

# GENERAL FUND UPDATED REVENUE TRENDS

A Report Prepared for the  
Revenue & Transportation Interim Committee

By

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## INTRODUCTION

This report highlights the year-to-date revenue collections through the end of November FY 2015, and provides an overview by revenue source of the impact of new data and revised modeling on revenue trends.

## SUMMARY OF UPDATED REVENUE TRENDS: CONSISTENT WITH HJ 2

The updated revenue trend for the 2017 biennium is in aggregate consistent with HJ 2, with a decrease of \$13.2 million or 0.3% over the biennium. Although the updated revenue trends will not be incorporated into the official revenue estimate, the changes could have a small negative impact on the ending fund balance. The table below shows the difference between the updated trend and HJ 2, and the differences are summed over the biennium to produce a potential decrease in the ending fund balance of \$13.2 million.

Potential Fund Balance Impact of Updated Trend (\$ Millions)			
	FY 2016	FY 2017	Total Impact
Updated Trend	\$2,249.6	\$2,355.5	
Less HJ 2	<u>2,262.9</u>	<u>2,355.4</u>	
Potential Change to Fund Balance	(13.3)	0.1	
Potential Change Total			(\$13.2)

## FY 2016 YEAR-TO-DATE REVENUE

FY 2016 general fund revenues through the end of November are \$10.2 million or 1.4% ahead of FY 2015 revenues through the same period; this increase is below the anticipated growth of 2.9%. Nearly all of the increase can be attributed to the top seven sources. Individual income tax continues to increase over FY 2015; strong growth may continue through January 2016, as CY 2015 quarterly estimated payments are likely to be based on elevated CY 2014 capital gains income. Video gaming tax appears low due to an accounting anomaly in FY 2015; the difference should be resolved by next month.

**General Fund Revenue Monitoring Report**  
(\$ Millions)

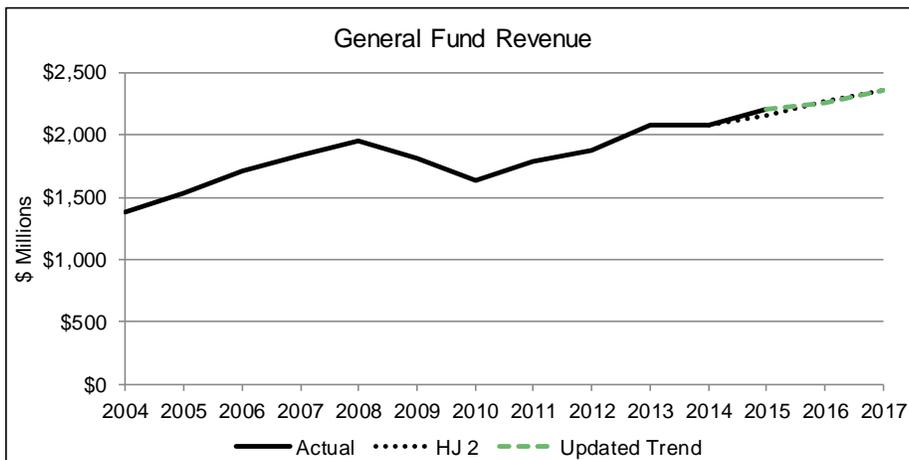
Revenue Source	Actual FY 2015	HJ 2 Est. FY 2016	HJ 2 Est. % Change	11/30/2014 FY 2015	11/30/2015 FY 2016	YTD Difference	YTD % Change
<b>Largest Seven Sources</b>							
Individual Income Tax	\$1,175.745	\$1,229.616	4.6%	\$521.980	\$553.784	\$31.803	6.1%
Property Tax	247.881	253.799	2.4%	11.641	8.320	(3.321)	-28.5%
Corporation Tax	172.729	179.898	4.2%	54.731	46.536	(8.196)	-15.0%
Vehicle Taxes & Fees	106.382	106.199	-0.2%	35.766	38.838	3.073	8.6%
Oil & Natural Gas Taxes	73.184	59.250	-19.0%	-	-	-	
Insurance Tax	66.582	72.279	8.6%	13.436	14.524	1.088	8.1%
Video Gaming Tax	59.799	62.007	3.7%	29.511	15.252	(14.259)	-48.3%
<b>Other Business Taxes</b>							
Drivers License Fee	4.811	4.081	-15.2%	1.582	1.894	0.312	19.7%
Investment Licenses	6.773	7.412	9.4%	0.483	0.623	0.140	29.0%
Lodging Facilities Sales Tax	19.697	21.872	11.0%	7.909	9.742	1.833	23.2%
Public Contractor's Tax	3.257	3.560	9.3%	2.827	2.102	(0.725)	-25.6%
Railroad Car Tax	3.706	3.741	0.9%	1.460	2.375	0.915	62.7%
Rental Car Sales Tax	3.907	3.486	-10.8%	1.701	1.987	0.286	16.8%
Retail Telecom Excise Tax	18.257	18.999	4.1%	3.880	4.233	0.352	9.1%
<b>Other Natural Resource Taxes</b>							
Coal Severance Tax	16.063	14.434	-10.1%	4.492	4.366	(0.127)	-2.8%
Electrical Energy Tax	5.133	4.580	-10.8%	1.326	1.192	(0.134)	-10.1%
Metal Mines Tax	8.320	8.311	-0.1%	0.000	0.000	(0.000)	-51.0%
U.S. Mineral Leasing	26.960	24.069	-10.7%	7.374	7.830	0.455	6.2%
Wholesale Energy Trans Tax	3.795	3.595	-5.3%	0.983	0.913	(0.070)	-7.1%
<b>Other Interest Earnings</b>							
Coal Trust Interest Earnings	21.168	19.805	-6.4%	5.309	4.218	(1.090)	-20.5%
TCA Interest Earnings	2.164	8.527	294.0%	0.660	1.078	0.418	63.4%
<b>Other Consumption Taxes</b>							
Beer Tax	3.034	3.129	3.1%	1.145	1.117	(0.027)	-2.4%
Cigarette Tax	29.604	31.036	4.8%	11.943	12.706	0.763	6.4%
Liquor Excise Tax	19.257	19.521	1.4%	6.663	6.648	(0.015)	-0.2%
Liquor Profits	11.000	11.021	0.2%	-	-	-	
Lottery Profits	12.363	11.031	-10.8%	-	-	-	
Tobacco Tax	6.056	6.396	5.6%	2.238	2.219	(0.019)	-0.9%
Wine Tax	2.307	2.363	2.4%	0.814	0.825	0.011	1.4%
<b>Other Sources</b>							
All Other Revenue	40.822	40.060	-1.9%	14.455	13.743	(0.711)	-4.9%
Highway Patrol Fines	4.042	4.349	7.6%	1.281	1.344	0.064	5.0%
Nursing Facilities Fee	4.810	4.756	-1.1%	1.194	1.183	(0.012)	-1.0%
Public Institution Reimbursement:	16.819	16.606	-1.3%	3.132	0.502	(2.631)	-84.0%
Tobacco Settlement	<u>3.225</u>	<u>3.145</u>	<u>-2.5%</u>	<u>-</u>	<u>0.023</u>	<u>0.023</u>	
Largest Seven Subtotal	1,902.301	1,963.049	3.2%	667.066	677.254	10.188	1.5%
Remaining Sources Subtotal	297.352	299.883	0.9%	82.851	82.863	0.012	0.0%
<b>Grand Total</b>	<b>\$2,199.653</b>	<b>\$2,262.932</b>	<b>2.9%</b>	<b>\$749.916</b>	<b>\$760.117</b>	<b>\$10.200</b>	<b>1.4%</b>

## UPDATED REVENUE TRENDS

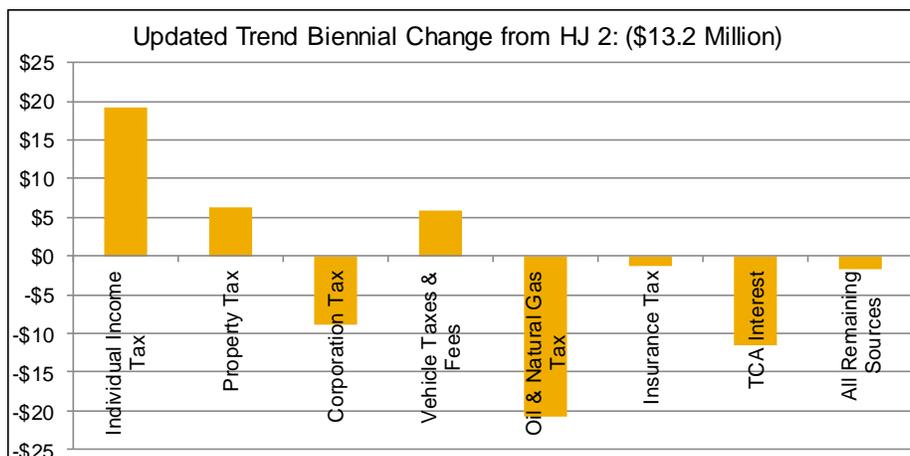
The updated revenue trends for each source reflect a combination of changes in base year data, revised assumptions, modeling adjustments, and new IHS forecasts. While it is instructive to see the impact of the new data on expected revenue trends, it is important to note that no changes have been made to the official estimate contained in HJ 2. The updated revenue trends in this report are informational only. The new data available since the adoption of HJ 2 includes the following sources:

- FY 2015 revenue collections
- New individual and corporate tax return data, and property valuation data
- New oil and natural gas production data
- Updated metal price forecasts
- Updated IHS forecasts

All revenue trend graphs show actual collections from FY 2004 to FY 2015, the HJ 2 estimate for FY 2015 through FY 2017, and the updated trend for FY 2016 and FY 2017. The aggregate of the individual updated trends compared to the total HJ 2 general fund estimate is shown in the chart below. FY 2015 collections were higher than anticipated, but the updated trend for FY 2016 and FY 2017 is consistent with HJ 2 estimate.

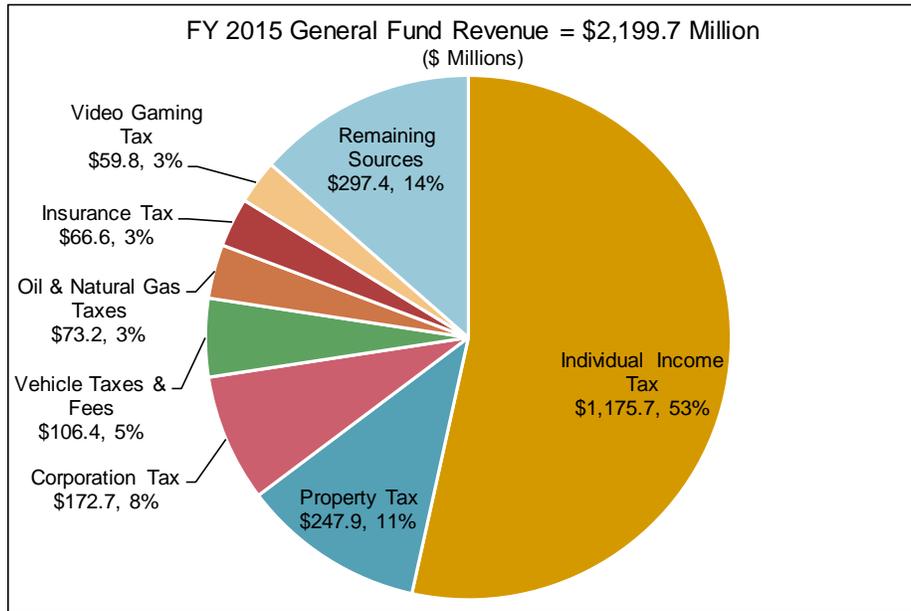


Total biennium impacts of the updated trends by source are shown below:



## Large Revenue Sources

In FY 2015, the largest seven revenue sources accounted for 86% of total general fund revenue. This section will highlight the updated trends with each source and further revenue detail if applicable.

