



MONTANA LEGISLATIVE BRANCH

Legislative Fiscal Division

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Director
AMY CARLSON


DATE: March 19, 2021
TO: House Taxation Committee
FROM: LFD Revenue Team
RE: General Fund Revenue Forecast Update #3

GENERAL FUND REVENUE SUMMARY

This is the third of the monthly revenue forecast updates throughout the 2021 Session designed to brief the legislature on recent economic trends and the corresponding outlook for the 2023 Biennium general fund revenue estimate. This update is based on actual revenue collections received through the end of February 2021 and updated national and Montana forecasts from IHS.

Forecast Update Based on New Data

The March economic forecasts from IHS combined with LFD revenue models generates a general fund revenue forecast that is \$352.0 million higher than the official estimate in HJ 2 over the three-year forecast period. This is \$51.2 million higher than February forecast update.

 General Fund Revenue Comparison: Update Compared to HJ 2 (\$ Millions)									
Revenue Source	Actual FY 2020	FY 2021	HJ 2 FY 2022	FY 2023	FY 2021	LFD Update FY 2022	FY 2023	3-Year \$ Difference	3-Year % Difference
Largest Seven Sources									
Individual Income Tax	\$1,435.240	\$1,404.584	\$1,443.769	\$1,523.161	\$1,516.129	\$1,558.980	\$1,643.578	\$347.173	7.9%
Property Tax	308.610	313.021	333.017	339.825	313.430	332.412	338.781	(1.241)	-0.1%
Corporation Tax	187.358	156.256	163.528	168.808	149.420	159.088	170.783	(9.300)	-1.9%
Vehicle Taxes & Fees	108.482	109.273	110.402	111.384	109.320	110.949	112.228	1.439	0.4%
Oil Severance Tax	38.380	36.488	40.402	41.002	40.367	44.353	40.826	7.654	6.5%
Insurance Tax	82.489	86.072	84.780	87.767	88.450	92.000	95.723	17.555	6.8%
Video Gaming Tax	57.447	60.320	63.336	66.503	60.320	63.336	66.503	0.000	0.0%
Other Business Taxes									
Drivers License Fee	4.410	4.029	4.053	4.071	4.041	4.073	4.097	0.058	0.5%
Investment Licenses	15.711	16.385	16.524	16.866	16.385	16.580	17.014	0.205	0.4%
Lodging Facilities Sales Tax	25.058	20.878	30.589	36.378	20.374	30.187	37.441	0.156	0.2%
Public Contractor's Tax	6.729	4.987	5.103	5.206	4.985	5.083	5.181	(0.046)	-0.3%
Railroad Car Tax	4.294	4.305	4.393	5.140	4.305	4.391	5.509	0.366	2.6%
Rental Car Sales Tax	4.224	3.823	4.727	5.219	3.571	4.681	5.212	(0.305)	-2.2%
Retail Telecom Excise Tax	11.788	10.954	10.085	9.190	11.004	10.168	9.287	0.231	0.8%
Other Natural Resource Taxes									
Coal Severance Tax	10.920	10.966	10.812	10.648	9.553	8.697	7.689	(6.487)	-20.0%
Electrical Energy Tax	3.910	4.480	4.223	4.203	3.987	3.759	3.741	(1.420)	-11.0%
Metal Mines Tax	8.724	9.922	8.038	8.222	9.922	8.038	8.222	0.000	0.0%
U.S. Mineral Royalties	18.527	18.729	17.909	17.221	17.619	16.196	14.526	(5.517)	-10.2%
Wholesale Energy Trans Tax	3.351	3.467	3.460	3.466	3.467	3.460	3.466	0.000	0.0%
Other Interest Earnings									
Coal Trust Interest Earnings	21.600	17.904	16.828	15.700	17.896	16.813	15.693	(0.030)	-0.1%
TCA Interest Earnings	18.597	2.740	1.582	1.724	2.392	1.002	1.440	(1.212)	-20.0%
Other Consumption Taxes									
Beer Tax	3.167	3.102	3.111	3.117	3.119	3.133	3.142	0.064	0.7%
Cigarette Tax	26.983	27.045	26.558	26.113	27.080	26.542	25.908	(0.185)	-0.2%
Liquor Excise Tax	23.786	24.930	26.426	28.014	24.960	26.436	27.901	(0.073)	-0.1%
Liquor Profits	18.080	15.800	15.800	16.900	15.800	15.800	16.800	(0.100)	-0.2%
Lottery Profits	8.073	13.144	13.021	13.145	13.224	13.122	13.259	0.296	0.8%
Tobacco Tax	5.754	5.724	5.627	5.565	5.646	5.534	5.472	(0.263)	-1.6%
Wine Tax	2.522	2.579	2.637	2.697	2.577	2.634	2.693	(0.008)	-0.1%
Other Sources									
All Other Revenue ¹	46.062	44.685	44.075	46.685	45.100	45.168	47.889	2.712	2.0%
Highway Patrol Fines	3.458	3.691	3.670	3.607	3.691	3.670	3.607	0.000	0.0%
Nursing Facilities Fee	4.188	3.992	3.896	3.799	3.992	3.896	3.799	0.000	0.0%
Public Institution Reimb.	12.745	12.555	12.382	13.410	12.555	12.382	13.410	0.000	0.0%
Tobacco Settlement ²	2.654	12.406	2.936	2.912	12.517	3.028	3.007	0.297	1.6%
Total General Fund	\$2,533.321	\$2,469.234	\$2,537.695	\$2,647.666	\$2,577.199	\$2,655.591	\$2,773.824	\$352.019	4.6%
Guarantee Account	42.452	42.914	42.406	42.845	42.928	42.374	42.646	0.216	-0.2%
Total General Fund & Guarantee	\$2,575.774	\$2,512.148	\$2,580.101	\$2,690.511	\$2,620.127	\$2,697.965	\$2,816.470	\$352.236	4.5%

¹Includes fiscal note from I-190 (Marijuana Tax, \$2.2 million)

