Localized Impacts of Oil and Gas Production and Drilling Activity in Oklahoma

for the
Oklahoma Commission on Marginally Producing Oil and Gas Wells

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This report summarizes the impact of oil and gas activity in Oklahoma at the county level and region level. The report discusses production, drilling activity, and total economic impacts by region of the state.

Local Oil and Gas Production

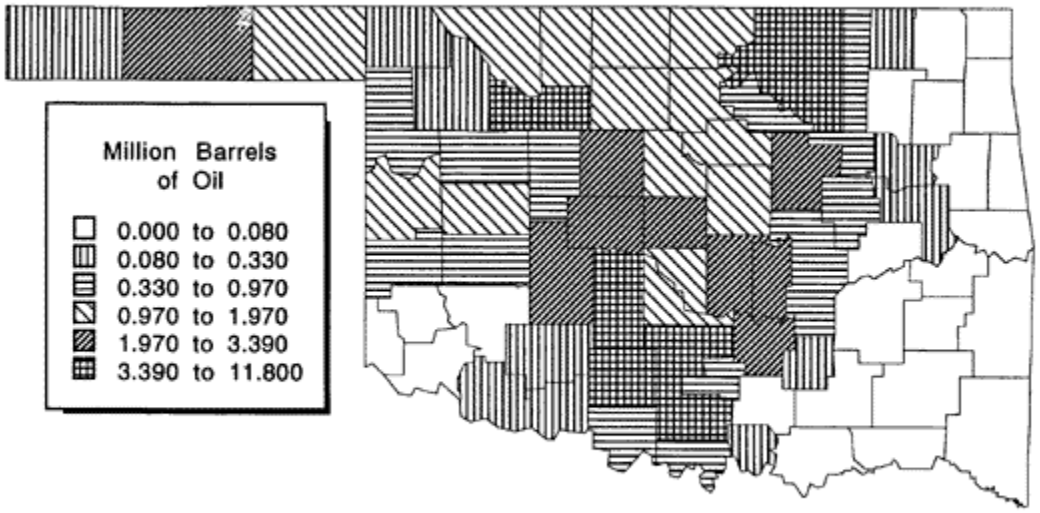
Oklahoma oil production is concentrated in a corridor stretching from Carter County and Stephens County in south central Oklahoma, northward to Osage County, then west to Alfalfa County (Map 1). Significant levels of oil production are also found in Major County and Grady County.

For the most part, the largest gas producing counties are found in an area extending from Stephens County and Carter County in the south central portion of the state north, including the majority of the counties in central and northwestern Oklahoma and portions of the panhandle (Map 2). Major producers include Grady County, Custer County, Roger Mills County and Texas County. A cluster of five counties with significant levels of gas production is also located in the eastern portion of the state, particularly Latimer County and Pittsburg County.

In 1994, three quarters of total oil production in Oklahoma (crude and condensate oil) occurred in twenty counties. The top ten producing counties, as shown in Table 2, accounted for more than half of all oil production. Carter County was the top producer with 11.7 million barrels in 1994, roughly 13 percent of the state's production. Stephens

County was the second largest producer with 7.4 million barrels with Osage County third with 5 million barrels. A total of nine counties produced less than one-tenth of one percent of the state's production and ten counties produced no oil at all in 1994.

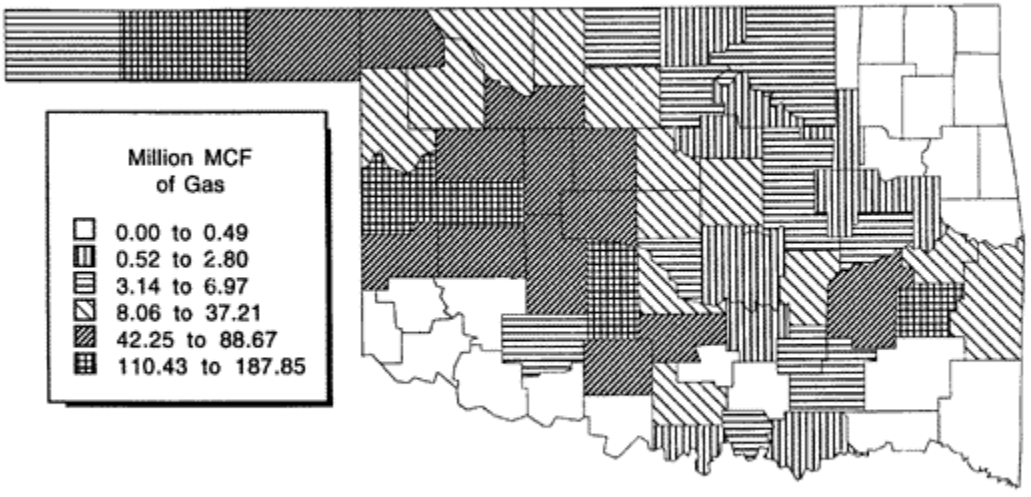
Map 1. Total Oil Production by County: 1994



