

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

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Introduction

- Educational report takes a deeper dive into the value of the oil and gas industry relative to the New Mexico economy
- IMPLAN software provides “Input-Output” estimates of how the industry affects households and other businesses
- IMPLAN also provides estimates of the effects of State and Local government spending supported by industry payments
- Data from State and Local sources were used to validate results

Key Findings

In 2018, oil and gas industry spending supported:

- 134,608 jobs, 12.1% of the State total;
- \$7.6 billion of Labor Income, 13.5% of the State total;
- \$16.6 billion of Gross State Product, 15.8% of the State total;
and
- \$2.2 billion of State and Local taxes, 25.0% of the State total.

Definitions & Methodology

- Direct impacts:
 - Oil and gas industry employment, payroll, purchases, income distribution, tax payments, etc.
 - Includes upstream (drilling, production) and downstream (refining, pipeline transportation, wholesale and retail) components of the industry
- Indirect impacts:
 - Employment, spending, etc., by companies that receive payments from the oil and gas industry
- Induced impacts:
 - Impacts of spending by employees, suppliers, and owners of the oil and gas industry and other industries supported by oil and gas

Definitions & Methodology (continued)

- Employment:
 - Full and part-time jobs, including payroll employment, self employed, and sole proprietors
- Labor Income:
 - Wages and salaries, self-employment income and proprietors' income
- Value Added:
 - Total Sales less the cost of inputs; equal to the industry's contribution to Gross State Product
- State & Local Taxes:
 - Tax revenue only, does not include royalties or permanent fund distributions

Definitions & Methodology (continued)

Input-Output Analysis:

- Mathematical representation of the economy at a point in time
- IMPLAN model uses state and national data for industry-to-industry coefficients
- Regional Purchase Coefficients determine how much spending is with in-state versus out-of-state businesses
- Results may not match information from state sources exactly, but they enable estimates of how industries affect each other and the State

2018 Economic Activity Supported by the Oil and Gas Industry

Impact	Employment	Labor Income	Gross State Product	State & Local Taxes
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	\$2,248,844,485
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

Total impacts were modelled through two channels:

- 1. Payments to businesses and households*
- 2. Payments to state and local governments*

Impacts by Channel

Channel/Impacts	Employment	Labor Income	Gross State Product	State & Local Taxes
Payments to Businesses and Households:				
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
Payments to State and Local Governments:				
Direct	34,807	\$1,965,309,433	\$2,328,124,279	\$58,475,020
Indirect	1,763	\$79,796,418	\$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

Direct Oil & Gas Economic Activity

	Employment	Labor Income	GSP	LI/job
Support activities for O&G operations	15,587	\$1,250,215,714	\$1,776,482,779	\$80,209
Oil and gas extraction	10,518	\$817,099,447	\$4,542,506,953	\$77,684
Retail - Gasoline stores	6,482	\$220,913,984	\$405,034,198	\$34,082
Drilling oil and gas wells	3,708	\$322,493,038	\$628,966,804	\$86,980
Construction	1,428	\$71,574,347	\$34,739,381	\$50,107
Wholesale - Petroleum products	879	\$58,745,644	\$855,881,292	\$66,799
Natural gas distribution	829	\$94,673,656	\$248,165,338	\$114,192
Retail - Nonstore retailers	802	\$10,457,662	\$42,231,018	\$13,042
Petroleum refineries	717	\$108,080,836	\$974,529,936	\$150,758
Pipeline transportation	672	\$95,506,042	\$187,079,398	\$142,124
Petroleum products manufacturing	139	\$7,729,941	\$27,887,558	\$55,611
Total	41,762	\$3,057,490,312	\$9,723,504,655	\$73,213

