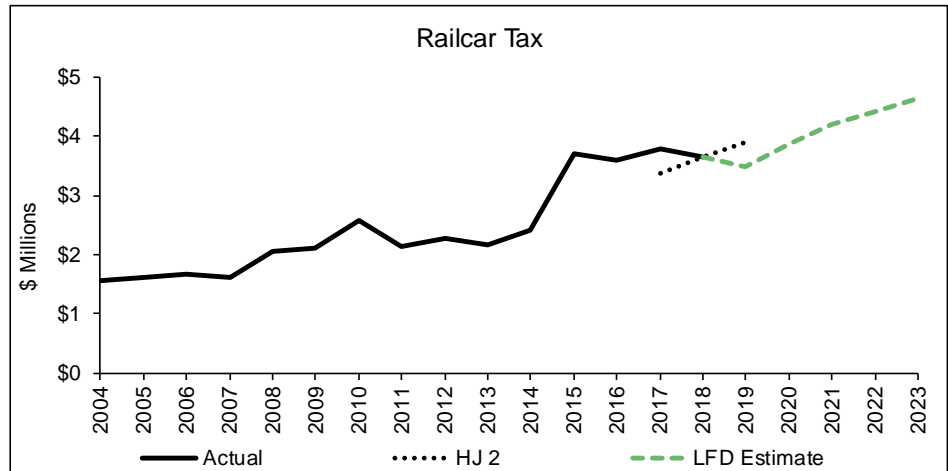
Rental Car Sales Tax

Rental car sales tax collections were above the HJ 2 estimate in FY 2017 and FY 2018. Rental car sales tax was forecast in HJ 2 based on the IHS Markit projection of Montana personal consumption expenditure series for transportation.

Rental Car Sales Tax
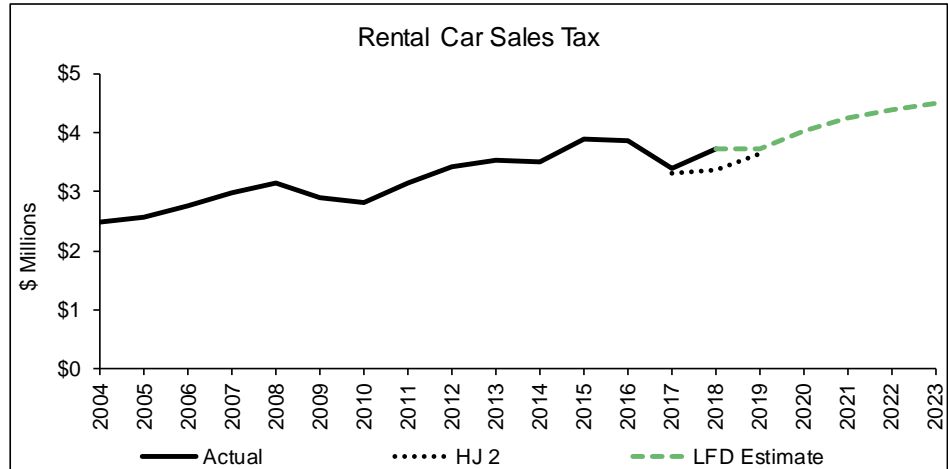
Retail Telecommunications Excise Tax

Retail telecommunications excise tax collections were below the estimate contained in HJ 2 in FY 2017 and FY 2018. The estimate was based on U.S. Census Bureau data for landline and cell phone use, other sources of cell phone statistics, and the IHS forecast of Montana population. Modeling for the LFD estimate assumes a faster decline in the use of landlines and starts from the lower FY 2018 base.

Retail Telecommunications Excise Tax
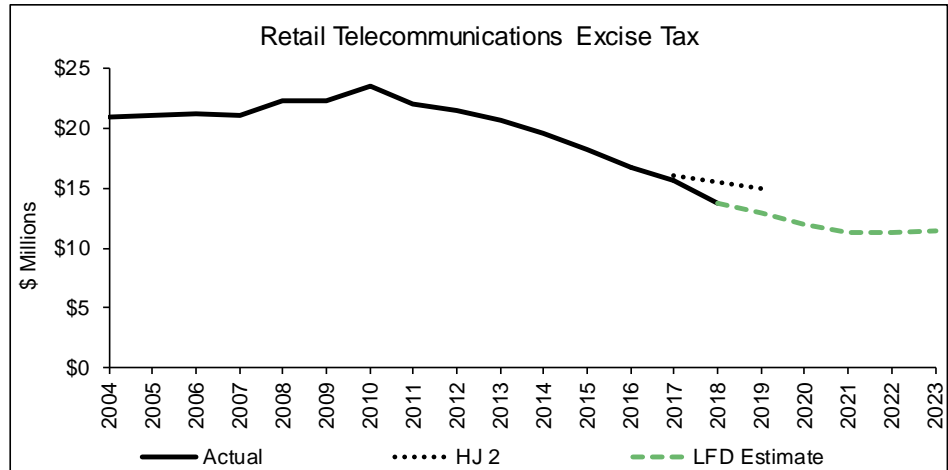
Other Natural Resource Taxes

Coal Severance Tax

Coal severance tax collections exceeded the HJ 2 in FY 2017 and FY 2018. A slight decrease is forecast in FY 2019 compared to HJ 2.

Coal Severance Tax

$ Millions

Actual ······ HJ 2 ─ ─ LFD Estimate
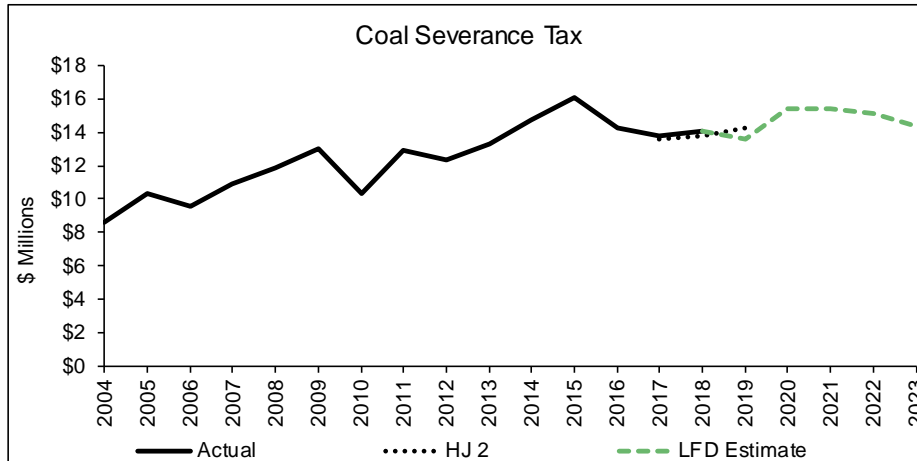
The increase in projected general fund coal revenue in FY 2020 and FY 2021 is due to HB 209 (2015 Session) which increased funding to the Coal Natural Resources Account from 2.9% to 5.8% in FY 2018 and FY 2019. The additional 2.9% reverts to the general fund in FY 2020.