Total oil production consists of crude oil and condensate.

Source: Oklahoma Corporation Commission.

Map 2. Total Gas Production by County; 1994



Total gas production consists of natural and casinghead gas.

Source: Oklahoma Corporation Commission.

Table 1: Total Oil Production* by County, 1990 and 1994

Rank	County	1990 (bls)	1994 (b1s)	1994 Percent of State Total	1994 Cumulative Percent	Change 1990-94
1	Carter	14,403,845	11,676,968	12.9%	12.9%	-18.9%
2	Stephens	9,436,725	7,375,556	8.1%	21.0%	-21.8%
3	Osage	6,227,392	5,025,164	5.5%	26.5%	-19.3%
4	Garvin	5.570,796	4,627,578	5.1%	31.6%	-16.9%
5	Grady	5,321,493	4,250,701	4.7%	36.3%	-20.1%
6	Major	3,341,732	4,016,&33	4.4%	40.7%	20.2%
7	Creek	4,267,316	3,387,777	3.7%	44.5%	-20.6%
8	Caddo	3,405,999	3,328,111	3.7%	48.2%	-2.3%
9	Ponlotoc	3,707,808	3,058,482	3.4%	51.5%	-17.5%
10	Oklahoma	3,202,263	2,823,692	3.1%	54.6%	-11.8%
11	Pottawatomie	3,285,965	2,618,782	2.9%	57.5%	-20.3%
12	Seminole	3,549,269	2,477,696	2.7%	60.3%	-30.2%
13	Kingfisher	2,739,511	2,140,900	2.4%	62.6%	-21.9%
14	Canadian	1,670,191	2,023,736	2.2%	64.8%	21.2%
15	Texas	2,544.921	1,974,804	2.2%	67.0%	-22.4%
16	Beam	2,079,899	1,920,947	2.1%	69.1%	-7.6%
17	McClain	2,581,578	1,772,920	2.0%	71.1%	-31.3%
is	Noble	2,107,674	1,485,249	1.6%	72.7%	-29.5%
19	Gustaf	1,733,956	1,405,480	1.5%	74.3%	-18.9%
20	Payne	1,370,563	1,384,070	1.5%	75.8%	1.0%
21	Garfield	2,031,446	1,278,788	1.4%	77.2%	-37.1%
22	Grant	2,187,634	1,238,961	1.4%	78.6%	-43.4%
23	Roger Nils	1,308,006	1,217,525	1.3%	79.9%	-6.9%
24	Kay	1,137.924	1,135,175	1.3%	81.2%	-0.2%
25	Alfalfa	979,993	1,114,236	1.2%	82.4%	13.7%
26	Lincoln	1,149,758	1,112,234	1.2%	83.6%	-3.3%
27	Cleveland	1,570,900	1,059,032	1.2%	84.8%	-32.6%
28	Logan	1,308,428	1,054,208	1.2%	86.0%	-19.4%
20	Woods	632,756	972,769	1.1%	87.0%	53.7%
30	Okfuskee	960,363	919,610	1.0%	88.0%	-4.2%
31	Dewey	1,456,143	895,953	1.0%	89.0%	-38.5%
32	Pawnee	1,221,092	851,803	0.9%	90.0%	-30.2%
33	Away	1,501,291	837,021	0.9%	90.9%	-44.2%
34	Okmulgee	1,069,513	730,827	0.8%	91.7%	-31.7%

35	Lam	934,106	665,444	0.7%	92.4%	-28.8%
36	Hughes	800,217	655,932	0.7%	93.1%	-18.00/0
37	Ellis	618,347	580,077	0.6%	93.8%	-6.2%
38	Beckham	933,889	503,744	0.6%	94.3%	-46.1%
30	Blaine	898,427	496,121	0.5%	94.9%	-44.8%
40	Tulsa	625,647	474,220	0.5%	95.4%	-24.2%
State	111,576,838	90,730,826	100.0%			-18.7%

* Total oil production consists of crude oil and condensate oil. Only the top 40 counties are included. Source: Oklahoma Corporation Commission.

