



## BUREAU OF BUSINESS & ECONOMIC RESEARCH

# Lea County Economic Analysis

---

RESEARCH FUNDED BY LEA COUNTY

MICHAEL O'DONNELL, PH.D AND JULIAN BACA, M.A.

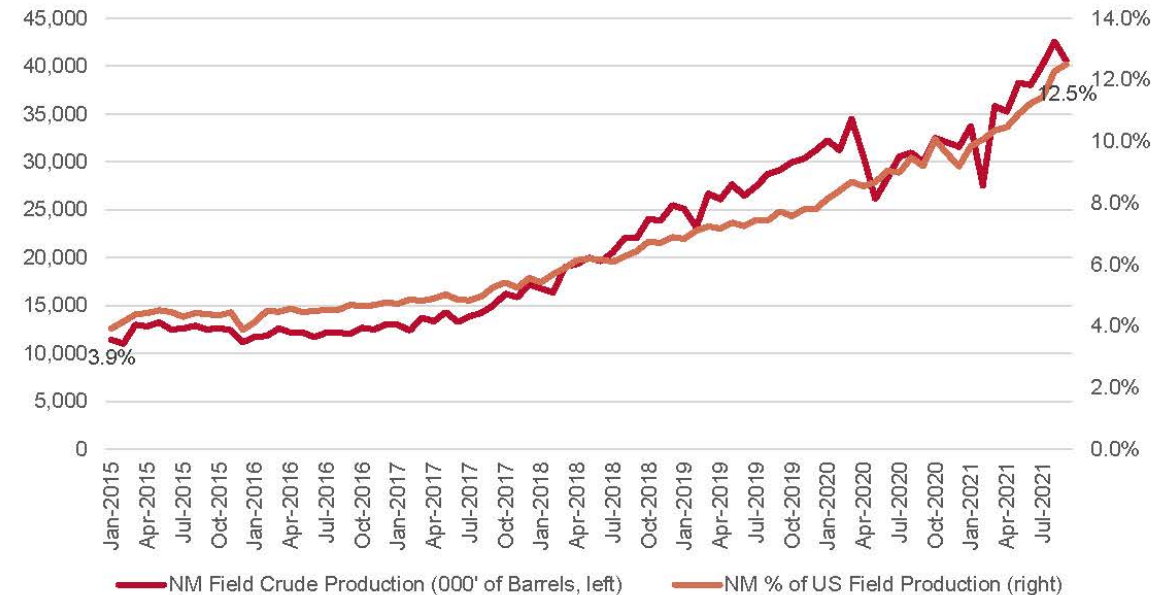
[MO8684@UNM.EDU](mailto:MO8684@UNM.EDU)

[JBACA63@UNM.EDU](mailto:JBACA63@UNM.EDU)