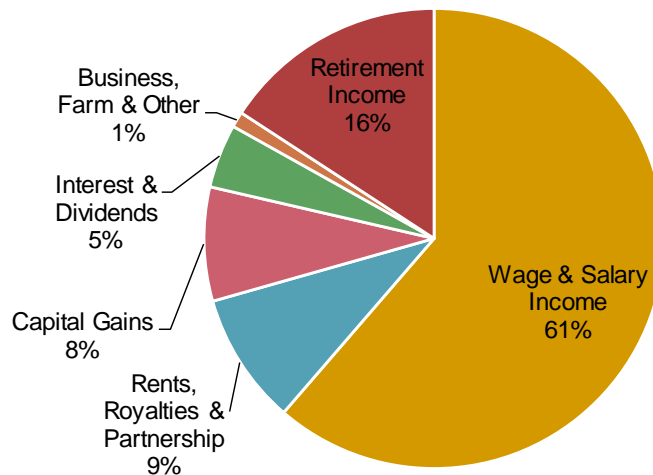
²Includes \$10 million in OTO revenues in FY 2021 from recent tobacco settlement

Forecast Methodology by Source

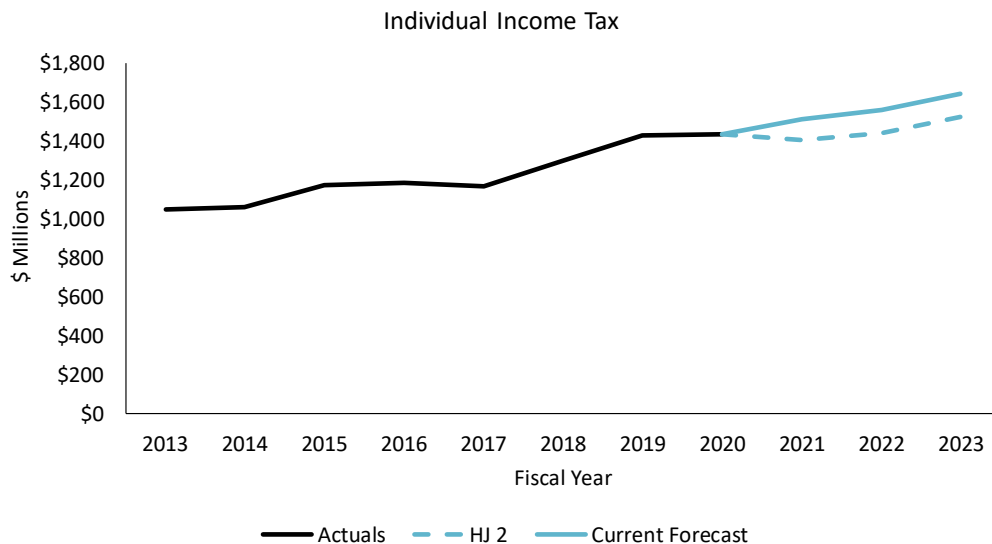
Individual Income Tax

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. These modeled growth rates primarily use economic data that the LFD receives from IHS Markit. For example, wage income growth rates are modeled using the IHS forecast for Montana wage disbursements.

CY 2019 Individual Income = \$31,114 Million



Once the calendar year tax liability is estimated, it then must be converted to a fiscal year estimate. This process is not perfect, as the timing of taxes paid as well as taxpayer behavior can be difficult to predict.



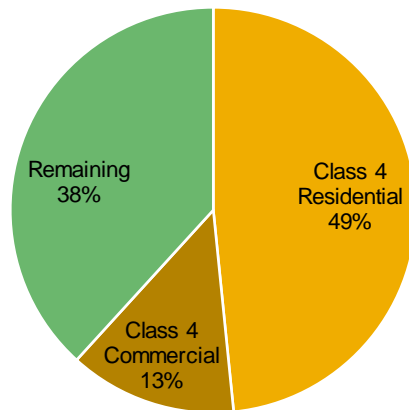
The modeling process usually ends here, but for this biennium numerous adjustments outside of the usual modeling process have been made to account for the provisions of the federal stimulus bills passed within the last year. Provisions within these bills loosened laws on carrying back losses and allowed businesses to deduct Payment Protection Program (PPP) loans while not including them as income. Ultimately, it is estimated that these provisions will reduce tax liabilities by just over \$100 million over the three-year forecast period.

The forecast for individual income tax has improved since HJ 2 was adopted in November. This is primarily due to the approval of numerous vaccine candidates and two additional rounds of stimulus, which were not included in the IHS data used to create the HJ 2 estimate.

Property Tax

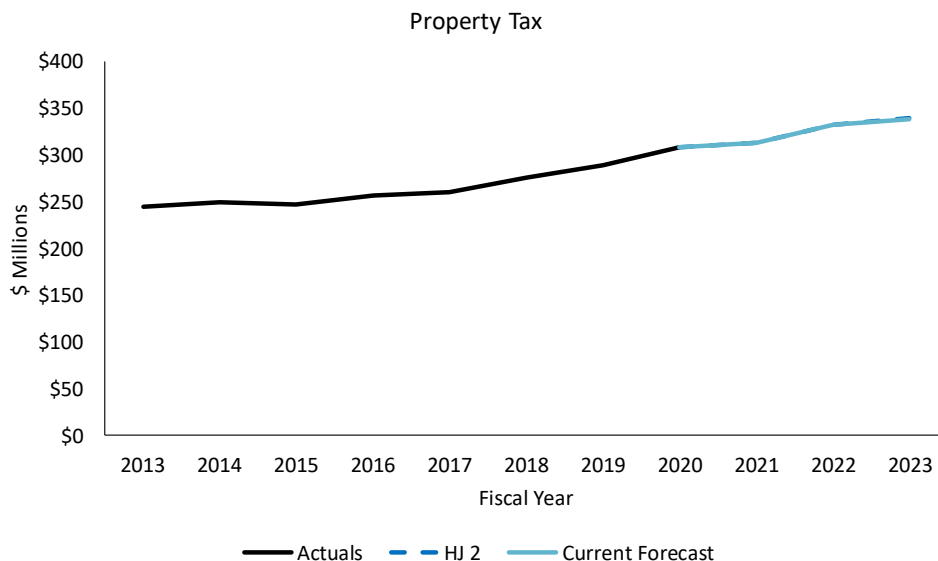
Montana law requires counties to levy a county equalization levy of 55 mills, a state equalization levy of 40 mills (often referred to together as the 95 mills) for K-12 schools, and 6 mills for the university system against all taxable value in each county. A mill levy of 1.5 mills is also applied against 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.

TY 2020 Taxable Value with Class 4 Split



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.