Total oil production in Oklahoma fell by almost 19 percent from 1990 to 1994. The top ten producing counties fell by an average of 16 percent; declines in these counties ranged from a 22 percent decline in Stephens County to a 2.3 percent decline in Caddo county. Production declines in the top ten counties alone totaled 9.3 million barrels of oil between 1990 and 1994.

Although the majority of counties faced similar or even greater declines in oil production during this period, seven counties experienced production increases. For example, Major County posted an increase of 674 thousand barrels of oil from 1990 to 1994. Canadian County increased production by 354 thousand barrels and Payne County by 14 thousand barrels.

The distribution of gas production (natural and casinghead gas) in Oklahoma is more concentrated than is the case with oil production: 15 counties account for 75 percent of gas production and the top ten counties produce 58 percent of all gas. Roger Mills County was the top producer of gas with 187 million MCF or almost 10 percent of the state's production (Table 2). Latimer County produced 176.2 million MCF and Grady County 112.3 million MCF. Seven counties produced less than one-tenth of one percent of gas production in the state and twelve counties produced no gas at all.

Declines in gas production between 1990 and 1994 were somewhat less pronounced than was the case for oil production. Total gas production in the state fell 14.9 percent during the period. Gas production in the top ten counties fell an average of 11.5 percent for a total drop of 127.6 million MCF or 38.6 percent of the total decline in the state. As

was the case with oil production, the majority of counties experienced a decline in gas production during the period. However, seven counties showed increases in gas production with Stephens County posting the largest gain with an increase of 5.6 million MCF during the period.

Table 2: Total Gas* Production by County, 1990 and 1994

Rank	County	1990 (mcf)	1994 (mcf)	1994 Percent of State Total	1994 Cumulative Percent	Change 1990-94
1	Roger Mills	166,580,985	187,848,796	9.97%	9.97%	12.77%
2	Latimer	207,407.451	176,193,552	9.35%	19.32%	-15.05%
3	Grady	122,817,761	112,266,868	5.96%	25.27%	-8.59%
4	Custer	126,069,917	111,661,945	5.92%	31.20%	-11.43%
5	Texas	118,354,798	110,433,913	5.86%	37.06%	-6.69%
6	Pittsburg	106,745,793	88,665,269	4.70%	41.76%	-16-94%
7	Caddo	88,738,208	88,444,686	4.69%	46.45%	-0.33%
8	Beaver	94,349,242	77,895,710	4.13%	50.59%	-17.44%
9	Beckham	103,368,540	73,715,753	3.91%	54.50%	-28.69%
10	Major	91,302,129	70.965,475	3.77%	58.26%	-22.27%
11	Canadian	99,181,290	67,734,784	3.59%	61.86%	-31.71%
12	Blaine	90,078,064	61,504,533	3.26%	65.12%	-31.72%
13	Washita	65,236,558	57,338,812	3.04%	68.16%	-12.11%
14	Dewey	63,069,817	48,302,989	2.56%	70.73%	-23.41%
15	Stephens	42,216,940	47,884,346	2.54%	73.27%	13.42%
16	Harper	63,369,999	47,486,261	2.52%	75.79%	-25.07%
17	Garvin	53,737,210	44,015,705	2.34%	78.12%	-18.09%
is	Kingfisher	49,863,999	42,253,788	2.24%	80.36%	-15.26%
19	LeFlore	31,105,135	37,210,064	1.97%	82.34%	19.63%
20	Ellis	37,766,965	31,791,196	1.69%	84.03%	-15.82%
21	Haskell	49,504,829	29,985,418	1.59%	85.62%	-39.43%
22	Woodward	34,341,085	29,048,784	1.54%	87.16%	-15.41%
23	Woods	33,456,766	27,278,489	1.45%	88.61%	-18.47%
24	Garfield	35,653,577	26,449,254	1.40%	90.01%	-25.82%
25	Oklahoma	26,158,575	22,304,731	1.18%	91.19%	-14.73%
26	McClain	26,897,786	22,184,433	1.18%	92.37%	-17.52%
27	Carter	20,624,531	18,886,174	1.00%	93.37%	-8.43%
28	Malta	12,556,992	12,670,350	0.67%	94.04%	0.90%