FEBRUARY 3, 2022

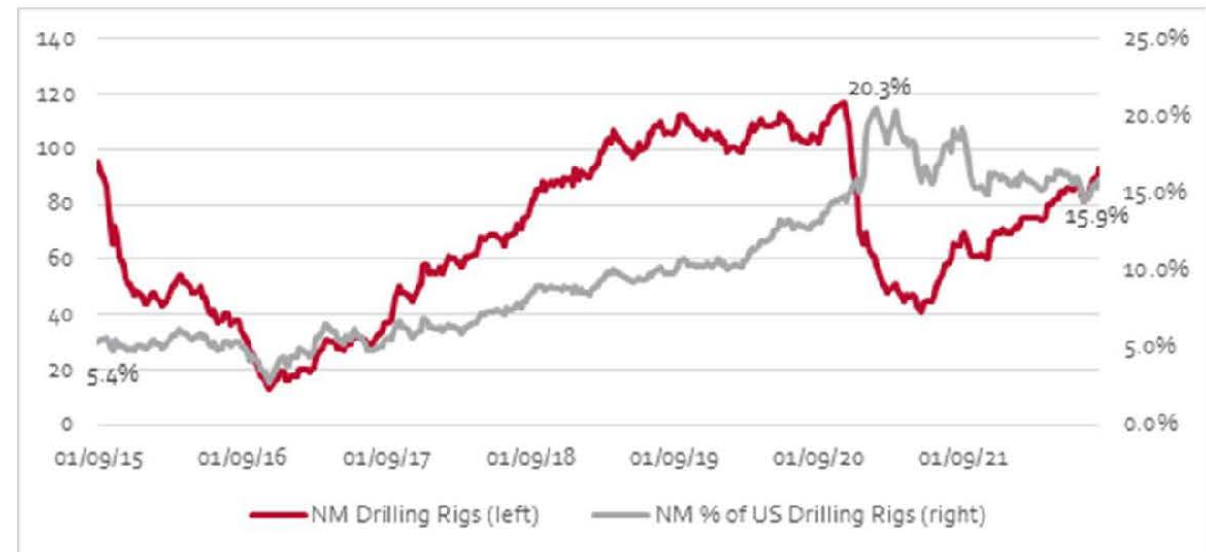
# NM Oil & Gas Market Overview

- NM crude oil production touched a high of 42,000 barrels in August 2021;
- NM's share of total US crude oil production also reached an all-time high of 12.5% in September of 2021 (by way of comparison, this level was 4% in 2016)



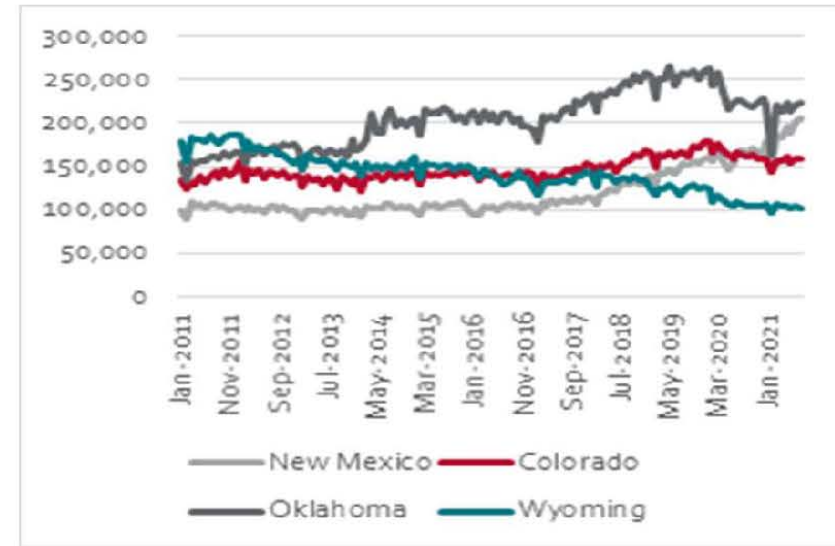
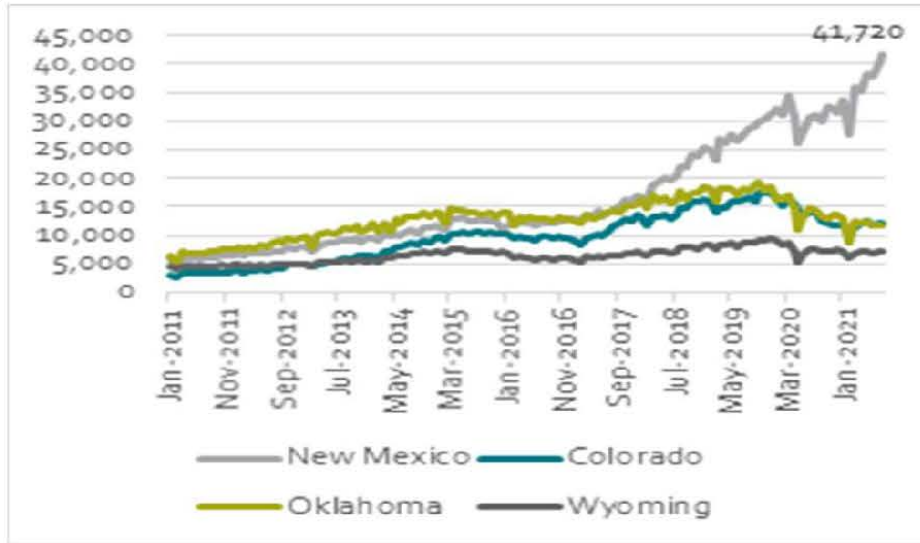
## NM Oil & Gas Market Overview

- Drilling activity has accelerated in New Mexico in the last five years;
- Prior to 2017, about 5.5% of all rigs operating in the US were in New Mexico; that percentage slowly increased, peaking over 20% by May 2020;
- Coinciding with the low West Texas Intermediate price, rig counts fell from about 115 in March 2020 to a recent low of 41 in September 2020;
- Rig counts have recovered and by the end of 2021 totaled about 93;
- Currently, about 16% of all rigs operating in the US are operating in New Mexico.