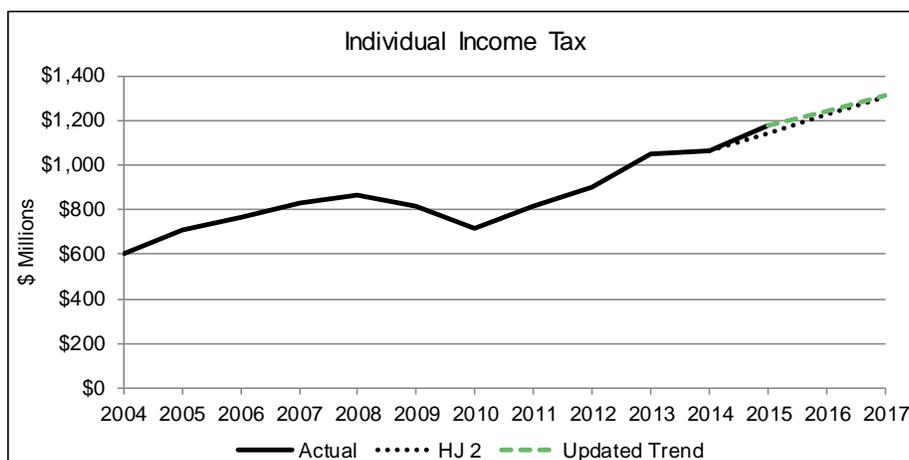


## Individual Income Tax

Individual income tax collections through the end of November are \$31.8 million or 6.1% above the year-to-date collections in FY 2015. The strong growth in estimated payments likely reflects the elevated CY 2014 capital gains income, and may continue through January.

Individual Income Tax (\$ Millions)				
	YTD 2016	YTD 2015	\$ Difference	% Difference
Withholding	\$336.4	\$325.1	\$11.3	3.5%
Estimated Payments	107.6	90.9	16.7	18.4%
Current Year Payments	18.0	17.2	0.8	4.5%
Audit, P&I, Amended	15.4	11.4	3.9	34.4%
Refunds	(70.3)	(62.7)	(7.6)	12.1%
Refund Accrual Reversal	140.0	132.6	7.4	5.6%
Partnership Income Tax	3.8	2.5	1.3	53.3%
Mineral Royalties	2.8	4.9	(2.1)	-42.2%
<b>Total</b>	<b>\$553.8</b>	<b>\$522.0</b>	<b>\$31.8</b>	<b>6.1%</b>

Individual income tax collections were \$33.3 million above the FY 2015 estimate contained in HJ 2. The updated trend includes the FY 2015 actual collections, as well as CY 2014 tax data and data from the most recent IHS forecast. The remainder of this section summarizes the known estimate errors and corresponding explanations, as well as adjustments included in the model. The updated trend based on the new data and revised modeling is slightly above the estimate contained in HJ 2.



### Error Analysis

The difference of \$33.3 million between actual collections and the HJ 2 is primarily explained by three sources of error:

- Estimated CY 2014 growth rates for income and deduction items, \$12 million
- CY 2014 tax simulation model, \$12 million
- Fiscal year conversion, \$20 million

Note that the error amounts cannot be directly summed to produce the overall error of \$33.3 million as there are mitigating effects within the conversion process. Another source of error can arise from the IHS forecast error, but as explained in a later subsection, none of the FY 2015 error was as a result of IHS CY 2014 forecasting error. The CY 2014 error impact in FY 2015 is explained in greater detail in subsections below.

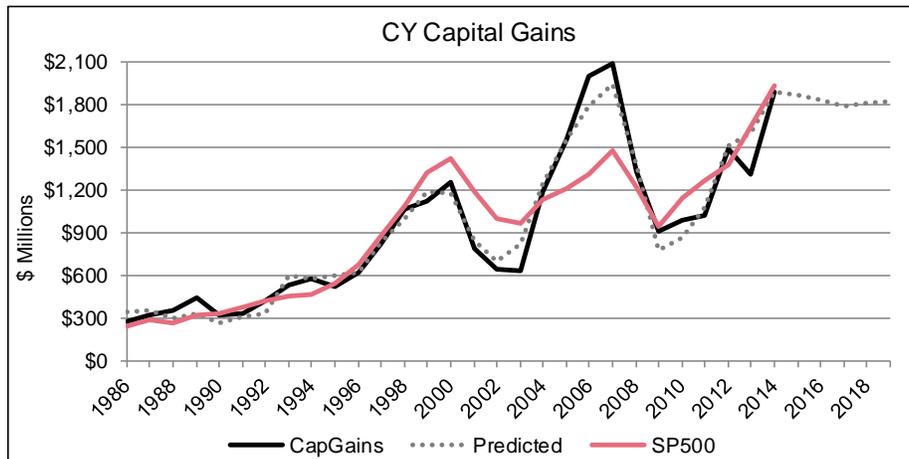
### Growth Rates

Growth rates for each type of income, addition, reduction and itemized deduction are developed using the historical return data and various economic indicators. Estimate error can result from unusual historical data, use of incorrect economic indicators, and the inaccurate forecast growth of economic indicators. Note that the release date of the IHS forecast is important, and impacts accuracy of the forecast. The adjacent table compares the income levels forecast in HJ 2 with actual CY 2014 data from tax returns.

CY 2014 Income Levels (\$ Millions)				
	Actual	HJ 2	\$ Diff	% Diff
Wage Income	\$15,910.9	\$16,138.3	(\$227.4)	-1.4%
Interest Income	264.7	293.3	(28.6)	-9.8%
Dividend Income	620.6	570.7	49.9	8.7%
Net Business	832.5	816.9	15.6	1.9%
Cap. Gains	1,894.6	1,565.7	328.9	21.0%
Sup. Gains	115.7	52.7	63.0	119.7%
Rents & Royalties	2,571.2	2,628.9	(57.7)	-2.2%
IRA Income	678.7	703.0	(24.3)	-3.5%
Taxable Pensions	2,050.0	2,066.0	(16.1)	-0.8%
Taxable Soc. Sec.	882.2	873.0	9.2	1.1%
Farm Income	(115.2)	(145.6)	30.4	-20.9%
Other Income	(308.6)	(184.0)	(124.6)	67.7%
<b>Total</b>	<b>\$25,397.3</b>	<b>\$25,378.9</b>	<b>\$18.4</b>	<b>0.1%</b>

The overestimate of wage income and other income was largely offset by the underestimate of capital gains income, with the net difference from all other sources amounting to \$41 million. Using all actual CY 2014 growth rates in the HJ 2 income tax model suggests that the differences in growth rates produced a \$12 million underestimate of FY 2015 collections.

Capital gains income is responsible for much of the volatility in total individual income. The figure on the next page shows actual capital gains income with the black line and the model estimate in the dashed grey line. For comparison, the S&P 500 Index is shown in red.



Modeled growth rates based on the dashed gray line are applied to the last actual value on the black line to produce forecast income levels. If the base year is unusually high or low, the resulting forecast of revenue may be similarly too high or too low.

### *IHS Forecast*

IHS data is used to model each of the income types, and several of the additions, reductions and itemized deductions. Changes in the data—whether historical revisions or updated estimates—automatically result in changes to the forecast income. In addition, the federal and state income tax brackets are forecast based on changes in CPI. Even small changes in the CPI can impact the overall revenue estimate. However, since HJ 2 was based on the March 2015 release of the IHS forecast, the actual CY 2014 values for most variables were already known. As a result, there was almost no error in FY 2015 collections due to the IHS forecast for CY 2014.

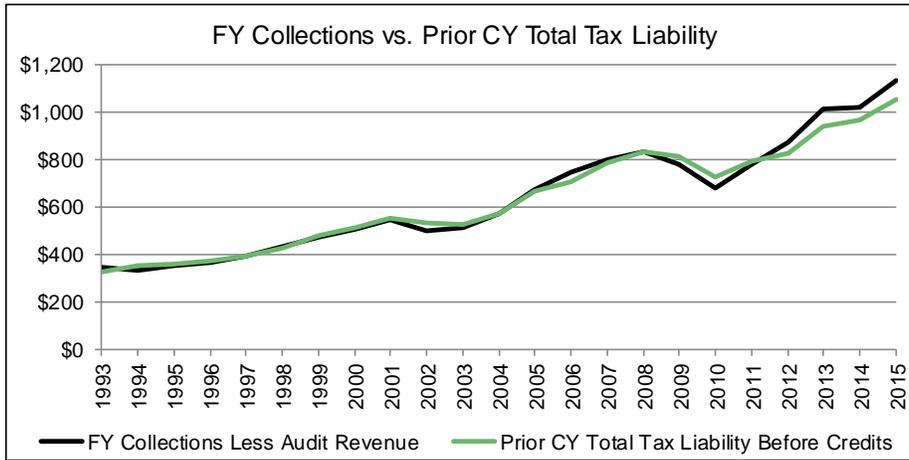
### *Tax Simulation Model*

The tax simulation model forecasts calendar year full-year resident tax liability by applying the growth rates discussed above to each resident taxpayer’s income and deduction items. The model makes various determinations on income type, income level and filing status. These assumptions are used to assign tax rates and applicable deductions, and ultimately the amount of tax liability. The model aggregates all the individual taxpayer information for each income line to produce an estimate of full-year resident calendar year tax liability.

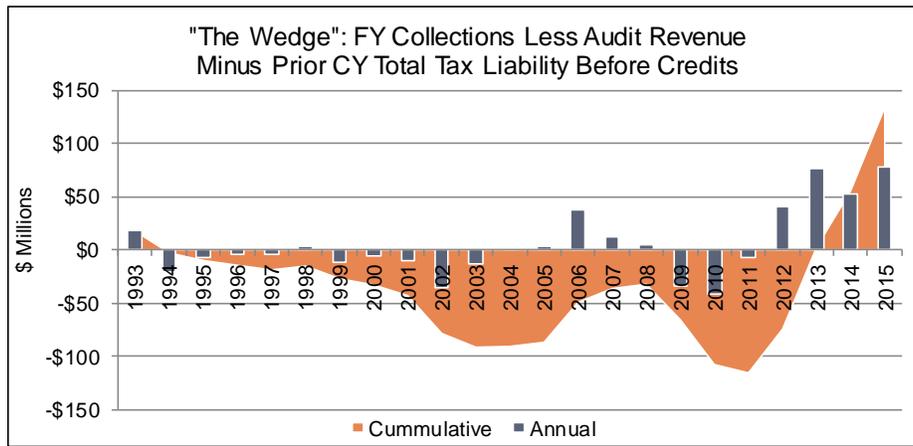
Combining the most recent IHS forecast with the known CY 2014 growth rates in the HJ 2 income tax model produces results that suggest the simulation model is responsible for an underestimate of about \$12 million.

### *Fiscal Year Conversion*

The fiscal year conversion takes the calendar year full-year resident liability output of the tax simulation model and adjusts for non-full-year resident liability to produce a total calendar year liability. The growth rate of total calendar year liability is applied to the last fiscal year total collections, excluding audit and penalty and interest collections to produce estimated fiscal year collections before audits and other adjustments. Finally, estimated audit, penalty, and interest collections, as well as any other adjustments are added to produce the final estimate. The chart below shows fiscal year collections and prior year total tax liability before credits.



The following chart shows the difference between the black and green lines in the figure above, with the bars representing the annual difference and the shaded green area representing the cumulative difference. Note the increasing positive annual and cumulative differences in recent years.



Calculated growth rates are applied to the last known fiscal year’s collections, so any unusual collection activity may be propagated throughout the forecast years. Even if all growth rates are accurate, if they were applied to an unusually high base year or an unusually low base year, the likely result would be over- or underestimating future fiscal year collections. Base year adjustments can be made, but there is typically only scant evidence for making these types of adjustments; furthermore, if the changes are wrong, the method extends the error for all three years of the forecast period.