29	Logan	13,166,648	11,380,448	0.60%	94.65%	-13.57%
30	Hughes	13,250,648	10,822,133	0.57%	95.22%	-18.33%
31	Lincoln	7,325,538	8,065,490	0.43%	95.65%	10.10%
32	Sequoyah	9,860,015	6,969,827	0.37%	96.02%	-29.31%
33	Cimarron	10,733,117	6.742,048	0.36%	96.38%	-37.18%
34	Marshall	6,098,335	6,194,767	0.33%	96.71%	1.58%
35	Comanche	6,367,979	5,287,936	0.28%	96.99%	-16.96%
36	Grant	8,241,522	4,903,822	0.26%	97.25%	-40.50%
37	Coal	4,890,169	4,762,905	0.25%	97.50%	-2.60%
38	Noble	7,000,758	4,445,886	0.24%	97.74%	-36.49%
39	Okfuskee	4,782,591	4,162,567	0.22%	97.96%	-12.96%
40	Creek	5,081,576	3,947,906	0.21%	98.17%	-22.31%
Stale	2,214,530,568	1,884,668,591	-14.90%			

* Total Gas Production consists of natural gas and casinghead gas. Only the top 40 counties are included. Source: Oklahoma Corporation Commission.

Drilling Activity

As shown in Table 3, half of all well completions in 1994 occurred in just 13 counties. Carter County experienced the greatest amount of drilling activity with 100 completions, followed by Major County (94 completions), Beaver County (88 completions) and Grady County (77 completions). These four counties accounted for 22 percent of all well completions in 1994. Many counties experienced very little drilling activity: twenty counties had 9 completions or less and 16 counties reported no completions at all in 1994.

Depressed oil and unstable natural gas prices contributed to declines in Oklahoma drilling activity from 1990 to 1994. The total number of wells drilled and completed in Oklahoma fell 36 percent during the period. The effects on drilling activity by county are shown in Table 3. Completions in Carter County remained fairly stable, falling only 3.8 percent while completions in Beaver County fell 16 percent. Major County, on the other hand, registered an increase of 20 completions for a 27 percent gain from 1990 to 1994.

Employment and Employee's Earnings

Table 4 shows that 75 percent of the wage and salary employment in this sector was concentrated in nine counties. Three counties--Tulsa County, Oklahoma County and Washington County--accounted for a little more than half of all employment in this sector. The heavy concentration of employment in these counties is most likely attributable to the location of oil and gas company headquarters and regional offices. A total of sixteen counties had 20 employees or less in this sector and five counties had no employees at all.

Wage and salary employment in the oil and gas extraction sector fell from a 1990 total of 41,774 to 33,120 in 1994, a 20.7 percent decline. The top five counties with the highest employment in this sector together lost a total of 5,800 employees; Tulsa County alone lost over 2,900.

Employee earnings in the oil and gas sector fell 8.9 percent during the period. As expected, those counties with the largest declines in employment also experienced the greatest declines in earnings (Table 5). The largest declines occurred in Tulsa County (-$72.8 million) and Washington County (-$48.5 million).

Table 3: Total Well Completions* by County, 1990 and 1994

Rank	County	1990 Completions	1994 Completions	1994 Percent of State Total	1994 Cumulative Percent	Percent Change 1990-94
I	Carter	104	100	6.22%	6.22%	-3.85%
2	Major	74	94	5.85%	12.06%	27.03%
3	Beaver	105	88	5.47%	17.54%	-16.19%
4	Grady	83	77	4.79%	22.33%	-7.23%
5	Stephens	112	66	4.10%	26.43%	-41.07%
6	Roger Mills	58	64	3.98%	30.41%	10.34%
7	Garvin	113	63	3.92%	34.33%	-44.25%
8	Pittsburg	50	60	3.73%	38.06%	20.00%
9	Harper	50	47	2.92%	40.98%	-6.00%
10	Caddo	37	46	2.86%	43.84%	24.32%

