

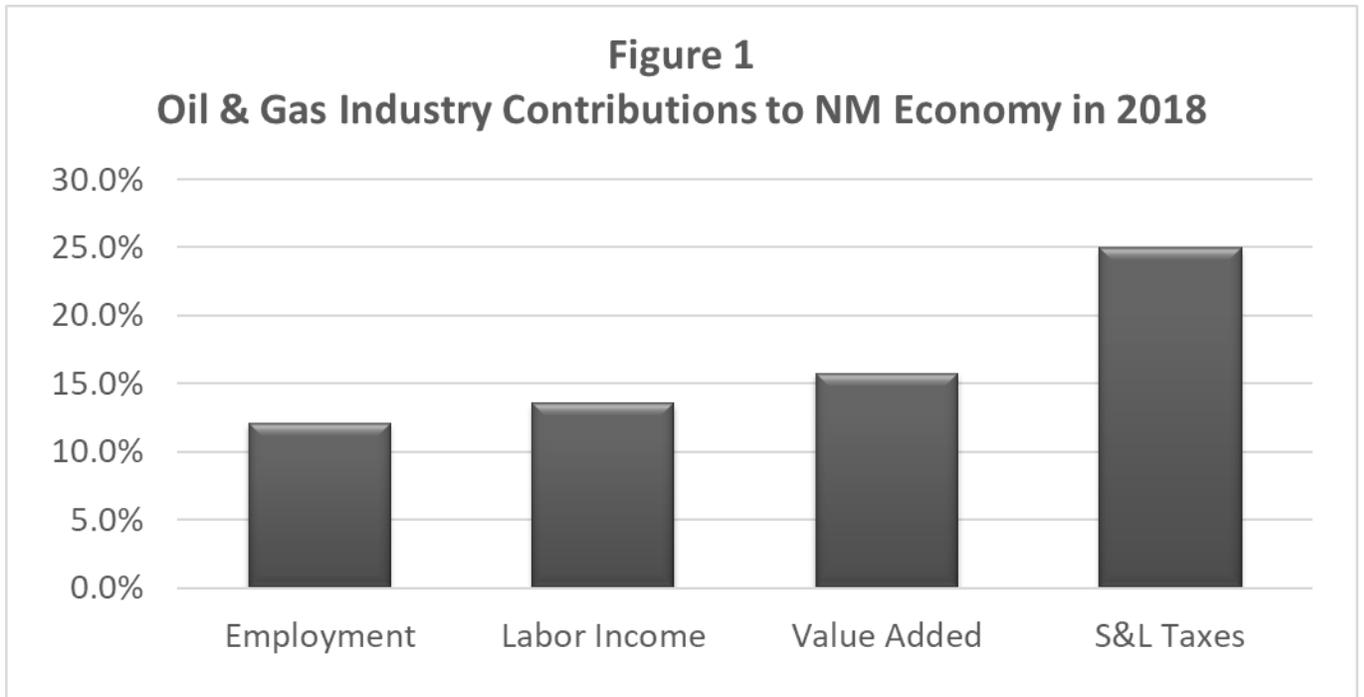
NEW MEXICO TAX RESEARCH INSTITUTE

Economic Activity Supported by the Oil and Gas Industry in New Mexico

Executive Summary:

In addition to direct economic activity of the oil and gas industry in New Mexico, the industry supports other businesses through its purchases, employment, and payments to state and local governments. In this report, we use input-output analysis embodied in the IMPLAN software application, to estimate the total economic activity supported by the industry as of 2018:

- Oil and gas industry activities, including payments to other industries, to households and to State and Local governments supported over 134,000 jobs, 12% of total statewide employment.
- The oil and gas industry also supported:
 - ✓ \$7.6 billion of Labor Income or 13.6% of the state total for all employers;
 - ✓ \$16.6 billion of Value Added or 15.8% of the state total; and
 - ✓ \$2.2 billion of State and Local tax payments, or 25.0% of the state total.



Key Findings:

Table 1 presents a summary of the economic activity in New Mexico supported by the oil and gas industry in 2018. Four measures of activity are presented:

- *Employment*: All full and part-time jobs, including self-employment and sole proprietorships as well as payroll employment. Employment is measured at the place of employment not the place of residence.
- *Labor Income*: Includes income of self-employed and small business owners as well as wages and salaries of payroll employees.
- *Value Added*: Sales revenue less the costs of inputs other than labor. Value Added of a particular industry or set of industries represents their contribution to the state's Gross State Product (GSP).
- *State and Local Taxes*: Includes all taxes paid by industries and households as a result of the oil and gas industry's activities.

Table 1 presents estimates of Direct, Indirect and Induced impacts. "Direct" impacts measure the *activities of the industry or government payments supported by the industry*. "Indirect" impacts measure sales and employment of *other industries from whom goods and services are purchased*. "Induced" activity is economic activity due to *spending by employees and owners* of the oil and gas industry and those industries that support it, as well as that supported by government revenue from the industry.