Electrical Energy Tax

Electrical energy tax collections were below the HJ 2 estimate in FY 2017 and FY 2018. This source is modeled on past average collections, so the forecast moving forward simply follows the long-term trend.

Electrical Energy Tax

$ Millions

Actual ······ HJ 2 ─ ─ LFD Estimate
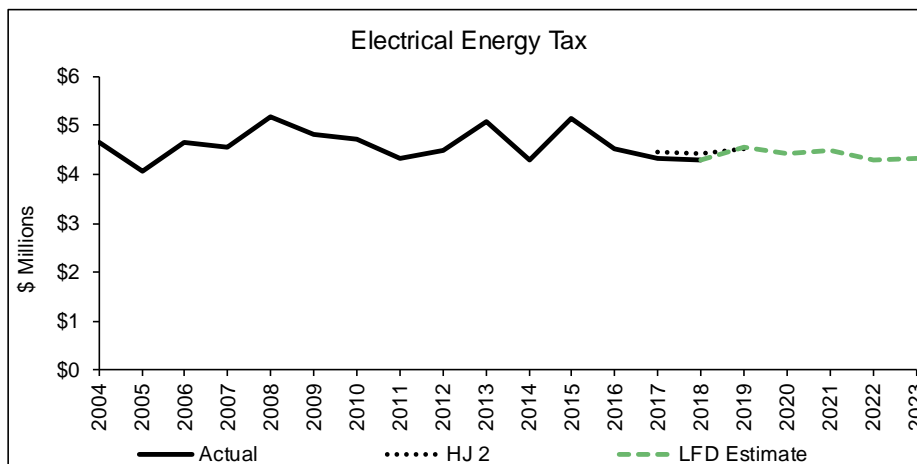
Metalliferous Mines Tax

FY 2018 metal mines tax collections were well above the estimate contained in HJ 2, after coming in quite close to HJ 2 in FY 2017. The increase is primarily attributable to higher metal prices than anticipated in HJ 2 in CY 2017. The LFD estimate includes revised price outlooks for most metals and production forecasts by metal type based on a five-year moving average.

Metalliferous Mines Tax
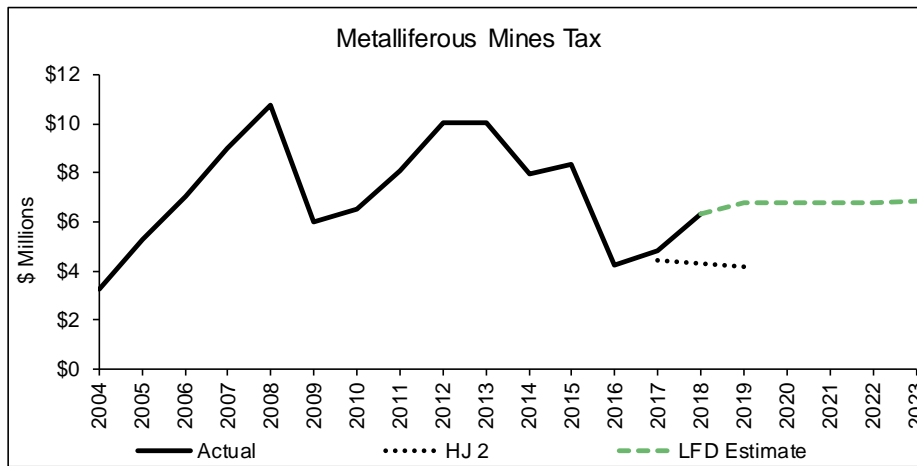
U.S. Mineral Royalties

U.S. mineral royalties were below the HJ 2 estimate in FY 2017 and quite close to the estimate in FY 2018. The increased collections are primarily due to higher energy prices. Royalty collections are expected to remain flat moving forward.
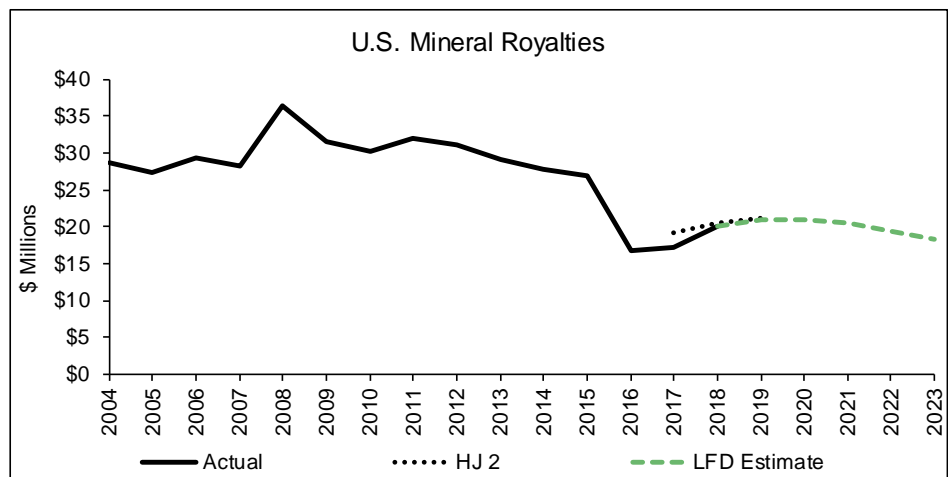