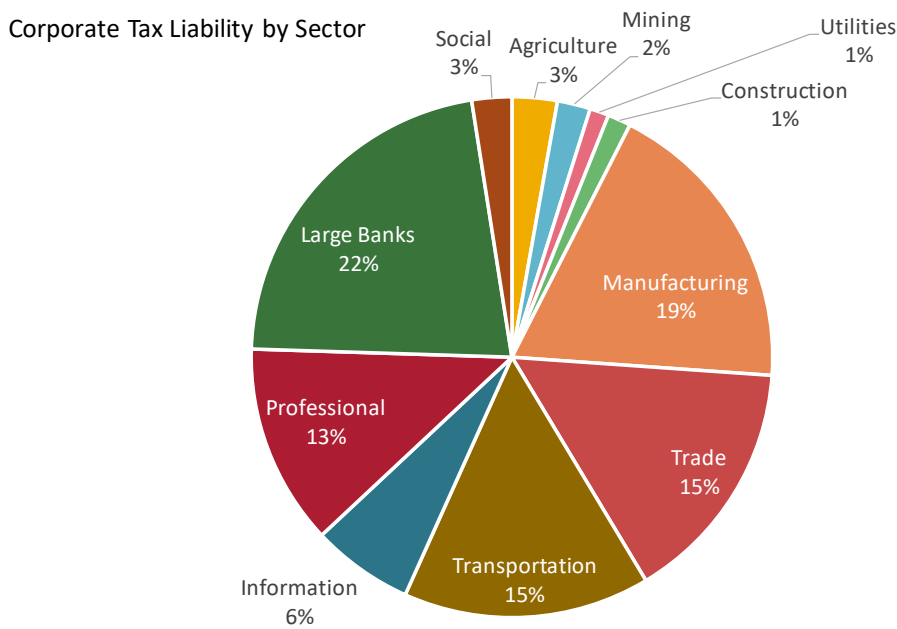


Assessed and taxable values are measured on January 1 of the tax year. The taxes are due to the state in the following November and May, i.e. in the fiscal year following the calendar year in which the values are measured. Coal gross proceeds are due to the state in the fiscal year two years after the 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.

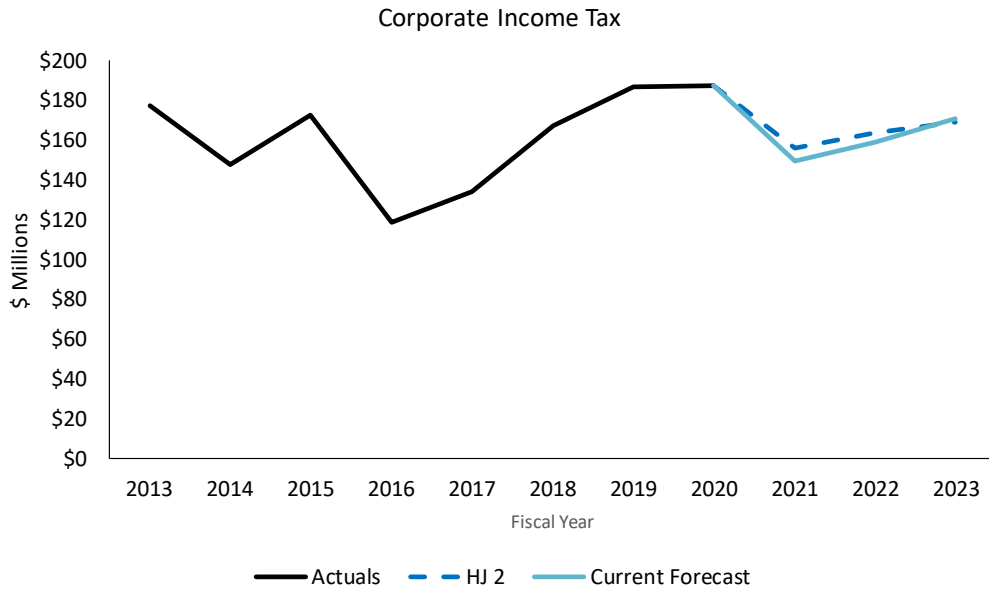
The latest year for which taxable value by class is available is the base from which future taxable values are derived. Growth rates are applied to the taxable value in each class of property. For the most part, growth rates are based on historical growth and on expected changes in tax rates in upcoming fiscal years.

Corporate Income Tax

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.

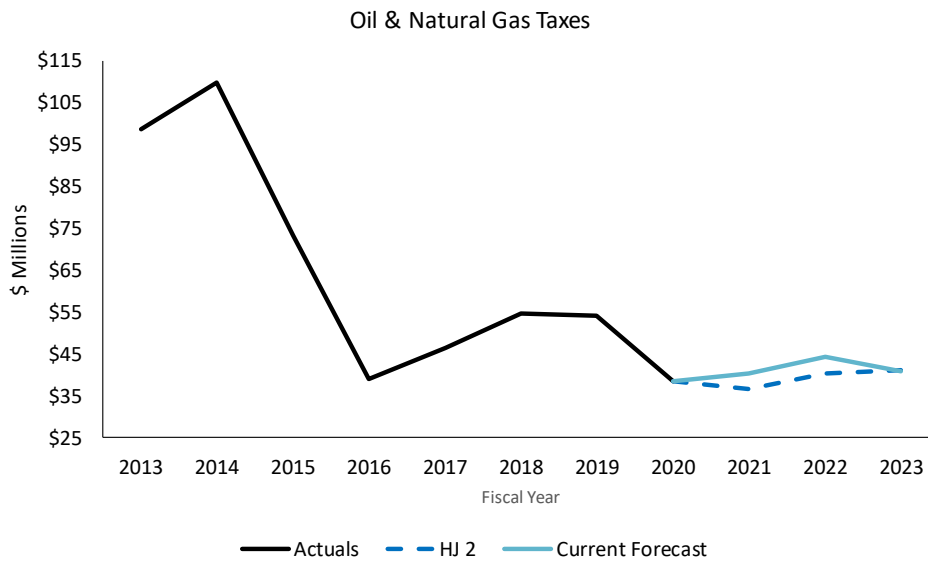


Similarly to individual income tax, provisions of the Consolidated Appropriations Act may reduce tax liabilities for corporations in Montana. It is estimated that these provisions may reduce revenues by \$40 million over the three-year forecast period.