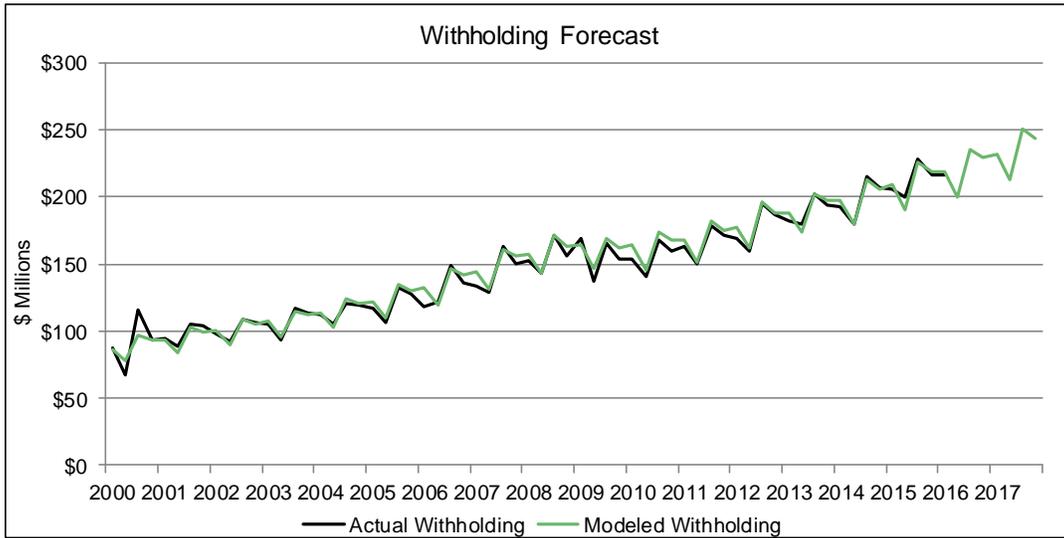
Applying the actual CY 2014 growth to the FY 2014 base results in a FY 2015 estimate that is below actual FY 2015 collections by about \$20 million. This implies that the FY 2014 base may have been unusually low (as suggested by a recent Rockefeller report: [State Revenue Special Report: Windfall “April Surprises”: Strong Growth in Overall Income Tax Revenues Despite Weak Withholding](#)) or that FY 2015 collections were inflated.

Cash Flow Analysis—A Preliminary Approach

The cash flow analysis is an entirely new approach to estimating individual income tax. The research is in formative stages and more work needs to be done to understand the method’s accuracy and risk. There is no intention to replace the historical tax return-based model that has been in place for many years. However, the cash flow analysis may offer some useful perspective on the results of the tax return-based model and may catch turning points in taxpayer behavior sooner than the tax return-based model, whose data is lagged by a year or more.

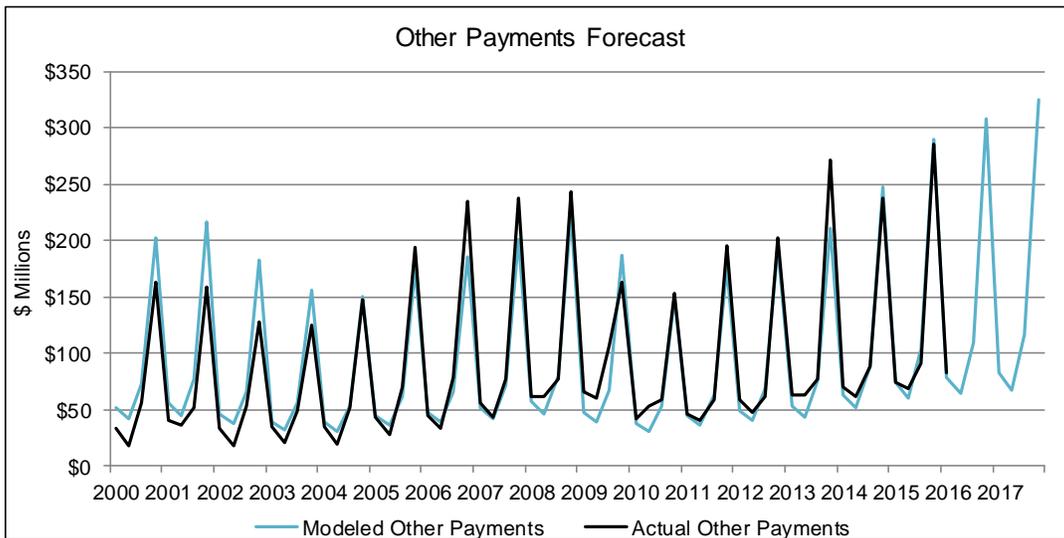
### Withholding Forecast

The withholding forecast uses the IHS outlook for Montana wage disbursements as the primary driver of growth. In addition, the model assumes that the historical tendency of taxpayers to increase their withholding relative to wages will continue. The model uses year-to-date withholding as an indicator of the current year's collections, weighted by the average year-to-date cumulative share that the collections represent. The remainder of the current year is forecast using the trended growth rate applied to the most recent complete fiscal year. Future years are forecast based on the trended growth rate.



### Other Payments Forecast

The other payment forecast—which includes quarterly estimated payments, current year payments, and mineral and partnership withholding—uses the IHS outlook for the S&P 500 stock market index as the primary driver of growth. The model assumes the average historical periodicity of payments for the outlook period. The model uses year-to-date other payments as an indicator of the current year's collections, weighted by the average year-to-date cumulative share that the collections represent. The remainder of the current year is forecast using the trended growth rate applied to the most recent complete fiscal year. Future years are forecast based on the trended growth rate.



### Remaining Collection Types Forecast

The cash flow forecast for the remaining payment types—refunds; audit, penalties and interest, and amended revenues; and accruals—are based on historical collections relative to withholding and other payments. Refunds and accruals are estimated as a percentage for forecast withholding, while the sum of audit, penalty and interest, and amended collections are estimated as a percentage of the sum of withholding and other payments. At this time, the forecast for other collection types does not include year-to-date quarterly data.

### Fiscal Year Total

Summing the estimates for withholding, other payments, and remaining collection types results in a fiscal year forecast for total individual income tax revenue. The cash flow estimates shown in the table below utilize the most recent quarterly data from FY 2016. For the two estimated years, the cash flow estimate is \$3 million below the updated trend.

FY	Model Results Comparison		
	HJ 2	Updated Trend	Cash Flow
2015	\$1,142	\$1,176	\$1,176
2016	1,230	1,243	1,240
2017	1,307	1,313	1,313

The potential revenue risks of the updated trend forecast are concentrated in two areas:

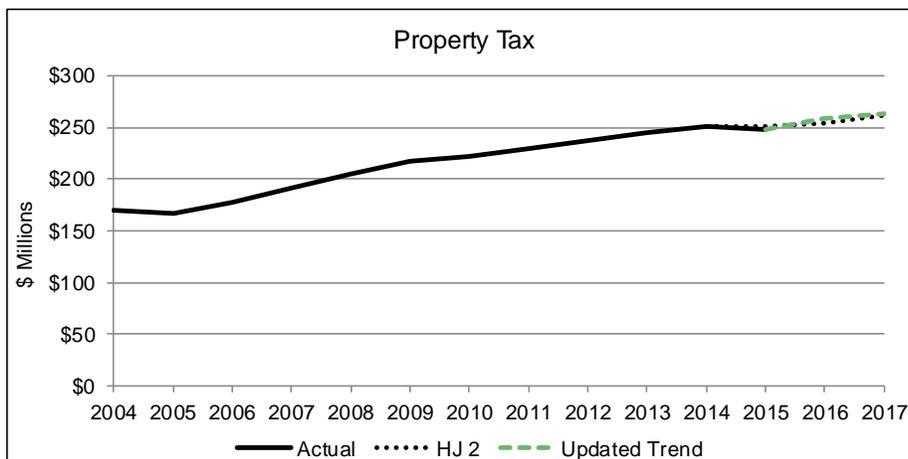
- Applying modeled growth rates to the CY 2014 income levels assumes that the CY 2014 income levels are sustainable; capital gains income growth may contain the most risk
- Applying modeled calendar year growth rates to the FY 2015 base year collections assumes that actual collections were neither too high nor too low, and that taxpayers will continue to overpay their taxes and apply the balance to the following year

### Cash Flow Analysis—Next Steps

The historical accuracy of this cash flow model will be assessed using actual collections and archived IHS forecasts. The revenue risk—both upside and downside—will be calculated to compare the cash flow model’s impact on volatility relative to the tax return-based model. Further conversations with other states using a cash flow model will be initiated to further refine the modeling process. Final collections in FY 2016 will provide a useful point—but only one point—of comparison for judging the accuracy of this approach.

### Property Tax

Property taxes are expected to come in very close to the estimate contained in HJ 2. Collections due to mills on property are expected to increase slightly, and there is an additional impact in FY 2016 due to increased federal payments from the reauthorization of the Secure Rural Schools Act. The reauthorization is set to expire after the FY 2016 payment, thus it does not affect FY 2017.

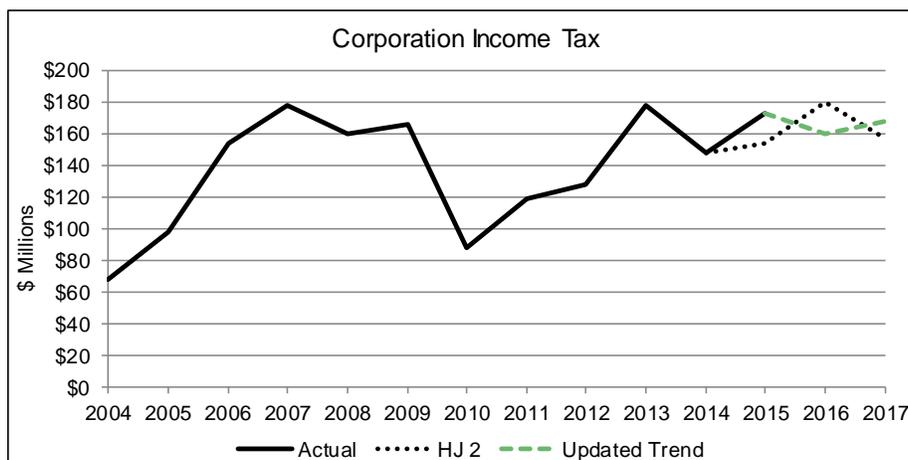


### Corporation Income Tax

Corporation income tax collections through the end of November are \$8.2 million or 15.0% below the year-to-date collections in FY 2015. The collections by account type are shown in the following table.

Corporation Income Tax (\$ Millions)				
Account	YTD 2016	YTD 2015	\$ Difference	% Difference
Corporation Tax	\$7.0	\$10.7	(\$3.7)	-34.4%
Estimated Payments	39.1	40.6	(1.5)	-3.7%
Refunds	(5.6)	(8.4)	2.8	-33.1%
Refund Accrual Reversal	4.3	8.1	(3.8)	-47.0%
Audit, P&I, Amended	1.8	3.8	(2.0)	-52.6%
<b>Total</b>	<b>\$46.5</b>	<b>\$54.7</b>	<b>(\$8.2)</b>	<b>-15.0%</b>

The updated trend includes the FY 2015 actual collections, as well as CY 2013 corporate tax data and the most recent IHS forecast. Much of the increase in collections from FY 2014 to FY 2015 was due a one-time audit. As a result, collections in FY 2016 are expected to decrease compared to FY 2015.



The primary reason for the difference between HJ 2 and the updated trend is due to an assumed taxpayer behavior shift of \$25 million from FY 2015 to FY 2016 contained in HJ 2 that is no longer expected to materialize. No significant modeling changes were made to produce the updated trend. The increase in FY 2017 compared to HJ 2 is due to an anticipated increase in the transportation sector, a result of new knowledge regarding the sector from the CY 2013 tax data. The CY 2013 tax data and corresponding HJ 2 sector-by-sector estimates are shown in the table below.