Wholesale Energy Transaction Tax

Wholesale energy transaction tax, imposed on transmission services providers, nearly identical to HJ 2 in FY 2018 and slightly above the FY 2017 collections. This source is estimated in HJ 2 based on historical trends.
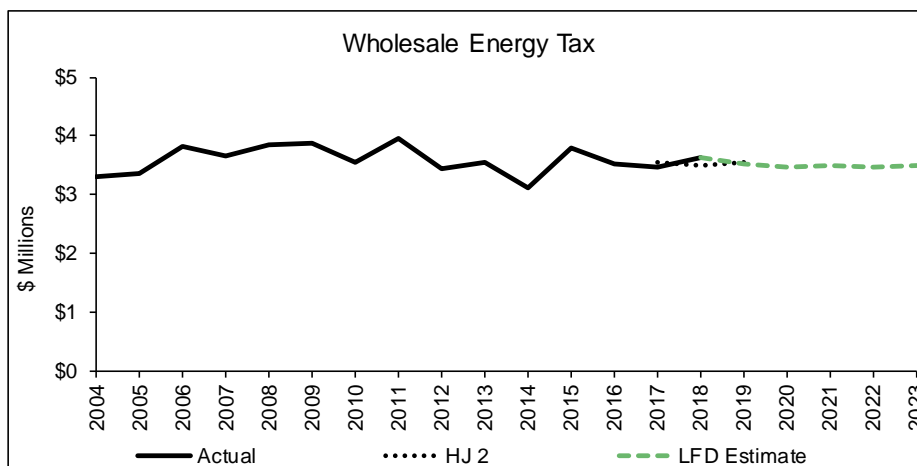
Other Interest Earnings

Coal Trust Interest Earnings

Coal trust earnings were below the estimate contained in HJ 2 by in FY 2018. Revenue from this source is estimated using projected trust balance amounts and forecast interest rates based on suggestions from the Board of Investments (BOI).
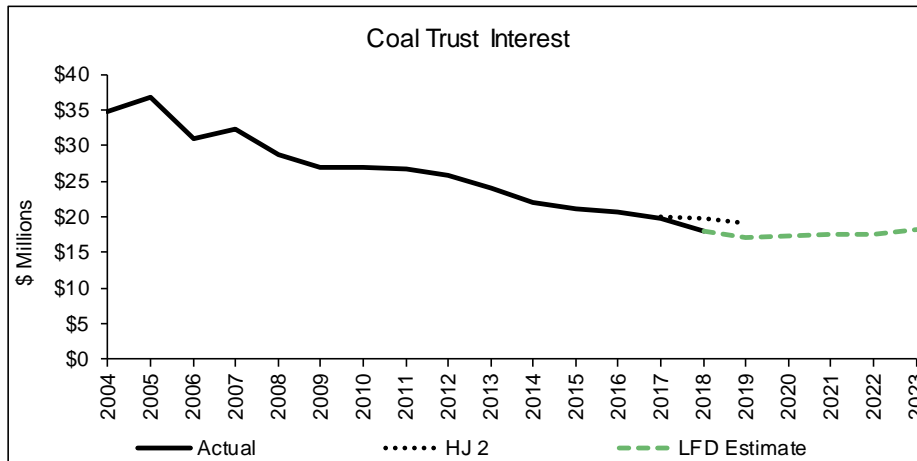
The LFD estimate is below the HJ 2 estimate for FY 2019 due to a downward revision in the return rate. Return rates in the Trust Funds Bond Pool (TFBP) are expected to reverse their downward trend and begin increasing towards the end of the 2021 biennium.

Treasury Cash Account Interest

TCA interest earnings in FY 2018 came in above HJ 2 by $3.3 million and grew by $5.2 million compared to FY 2017. The increase above the original estimate as well as the year-over-year growth was due to increases in short-term interest rates. A larger short-term investment pool (STIP) cash balance, coupled with an increasing interest rate forecast from IHS Markit, results in revenue from this source continuing to increase over the 2021 biennium.
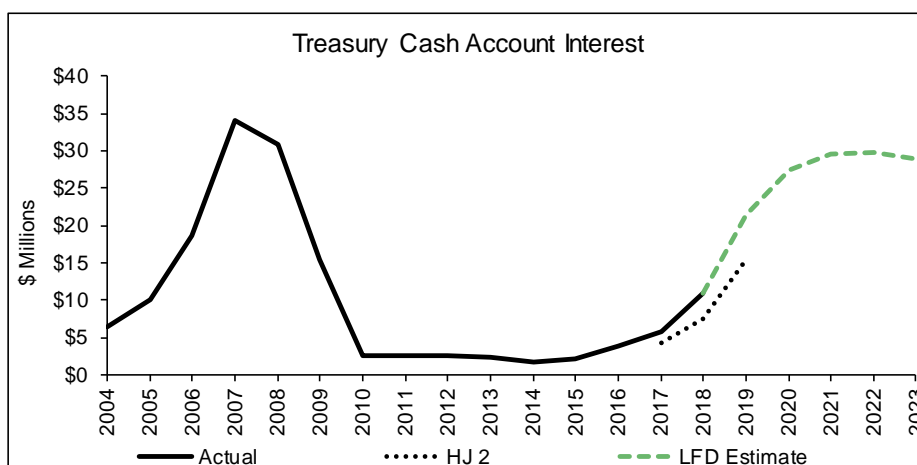
Other Consumption Taxes

Beer Tax

Beer tax revenue came in below the HJ 2 estimate in FY 2017 and FY 2018, with the difference growing over time. The HJ 2 estimate was based on two Montana-specific indicators from IHS: the personal consumption expenditure series for food and population over age 21.

