

REVENUE ESTIMATING CONFERENCE
January 13, 2017

Legislative Fiscal Office
State Revenue Forecast

(millions of \$)

	Actual FY16	Forecast=> FY17	FY18	FY19	FY20	FY21
Total Tax Revenue	\$10,400	\$11,734	\$11,958	\$10,982	\$11,148	\$11,335
Less Dedications	(\$2,503)	(\$2,449)	(\$2,489)	(\$2,479)	(\$2,518)	(\$2,589)
SGF Revenue	\$7,897	\$9,284	\$9,470	\$8,503	\$8,630	\$8,746
Change From REC	\$0	(\$341)	(\$398)	(\$245)	(\$267)	na
Yr/Yr SGF Change	(\$512)	\$1,387	\$186	(\$967)	\$127	\$116
Yr/Yr % Change	-6.1%	17.6%	2.0%	-10.2%	1.5%	1.3%
Yr/Yr Total Tax Change	(\$68)	\$1,333	\$225	(\$976)	\$166	\$187
Yr/Yr % Change	-0.6%	12.8%	1.9%	-8.2%	1.5%	1.7%

The table above depicts the current recommended aggregate forecast horizon. Substantial downgrades to the general fund forecast relative to the June 30, 2016 official baseline are recommended. The downgrades incorporate the actual results of FY16, where general fund collections came in some \$315 million lower than anticipated, as well as reassessments of the economy's growth prospects and oil and natural gas price and production estimates. While mineral prices are upgraded substantially from the official baseline, poor revenue performance in FY16 combined with continuing employment declines with little sign of improvement result in a net downgrade to the revenue baseline forecast in all years of the forecast horizon. Major revenue areas are discussed below.

Year-over-year changes appear odd but are the result of temporary revenue increases enacted in the 2015 Regular session, and the 2016 1st & 2nd Extraordinary Sessions, much of which terminate at the end of FY18. Thus, revenue increases sharply in FY17, grows modestly in FY18, and then declines sharply in FY19, with modest growth after that.

Underlying economic projections anticipate a bottoming out of the state's employment decline in 2017, with a slow improvement over the second half of 2017 and beyond. However, annual employment growth seems likely to be negative for some months to come, with consequent dampening of aggregate incomes and tax receipts. Economic conditions are depicted and discussed below.

Forecast risks are still probably weighted to the downside. While oil and natural gas prices may have established a sustainable bottom range, the U.S. economy has exhibited only modest growth and is still well below its traditional potential growth, while the world economy continues to struggle, both advanced and emerging economies. The revenue raising legislation enacted in the 2015 Regular Session made significant changes in ways that add substantial uncertainty to the amounts of additional revenue expected, and the 2016 1st & 2nd Extraordinary Session actions relied, in material part, on

essentially unknown potential tax bases. Finally, much of the actions taken in these sessions were complicated measures that terminate in just two years, adding uncertainty of compliance and enforcement to that of potential unanticipated taxpayer response.

Oil and Gas Price Forecast

	FY16	FY17	FY18	FY19	FY20	FY21
Oil, \$/bbl	\$44.42	\$48.13	\$51.41	\$53.99	\$56.44	\$58.43
Change From REC		\$18.13	\$15.86	\$15.73	\$16.27	\$18.26
Gas, \$/mcf	\$2.15	\$3.08	\$3.22	\$3.29	\$3.39	\$3.52
Change From REC		\$0.99	\$1.03	\$1.00	\$1.01	\$1.14
Gas Sev. Tax, ¢/mcf	15.8	9.8	11.7	12.2	12.5	13.0

Oil and natural gas prices are upgraded with this forecast, primarily reflecting the fact that new baseline forecasts have not been adopted for nearly a year. International oil producers have been able to support oil prices through jawboning and announced production cuts, and prices have bounced around within the mid-\$40s to mid-\$50s per barrel for several months. Natural gas prices have also recovered from their lows and varied in the in the upper \$2s per mcf range for some time, as well, albeit with considerable ability to surge up or down. 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 is the distinct possibility of a supply-based ceiling on oil and gas prices in 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. Barring strong surges in demand or sharp cutbacks by other producers, U.S. shale production is likely to impose a controlling effect on price increases.

Severance and Royalty Forecast

(millions of \$)

	FY16	FY17	FY18	FY19	FY20	FY21
Severance & Royalty	\$580	\$581	\$652	\$677	\$704	\$722
Change From REC		\$125	\$138	\$129	\$132	na

Mineral revenue forecasts are upgraded substantially from the existing forecast baseline as the result of higher price forecasts. Much of this upgrade comes in severance tax rather than royalties as royalty production has exhibited a distinctly faster decline than total production since 2014. Severance taxes are negatively influenced in FY17 by the 38% drop in the natural gas severance tax rate from its FY16 level, based on gas price weakness during FY16, but will be positively influenced in FY18 by stronger gas prices this year boosting the tax rate next year. Based on forecasts of gradually improving prices, mineral revenues are expected to climb modestly over time.

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 slowly continue to expand and oil & gas supply overhangs are worked off. Some ceiling probably exists for these prices, though, as a result of the spread of horizontal drilling / hydraulic fracturing techniques and the shift to the U.S. as the world swing producer of oil.

Sales Tax Forecast

(millions of \$)

	FY16	FY17	FY18	FY19	FY20	FY21
General Sales Tax	\$2,938	\$3,741	\$3,798	\$2,815	\$2,791	\$2,824
Change From REC		(\$33)	\$47	\$84	\$93	na
Vehicle Sales Tax	\$411	\$517	\$511	\$438	\$432	\$436
Change From REC		(\$6)	(\$19)	(\$11)	(\$11)	na

General sales tax forecasts are modestly downgraded for FY17 as a result of weak receipts in FY16 and persistent economic weakness during this fiscal year. The upgrades in FY18 and beyond primarily reflect a change in the timing of underlying economic outlook to one of slow modest improvement beginning in 2017, from one of essentially zero growth. Base tax receipts growth, exclusive of the effects of temporary legislative changes to the tax rate and base, are only about 1.5% per year.

These forecasts incorporate the expected revenue 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. The two-year effectiveness of these changes accounts for the step-down in FY19 and beyond from the level in FY18.

Vehicle sales tax forecasts are decreased somewhat throughout the forecast horizon. Although lower motor fuel prices provide a positive influence on this tax, employment declines over the past year have had a negative influence. The step-up in FY17 and FY18 is associated with the temporary state sales tax increase enacted in the 2016 1st & 2nd Extraordinary Sessions. Again, the two-year effectiveness of these changes accounts for the step-down in FY19 and beyond.

These sales tax forecasts currently incorporate additional receipts associated with repair and replacement spending following the late August flooding disaster in a number of parishes. The tax effect of post-event spending may have begun showing up in tax receipts as early as September, and appear to be in October and November receipts, as well. However, such effects are not apparent in the December receipts, especially with regard to vehicles. The initial surge of such receipts may be behind us, again, especially regarding vehicles, and subsequent periods may show much less obvious receipts, even though home and infrastructure repair will continue on for many more months.

Personal Income Tax Forecast
(millions of \$)

	FY16	FY17	FY18	FY19	FY20	FY21
Income Tax	\$2,878	\$2,881	\$2,929	\$2,943	\$2,982	\$3,022
Change From REC		(\$207)	(\$248)	(\$313)	(\$368)	na

Personal income tax forecasts are substantially downgraded throughout the forecast horizon with the expectation of the beginning of an employment recovery pushed back into 2017 and only improving slowly after that. Underlying base growth beyond FY17 is no more than 1.5% per year. The essentially flat performance in FY17 is attributable to the further and permanent reduction in the credit for the Citizens Insurance Assessment, but this gain is offset in FY19 and beyond by the expiration of the reduction in the credit for taxes paid to other states enacted in the 2015 regular session.

Corporate Tax Forecast
Combined Income & Franchise Tax
(millions of \$)

	FY16	FY17	FY18	FY19	FY20	FY21
Corporate Tax	\$249	\$412	\$452	\$484	\$575	\$637
Change From REC	\$0	(\$98)	(\$153)	\$33	\$71	na

Corporate tax forecasts have been downgraded for FY17 and FY18, but upgraded somewhat in the out-years. Final collections in FY16 (\$248 million) were far below what was expected at the outset of the year (\$780 million), inclusive of actions taken in the 2015 regular session that were intended to expand collections in FY16 by being applicable to returns filed after June 30, 2015 (\$404 million). Much of the expected revenue increase was to result from a 28% reduction of numerous tax credits and deductions. Instead, collections actually came in less than in FY15, and refunds during FY16 were 44% greater than during FY15.

However, actions of the 2015 session are presumed to be reflected in the baseline of collections going forward, and no incremental additions related to that session's actions are included in the forecast. The FY17 forecast of that base of collections is an increase over FY16 of some \$314 million. Added to that baseline forecast are the expected fiscal effects of actions taken in the 2nd extraordinary session of 2016, as well as the expiration of 2015 session actions in FY19 and beyond. FY17 collections have along way to go to get to even the downwardly revised recommendation here, but much of the net receipt weakness this year is associated with accumulated film tax credits that have been cleared out with respect to FY17. Net receipts in the second half of the fiscal year should be substantially better than in the first half and, in fact, have been considerably better than last fiscal year.