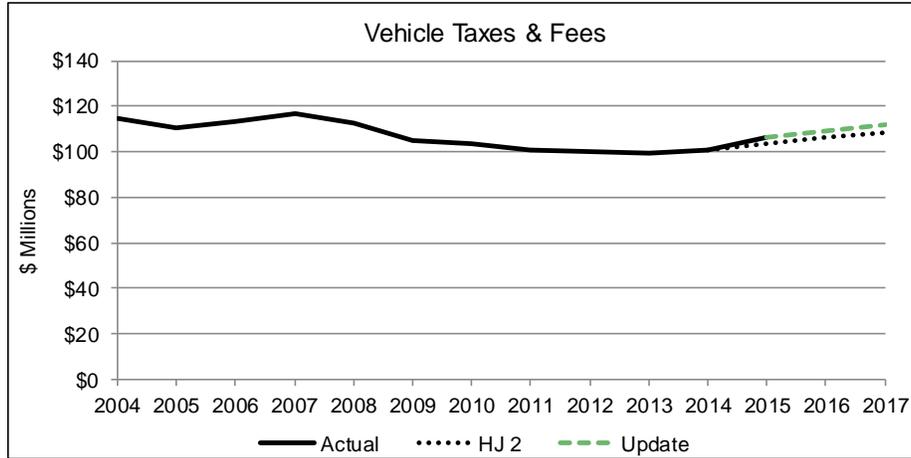
As new calendar year data becomes available, the sectors' individual models are updated. The sectors are modeled primarily using IHS economic variable forecasts. Model updates, coupled with changes or revisions in IHS forecasts also result in changes to the forecast tax liability. The effects of the model updates and changes to the IHS forecasts appear to be small for the updated trend. There was virtually no change in the update that resulted from updates made to the forecasts of refunds and audit payments.

CY 2013 Tax Liability (\$ Millions)				
Sector	Actual	HJ 2	\$ Diff	% Diff
Agriculture	\$5.8	\$4.1	\$1.7	41.7%
Mining	3.8	14.3	(10.5)	-73.1%
Utilities	1.0	1.2	(0.2)	-17.6%
Construction	2.2	3.4	(1.1)	-33.0%
Manufacturing	36.0	43.0	(7.0)	-16.2%
Wholesale & Retail Trade	25.6	21.8	3.8	17.4%
Transportation	20.2	11.5	8.7	75.5%
Information	9.5	3.2	6.4	199.7%
Professional	8.1	8.1	0.1	1.0%
Large Banks & Holding Companies	27.3	29.8	(2.4)	-8.2%
Social	3.2	1.2	2.1	174.2%
Unknown	0.0	0.0	0.0	429.8%
<b>Total</b>	<b>\$142.9</b>	<b>\$141.4</b>	<b>\$1.5</b>	<b>1.1%</b>

Note that the "unbiasing" adjustments that were included in HJ 2 are also included in the updated trend.

## Vehicle Taxes & Fees

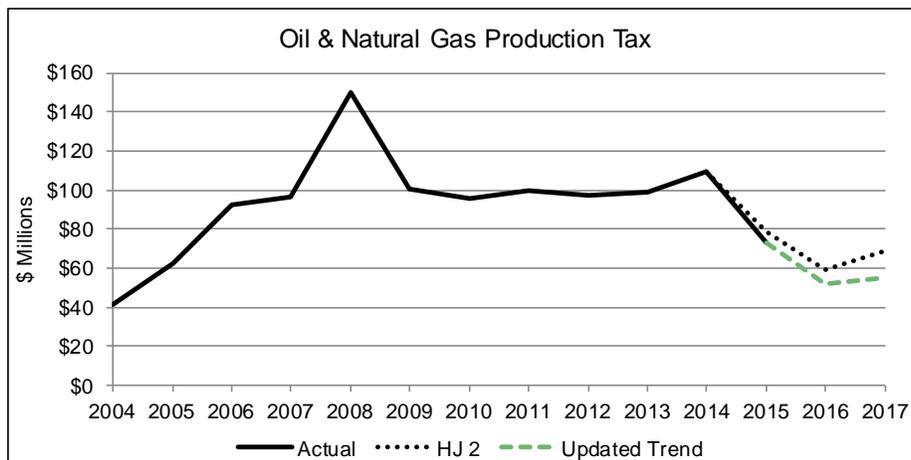
Combined FY 2015 revenue collections from vehicle taxes and fees were \$2.9 million or 2.8% larger than anticipated in HJ 2. Revenue from this source is forecast based on IHS estimates for new and used Montana car sales. Using these estimates, a growth rate in Montana's vehicle stock is developed to apply to forecast years.



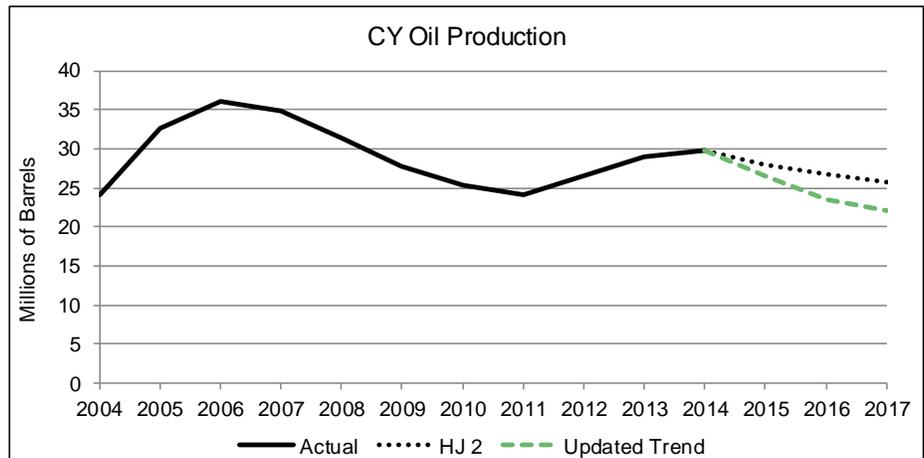
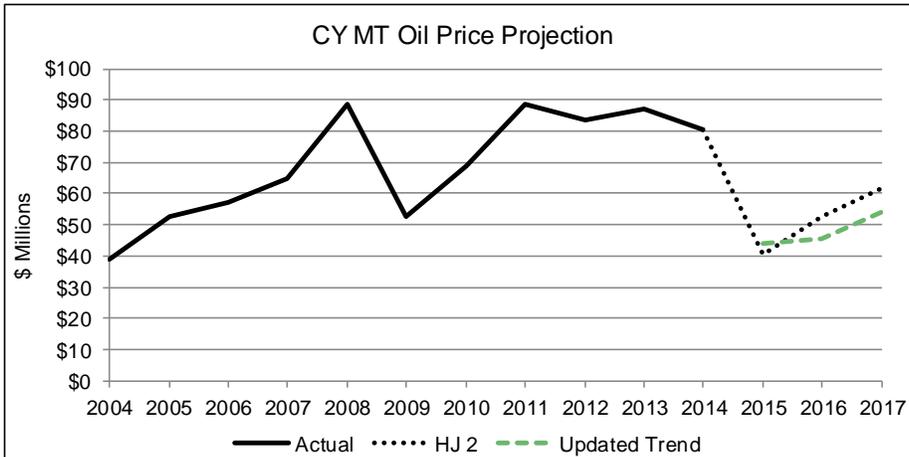
Through four months of FY 2016, this source has grown 2.2%. For this particular source, collections through four months are a good indicator of final collections. Therefore, the updated FY 2016 trend was made by applying the 2.2% year-to-date growth to the actual FY 2015 collections. The modeled growth rate from FY 2016 to FY 2017 is then applied to the new FY 2016 update to produce the FY 2017 update.

## Oil & Natural Gas Severance Tax

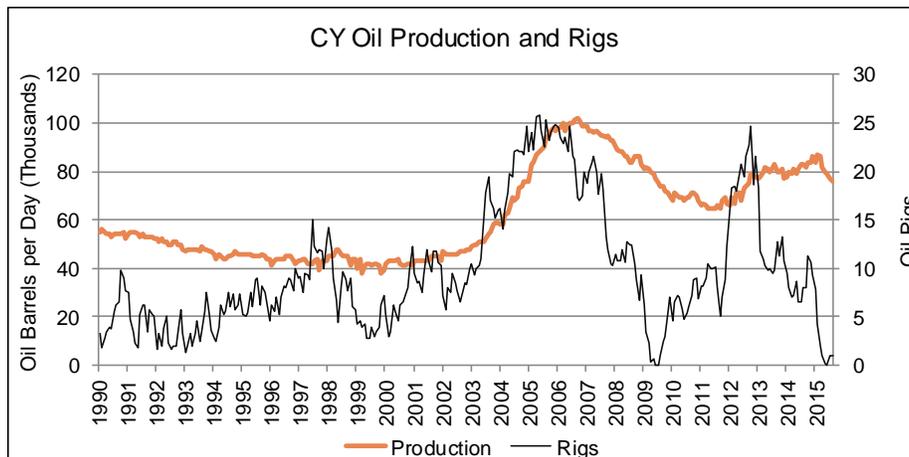
Oil and natural gas production tax collections were \$5.6 million below the HJ 2 estimate in FY 2015. Both price and production play into a decreased revenue outlook: low oil prices are expected to continue longer than anticipated in HJ 2, while the number of new wells being drilled has fallen significantly.



Since April 2015, there has only been one drilling rig or none operating in the state, down from ten drilling rigs in earlier in the year. The reduced number of rigs is having an effect on the expected future production compared to HJ 2, as shown in the second figure on the next page. The ability of oil companies to mitigate the decline of oil production in existing wells causes additional unknowns for production; the updated trend assumes it will fall similarly to HJ 2 projections.



The chart below shows production and rigs by calendar year. Note that the production is depicted in daily barrels as opposed to annual barrels as above, but the peak in CY 2006 – CY 2007 can be compared for reference. The effect of oil rigs can also be seen in relation to production.



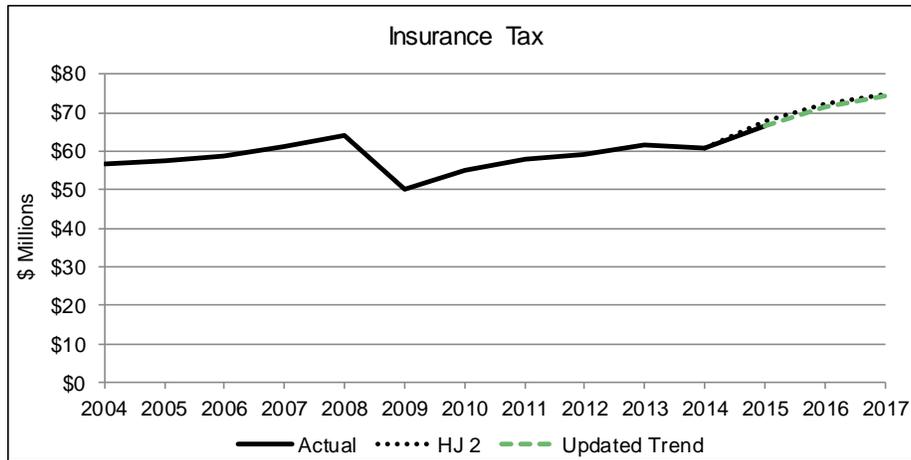
### Insurance Tax

FY 2015 revenue came in \$1.1 million below the level anticipated in HJ 2. This changes the baseline data for FY 2016-2017 estimates going forward. These updated trends reflect that change with slightly lower estimates than those adopted in HJ 2. Year-to-date collections show increased revenue of

about 4.0% over FY 2015. This number does not reflect new marketplace activity, as most growth is anticipated to materialize in March and April.