This model also forecasts an effective tax rate based on growth trends for the various distributor sizes, which is applied to the total forecast consumption. The tax rate for distributors moving less than 5000 barrels per year is only $1.30 per barrel, and for those distributing between 5,001 and 10,000 the rate is $2.30, much less than the nominal $4.30 for larger distributors. There is a small but steady decline in effective tax rate as the market share of small brewers increases.
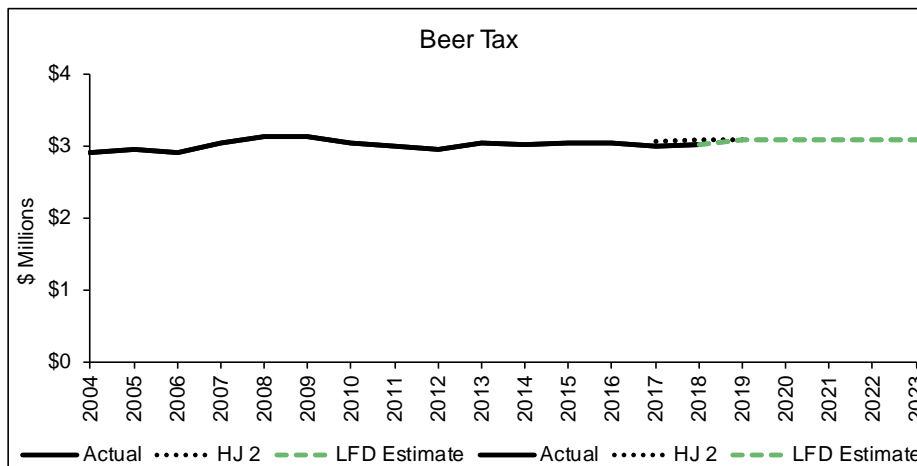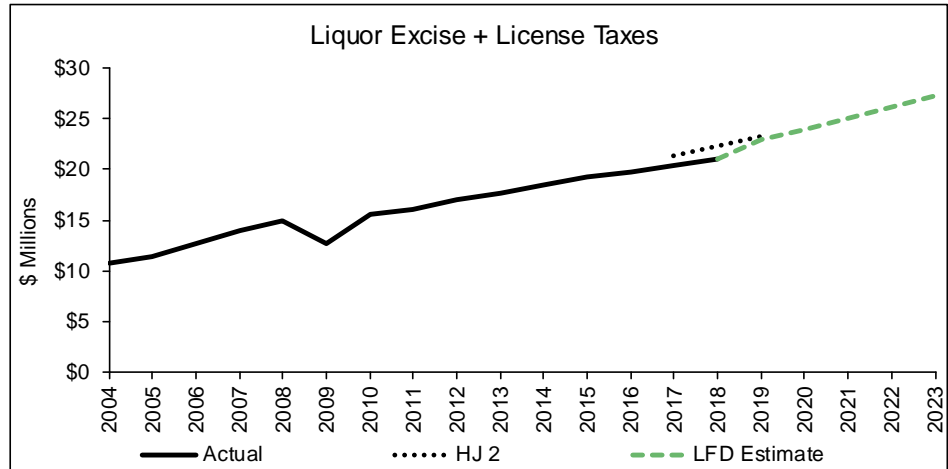

Cigarette Tax

Cigarette tax collections were below the HJ 2 revenue estimate in FY 2017 and declined further in FY 2018. The HJ 2 forecast for this source was based on the IHS Markit series for consumer price index for tobacco, consumer spending on tobacco products, and Montana population over age 18. Modeling has not changed, but continues to decline from the lower FY 2018 base.
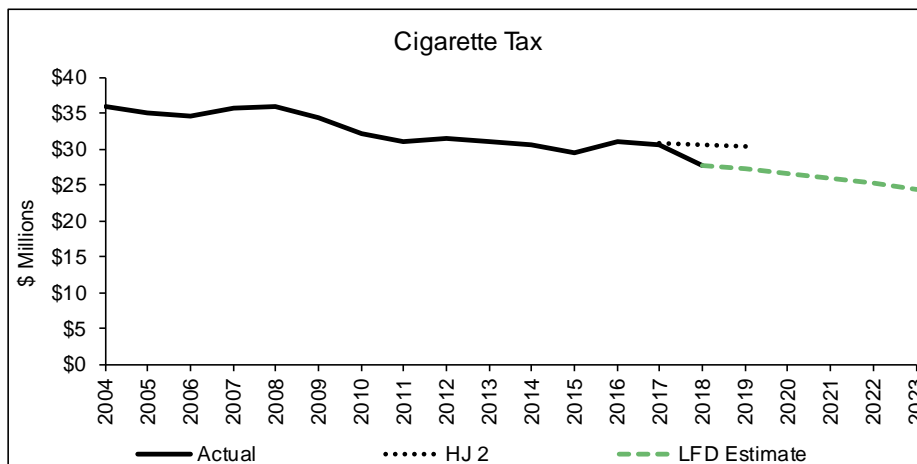
Liquor Excise & License Tax

Liquor excise tax revenue came in below the official projection in FY 2017 and FY 2018. The IHS Markit forecast of Montana personal consumption expenditure series for food was used as an input for this source in HJ 2. The IHS Markit outlook in FY 2018 has declined by 3.9% since the March 2017 forecast that was used as the basis for the HJ 2; the revised outlook is consistent with the lower revenue growth which suggests the model is performing well.

Liquor Excise + License Taxes

Liquor Profits

Liquor profits came in slightly the HJ 2 estimate in FY 2017 and below it in FY 2018. The estimate in HJ 2 assumed the fiscal note amounts for the liquor license auction enacted in SB 5 (2017 November Special Session). However, due to the delay in implementing the program, no addition revenues were collected in FY 2018. The LFD estimate assumes a lower level of future liquor license auction revenue, based on the slow start and paucity of data.

Liquor Profits
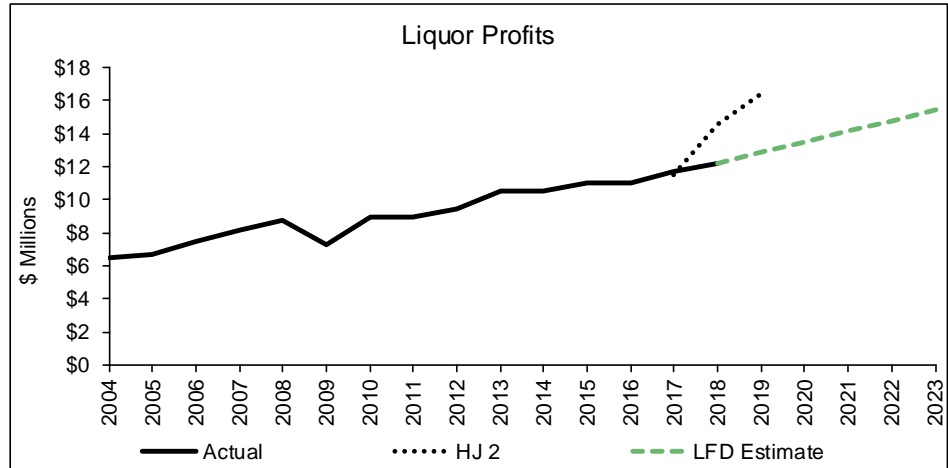
Lottery Profits

Lottery profits were below than forecast in HJ 2 in FY 2017 and FY 2018. In HJ 2, the IHS Markit forecast short-term interest rates and Montana population over age 18 were used as inputs for this source. The HJ 2 forecast followed several years consistent revenues, ending with the record Powerball jackpot of over $1.5 billion in FY 2016, which had been a strong driver of sales. FY 2017 ticket sales per capita declined nearly 15% possibly due to consumer jackpot fatigue. In FY 2018 ticket sales recovered somewhat; however, vendor costs rose following the recent expiration of a 10-year contract. The model has been updated to incorporate the new developments.