As described in the "Methodology" sections, the results presented in Table 1 include two categories of impacts of the oil and gas industry. The first category are estimates from the IMPLAN modelling tool titled an Industry Contribution Analysis (ICA). This model provides input-output analysis of the industry's purchases, hiring and spending within the state. The second category is estimates of the impacts of the spending of the State and Local government revenue contributed by the industry. These estimates come from an Institutional Spending Pattern Analysis (ISA) provided by IMPLAN. The estimated state and local government spending supported by the industry was calculated from reports previously published by the NMTRI.

Table 1: Total Impacts of the Oil and Gas Industry on the New Mexico Economy in 2018

Impact	Employment	Labor Income	Value Added	S&L Taxes
Industry Contribution:				
Direct	41,762	\$3,057,490,312	\$9,723,504,655	1,774,337,842
Indirect	24,590	\$1,213,311,421	\$1,966,591,407	\$150,087,740
Induced	21,317	\$852,533,364	\$1,616,406,506	160,480,034
Total	87,669	\$5,123,335,097	\$13,306,502,568	\$2,084,905,616
Government Spending:				
Direct	34,807	\$1,965,309,433	\$2,328,134,279	\$58,475,020
Indirect	1,763	\$79,796,419	\$162,850,499	\$20,329,699
Induced	10,369	\$416,436,931	\$802,882,287	\$85,134,070
Total	46,940	\$2,461,542,782	\$3,293,867,065	163,938,789
Total Impacts:				
Direct	76,569	\$5,022,799,745	\$12,051,638,934	\$1,832,812,862
Indirect	26,353	\$1,293,107,839	\$2,129,441,906	\$170,417,439
Induced	31,687	\$1,268,970,295	\$2,419,288,793	\$245,614,104
Total	134,608	\$7,584,877,879	\$16,600,369,633	\$2,248,844,405
NM Total	1,114,378	\$55,949,059,846	\$105,334,815,733	\$9,004,819,837
O&G Share	12.1%	13.6%	15.8%	25.0%

Source: IMPLAN modelling results prepared by the authors.

Industry-Specific Activity Supported by the Oil and Gas Industry

Table 2 presents total impacts of the oil and gas industry -- including Direct, Indirect and Induced effects – sorted by major industry group. These impacts include the results of the Industry Contribution Analysis together with those of the Government Spending Analysis.

Table 2: Industry Specific Activity Supported by the Oil and Gas Industry in 2018

Industry	Employment	Labor Income	Value Added
Agriculture	348	\$10,574,903	\$11,795,467
Mining	30,010	\$2,403,321,294	\$7,013,897,153
Utilities	1,141	\$125,893,081	\$353,908,882
Construction	6,396	\$323,170,444	\$321,885,282
Manufacturing	1,405	\$136,412,015	\$1,076,664,335
Wholesale	2,931	\$182,883,774	\$1,079,957,823
Retail	13,067	\$410,763,234	\$728,172,056
Transportation	3,998	\$287,425,414	\$436,202,471
Information	762	\$44,503,921	\$108,350,374
Finance	4,846	\$241,792,390	\$416,847,106
Real Estate	3,811	\$117,821,988	\$1,025,979,680
Professional Services	7,547	\$477,969,494	\$600,709,713
Other Services	7,796	\$303,380,317	\$397,431,150
Education & Health	8,983	\$459,350,874	\$520,608,035
Entertainment & Accommodations	7,933	\$182,565,155	\$265,491,877
Repair and Other Services	4,733	\$184,876,146	\$220,790,638
Government	28,901	\$1,692,173,435	\$2,021,677,592
Total	134,608	\$7,584,877,879	\$16,600,369,633

Source: IMPLAN modelling results prepared by the authors.

Table 3 provides a comparison of the total employment supported by oil and gas industry with the total employment in each major industry group in New Mexico. The share of total employment supported by the industry ranges from 82.5% in the Mining sector to 1% in the Agriculture sector. 15% of all government jobs in the state are supported by the industry, but almost all of those are in the State and Local government sector, where they comprise 19% of the total.

Table 3: Share of Total Employment Supported by the Oil and Gas Industry in 2018

Industry	Total Employment	O&G Supported	O&G Share
Agriculture	36,170	348	1.0%
Mining	36,258	30,010	82.8%
Utilities	5,076	1,141	22.5%
Construction	68,777	6,396	9.3%
Manufacturing	35,053	1,405	4.0%
Wholesale	24,192	2,931	12.1%
Retail	99,539	13,067	13.1%
Transportation	32,780	3,998	12.2%
Information	14,694	762	5.2%
Finance	37,638	4,846	12.9%
Real Estate	42,295	3,811	9.0%
Professional Services	89,127	7,547	8.5%
Other Services	62,813	7,796	12.4%
Education & Health	150,559	8,983	6.0%
Entertainment & Accommodations	122,930	7,933	6.5%
Repair and Other Services	64,250	4,733	7.4%
Government	192,225	28,901	15.0%
Total	1,114,376	134,608	12.1%

Source: IMPLAN modelling results prepared by the authors.