## NM Oil & Gas Market Overview

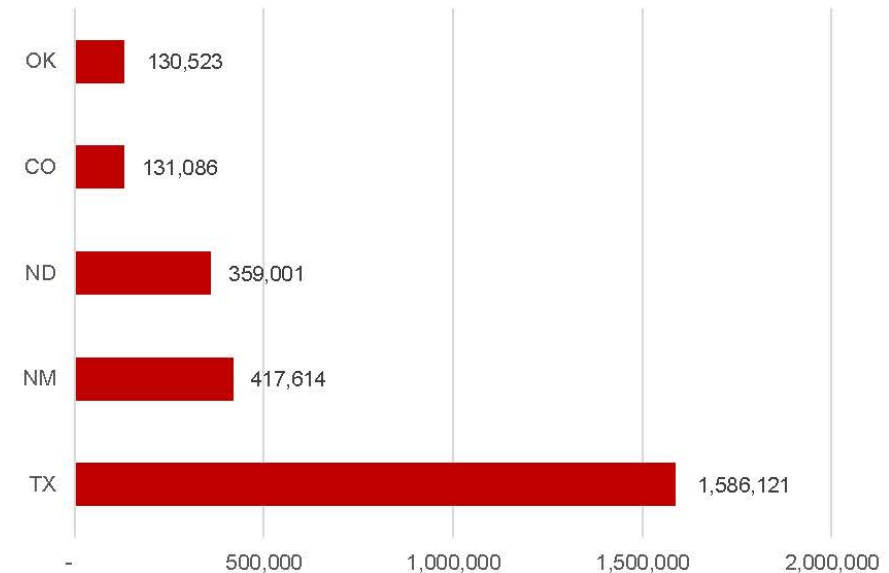
- Oil & gas production in New Mexico has tended to increase relative to surrounding states that had produced similar volumes to the state beginning in 2011;
- Oil production in New Mexico now dwarfs production in Oklahoma, Colorado, and Wyoming and while New Mexico previously produced the smallest volume of natural gas, only Oklahoma currently produces a greater volume.



## NM Oil & Gas Market Overview

- New Mexico ranked 2<sup>nd</sup> in oil field production among the lower 48 states in 2021;
- Lea County has ranked among the top 3 crude oil producing US counties over the last several years, ranking 1<sup>st</sup> in December 2019 and January 2020 (2021 county level data is pending from the EIA);
- Lea County accounts for most of the crude oil production in New Mexico.

