NEW MEXICO TAX RESEARCH INSTITUTE

Fiscal Impacts of Oil and Natural Gas Production in New Mexico
Preliminary Report

January 2018

Share of General Fund Attributed to Current and Historical Oil and Gas Production Taxes and Royalties

	FY17			FY 16			FY 15			FY14		
	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %
Gross Receipts	2,013.5	103.8	5.2%	1,975.4	103.7	5.3%	2,095.2	177.4	8.5%	1,992.0	153.7	7.7%
Compensating	48.5	10.8	22.2%	46.9	18.9	40.2%	71.8	16.9	23.6%	78.3	13.7	17.6%
Motor Vehicle Excise Tax	145.2	**	**	150.4	**	**	138.7	**	**	133.3	**	**
Personal Income Tax	1,380.7	94.0	6.8%	1,327.2	107.8	8.1%	1,339.7	128.8	9.6%	1,254.9	143.2	11.4%
Corporate Income-net of refunds	70.2	9.8	14.0%	118.5	16.6	14.0%	254.5	35.6	14.0%	196.8	42.0	21.4%
Oil & Gas School Tax, excluding Advance Payments	304.3	304.3	100.0%	236.8	236.8	100.0%	375.4	375.4	100.0%	500.7	500.7	100.0%
Oil Conservation, excluding Advance Payments	16.8	16.8	100.0%	10.8	10.8	100.0%	19.2	19.2	100.0%	26.2	26.2	100.0%
Natural Gas Processors	10.3	24.2	100.0%	20.4	23.3	100.0%	18.6	18.2	100.0%	16.2	16.2	100.0%
Land Grant Perm. Fund Income	541.5	524.1	96.8%	555.1	537.0	96.7%	502.8	486.6	96.8%	449.4	434.8	96.7%
Earnings on State Balances****	-3.2	-0.5	14.0%	21.6	3.4	15.9%	17.0	2.9	17.2%	19.0	3.0	15.7%
Severance Tax Perm. Fund Income	200.4	174.4	87.0%	193.5	168.4	87.0%	182.7	158.1	86.5%	170.5	147.6	86.6%
Federal Mineral Leasing	435.7	407.6	93.6%	390.0	363.1	93.1%	542.2	507.6	93.6%	569.9	540.7	94.9%
Land Office Income	71.5	49.7	69.5%	47.8	26.4	55.2%	42.2	26.6	63.0%	47.5	33.0	69.4%
Recurring Reversions *****	76.5	22.8	29.8%	55.2	18.2	33.0%	58.6	19.2	32.8%	101.8	31.7	31.2%
All other recurring revenues*	574.0	0.0	0.0%	709.3	0.0	0.0%	562.5	0.0	0.0%	518.7	0.0	0.0%
TOTAL RECURRING REVENUES	5,886.0	1,741.8	29.6%	5,859.0	1,634.5	27.9%	6,221.0	1,972.5	31.7%	6,075.0	2,086.5	34.3%

Direct Taxes, Rents, Royalties and Lease Bonus Payments	14.0%	823.2	47.3%	11.9%	695.9	42.6%	16.1%	999.5	50.7%	19.3%	1,172.5	56.2%
Indirect Taxes (including PIT)	3.7%	220.1	12.6%	4.0%	233.1	14.3%	5.3%	328.3	16.6%	5.5%	331.6	15.9%
STPF and LGPF Distributions	11.9%	698.5	40.1%	12.0%	705.4	43.2%	10.4%	644.7	32.7%	9.6%	582.4	27.9%
	29.6%	1,741.8	100.0%	27.9%	1,634.5	100.0%	31.7%	1,972.5	100.0%	34.3%	2,086.5	100.0%

* Includes MSA (Tobacco Settlement Revenues) that have been appropriated in that year, but do not include earnings of the TSPF or MSA revenues deposited to the corpus of the TSPF.
** Analysts will use an IMPLAN model to calculate a plausible model for purchases of cars and trucks by the OGAS production industry. This is a direct tax paid by the purchasers of the vehicles and is appropriate to include in this study.
*** The coal conservation tax has been separated in this version of the study and is included in "unlisted recurring revenues". Because of this change, the OGAS % is shown as 100%
**** A substantial portion of the treasurer's balances consist of general fund reserves and the tax administration account. For the purposes of this study, we will use 50% of the previous fiscal year's OGAS % for the portion of treasure's balances to add to other OGAS contributions.
***** These "recurring reversions" are considered to contribute at the average of previous two fiscal year's OGAS contribution %.

	FY13			FY 12			FY 11			FY 10		
	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %
Gross Receipts	1,917.7	128.5	6.7%	1,928.5	139.6	7.2%	1,822.5	94.0	5.2%	1,634.4	56.2	3.4%
Compensating	50.9	15.8	31.1%	62.1	15.4	24.8%	69.1	11.6	16.8%	50.9	5.0	9.9%
Motor Vehicle Excise Tax	125.5	**	**	114.7	**	**	103.7	**	**	92.3	**	**
Personal Income Tax	1,240.9	124.0	10.0%	1,150.5	121.5	10.6%	1,096.9	56.2	5.1%	956.5	51.9	5.4%
Corporate Income-net of refunds	267.2	54.0	20.2%	281.0	56.8	20.2%	229.8	46.5	20.2%	125.1	25.3	20.2%
Oil & Gas School Tax, excluding Advance Payments	379.9	379.9	100.0%	399.6	399.6	100.0%	376.1	376.1	100.0%	324.5	324.5	100.0%
Oil Conservation, excluding Advance Payments* **	19.6	19.6	100.0%	20.2	20.2	100.0%	18.2	18.2	100.0%	15.2	15.2	100.0%
Natural Gas Processors	24.2	24.2	100.0%	23.3	23.3	100.0%	18.2	18.2	100.0%	40.4	40.4	100.0%
Land Grant Perm. Fund Income	440.9	425.8	96.6%	461.7	445.6	96.5%	446.2	430.5	96.5%	437.1	421.7	96.5%
Earnings on State Balances****	14.7	2.3	15.5%	17.4	2.8	16.2%	17.6	3.1	17.3%	22.1	3.1	14.0%
Sev Tax Perm. Fund Income	176.2	152.0	86.3%	183.4	157.8	86.0%	184.6	158.7	86.0%	187.1	160.8	85.9%
Federal Mineral Leasing	459.6	406.4	93.3%	502.6	362.7	93.0%	411.8	506.9	93.5%	355.3	531.8	93.3%
Land Office Income	44.6	48.4	67.7%	92.5	41.6	87.1%	65.6	33.5	79.4%	67.7	40.3	84.9%
Recurring Reversions *****	65.8	20.8	31.7%	65.9	22.0	33.5%	73.5	23.4	31.8%	391.3	117.2	29.9%
All other recurring revenues*	519.6	0.0	0.0%	538.2	0.0	0.0%	555.0	0.0	0.0%	490.8	0.0	0.0%
TOTAL RECURRING REVENUES	5,747.3	1,801.8	31.3%	5,841.7	1,808.9	31.0%	5,488.8	1,776.9	32.4%	5,190.8	1,793.4	34.5%

Direct Taxes and Royalties	16.5%	948.3	54.4%	15.7%	919.6	56.3%	18.4%	1,011.0	51.3%	18.9%	982.5	47.1%
Indirect Taxes	4.8%	275.7	15.8%	4.9%	285.8	17.5%	3.2%	176.7	9.0%	4.4%	228.4	10.9%
STPF and LGPF Distributions	10.1%	577.8	33.2%	10.3%	603.4	36.9%	10.7%	589.2	29.9%	11.2%	582.5	27.9%
		1,801.8	100.0%		1,808.9	100.0%		1,776.9	1000%		1,793.4	100.0%

* Includes MSA (Tobacco Settlement Revenues) that have been appropriated in that year, but do not include earnings of the TSPF or MSA revenues deposited to the corpus of the TSPF.

** Analysts will use an IMPLAN model to calculate a plausible model for purchases of cars and trucks by the OGAS production industry. This is a direct tax paid by the purchasers of the vehicles and is appropriate to include in this study.

*** The coal conservation tax has been separated in this version of the study and is included in "unlisted recurring revenues". Because of this change, the OGAS % is shown as 100%

**** A substantial portion of the treasurer's balances consist of general fund reserves and the tax administration account. For the purposes of this study, we will use 50% of the previous fiscal year's OGAS % for the portion of treasure's balances to add to other OGAS contributions.

***** These "recurring reversions" are considered to contribute at the average of previous two fiscal year's OGAS contribution %.

	FY 09			FY 08			FY 07			FY 06		
	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %	Total Gen Fund	OGAS Portion	OGAS %
Gross Receipts	1,831.9	72.0	3.9%	1,858.4	72.6	3.9%	1,840.5	72.6	3.9%	1,689.8	76.0	4.5%
Compensating	69.9	7.9	11.3%	64.5	7.0	10.9%	61.4	7.7	12.6%	51.8	7.7	12.6%
Motor Vehicle Excise Tax	100.5	**	**	127.6	**	**	131.3	**	**	121.9	**	**
Personal Income Tax	958.5	51.5	5.4%	1,213.5	73.2	6.0%	1,180.2	68.1	5.8%	1,124.0	68.1	5.8%
Corporate Income-net of refunds	192.5	38.9	20.2%	354.6	71.7	20.2%	459.9	93.0	20.2%	377.2	76.2	20.2%
Oil & Gas School Tax, excluding Advance Payments	370.4	370.4	100.0%	557.7	557.7	100.0%	420.3	420.3	100.0%	483.2	483.2	100.0%
Oil Conservation, excluding Advance Payments	17.0	17.0	100.0%	26.0	26.0	100.0%	18.8	18.8	100.0%	21.6	21.6	100.0%
Natural Gas Processors	40.3	40.3	100.0%	30.6	30.6	100.0%	35.6	35.6	100.0%	26.8	35.6	100.0%
Land Grant Perm. Fund Income	433.5	298.5	67.7%	390.5	377.5	96.7%	364.7	352.6	96.7%	354.2	342.1	96.6%
Earnings on State Balances****	67.8	10.2	15.0%	93.7	14.6	15.6%	87.3	14.5	16.6%	64.2	8.5	13.3%
Sev Tax Perm. Fund Income	191.3	164.4	85.9%	177.2	152.0	85.8%	171.0	146.7	85.8%	171.8	147.4	85.8%
Federal Mineral Leasing	507.2	391.4	89.8%	564.2	371.7	95.3%	501.1	513.7	94.7%	556.5	542.5	95.2%
Land Office Income	36.4	28.2	77.4%	46.1	35.3	76.6%	50.4	45.2	89.7%	52.7	39.1	74.2%
Recurring Reversions *****	322.3	98.5	30.6%	59.0	18.9	32.1%	37.0	12.3	33.1%	14.3	4.2	29.0%
All other recurring revenues*	532.0	0.0	0.0%	474.3	0.0	0.0%	433.3	0.0	0.0%	480.6	0.0	0.0%
TOTAL RECURRING REVENUES	5,671.6	1,589.3	28.0%	6,037.9	1,808.8	30.0%	5,792.8	1,801.1	31.1%	5,590.7	1,852.2	33.1%

Direct Taxes and Royalties	15.8%	966.2	55.3%	18.2%	1,172.7	71.9%	19.6%	1,206.9	61.3%	21.6%	1,281.9	61.3%
Indirect Taxes	4.1%	160.2	9.2%	3.0%	106.7	6.5%	2.9%	94.9	4.8%	2.8%	80.8	3.9%
STPF and LGPF Distributions	8.2%	462.9	26.5%	8.8%	529.5	32.5%	8.6%	499.3	25.4%	8.8%	489.5	23.4%
		1,589.3	100.0%		1,808.8	100.0%		1,801.1	100.0%		1,852.2	100.0%

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** Analysts will use an IMPLAN model to calculate a plausible model for purchases of cars and trucks by the OGAS production industry. This is a direct tax paid by the purchasers of the vehicles and is appropriate to include in this study.
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	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Comparisons between Royalties on State Lands and LGPF distributions												
Royalties	435.0	406.3	653.5	726.4	494.1	512.9	398.0	316.5	459.6	459.9	390.4	405.3
LGPF Distributions (100%)	541.5	555.1	502.8	449.4	440.9	461.7	446.2	437.1	433.5	390.5	364.7	354.2
Are Royalties paid by producers greater than LGPF distributions to the General Fund?												
Over the 12-year period, royalties paid have exceeded LGPF distributions by **$280.4 million**.	-106.5	-148.8	150.7	277.0	53.2	51.2	-48.2	-120.7	26.1	69.4	25.8	51.2
Similar analysis for distributions from the STPF compared to OGAS severance taxes paid.												
OGAS Severance Taxes	322.7	469.5	420.0	525.3	399.3	436.9	378.5	332.3	453.9	514.1	423.4	469.7
STPF Distributions (100%)	200.4	193.5	182.7	170.5	176.2	183.4	184.6	187.1	191.3	177.2	171.0	171.8
Are OGAS Severance Taxes paid by producers greater than STPF distributions to the General Fund?												
Over the 12-year period, Severance Taxes paid exceed STPF distributions by almost **$3.0 billion**.	122.3	276.0	237.3	354.8	223.1	253.5	193.9	145.2	262.6	336.9	252.4	297.9

Impacts of Oil and Natural Gas Production in New Mexico on the State General Fund

Summary:

This project will be divided into three separate, but linked, reports.