11	Oklahoma	88	41	2.55%	46.39%	-53.41%
12	Woodward	14	37	2.30%	48.69%	164.29%
13	Woods	39	35	2.18%	50.87%	-10.26%
14	Texas	39	34	2.11%	52.99%	-12.82%
15	Hughes	67	34	2.11%	55.10%	-49.25%
16	Blaine	22	34	2.11%	57.21%	54.55%
17	Canadian	45	34	2.11%	59.33%	-24.44%
18	Payne	40	34	2.11%	61.44%	-15.00%
19	Custer	24	32	1.99%	63.43%	33.33%
20	Haskell	28	32	1.99%	65.42%	142M
21	Ellis	34	31	1.93%	67.35%	-8.82%
22	Alfalfa	32	29	1.80%	69.15%	-9.38%
23	Noble	51	29	1.80%	70.96%	-43.14%
24	Okfuskee	50	29	1.80%	72.76%	-42.O0%
25	Latimer	45	28	1.74%	74.50%	-37.78%
26	Lincoln	34	28	1.74%	76.24%	-17.65%
27	LeFlore	31	27	1.68%	77.92%	-12.90%
28	Kingfisher	34	27	1.68%	79.60%	-20.59%
29	Dewey	35	24	1.49%	81.09%	-31.43%
30	Garfield	45	24	1.49%	82.59%	-46.67%
31	Beckham	40	23	1.43%	84.02%	-42.50%
32	Creek	90	23	1.43%	85.45%	-74.44%
33	Logan	43	22	1.37%	86.82%	-48.84%
34	Seminole	81	21	1.31%	88.12%	-74.07%
35	Pottawatomie	40	20	1.24%	89.37%	-50.00%
36	Comanche	4	19	1.18%	90.55%	375.O0%
37	McClain	38	18	1.12%	91.67%	-52.63%
38	Coal	15	14	0.87%	9-2.54%	-- 6.67%
39	Okmulgee	61	14	0.87%	93.41%	-77.05%
40	Pontotoc	14	13	0.81%	94.22%	-7.14%
State	2,523	1,608				-36.27%

* Total completions consist of oil, gas and dry well completions. Only the top 40 counties are included.

Source: Oklahoma Corporation Commission.

Table 4: Wage and Salary Employment In the Oil and Gas

Extraction Sector by County, 1990 and 1994

Rank	County	1990 (employees)	1994 (employees)	1994 Percent of State Total	1994 Cumulative Percent	Percent Change 1990-1994
I	Tulsa	10,638	7,671	23.16%	23.16%	-27.89%
2	Oklahoma	7,559	6,591	19.90%	43.06%	-12.80%
3	Washington	3,977	2,662	8.04%	51.10%	-33.07%
4	Kay	2,727	2,612	7.89%	58.98%	-4.24%
5	Garfield	1,557	1,119	3.38%	62.36%	-28.11%
6	Osage	1,396	1,110	3.35%	65.71%	-20.48%
7	Carter	1,351	1,132	3.42%	69.13%	-16.24%
8	Stephens	1.207	1,134	3.42%	72.55%	-6.03%
9	Woodward	1,147	983	2.97%	75.52%	-14.33%
10	Garvin	793	658	1.99%	77.51%	-16.98%
11	Beckham	752	534	1.61%	79.12%	-29.01%
12	Canadian	710	524	1.58%	80.70%	-26.27%
13	Kingfisher	634	531	1.60%	82.30%	-16.23%
14	Creek	579	462	1.40%	83.70%	-20.26%
15	Seminole	543	375	1.13%	84.83%	-30.87%
16	Latimer	469	402	1.21%	86.05%	-14.37%
17	McClain	378	325	0.98%	87.03%	-13.94%
18	Cleveland	355	241	0.73%	87.76%	-32.21%
19	Grady	352	316	0.95%	88.71%	-10.25%
20	Payne	336	317	0.96%	89.67%	-5.68%
21	Pawnee	318	192	0.58%	90.25%	-39.73%
22	Pottawatomie	274	181	0.55%	90.79%	-33.66%
23	Custer	260	231	0.70%	91.49%	-11.29%
24	Blaine	248	169	0.51%	92.00%	-31.92%
25	Texas	228	211	0.64%	92.64%	-7.75%
26	Pontotoc	217	179	0.54%	93.18%	-17.37%
27	Dewey	201	151	0.46%	93.64%	-24.64%
28	LeFlore	165	199	0.60%	94.24%	20.59%
29	Major	158	123	0.37%	94.61%	-21.94%
30	Caddo	143	143	0.43%	95.04%	0.10%
31	Washita	141	123	0.37%	95.41%	-12.54%
32	Hughes	132	108	0.33%	95.74%	-17.59%
33	Noble	129	89	0.27%	96.01%	-31.47%

