

# **KEY DIFFERENCES BETWEEN EXECUTIVE AND LFD REVENUE ESTIMATES**

The difference between the executive and LFD revenue estimate can almost entirely be explained by the differences in four revenue sources. As summarized in the table below, difference in the individual and corporation income taxes, oil & natural gas production taxes, and U.S. mineral royalties account for 99.4% of the overall difference between the two total estimates.

Key Differences from Executive Revenue Estimate (\$ Millions)				
	Executive	LFD	3-Year	% Share of
	3-Year Total	3-Year Total	Difference	<b>Total Difference</b>
Individual Income Tax	\$3,602.8	\$3,486.8	\$115.9	39.2%
Corporation Tax	572.7	458.8	113.9	38.5%
Oil & Natural Gas Production Tax	319.9	267.3	52.5	17.8%
U.S. Mineral Royalties	95.3	76.2	19.2	6.5%
Remaining	2,281.0	2,287.1	(6.1)	-2.1%
Total General Fund	\$6,871.6	\$6,576.2	\$295.4	100.0%

#### **Individual Income**

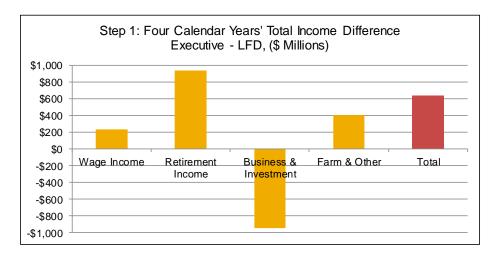
The individual income tax estimating process contains three broad steps, which are illustrated in the diagram below. First, growth rates for each income type and other line items are developed—income streams are generally modeled on various IHS predictors, while many of the smaller addition, reduction or deduction items are forecast based on historical trend or an assumption of no growth.

Second, the tax simulation model produces a calendar year state tax liability forecast by applying the modeled growth rates to each resident taxpayer's income and deduction items. The model is updated each year by the Department of Revenue (DOR) to incorporate the changes in federal and state tax law.

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

Income & other line item growth rates	Current year tax simulation model from DOR	Conversion to fiscal year and inclusion of audit revenue and any adjustments
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The difference between the executive and LFD estimates appears to be generated at each step of the process. The chart below illustrates the aggregate difference over the calendar year forecast period of 2014-2017 by broad income categories. The total difference of \$631 million over the four-year period is also included.



Assuming that on average 75% of the four calendar years' revenue will translate to three fiscal years' collections, and using the average effective tax rate of 4.5%, the difference between the two estimates based on different growth rates in step 1 would explain about \$21.3 million of the \$115.9 million total difference.

The remaining difference of \$94.6 million is likely attributable to steps 2 and 3 of the estimating process. The LFD estimate utilized the CY 2013 tax simulation model and CY 2013 taxpayer data provided by DOR as the basis for forecast state tax liability. The executive estimate relied on the CY 2012 tax simulation model and CY 2013 taxpayer data. Each year DOR updates the tax simulation model to reflect changes in state and federal tax laws, and individualize it to a given tax year's taxpayer data. Using current taxpayer data with a prior year's model may lead to an incomplete assessment of state tax liability.

### **Corporation Income**

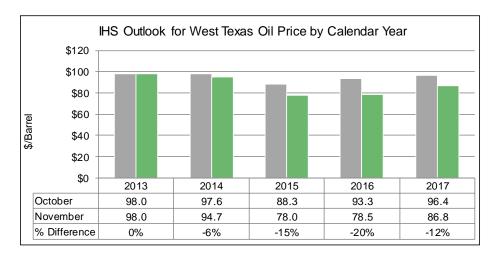
The difference between the legislative and executive forecasts is primarily due to significant differences in modeling methodology. The executive forecast is based on a model using lagged U.S. corporate profits, while the legislative forecast takes a multi-sector approach using multiple economic variables to forecast various corporate sectors. The difference between the two approaches has been discussed extensively throughout the interim; for more information, see the report here: <a href="Corporation Tax Estimating: Using Confidence Intervals to Minimize Forecasting Error">Confidence Intervals to Minimize Forecasting Error</a>.

Since several of the sector models rely on the IHS forecast of West Texas Intermediate (WTI) oil price, the IHS November downward revision has a significant impact on the LFD estimate of corporation income tax—resulting in a revenue reduction of about \$25 million over the three-year period.

Finally, an additional difference arises through the estimate of refunds and audit, penalty and interest revenues. The LFD methodology estimates these items separately and adds them to the fiscal year estimate of corporation income tax liability. With historically low total audit revenue in FY 2014 and information from the Department of Revenue that suggested the decline was primarily a result of corporations correctly applying the water's edge election, the LFD estimate reduced the forecast of future audit revenue. The executive includes all refund and audit revenue in the single-variable modeling approach, which implies a growth of audit revenue equal to the overall corporation income tax growth.

### Oil & Natural Gas Production Tax

The difference between the executive and LFD estimates of oil and natural gas production tax stems almost entirely from price differences in oil. The October IHS forecast had much higher estimates for oil prices than the November IHS forecast, which assumes the current price weakness is likely to continue. Due to timing of when estimates are published, this abnormally large price change affected the estimates greatly. Prior to this price change, the OBPP and LFD had almost identical estimates in FY 2015 and FY 2016, and a small difference in FY 2017 where OBPP assumed an uptick in production relative to the LFD production outlook.



## **U.S. Mineral Royalties**

The difference in U.S. mineral royalties is also related to the IHS revised outlook for oil price, which pushed down LFD estimates. This can be seen below in the drop from FFY 14 to FFY 15 in the oil value chart. LFD has lower estimated value of coal and oil from federal lands, which may include lower production and price.