Top 5 States by Crude Oil Production (1,000 BLS), thru Nov. 2021

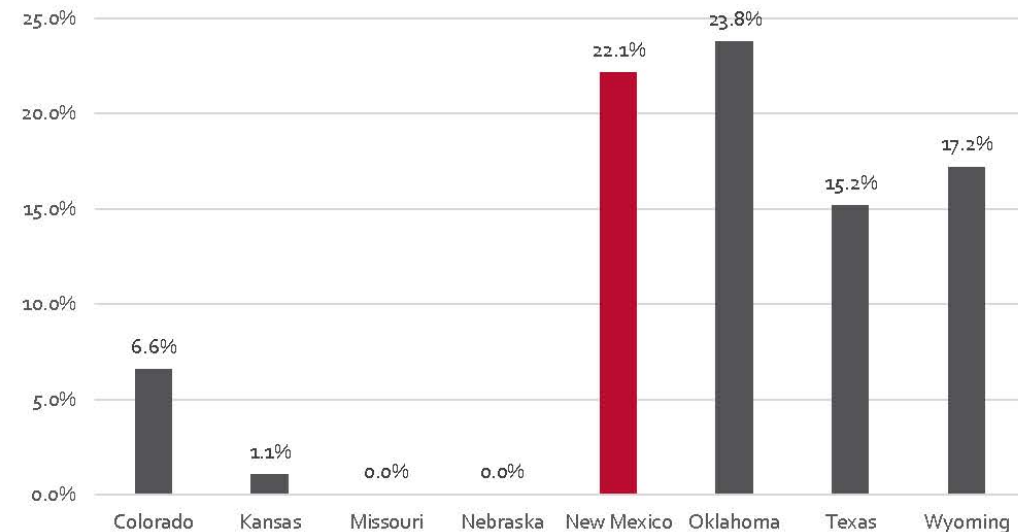




## Lea County Contribution to NM Economy

- In 2020, approximately 22.1% of the value of all private sector economic output in New Mexico was from oil & gas extraction;
- This is greater than most surrounding states with only Oklahoma having a larger share (23.8%);
- Lea County contributes most of the crude oil & gas production in New Mexico.
- In 2020 (BEA data) Lea contributed \$9.3 billion to New Mexico's \$95.7 billion economy, or 9.4% of the state's Gross State Product (GSP);
- Whereas NM GSP has grown at an annual rate of 1% over the last 15 years, Lea grew by 8% per year over the same time period.

*The Value of Oil and Gas Production as a Percent of the Value of Real Gross State Product in 2020 by State, Private Industries Only*



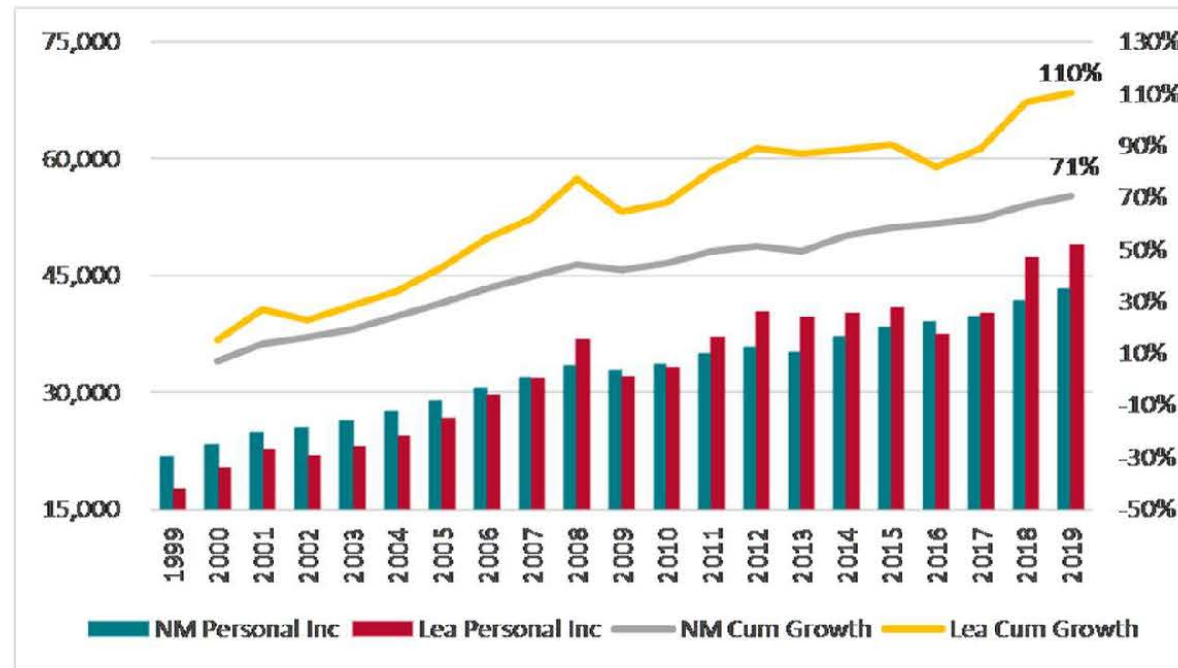
## Lea County Economic Profile – Gross State Product (GSP)

- According to BEA data, the mineral extraction sector accounts for 78% of GSP in the County;
- Other sectors making important contributions were Finance, insurance, real estate (5%); Transportation and warehousing (3%); Construction (3%); Manufacturing (3%); and Government (3%).