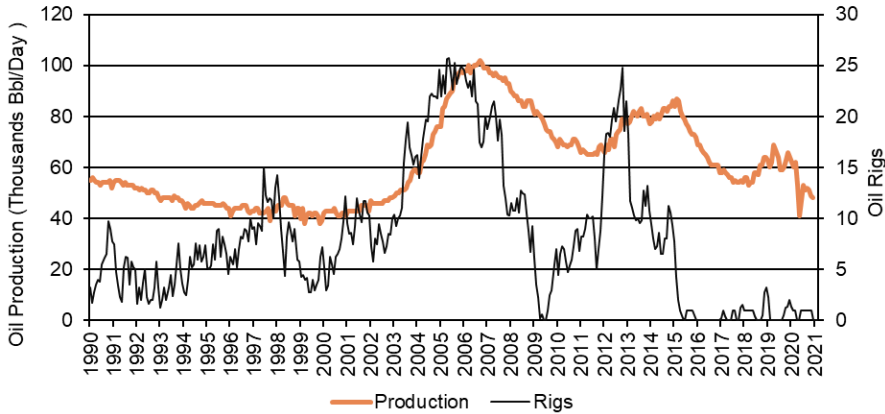


Oil and Natural Gas Production Tax

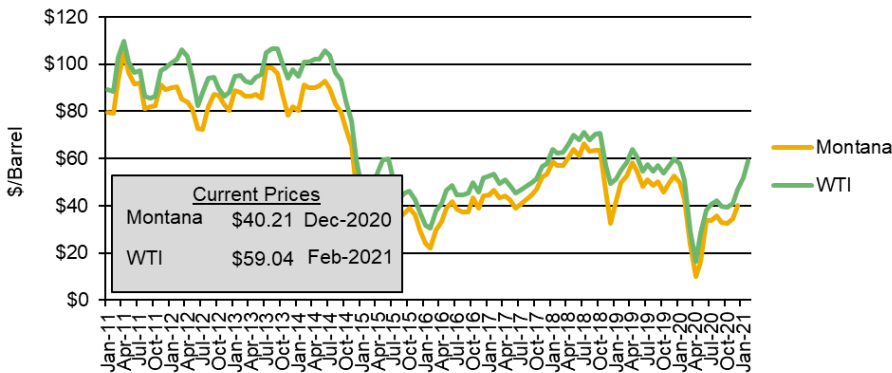
Oil and Natural gas production tax collections are estimated by applying the LFD production model to future West Texas Intermediate oil price estimates and Henry Hubb natural gas price estimates from IHS. To estimate future production, DNRC provides monthly historical production of oil and natural gas by each field and well in the state. This production data is then used to develop a normalized decline curve which represents average production of horizontal wells by month of production, and thus allows for estimates of future production while accounting for the various tax rates and time. In addition to data from DNRC and IHS, drilling rigs in the state are monitored through Baker Hughes, additional production and price numbers are monitored from the U.S. Energy Information Administration, and DOR provides additional data on revenue collections, production, price, and value by oil type on a quarterly basis.



Montana Oil Production & Operating Rigs

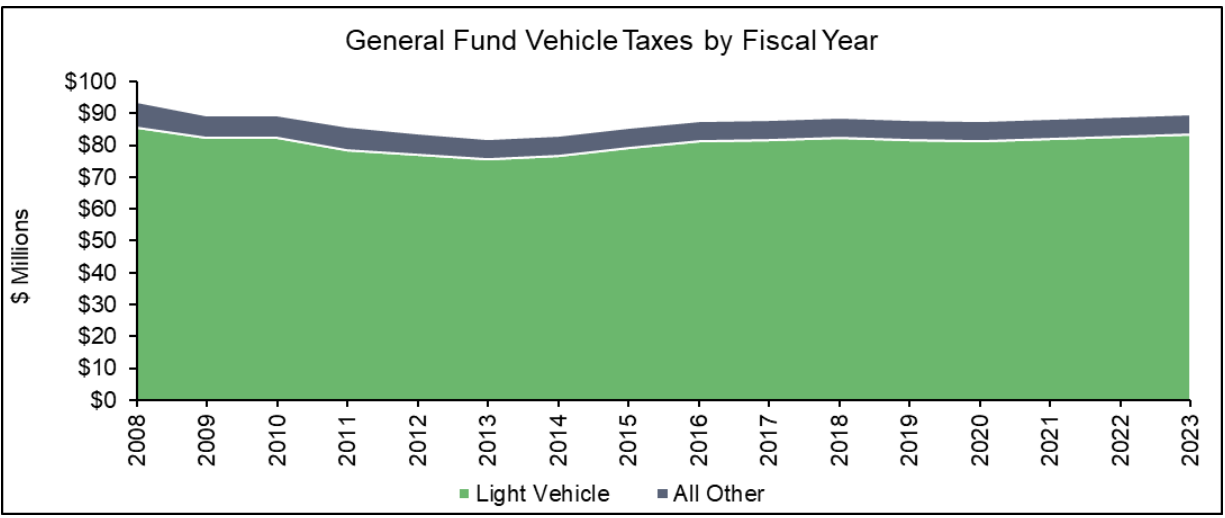
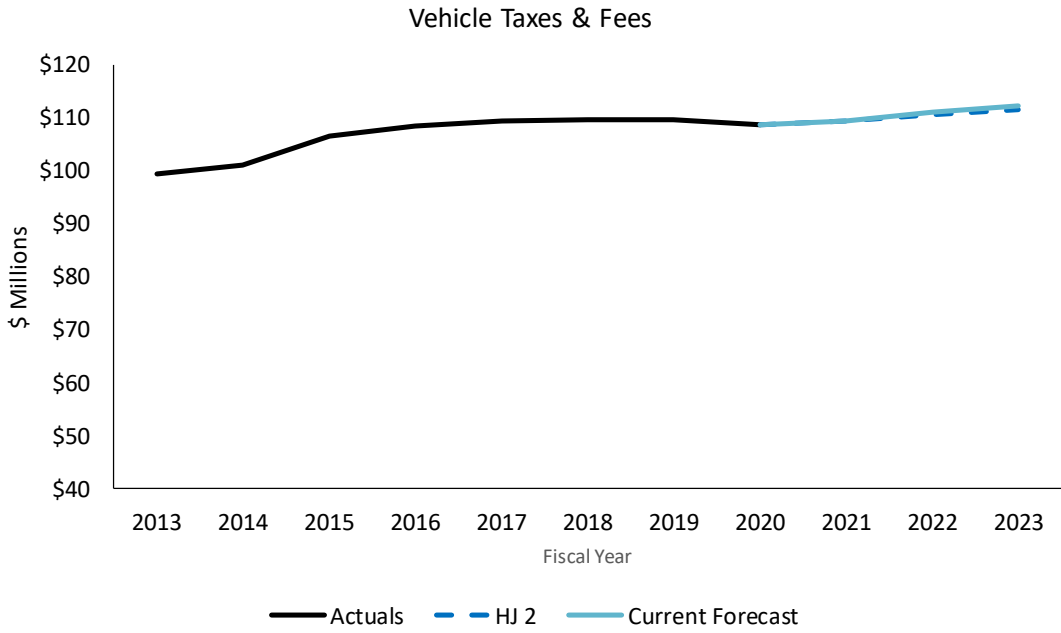