Source: IMPLAN results prepared by the authors

Labor Income includes proprietor's income of self-employed

Employment Impacts by Industry

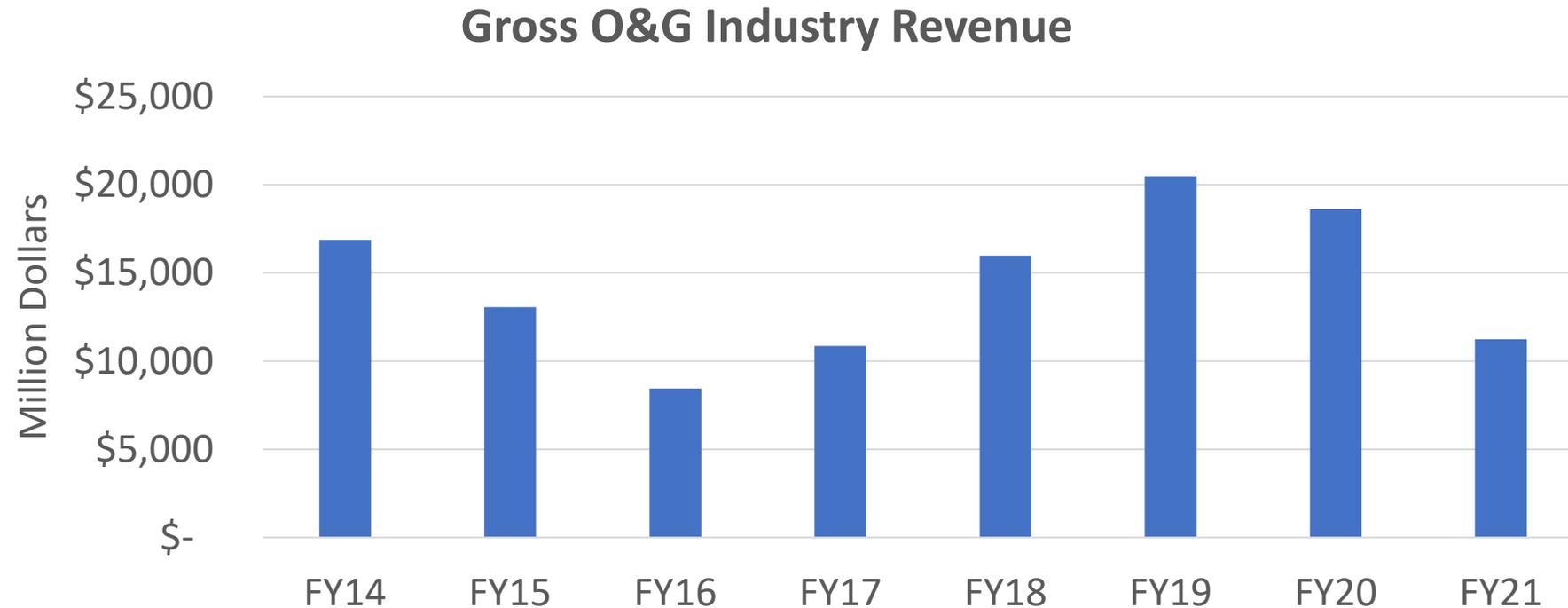
Industry	Business/House holds Payments	Government Payments	Total Impacts	Share of Industry Total
Agriculture	154	194	348	1.0%
Mining	29,908	102	30,010	82.5%
Utilities	1,071	69	1,141	22.0%
Construction	2,439	3,957	6,396	9.3%
Manufacturing	1,192	213	1,405	3.9%
Wholesale	2,498	433	2,931	12.0%
Retail	11,150	1,917	13,067	13.0%
Transportation	3,209	789	3,998	12.1%
Information	532	230	762	5.2%
Finance	4,191	655	4,846	12.8%
Real Estate	2,919	892	3,811	9.0%
Professional Services	6,387	1,160	7,547	8.4%
Other Services	6,418	1,378	7,796	12.3%
Education & Health	5,955	3,029	8,983	5.9%
Entertainment & Accomodations	5,663	2,270	7,933	6.4%
Repair and Other Services	3,332	1,401	4,733	7.3%
Government	650	28,251	28,901	15.0%
Total	87,669	46,940	134,608	12.1%

State & Local Government Spending Supported by the Oil & Gas Industry

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

- Estimates using NMTRI reports and state & local budget information (2018)
- Includes revenue from royalties on federal lands and distributions from the permanent funds (2018)
- Inputs to IMPLAN Institutional Spending Pattern Analysis

Trends



Source: Consensus Revenue Estimating Group

Since 2018, revenue increased sharply, but FY21 revenue is expected to fall significantly below the levels that prevailed in 2018

Discussion

- Input-Output modelling is a widely used method that provides a **simplified, but insightful picture** of the State's economy
- Enables **tracing of the ultimate effects** of spending by businesses and governments
- Oil and gas “**punches above its weight**” through payments to state and local governments due to high-Value Added, high tax rates, and royalty payments
- Not a substitute for CREG's economic analysis, but provides a wider lens on the economy by **integrating other data sources and modelling techniques**