34	Nowata	126	78	0.24%	96.24%	-38.13%
35	Pittsburg	122	102	0.31%	96.55%	-16.21%
36	Beaver	121	102	0.31%	96.86%	-15.62%
37	Okmulgee	119	80	0.24%	97.10%	-32.72%
38	Grant	118	69	0.21%	97.31%	-41.80%
39	Muskogee	94	57	0.17%	97.48%	-39.15%
40	Lincoln	93	97	0.29%	97.78%	4.45%
	state	41,774	33,120			-20.72%
Source: Bureau of Economic Analysis, IMPLAN, and CEMR.						

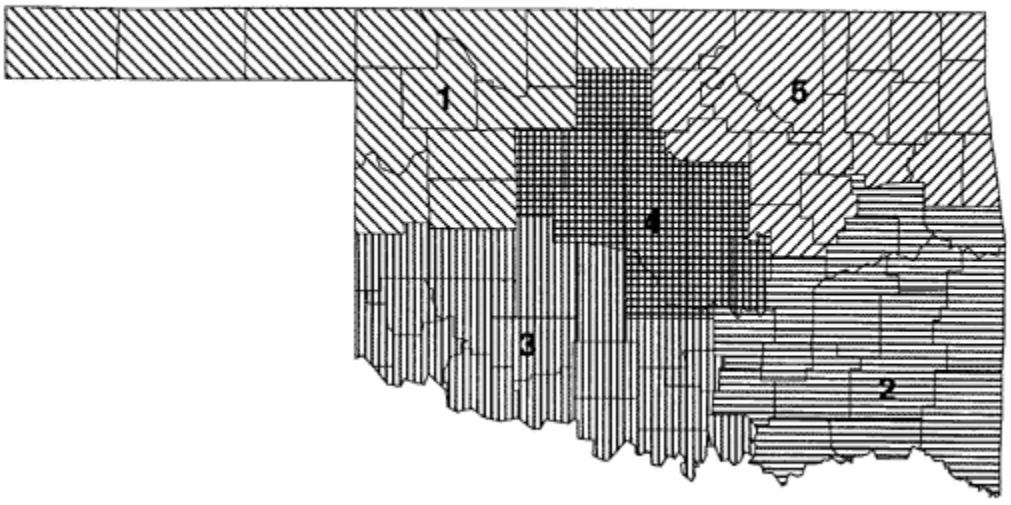
Table 5: Wages and Salaries for the Oil and Gas Sector by County, 1990 and 1994

Rank	County	1990 (dollars)	1994 (dollars)	1994 Percent of State Total	1994 Cumulative Percent	Percent Change 1990-94
I	Tulsa	440,636,780	367,865,986	27.42%	27.42%	-16.51%
2	Oklahoma	279,814,297	282,45.4,179	21.05%	48.47%	0.94%
3	Washington	215,421,640	166,923,026	12.44%	60.91%	-22.51%
4	Kay	130,483,259	144,657,030	10.78%	71.69%	10.86%
5	Osage	61,446,264	56,564,795	4.22%	75.90%	-7.94%
6	Carter	39,603,910	38,402,504	2.86%	78.76%	-3.03%
7	Stephens	28,470,616	30,972,456	2.31%	81.07%	8.79%
8	Garfield	27,418,900	22,821,016	1.70%	82.77%	-16.77%
9	Woodward	22,931,042	22,742,665	1.69%	84.47%	-0.82%
10	Garvin	20,254,900	19.465,974	1.45%	85.92%	-3.89%
11	Canadian	21,696,200	18,519,809	1.38%	87.30%	-14.64%
12	Beckham	22,303,138	18,328,443	1.37%	88.66%	-17.82%
13	Kingfisher	14,579,420	14,139,279	1.05%	89.72%	-3.02%
14	McClain	12,666,928	12,619,808	0.94%	90.66%	-0.37%
15	Creek	10,712,949	9,889,858	0.74%	91.40%	-7.68%
16	Grady	8,619,054	8,954,854	0.67%	92.06%	3.90%
17	Latimer	9,028,995	8,950.914	0.67%	92.73%	-0.86%
is	Custer	7,670,312	7,876,818	0.59%	93.32%	2.69%
19	Seminole	9,616,435	7,696,369	0.57%	93.89%	-19.97%
20	Cleveland	9,160,182	7,188,539	0.54%	94.43%	-21.52%
21	Texas	5,962,468	6,367,487	0.47%	94.90%	6.79%
22	Payne	5,083,864	5,551,447	0.41%	95.32%	9.20%