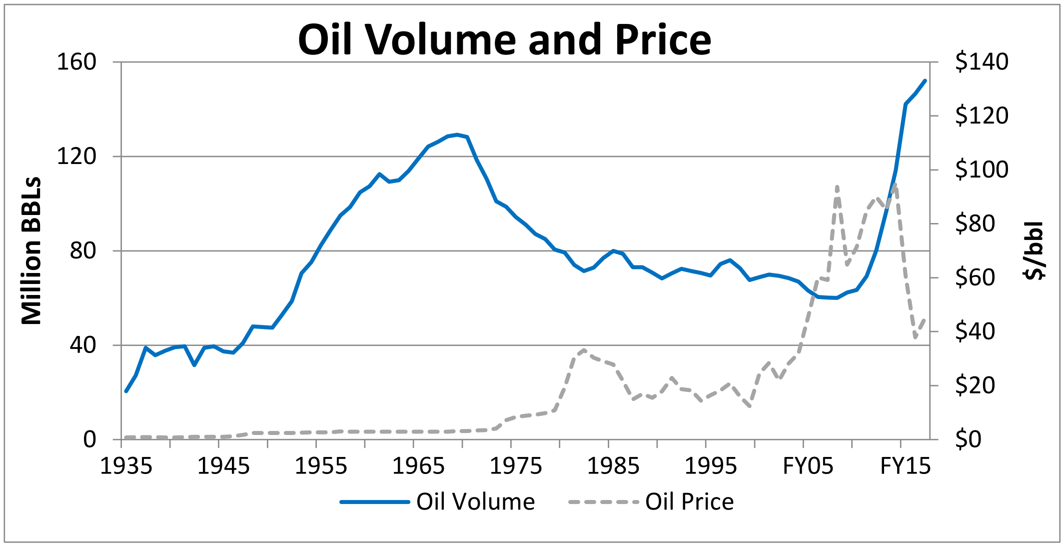
1) This report is titled, "Impacts of Oil and Natural Gas Production in New Mexico on the State General Fund" and updates some portions of the merged January 2014 report. This report restricts its attention to the question as posed in the 2014 report: "What fraction of the State General Fund can reasonably be attributed to the tax, royalty, bonus, rental and fee revenue contributed directly or indirectly, currently and historically, by major and independent oil, gas and CO2 producers and support companies?"

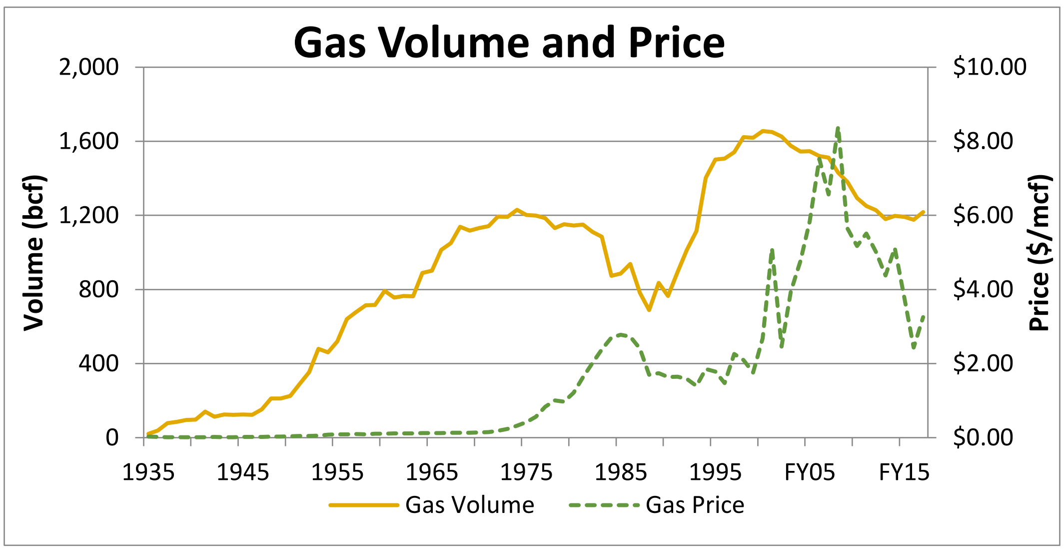
2) A separate report is titled, "Impacts of Oil and Natural Gas Production in New Mexico on the various producing and non-producing counties in the state. In the January 2014 report, data on funding of K-12 education, funding of higher education and funding of authorized capital projects in each county were completely detailed. In this report to date, the direct impacts from gross receipts taxes, ad valorem production taxes and ad valorem production equipment taxes have been updated for the interval between FY 14 and FY 17 for the 13 producing counties. The data for updating these elements for the non-producing counties have been extracted and will be provided soon. For the purpose of estimating the impact on producing and non-producing counties, there has been relatively modest change in either the General Fund OGAS % or in the K-12 or higher education funding. No new insights will be gained from updating these portions of the county reports. Capital outlay, funded primarily from Severance Tax Bonds supported by Oil and Gas Severance Taxes paid by the OGAS industry, continue to be a critical interest throughout the state. However, solvency measures taken in the FY10 through FY12 period and again last year, indicate that capital outlay funding needs to be reformed. There is a large difference between projects that are funded in the annual capital outlay authorization bill and in the amount and timing of actual projects built through this funding mechanism. While we can continue to update the authorizations, actual construction remains difficult to track from outside the process.

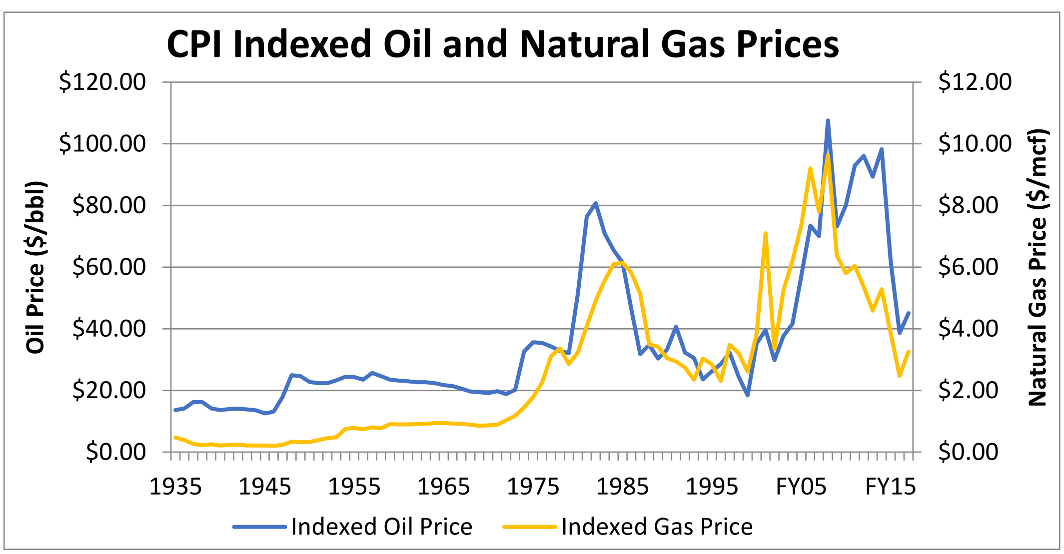
3) The third report is titled, "An Updated Profile of Oil and Natural Gas Production in the State." Five charts drawn from this report are shown on the facing pages. First, note that each current month's crude oil volume sets a record. The previous high was in 1970 just prior to the 1973 oil embargo. Notice also that the state has transitioned from a natural gas province to a crude oil province, with the crossover occurring about in mid- 2010. The change was primarily driven by the technological advances of horizontal drilling and "fracking." Other stories Include the decline of replacement drilling for natural gas in the San Juan, the decline in use of CO2 for enhanced recovery, the relatively high transportation and processing costs in the San Juan.

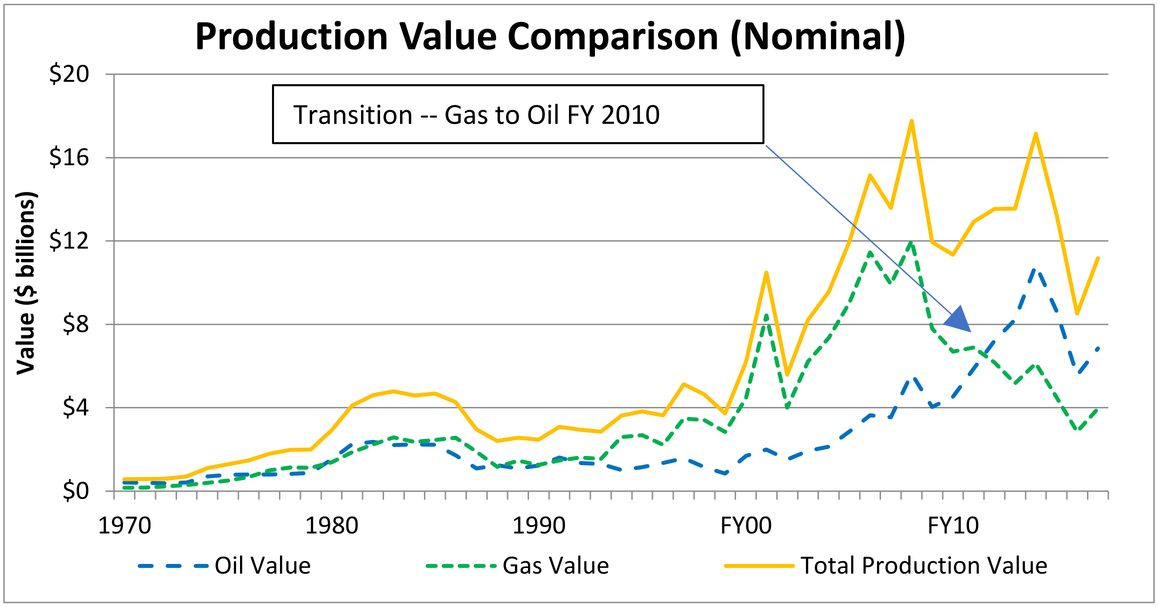
Historical OGAS Volume Records				**Historical OGAS Production Value Records**				
				($ in billions)	Nominal	Year	CPI Indexed **	Year
Oil	1970	129.2 million bbls		**Oil**	$10.86	FY 14	$11.12	FY 14
	FY 2017	152.1 million bbls		**Gas**	$12.01	FY 08	$13.99	FY 06
Gas	1975	1.202 bcf		**Total**	$17.76	FY 08	$20.39	FY 08
	FY 2001	1,650 bcf						