Lottery Profits
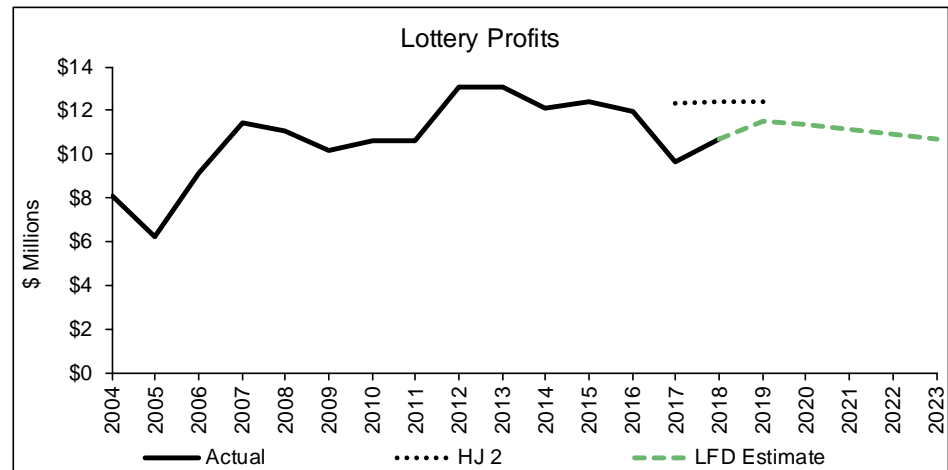
Tobacco Tax

Tobacco tax revenue came in below the official projection for FY 2017 and FY 2018. The HJ 2 estimate was based on IHS forecasts of Montana personal consumption expenditures and population over age 18. The model has not been changed but grows from the lower FY 2018 base.
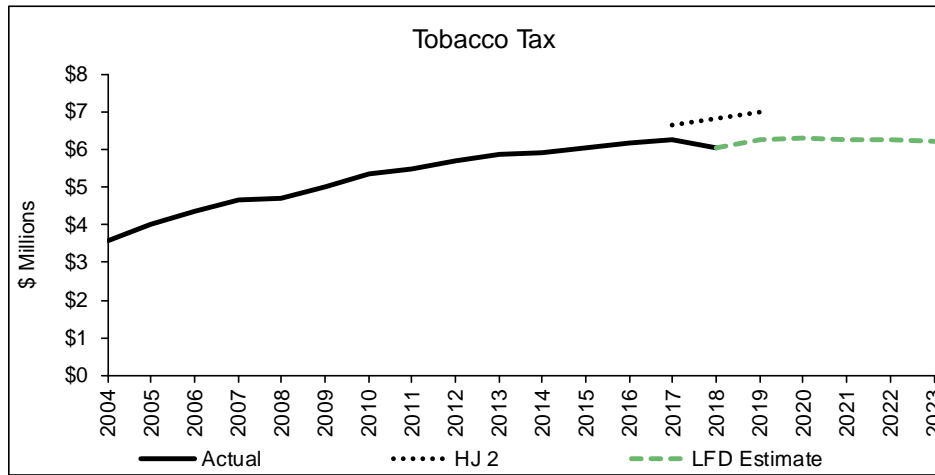
Wine Tax

Wine tax revenue came in a bit below to the official estimate in FY 2017 and FY 2018. The HJ 2 estimate was based on the IHS forecast of Montana population over age 21; modeling for this source has not changed but incorporates the most recent collections.
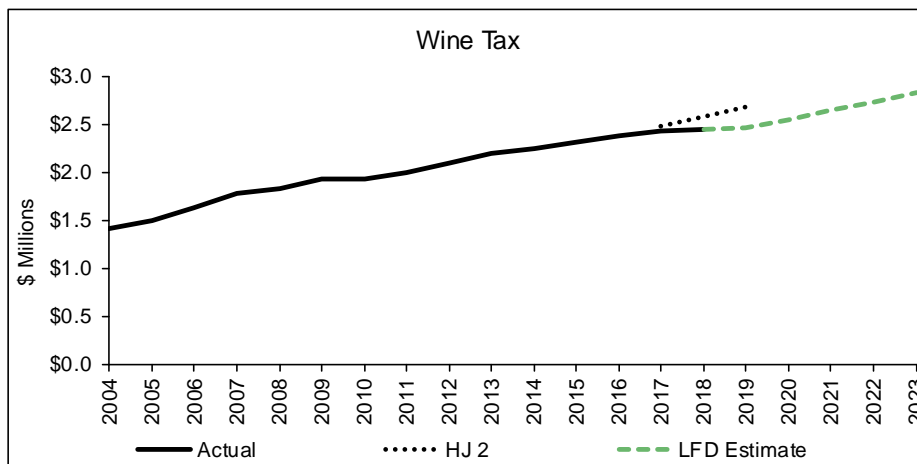
Other Sources

All Other Revenue

All other revenue collections were below the HJ 2 estimate for FY 2018. The large jump in collections in FY 2018 and FY 2019 are due to one-time legislatively authorized transfers. By FY 2020 this source is expected to return to traditional levels.

All Other Revenue
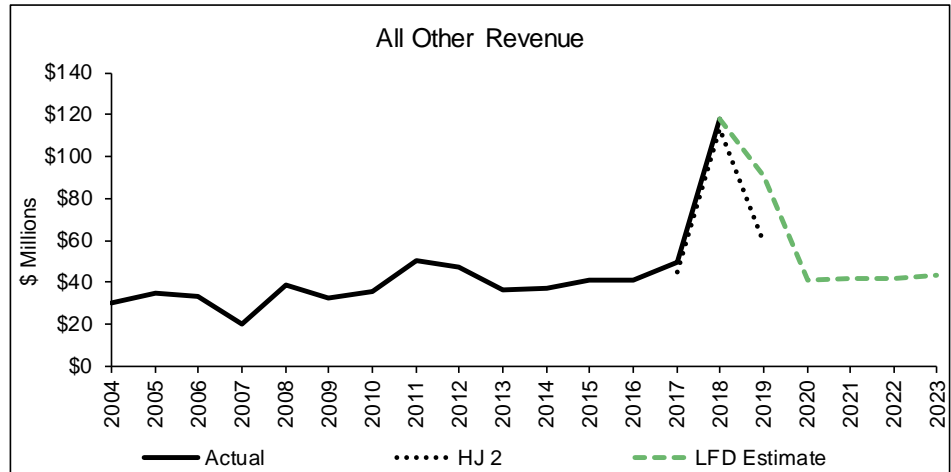
Highway Patrol Fines

Highway patrol fines were below the official HJ 2 estimate in FY 2017 and FY 2018. Incorporating the lower recent collections results in a forecast below HJ 2 for FY 2019, with very little growth over the next biennium.