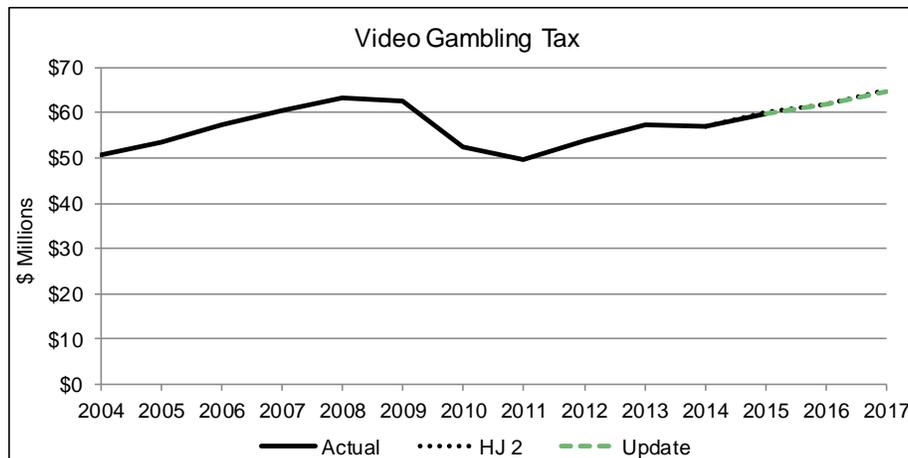
There are a number of changes that will impact future general fund insurance tax revenue:

- Changes in the providers participating on the Montana exchange: the providers on the health exchange have changed every year. Some of the companies are taxable and others are not, so as this continues to shift, there will be unpredictable fluctuations in revenue.
- Allowed premium increases: premium increases allowed for 2016 were much larger than those for 2015. Increases in future years will depend on expense trends as the market reaches equilibrium.
- Take up population: as the Affordable Care Act (ACA) continues to ramp up, the take up rate is still fluctuating. Federal penalties continue to increase, encouraging more people to purchase premiums; at the same time, some individuals who previously purchased coverage did not choose to renew. Future changes will influence tax collections.



### Video Gambling Tax

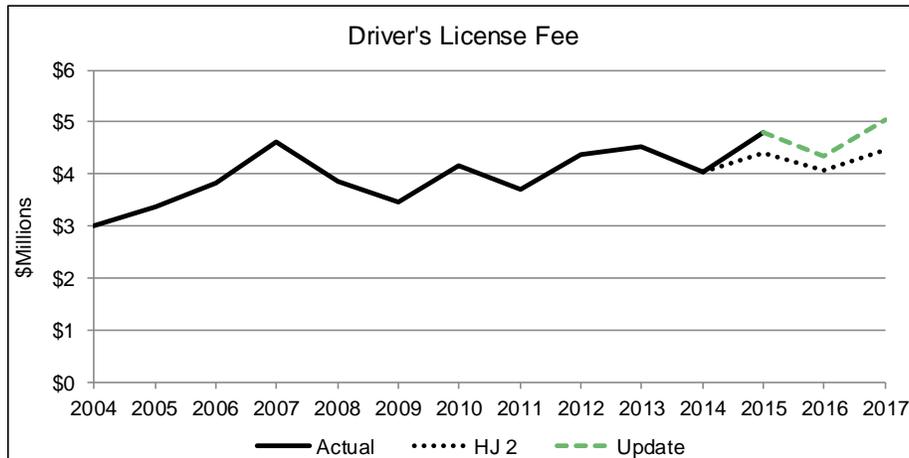
Video gambling revenue was \$0.2 million less than what was anticipated in FY 2015. This revenue source is modeled entirely on Montana personal income. The slight increase in the updated trend is due to an increase in the IHS estimate for Montana personal income.



## Other Business Taxes

### Driver's License Fee

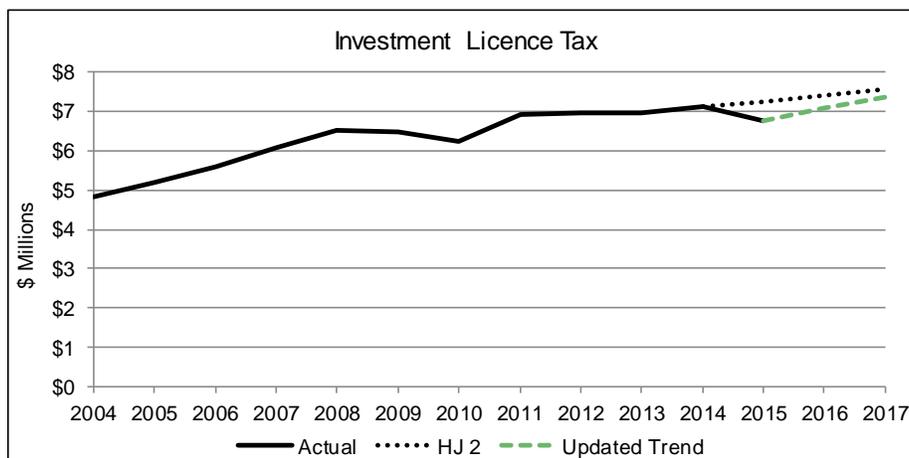
Total driver's license revenue exceeded the estimate contained in HJ 2 by \$0.4 million for FY 2015. Since fees are fixed, this increase was caused by a larger-than-expected number of Class D (standard) driver's license purchases.



The updated trend is based on forecast population data and historical ratios between licenses and actual populations. Actual ratios from the most recent fiscal years are applied accordingly to forecast years. The increase is driven by the larger-than-expected collections in FY 2015, which now serves as the new base year.

### Investment License Fee

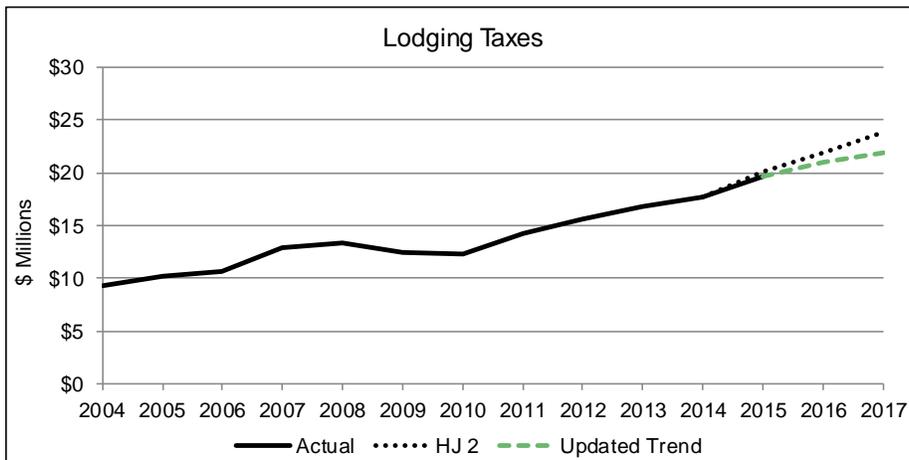
Investment license fee collections were \$0.5 million below the estimate contained in HJ 2 in FY 2015. Collections were forecast in HJ 2 based on the S&P 500 Index and CPI, as well as a time series forecast of new firms. Revised modeling is more straightforward and is based on the Montana PCE series for financial services.



### Lodging Facilities Sales Tax

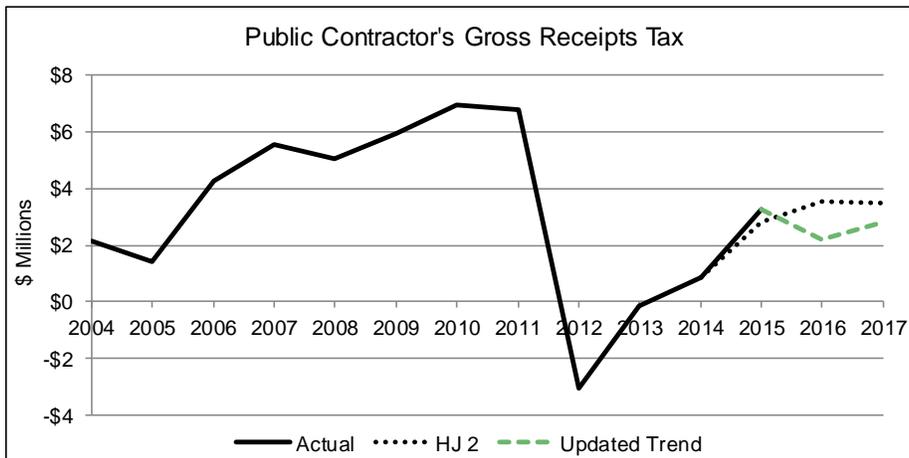
Lodging facilities sales tax collections were \$0.4 million below the estimate contained in HJ 2 in FY 2015, primarily due to an alternative assumption in HJ 2 that called for a \$0.3 million increase over the modeled baseline. This revenue source was forecast in HJ 2 based on U.S. consumer spending on

accommodations. The updated trend is based on the same model, but does not anticipate revenues over the baseline.



### Public Contractor's Tax

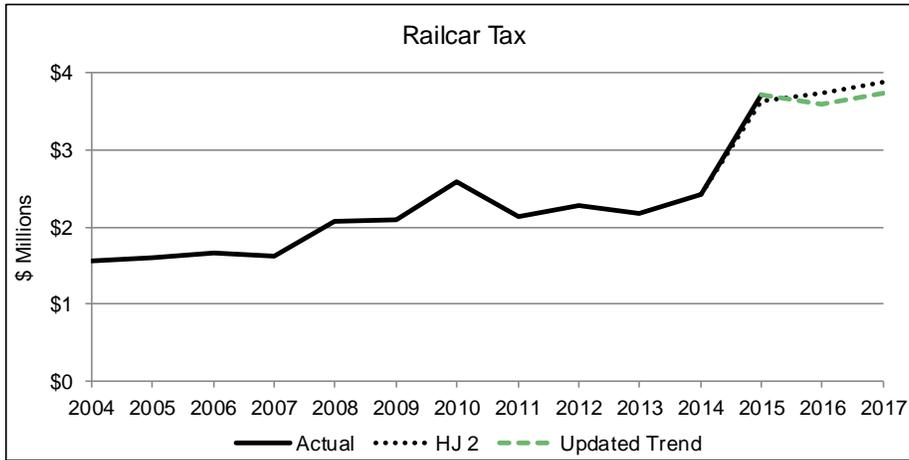
Public contractors' gross receipts tax collections were \$0.4 million above the estimate contained in HJ 2 in FY 2015. Higher levels of credits & refunds due to the increased number of public projects funded through the American Recovery & Reinvestment Act (ARRA) in 2009 and 2010, coupled with the subsequent decrease in publicly funded projects resulted in reduced net taxes for several years; this fluctuation seems to finally be complete. According to the Department of Revenue, filing for this tax source will be available on the online Taxpayer Access Point (eTAP) within a year, which should allow for timelier processing. In addition, the department is starting to implement penalty provisions for late filers, thereby encouraging timely compliance from taxpayers.



This source was estimated in HJ 2 based on time-series forecast of highway construction spending and a ten-year average for other construction; the updated trend continues the time-series forecast of highway construction, but focusses on more recent trends in other construction.