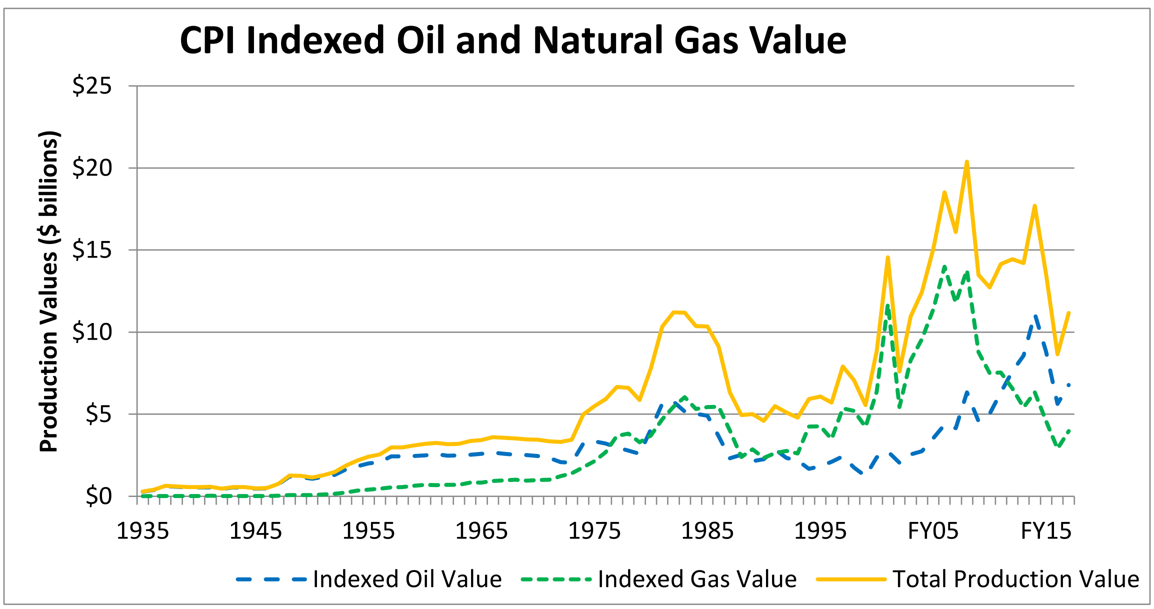
** (2017 = 100)


Oil Volume and Price
Million BBLs
160
120
80
40
0
$140
$120
$100
$80
$60
$40
$20
$0
$/bbl
1935
1945
1955
1965
1975
1985
1995
FY05
FY15
Oil Volume
Oil Price


Gas Volume and Price
Volume (bcf)
2,000
1,600
1,200
800
400
0
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
Price ($/mcf)
1935
1945
1955
1965
1975
1985
1995
FY05
FY15
Gas Volume
Gas Price


CPI Indexed Oil and Natural Gas Prices
Oil Price ($/bbl)
$120.00
$100.00
$80.00
$60.00
$40.00
$20.00
$0.00
$12.00
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
Natural Gas Price ($/mcf)
1935
1945
1955
1965
1975
1985
1995
FY05
FY15
Indexed Oil Price
Indexed Gas Price


Production Value Comparison (Nominal)
Transition -- Gas to Oil FY 2010
Value ($ billions)
$20
$16
$12
$8
$4
$0
1970
1980
1990
FY00
FY10
Oil Value
Gas Value
Total Production Value


CPI Indexed Oil and Natural Gas Value
Production Values ($ billions)
$25
$20
$15
$10
$5
$0
1935
1945
1955
1965
1975
1985
1995
FY05
FY15
Indexed Oil Value
Indexed Gas Value
Total Production Value

Impacts of Oil and Natural Gas Production in New Mexico on the State General Fund

- For the period from FY 06 through FY 07, the average contribution of the OGAS production industry to the State General Fund has been 31.2%. See tables on pages 1, 2 and 3. See charts on page 4.
- This report chooses to define this contribution in a somewhat unconventional fashion:
  (1) Direct contributions are of emergency school tax payments, natural gas processors tax payments, land maintenance fund (State Land Office) residual from lease bonuses on state lands and the sharing percentage of OGAS production on federal lands.
  (2) Somewhat more subtle direct contributions are from:
    (a) Gross receipts tax is included because the only NAICS codes included are "in the industry". That is, OGAS drilling, OGAS support services, oil and gas construction, oil and natural gas pipelines are all part of the OGAS producing industry.
    (b) Compensating taxes – primarily on well head equipment purchased from outside the state, but paid directly by producers; and
    (c) Corporate Income taxes paid by producing and support companies;
  (3) Indirect contributions include some other sources:
    (a) Personal Income taxes paid by employees of producing and support companies, by investors and royalty holders that are subject to Oil and Gas Withholding payments, as well as investors in producing and support companies that operate as pass-through entities. These latter individuals report their income on the New Mexico personal income tax returns and may or may not be subject to the Oil and Gas Withholding program;
    (b) A small portion of the negative earnings on state balances was included; and
    (c) A portion of recurring reversions (measured by the average of the previous two-years of contribution percentage).
  (4) Investment returns from historical and current royalty payments for production of oil or gas on state lands, or historical and current severance taxes. This inclusion was somewhat controversial in the January 2014 report. However, these inclusions are explained in two ways. The exact percentage of "ownership" of the two permanent funds can and has been established with a careful analysis of relative contributions back to 1898 in the case of the LGPF and 1973 in the case of the STPF. There is no doubt the original source of funds establishing the funds are royalties paid on OGAS production on state lands (LGPF – 96.6%) and OGAS severance taxes paid on OGAS production in the state (STPF – averaging 87%).

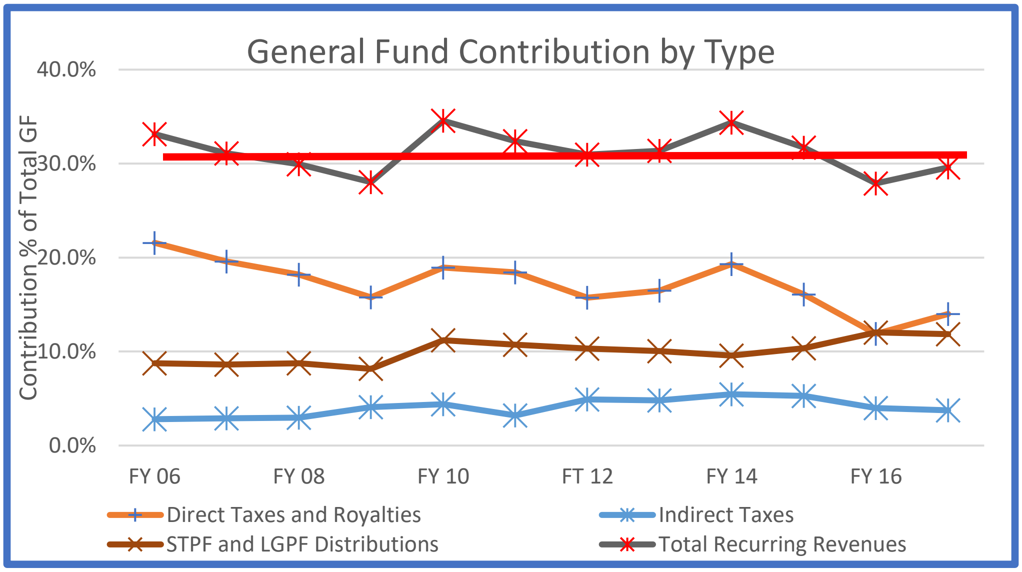
      The second rationale, however, is more interesting. See the table on page 4.

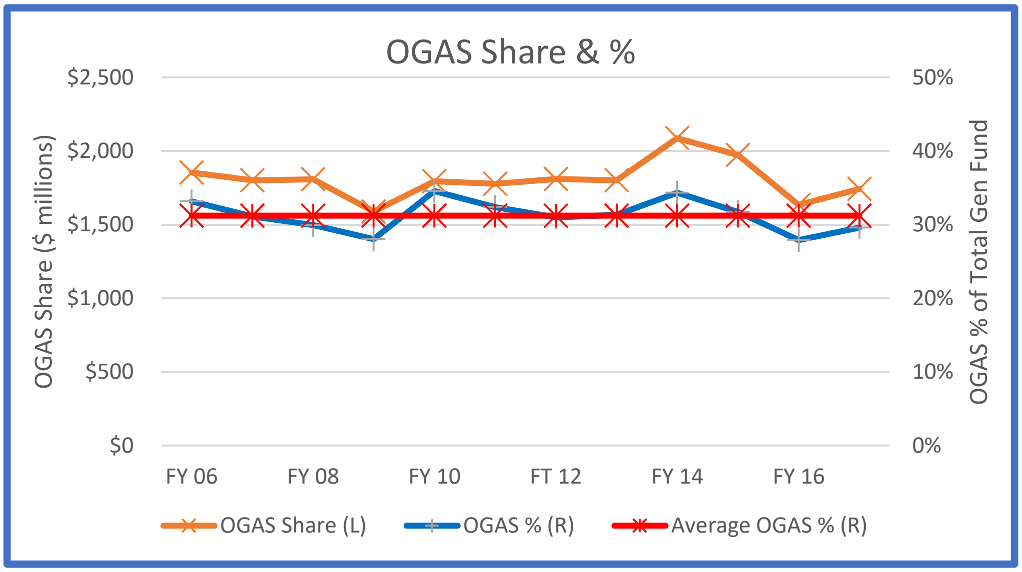
      - Over the 12-year period, Royalties paid exceed LGPF distributions by $280.4 million.
      - Over the 12-year period, Severance Taxes paid exceed STPF distributions by almost $3.0 billion.
      - These hidden tax and royalty payments by the producers exceed the amount of distributions from the permanent funds to the General Fund. It is, therefore, perfectly appropriate to include the distributions in this analysis.
- We will deal with these contributions at some length later in this report.