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. Taxpayer response and the interaction of those

changes is essentially unknown and unquantifiable. For example, certain changes were made to expand the corporate tax base and liability (add-back provisions and single sales apportionment with market sourcing of sales). However, other changes expand the availability of nonrefundable tax credits (inventory tax credit). Thus, it is possible that the gains from tax liability expansion may be offset to some extent by the greater availability of inventory tax credit carry-forwards. With the already 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 \$)

	FY16	FY17	FY18	FY19	FY20	FY21
All Gaming	\$906	\$881	\$868	\$872	\$876	\$880
Change From REC		(\$26)	(\$22)	(\$18)	(\$14)	na

Gaming forecasts have been downgraded largely reflecting the weakness of discretionary spending in the state’s economy from both residents and tourists. Lottery transfers reflect the historically large Powerball jackpot experienced in January (which support the FY17 budget), then return to normal sales levels supporting FY18 and beyond. Land-based casino activity has been essentially flat since 2010, but has distinctly stepped down after the New Orleans ban on indoor smoking, which became effective April 2015, and a second step-down seems evident from mid-2016. Monthly remittances are fixed by contract, but a true-up to actual annual gaming activity occurs in March each year, at which point all influences on gaming activity are realized by the state fisc. FY17 transfers are expected to be 6% lower than in FY16, after a 10.6% drop in FY16 from FY15, and are not expected to be no greater than the \$60 million minimum amount provided for in the operating contract. Riverboat gaming has exhibited only very modest growth in most years, except for when new venues open (the latest being the Golden Nugget boat in Lake Charles as of early December 2014). Riverboat is downgraded throughout the forecast horizon relative to previous expectations but still exhibits modest growth year-over-year. Video Poker gaming has been mildly variable from year to year, but exhibited negative performance in FY16 with another modest drop expected for FY17, before very modest growth returns in the out-year’s forecasts. Racetrack Slot gaming performance has been negative in recent years, accelerating its downward performance in FY16, with the expectation of another down year in FY17. At best, no growth is the prospect for FY18 and beyond.

Tobacco, Alcohol, and Beer Tax Forecast

(millions of \$)

	FY16	FY17	FY18	FY19	FY20	FY21
Tob, Alc, Beer Tax	\$316	\$398	\$399	\$399	\$400	\$400
Change From REC		\$17	\$17	\$17	\$17	na

Tobacco, Alcohol, and Beer personal excise taxes are increased somewhat from the previous forecast, even though these are stable taxes largely driven by demographics and consumer tastes. Alcohol and beer products were subject to tax increases in the 2016 1st Extraordinary Session, and cigarette tobacco products faced tax increases in that session and in the 2015 Regular session. The 2016 session tax rate increases went into effect on April 1, 2016 and generated revenue during FY16. Collections during FY16 were close to estimates, exhibiting errors of only 0.2% for beer, 0.7% for tobacco, and 2.4% for alcohol. Even given that performance, tobacco taxes appear to be settling at a level that warrants an increase in the baseline tax forecast. The revenue increases generated from cigarettes is fully dedicated to health care financing, while that from alcohol and beer continues to support the general fund.

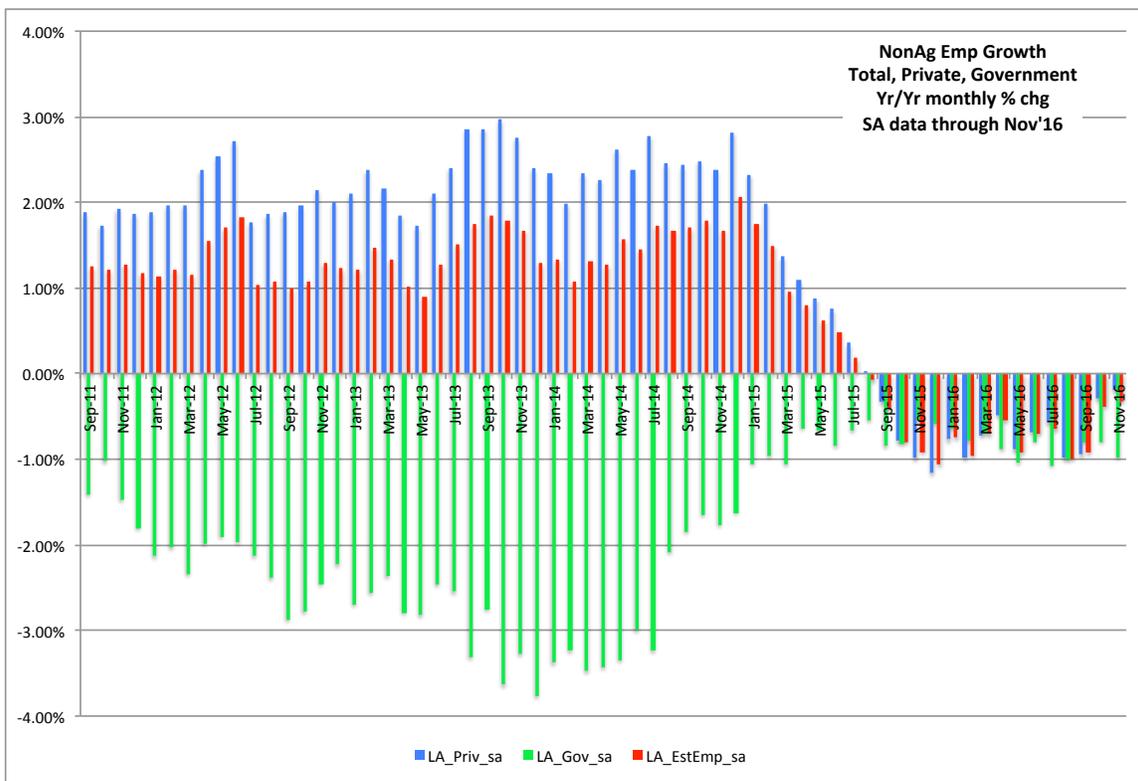
Excise License Tax Forecast

(millions of \$)

	FY16	FY17	FY18	FY19	FY20	FY21
Excise License Tax	\$530	\$790	\$779	\$752	\$766	\$768
Change From REC	\$0	(\$4)	(\$64)	(\$90)	(\$112)	na

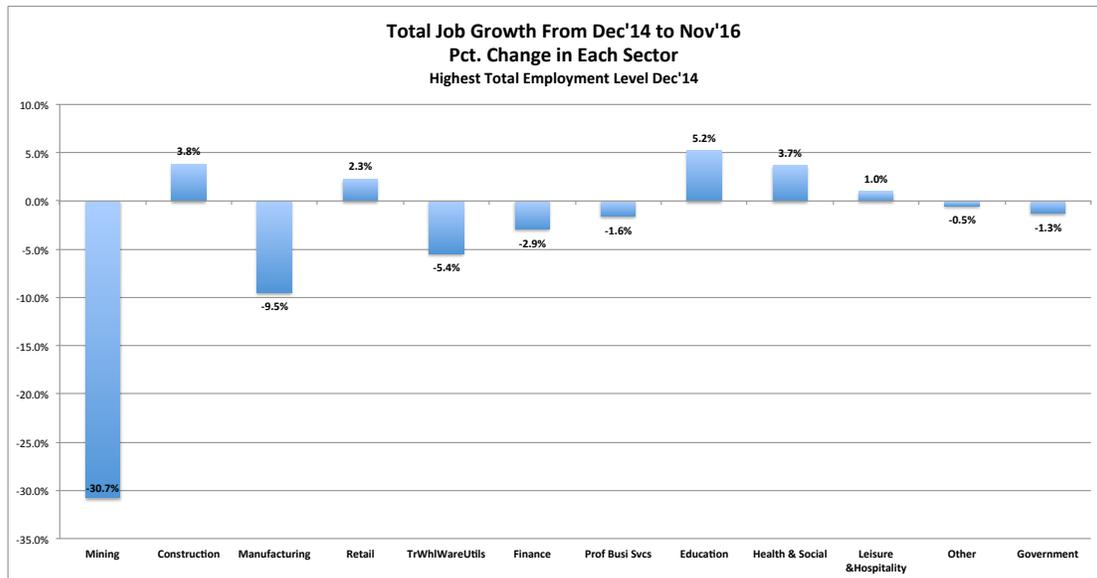
Premium tax forecasts have been downgraded on the weakness of personal income growth prospects as the state’s economic recovery is pushed back and moderated. Collections in FY16 were very close to forecast with only 0.1% error. Collections have stepped up in recent years as the expansion of coverage associated with the Healthy Louisiana program (formerly Bayou Health) has proceeded, and as Medicaid expansion has begun being implemented and legislation has increased the tax rate on the premiums of health maintenance organizations. In addition, the FY17 and FY18 collections will be enhanced from a temporary reduction in the investment tax credit enacted in the 2016 1st Extraordinary Session. The La Dept. of Health is reporting greater Medicaid enrollment than previously expected and has recommended an increase to the premium tax forecast. However, the FY17 forecast already anticipates a nearly 50% increase over FY16 collections, and through December receipts is running less than 20% ahead. Although greater tax receipts associated with Medicaid premiums may occur, the bulk of the tax is not related to Medicaid premiums and appears to be lagging. Reconciliation returns and tax payments will be received in the spring of 2017 for all insurance premiums subject to the tax, at which point an assessment of performance of the entire tax will be possible. Thus, no additions were made at this point for the LDH analysis.

Underlying economic conditions are summed up in the following two charts. The first displays payroll employment growth for each month from the same month one year before. Employment growth began slowing in the state at the beginning of 2015 and began absolute declines by August of 2015. Growth has settled to a roughly consistent 1% decline rate since then. Of note here is that this slow down and contraction is essentially a private sector employment phenomenon. The public sector has been declining for many months prior to the start of the total employment growth slow down in early-2015. Earlier in 2016 it was expected that the total employment declines would bottom out and begin a turn-around to eventual employment increases again by the end of 2016. While employment growth declines appear to have bottomed out in roughly the 1% range, there has been no sustained turn-around in total employment as of yet. Some improvement may be hinted at by the October and November figures, but those months were still declines relative to the same months in the prior year, which were decline months themselves. Thus, the level of employment continues to fall, and no end is yet confidently in sight. Consequently, the sustained turn-around that will eventually come has been pushed back into the second half of 2017, and a very modest climb out is expected in the months after that.