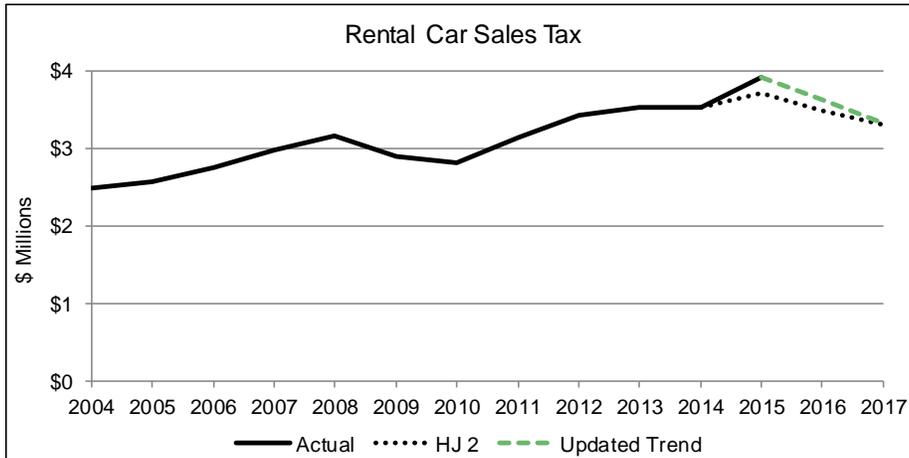
### Railroad Car Tax

Railroad car tax revenue had fairly consistent growth until a sharp increase occurred in FY 2015. This increase in FY 2015, to \$3.7 million, came in very close to the \$3.6 million estimate in HJ 2. The lower updated trend represents the change in tax rate due to reappraisal. The rail car tax rate is calculated using other tax rates, including class 4 residential and commercial property. The effect of reappraisal was to cut the railcar tax rate from 3.28% to 2.97%.



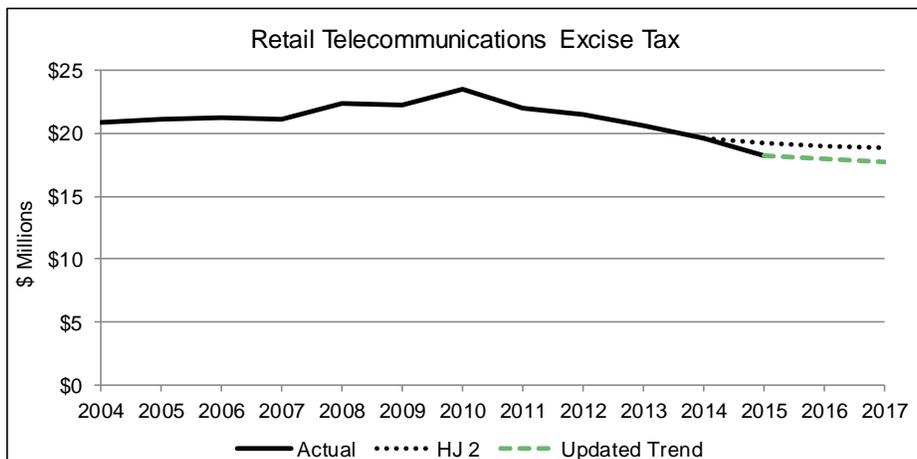
### Rental Car Sales Tax

Rental car sales tax collections were \$0.2 million above the estimate contained in HJ 2 in FY 2015. The forecast in HJ 2 was based on Montana retail sales; modeling has been revised by replacing Montana retail sales with the Montana PCE series for transportation services.



### Retail Telecommunications Excise Tax

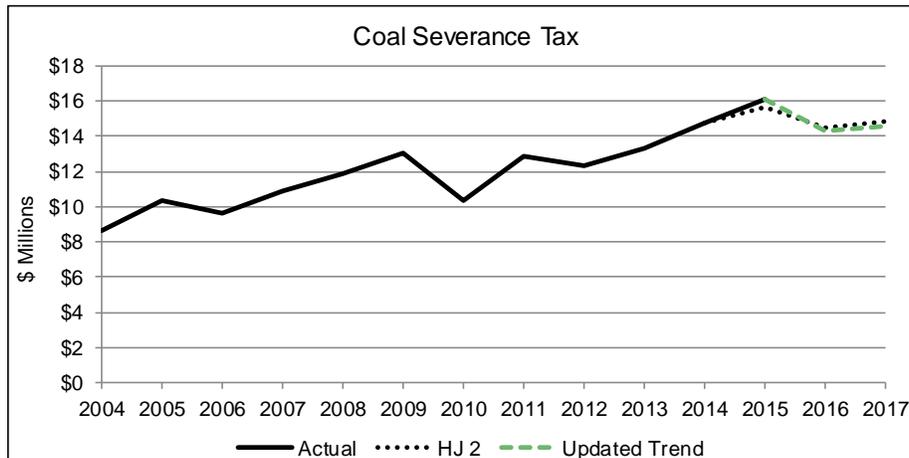
FY 2015 retail telecommunications excise tax came in \$1.0 million below the HJ 2 estimate. Collections were forecast in HJ 2 based on U.S. Census Bureau data for landline use decline and cell phone use growth, and the IHS forecast of Montana population growth. Modeling for the updated trend has not changed, but starts from the lower FY 2015 base.



## Other Natural Resource Taxes

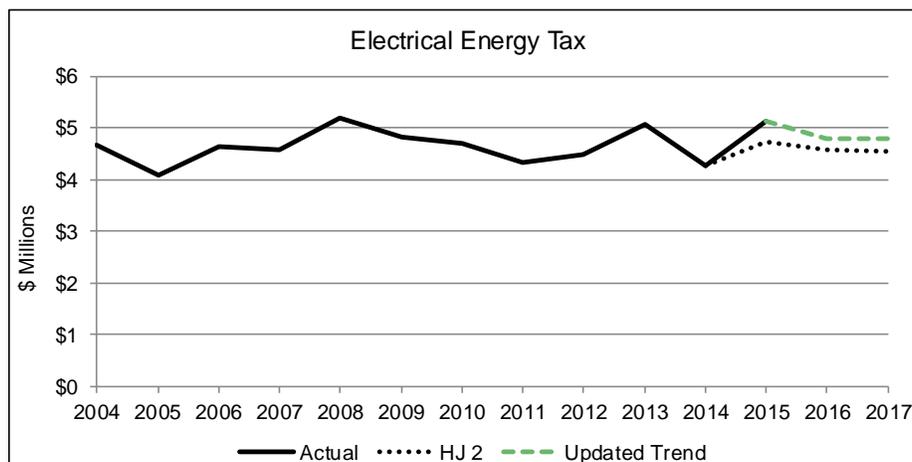
### Coal Severance Tax

The updated trend for coal severance tax is very close to the estimate compared to HJ 2. Total coal collections are expected to stay fairly flat through the remainder of the biennium. The drop in the collections for the general fund are due to [HB 228 \(2015 Session\)](#) which increased funding to the Coal Natural Resources Account from 2.9% to 5.8%, and thereby decreased the amount going to the general fund.



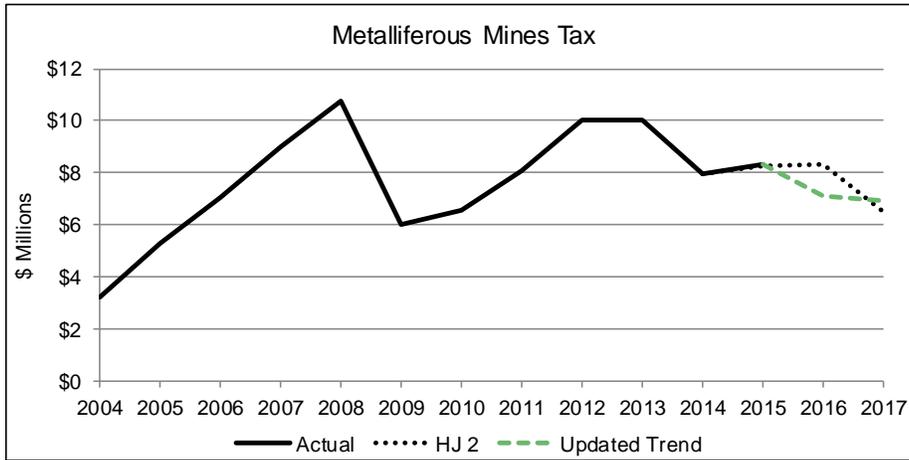
### Electrical Energy Tax

Electrical energy tax collections came in at \$5.1 million in FY 2015, \$0.4 million above the HJ 2 estimate. This source is modeled on past average collections, so the updated trend reflects the increase in FY 2015.



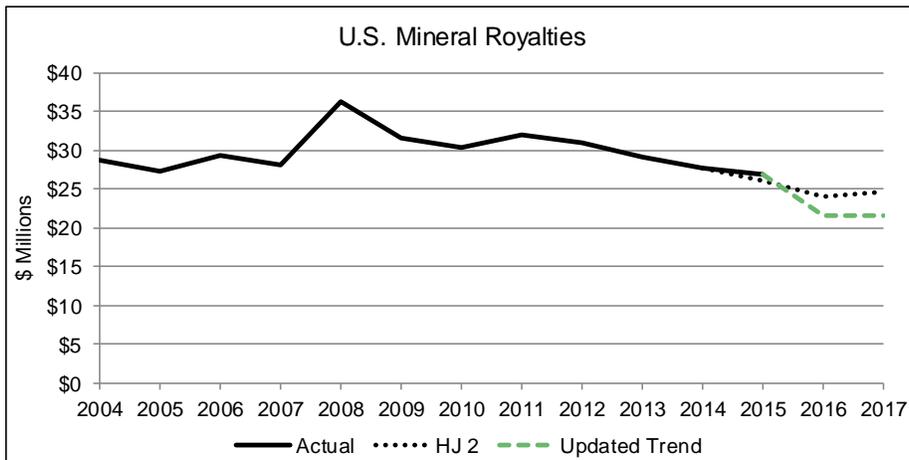
### Metalliferous Mines Tax

Metal mines tax collections were \$0.1 million above the estimate contained in HJ 2 in FY 2015. The increase was primarily due to a much higher-than-anticipated price for molybdenum in CY 2014, which more than offset the lower-than-anticipated silver production. The updated trend includes a lower price outlook for most metals, but contains the same production forecast as HJ 2.



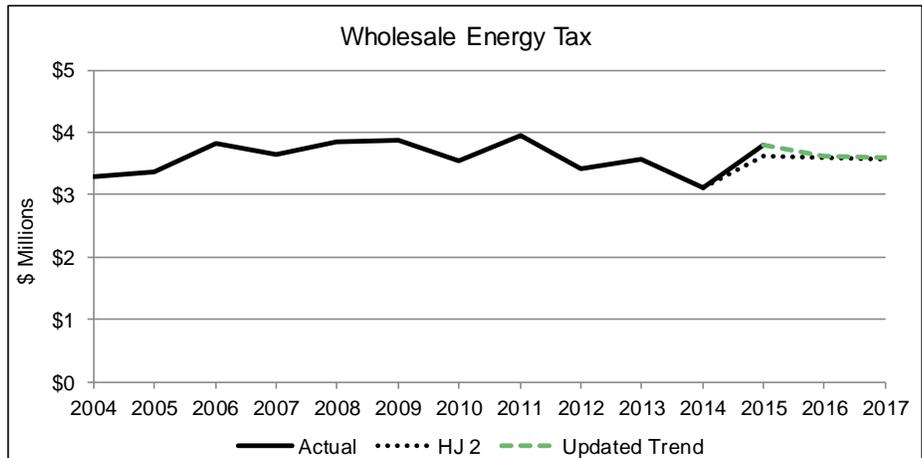
### U.S. Mineral Royalties

FY 2015 collections came in close to the HJ 2 estimate; however, the updated trend forecasts lower collections in FY 2016 and FY 2017. There are two reasons for the lower expected revenue trend: the reduced outlook for oil price and a decrease in expected bonus payments. Oil is the second largest source of U.S. mineral royalties after coal, and the IHS outlook for oil prices has declined since HJ 2. Bonus payments are a very volatile part of U.S. mineral royalties, and while averages have been used in past estimates, the updated trend estimates bonus payments at the lower end of historical collections based on the current forecast of low energy prices.



