

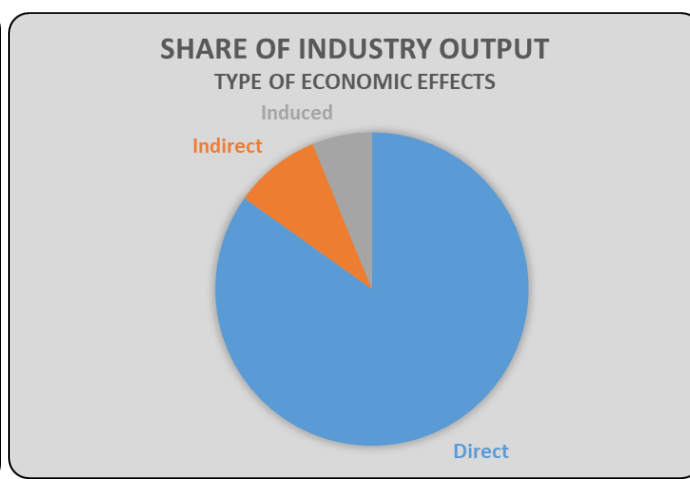
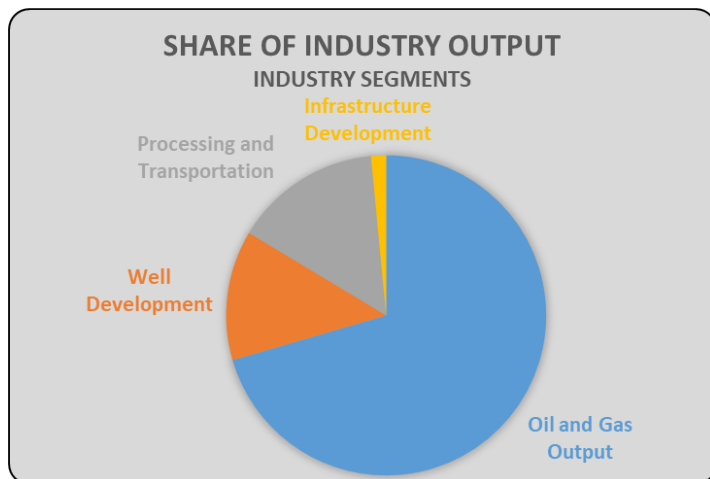
ECONOMIC CONTRIBUTION STUDY North Dakota Oil and Natural Gas Activities in 2019

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Biennial economic contribution studies of the petroleum industry have been conducted since 2005. Over this period, the industry grew from a few thousand wells to become the nation's second largest oil producing state. A swift and substantial price collapse in late 2014 resulted in dramatic contractions in both oil field development and the value of oil and gas production. The industry rebounded by 2017, and while drilling activity did not return to levels found prior to the price collapse, overall output in the industry again exceeded \$30 billion. The industry's economic footprint in the state increased and stabilized in 2018 and 2019, prior to the demand collapse created by the Covid-19 pandemic.

Industry Output

Industry output includes sales in the petroleum industry, and also includes the sum of gross receipts (i.e., sales of goods and services) in all economic sectors affected by the petroleum industry. Total gross business volume was estimated at \$40.2 billion, of which, about \$28 billion was from direct sales of crude oil and natural gas. Direct effects represented about 80 percent of the industry's gross business volume, with the remaining 20 percent split between indirect and induced economic effects.



Employment and Employment Compensation

In 2019, direct employment in all segments of the petroleum industry was estimated at nearly 24,000 jobs. Economic activity from Indirect and induced effects supported an additional 17,000 and 18,000 jobs, respectively. Of the 59,100 jobs attributed to the industry, about 48,500 jobs were supported by oil and gas production and well development. The remaining 10,500 jobs were associated with processing, transportation, and infrastructure development. Employment compensation, which includes wages, salaries, and employee benefits was estimated at \$4.5 billion.

Employment and Employment Compensation, by Industry Segment and Economic Effect, 2019				
Employment and Labor Income	Economic Effects			Total
	Direct	Indirect	Induced	
----- 000s jobs -----				
Oil and Gas Production	11.6	9.1	9.9	30.6
Well Development	6.8	5.7	5.4	17.9
Processing and Transportation	2.0	1.8	1.8	5.6
Infrastructure Development	3.5	0.4	1.1	5.0
All Segments	23.9	17.0	18.2	59.1
----- millions 2019 \$ -----				
Oil and Gas Production	1,376	620	415	2,411
Well Development	861	312	226	1,399
Processing and Transportation	154	101	76	331
Infrastructure Development	229	32	55	316
All Segments	2,620	1,065	772	4,457

Government Revenues

Total direct and indirect state, tribal, and local government revenues were estimated at \$3.8 billion in 2019, of which, severance taxes were \$2.4 billion.

State, Tribal, and Local Government Revenues			
Government Revenue	Paid Directly by the Industry	Collected from Secondary Effects	Total Collections
----- millions 2019 \$ -----			
Severance Taxes	2,418.8	---	2,418.8
Public Royalties and Lease Bonuses*	840.5	---	840.5
Sales, Property, and Corporate Income Taxes	259.6	92.3	351.9
Personal Income	39.6	30.7	160.5
Fees, Permits, Licenses, and Miscellaneous	129.9	13.9	53.5
Totals	3,688.4	136.9	3,825.3

* State, tribal, and net-federal royalties, after removing severance taxes.

Share of State Economy

Economic Metric	2019
Employment (jobs measured by QCEW)	
Private	16.8%
Private and Public	14.0%
Wages/Salaries (all private and public)	19.2%
GSP (value-added)	25.3%
Gross Business Volume	26.4%
Share of State and Local Government Revenues	36.1%