Highway Patrol Fines
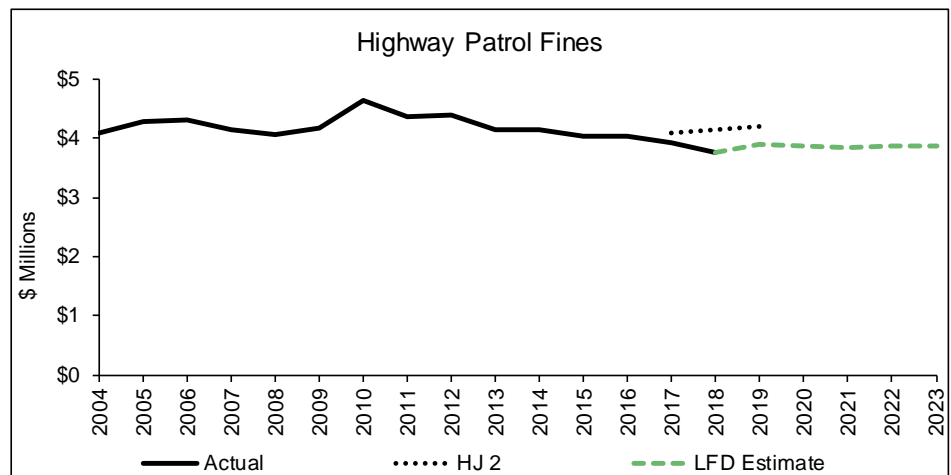
Nursing Facilities Fee

Nursing facilities fees came in very close to the HJ 2 revenue estimate in FY 2017 and FY 2018. This source has declined most years since inception and is forecast primarily based on a time series of proxy bed days.

Nursing Facilities Fee
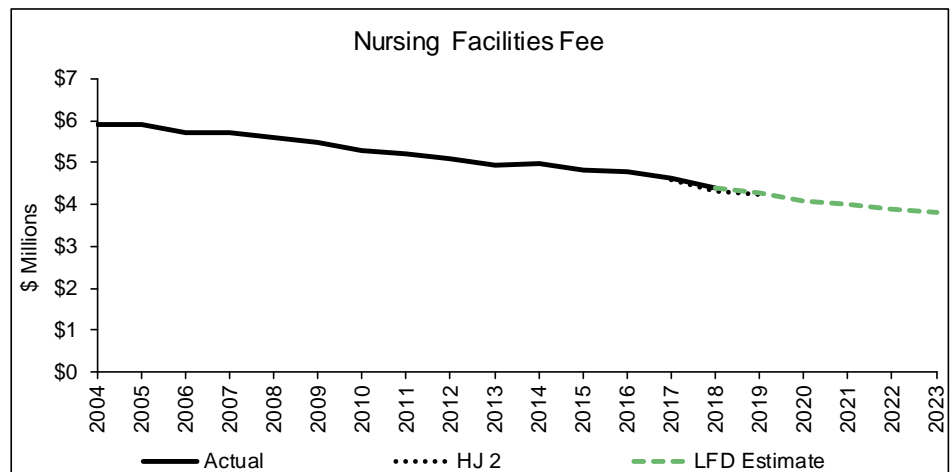
Public Institution Reimbursements

Public institution reimbursements were above the HJ 2 revenue estimate in FY 2017 and FY 2018. This source has a history of fluctuating collections primarily due to timing of federal payments. Modeling for this source relies primarily on a time trend of nursing facility residents.
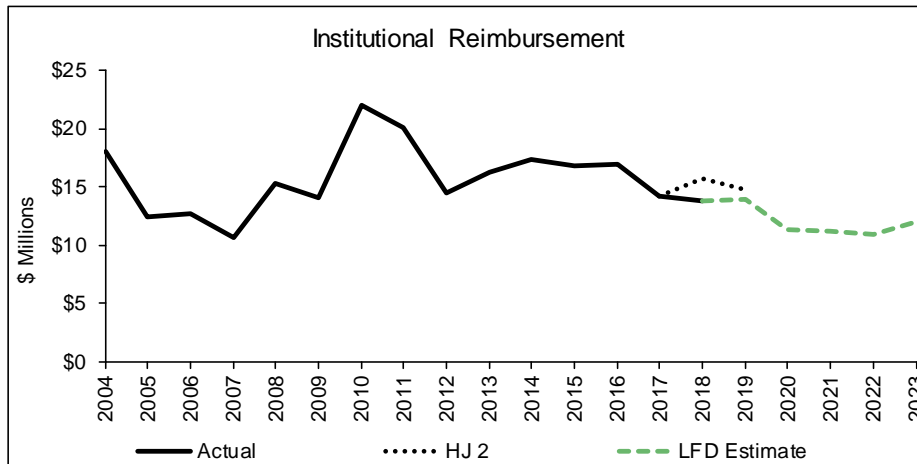
Tobacco Settlement

Tobacco settlement revenue was above the HJ 2 estimate in FY 2017 and FY 2018, with the difference increasing over time. Fluctuations in this revenue source are generally due to disputes and litigation by attorneys representing the cigarette companies, and the states that delay or mildly adjust the amount of the settlement. These changes are not captured in the revenue model and are likely to continue to contribute to discrepancies between estimates and actuals.
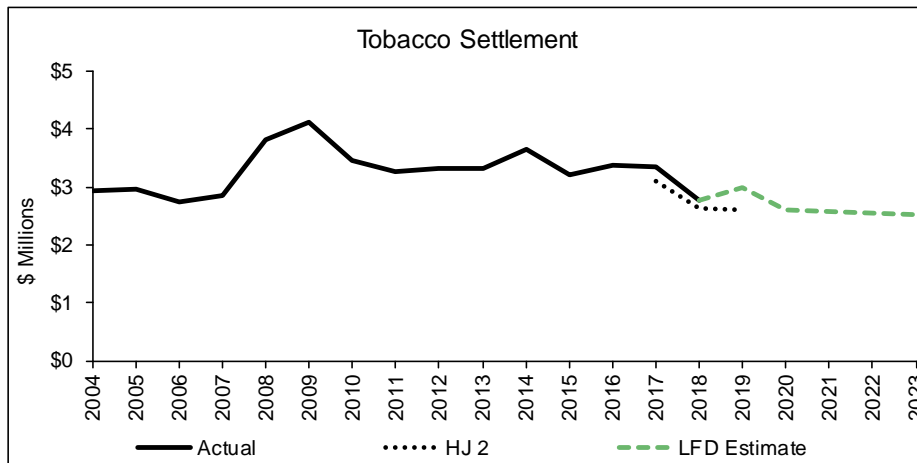
2021 BIENNIUM GUARANTEE FUND REVENUE ESTIMATE