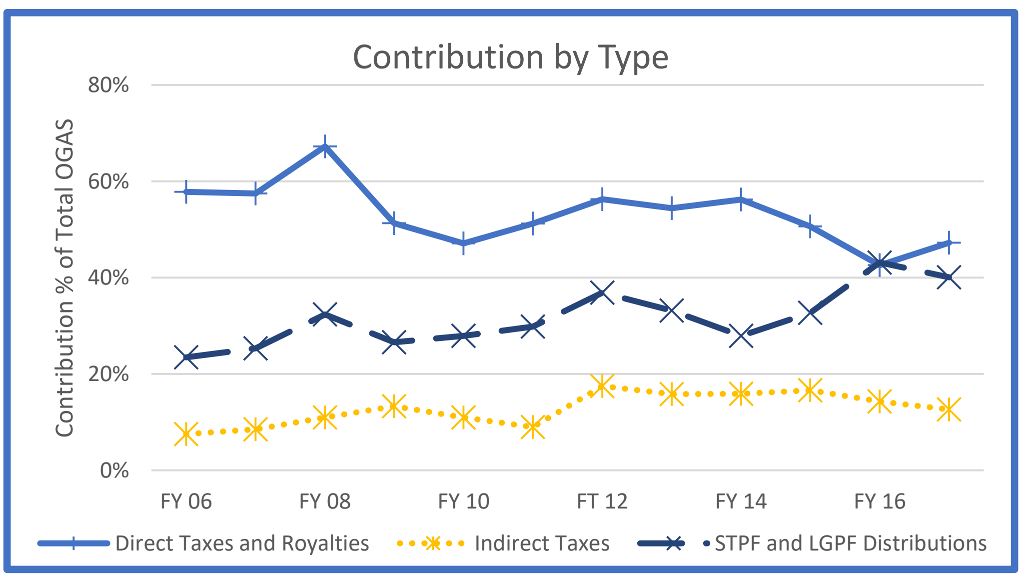
- We did not put into the calculation several items for which an argument could be made for inclusion. These include the following:
    1. Motor vehicle excise tax is paid directly by the companies and individuals owning cars and trucks used in the businesses of producing oil and gas in the state. To the extent that water (mud) trucks, mobile air compressors, completing rigs and cargo trucks are not considered construction equipment, these vehicles are subject to the motor vehicle excise tax. Conventional and horizontal drilling rigs are not considered mobile equipment and the initial purchase is either subject to the gross receipts tax or the compensating tax[1]. At one point, the analysts believed that an IMPLAN model or using RIMS II I/O coefficients could unravel this element. Time and funding constraints have limited this approach.
    2. Insurance premiums tax on employee health care (whether paid 100% by the company or shared between employee and employer), property and casualty insurance (although only a portion of this tax accrues to the General Fund, motor vehicle insurance and miscellaneous insurance, such as key man or errors and omissions insurance. Insurance premiums taxes … this is a direct tax for some components of the industry's activities. Property/casualty insurance premiums tax is a direct tax on the industry but only partially a general fund contribution, since a portion of the tax is transferred to the state fire marshal for further distribution to the various paid and volunteer fire departments around the state and a further portion is distributed to police and sheriff's departments. Insurance premiums tax on employee health insurance is an indirect contribution, but is difficult to measure. There are some insurance premiums taxes, for example, vehicle insurance, business interruption insurance, key employee insurance and others, that could be considered direct, but the only way to include this component in the study would be to sample some of the firms in the industry. This should include majors, independents and support firms.
    3. Pyramided and indirect gross receipts taxes. We have included clearly pyramided taxes from such services as OGAS support services and OGAS drilling. Wholesale GRT would be a GRT tax remitted by wholesalers selling wellhead equipment, fluids, pipe and similar supplies or equipment directly to the producers. Since these wholesalers are an essential part of the OGAS production industry, this GRT would be considered as direct taxes. However, the available wholesale data were inadequately specific to be clearly related to supplies and equipment needed by the industry. Because of measurement problems, we have not included wholesale equipment suppliers in this direct tax. A cursory look at the 2012 Economic Census of New Mexico's Wholesale businesses shows $712 million in total sales for the NAICS code 4238306 (Oil well, oil refinery, and pipeline machinery, equipment, and supplies merchant wholesalers) so failing to include this sector is probably material. An approach to the problem using the most recent Economic Census is feasible.
    4. In addition, there are the usual pyramided services such as accounting, legal services, geology, security, surveying and similar professional and technical services. In the next phase of this study, we plan to build an IMPLAN model that will allow some of this indirect component of gross receipts to be estimated.

The most important charts of this study follow. Note that the 12-year average contribution from all three categories of contribution is shown as the solid red line at 31.2% contribution.

[1] Section 7-9-77(A) NMSA 1978 provides a 50% discount for compensating tax for construction and similar equipment that does not have to be registered for on-road use. This is a fairly narrow deduction, but does include OGAS drilling rigs


General Fund Contribution by Type
40.0%
30.0%
20.0%
10.0%
0.0%
Contribution % of Total GF
FY 06
FY 08
FY 10
FT 12
FY 14
FY 16
Direct Taxes and Royalties
Indirect Taxes
STPF and LGPF Distributions
Total Recurring Revenues


OGAS Share & %
$2,500
$2,000
$1,500
$1,000
$500
$0
OGAS Share ($ millions)
50%
40%
30%
20%
10%
0%
OGAS % of Total Gen Fund
FY 06
FY 08
FY 10
FT 12
FY 14
FY 16
OGAS Share (L)
OGAS % (R)
Average OGAS % (R)


Contribution by Type
80%
60%
40%
20%
0%
Contribution % of Total OGAS
FY 06
FY 08
FY 10
FT 12
FY 14
FY 16
Direct Taxes and Royalties
Indirect Taxes
STPF and LGPF Distributions

- The most interesting thing to notice is that there is a significant secular decline in direct percentage from FY 06 to FY 17. Somewhat compensating for this decline, the investment component increased over the same period.
- Note that the direct taxes and royalties peaked in percentage terms at 21.6% in FY 06 while achieving a minimum of 11.9% in FY16. We believe that not only is this the relatively largest contribution from this source for the 12-year study period, but is the greatest percentage in history. We will review the archives and calculate this direct contribution in the 1970-1975 period to assess whether the post-embargo production values contributed more than 22% of the general fund. This interesting factoid will be reported in April at the annual NMTRI research conference.
- The maximum for the indirect and miscellaneous revenues peaked in FY14 at 5.5% of the General Fund and achieved a minimum for the period of 2.8% in FY06. Investment revenue was at a minimum of 8.6% in FY 07 and at a maximum of 12% in FY16.
- Another observation is that FY 17 was noticeably greater OGAS related revenue collections than FY 16. This confirms the most recent (December 2017) consensus revenue estimate.
- FY2017 General Fund contributions from direct and indirect, current and historical oil and natural gas production is shown below:

	FY17		
	Total Gen Fund	OGAS Portion	OGAS %
Gross Receipts	2,013.5	103.8	5.2%
Compensating	48.5	10.8	22.2%
Motor Vehicle Excise Tax	145.2	**	**
Personal Income Tax	1,380.7	94.0	6.8%
Corporate Income-net of refunds	70.2	9.8	14.0%
Oil & Gas School Tax, excluding Advance Payments	304.3	304.3	100.0%
Oil Conservation, excluding Advance Payments and Coal conservation.	16.8	16.8	100.0%
Natural Gas Processors	10.3	24.2	100.0%
Land Grant Perm. Fund Income	541.5	524.1	96.8%
Earnings on State Balances****	-3.2	-0.5	14.0%
Severance Tax Perm. Fund Income	200.4	174.4	87.0%
Federal Mineral Leasing	435.7	407.6	93.6%
Land Office Income	71.5	49.7	69.5%
Recurring Reversions *****	76.5	22.8	29.8%
All other recurring revenues*	574.0	0.0	0.0%
TOTAL RECURRING REVENUES	5,886.0	1,741.8	29.6%

Direct Taxes and Royalties		823.2	47.3%
Indirect Taxes		220.1	12.6%
STPF and LGPF Distributions		698.5	40.1%
		1,741.8	

* Includes MSA (Tobacco Settlement Revenues) that have been appropriated in that year, but do not include earnings of the TSPF or MSA revenues deposited to the corpus of the TSPF.

** Analysts will use an IMPLAN model to calculate a plausible model for purchases of cars and trucks by the OGAS production industry. This is a direct tax paid by the purchasers of the vehicles and is appropriate to include in this study.

*** The coal conservation tax has been separated in this version of the study and is included in "unlisted recurring revenues". Because of this change, the OGAS % is shown as 100%

**** A substantial portion of the treasurer's balances consist of general fund reserves and the tax administration account. For the purposes of this study, we will use 50% of the previous fiscal year's OGAS % for the portion of treasure's balances to add to other OGAS contributions.

***** These "recurring reversions" are considered to contribute at the average of previous two fiscal year's OGAS contribution %.

- One modification for this edition of the report was to move from determining the contribution to total general fund revenues to determining the contribution to (modified) ***<u>recurring</u>*** revenues. Primarily this was done because of the large amount of transfers in FY 2017 as part of the solvency package. It may be in future editions of this study that this choice may be reconsidered, but for now, recurring revenue (as modified by moving most reversions into the recurring category) seems appropriate.
- The January 2014 report calculated percentages based on total general fund operating account. This includes non-recurring revenue but excludes appropriation contingency fund, tax stabilization reserve and the tobacco settlement fund. This report is slightly different and can be rationalized by pointing out that the new money paid by the tobacco industry has been treated like an unrestricted revenue source instead of a restricted and sequestered revenue source like the oil and gas royalties collected on oil and gas production on state lands. However, not all the tobacco settlement money that the state has received since FY 2003 has been currently appropriated. At its peak in May 2016, the TSF had a corpus of about $258 million. This money was either swept or borrowed in the 2017 session. The market value of the TSPF as of December 31, 2016 was $231,818,322. $109,052,359 was swept from the fund in January 2017, leaving the market value of the corpus $124,981.093. As of the end of November, the corpus increased to $154,899,327. To the extent that the revenues were treated as appropriations, this amount has been added back as quasi-recurring General Fund revenues. Overall, the tables presented on pages 1 through 3 have been fully adjusted for this subtlety.

Before annotating the individual components, we note both these data and related data important to understand the scope of the impact of the OGAS production on the state General Fund, the Severance Tax Bond Fund and Severance Tax Permanent Fund and the Land Grant Permanent Fund. We also note several sources of local revenue attributable to OGAS production.

- **Percentage of General Fund Attributed to Oil and Natural Gas Production**
- FY 17 -- 29.6%; FY 16 – 27.9%; FY 15 – 31.7 %; Average FY 06 to FY 17 – 31.2%. For detail of the earlier years, see tables on pages 1 through 3.
- **FY 17 Percentage of LGPF attributed to Oil and Natural Gas Production** -- 96.8%
- **FY 17 Percentage of STPF attributed to Oil and Natural Gas Production** -- 87%
- **FY 17 Severance Taxes Paid to STBF and a portion thence to STPF (after bond repayments).**
- $331,701,614, with $0 to STPF. (Note: accounting change for FY 17 resulted in 13 months' worth of OGAS severance tax transferred to the STBF. Of this total, $231,257,368 was attributed to oil, $98,272,857 to natural gas and $2,171,390 to CO_2.)
- **FY 2017 Ending Balance in the Severance Tax Permanent Fund (STPF).** -- $4,906,055,513
- **FY 2017 Royalties paid for production on State Lands**
- $448,746,223 based on production months July 2016 through June 2017, but $406,273,449 as reported in the SLO fiscal year ending statistics document. The difference is, presumably, that the ONGARD reports track production month, not reporting month as used by SLO. Note: royalties paid on production on State lands are transferred to the Land Grant Permanent Fund.

- **Bonus Payments to SLO for the right to produce on State Lands, Rentals and Interest:**
  FY 17 -- $70,039,620 – FY 16 -- $42,605,846; FY 15 – $44,108,548; FY 14 – $51,744,144. Bonuses, rentals and interest on production on state lands are retained in the Land Maintenance Fund. The budget of the State Land Office is met from the Land Maintenance Fund, and any surplus is distributed to the beneficiaries of the LGPF, including the Common Schools portion which is considered General Fund.
- **FY 2017 Ending Balance in Land Grant Permanent Fund (LGPF) --** $16,268,707,813.
- **FY 17 Royalties Paid to ONRR for production on Federal land of which a portion is returned as federal revenue sharing**
  $682,863,190 based on ONGARD royalty deductions. Of this total production, $428.53 million is attributed to oil production, $253.72 million to natural gas production and $0.61 million to CO2 production on Federal lands. Total FY 17 Federal Mineral Leasing payments totaled $435 million with $407,603,643 returned as revenue sharing attributed to oil and gas production. More detail for other years included later in this report.
- **FY 17Royalties paid for production on Indian Lands**
  $22.82 million of which $7.01 million is from oil production and $15.81 million from gas production.
- **In Lieu of School and Severance Taxes paid for production on Indian Land.** Production from new wells in Indian country is allowed a credit of ¾rd of the total tax amount imposed by the tribe, nation or pueblo. This has varied from around $2.5 to $3.0 million annually.
- **TY 2017 Total Ad Valorem Production Tax (ONGARD) and Ad Valorem Prod Equipment Tax.**

	Oil	**Gas**	**CO2**	**Total**
FY 15	$87,102,924	$41,945,975	$870,018	$129,918,917
FY 16	$107,966,465	$41,685,003	$992,360	$150,643,829
FY 17	$76,749,824	$35,869,445	$604,898	$113,224,167

For FY 17, approximately $5.9 million for state GO Bond Debt Service and $107.3 million for all local property tax beneficiaries.

