REVENUE ESTIMATING CONFERENCE
December 14, 2017

Legislative Fiscal Office
State Revenue Forecast
(millions of $)

	Actual FY17	Forecast=> FY18	FY19	FY20	FY21	FY22
Total Tax Revenue	$11,936	$12,159	$11,195	$11,348	$11,539	$11,780
Less Dedications	($2,508)	($2,573)	($2,585)	($2,606)	($2,627)	($2,649)
SGF Revenue	$9,428	$9,585	$8,610	$8,742	$8,912	$9,131
Change From REC	$0	$143	$242	$187	$231	na
Yr/Yr SGF Change	$1,531	$158	($975)	$132	$170	$219
Yr/Yr % Change	19.4%	1.7%	-10.2%	1.5%	1.9%	2.5%
Yr/Yr Total Tax Change	$1,535	$223	($963)	$153	$191	$241
Yr/Yr % Change	14.8%	1.9%	-7.9%	1.4%	1.7%	2.1%

The table above depicts the total recommended forecast. A large increase in collections occurred in FY17 as tax increases were realized for the full year, followed by modest growth in FY18. Revenues step down sharply in FY19 due to tax expirations, and then return to modest growth over FY20 – FY22. Relative to the official baseline forecast in place, the recommended forecasts reflect upgrades largely due to a slowly improving economic outlook. Major revenue areas are discussed further below.

Underlying economic projections anticipate modest growth of the economy during FY18 and beyond, with employment growth less than 1% per year and nominal income growth less than 2.5% per year. Economic conditions are depicted and discussed further below, as well.

Forecast risks are probably balanced. Oil and natural gas prices seem to have established a sustainable range, and the U.S. economy is exhibiting modest but sustained growth while the world economy continues to improve, as well. Downside risks are always present with regard to commodity prices, though, as they are with the world's economies, in general. Continuing rebuilding in the Baton Rouge area after the 2016 floods may maintain some support to sales and income tax receipts, but some other economic driver sector will have to emerge to carry the economy as this and the industrial construction boom plays out.

Aside from the total tax and general fund forecasts summarized here, numerous separate dedication and fee projections are presented on supplemental schedules. Those projections are constructed by agency and DOA analysts for budget development purposes. The LFO columns of those schedules are simply filled with those agency and DOA values, and do not constitute independent analyses or projections.

Oil and Gas Price Forecast

	FY17	FY18	FY19	FY20	FY21	FY22
Oil, $/bbl	$48.51	$51.24	$54.07	$55.47	$53.86	$54.90
Change From REC		$0.10	$2.95	$3.91	$1.64	na
Gas, $/mcf	$3.14	$3.06	$3.03	$3.20	$3.32	$3.42
Change From REC		$0.07	($0.11)	($0.09)	($0.06)	($0.03)
Gas Sev. Tax, ¢/mcf	9.8	11.1	11.4	12.2	12.5	12.8

Oil prices are modestly upgraded with this forecast, primarily reflecting the fact that OPEC oil producers have extended their current production curtailment agreement and have largely been successful holding to it, and geopolitical risk factors have returned to the market. While U.S. shale oil producers have responded with increasing production, global demand growth has added another supportive force to prices. **Natural gas prices** have not exhibited strengthening and forecasts have been modestly downgraded. Price forecasts are based on an average of West Texas Intermediate projections by Moody's Analytics, the Energy Information Administration, and Louisiana spot price projections of the State Department of Natural Resources. With horizontal drilling / hydraulic fracturing of shale formations becoming an industry norm, there appears to be the development of a supply-based ceiling on oil and gas prices for the foreseeable future. These wells can be relatively quickly drilled and there is a substantial inventory of drilled but not yet fractured wells built up that can be quickly completed as prices rise. In addition, U.S. shale producers are increasingly efficient, and shut-in prices have dropped into the mid-$20s and $30 per barrel. Barring strong surges in demand or sharp cutbacks by other producers, U.S. shale production is likely to impose a constraining effect on price increases.

Severance and Royalty Forecast
(millions of $)

	FY17	FY18	FY19	FY20	FY21	FY22
Severance & Royalty	$512	$528	$541	$558	$574	$591
Change From REC		$1	$49	$90	$124	na

Mineral revenue forecasts are upgraded from the existing forecast baseline as the result of higher price forecasts; albeit, with essentially no change for FY18. Of note in mineral revenue has been the distinctly faster decline rates exhibited in oil production, and especially in royalty production, since 2014. These decline rates are expected to moderate as prices have stabilized, allowing price strength to translate to revenue growth.