The guarantee fund is a state special revenue fund dedicated as the first source of school funding. Since the available funds from the guarantee fund directly offset general fund spending, the LFD revenue estimate recommendation is included for informational purposes. The guarantee fund primarily receives revenue generated from common school state land and the subsequent interest on the common school trust account. Guarantee account revenues are anticipated to grow slowly in the 2021 biennium.

Guarantee Fund
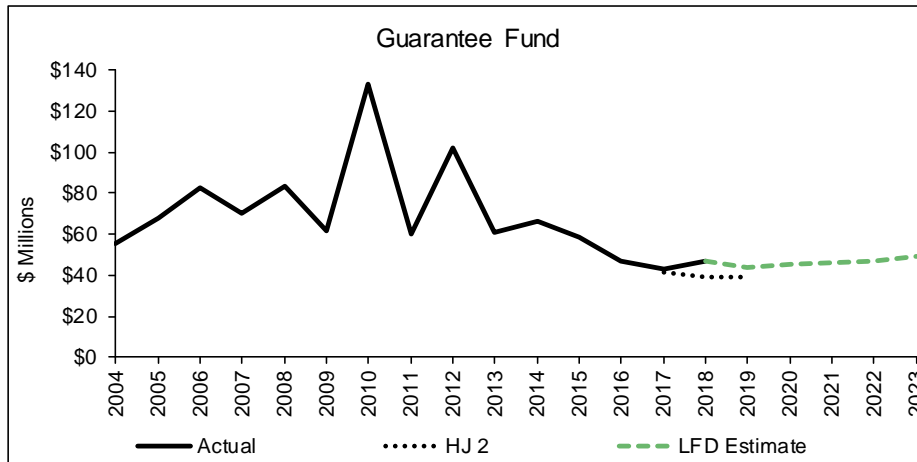
APPENDIX

DETAILED COMPARISON WITH EXECUTIVE ESTIMATE

	Actual	OBPP			LFD			3-Year	3-Year
Revenue Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2019	FY 2020	FY 2021	$ Diff.	% Diff.
Largest Seven Sources									
Individual Income Tax	$1,297.777	$1,341.149	$1,418.275	$1,488.166	$1,359.066	$1,425.943	$1,490.046	($27.465)	-0.6%
Property Tax	276.414	282.672	302.446	310.307	283.225	302.470	309.103	0.627	0.1%
Corporation Tax	167.100	145.485	150.441	156.794	167.854	174.678	174.864	(64.676)	-12.5%
Vehicle Taxes & Fees	109.540	108.700	109.400	110.200	111.525	112.979	114.156	(10.359)	-3.1%
Oil & Natural Gas Taxes	54.508	60.041	60.618	61.354	60.049	56.652	53.062	12.250	7.2%
Insurance Tax	75.273	78.086	79.769	81.333	77.475	81.158	83.915	(3.361)	-1.4%
Video Gaming Tax	60.324	62.712	65.226	67.521	60.158	60.248	60.172	14.880	8.2%
Other Business Taxes									
Drivers License Fee	4.581	4.306	4.504	4.655	4.342	4.370	4.394	0.359	2.7%
Investment Licenses	7.683	8.023	8.259	8.420	7.963	8.282	8.504	(0.047)	-0.2%
Lodging Facilities Sales Tax	24.091	26.113	28.261	30.746	25.218	26.380	27.287	6.234	7.9%
Public Contractor's Tax	4.267	4.250	4.374	4.513	3.503	3.579	3.655	2.401	22.4%
Railroad Car Tax	3.649	3.494	3.527	3.583	3.492	3.878	4.196	(0.963)	-8.3%
Rental Car Sales Tax	3.719	4.025	4.170	4.310	3.730	4.039	4.258	0.479	4.0%
Retail Telecom Excise Tax	13.726	12.817	11.983	11.204	12.889	11.927	11.370	(0.183)	-0.5%
Other Natural Resource Taxes									
Coal Severance Tax	14.107	14.872	17.118	17.276	13.555	15.385	15.413	4.912	11.1%
Electrical Energy Tax	4.302	4.097	4.581	4.775	4.547	4.416	4.497	(0.006)	0.0%
Metal Mines Tax	6.291	6.591	6.755	6.927	6.749	6.767	6.761	(0.004)	0.0%
U.S. Mineral Royalties	20.139	23.217	23.590	23.747	20.934	20.891	20.547	8.181	13.1%
Wholesale Energy Trans Tax	3.628	3.434	3.761	3.823	3.516	3.464	3.485	0.553	5.3%
Other Interest Earnings									
Coal Trust Interest Earnings	17.938	18.332	19.301	19.515	17.088	17.333	17.504	5.223	10.1%
TCA Interest Earnings	10.888	21.955	29.895	33.716	21.514	27.318	29.643	7.091	9.0%
Other Consumption Taxes									
Beer Tax	3.002	2.994	2.984	2.972	3.074	3.074	3.075	(0.273)	-3.0%
Cigarette Tax	27.755	27.392	27.039	26.683	27.313	26.687	26.057	1.057	1.3%
Liquor Excise Tax	21.007	22.468	23.480	24.537	22.884	23.893	25.044	(1.336)	-1.9%
Liquor Profits	12.200	12.800	13.400	14.100	12.900	13.500	14.200	(0.300)	-0.7%
Lottery Profits	10.699	10.454	10.930	11.038	11.510	11.337	11.136	(1.562)	-4.6%
Tobacco Tax	6.058	6.004	6.011	6.015	6.273	6.279	6.268	(0.789)	-4.2%
Wine Tax	2.446	2.439	2.475	2.509	2.461	2.554	2.644	(0.234)	-3.1%
Other Sources									
All Other Revenue	117.645	92.214	40.996	41.259	90.686	40.911	41.446	1.426	0.8%
Highway Patrol Fines	3.754	3.699	3.726	3.780	3.907	3.862	3.841	(0.404)	-3.5%
Nursing Facilities Fee	4.405	4.327	4.273	4.234	4.275	4.087	3.990	0.482	3.9%
Public Institution Reimb.	13.754	11.856	11.831	11.921	13.887	11.396	11.197	(0.873)	-2.4%
Tobacco Settlement	2.778	3.156	2.759	2.654	2.996	2.603	2.581	0.390	4.8%
Total General Fund	$2,405.447	$2,434.174	$2,506.157	$2,604.585	$2,470.557	$2,522.338	$2,598.311	($46.290)	-0.6%
Guarantee Account	47.053				43.384	45.551	45.888		
Total General Fund & Guarantee	$2,452.501	$2,434.174	$2,506.157	$2,604.585	$2,513.941	$2,567.889	$2,644.199		