### Wholesale Energy Transaction Tax

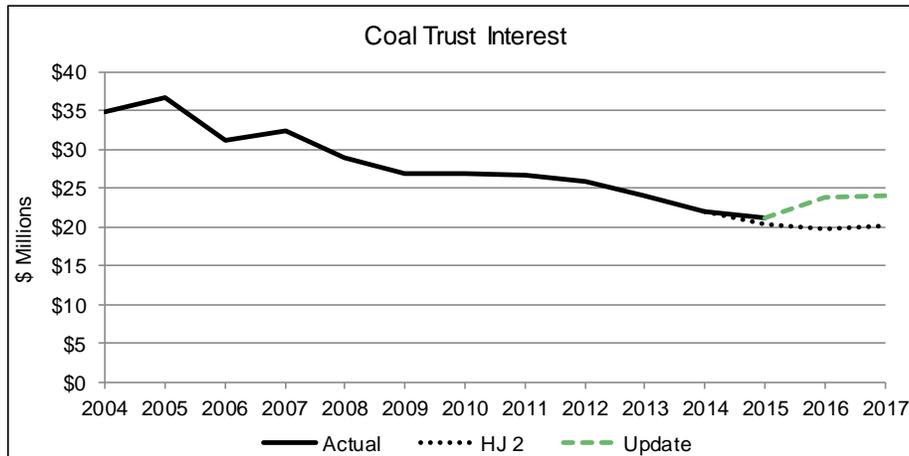
Wholesale energy transaction tax, imposed on transmission services providers, was \$0.2 million above the HJ 2 forecast in FY 2015. This source was estimated in HJ 2 based on historical trends; the modeling for the updated trend has not changed, although it includes data from FY 2015.



## Other Interest Earnings

### Coal Trust Interest Earnings

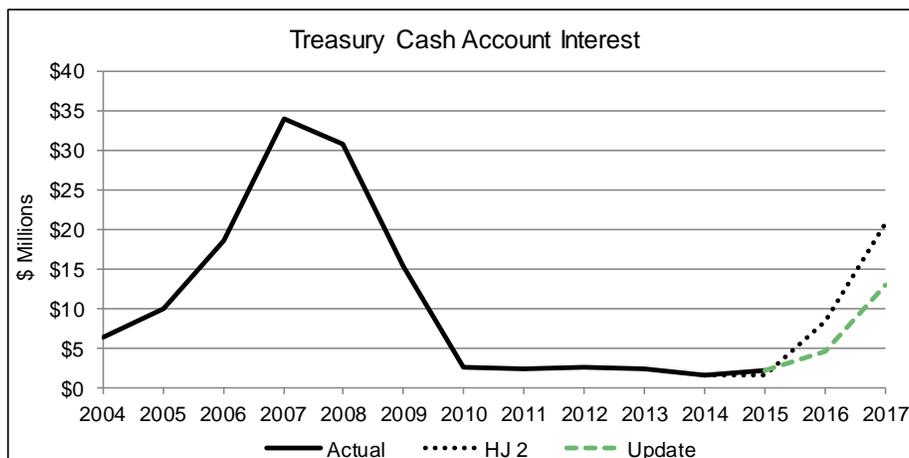
Coal trust earnings were above the estimate contained in HJ 2 by \$0.7 million. Revenue from this source was estimated in HJ 2 using year-end balance amounts and forecast interest rates based on suggestions from the Board of Investments (BOI).



The model for the updated trend has been revised to include year-to-date collections through October, which were up 18.2% over the prior year. Using past years' collection trends, the FY 2016 estimate was adjusted to account for current collections. The FY 2017 update assumes a return rate similar to FY 2015, which is above the HJ 2 assumption.

### Treasury Cash Account Interest

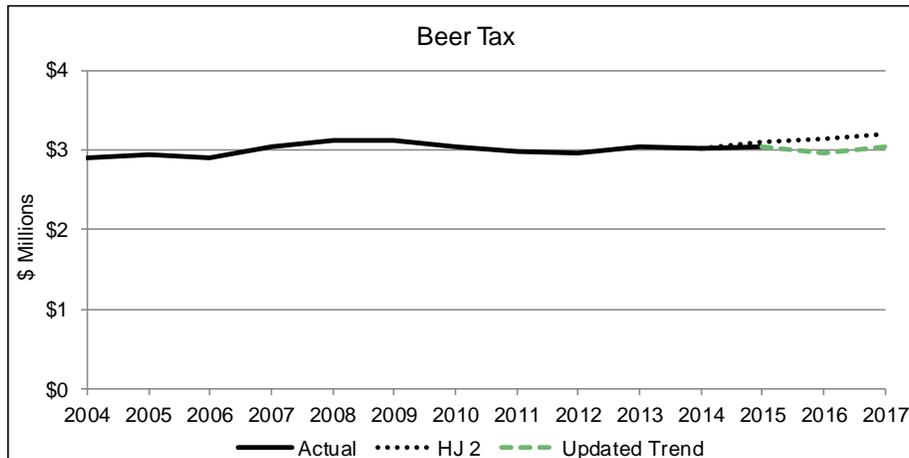
Based on year-end data for FY 2015, revenue from TCA interest earnings was \$0.6 million above the estimate provided in HJ 2. The updated trend is based on IHS projections for short-term interest rates. In HJ 2, interest rates were expected to finally rise but have since been revised downward, explaining the decrease in the updated trend compared to HJ 2. If rates do not increase as expected in the latest IHS forecast, the revenue risk for FY 2016 is about \$2 million.



## Other Consumption Taxes

### Beer Tax

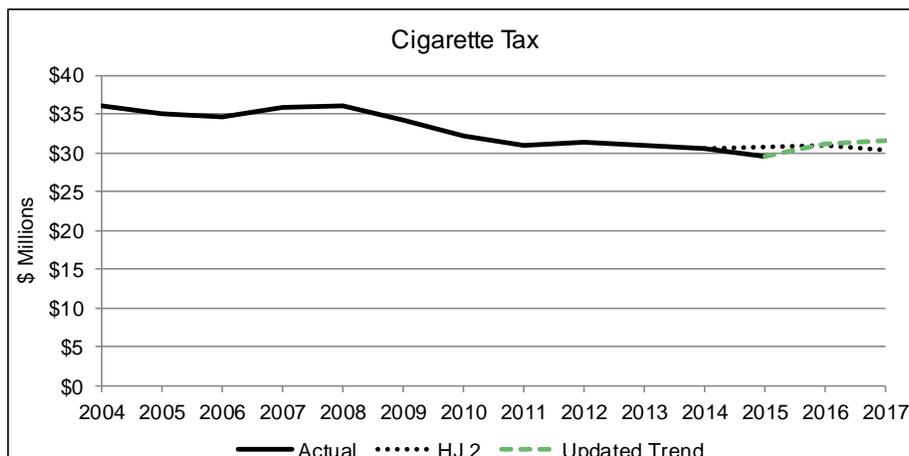
FY 2015 revenue grew only 0.1% over FY 2014, which was lower than estimated in HJ 2. Year-to-date revenue through October is down 2.9%. The updated trend reflects this information. In addition, this source has been modified since HJ 2 to forecast consumption per capita in the over-21 population and then apply that trended rate to the forecasted population, which yields slower growth. The per capita consumption is forecast using the IHS outlook for US CPI and historical time trends.



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 number of smaller breweries, and therefore smaller distributors, increases.

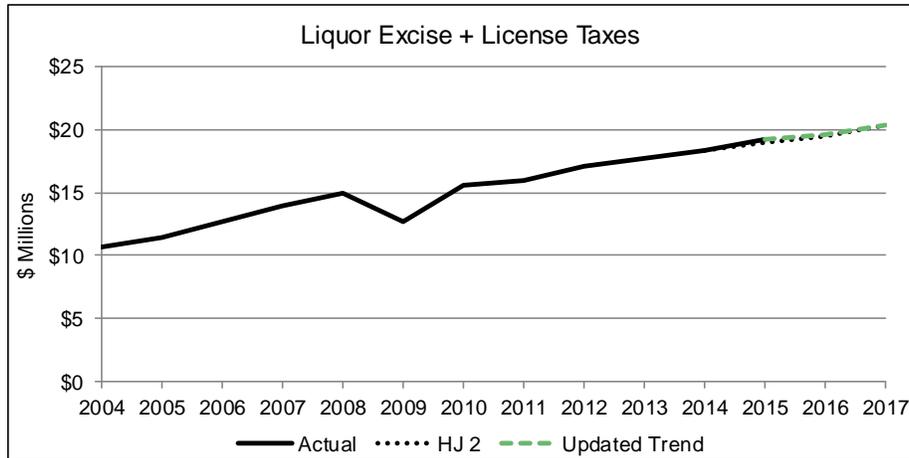
### Cigarette Tax

FY 2015 cigarette tax revenue decreased by 4.5% from FY 2014, a larger decline than expected in HJ 2. Part of the decline may be due to the rising popularity of untaxed e-cigarettes, which will be explored in future research. Since HJ 2, this source has been modified to forecast consumption per capita in the over-18 population and then apply that trended rate to the forecasted population going forward. This per capita consumption is forecast using the IHS outlook for US CPI and historical time trends.



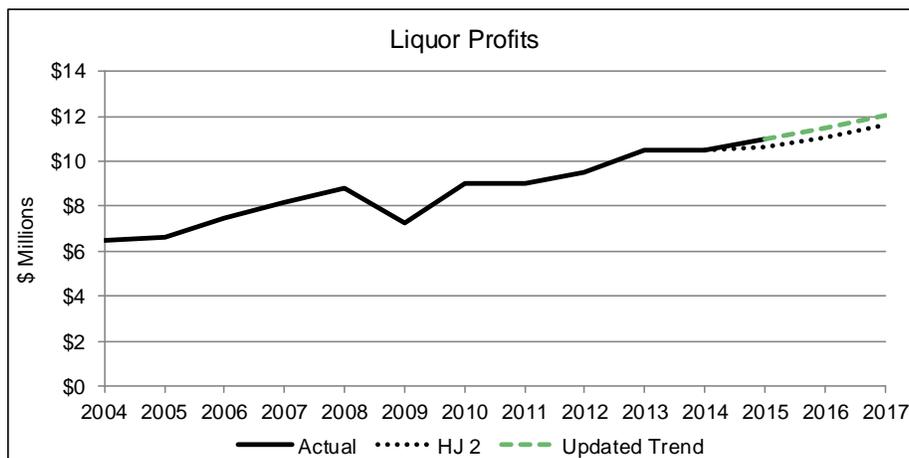
## Liquor Excise & License Tax

Liquor excise tax revenue came in \$0.3 million over the FY 2015 estimate in HJ 2. Since HJ 2, this source has been modified to forecast consumption per capita in the over-21 population and then apply that trended rate to the forecasted population going forward. This per capita consumption is forecast using the IHS outlook for US CPI and historical time trends.



## Liquor Profits

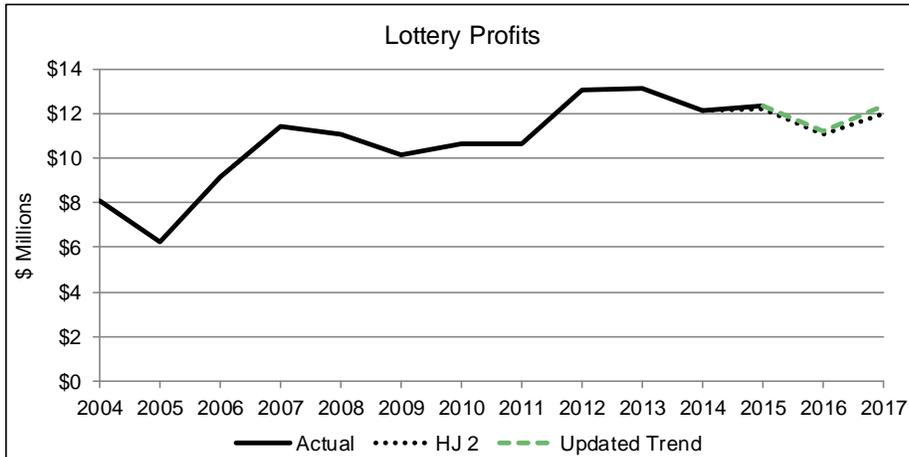
FY 2015 liquor profits came in \$0.3 million above the estimate contained in HJ 2. Profits are forecast using the same model as excise and license taxes; for more information, read the preceding write-up.