Risks to the mineral revenue forecast always exist, as these revenues are largely influenced by international and regional commodity prices that can experience dramatic swings. Currently, the balance of those risks seems to be to the upside as the U.S. and world economies experience a rare period of joint expansion, and non-U.S. oil producers continue to constrain their production. However, as prices improve the incentive to increase production also increases, for all producers, not just U.S. shale producers. Thus, some ceiling probably exists for these prices.

Sales Tax Forecast
(millions of $)

	FY17	FY18	FY19	FY20	FY21	FY22
General Sales Tax	$3,827	$3,887	$2,955	$2,948	$2,983	$3,046
Change From REC		$87	$33	($34)	($32)	na
Vehicle Sales Tax	$529	$490	$424	$430	$435	$457
Change From REC		($45)	$2	$19	$14	na

General sales tax forecasts are upgraded in the early periods of the forecast horizon and downgraded after that. A slowly improving economy helps, but the expiration of a substantial amount of sales tax at the start of FY19 dominates the outlook. Base tax receipts growth, exclusive of the effects of temporary legislative changes to the tax rate and base, are still only about 1.5% - 2.0% per year. Fairly conservative but this tax has not exhibited consistent growth for a number of years.

These forecasts incorporate the expected expiration of legislation from the 2016 1st & 2nd Extraordinary Sessions, that raised the state sales tax rate and expanded the state sales tax base through FY18, with a trailing effect nine months into FY19 from continued taxation of business utilities. These legislative changes account for the step-down in FY19 and beyond from the level in FY18.

Vehicle sales tax forecasts are decreased in FY18 as the vehicle replacements necessary in the aftermath of the late August flooding boosted FY17 receipts but cease to be a factor after that. Collections step down again in FY19 as the temporary state sales tax rate increase expires. Modest growth returns in the out-years after these extraordinary influences play out.

Personal Income Tax Forecast
(millions of $)

	FY17	FY18	FY19	FY20	FY21	FY22
Income Tax	$2,960	$3,024	$3,091	$3,164	$3,237	$3,310
Change From REC		$8	$14	($45)	($66)	na

Personal income tax forecasts are modestly upgraded for FY18 and FY19, then downgraded for the two years beyond. Slowly improving employment, and hourly earnings growth near the national rate of about 2% should result in some growth in this tax, but forecast growth is only a modest 2.0% - 2.5% per year, as this tax has also failed to exhibit consistent growth in recent years.

Corporate Tax Forecast

Combined Income & Franchise Tax

(millions of $)

	FY17	FY18	FY19	FY20	FY21	FY22
Corporate Tax	$388	$383	$325	$350	$375	$400
Change From REC		$45	$124	$138	$176	na

Corporate tax forecasts have been upgraded relative to the very low levels in the current official forecast. Collections in FY17 were close to but still under the forecast for that year, and likely reflect the effect of extending the franchise tax to pass-through entities and raising the minimum tax amount. Forecasts are placed at the bottom of the range of likely outcomes, and then an ad hoc deduction was made for FY19 in anticipation of credit claims from earlier periods being redeemed at full value upon expiration of the 28% reduction in credit values enacted in 2015 and 2016. Corporate receipts step-up each year thereafter.

Corporate tax receipts have always been the riskiest of all the taxes that finance the state general fund budget, and substantial changes have been made to final corporate tax calculations in the last four sessions; some temporary and some permanent. Taxpayer response and the interaction of those changes is essentially unknown and unpredictable. With the substantial tax planning potential of corporate tax filers and the fact that one-half to two-thirds of corporate tax is routinely collected in the last quarter of the fiscal year, it is essentially impossible to forecast corporate tax collections, even near the end of the fiscal year.