Average Labor Income per job in the Mining sector was \$80,092 in 2018. This was well above the statewide average of \$50,206 calculated using IMPLAN data.

County-by-County Economic Impacts of the Oil and Gas Industry:

Table 4 presents total economic impacts of the oil and gas industry in each county. Appendix D presents the breakout of these results by Direct, Indirect and Induced economic effects. As in the statewide results, these impacts include the effects of the Industry Contribution Analysis and the Government Spending Analysis.

Table 4: County-by-County Impacts of the Oil and Gas Industry in 2018

County	Employment	Labor Income	Value Added
Bernalillo	25,866	\$1,317,641,983	\$2,065,943,809
Catron	181	\$3,674,119	\$20,594,107
Chaves	5,649	\$488,689,563	\$833,444,948
Cibola	853	\$32,138,394	\$68,496,079
Colfax	661	\$26,434,594	\$63,769,589
Curry	1,676	\$62,396,577	\$153,198,013
De Baca	107	\$4,086,462	\$13,853,273
Dona Ana	6,375	\$299,025,603	\$425,649,131
Eddy	16,572	\$1,273,110,038	\$3,848,535,460
Grant	1,085	\$37,730,382	\$66,532,108
Guadalupe	335	\$10,728,621	\$30,071,040
Harding	28	\$1,220,543	\$5,386,353
Hidalgo	213	\$6,753,638	\$11,682,157
Lea	18,329	\$1,295,677,389	\$3,230,382,193
Lincoln	1,163	\$41,351,129	\$79,106,822
Los Alamos	502	\$23,580,395	\$38,615,064
Luna	620	\$25,301,522	\$46,500,330
McKinley	2,646	\$130,180,822	\$364,554,188
Mora	137	\$3,575,182	\$7,247,331
Otero	1,356	\$49,981,557	\$86,441,098
Quay	579	\$18,168,825	\$44,528,473
Rio Arriba	1,372	\$61,606,843	\$145,601,394
Roosevelt	637	\$26,990,990	\$39,288,431
San Juan	14,180	\$886,754,873	\$2,401,045,566
San Miguel	1,109	\$43,249,989	\$75,337,819
Sandoval	2,791	\$116,033,706	\$194,410,072
Santa Fe	6,967	\$327,075,968	\$551,377,459
Sierra	406	\$10,301,650	\$26,019,041
Socorro	837	\$29,421,551	\$76,249,667
Taos	1,134	\$38,345,487	\$89,602,949
Torrance	666	\$26,412,326	\$102,148,577
Union	156	\$5,567,096	\$9,696,801
Valencia	1,900	\$83,467,016	\$157,528,229

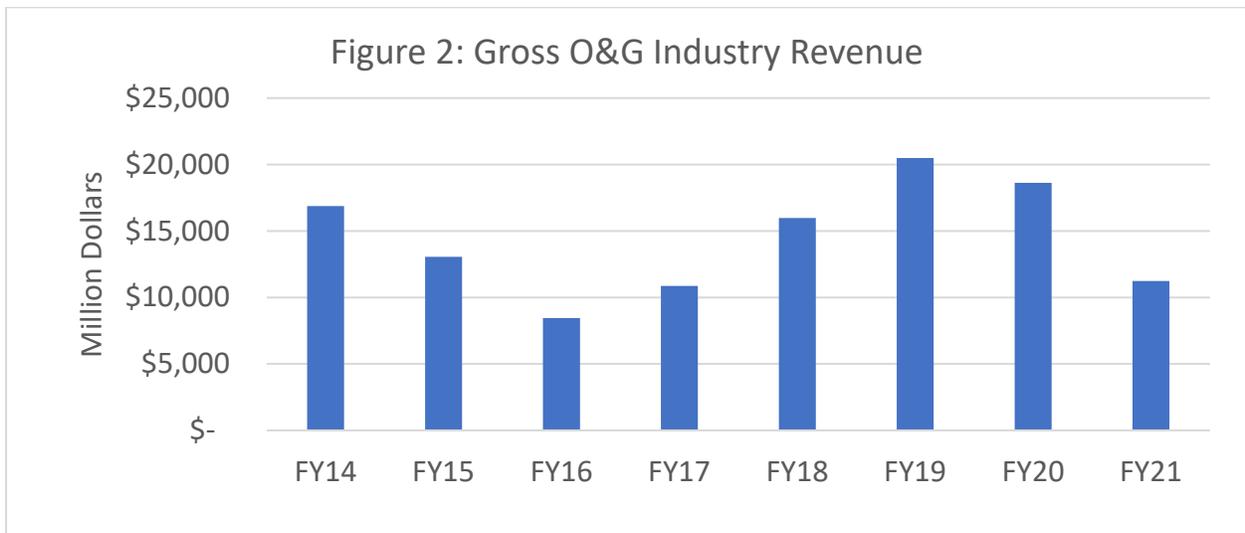
Source: IMPLAN modelling results prepared by the authors.