Montana Oil Price vs. WTI Oil Price



Vehicle Registration Taxes and Fees

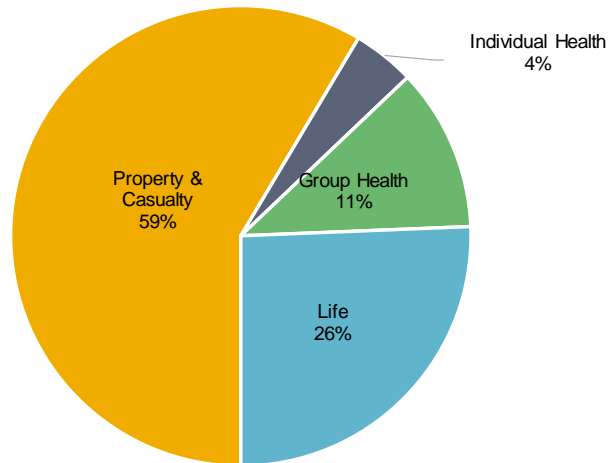
Vehicle taxes and fees vary by vehicle type, age and weight. There are five primary categories of vehicles (light vehicles, large trucks, motor homes, motorcycles and boats/snowmobiles), in addition to a variety of other motor vehicle fees. Changes in revenue result from changes in the vehicle stock in Montana, therefore growth rates for vehicle stock are modeled on IHS Markit estimates for national and Montana-specific vehicle stock and new car sales. The growth rate is applied to base year revenues from SABHRS for each vehicle class and projected forward.



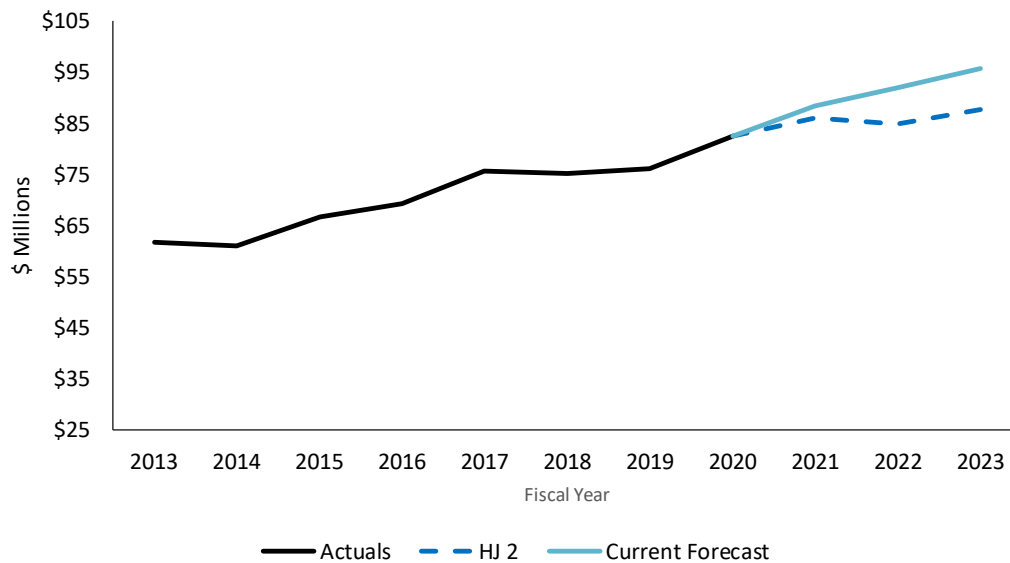
Insurance Tax

The insurance tax is equal to 2.75% of net premiums sold on Montana insurance policies with an additional 2.5% tax on the fire portion of net premiums for selected risks. Most policies fall into one of three categories: property/casualty, life, and health. The insurance tax estimate is based on trended proxy premiums and the Montana personal consumption expenditures (MT PCE) for finance and insurance products as provided by IHS Markit. At the time of the HJ 2 estimate in November the IHS variable was indicating a dip in demand for financial products in FY 2022. In the most recent update, IHS adjusted its estimate upward and as a result the current forecast is now in line with the growth seen in recent years.