Gaming Revenue Forecast

(millions of $)

	FY17	FY18	FY19	FY20	FY21	FY22
All Gaming	$894	$875	$864	$862	$861	$861
Change From REC		$10	($1)	($3)	($4)	na

Gaming forecasts are only modestly changed. These receipts reflect discretionary spending in the state's economy from both residents and tourists, and that spending has remained stable but weak. Lottery transfers in calendar year 2017 supporting the FY18 budget are nearly complete, and reflect no extraordinarily high jackpots as were experienced 2016. Normal sales levels are projected forward until extraordinary jackpots occur. Land-based casino activity distinctly stepped down in mid-2015 after the New Orleans ban on indoor smoking. Monthly transfers are fixed by contract, but a true-up to actual annual gaming activity occurs in March each year, at which point all influences on this gaming activity are realized by the state fisc. At this point, transfers are not expected to be greater than the $60 million minimum amount provided for in the operating contract. Riverboat gaming has exhibited only very modest growth or declines in most years, except when new venues open, and is expected to modestly decline in FY18 and then modestly grow in the out-years. A downward adjustment was made for FY19 and beyond to account for the Baton Rouge smoking ban effect on activity in that market. Video Poker gaming has exhibited negative performance since FY16, and modest drops are expected throughout the forecast horizon. Racetrack Slot gaming performance has also been negative in recent years with the expectation of continuing modest declines each year.

Tobacco, Alcohol, and Beer Tax Forecast
(millions of $)

	FY17	FY18	FY19	FY20	FY21	FY22
Tob, Alc, Beer Tax	$392	$392	$392	$393	$393	$393
Change From REC		$2	$6	$10	$18	na

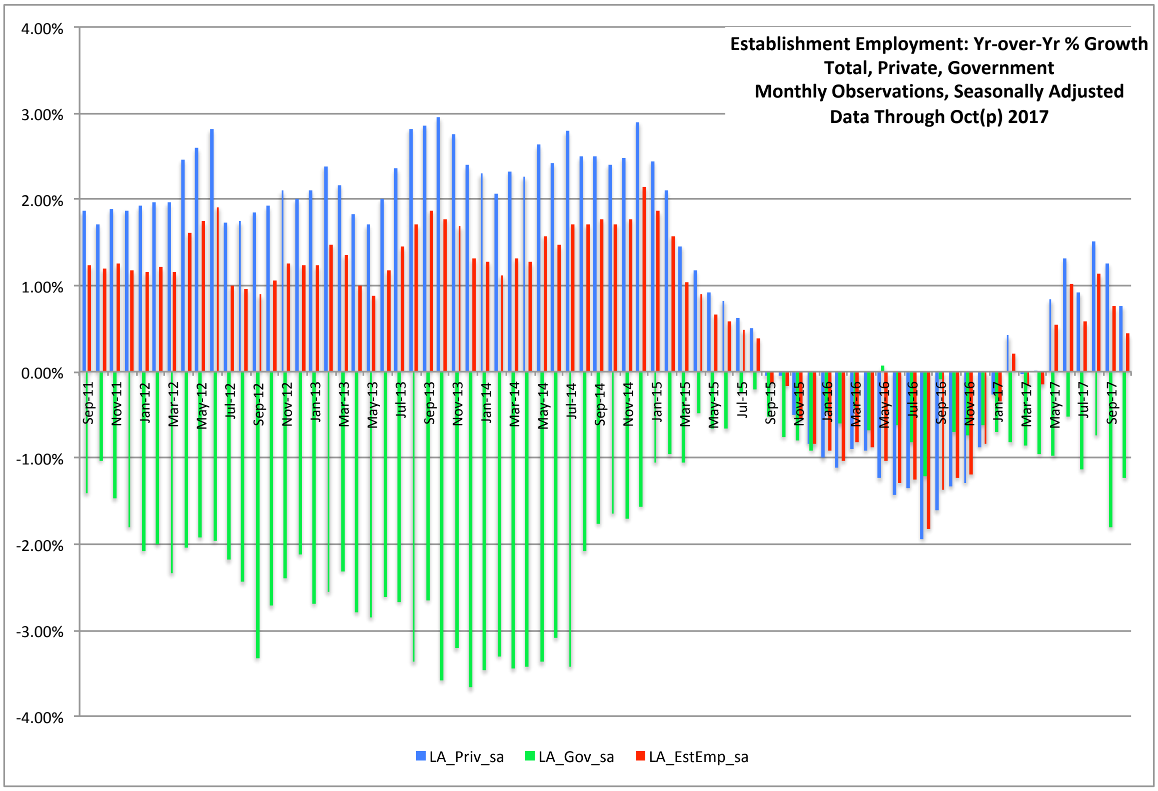
Tobacco, Alcohol, and Beer personal excise taxes are upgraded slightly from the current forecast; primarily a re-assessment of tobacco tax collections. Receipts from liquor, wine, and beer have stepped-up since their tax increases went into effect in April of 2016, and have returned to their stable behavior. Cigarette tobacco products faced tax increases in 2015 and 2016, and it has taken until into FY17 for receipts to settle into a new norm after stockpiling and work-off behavior of wholesalers. That new norm warrants a modest increase in the baseline tax forecast.