General Fund Revenue Estimate Overview & Comparison ($ Millions)

GENERAL FUND REVENUE COLLECTIONS THROUGH OCTOBER

	Actual	HJ 2/SS	HJ 2 Est.	Oct	Oct	YTD	YTD
Revenue Source	FY 2018	FY 2019	% Change	FY 2018	FY 2019	Difference	% Change
Largest Seven Sources							
Individual Income Tax	$1,297.777	$1,404.299	8.2%	$509.312	$545.234	$35.922	7.1%
Property Tax	276.414	286.126	3.5%	5.998	10.236	4.237	70.6%
Corporation Tax	167.100	173.148	3.6%	42.360	55.470	13.110	30.9%
Vehicle Taxes & Fees	109.540	114.550	4.6%	30.353	29.646	(0.707)	-2.3%
Oil & Natural Gas Taxes	54.508	48.914	-10.3%	-	-	-	
Insurance Tax	75.273	79.893	6.1%	14.378	15.090	0.711	4.9%
Video Gaming Tax	60.324	64.516	6.9%	14.926	15.762	0.835	5.6%
Other Business Taxes							
Drivers License Fee	4.581	5.007	9.3%	1.479	1.314	(0.165)	-11.1%
Investment Licenses	7.683	7.994	4.0%	0.593	0.616	0.023	3.8%
Lodging Facilities Sales Tax	24.091	24.771	2.8%	4.847	4.982	0.135	2.8%
Public Contractor's Tax	4.267	2.527	-40.8%	2.264	2.498	0.234	10.3%
Railroad Car Tax	3.649	3.905	7.0%	0.505	0.756	0.251	49.7%
Rental Car Sales Tax	3.719	3.658	-1.6%	0.741	0.799	0.058	7.9%
Retail Telecom Excise Tax	13.726	14.966	9.0%	1.009	1.048	0.040	3.9%
Other Natural Resource Taxes							
Coal Severance Tax	14.107	14.297	1.3%	1.383	2.161	0.777	56.2%
Electrical Energy Tax	4.302	4.524	5.2%	0.824	1.190	0.367	44.5%
Metal Mines Tax	6.291	4.156	-33.9%	-	0.016	0.016	
U.S. Mineral Leasing	20.139	21.229	5.4%	4.322	3.919	(0.403)	-9.3%
Wholesale Energy Trans Tax	3.628	3.537	-2.5%	0.547	0.743	0.196	35.7%
Other Interest Earnings							
Coal Trust Interest Earnings	17.938	19.067	6.3%	3.951	4.136	0.185	4.7%
TCA Interest Earnings	10.888	15.507	42.4%	2.044	4.736	2.692	131.7%
Other Consumption Taxes							
Beer Tax	3.002	3.076	2.5%	0.845	0.873	0.028	3.3%
Cigarette Tax	27.755	30.463	9.8%	8.369	9.891	1.522	18.2%
Liquor Excise Tax	21.007	23.218	10.5%	5.386	5.463	0.077	1.4%
Liquor Profits	12.200	16.425	34.6%	-	-	-	
Lottery Profits	10.699	12.365	15.6%	0.000	-	(0.000)	-100.0%
Tobacco Tax	6.058	6.999	15.5%	1.641	1.594	(0.048)	-2.9%
Wine Tax	2.446	2.674	9.3%	0.629	0.642	0.014	2.1%
Other Sources							
All Other Revenue	117.645	58.394	-50.4%	49.558	16.920	(32.638)	-65.9%
Highway Patrol Fines	3.754	4.190	11.6%	0.900	1.034	0.134	14.9%
Nursing Facilities Fee	4.405	4.247	-3.6%	1.027	0.507	(0.520)	-50.7%
Public Institution Reimbursement	13.754	14.734	7.1%	0.563	2.191	1.628	289.3%
Tobacco Settlement	2.778	2.599	-6.4%	0.006	0.337	0.331	5464.5%
Ongoing Revenue Subtotal	2,333.618	2,480.250	6.3%	674.389	735.802	61.413	9.1%
OTO Revenue & Transfers Subtotal	71.829	15.726		36.370	4.000	(32.370)	
Grand Total	$2,405.447	$2,495.975	3.8%	$710.759	$739.802	$29.043	4.1%

General Fund Revenue Monitoring Report
($ Millions)

Individual Income Collections by Account

Individual Income Tax ($ Millions)				
	YTD 2019	YTD 2018	$ Difference	% Difference
Withholding	$316.2	$293.6	$22.6	7.7%
Estimated Payments	99.0	97.1	1.9	2.0%
Current Year Payments	18.9	20.0	(1.1)	-5.5%
Audit, P&I, Amended	9.1	6.4	2.6	40.9%
Refunds	(64.9)	(66.4)	1.5	-2.3%
Refund Accrual Reversal	161.9	153.2	8.7	5.7%
Partnership Income Tax	3.4	3.8	(0.3)	-9.0%
Mineral Royalties	1.6	1.6	0.1	4.0%
Total	$545.2	$509.3	$35.9	7.1%

Corporation Income Collections by Account

Corporation Income Tax ($ Millions)				
Account	YTD 2019	YTD 2018	$ Difference	% Difference
Corporation Tax	$14.4	$5.1	$9.3	181.7%
Estimated Payments	37.6	36.6	1.0	2.8%
Refunds	(2.8)	(3.4)	0.6	-17.0%
Refund Accrual Reversal	4.9	3.3	1.6	46.7%
Audit, P&I, Amended	1.4	0.7	0.7	95.7%
Total	$55.5	$42.4	$13.1	30.9%