CY 2019 Premium Tax by Type

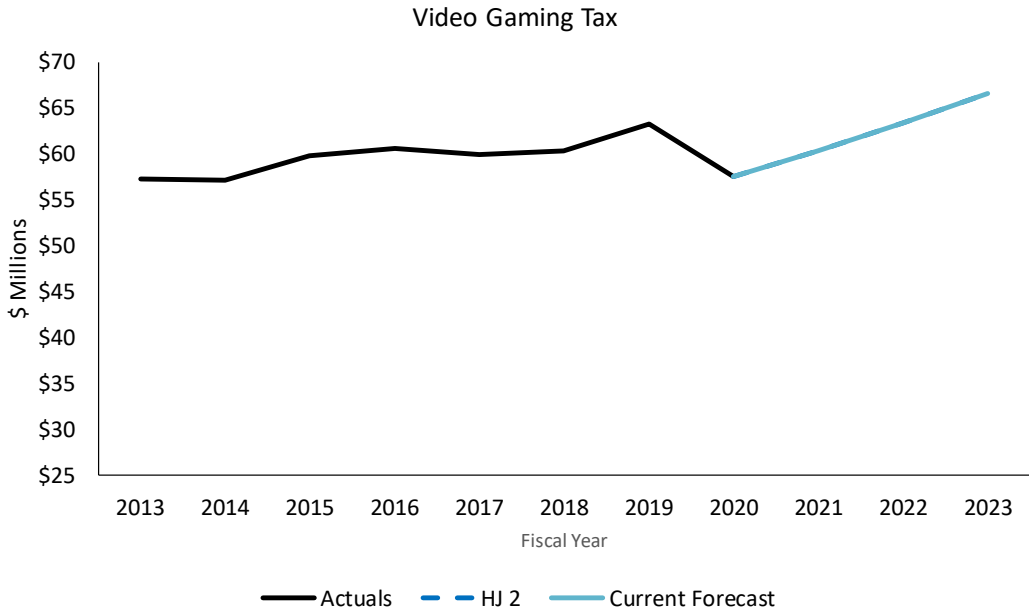


Insurance Tax



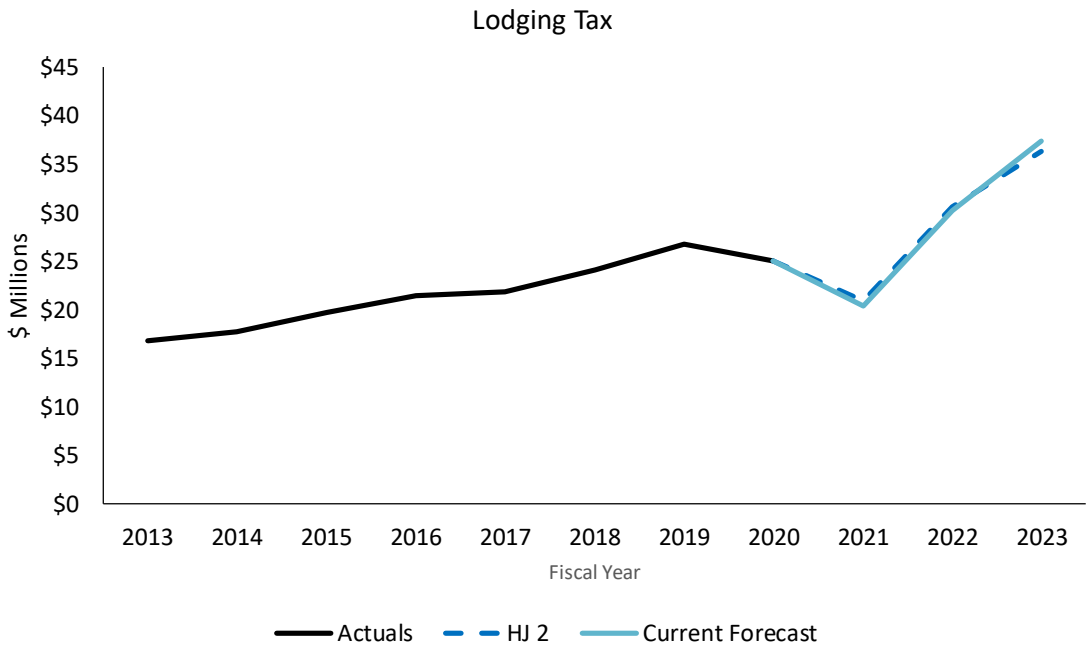
Video Gaming Tax

Video gambling revenue is derived from two sources: license fees and video gambling taxes. The general fund revenue for this source is derived from a tax of 15% on net payouts per video gambling machine. The estimate for video gambling revenue is based on IHS forecasts of Montana population coupled with a moving average modeled growth rate. This source was considerably impacted by restrictions during the early days of the COVID-19 pandemic but appears to be recovering.



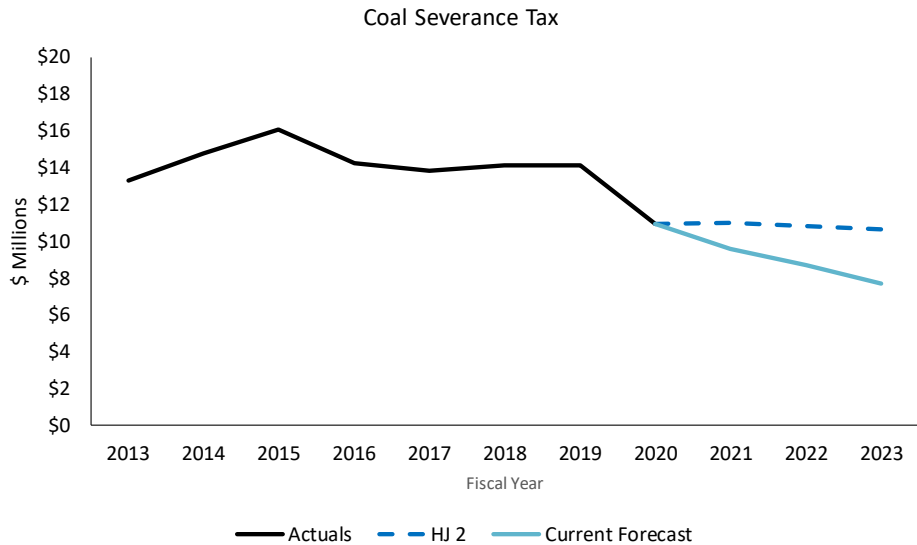
Lodging Sales Tax

To forecast lodging sales taxes, estimates on U.S. consumer spending on accommodations from IHS are used to estimate a proxy for future taxable room charges (tax collections divided by tax rate) in Montana. The forecast proxy for taxable room charges is then multiplied by the tax rate to generate lodging tax revenue estimates.