Industry Sector	\$thous 2019	Pct %
All industry total	9,291,716	
Private industries	9,030,971	97%
Agriculture, forestry, fishing and hunting	181,531	2%
Mining, quarrying, and oil and gas extraction	7,202,498	78%
Utilities	221,981	2%
Construction	243,413	3%
Manufacturing	318,573	3%
Wholesale trade	155,764	2%
Retail trade	229,469	2%
Transportation and warehousing	258,437	3%
Information	46,137	0%
Finance, insurance, real estate, rental, and leasing	485,035	5%
Professional and business services	176,823	2%
Ed services, health care, and social assistance	144,505	2%
Arts, entertain, recreation, accommodation, and food	126,592	1%
Other services (except government and government	86,043	1%
Government and government enterprises	298,451	3%

## Lea County Economic Profile - Income

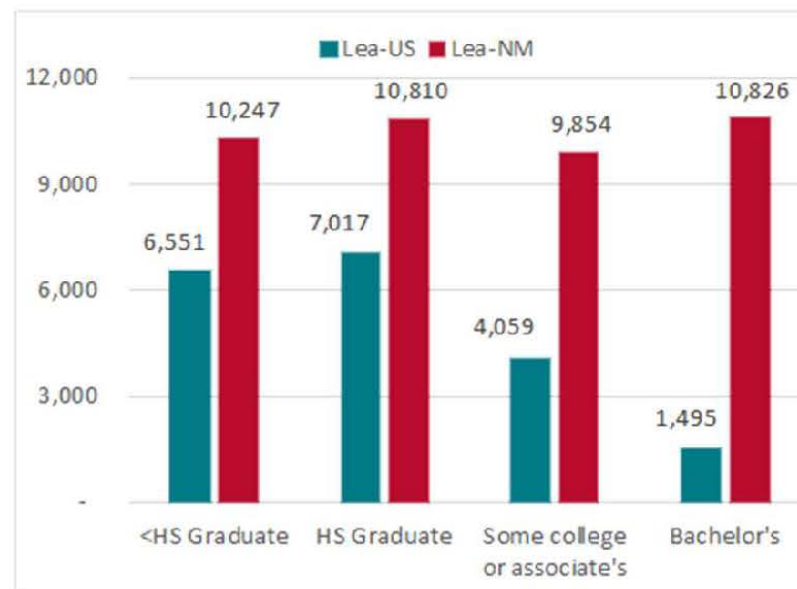
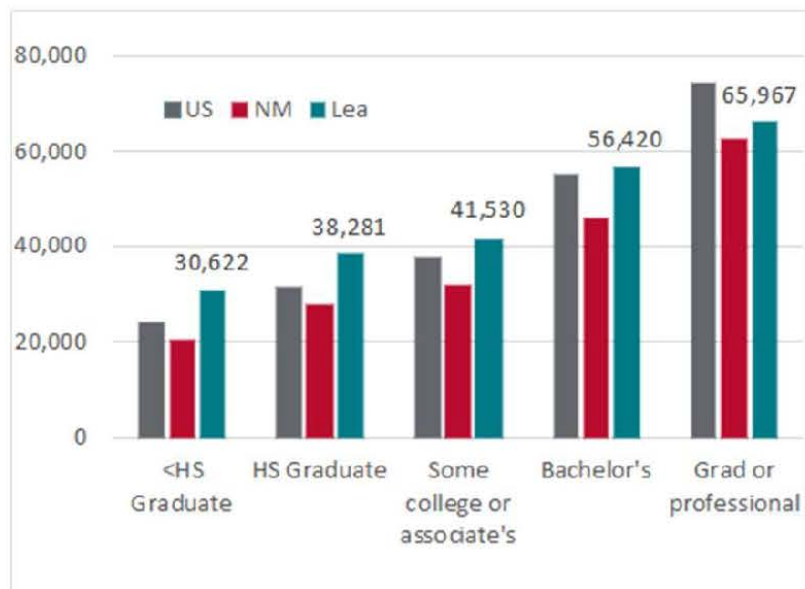
- Lea County Personal Income Per Capita surpassed the statewide figure in the last decade, exceeding the state average by nearly 40% (cumulative) over the last 20 years.