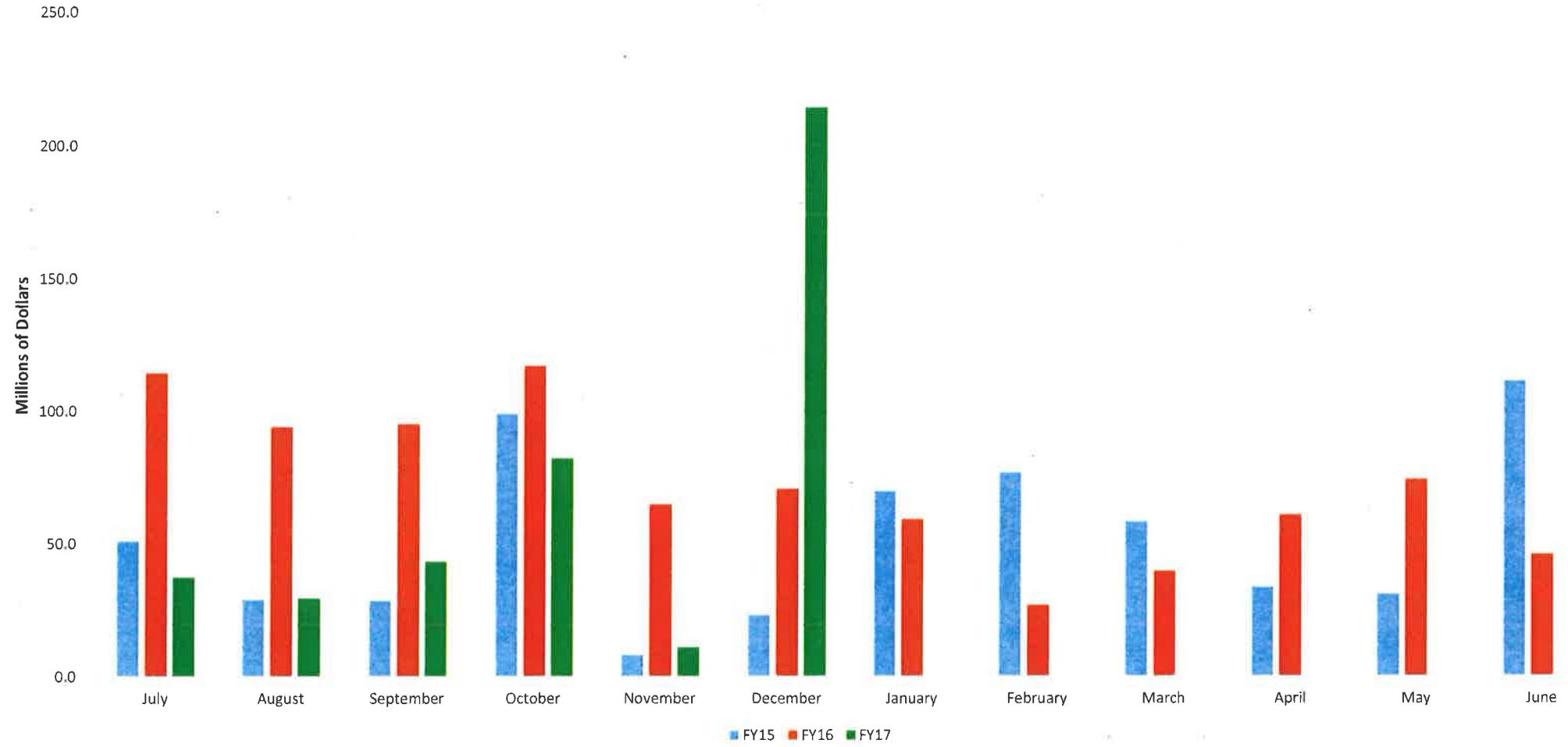
The second chart below decomposes employment growth by major industry sector for the last nineteen months, from the peak of statewide employment in December 2014 to the latest reported month. The most obvious aspect of the chart is the decline in mining employment (oil & gas) over this time period, but declines have also occurred in the associated sectors of manufacturing, transportation, finance, and business & other

services. Of note here is that these declining sectors are primarily the highest average wage sectors of the economy. Positive growth is still being exhibited in the relatively high average wage construction sector, and in the moderate average wage sectors such as health care, education, and social assistance. The large but lowest wage sectors of retail trade and leisure & hospitality have also eked out employment growth over this period. Finally, the moderate average wage government sector (federal, state, and local) has continued to decline. These employment trends associated with their average wages go a long way to explaining the current fiscal condition of the state.



	Mining	Construction	Manufacturing	Retail	TrWhlWareUtils	Finance	Prof Busi Svcs	Education	Health & Social	Leisure & Hospitality	Other	Government	
Employment, November 2016, thousands	1975.3	38.3	146.7	134.0	236.0	154.7	90.2	211.4	48.5	265.0	227.5	99.9	323.1
Change Since Dec 2014, thousands	-25.9	-17.0	5.4	-14.0	5.3	-8.9	-2.7	-3.4	2.4	9.4	2.2	-0.5	-4.1
Average Annual Wage, 2015	\$95,128	\$56,738	\$69,334	\$26,736	\$61,930	\$63,183	\$54,447	\$39,578	\$42,641	\$20,231	\$42,364	\$45,001	

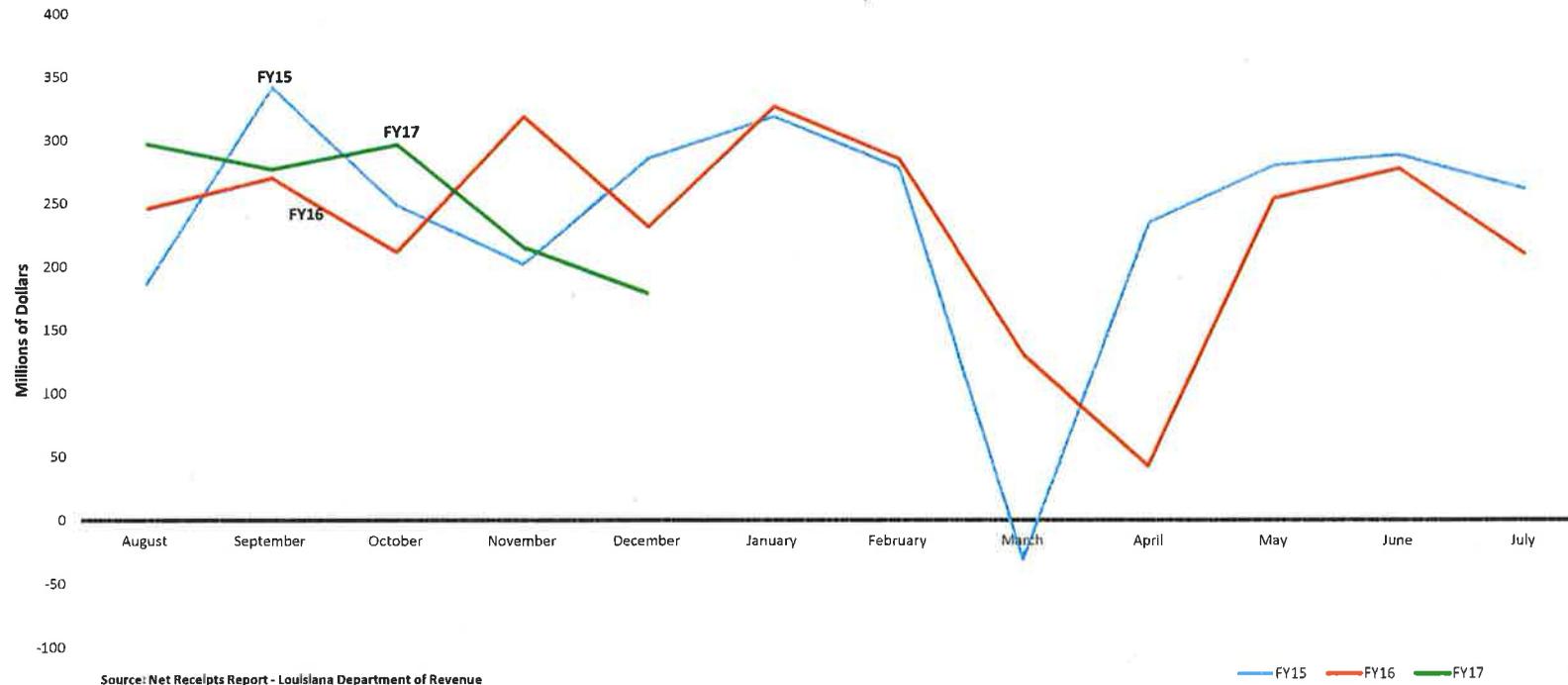
Refunds to taxpayers in Total Corporate Collections



INDIVIDUAL INCOME TAX MONTHLY COLLECTIONS
 In millions of dollars (adjusted for Amnesty collections)

	FY13	FY14	FY15	FY16	FY17
August	190	181	186	246	297
September	241	340	342	270	277
October	281	242	248	211	296
November	210	185	202	318	215
December	242	264	285	231	179
January	407	379	318	326	
February	217	242	278	285	
March	-100	-72	-31	130	
April	277	207	235	43	
May	271	219	279	253	
June	233	317	288	277	
July	280	253	261	210	

Total Individual Income Tax Collections
 Monthly by Fiscal Year (August to July)