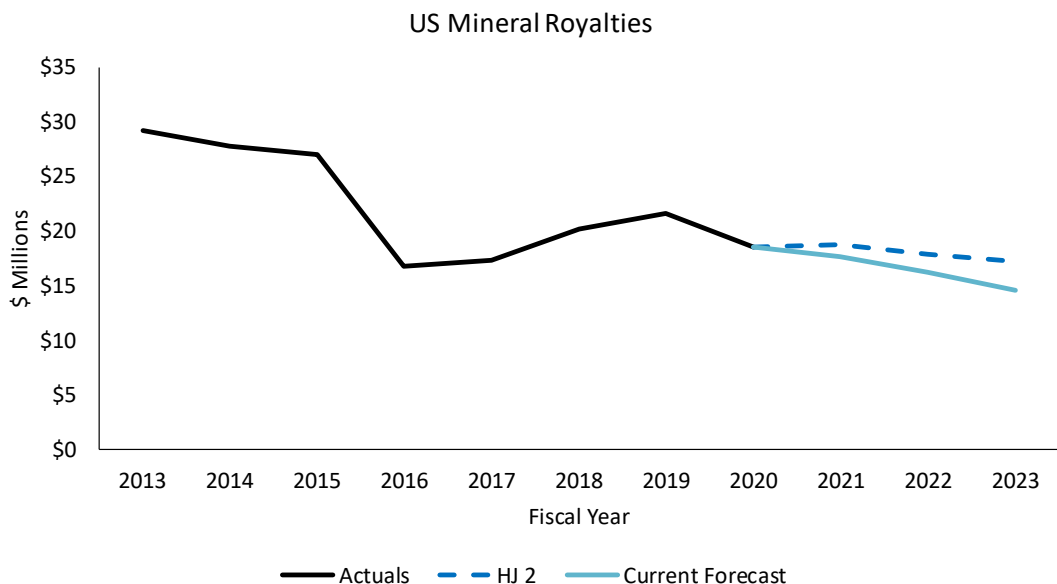
Coal Severance Tax

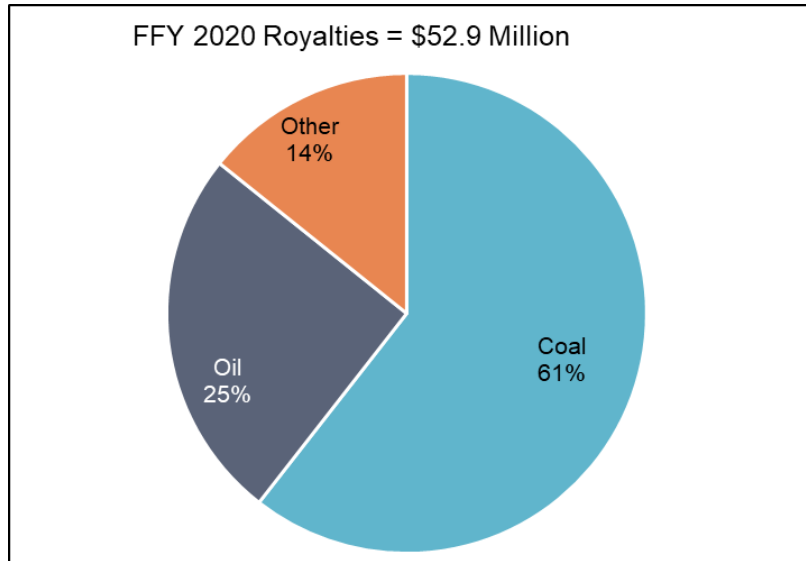
The estimate for this revenue source is based on collection data from SABHRS, historical price and production data from DOR, and anticipated production. This source has recently seen a decline with the closure of Colstrip Units 1 & 2. Unless mines within the state find new customers, this decline is expected to continue as domestic coal electrical generating plants close.



US Mineral Royalties

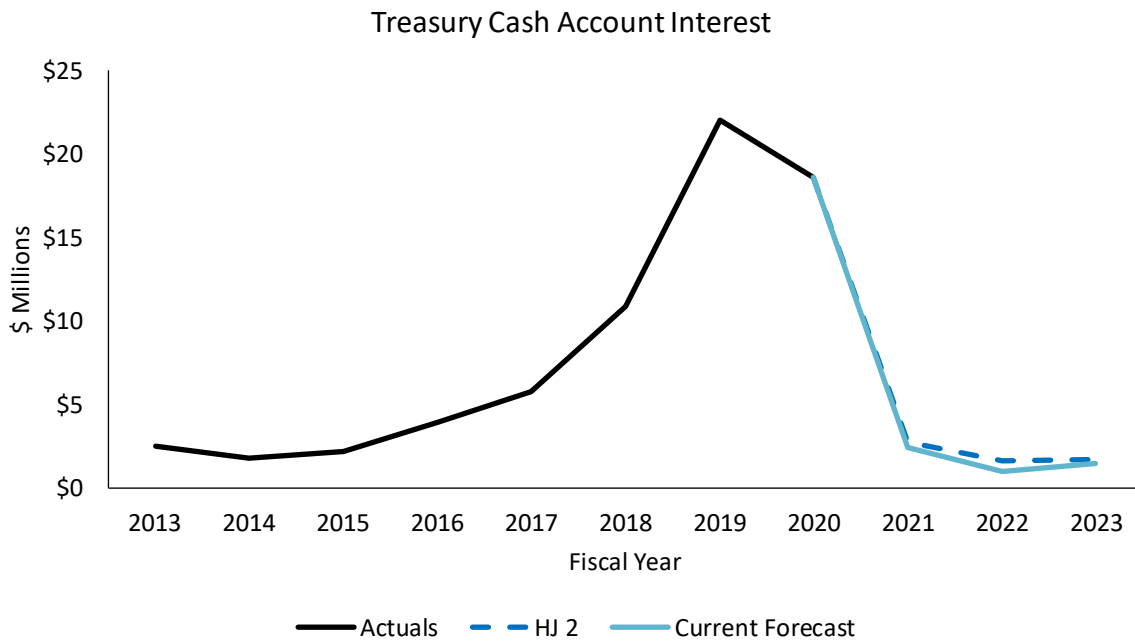
50% of all sales, bonuses, royalties, and rentals received from mineral extraction on federal lands in Montana must be paid to the state, however that rate is currently set at 48%. To forecast revenue from these royalties, federal fiscal year data on receipts by mineral type are combined with price data, growth rates and distributions from other LFD analysis of natural resources, primarily coal and oil & natural gas. Rents, bonuses and other revenues are simply trended as they are more volatile than royalties.