## Lottery Profits

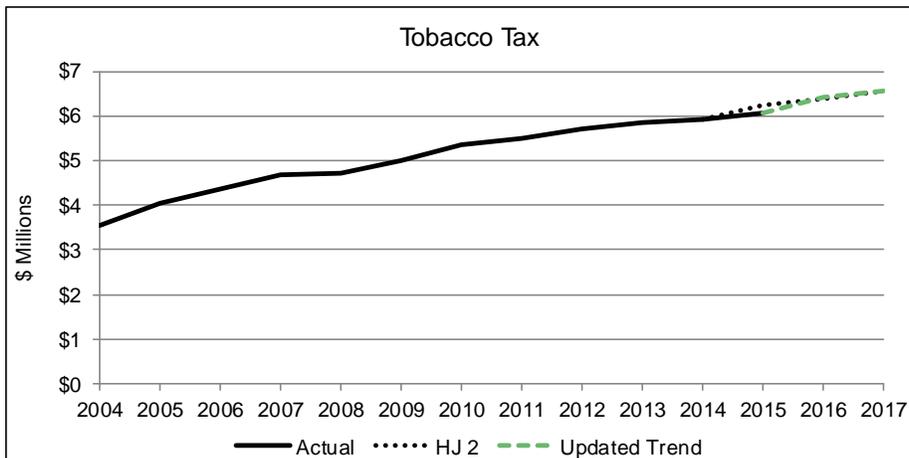
Lottery profits for FY 2015 came in \$0.2 million over the HJ 2 estimate, which is reflected in the updated trend. Modeling for this source has also been modified to forecast consumption per capita in the over-18 population and then apply that trended rate to the forecasted population. The per capita consumption is forecast using US CPI and historical time trends.

[HB 617 \(2015 Session\)](#) established a cap on the general fund transfer of lottery revenue at the FY 2015 amount, with any increases to be transferred to a special revenue account to provided college scholarships for STEM students. This legislative change is reflected in both the HJ 2 and Updated Trend lines following figure.



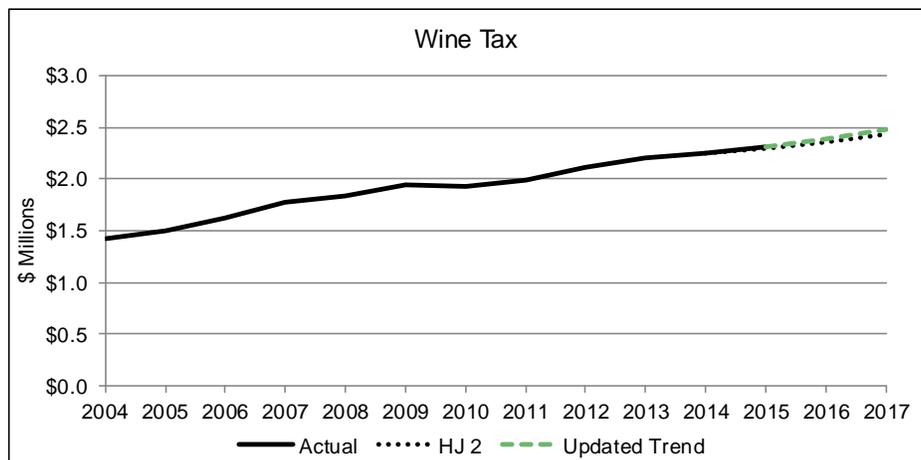
### Tobacco Tax

Tobacco tax revenue came in under the HJ 2 estimate for FY 2015 by \$0.2 million. Since HJ 2, this source has been modified to forecast consumption per capita in the over-18 population and then apply that trended rate to the forecasted population. This per capita consumption is forecast using the IHS outlook for US CPI and historical time trends.



### Wine Tax

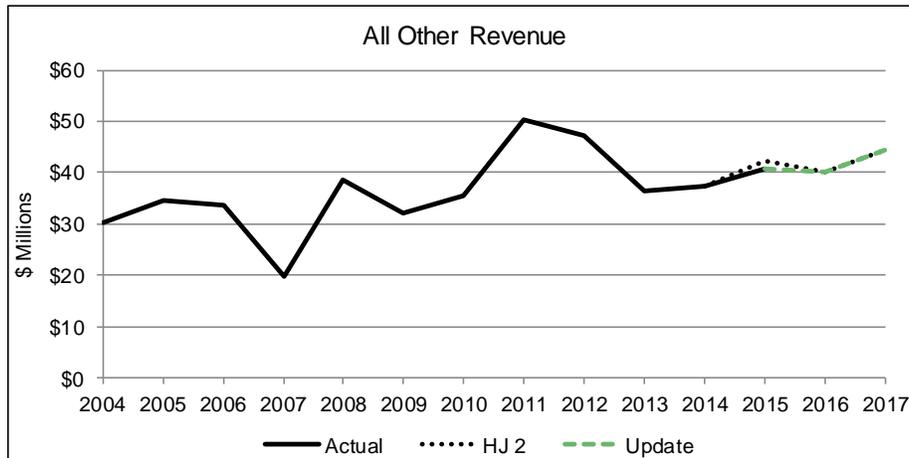
FY 2015 wine tax revenue was very close to the HJ 2 estimate. The updated trend includes FY 2015 actual collections and the updated population estimate from IHS. Additionally, this source has been modified to forecast consumption per capita in the over-21 population and then apply that trended rate to the forecasted population going forward. This per capita consumption is forecast using the IHS outlook for US CPI and historical time trends.



## Other Sources

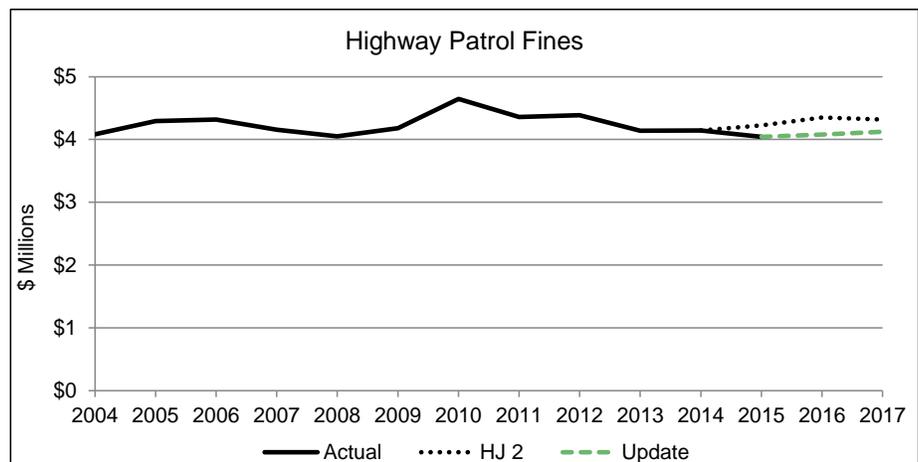
### All Other Revenue

Combined revenue from all other general fund sources was \$1.5 million below the estimate contained in HJ 2. The modeling for this source has not changed and the updated trend closely tracks the estimates in HJ 2.



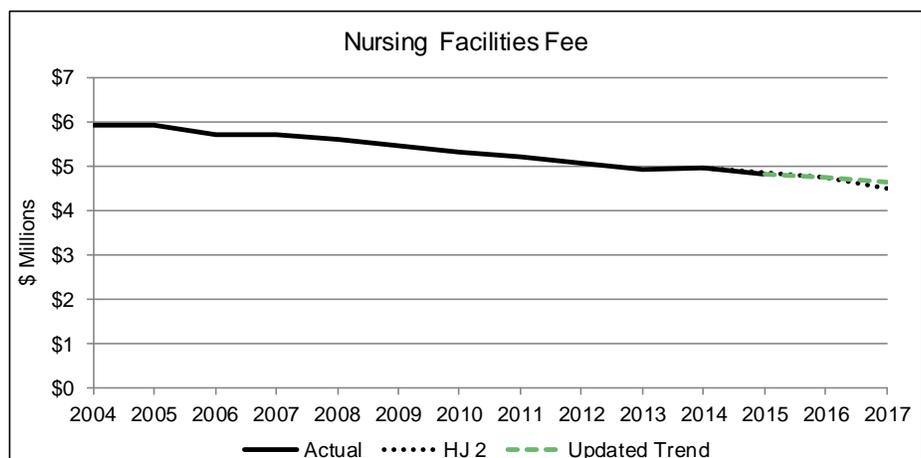
### Highway Patrol Fines

Revenue generated from highway patrol fines in FY 2015 was \$0.2 million less than the estimate provided in HJ 2. The decrease in the updated trend is a result of the lower-than-expected FY 2015 collections.



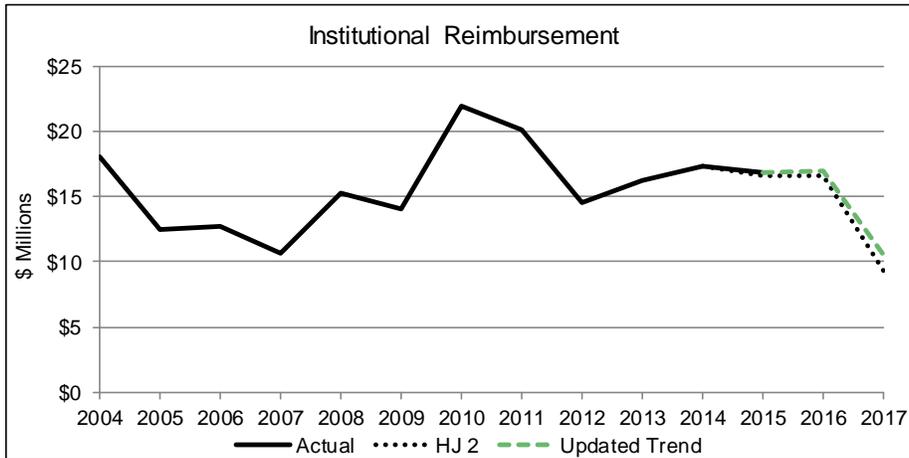
### Nursing Facilities Fee

Nursing facilities fees came in very close to the HJ 2 revenue estimate. This source has been on a linear decline since 2007; the update continues to use the same linear time trend approach from earlier estimates and includes FY 2015 collections.



## Public Institution Reimbursements

Public institution reimbursements were \$0.2 million above HJ 2 for FY 2015. The additional revenue is reflected in the updated trend line which is slightly higher than the HJ 2 projections.



This source is impacted by [SB 411 \(2015 Session\)](#), the bill closing the Montana Developmental Center (MDC). MDC is one of five state facilities from which the general fund receives reimbursement. While this revenue reduction is anticipated, the bill is expected to reduce general fund expenditures to the facility by more than the reimbursement loss for a net gain in general fund. This legislative change is reflected in both the HJ 2 and Updated Trend lines on the graph above.

## Tobacco Settlement

FY 2015 tobacco settlement revenue was slightly above the HJ 2 estimate. Changes in the tobacco settlement received by Montana are based on market share of the participating manufacturers and volume of cigarettes sold, but the majority of annual fluctuations are due to litigation between the tobacco companies and the states. The first of the lawsuits (from over a decade ago) are just being settled and both the outcomes and their timing are unpredictable.