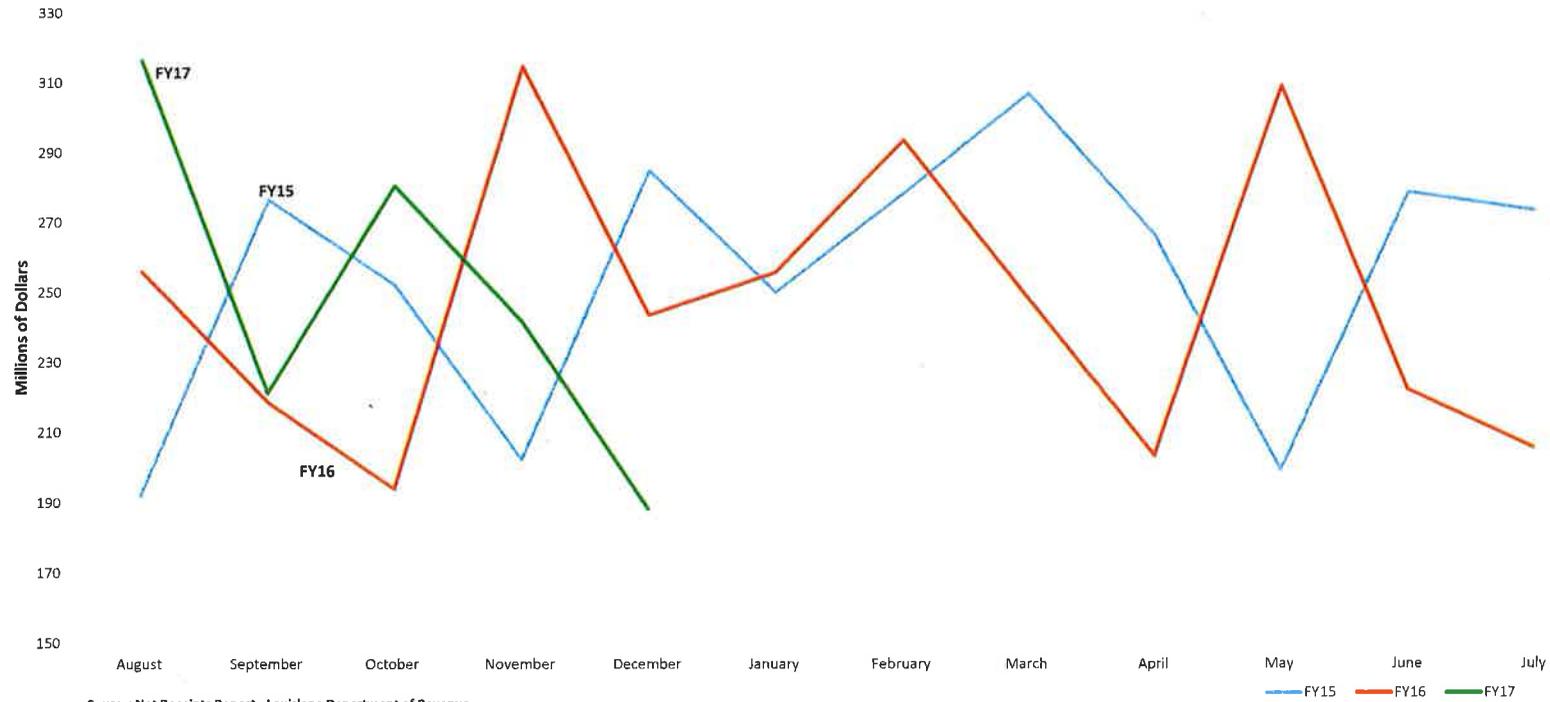


Source: Net Receipts Report - Louisiana Department of Revenue

GROSS WITHHOLDINGS (BEFORE REFUNDS TO TAXPAYERS)
 In millions of dollars (adjusted for Amnesty collections)

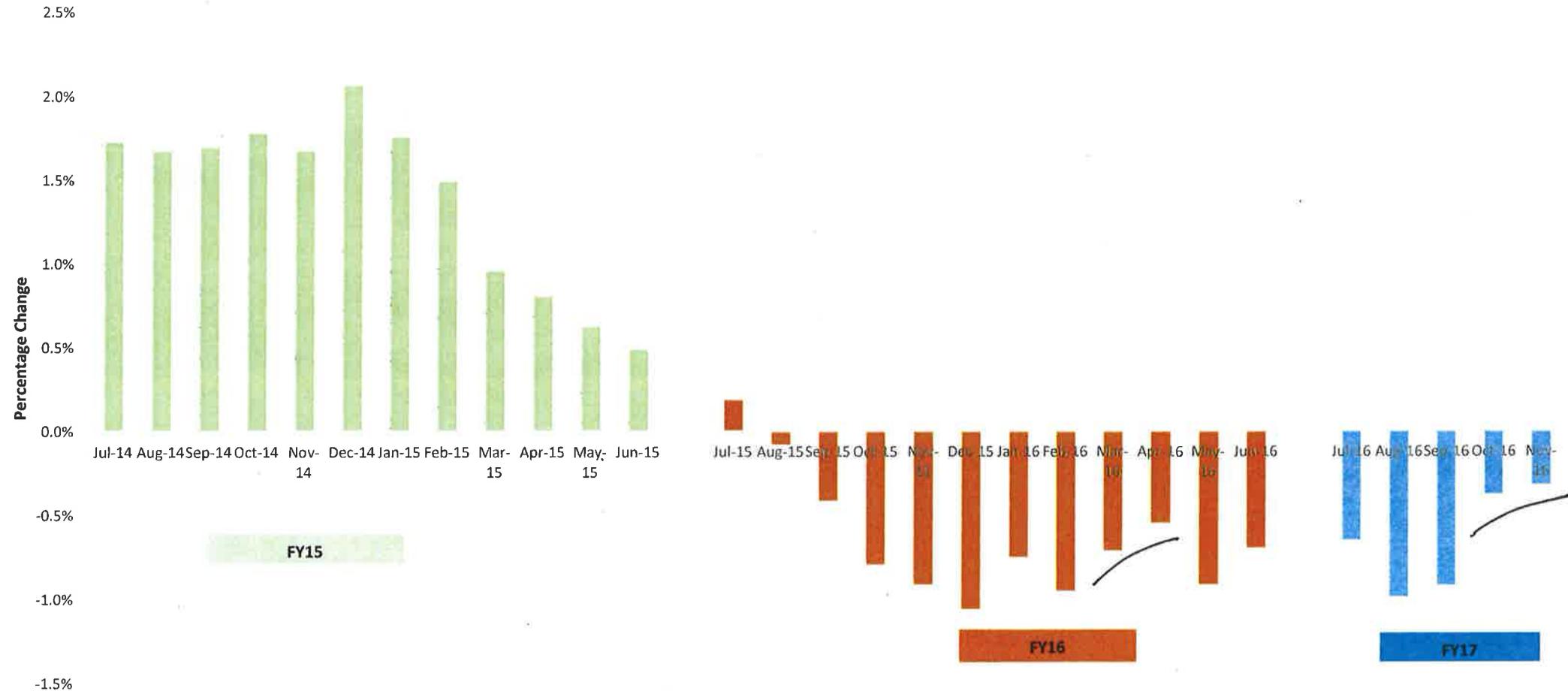
	FY13	FY14	FY15	FY16	FY17
August	198	185	192	256	317
September	190	265	277	218	221
October	278	243	252	194	281
November	220	198	202	315	242
December	243	275	285	243	188
January	285	289	250	256	
February	238	243	278	293	
March	173	237	307	248	
April	297	252	266	203	
May	217	189	199	309	
June	193	279	279	222	
July	283	261	273	206	

Gross Withholdings (before refunds)
 Monthly by Fiscal Year (August to July)