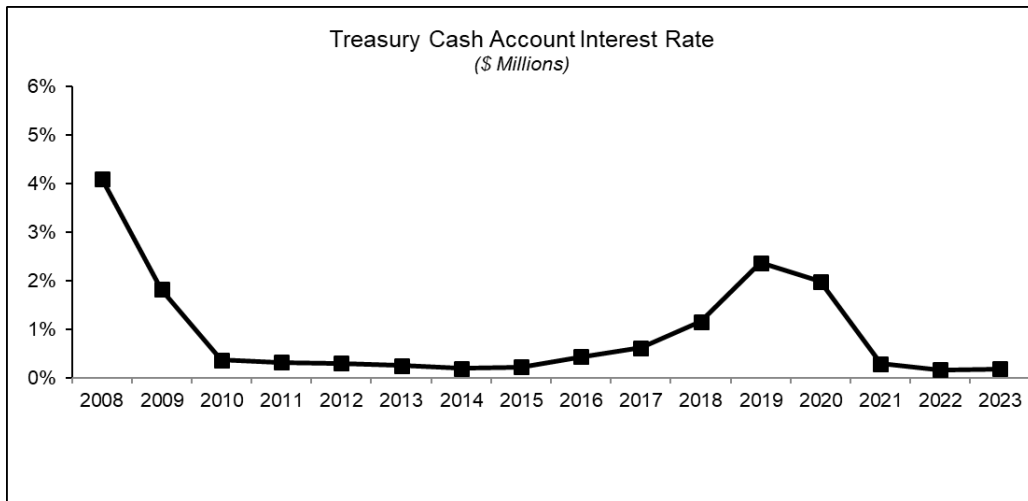




Treasury Cash Account Interest

TCA Interest revenue is forecast based off of average TCA balance and short-term interest rates. The average TCA balance is modeled off the forecast general fund ending balance. Short term interest rates are based on a composite rate of IHS Markit forecasts for 3-month commercial paper, 3-month Treasury bill and 6-month Treasury bill rates. The average balance is multiplied by the composite interest rate to estimate total fiscal year revenue.





Other Natural Resource Revenue

Natural resource revenue from other sources (Electrical Energy, Wholesale Energy, Metal Mines) are forecast relatively similarly. Historical energy, price, and production data for these sources are provided from DOR, and additional price forecasts are provided from USGS and World Bank Commodity Market Outlook. Production is generally trended forward or forecast with a moving average, then if applicable, multiplied by price to obtain taxable value. The taxable value or taxable kilowatt hours (for energy taxes) are then multiplied by the applicable tax rate to produce total revenue estimates.

Other Business Tax Revenue

Revenue from business and personal taxes are generally forecast using historical revenue collections from SABHRS, and relevant economic forecasts from IHS. Proxy's for taxable value are generated using a trend equation and multiplied by relevant tax rates to obtain revenue forecasts.

Other Consumption Tax Revenue

Revenues from consumption taxes are generally forecast using combinations of the IHS PCE for Food, IHS population estimates for Montana, proxy per capita consumption and historical revenue collections. Sources classified as consumption taxes include beer, cigarette, fuel, liquor, lottery, tobacco, and wine tax.

All Other Revenue

There are numerous other small sources that do not fit into any of the above categories that are deposited into the general fund. In the state accounting system these represent at least 150 different accounts on an annual basis. The largest accounts are estimated individually while the remaining accounts are estimated in aggregate using a moving average.

Comparison to the Executive

March 2021 General Fund Revenue Estimate Overview & Comparison									
(\$ Millions)									
Revenue Source	Actual FY 2020	LFD March 2021			OBPP March 2021			3-Year \$ Diff.	3-Year % Diff.
		FY 2021	FY 2022	FY 2023	FY 2021	FY 2022	FY 2023		
Largest Seven Sources									
Individual Income Tax	\$1,435.240	\$1,516.129	\$1,558.980	1,643.578	\$1,494.765	\$1,539.515	\$1,602.681	\$81.726	1.8%
Property Tax	308.610	313.430	332.412	338.781	314.317	334.027	338.924	(2.646)	-0.3%
Corporation Tax	187.358	149.420	159.088	170.783	156.448	163.348	166.297	(6.802)	-1.4%
Vehicle Taxes & Fees	108.482	109.320	110.949	112.228	110.200	113.700	116.600	(8.003)	-2.4%
Oil & Natural Gas Taxes	38.380	40.367	44.353	40.826	39.150	44.439	44.595	(2.639)	-2.1%
Insurance Tax	82.489	88.450	92.000	95.723	86.706	89.222	91.810	8.435	3.2%
Video Gaming Tax	57.447	60.320	63.336	66.503	60.753	67.310	70.998	(8.903)	-4.5%
Other Business Taxes									
Drivers License Fee	4.410	4.041	4.073	4.097	4.340	4.268	4.376	(0.774)	-6.0%
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Public Contractor's Tax	6.729	4.985	5.083	5.181	4.904	4.989	5.518	(0.161)	-1.0%
Railroad Car Tax	4.294	4.305	4.391	5.509	4.791	4.493	4.431	0.490	3.6%
Rental Car Sales Tax	4.224	3.571	4.681	5.212	3.283	4.002	4.685	1.494	12.5%
Retail Telecom Excise Tax	11.788	11.004	10.168	9.287	10.831	9.948	9.137	0.544	1.8%
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Liquor Excise Tax	23.786	24.960	26.436	27.901	25.568	26.512	27.561	(0.344)	-0.4%
Liquor Profits	18.080	15.800	15.800	16.800	14.250	14.750	15.250	4.150	9.4%
Lottery Profits	8.073	13.224	13.122	13.259	9.864	12.481	13.375	3.886	10.9%
Tobacco Tax	5.754	5.646	5.534	5.472	5.628	5.582	5.467	(0.025)	-0.2%
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Public Institution Reimb.	12.745	12.555	12.382	13.410	13.323	12.186	13.356	(0.520)	-1.3%
Tobacco Settlement ²	2.654	12.517	3.028	3.007	12.932	3.009	2.903	(0.293)	-1.6%
Total General Fund	\$2,533.321	\$2,577.199	\$2,655.591	\$2,773.824	\$2,550.261	\$2,639.677	\$2,727.900	\$88.776	1.1%
Guarantee Account	42.452	42.914	42.406	42.845	41.033	42.230	42.567	2.3	1.8%
Total General Fund & Guarantee	\$2,575.774	\$2,620.114	\$2,697.996	\$2,816.669	\$2,591.294	\$2,681.907	\$2,770.467	\$91.111	1.1%

¹LFD estimate includes ~ \$2.2 million from I-190 (Marijuana Tax)

²LFD estimate includes ~ \$10 million of OTO revenue from recent tobacco settlement