County-by-county impacts in the IMPLAN model rely on additional assumptions compared with the Statewide model. These assumptions have the effect of reducing the estimated Indirect and

Induced impacts estimated by the model. Thus, the county-by-county estimated impacts are conservative in the sense of underestimating total impacts compared with the statewide model.

Recent Trends in Industry Revenue:

As illustrated in Figure 2, gross industry revenue – gross revenue from sales of oil and gas products reported on severance tax returns – increased significantly from FY17 to FY19 and is expected to decline significantly by FY21. Based on the Consensus Group estimate, FY21 gross revenue will be about 40 percent below the level that prevailed in CY18. In addition, the number of rigs drilling for oil and gas in the state has recently declined to roughly half the level of CY18. State and local taxes derived from the industry will also be significantly lower. Based on these trends, the level of economic activity supported by the industry is likely to be significantly lower in the coming year than that presented in this report for CY18.



Source: Consensus Revenue Estimating Group

Methodology and Key Inputs:

As noted above, this study presents results from two types of economic analysis of the oil and gas industry’s activities: the Industry Contribution Analysis calculates the activity in the state related to the spending by the industry. The Institutional Spending Pattern Analysis estimates the activity supported by the industry’s payments to State and Local Governments.

Industry Contribution Analysis (ICA):

IMPLAN’s “Industry Contribution Analysis” (ICA) provides estimates of the total contributions of a particular industry through its interactions with other industries and with households. To characterize the total amount of economic activity supported by the oil and gas industry IMPLAN divides economic activity into three components:

- “Direct” economic activity comprises the activities of the industry itself, e.g., the number of people employed by the industry, the industry’s purchases from other businesses, the industry’s sales revenue and taxes paid.;
- “Indirect” activity is the economic activity of other industries from whom the industry makes purchases including other industry sales, employment, payroll, and activities that support oil and gas activities; and
- “Induced” activity is additional economic activity such as spending by employees and owners of the oil and gas industry and those industries that support it.

All of the activity results presented are those that occur in New Mexico. IMPLAN adjusts for trade flows across the State’s borders and internationally. These adjustments include those for employees who commute from other regions.¹ Thus, in the case of compensation paid to a worker or business owner residing outside the state, the Induced economic effects of those payments would be excluded from the activity reported for New Mexico and is termed a “leakage” from the Input/Output model. For more information on the IMPLAN modeling process, visit IMPLAN.com.

Table 5 presents the Direct economic activity levels of each of the subsectors that comprise the Oil and Gas Industry in New Mexico. These serve as the “inputs” into the Input-Output analysis of the industry’s impacts.

¹ IMPLANhelp.zendesk.com, “How Commuter Employee Compensation Is Estimated.”

Table 5: 2018 Direct Economic Activity of Sub-sectors in the Oil and Gas Industry

Industry	Employment	Labor Income	Income Per Job	Value Added
O&G Extraction	10,518	\$817,099,447	\$77,686	\$4,542,506,953
O&G Drilling	3,708	\$322,493,038	\$86,972	\$628,966,804
O&G Support	15,587	\$1,250,215,714	\$80,209	\$1,776,482,779
Natural Gas Distribution	829	\$94,673,656	\$114,202	\$248,165,338
O&G Pipeline Construction*	1,428	\$71,574,347	\$50,122	\$34,739,381
Petroleum Refineries	717	\$108,080,836	\$150,740	\$974,529,936
Petroleum Product Manufacturing	139	\$7,729,941	\$55,611	\$27,887,558
Petroleum Product Wholesale	879	\$58,745,644	\$66,832	\$855,881,292.03
Gasoline Stations	6,482	\$220,913,984	\$34,081	\$405,034,197.70
Fuel Dealers*	802	\$10,457,662	\$13,039	\$42,231,018.39
Pipeline Transportation	672	\$95,506,042	\$142,122	\$187,079,398
Total	41,762	\$3,057,490,312	\$73,212	\$9,723,504,655

*IMPLAN industry totals were reduced to model only the Oil and Gas share based on data for Gross Receipts by industry from the RP-80 report published by the N.M. Taxation and Revenue Department.

Institutional Spending Pattern Analysis (ISA):

The ICA analysis does not reflect the economic effects of State and Local government spending supported by the industry. However, IMPLAN provides another tool for calculating this activity called an “Institutional Spending Pattern Analysis” (ISA).

As documented previously in annual reports by the New Mexico Tax Research Institute (NMTRI), the O&G Industry pays a significant share of the total revenue of State and Local government. NMTRI estimated the Industry provided 32.3 percent of total State General Fund revenue in FY18. In a recent update, NMTRI estimated this percentage increased to 38.9 percent in FY19.