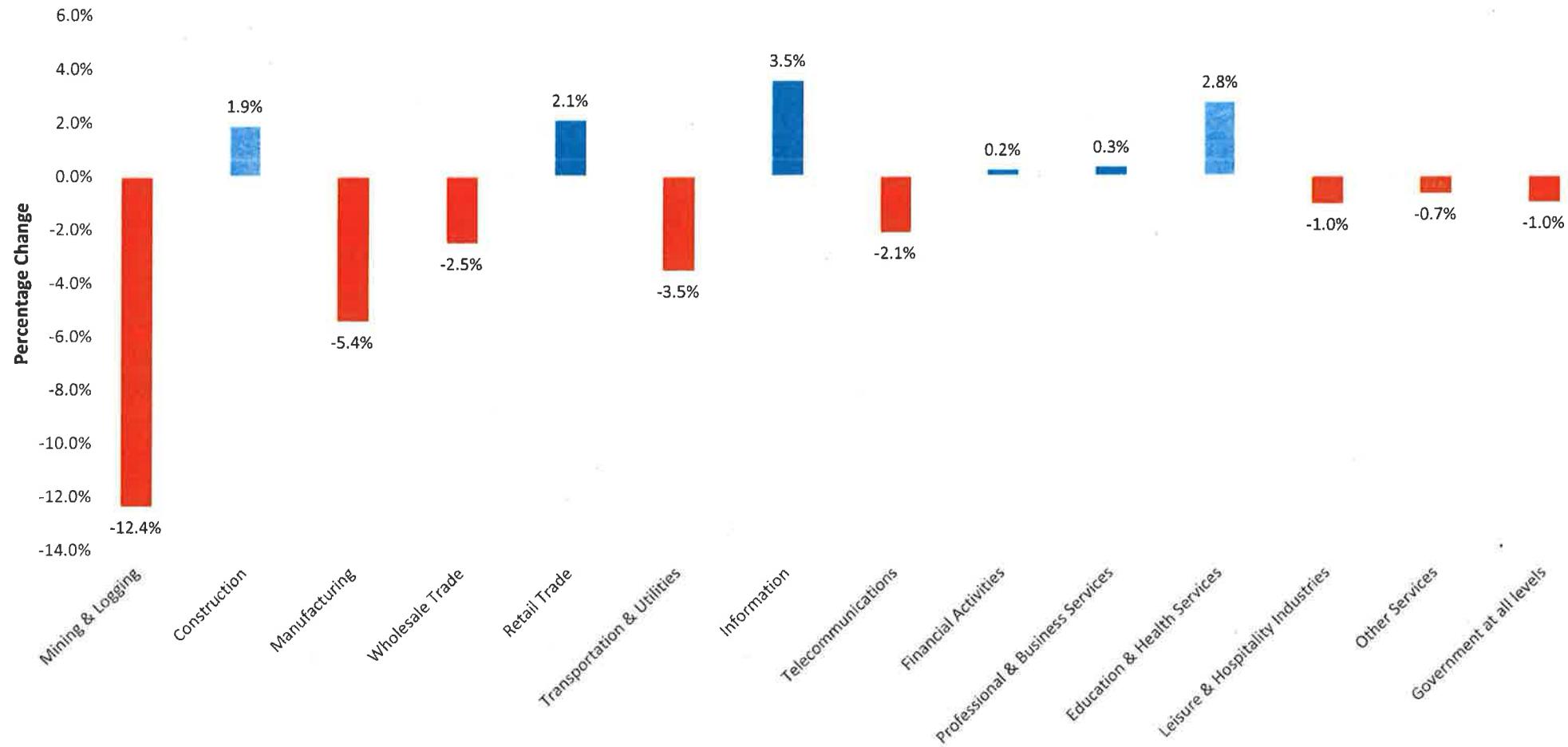


Source: Net Receipts Report - Louisiana Department of Revenue

Total Employment Change in % Year over Year - Data until November 2016

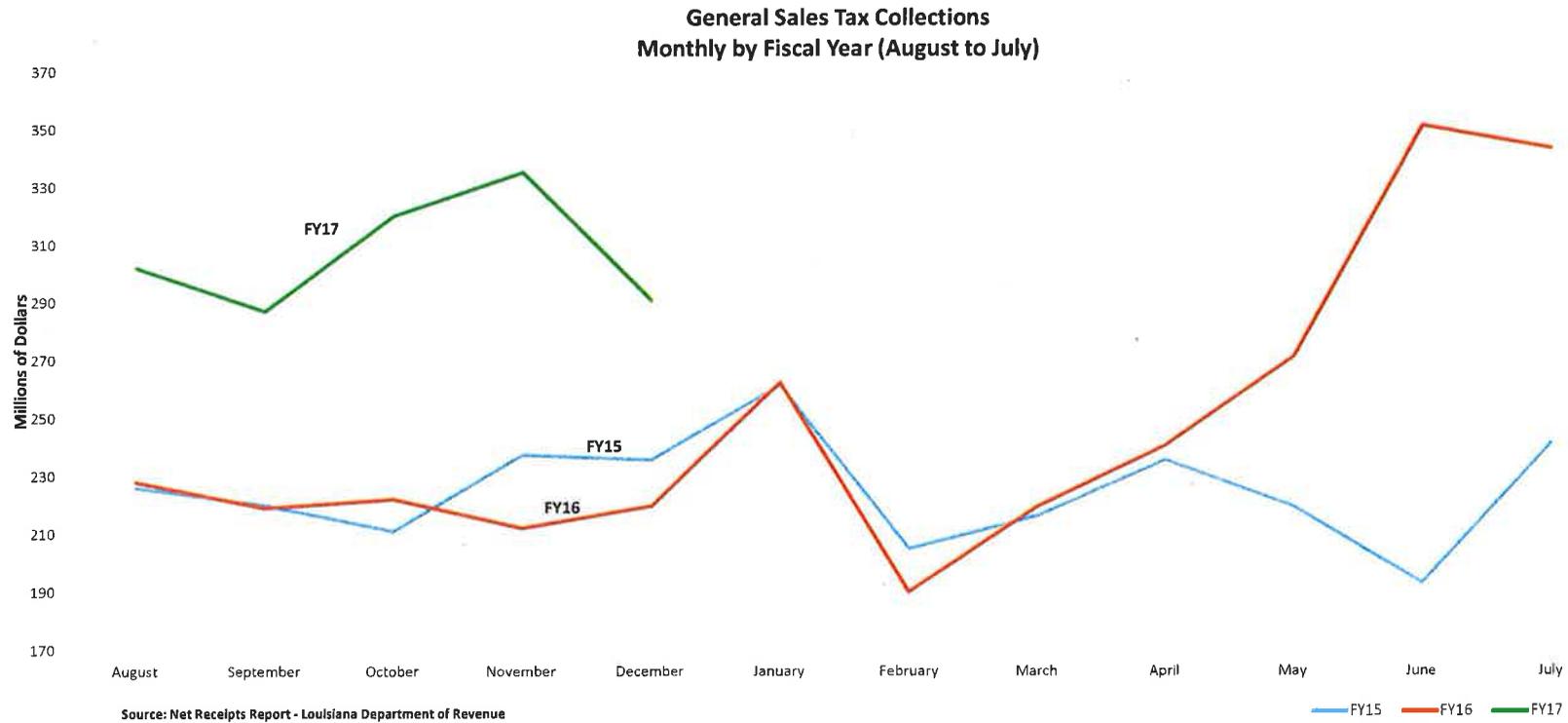


Employment Change by Sector Year over Year - November 2016



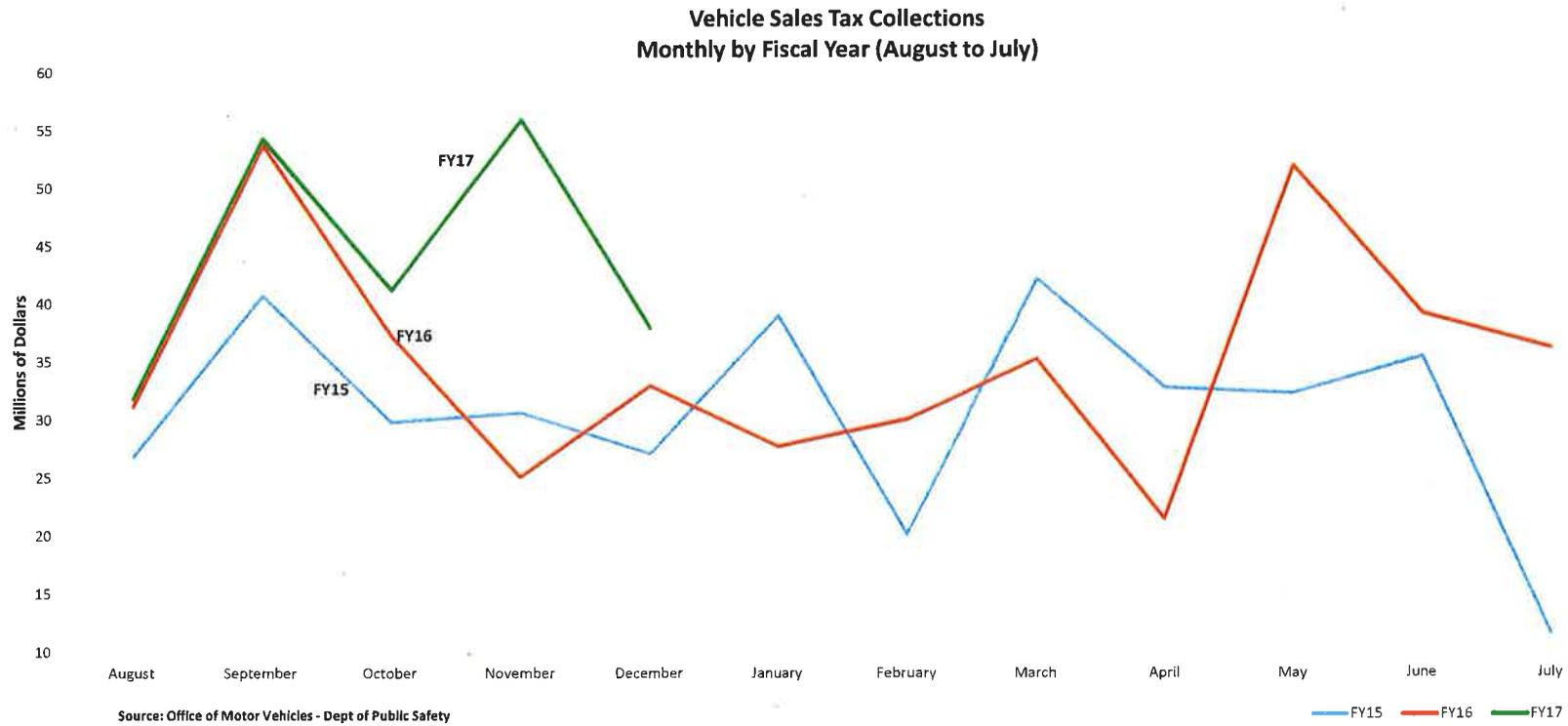
GENERAL SALES TAX MONTHLY COLLECTIONS
 In millions of dollars (adjusted for Amnesty collections)

	FY13	FY14	FY15	FY16	FY17
August	193	209	226	228	302
September	200	210	220	219	287
October	214	212	211	222	320
November	217	219	237	212	335
December	216	212	236	220	291
January	255	258	261	262	
February	201	189	205	190	
March	196	219	216	219	
April	231	229	235	240	
May	235	234	219	271	
June	226	237	193	351	
July	219	239	241	343	



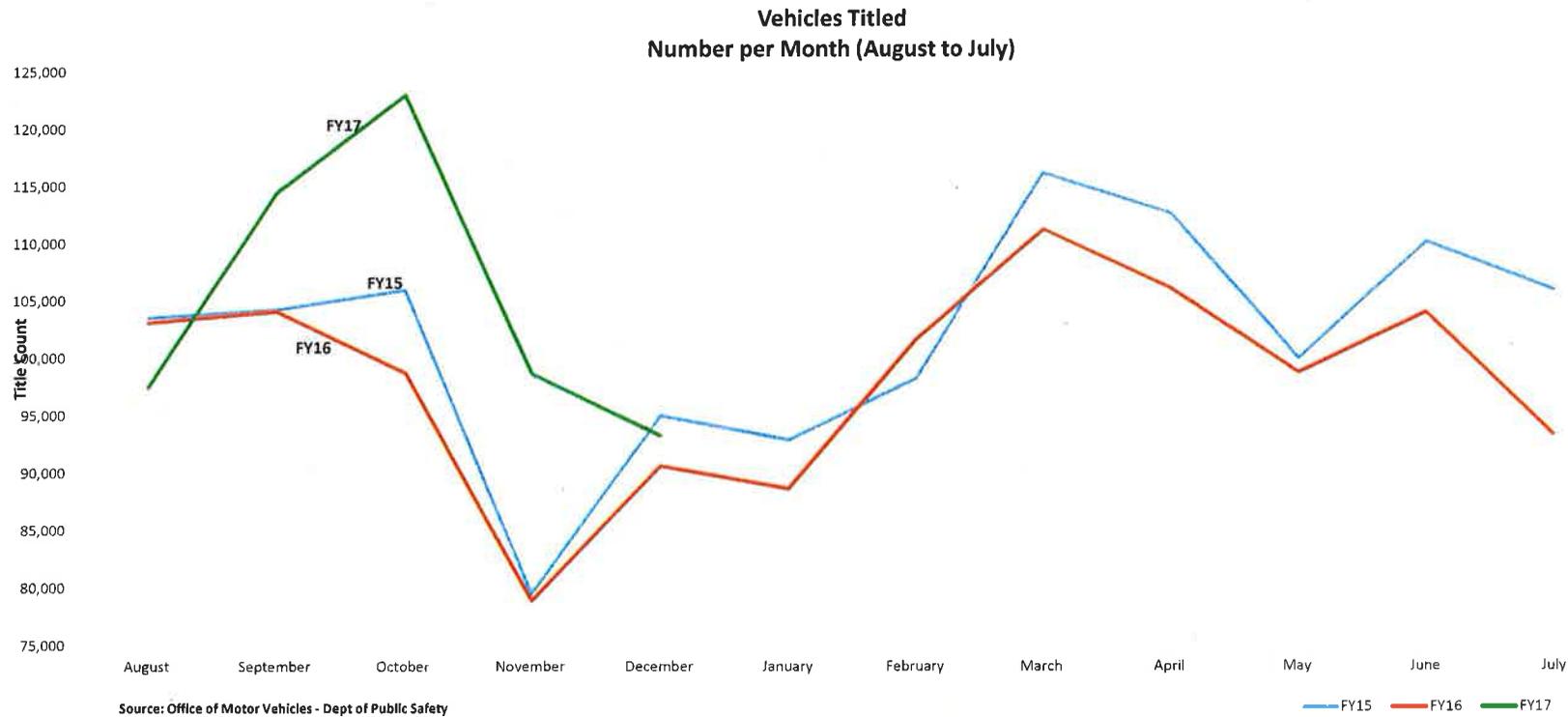
VEHICLE SALES TAX MONTHLY COLLECTIONS
In millions of dollars