## Lea County Economic Profile – Earnings (by Education Level)

- When controlling for education, workers in Lea make more than their statewide and US peers;
- The difference in pay (relative to the NM median) is large with workers in Lea earning roughly \$10,000 more than their statewide peers.



## Lea County Economic Profile - Employment

- As measured by employment, the Mining, Oil & Gas sector is the most important by far in Lea County, with this sector accounting for 1 in 5 jobs (22.5%);
- Notably, Oil & Gas sector jobs in Lea County account for 26.6% of jobs in this sector statewide;
- Other important sectors in Lea as measured by employment are Retail Trade (3,220 jobs; 12.9%), Health Care (2,742; 11.0%), Construction (2,131; 8.5%), and Accommodation & Food Services (2,109; 8.4%); these sectors account for 4 out of 10 jobs in Lea.

Geography	Employment		Percent		
	NM	Lea	NM	Lea	Diff.
Ag, Forestry, Fish, Hunt	8,304	473	1.5%	1.9%	-0.2%
Mining, Oil & Gas	21,100	5,621	3.7%	22.5%	18.8%
Utilities	3,939	297	0.7%	1.2%	0.5%
Construction	37,840	2,131	6.6%	8.5%	1.9%
Manufacturing	31,851	767	5.6%	3.1%	-2.5%
Wholesale Trade	21,420	1,040	3.8%	4.2%	0.4%
Retail Trade	89,446	3,220	15.7%	12.9%	-2.8%
Transp and Warehousing	18,083	1,186	3.2%	4.7%	1.6%
Information	13,009	343	2.3%	1.4%	-0.9%
Finance and Insurance	20,934	639	3.7%	2.6%	-1.1%
Real Estate, Rental, Leasing	9,304	477	1.6%	1.9%	0.3%
Prof, Scientific, Technical Svcs	53,797	984	9.4%	3.9%	-5.5%
Mgmt of Cos	5,029	187	0.9%	0.7%	-0.1%
Admin, Support, Waste Mgmt, Remed	37,125	1,579	6.5%	6.3%	-0.2%
Educational Services	8,360	161	1.5%	0.6%	-0.8%
Health Care	96,176	2,742	16.9%	11.0%	-5.9%
Arts, Entertainment, and Recreation	6,846	229	1.2%	0.9%	-0.3%
Accommod & Food Svcs	68,185	2,109	12.0%	8.4%	-3.5%
Other Services (ex-PA)	19,469	804	3.4%	3.2%	-0.2%

## Lea County Economic Profile – Housing Market

- On an absolute basis, Lea County median home prices (px) have not experienced the same strength as other markets in New Mexico;
- In fact, according to the most recent NM Realtors Association information, median prices declined slightly in Lea from 2020 to 2021.

<u>County</u>	<u>Y/Y % Change</u>	<u>2020 Year To Date</u>		<u>2021 Year To Date</u>	
		<u>Sales</u>	<u>Median Px</u>	<u>Sales</u>	<u>Median Px</u>
<i>Lea County</i>	-7.3%	530	\$ 205,000	573	\$ 190,000
Eddy County	-7.3%	700	\$ 258,838	613	\$ 240,000
Dona Ana	23.5%	1,579	\$ 200,000	2,576	\$ 247,000
<b>New Mexico</b>	14.2%	<b>26,075</b>	<b>\$ 240,000</b>	<b>27,085</b>	<b>\$ 274,000</b>



## Lea County Economic Profile – Housing Market

- When considering housing affordability (Median Home Value/Median Household Income), the Lea housing market is among one of the most affordable in New Mexico;
- At 2.2, Lea is well below the statewide (3.4) and US (3.5) housing affordability ratios.