23	Blaine	5,399,480	4,255,857	0.32%	95.63%	-21.18%
24	Dewey	4,773,812	4,164,519	0.31%	95.94%	-12.76%
25	Hughes	3,646,034	3,478,391	0.26%	96.20%	-4.60%
26	Pontotoc	3,350,737	3,205,124	0.24%	96.44%	-4.35%
27	Pawnee	4,473,659	3,121,636	0.23%	96.67%	-30.22%
28	Woods	2,914,542	3,023,389	0.23%	96.90%	3.73%
29	Washita	2,929,673	2,966,187	0.22%	97.12%	1.25%
30	Caddo	2,484,563	2,879,222	0.21%	97.33%	15.88%
31	maw	3,150,925	2,847,276	0.21%	97.55%	-9.64%
32	Pottawatomie	3,645,192	2,799,532	0.21%	97.76%	-23.20%
33	Pittsburg	2,548,303	2,471,781	0.18%	97.94%	-3.00%
34	Lincoln	1,864,430	2,254,493	0.17%	98.11%	20.92%
35	Beaver	2,184,372	2,133,746	0.16%	98.27%	-2.32%
36	Okmulgee	2,542,543	1,980,385	0.15%	98.41%	-22.11%
37	Nowata	2,452,939	1,757,062	0.13%	98.55%	-28.37%
38	Noble	2,050,506	1,626,870	0.12%	98.67%	-20.66%
39	Roger Mills	1,200,367	1,567,238	0.12%	98.78%	30.56%
40	Alfalfa	1,204,709	1,475,931	0.11%	98.89%	22.51%
	State	1,473,468,000	1,341,813,000			-8.94%

Source: Bureau of Economic Analysis, IMPLAN, and CEMR.

Map 3. Producion Regions Based on Barrels of Oil Equivalents; 1994



Source: Oklahoma Corporation Commission and CEMR

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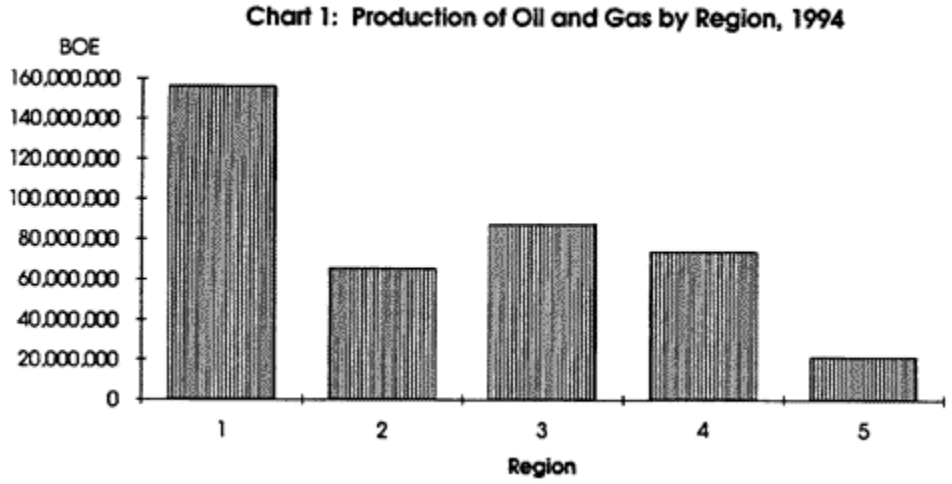


Local Economic Impacts

Localized impacts of oil and gas production and drilling activity were estimated by constructing input-output models for five regions of the state (Map 3). The regions were constructed by selecting the largest producing counties, then adding adjacent counties to form a contiguous multi-county area. Multipliers were calculated for each region to allow the estimation of economic impacts that occur within regions due to oil and gas production and drilling activity.