	FY13	FY14	FY15	FY16	FY17
August	26	29	27	31	32
September	27	32	41	54	54
October	32	32	30	37	41
November	25	29	31	25	56
December	23	26	27	33	38
January	32	27	39	28	
February	29	29	20	30	
March	31	33	42	35	
April	34	35	33	21	
May	34	33	32	52	
June	26	27	35	39	
July	29	30	12	36	



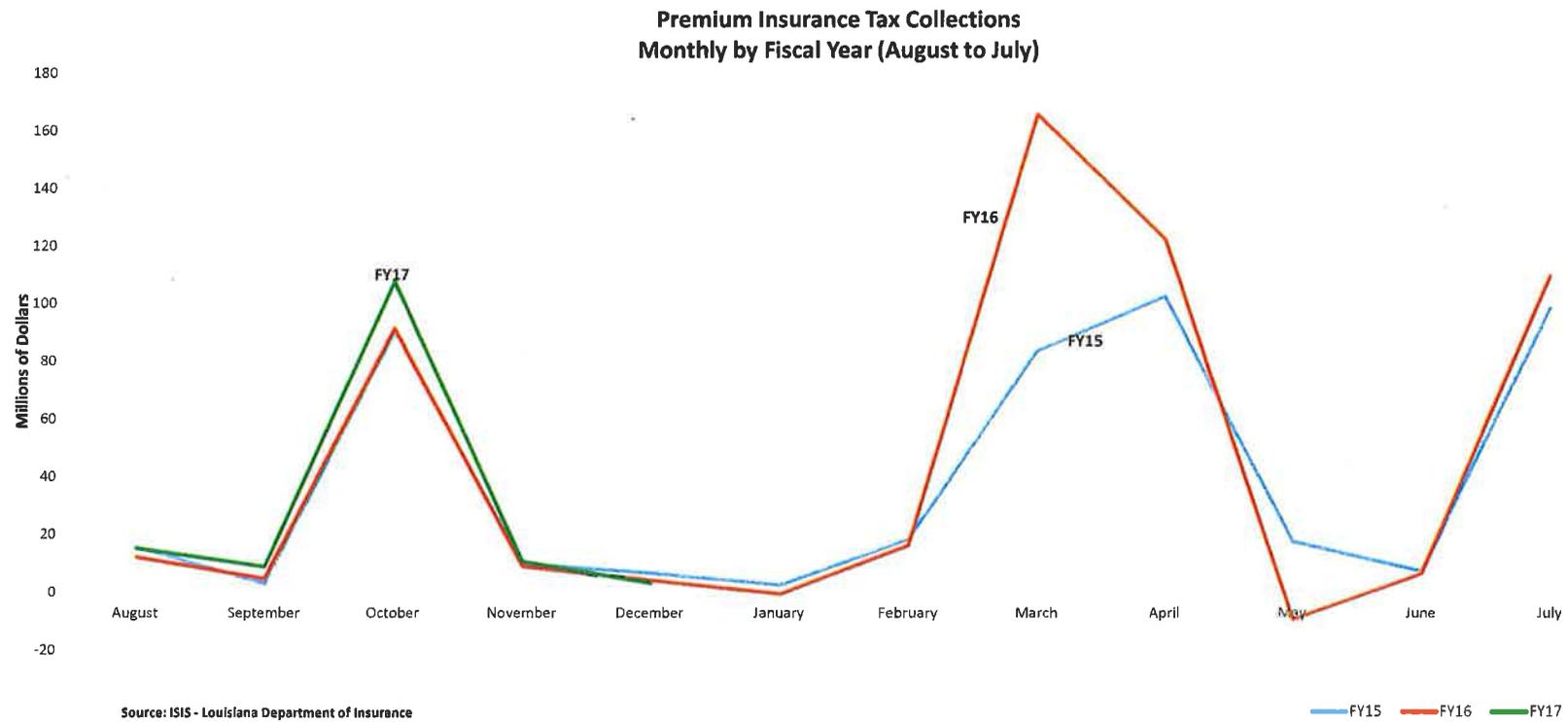
VEHICLES TITLED PER MONTH - VOLUME
Number per month

	FY13	FY14	FY15	FY16	FY17
August	92,966	106,455	103,539	103,110	97,463
September	90,120	96,993	104,232	104,092	114,439
October	104,614	101,508	105,959	98,744	123,013
November	85,019	78,951	79,524	78,910	98,662
December	78,500	81,168	95,010	90,616	93,275
January	95,324	84,867	92,866	88,620	
February	93,657	101,873	98,216	101,645	
March	109,498	110,872	116,113	111,206	
April	115,054	109,460	112,599	106,053	
May	108,440	106,136	99,982	98,730	
June	97,197	102,601	110,107	103,965	
July	105,463	106,123	105,893	93,314	



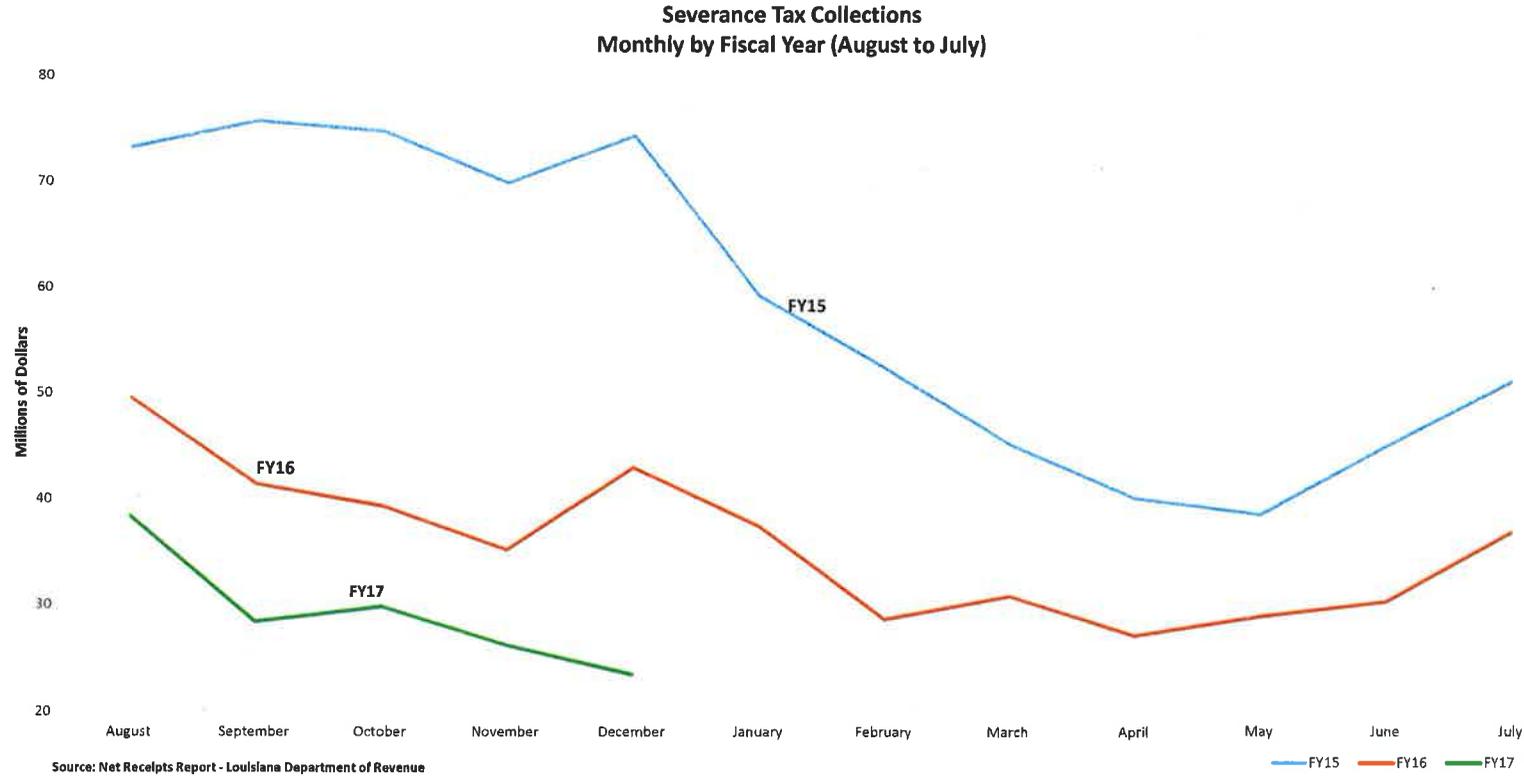
PREMIUM INSURANCE TAX - TOTAL COLLECTIONS MONTHLY
In millions of dollars

	FY13	FY14	FY15	FY16	FY17
August	8	9	16	12	15
September	6	6	3	5	9
October	77	84	90	91	108
November	9	14	10	9	10
December	6	9	7	4	3
January	2	1	2	-1	
February	11	10	18	16	
March	70	98	83	166	
April	127	106	102	122	
May	13	9	17	-10	
June	2	5	7	6	
July	89	93	98	109	