NMTRI used information on the State Operating Budget and Local Revenues to estimate that a total of \$2.5 billion of State and Local government spending was supported by the Upstream Oil and Gas Industry in FY18. That amount increased to \$3.7 billion in FY19. Adjusting these estimates for timing, total State and Local Spending supported by the Industry during calendar

year 2018 was \$3.1 billion. State and Local revenue and spending supported by the Downstream Oil and Gas Industry were drawn from IMPLAN data. When combined with the Upstream contributions, total State and Local spending supported by the Oil and Gas Industry in 2018 reached \$3.3 billion. This report uses the ISA to calculate the economic activity supported by these revenues. In this analysis:

- “Direct” activity is the activity paid for by State and Local government, e.g. employment, purchases, construction.;
- “Indirect” activity is the activity of businesses supported by Government spending; and
- “Induced” activity is that supported by the spending of households who receive payments through the Direct and Indirect activity.

Table 6 summarizes the inputs to the ISA analysis. Spending categories reflect the categories designed by IMPLAN for ISA modeling. The allocation of State government spending between Education and Non-Education reflects the shares of each of those purposes within the General Fund budget. Construction spending reflects - construction spending financed by Severance Tax Bonds. The allocation of Local spending is based on property tax rate certificates. Local government Gross Receipts Taxes were applied to the Non-education Operating budget.

Table 6: Government Spending in 2018 Supported by Oil & Gas Revenue

<u>Spending Category</u>	<u>Amount</u>
Education Operating Budget	\$1,512,000
Non-education Operating Budget	\$1,319,000
Capital Spending	\$506,000
Total	\$3,338,000

Source: Authors’ calculations from NMTRI reports, state operating budgets and property tax rate certificates.

Comparison of Tax Estimates:

Table 7 presents a comparison of estimates of state and local taxes (SALT) paid by the oil and gas industry from annual reports by the NMTRI with those from the IMPLAN system. The NMTRI results, which were prepared on a fiscal year basis, are adjusted to estimate the amounts accruing during Calendar Year 2018. The IMPLAN estimates of Direct SALT are adjusted to

eliminate the taxes attributed to sectors that were not included in the NMTRI study. These include retail gasoline stations, refineries, natural gas distribution and others. IMPLAN estimates of SALT paid by the industry appear to be about 10 percent lower than those estimated by the NMTRI. This difference is due to the different sources of information and modelling estimates used by IMPLAN.

Table 7: Comparison of Estimated State & Local Taxes Paid by the Oil and Gas Industry

(Dollar amounts in Millions)

	FY18	FY19	Estimated CY18
NMTRI Reports:			
State General Fund	\$803	\$1,066	\$935
Other State Funds	\$506	\$673	\$590
Local Governments	\$233	\$307	\$270
Total NMTRI SALT	\$1,542	\$2,046	\$1,794
IMPLAN Direct SALT			\$1,774
Less industries not included in NMTRI			-\$145
Net IMPLAN Direct SALT			\$1,629
IMPLAN/NMTRI			90.8%

Source: NMTRI estimates from the FY18 and FY19 reports on state and local revenues deriving from the oil and gas industry. IMPLAN estimates prepared by the authors.

Table 8 presents a comparison of state and local tax (SALT) collections as reported by the state and local governments with the aggregate amount of SALT estimated by IMPLAN. IMPLAN's estimates are about 9 percent lower than the amounts compiled from various state and local sources.

**Table 8: Comparison of Estimates of Aggregate State & Local Tax (SALT) Payments
(Dollar amounts in millions)**

	CY18 Revenue	Data Source
State:		
General Fund	\$5,474	Consensus Estimating Group
Other Funds	\$575	DFA Bond Reports
State Total	\$6,048	
Local Governments:		
Gross Receipts Tax	\$1,949	TRD RP-500
Property Tax	\$1,820	DFA Local Government Division
Local Total	\$3,824	
Grand Total SALT	\$9,872	
IMPLAN Total SALT	\$9,005	IMPLAN
IMPLAN/NM Revenue Reports	91.2%	

Source: Authors' calculations based on sources cited.

Combining the results presented in Tables 7 and 8, the estimate of the oil and gas industry's share of total SALT using IMPLAN is virtually identical to what would be derived from financial reports of state and local governments. IMPLAN's estimate of SALT paid by the industry is 10 percent lower than that derived from state and local sources, while IMPLAN's estimate of total SALT is about 9 percent lower. Thus, the ratio of the two is almost identical. As illustrated in Table 9.

**Table 9: Oil and Gas Industry Share of Total State & Local Taxes
(Dollar amount in millions)**

	IMPLAN	State Revenue Reports*
O&G Industry Direct SALT Payments	\$1,774	\$1,939
Total SALT Payments	\$9,005	\$9,872
O&G Industry Direct SALT Share of Total SALT	19.7%	19.6%

*O&G payments include IMPLAN estimates for industries not included in NMTRI reports.

Source: Authors' calculations from state and local revenue reports and from IMPLAN.