Geography	Home Val.	HH Income	Affordability	Geography	Home Val.	HH Income	Affordability
Taos	239,500	38,329	6.2	San Juan	151,200	50,518	3.0
Santa Fe	291,800	61,200	4.8	Luna	86,900	29,360	3.0
San Miguel	135,000	30,946	4.4	Socorro	124,100	42,083	2.9
Lincoln	193,900	46,216	4.2	Valencia	142,600	48,945	2.9
Rio Arriba	167,300	39,952	4.2	Colfax	104,800	36,302	2.9
Catron	175,400	41,910	4.2	Curry	125,000	45,092	2.8
Mora	112,300	28,446	3.9	Roosevelt	118,200	42,702	2.8
Sierra	117,400	29,755	3.9	Otero	112,400	41,988	2.7
Bernalillo	199,300	53,329	3.7	Chaves	108,700	43,359	2.5
Dona Ana	147,400	40,973	3.6	Quay	72,700	29,035	2.5
Harding	102,400	29,375	3.5	Los Alamos	302,800	121,324	2.5
<b>United States</b>	<b>217,500</b>	<b>62,843</b>	<b>3.5</b>	Union	88,000	35,884	2.5
<b>New Mexico</b>	<b>171,400</b>	<b>49,754</b>	<b>3.4</b>	Eddy	155,900	65,328	2.4
Guadalupe	85,000	24,798	3.4	Lea	133,100	60,546	2.2
De Baca	106,300	31,625	3.4	Cibola	84,400	39,413	2.1
Grant	125,100	37,843	3.3	Hidalgo	86,000	42,526	2.0
Torrance	114,300	36,120	3.2	McKinley	64,800	33,834	1.9
Sandoval	200,900	63,802	3.1				

# Lea County Demographics - Population

- Lea's population was the fastest growing in the last ten years, increasing at a rate more than 5 times (15%) faster than the statewide growth rate of 2.7%;
- This is particularly notable given that many counties in the state experienced shrinking populations (some in the double digits) and shrinking GSP growth;
- The main driver of this growth is births (relative to the number of deaths) and, to a lesser degree, inward migration;
- The Lea County population is younger than the statewide averages with nearly 1/3<sup>rd</sup> of the population under the age of 18, compared to less than 1/4<sup>th</sup> in New Mexico;
- The Median age in Lea is 32 compared to 38 for New Mexico, and the County (16%) has fewer seniors (over the age of 60) than the state (24%);



## Economic Impacts – Employment & Output

- Economic activity in Lea contributed an average of 29,600 jobs per year over the last 5 years directly with a multiplier of 1.77, which has helped to support an additional 22,000 jobs;
- The total economic impact for Lea over the last five years averaged \$9 billion.

### *(Employment)*

<u>Impact Type</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>5YR Avg.</u>
Direct Effect	27,410	28,425	31,636	32,888	27,959	29,664
Indirect Effect	9,549	9,857	11,217	11,656	9,597	10,375
Induced Effect	11,330	11,754	13,345	13,917	11,459	12,361
Total Effect	48,288	50,036	56,197	58,460	49,014	52,399
Multiplier	1.76	1.76	1.78	1.78	1.75	1.77

### *(Output)*

<u>Impact Type</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>5YR Avg.</u>
Direct Effect	5.17	5.36	6.11	6.38	5.17	5.64
Indirect Effect	1.62	1.66	1.89	1.97	1.62	1.75
Induced Effect	1.51	1.55	1.76	1.84	1.51	1.64
Total Effect	8.30	8.57	9.76	10.19	8.30	9.02
Multiplier	1.61	1.60	1.60	1.60	1.61	1.60

## Economic Impacts - Industry

- On an industry level, oil & gas drilling made a large contribution (approx. \$2 billion) as well as Support activities for oil & gas operations (\$309 million);
- Other important contributors are wholesale trade, health care, construction, and truck transportation.

Sector	Employment	Labor	Output
Drilling oil and gas wells	5,638	\$499.1	\$1,975.8
Full-service restaurants	3,195	\$67.4	\$143.9
Elementary and secondary schools	2,248	\$88.4	\$135.2
Offices of physicians	2,198	\$185.4	\$274.1
Support activities for oil and gas operations	1,816	\$138.7	\$309.1
Construction of new highways and streets	1,653	\$73.2	\$262.9
Truck transportation	1,571	\$96.3	\$266.9
Wholesale trade	1,517	\$86.7	\$315.1
Employment services	1,377	\$54.6	\$97.1
Other local government enterprises	1,185	\$72.1	\$305.0