For Tax Year 2017, based on CY 2016 production, total Ad Valorem Production Equipment Tax was about $19.5, million, of which $1.0 million state GO Bond Debt Service and $18.54 million for all local property tax beneficiaries). These statistics derive from the “rate sheets” available from the Department of Finance, Local Government Division. Statutorily, the Ad Valorem Production tax should be 27% of the Ad Valorem Production tax. Based on the 2017 property tax rate sheets, however, the actual ratio is 20.5%.

	TY 2017 NEW MEXICO OGAS TOTAL	
		20.5%
	Production	Equipment
Assessed Value	$3,616,568,102	$742,949,817
State Obligations/Revenues	$4,918,533	$1,010,412
County Obligations/Revenues	$33,525,318	$6,891,471
Municipal Obligations/Revenues	$217,199	$40,800
School Obligations/Revenues	$37,075,642	$7,613,681
Colleges, Hospitals, etc. Obligations/Revenues	$19,125,450	$3,930,129
Total Obligations/Revenues	$94,862,142	$19,486,493

Revenue Source Detail.

Gross Receipts Tax

- The inclusion of Gross Receipts and Compensating Tax in calculating the percentage of the General Fund attributable to OGAS production in the state may be somewhat unconventional. Conventionally, only taxes imposed directly on and paid by the industry members are included in the calculation. First, however, although the New Mexico Gross Receipts Tax is a sales tax paid by the vendor or seller, the economic burden of the tax is borne by the buyer.
- Secondly, it is appropriate to include in the General Fund impact, the gross receipts taxes paid by all companies involved in extracting oil and natural gas in the state. In addition to the three NAICS codes included in the 2014 report (OGAS extraction, OGAS drilling and OGAS support), we have included a total of 17 two, three, four, five or six-digit NAICS codes as reported in the venerable RP-80 report available from TRD's website. By the end of the report, we included 12 rows of data in NAICS 21, two rows of data in construction (NAICS 23), one category in manufacturing (NAICS 33) and two rows in pipeline transportation (NAICS 486). We used this level of analysis for the state level analysis and the local level inclusions.

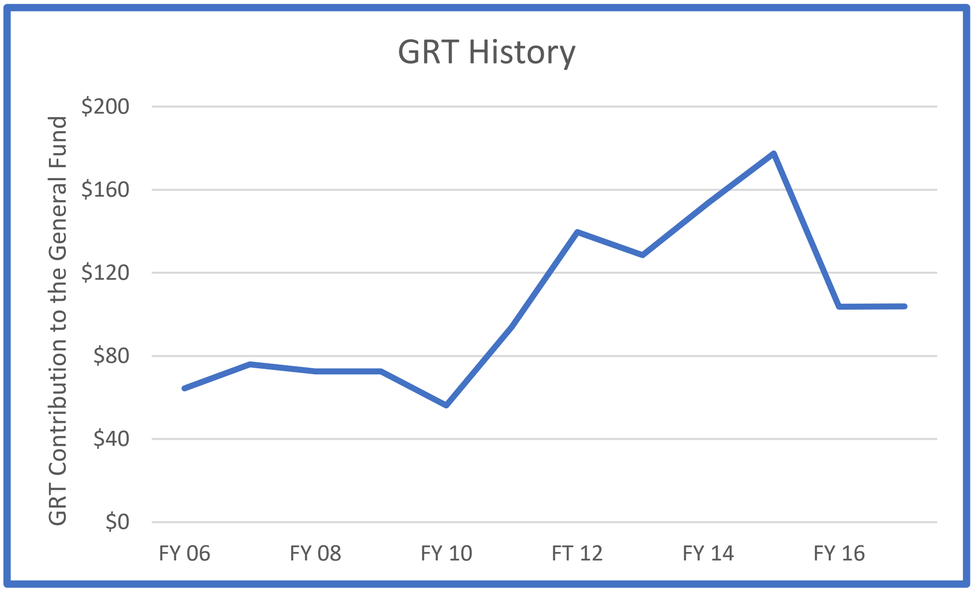
NAICS Codes	Industry Categories
21	Mining, Quarrying, and Oil and Gas Extraction
211	Oil and Gas Extraction
2111	Oil and Gas Extraction
21111	Oil and Gas Extraction
211111	Crude Petroleum and Natural Gas Extraction
213	Support Activities for Mining
2131	Support Activities for Mining
21311	Support Activities for Mining
213111	Drilling Oil and Gas Wells
213112	Support Activities for Oil and Gas Operations
213118	Services to oil and gas extraction
213119	Other support activities for mining
23712	Oil and Gas Pipeline and Related Structures Construction
237120	Oil and Gas Pipeline and Related Structures Construction
333132	Oil and Gas Field Machinery and Equipment Manufacturing
486	Pipeline Transportation (USA/CAN/MEX)
486110	Pipeline Transportation of Crude Oil

- Another modification of the methodology for this edition of the study was to calculate the amount of administrative fee collected from municipalities and counties an include this as State General Fund revenue. While the attribution rules are somewhat complex, suffice it say that a 3.25% administrative fee is collected from all local option taxes of Counties and all local option taxes above the first .5%, (but not including the 1.225% state shared GRT) imposed by municipalities. This administrative fee is imposed in statute[2] at the rate of 3% on only some distributions to the counties and municipalities, while each year since FY 10, an additional .25% has been imposed in the General Appropriation Act (GAA), and since FY 12 on the

[2] 7-1-6.34 NMSA 1978

hold-harmless distributions, again in the GAA. The underlying 3% is collected on behalf on the General Fund, and the additional .25% is appropriated in the GAA to TRD for enhanced audit function.

- Before the 2014 report, the direct contribution of the OGAS support industry to the General Fund was not well understood. The following chart details the history by fiscal year of this direct GRT. Clearly the peak – of drilling and completion activity – occurred in FY 15, at $177.4 million. Another interesting observation is to look at the first quarter of each fiscal year. The next table shows a historical reference year and four successive first quarters from FY 14 through FY 17.



(Dollars in Millions)	FY 07 Q1	FY15 Q1	FY 16 Q1	FY 17 Q1	FY 18 Q1
OGAS Extraction	$1.61	$2.80	$1.77	$0.78	$3.45
Coal Extraction	$6.47	$8.94	$3.67	$1.26	$2.46
Other Metal & Non-metal mining & misc	$6.66	$9.27	$4.07	$1.56	$2.86
OGAS Drilling, Support, Pipelines, etc.	$24.35	$63.89	$41.55	$18.71	$50.75
Total OGAS contribution	$25.96	$66.70	$43.33	$19.48	$54.20
OGAS %	66%	79%	85%	87%	91%

- This table exhibits some of the extreme variability of OGAS and other mining GRT. It also partially explains the recent announcement (December 2017) that first quarter revenues for the general fund were 17% greater in FY 18 than the comparable period in FY 17. We have included both metal and non-metal mining in the table above for reference. General Fund revenues attributable to OGAS and other mining increased more than $34 million between FY 17 Q1 (2016:Q3) and FY 18 Q1 (2017:Q3).
- In preparing this report, the analysts were struck with the level and pervasiveness of tax pyramiding imposed on the industry. A substantial portion of the producers' activities are contracted. This includes geologic survey, well drilling, well completion, wellhead equipment, transportation, natural gas processing, legal services, accounting, marketing and others. Estimating the level of this pyramiding could be part of a comprehensive survey of the industry to stand along with the estimate of insurance premiums tax and corporate income tax. We do not believe that the new Ernst-Young/Georgia State University GRT and PIT

study tools can unravel the level of GRT pyramiding experienced by the industry. However, as the legislature attempts over the next few years to accomplish some GRT tax reform, the industry might want to improve the understanding of this issue.

- It should be noted that these changes to methodology were applied at both the state level and the local government level. The following table shows the GRT impact for the major producing counties, as well as the total for non-listed counties. Also note that the difference between the column total and the $103.8 million reported in the table on Page 1 for FY 17 is the companies that report at the 5.125% state rate for out-of-state locations.

OGAS GRT Allocation to the Counties			
(Dollars in millions)	FY 17 Total		
	State GRT c/ Admin	County GRT c/ Admin	Muni GRT c/Admin
Chaves County - remainder	$0.44	$0.10	
-muni activity	$0.31	$0.12	$0.16
Colfax Count - remainder	$0.00	$0.00	
-muni activity	$0.00	$0.00	$0.00
Eddy County - remainder	$26.57	$3.74	
-muni activity	$3.95	$2.16	$1.56
Lea County - remainder	$28.37	$2.01	
-muni activity	$24.62	$6.98	$11.25
McKinley County - remainder	$0.01	$0.00	
-muni activity	$0.02	$0.01	$0.01
Rio Arriba County - remainder	$0.39	$0.10	
-muni activity	$0.07	$0.02	$0.02
Roosevelt County - remainder	$0.20	$0.06	
-muni activity	$0.01	$0.01	$0.01
San Juan County - remainder	$2.89	$0.54	
-muni activity	$5.42	$2.03	$2.98
Sandoval County - remainder	$0.22	$0.03	
-muni activity	$0.03	$0.01	$0.01
Non-listed Counties - remainder	$0.39	$0.10	
-muni activity	$0.89	$0.36	$0.26
Total	$94.82	$18.37	$16.27

- In future editions of this report, we may include the economic burden of other purchases by oil and natural gas-related companies. We will use the IMPLAN model and tool to determine the plausible amount of taxable purchases of goods and services that are made by oil and gas industry members. Consider the $103.8 million estimate above as a lower bound on the Gross Receipts Tax economic burden. Alternatively, as discussed previously, we may use an industry survey approach to refine and extend the phase 1 results.

Compensating Tax

- The Compensating Tax is a tax borne directly by the oil and gas producers and support companies. For example, a “pump-jack” purchased outside the State, but imported and used in extracting hydrocarbons in

New Mexico, is subject to the compensating tax of 5.125%.[3] NMTRD's Tax Policy and Research Office graciously provided the following data for the 2014 report. We were hopeful that, in the future, TRD would resume the preparation and dissemination of the old RP-90 report of which these compensating tax data are an extract. Unfortunately, TRD has not resumed the preparation of the RP-90 report in any greater depth than two digits NAICS.

- Compensating tax and employee PIT withholding… the most recent 6-digit NAICS redacted RP-90 from NM TRD was FY 2011. We have modeled the OGAS comp using the concurrent estimates of the OGAS contribution from GRT applied to the entire mining sector, but this is, at best, a work-around. Errors from this source and from measurement of employee PIT withholding, however, are not likely to exceed ± .4% in the determination of contribution.

Compensating Tax ($1,000)					
	FY2009	FY2010	FY2011	FY2012	FY2013
Oil and Gas Extraction	$2,000	$1,873	$2,255	$2,497	$3,251
Drilling Oil and Gas Wells	$2,928	$1,067	$2,146	$2,071	$3,349
Support Activities for Oil and Gas Operations	$4,959	$3,495	$10,288	$14,409	$13,124
Total OGAS-related	$9,887	$ 6,434	$14,689	$18,977	$19,725
State Funds *	$7,415	$4,826	$11,016	$14,233	$14,793
Local Governments	$2,472	$1,609	$3,672	$4,744	$4,931

* General Fund portion is approximately 70% of this amount, 15% small cities, 10% small counties and about ≈ 5% paid as Municipal equivalent distributions to municipalities. However, as an artifact of GenTax accounting, the municipal equivalent distribution is scored against Gross Receipts tax.