Comparison to Other Studies

ICF:²

In addition to a detailed analysis of the infrastructure needs of the oil and gas industry in New Mexico, ICF used the IMPLAN application to estimate the economic activity in New Mexico supported by the industry. The ICF study differed from the current report in that ICF prepared estimates of capital spending by the industry outside of the IMPLAN application. ICF also prepared its own estimates of independent contractors and other non-payroll based employment. Finally, ICF did not include the economic impacts of the State and Local Government spending supported by the industry. Major findings of the ICF report include:

- In 2017 the entire industry contributed \$13.5 billion, or 14% to the Gross State Product of New Mexico, including Direct, Indirect, and Induced effects.
- In 2017, the industry supported a total of 77,013 jobs in New Mexico.

Although it is not possible to precisely characterize all of the differences in the two studies, they appear to be generally consistent with results of the ICA in the current study.

PWC:³

This study used the IMPLAN application to estimate the Direct, Indirect, and Induced economic impacts of the oil and gas industry on each of the 50 states. Like the ICF study, this one included all segments of the oil and gas industry, not just the exploration, production and refining segments. Like the ICF study and unlike the current study, PWC did not include estimates of the activity supported by the State and Local revenue payments from the industry. Due to the lack of data on capital investment by the industry at the state level, PWC did not include impacts of capital spending in the report.

PWC found the industry supported a total of 45,328 Direct jobs, and 90,100 total jobs including Indirect and Induced effects comprising 8.3% of all jobs in the state. PWC reported that, in

² ICF, “*Economic Importance of New Mexico Oil and Natural Gas Infrastructure*,” September 2019, prepared for the American Petroleum Institute and the New Mexico Oil and Gas Association.

³ “*Impacts of the Oil and Natural Gas Industry on the U.S. Economy: 2015*,” PWC, July 2017, prepared for the American Petroleum Institute.

2015, the industry supported Labor Income of \$5.2 billion, or 10.0% of the state total and Value Added of \$12.8 billion, 13.3% of the state total.

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Appendices:

The following appendices presents detailed information on the modelling results combining both the ICA and ISA analyses.

Appendix A: Oil and Gas Industry Employment Impacts by Major Industry

Industry	Direct	Indirect	Induced	Total
Agriculture	118	55	175	348
Mining	29,830	161	20	30,010
Utilities	853	200	87	1,141
Construction	5,271	880	245	6,396
Manufacturing	923	334	148	1,405
Wholesale	994	1,346	591	2,931
Retail	7,294	508	5,265	13,067
Transportation	1,041	2,147	810	3,998
Information	85	340	337	762
Finance	23	3,105	1,719	4,846
Real Estate	259	2,177	1,376	3,811
Professional Services	533	5,870	1,144	7,547
Other Services	586	5,832	1,377	7,796
Education & Health	208	67	8,708	8,983
Entertainment & Accommodations	224	1,776	5,933	7,933
Repair and Other Services	223	1,139	3,370	4,733
Government	28,105	416	380	28,901
Total	76,569	26,353	31,687	134,608

Source: IMPLAN model results prepared by the authors.

Appendix B: Oil and Gas Industry Labor Income Impacts by Major Industry

Industry	Direct	Indirect	Induced	Total
Agriculture	\$4,080,221	\$1,373,968	\$5,120,714	\$10,574,903
Mining	\$2,390,967,116	\$10,893,366	\$1,460,811	\$2,403,321,294
Utilities	\$96,844,069	\$20,135,237	\$8,913,775	\$125,893,081
Construction	\$267,351,849	\$43,985,376	\$11,833,219	\$323,170,444
Manufacturing	\$119,497,925	\$11,752,101	\$5,161,990	\$136,412,015
Wholesale	\$65,425,827	\$82,246,225	\$35,211,722	\$182,883,774
Retail	\$231,640,007	\$18,132,445	\$160,990,782	\$410,763,234
Transportation	\$109,962,956	\$132,108,948	\$45,353,509	\$287,425,414
Information	\$5,063,810	\$19,880,145	\$19,559,966	\$44,503,921
Finance	\$1,361,938	\$150,217,978	\$90,212,474	\$241,792,390
Real Estate	\$5,530,255	\$80,726,696	\$31,565,038	\$117,821,988
Professional Services	\$39,786,776	\$373,671,437	\$64,511,281	\$477,969,494
Other Services	\$22,724,775	\$225,945,990	\$54,709,552	\$303,380,317
Education & Health	\$5,354,861	\$1,789,059	\$452,206,954	\$459,350,874
Entertainment & Accommodations	\$5,126,129	\$38,788,097	\$138,650,929	\$182,565,155
Repair and Other Services	\$8,893,242	\$55,781,238	\$120,201,666	\$184,876,146
Government	\$1,643,187,988	\$25,679,534	\$23,305,913	\$1,692,173,435
Total	\$5,022,799,745	\$1,293,107,839	\$1,268,970,295	\$7,584,877,879

Source: IMPLAN model results prepared by the authors.