Excise License Tax Forecast
(millions of $)

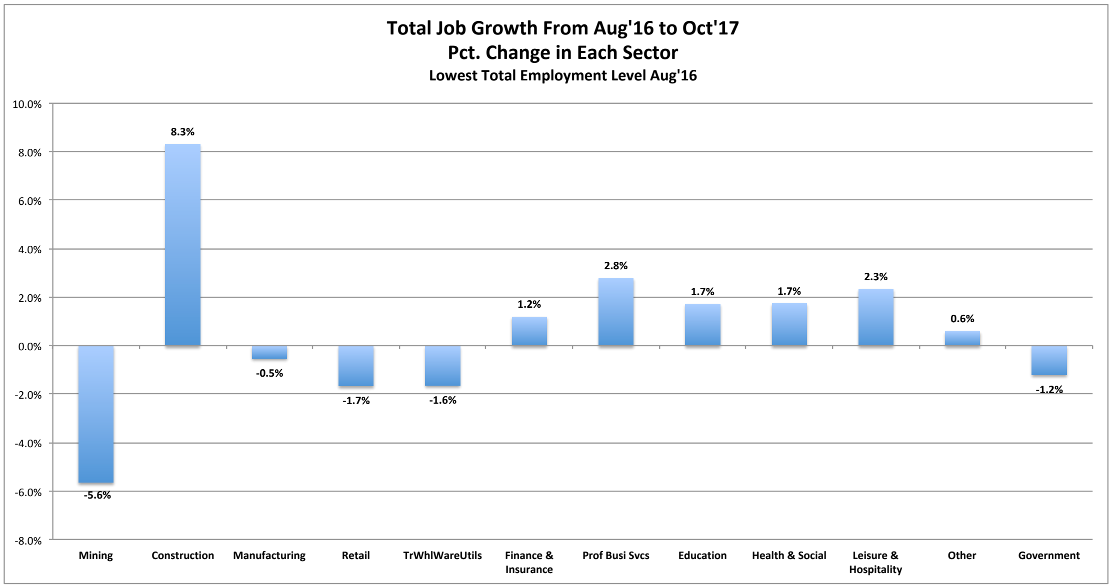
	FY17	FY18	FY19	FY20	FY21	FY22
Excise License Tax	$885	$1,021	$1,040	$1,059	$1,079	$1,098
Change From REC	$0	$85	$92	$87	$78	na

Premium tax forecasts have been materially upgraded relative to the current baseline forecast. Collections began stepping up in recent years as the expansion of coverage associated with the Healthy Louisiana program (formerly Bayou Health) has proceeded, and as Medicaid expansion has been implemented. In addition, legislation increasing the tax rate on the premiums of health maintenance organizations enhanced collections. Collections stepped-up especially sharply in FY17 and are running well ahead of that year so far in FY18. The projection for the Medicaid premium tax amount is capped at $495 million per year throughout the forecast, dedicated to the Medical Assistance Trust Fund, with all other growth in the tax attributable to the non-Medicaid premium base, flowing largely to the state general fund. Considerable caution should be considered here since these projected revenue increases result from both tax rate and base increases that may not have yet settled into a new norm. Changes to this one revenue source constitute over 42% ($61 million) of the increase in FY18 state general fund forecast, and over 28% ($68 million) of the FY19 forecast increase.

Underlying economic conditions are summed up in the following charts. The first displays payroll employment growth for each month from the same month one year before, as of the end of October 2017. After the state recession of 2015-2016, it took a few months into 2017 to establish some sustained growth, but that appears to be happening with regard to the private sector and total employment. This pattern of modest employment growth is the basic economic driver of the revenue forecasts. From the month of May 2017 to October 2017, average monthly growth of total establishment employment has been 0.74%, and for the private sector alone 1.10%.