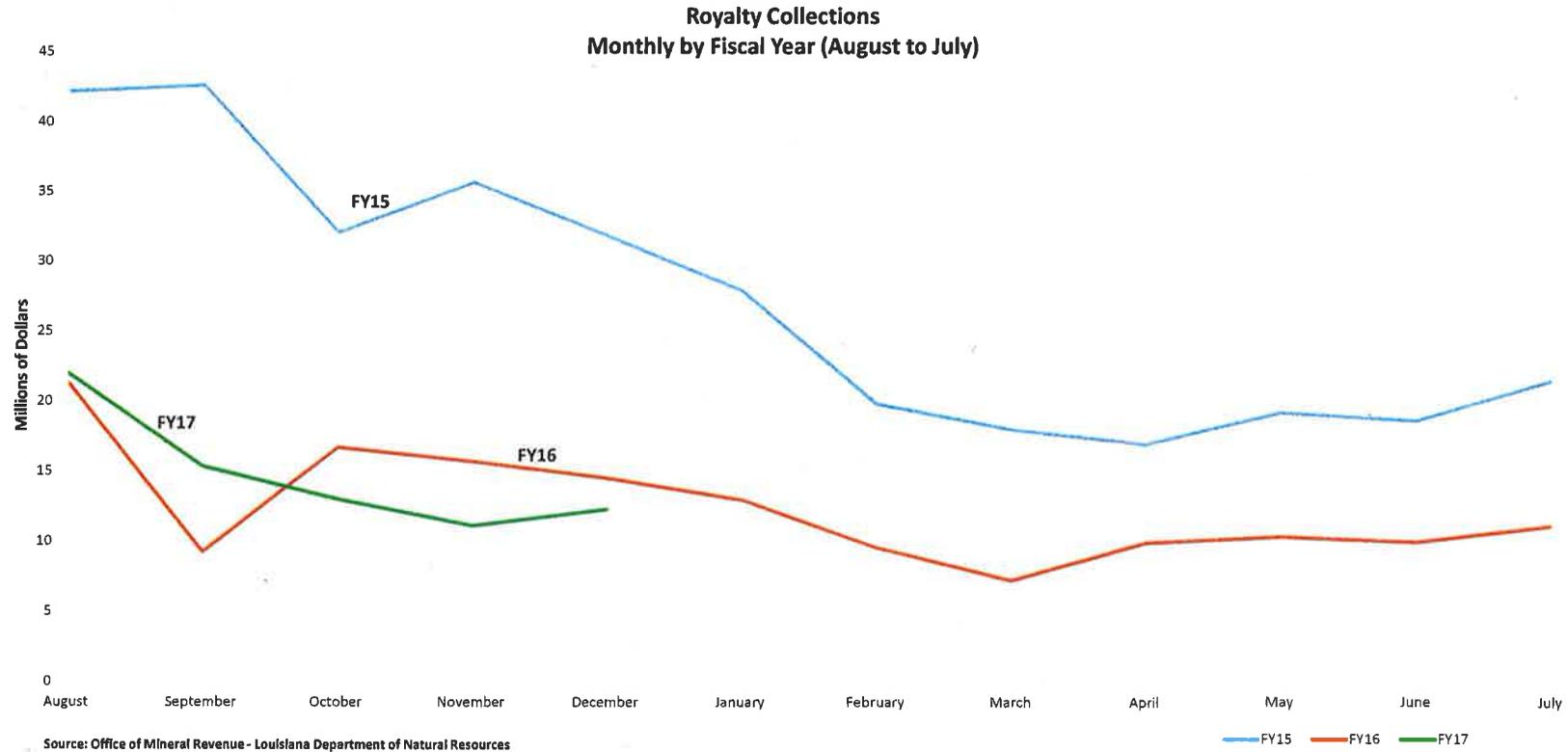
SEVERANCE TAX MONTHLY COLLECTIONS
 In millions of dollars (adjusted for Amnesty collections)

	FY13	FY14	FY15	FY16	FY17
August	62	75	73	50	38
September	64	74	76	41	28
October	64	68	75	39	30
November	68	67	70	35	26
December	75	63	74	43	23
January	71	65	59	37	
February	78	65	52	29	
March	74	61	45	31	
April	66	68	40	27	
May	73	74	39	29	
June	74	68	45	30	
July	75	84	51	37	



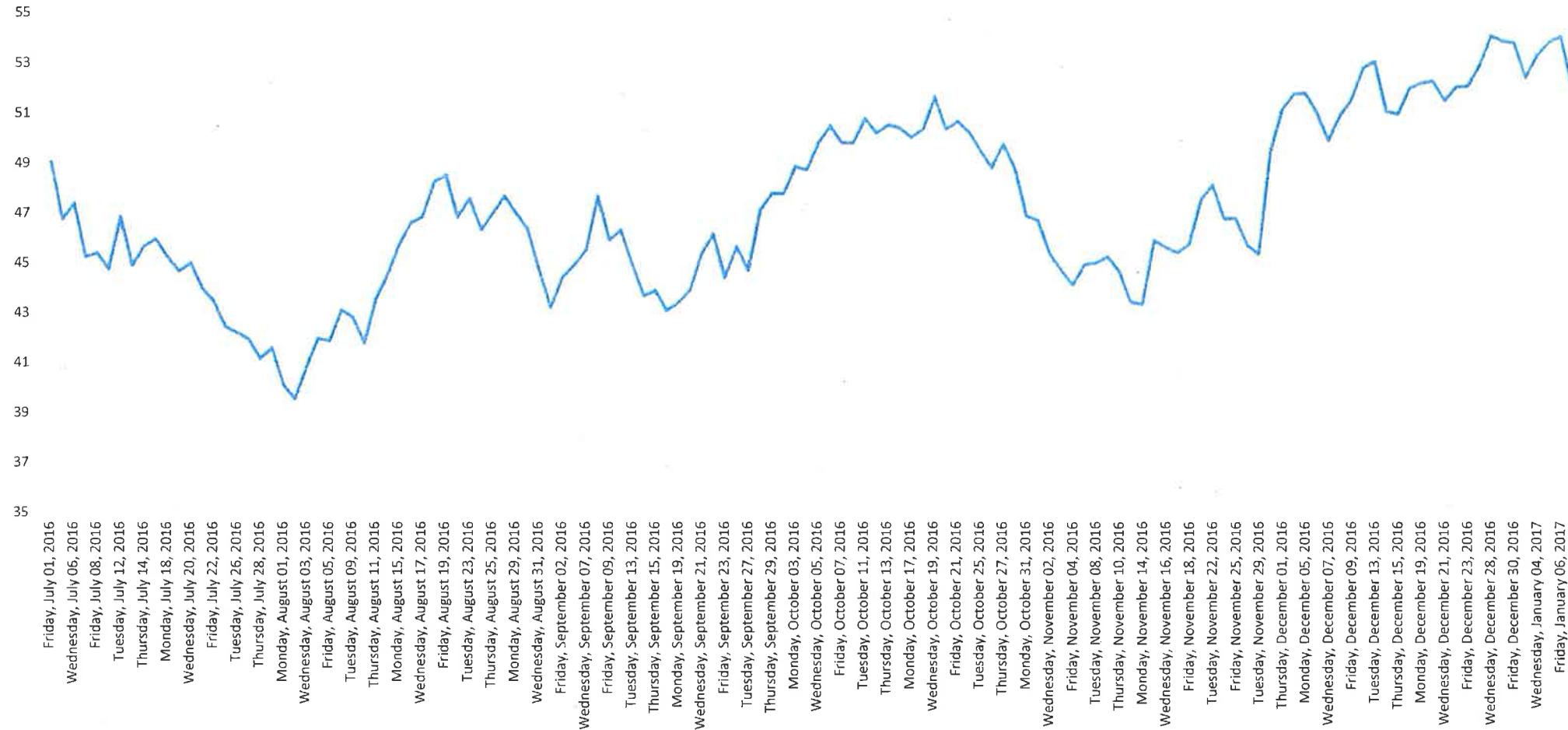
ROYALTY MONTHLY CASH COLLECTIONS
In millions of dollars

	FY13	FY14	FY15	FY16	FY17
August	34	41	42	21	22
September	36	44	43	9	15
October	36	44	32	17	13
November	30	44	36	16	11
December	46	37	32	14	12
January	39	34	28	13	
February	41	37	20	10	
March	47	32	18	7	
April	40	38	17	10	
May	40	42	19	10	
June	44	38	19	10	
July	42	34	21	11	