As shown in Chart 1 and Table 6, the Northwest portion of the state (Region 1) accounts for 39 percent of oil and gas production (BOE) but shows only a small amount of employment in the production sector. This is most likely due to the fact that Region 1 is a large producer of gas, and gas production is much less labor intensive than is production of oil.

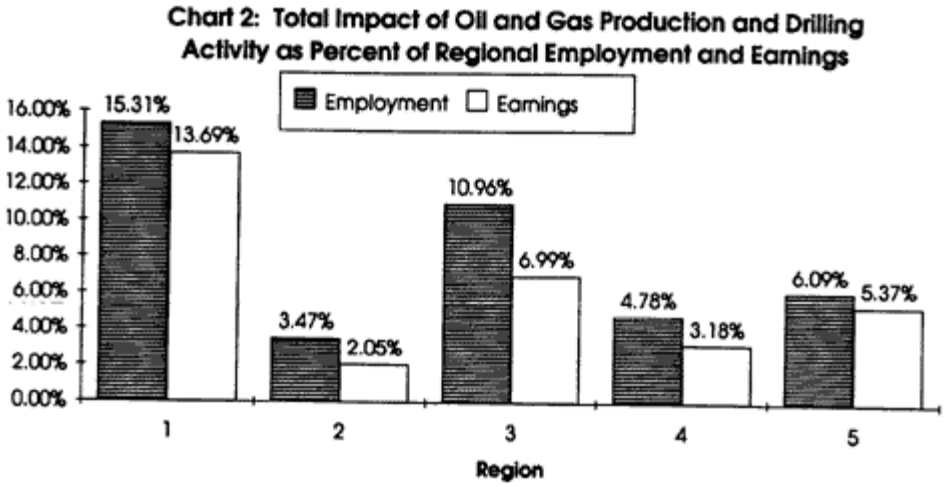
Central Oklahoma (Region 4) and Northeast Oklahoma (Region 5) generate 24 percent of oil and gas production in Oklahoma (BOE) but account for more than 80 percent of employment in the production sector. The explanation for this apparent anomaly involves the manner in which employment data are classified. These areas of the state contain headquarters and regional offices for a number of oil and gas producing companies;

much of the employment in these offices will be classified in the oil and gas production sector.

Economic impacts attributable to oil and gas production and drilling activity are shown in Table 6. The direct effect is measured by the level of employment and earnings paid to employees of oil and gas companies in each region. The indirect effect indicates the impact of spending within the region by oil and gas companies for supplies, machinery, materials, and other required goods and services. As incomes of employees in the oil and gas sector rise and incomes of employees of suppliers increase, consumer expenditures will increase. The impact of increased consumption expenditures is the induced effect.

In southwest Oklahoma (Region 3), for example, oil and gas producers employ approximately 3,502 persons (direct effect). Spending by these companies within the region supports another 6,960 employees (indirect effect). And household spending related to income earned in oil and gas production produces an additional 5,297 jobs in the region. In total, oil and gas production supports 15,760 jobs in southwest Oklahoma. Similar impacts are shown for each region for drilling activity. The northwest region shows the largest employment impacts, followed by the southwest region and the central region.

The impact of oil and gas activity relative to the size of the regional economy varies greatly from region to region. In the northwest (Region 1), for example, 15.3 percent of employment and 13.7 percent of employee' earnings can be attributed to oil and gas production and drilling activity (Chart 2). The relative impact of oil and gas activity on the economy of southeast Oklahoma (Region 2) is much smaller, accounting for just 3.5 percent of employment and 2 percent of employee's earnings.



The Commission on Marginally Producing Oil and Gas Wells wishes to thank David A. Penn and John McCraw of the Center for Economic and Management Research, College of Business Administration, University of Oklahoma.

For more information about this report, contact the Commission on Marginally Producing Oil and Gas Wells at 1-800-390-0460.

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