Appendix C: Oil and Gas Industry Value Added Impacts by Major Industry

Industry	Direct	Indirect	Induced	Total
Agriculture	\$4,224,874	\$1,568,355	\$6,002,238	\$11,795,467
Mining	\$6,953,763,413	\$52,349,509	\$7,784,231	\$7,013,897,153
Utilities	\$254,146,915	\$69,511,489	\$30,250,477	\$353,908,882
Construction	\$244,386,634	\$60,267,938	\$17,230,709	\$321,885,282
Manufacturing	\$1,019,920,763	\$43,225,362	\$13,518,210	\$1,076,664,335
Wholesale	\$875,277,269	\$138,214,586	\$66,465,968	\$1,079,957,823
Retail	\$447,662,044	\$33,228,217	\$247,281,795	\$728,172,056
Transportation	\$200,502,506	\$178,721,403	\$56,978,562	\$436,202,471
Information	\$12,502,982	\$44,579,614	\$51,267,778	\$108,350,374
Finance	\$2,171,982	\$259,594,111	\$155,081,014	\$416,847,106
Real Estate	\$20,477,227	\$298,797,829	\$706,704,625	\$1,025,979,680
Professional Services	\$49,054,211	\$470,185,842	\$81,469,660	\$600,709,713
Other Services	\$31,324,857	\$294,999,980	\$71,106,313	\$397,431,150
Education & Health	\$5,861,192	\$2,165,489	\$512,581,354	\$520,608,035
Entertainment & Accommodations	\$7,003,678	\$55,521,847	\$202,966,352	\$265,491,877
Repair and Other Services	\$10,362,163	\$69,380,367	\$141,048,108	\$220,790,638
Government	\$1,912,996,223	\$57,129,968	\$51,551,400	\$2,021,677,592
Total	\$12,051,638,934	\$2,129,441,906	\$2,419,288,793	\$16,600,369,633

Source: IMPLAN model results prepared by the authors.

Appendix D: County-by-County Employment Impacts of the Oil and Gas Industry

County	Employment			
	Direct	Indirect	Induced	Total
Bernalillo	16,671	4,430	4,765	25,866
Catron	134	40	7	181
Chaves	3,079	966	1,604	5,649
Cibola	695	85	73	853
Colfax	472	106	82	661
Curry	1,265	264	147	1,676
De Baca	78	23	5	107
Dona Ana	4,763	633	979	6,375
Eddy	9,884	3,783	2,905	16,572
Grant	841	129	116	1,085
Guadalupe	273	39	23	335
Harding	21	6	1	28
Hidalgo	174	28	12	213
Lea	11,743	3,515	3,070	18,329
Lincoln	683	328	152	1,163
Los Alamos	371	107	24	502
Luna	487	60	73	620
McKinley	1,650	613	383	2,646
Mora	107	25	4	137
Otero	1,084	135	137	1,356
Quay	448	84	47	579
Rio Arriba	1,077	156	139	1,372
Roosevelt	532	48	57	637
San Juan	8,472	2,434	3,274	14,180
San Miguel	918	74	116	1,109
Sandoval	1,785	810	196	2,791
Santa Fe	4,257	1,654	1,056	6,967
Sierra	311	72	24	406
Socorro	681	89	66	837
Taos	698	274	162	1,134
Torrance	489	141	36	666
Union	118	26	12	156
Valencia	1,320	413	168	1,900

Source: IMPLAN model results prepared by the authors.