West Texas Intermediate (WTI) Daily Price
FY17

Last data: Monday, January 9, 2017

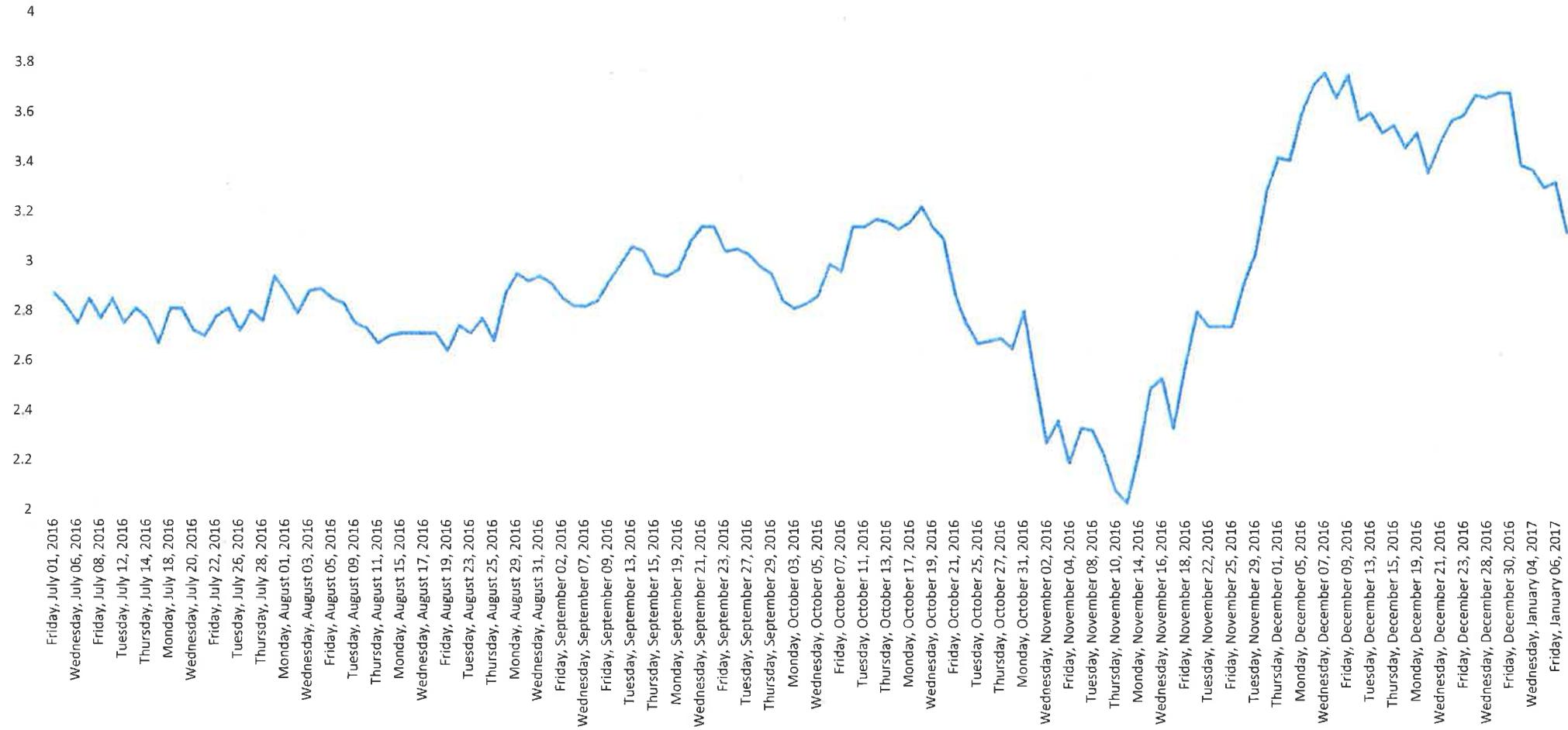


DAILY AVERAGE FY16:
DAILY AVERAGE FY17:

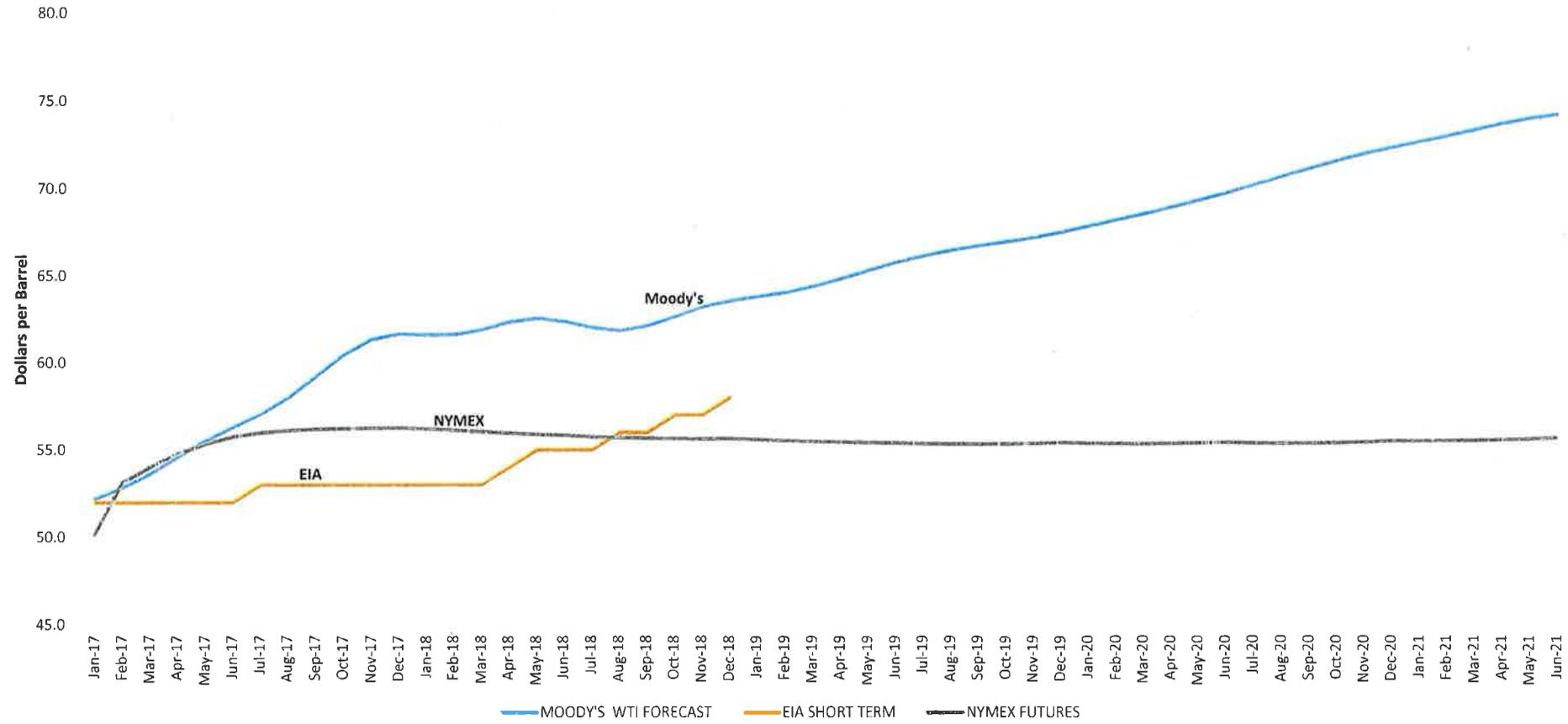
41.97
47.21

Henry Hub Daily Natural Gas Spot Price - price per mmbTU FY17

Last data: Monday, January 9, 2017



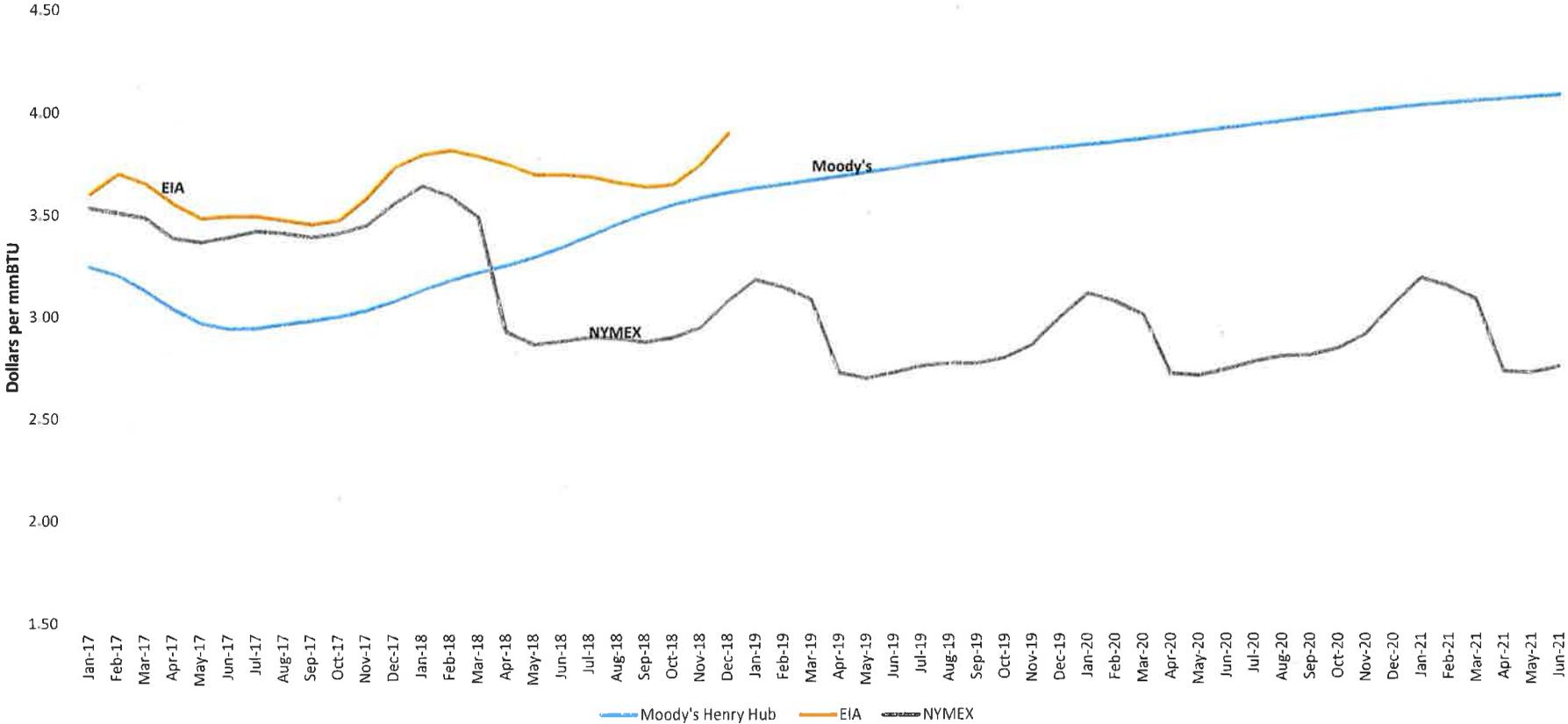
Crude Oil Price Forecasts by Moody's, EIA and the NYMEX



OPB Proposed Oil Price Forecast (dollars per barrel)

FY17	\$48.74
FY18	\$52.96
FY19	\$53.37
FY20	\$53.93
FY21	\$54.55

Henry Hub Natural Gas Price forecasts by Moody's, EIA and the NYMEX
Per million British Thermal Units (mmbTU)



OPB Proposed Natural Gas Price Forecast (dollars per mmbTU) and projected Severance Tax Rate

FY17	\$3.06	\$9.8 ¢ (this is the actual rate for FY16)
FY18	\$3.26	\$11.2 ¢
FY19	\$3.10	\$13.0 ¢
FY20	\$3.16	\$12.9 ¢
FY21	\$3.26	\$13.3 ¢