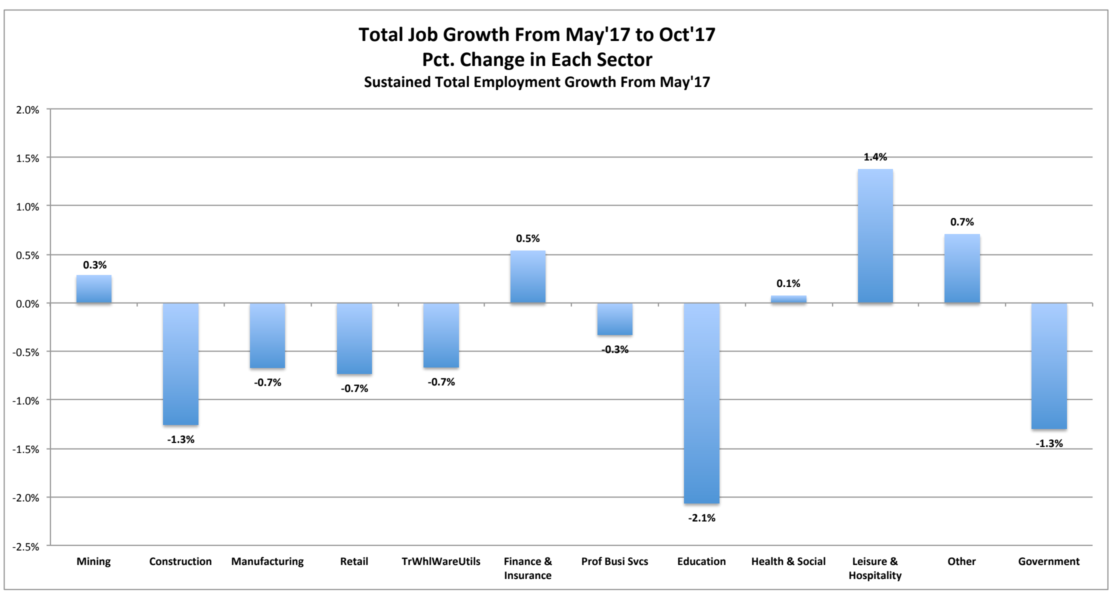


The composition of this growth is of concern, though. The two charts below decompose employment growth by major industry sector from the trough month of statewide employment in August 2016 to the latest reported month. The first most obvious aspect of the chart is the continuing decline in mining employment (oil & gas) over this period recovery, along with manufacturing, retail trade, and transportation. Other than retail trade, these sectors are among the highest average wage sectors of the economy. The second most obvious aspect is the outsized positive contribution of the construction sector. While construction is a relatively high average wage sector, its activity has been concentrated in industrial projects that are playing out. It is worrisome what sectors will take the place of construction to carry the economy along when these projects are largely completed.



Employment, October 2017, thousands												
1977.7	35.1	149.7	133.9	230.7	149.8	93.2	213.5	47.4	268.9	235.9	99.7	319.9
Change Since Aug 2016, thousands												
16.7	-2.1	11.5	-0.7	-3.9	-2.5	1.1	5.8	0.8	4.6	5.4	0.6	-3.9
Average Annual Wage, 2016												
	$93,805	$58,558	$70,739	$26,953	$60,245	$64,421	$52,444	$39,692	$43,065	$20,384	$35,389	$49,717

The chart below illustrates this worry by depicting the composition of job growth from May 2017 to date, the recent period of sustained positive employment growth.



Employment, October 2017, thousands												
1977.7	35.1	149.7	133.9	230.7	149.8	93.2	213.5	47.4	268.9	235.9	99.7	319.9
Change Since May 2017, thousands												
-6.7	0.1	-1.9	-0.9	-1.7	-1.0	0.5	-0.7	-1.0	0.2	3.2	0.7	-4.2
Average Annual Wage, 2016												
	$93,805	$58,558	$70,739	$26,953	$60,245	$64,421	$52,444	$39,692	$43,065	$20,384	$35,389	$49,717

In this period, most sectors have actually declined and most growth has come from the leisure & hospitality sector. Of note here is that mining employment has finally started to make a positive contribution to growth, but seems unlikely return to its levels of just a few years ago; ~55,000 jobs vs today's ~35,000 jobs. This underlying weakness of the economy is why the various personal income aggregates are projected to grow at relatively slow rates of 2% - 2.5%.

Finally, the chart below illustrates rapidly diminishing oil production trends in the state. While prices can still support mineral revenue to some extent, accelerating production declines are working against these revenues as major contributors to the state budget. Immediately below is total in-state oil production, rapidly falling off as the brief era of $100+/bbl oil ended in 2014. Production may be beginning to plateau, but at a substantially lower level than just three years ago, and without horizontal fracturing production in the state, a return to higher levels is highly unlikely.