Personal Income Tax

Conventionally, when determining the portion of the General Fund attributable to taxes and royalties paid by the oil and natural gas industry, personal income taxes paid by employees or investors in production of the industry are not included. This is a similar argument to the traditional exclusion of the economic burden imposed on the industry of the Gross Receipts Tax. In that case, the argument advanced was that the tax is not imposed directly on the producers. That argument, however, fails in the case of Oil and Gas withholding. This is a tax collected by the producers from investors and persons with royalty interests in oil and gas production. These taxes, when deducted from royalty payments or profit distributions made to out-of-state investors are then remitted to the Department. At personal income tax time, these withholding payments are applied to personal income tax liabilities incurred by the payment of royalties and dividends by the producers. In the first few years following enactment in 2004, this was not a significant revenue source. However, in FY2013, producers remitted $90,195,333 to TRD on behalf of their royalty holders and investors. In FY 2017, this amount was a somewhat reduced $69,874,036.

[3] A heavy drilling rig may be eligible for a 50% deduction from compensating tax pursuant to § 7-9-77(A) NMSA 1978.

(Amounts in $millions)	2017	2016	2015	2014	2013	2012
Net receipts from Oil and Gas (PIT) withholding tax	69.9	84.4	101.8	109.6	90.2	91.1
Net receipts from employee PIT withholding remitted by OGAS producers and other businesses in the industry.	24.1	23.4	27.0	33.6	32.8	30.3

This is not a direct tax. The producers have a fiduciary responsibility to collect and remit this withholding. Nor is the amount of oil and gas withholding a perfect estimate of the amount of New Mexico tax liability incurred by the investors and royalty holders. On the other hand, it is likely that refunds will be modest, since the vast majority of investors are subject to the maximum 4.9% current income tax rate, which is the 2017 withholding rate. Thus, the allocated income from oil and gas interests will end up being taxed at approximately the 4.9% tax rate. This may be a specious argument, however. Total production on private lands in the state in FY 2013 was approximately $1.8 billion. If royalties are a usual 1/8th, or 12.5% and the withholding tax rate is 4.9%, the total withheld and remitted to TRD should be around $11 million or less. Producers do have investors. Total production value for FY13, including production on State, Federal and private lands was $13.3 billion. If in addition to the $11 million in royalties on private lands, producers pay investors some portion of the profits from oil and gas production, $79 million in oil and gas withholding represents about $1.6 billion in profits subject to withholding. Thus, this is consistent with about 18% of production in New Mexico is financed by investors. This would imply, however, that there would be some depreciation deductions allowed against the withholding when tax returns were filed. Research will continue on this point.

In addition to the oil and gas withholding amounts, the industry deducts and remits personal income taxes from wages and salaries of New Mexico residents. Once again, for the 2014 report, TRD's Office of Tax Policy graciously provided an extract of the RP-90 which listed the withholding remitted to the Department based on the NAICS code of the remitter.

PIT Withholding ($1,000)					
	FY2009	FY2010	FY2011	FY2012	FY2013
Oil and Gas Extraction	$5,321	$4,938	$6,142	$5,554	$6,960
Drilling Oil and Gas Wells	$3,549	$2,513	$3,343	$3,618	$4,206
Support Activities for Oil and Gas Operations	$16,652	$12,975	$23,304	$19,269	$18,895
Total OGAS-related,	$25,521	$20,426	$32,790	$28,441	$30,060

As can be seen in the table, employers remitted slightly over $30 million in personal income tax withholding to TRD during FY2103. Again, using this amount as a surrogate for actual PIT liability is appropriate. These are very well-paid jobs and it is likely that little of the amount withheld will be subject to refund. One effect previously noted is that roustabouts and field hands are somewhat casual about personal income taxes. They tend to move casually into and out of the state and let the amount of taxes withheld by their employers suffice instead of filing a New Mexico income tax return in the event that they are no longer resident in the state at the time of filing. These migrant workers cheerfully abandon any refund they might be due. For many reasons, then, it is appropriate that we give to the industry $90 million +$30 million in attribution to the General Fund for oil and gas withholding and for withholding from wages and salaries.

For FY 14, FY 15, FY 16 and FY 17, we used the earlier RP-80 data for the FY09 through FY 13 period and allowed it to grow or decline by the growth percentage of the entire mining sector. Because OGAS share of the gross receipts of the mining sector has apparently grown from under 80% in FY 06 to over 91% in FY 2017, this allocation method will underestimate the OGAS industry contribution to Personal Income Tax withholding payments.

One further subtlety remains. Recognize that investors and royalty holders that are New Mexico residents or are regular corporations are not subject to the oil and gas withholding. We can only speculate on what portion of the royalty interests or profits distributed to investors show up on New Mexico personal income tax returns – either as direct income or as income reported from a pass-through entity such as a Subchapter S corporation, an LLC, a MLP or LLP or other partnership. In addition, resident fiduciaries and estates that have oil and gas income are subject to the personal income tax, which is reported as "fiduciary income tax." So again, as is the case for Gross Receipts Tax, it is likely that the estimate included here is a lower bound of the impact of the oil and gas industry on General Fund revenues. These ideas will be explored further in phase 2.

Corporate Income Tax

Regarding the current report, the Corporate Income Tax estimate is the weakest component. This is for several reasons – economic, behavioral and changes in corporate income tax rates and base statutes. Subsequent to the collapse of oil and gas prices in 2008 and again in 2015[4], corporate profits in the mining sector have been highly variable. New Mexico allows a carry-over, but not carry-back of losses. Thus, the extreme decrease of corporate income tax collections from high of $460 million in FY 2007 to $70 million in FY 2017 may be largely attributed to net loss carryovers from the mining sector. With this extreme volatility of total annual revenue, there had to have been a concomitant volatility of taxable income for CIT purposes.

In past years, TRD analysts have had difficulty tracking, understanding and estimating these corporate Income Tax revenues. TRD advises that these sectoral data will be published for the entire mining sector in January 2018 with the annual Tax Expenditure Report. Since there have been issues in coal, copper and potash on the metal and non-metal mining side, it will still be something of a guessing game to determine the contribution from OGAS. In the meantime, we have shown the contribution of OGAS to total CIT as 14% for FY 15, FY 16, and FY 17, but the amount – particularly for FY 17 could be negative.

Some of New Mexico's oil and gas producers are among the most profitable corporations in the world. These regular corporations are subject to the State's Corporate Income Tax. In August 2012, TRD's Office of Tax Policy and Analysis presented a comprehensive analysis of New Mexico's Corporate Income Tax.

For the five-year period of Tax Years 2006, 2007, 2008, 2009 and 2010, all mining, including oil and gas production, paid an average of 29.8% of all corporate income tax. For TY 2010, the August report indicates that 23.5% of gross CIT was paid by oil and gas and other mining. From a special extract provided by the TRD, the two categories "Oil and Gas Extraction" and 85% of "Support Activities for Mining" totaled 20% for TY 2010 and 14.1% for TY 2011. The August report also indicates that many oil and gas producers are reported in other categories. For the purpose of the 2014 report, we added 3.5 percentage points to both TY2010 and TY2011 total of NAICS 211 and 85% of NAICS 213. This yields a consistent picture of the impact of the OGAS industry on the General Fund. Because of the uniformity of this analysis for the TY10 through TY12, we have assumed that the

[4] Oil prices tumbled in 2008 from a peak of $130.60/bbl in June 2008 to $32.27/bbl in January 2009. During the course of the next several years, oil prices somewhat recovered to $95.61/bbl in Jun 2014. However, by February 2016, oil prices had fallen to $26.57. By July 2017, prices had recovered only to $43.06/bbl. The story for natural gas is similar. Gas prices peaked in July 2008 at $12.51/mcf, then fell to $3.40/mcf by April 2009. Prices recovered somewhat to $6.40/mcf by February 2014. In March 2016, gas prices averaged $1.96 /mcf. Gas prices reached $3.2mcf by July 2017.

OGAS contribution to the General Fund for FY13 is $54,000,000. The linkage between Tax Year liability and Fiscal Year payments is quite complex and varies year by year. Beginning with estimated payments the same month that the previous year's return is nominally due, followed by three more estimated payments over the next three quarters, followed by a tentative payment in March (or the third month after the end of the corporate fiscal year) and a final settlement six months later, tax year liabilities are spread over three fiscal years. For this reason, and the stability of the estimates in the table, we choose to report the stable tax year estimate rather than the more accurate fiscal year estimate.

Corporate Income Tax by Tax Year (Million $)			
	Est. Gross CIT	Est OGA S%	Amt Pd by OGAS
FY 06	$377.2	20.2%	$76.2
FY 07	$459.9	20.2%	$93.0
FY 08	$354.6	20.2%	$71.7
FY 09	$192.5	20.2%	$38.9
FY 10	$125.1	20.2%	$25.3
FY 11	$229.8	20.2%	$46.5
FY 12	$281.0	20.2%	$56.8
FY13	$267.2	20.2%	$54.0
FY14	$196.8	21.3%	$42.0
FY 15	$254.5	14.0%	$35.6
FY 16	$118.5	14.0%	$16.6
FY17	$70.2	14.0%	$9.8

The best guess is that the OGAS price collapse in late 2008 and early 2009 was clearly apparent in the data presented in the 2014 report. However, the 2015/2016 secondary price collapse was the major contributor to a virtually all-time minimum of only a net $70.2 million for FY 17. TRD analysts further speculate that there will be net operating loss carryovers to the FY 18 receipts. TRD promises to publish some sectoral corporate income tax data with the 2017 Taxation and Revenue Department Tax Expenditure Report. If this published data aids in understanding the overall contribution of the OGAS industry to the State General Fund, we will update this report later.

Oil and Gas School Tax

100% of revenues from the Oil and Gas School Tax are transferred to the General Fund. Since the end of FY2004, the General Fund has adopted full accrual accounting. This means that revenues attributed to July, which are reported to TRD through the ONGARD system in September, are booked as July revenues. This is not entirely accurate since producers amend returns sometimes for years. The bulk of the volume and value data are stable on a sales-month basis after three or four months, but the data on processing and transportation deductions can take up to two years to become stable. It is the distribution month data that correlates quite closely with the revenue distribution ONGARD reports. Unfortunately, amendments are made in discontinuous fashion and cannot be used for revenue estimating. However, for this project, we are mostly interested in revenue, not revenue estimating. Therefore, we have downloaded and formatted all the ONGARD data on a distribution basis (to correlate between volume, value and deductions), and reported the data on an accrual basis of the sales month. The revenue report exhibits General Fund transfers, net of tax incentives (if any) and Indian dual tax credits. These dual tax credits represent payments from the producers to various Indian tribes (primarily the Ute Mountain tribe and the Jicarilla Apache tribe). 75% of the amount paid to the tribes result in a credit against school tax, conservation tax, severance tax and the ad valorem production tax.

Oil Conservation Tax

The Oil Conservation Tax is somewhat more complex than the Oil and Gas School Tax. This is because there is a conservation tax imposed on coal that is processed outside the ONGARD system. A further slight complication is that the conservation tax rate was .19% until July 2010, .24% of net value until June 2015 and .19% currently. The rate is .19% for natural gas and CO2. A portion of the total proceeds of the conservation tax are distributed to the oil conservation fund. Further complicating the analysis is that there is a price trigger for the.24%. In this edition of the report, the coal conservation tax addition to the General Fund is considered as miscellaneous revenue and 100% of the OGAS conservation tax is considered as OGAS contribution

Coal Conservation Tax	
Accrual Period	General Fund
FY 05	$818,656
FY 06	$1,122,153
FY 07	$899,102
FY 08	$997,667
FY 09	$1,192,279
FY 10	$1,197,979
FY 11	$1,116,415
FY 12	$1,231,994
FY 13	$1,133,654
FY 14	$1,067,405
FY 15	$957,619
FY 16	$657,173
FY 17	$544,759

Natural Gas Processors Tax

100% of the Natural Gas Processors Tax is transferred to the General Fund. While the calculation of the tax rate for this tax is somewhat complex, it is relatively simple to determine the total amount attributed to the OGAS industry. For FY2013, this was $24,196,501 and for FY 17 $10,306,592.