County-by-County Labor Income Impacts of the Oil and Gas Industry

County	Labor Income			
	Direct	Indirect	Induced	Total
Bernalillo	\$877,038,061	\$234,699,647	\$205,904,275	\$1,317,641,983
Catron	\$2,777,148	\$784,440	\$112,531	\$3,674,119
Chaves	\$389,327,362	\$40,875,339	\$58,486,862	\$488,689,563
Cibola	\$25,746,044	\$3,678,144	\$2,714,206	\$32,138,394
Colfax	\$21,018,990	\$3,285,847	\$2,129,757	\$26,434,594
Curry	\$43,709,743	\$12,984,316	\$5,702,518	\$62,396,577
De Baca	\$3,045,177	\$859,194	\$182,091	\$4,086,462
Dona Ana	\$232,239,213	\$27,456,525	\$39,329,865	\$299,025,603
Eddy	\$926,628,260	\$227,446,343	\$119,035,435	\$1,273,110,038
Grant	\$29,498,777	\$4,859,878	\$3,371,727	\$37,730,382
Guadalupe	\$8,796,057	\$1,201,750	\$730,815	\$10,728,621
Harding	\$837,709	\$372,729	\$10,105	\$1,220,543
Hidalgo	\$5,577,665	\$817,711	\$358,262	\$6,753,638
Lea	\$957,325,000	\$210,812,202	\$127,540,186	\$1,295,677,389
Lincoln	\$29,471,427	\$7,081,560	\$4,798,142	\$41,351,129
Los Alamos	\$14,140,200	\$8,404,541	\$1,035,654	\$23,580,395
Luna	\$20,861,139	\$2,215,467	\$2,224,915	\$25,301,522
McKinley	\$93,936,614	\$23,481,495	\$12,762,713	\$130,180,822
Mora	\$2,960,812	\$510,310	\$104,061	\$3,575,182
Otero	\$39,998,439	\$4,930,234	\$5,052,883	\$49,981,557
Quay	\$13,234,140	\$3,040,054	\$1,894,630	\$18,168,825
Rio Arriba	\$51,424,887	\$5,348,098	\$4,833,858	\$61,606,843
Roosevelt	\$23,716,030	\$1,765,342	\$1,509,618	\$26,990,990
San Juan	\$649,760,080	\$105,863,865	\$131,130,927	\$886,754,873
San Miguel	\$38,039,872	\$2,199,642	\$3,010,475	\$43,249,989
Sandoval	\$82,033,618	\$27,673,548	\$6,326,540	\$116,033,706
Santa Fe	\$206,319,455	\$74,994,945	\$45,761,568	\$327,075,968
Sierra	\$7,700,066	\$1,967,467	\$634,117	\$10,301,650
Socorro	\$24,112,020	\$3,376,871	\$1,932,660	\$29,421,551
Taos	\$25,239,489	\$8,090,375	\$5,015,622	\$38,345,487
Torrance	\$21,311,206	\$3,955,043	\$1,146,076	\$26,412,326
Union	\$4,183,622	\$946,175	\$437,299	\$5,567,096
Valencia	\$63,116,561	\$15,677,407	\$4,673,048	\$83,467,016

Source: IMPLAN model results prepared by the authors.

County-by-County Value Added Impacts of the Oil and Gas Industry

County	Value Added			
	Direct	Indirect	Induced	Total
Bernalillo	\$1,283,148,455	\$402,430,156	\$380,365,198	\$2,065,943,809
Catron	\$18,924,464	\$1,263,607	\$406,037	\$20,594,107
Chaves	\$662,764,944	\$60,965,775	\$109,714,229	\$833,444,948
Cibola	\$55,795,232	\$7,204,677	\$5,496,170	\$68,496,079
Colfax	\$53,081,707	\$5,889,507	\$4,798,375	\$63,769,589
Curry	\$119,358,826	\$22,521,516	\$11,317,672	\$153,198,013
De Baca	\$11,943,243	\$1,415,143	\$494,887	\$13,853,273
Dona Ana	\$314,125,266	\$39,488,391	\$72,035,475	\$425,649,131
Eddy	\$3,198,997,293	\$406,994,993	\$242,543,174	\$3,848,535,460
Grant	\$50,525,664	\$8,318,663	\$7,687,780	\$66,532,108
Guadalupe	\$26,176,002	\$2,241,743	\$1,653,295	\$30,071,040
Harding	\$4,634,770	\$693,742	\$57,842	\$5,386,353
Hidalgo	\$9,612,229	\$1,268,069	\$801,859	\$11,682,157
Lea	\$2,600,580,756	\$371,266,277	\$258,535,160	\$3,230,382,193
Lincoln	\$56,277,725	\$12,806,453	\$10,022,645	\$79,106,822
Los Alamos	\$23,580,570	\$12,602,590	\$2,431,904	\$38,615,064
Luna	\$37,895,000	\$3,935,780	\$4,669,549	\$46,500,330
McKinley	\$296,108,326	\$43,023,072	\$25,422,791	\$364,554,188
Mora	\$5,851,785	\$1,056,225	\$339,321	\$7,247,331
Otero	\$67,409,323	\$8,762,098	\$10,269,677	\$86,441,098
Quay	\$35,086,290	\$5,799,868	\$3,642,315	\$44,528,473
Rio Arriba	\$126,539,715	\$9,348,219	\$9,713,460	\$145,601,394
Roosevelt	\$32,244,034	\$3,405,787	\$3,638,610	\$39,288,431
San Juan	\$1,977,774,698	\$183,484,049	\$239,786,819	\$2,401,045,566
San Miguel	\$64,773,157	\$3,878,416	\$6,686,246	\$75,337,819
Sandoval	\$140,898,633	\$38,768,087	\$14,743,352	\$194,410,072
Santa Fe	\$355,799,796	\$113,118,670	\$82,458,993	\$551,377,459
Sierra	\$20,910,967	\$3,693,692	\$1,414,382	\$26,019,041
Socorro	\$66,618,266	\$5,165,913	\$4,465,489	\$76,249,667
Taos	\$65,900,075	\$13,640,692	\$10,062,182	\$89,602,949
Torrance	\$91,313,821	\$8,076,145	\$2,758,611	\$102,148,577
Union	\$7,170,931	\$1,591,631	\$934,240	\$9,696,801
Valencia	\$118,438,457	\$28,133,117	\$10,956,655	\$157,528,229

Source: IMPLAN model results prepared by the authors.