Federal Mineral Leasing

Another somewhat complex revenue source is federal mineral leasing. Oil and Gas producers pay for the privilege of developing a particular OGAS site that is located on federal lands. After a well is in production, the producers pay royalties to the Office of Natural Resources Revenues (ONRR) based on a contractual percentage of production value. In many cases, the royalty percentage is 12.5%, or 1/8th of the value of production. There is some controversy over whether the royalty calculation is based on market price less transportation and processing costs or whether the royalty rate is imposed on the gross wellhead price before deductions.

Federal Mineral Leasing (New Mexico) --($ millions)

	OGAS Bonus	Other Revenues	Rents	Royalty	Total OGAS	OGAS % of Total	Dis-burse-ment	Disb % of Total
2003	$15.2	$9.6	$3.6	$547.7	$576.2	94.5%	$297.9	48.9%
2004	$38.4	$7.6	$3.3	$664.7	$714.0	97.0%	$365.0	49.6%
2005	$43.0	$30.9	$3.3	$811.3	$888.4	97.6%	$444.3	48.8%
2006	$85.9	$15.6	$3.4	$1,023.4	$1,128.2	98.7%	$573.4	50.2%
2007	$28.4	$104.1	$3.0	$930.6	$1,066.1	97.8%	$552.9	50.7%
2008	$51.2	$32.0	$3.4	$1,214.8	$1,301.3	98.0%	$614.8	46.3%
2009	$51.5	($51.7)	$3.1	$640.4	$643.3	95.5%	$388.5	57.7%
2010	$19.0	$7.1	$2.9	$745.0	$774.0	96.6%	$380.7	47.5%
2011	$26.2	$4.5	$2.6	$833.2	$866.5	96.7%	$434.6	48.5%
2012	$55.3	$7.2	$2.4	$854.0	$918.9	95.8%	$488.2	50.9%
2013	$72.7	$6.5	$2.2	$924.5	$1,005.9	95.9%	$478.8	45.7%
2014	$55.3	$7.2	$2.4	$854.0	$918.9	95.8%	$488.2	50.9%
2015	$72.7	$6.5	$2.2	$924.5	$1,005.9	95.9%	$478.8	45.7%
2016	$61.9	$13.6	$1.9	$1,073.0	$1,150.4	96.5%	$579.1	48.6%
FY03_FY09	$83.0	($8.1)	$1.7	$867.3	$944.0	96.1%	$496.0	50.5%
FY10_FY16	$102.2	($13.7)	$1.2	$601.2	$690.9	96.3%	$368.6	51.4%

Another collateral study will be detailed. This addresses the analyst's nervousness about the federal mineral leasing. This revenue source has never been well understood. For this study, we have made a breakthrough and have assembled comparable data from 1982 forward that correlates virtually perfectly with the actual amount of FML received by the state treasurer. Of note, the state seems to record about $1 million per year more than the ONRR indicates they paid. We have yet to unravel the mystery of which minerals and which activities generate a 25% revenue share, which minerals generate a 50% share and the extent to which the administrative 2% or 4% charge applies. And in the era after 2013, sequestration has also been an issue not well understood. This is of current interest, since it looks like that federal tax reform will be approved and signed by the president. The best evidence is that the bill will cost the treasury up to $1.5 trillion for the decade, which would probably invoke further rounds of sequestration.

Land Office Income

The State Land Office and the State Land Commissioner are charged with maximizing the income from land granted to the State at statehood in 1912. Until the late 1950s, the schools and institutions of higher education listed in the Constitution were operated largely on this income, supplemented by amounts collected through fines and forfeitures. In addition, the schools received a portion of local property taxes and money from the Emergency School Tax enacted in 1935. Now, all the royalties paid on oil and gas and other mineral production are deposited in the Land Grant Permanent Fund. The LGPF generates interest income which is booked as General Fund revenue, as previously discussed. However, the SLO also has a land maintenance fund, that is funded from grazing fees, leases not in the nature of royalties, interest, and, probably most importantly, bonus payments from oil and gas producers who bid on the right to drill and extract oil and natural gas from state lands. The SLO is self-funding from the revenues collected in the land maintenance fund. Any excess over SLO budget in the land maintenance fund is distributed to the schools and Constitutional institutions. The portion transferred to the public schools is booked as General Fund revenue. Data are available on the SLO website as annual reports and historical data is available at the SLO offices in Santa Fe. In addition, an extensive history of the bonus payments made for the right to produce oil and gas is available on the SLO website. For FY2013, SLO revenue paid by the oil and gas producers was $30,349,730 of a total of $44,631,955 transferred to the General Fund.

Severance Tax and Royalties – Contributions to the STBF, STPF and LGPF attributable to Oil and Gas Production

In addition to the payment of Emergency School Tax and the Conservation Tax (both fully or partially General Fund sources), OGAS producers make other payments to State funds, including the STBF, the STPF and the LGPF. In Appendix B, we discuss these payments that are included in the models for interest transfers to the State General Fund. We have finessed this a bit for the STBF and the STPF, although we have presented as accurate a picture of the LGPF as possible. The State Land Office is charged with managing almost 8,000,000 acres of State Lands for the benefit of the Common School Fund and the other Revenue Beneficiaries. We also discuss the STBF and the STPF in Appendix B. There are two forms of Severance Tax. The “Severance Tax” is imposed at various rates on the production (severing) of hard minerals. The “Oil and Gas Severance Tax” is imposed on the production (severing) of crude oil, natural gas, carbon dioxide or helium from the ground. The basic rate of the Oil and Gas severance tax is 3.75% of wellhead value. Since both oil and gas are priced at some distance from the wellhead, the taxable value is usually the sales price at the remote market, less transportation costs, processing costs and federal or state royalties. There is no royalty deduction for production on private lands. These severance taxes are collected by TRD and transferred monthly to the Severance Tax Bonding Fund (STBF). From its creation in 1973, funds in the STBF were used to amortize bonds, called Severance Tax Bonds (STBs). The proceeds of the bonds were used for various state and local capital projects. Over the years, we have used the money sequestered in the STBF to make principal and interest payments on senior bonds, which have a two-for-one coverage ratio. In the wake of the Zuni School Capital law suit, the state began using “the other half” of the money sequestered in the STBF to purchase supplemental bonds, which are allocated by the Public School Capital Outlay Council (PSCOC) to fairly allocate school construction grants around the State. In some years, the legislature and the governor determine that it is appropriate to use up any unneeded funds in the STBF and make no transfer to the Severance Tax Permanent Fund. These short-term (frequently 24 hours in duration) bonds are called, in the vernacular, "sponge bonds". In years past, we have sold regular, or senior sponge bonds and supplemental sponge bonds. Judging by the table on page six, the State has become quite aggressive in the utilization of the STBF stream. On net, we are transferring substantially more money to the General Fund as STPF interest than we are earning. Thus, we are eating our seed corn. In FY 2013, OGAS producers paid $399,482,155 in Oil and Gas Severance Taxes to the STBF. Mineral producers paid $19,232,667 in Severance Taxes to the STBF. These funds were fully consumed – through two semi-annual payments to amortize previously issued regular or supplemental bonds or were "sponged." There was no FY 2013 transfer to the STPF.

Proportion of the General Fund Attributable to Oil and Gas Production

When presented by DFA, the proportion of the General Fund attributable to oil and natural gas production is obtained by summing the receipts from emergency school tax, conservation tax, natural gas processor's tax, State Land Office income and federal mineral leasing (FML). This calculation ***overstates*** the percentage contribution on this basis because less than 100% of FML and SLO income is derived from oil and gas. In addition, a small amount of conservation tax is contributed by coal producers. The current study corrects these minor irregularities. Based on the DFA conventional calculation, the OGAS industry contributed an average percentage for the FY06 to FY17 period leads to conclusion that oil and gas production in the state contributed 16.2% of General Fund revenues. In contrast, our FY17 estimates follow:

	FY17		
	Total Gen Fund	**OGAS Portion**	**OGAS %**
Gross Receipts	2,013.5	103.8	5.2%
Compensating	48.5	10.8	22.2%
Personal Income Tax	1,380.7	94.0	6.8%
Corporate Income-net of refunds	70.2	9.8	14.0%
Oil & Gas School Tax, excluding Advance Payments	304.3	304.3	100.0%
Oil Conservation, excluding Advance Payments	16.8	16.8	100.0%
Natural Gas Processors	10.3	24.2	100.0%
Land Grant Perm. Fund Income	541.5	524.1	96.8%
Earnings on State Balances**	-3.2	-0.5	14.0%
Severance Tax Perm. Fund Income	200.4	174.4	87.0%
Federal Mineral Leasing	435.7	407.6	93.6%
Land Office Income	71.5	49.7	69.5%
Recurring Reversions ***	76.5	22.8	29.8%
All other recurring revenues*	574.0	0.0	0.0%
TOTAL RECURRING REVENUES	5,886.0	1,741.8	29.6%

This project, in comparison, has calculated that the contribution of the oil and gas production industry in New Mexico is at least 31.2% average for the FY06 to FY17 period or almost twice the contribution as calculated by DFA. As shown in the table above, this project has validated inclusion of the gross receipts tax economic burden, compensating tax, PIT withholding and oil and gas withholding on non-residents and a high percentage of interest from the permanent funds as attributable to oil and gas production.

As mentioned previously, this is probably a lower bound on the estimate of contribution of the industry. Oil and gas producers and suppliers purchase goods and services subject to the Gross Receipts Tax. The purchaser bears the economic burden of the tax, but not the legal burden in New Mexico. If the full amount of GRT reimbursed to suppliers were included, the GRT attribution would certainly increase, even double, from inclusion of just drilling, production and support services. Similarly, royalties and returns to investment in oil and gas production are subject to the personal (or corporate) income tax. There is no convenient means of estimating the amount of oil and gas production source income included in total personal income of resident investors or royalty holders.

Similarly, an unknown fraction of the corporate income tax is reported by oil and gas producers or suppliers in NAICS codes that make it difficult to provide an accurate estimate of the contribution of regular oil and gas producer or supplier corporations to the corporate income tax total. The $9.8 million estimated for FY 2017 in this project is then a probably lower bound.

What this Study Accomplished?

1) Built model quantifying the proportion of the LGPF interest attributable to OGAS with accuracy of ±.5%.
2) Built model quantifying the proportion of the STPF interest attributable to OGAS with accuracy of ±1%.
3) Included some of the economic burden of the Gross Receipts Tax in the calculation of the share of the General Fund attributable to OGAS.
4) Included Oil and Gas Withholding and direct PIT withholding on certain categories of wages and salaries for inclusion in determining the proper portion of the General Fund to attribute to OGAS.
5) Properly calculated the FML royalty share, including bonus payments, to attribute these federal revenue shares to OGAS.
6) Properly calculated the share of SLO revenues in the General Fund to OGAS bonus payments.
7) Assembled and organized a great deal of old, even antique data, and rendered this data into organized databases.

Appendix A – Background and Plan

Background:

In September 2013, the New Mexico Oil and Gas Association (NMOGA) contacted the New Mexico Tax Research Institute (NMTRI) to assess interest in having NMTRI research, analyze and report on the direct and indirect economic impacts of the Oil and Gas exploration, drilling and production industry in New Mexico. The query and implicit RFP fit nicely into a "retirement project" of NMTRI's principal investigator ("PI"), Laird Graeser.

The retirement project was to research and write a definitive history of revenue and public finance in New Mexico starting from the first property tax imposed in the State to fund free public education. This is an ongoing story. However, NMOGA offered financial support to NMTRI and the PI to investigate and document the portions of the overall story having to do with oil and gas production in the state, the role of the oil and natural gas production industries on the state's capital outlay through the severance tax bond fund and the proportion of the General Fund that the oil and natural gas industry can plausibly claim to "own." That is, what proportion or percentage of the General Fund, which is used to fund public school education, higher education, Medicaid and some other public welfare programs, general government, environmental protection, tourism support and promotion and economic development efforts , will reasonable people, when presented with unbiased analysis and data, understand is attributable to current or historical taxes, royalties and other money paid by the oil and gas production industry in New Mexico. Throughout this report, the phrase "OGAS" means "oil and natural gas production."

The NMTRI and PI proposed the following:

- The study would be divided into phases, with each phase extending the analysis into different areas. The results of each phase would be available prior to each annual legislative session and each phase would update the previous phase's data gathering and analysis. It is expected that there will be new areas to explore after the initial phase for approximately three phases in total.
- The phase 1 study would determine the plausible total contribution of the industry to the State General Fund for FY 2013 that would include not just the traditional reckoning of emergency school tax, natural gas processor's tax, the conservation tax and federal royalty sharing, but other revenues contributed by the industry. The most important non-traditional inclusion in this reckoning is interest paid to the General Fund from the Land Grant and the Severance Tax Permanent Funds. Also to be included in the phase 1 study would be the economic burden of the Gross Receipts Tax paid by members of the OGAS industry for oil and gas support services, drilling and petroleum production. Finally, working with Taxation and Revenue Department, the study will also determine the OGAS contribution to personal income tax withholding, oil and gas withholding and compensating tax.
- The phase 1 study would then determine, on a county-by-county basis, the contribution of OGAS to each county – directly, in terms of the ad valorem production and production equipment taxes in the producing counties, and indirectly, in terms of the amount of General Fund support of K through 12 public schools, charter schools and higher education. If time allowed, the phase 1 study would determine the contribution of the industry to capital outlay, whether the local capital projects in each county were funded via General Fund appropriations or Severance Tax Bonds. Thus, the phase 1 study would generate a partial economic impact estimate for producing and non-producing Counties.

- To ensure that the study would be independent and professional, NMOGA would fund a portion of the research, analysis, documentation and report-writing, but not all. (Note, as of 1/19/14, NMOGA funded approximately 1/3rd the cost of the phase 1 study reported in the phase 1 document available from the New Mexico Tax Research Institute. NMOGA would have the unlimited right to all data, data tables and would have the right to republish any portions of the final report, but would not own the copyright.
- To ensure preservation of all the rare, antique data gathered during the project, NMOGA would provide a website or cloud location for the PI and NMTRI to mount a searchable database of all the data developed during the study.
- The most important task in phase 2 of the study would be to reconcile the various data sources to improve both the LGPF and the STPF models. These reconciliations will not materially affect the estimate of OGAS attribution to the General Fund performed in phase 1, but will provide an increased level of confidence in the models.
- Phase 2 would then extend the study to other General Fund revenue sources that can be attributed to OGAS. These may include motor vehicle excise tax and insurance premiums tax. Via survey of the OGAS industry, we might be able to refine the CIT attribution and the compensating tax and PIT withholding directly attributed to OGAS. The survey would also extend the "economic burden" analysis for Gross Receipts Tax to all other categories of taxable purchases and extend the analysis to MVX and insurance premiums tax. With all these extensions and refinements, it is expected that OGAS will be able to claim that approximately 33+% of the General Fund is attributed to the industry.
- Phase 2 would also extend the study to other General Fund supported programs that can be assigned to counties. These areas would include public school transportation, "below-the-line" school grant programs, pre-K education funding, Medicaid funding, other state-funded income support, LICTR and elderly property tax rebate.
- Phase 3 would extend the analysis to some Other State Funds, including unemployment insurance (direct and indirect) and the State Road Fund.
- In phase 3, as well, working with Taxation and Revenue Department, we planned to assign personal income tax withholding and total personal income taxes paid by oil and gas industry employees to counties and refine the assumption that PIT withholding and Oil and Gas Withholding are good surrogates for net personal income taxes contributed by employees and contractors to the industry.
- In phase 3, we also planned to perform an IMPLAN study of direct, indirect and induced employment effects of OGAS to claim a greater amount of PIT withholding than in Phases 1 and 2. This extension might increase the percentage of the General Fund attributed to OGAS to 34%.

The proposal was accepted, and work began in late September 2013.

Accomplishing these various analytic tasks required unearthing and assembling a vast amount of data. In some cases, the data were gathered from 1986-2001 when the PI was chief economist for the New Mexico Taxation and Revenue Department (TRD) or from 2006-2010 when the PI was chief economist for the Department of Finance and Administration (DFA). Other data were obtained from the Anderson School Library at UNM or the Oil Recovery project at New Mexico Institute for Mining and Technology (NMIMT). Data for the Land Grant Permanent Fund (LGPF) model were obtained directly from the State Land Office (SLO), where staff graciously provided access to the entire series of annual reports of the State Land Commissioner going back to the enabling act of 1895. These data were fully discussed in the 2014 report as supporting the individual taxes and revenue sources contributing to the State General Fund, the Severance Tax Bonding Fund (STBF) and County-level capital outlay, operating and school funding from the same revenue sources as the State General Fund.

Update:

The phase 1 report; was delivered in January 2014. It was well received by the media. Legislators and tax and public finance professionals.

The initial study contained a few weaknesses – in corporate income tax (CIT), federal mineral leasing (FML) and local Gross Receipts Tax Revenues and Ad Valorem Production Equipment Tax. At the close of FY 14, rather than embark on Phase 2, it was decided to address some of the weaknesses of the report. Although the state level % OGAS contribution was updated with FY 14 data, most of the weaknesses remained and the data were not published.

With the Oil and Natural Gas price collapse in early 2015, interest in updating the report was muted. However, currently, the industry is setting new all-time crude oil production volume records. This has been driven by the companion new technologies of horizontal drilling and "fracking" despite the fact that crude oil prices have remained mired in the range of $50 to $60 per barrel. With the partial recovery of oil and natural gas contributions to general fund revenues, updating and expanding the 2014 report has become interesting.

Because of the limited time between when this interest was evinced and the critical 2018 legislative session, this is not a full update. Improved methodologies have been developed so that we have more confidence in the "31%" contribution number. That is, the current and historical, direct and some indirect contribution of the oil and natural gas production industry to the state general fund has averaged 31.2% of all (somewhat expanded) recurring general fund revenues for the period FY 06 through FY 17. The county portions of the 2014 report, however, have not been fully updated. We do report the direct gross receipts tax impacts and the production and production values and severance taxes and royalties paid on behalf of producers in the 13 production counties:

OGAS Producing Counties in New Mexico			
San Juan Basin	Permian Basin	CO2 Basin	Other
McKinley County	Chaves County	Harding County	Colfax County
Rio Arriba County	Eddy County	Quay County	Guadalupe County
San Juan County	Lea County	Union County	
Sandoval County	Roosevelt County		

There is isolated drilling activity, but no documented production in Otero County and DeBaca County. There is no longer any production in Guadalupe County and Production in McKinley County is now minimal.

What investigations remained for Phases Two and Three?

1) Improve the LGPF interest model by completing the transcription of early data from State Treasurer's reports and reports of the State Land Commissioner. Of utility would be to record the split between the common school fund and the other Constitutional institutions. (Current note: this has not been done, although the data are available as published in early reports of the State Land Commissioner.)

2) Reconcile the LGPF disclosure documents with ONGARD data. (Current note: this has been done, and primarily relies on the interesting fact that the state general fund has converted to full accrual, while the STBF, the LGPF and the STPF accounting remains on a cash basis. Of collateral interest, as well, the

Board of Finance accounts for the advanced payments of OGAS severance taxes as revenue. The General Fund has recorded these advanced payments as "due to taxpayers," but not revenue.

3) Reconcile the SLO annual reports with other data sources. (Same note as #2.)
4) Improve the STPF interest model by determining the percentage of contributions to the STBF that were used for bond payments and the percentage transferred to the STPF. (Current note: these data are available from the State Board of Finance in the annual "Continuing Disclosure" document. This is available around the end of January each year with data for the previous fiscal year.)
5) Work with TRD and DFA to extract net PIT liability when returns show credits from Oil and Gas Withholding. In addition, determine if there are any data that would allow calculation of net PIT from employees of companies within the industry. (Current note: this has not been possible. One highlight is the amount of data extracted by TRD to assist with the analysis effort conducted by Georgia State University in partnership with Ernst-Young (EY).)
6) Work with TRD, refine the true total of Compensating Tax, Corporate Income Tax, Gross Receipts Tax and Personal Income Tax Withholding to account for the fact that some members of the industry – particularly in Support Services do not report using the proper, attributable NAICS code.(Current note: some effort has been made in this area for for-profit and not-for-profit entities for various tax reform bills in the 2017 legislative session and the work done to create an analytical tool for gross receipts tax reform built by EY. This is not an easy issue to resolve, nor will it be resolved quickly. The EY work holds out hope.)
7) Work with TRD, allocate PIT withholding and final liability of OGAS employees to Counties. (Current note: no progress on this element.)
8) Unravel the mystery of too much money for oil and gas withholding, or at least confirm the speculation that the bulk of oil and gas withholding is attributed to payments to investors and not to royalties. Determine if the entire amount of withholding show up as liabilities. (Current note: no progress on this element.)
9) Consider investigating the cost structure of the industry through survey under NMOGA's auspices. This would provide direct evidence, supplemented by IMPLAN and RIMS II coefficients, of the amount of economic burden borne by the industry in addition to the burden of gross receipts tax on Oil and Gas Extraction, Oil and Gas Drilling and Oil and Gas Support Services. (Current note: this is the highest priority for the next update of this report. However, no progress has been made on this element.)
10) Include Water Trust Fund grants and Tribal Infrastructure grants and projects in the capital outlay by county tables. Consider separate tables for Jicarilla and Navajo nations. (Current note: water trust fund, Colonias and tribal total have been included in the county capital tables, however, these tables will not be published in the preliminary report.)
11) Reconcile Sales month detail and Distribution month summaries with the ONGARD revenue report and determine why the data are not exactly congruent. Is this because some of the gas plant products are reported in different counties than the county in which the gas was extracted? (Current note: no progress has been made in this element.)

Not included in this list were several areas where weakness have either emerged or been fully or at least partially resolved.

1) Corporate income tax has been increasingly difficult to understand. From record high receipts of $459.9 million during the FY 07 year, or even $281.0 million for FY 12, FY 17 net receipts were a modest $70.2 million. TRD analysts have promised some insights into this drop by sector to be published with the 2017 Tax Expenditure Report. Preliminary analysis indicates that oil and gas may have reported current tax losses for FY 17 and may have carried net operating losses over into FY 18. Credible sectoral data were last provided by TRD for Tax Year 2012.
2) Federal mineral leasing is gradually becoming more transparent and understood. The Office of Natural Resource's Revenue (ONRR) has published volume, value, royalty and disbursement data for the State total and the State General fund with a small amount of disbursement to Dona Ana County for some thermal energy sharing. The difference between the State Total and the General Fund Total is completely attributable to mineral production on Indian lands – primarily on Jicarilla and Navajo lands. There are some confidentiality issues for production on Indian lands. In addition, we have been unable to completely tie the reported royalties to the revenues distributed tables.
3) Although no longer a major source of general fund revenue, compensating tax data are now only available at the 2-digit NAICS level. Thus, we mix OGAS wellhead equipment, coal production machinery and OGAS drilling and completing (fracking) rigs and cannot clearly separate OGAS from non-OGAS compensating tax.