\*Labor Income and Output in \$millions

## Fiscal Impacts – Severance Taxes

- We looked at fiscal impacts and found that Lea contributed \$852 million in Severance Tax revenues, which accounted for more than half (53.5%) of total New Mexico revenues (\$1.59 billion);

<u>County</u>	<u>School</u>	<u>Severance</u>	<u>Production</u>	<u>Conservation</u>	<u>Total</u>	<u>Pct.%</u>
Lea	325.62	371.83	135.62	18.84	851.91	53.5%
Eddy	257.18	285.96	82.17	14.49	639.80	40.2%
San Juan	20.41	20.10	7.27	1.02	48.80	3.1%
Rio Arriba	14.27	13.57	5.53	0.69	33.78	2.1%
Other counties	7.37	8.11	2.68	0.41	18.56	1.2%
Total	624.85	699.57	233.27	35.44	1,592.86	100%



## Fiscal Impacts – Ad Valorem (Equipment & Production)

- Lea contributed most of the Equipment (57.5%) & Production (45.3%) Ad Valorem taxes in the state (2020), or \$30.61 million and \$133 million, respectively.

### *(Equipment)*

County	2016	2017	2018	2019	2020	Pct.%	5YR Avg.
Lea	9.88	9.12	15.96	26.00	30.61	57.5%	18.31
Eddy	7.43	6.43	9.80	15.88	18.21	34.2%	11.55
Other	5.09	3.94	5.49	6.22	4.45	8.4%	5.04
Total	22.41	19.49	31.25	48.10	53.27	100.0%	34.90

### *(Production)*

County	2016	2017	2018	2019	2020	2020 Pct.%	5YR Avg.
Lea	48.79	44.30	67.34	110.25	133.13	45.3%	80.76
Eddy	37.06	31.39	40.66	69.68	83.24	28.3%	52.41
Other	30.29	24.14	27.33	31.05	77.41	26.3%	38.04
Total	116.14	99.84	135.33	210.98	293.78	100.0%	171.21

## Fiscal Impacts – Gross Receipts

- In the last 5 years, Lea accounted for roughly 40-50% of GRT in the Mining, Oil & Gas sector in New Mexico, depending on the year;
- Lea accounted for 6-10% of total GRT collected in New Mexico in the last 5 years.

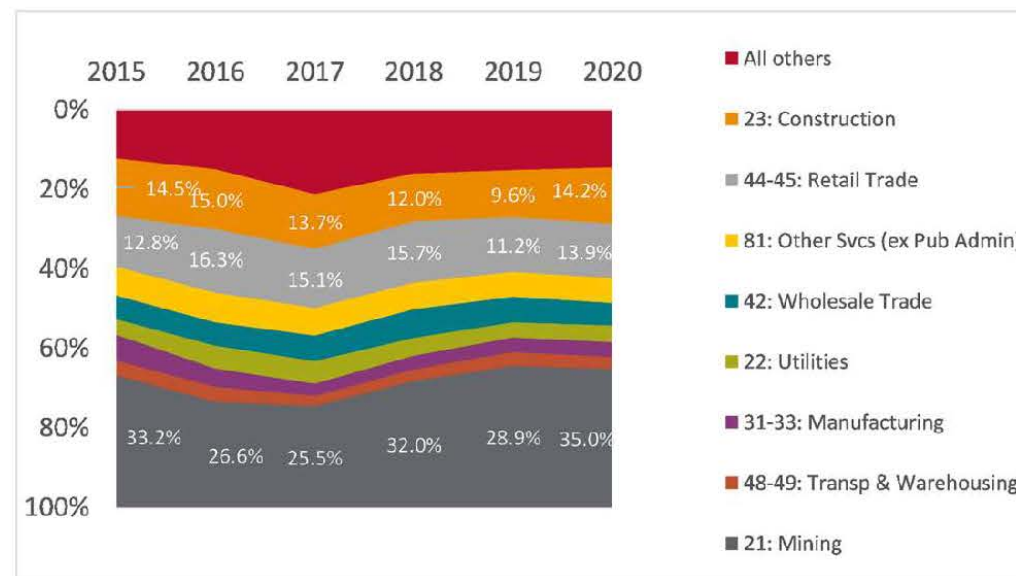
	2015	2016	2017	2018	2019	2020
State	3,813,816,289	3,718,391,593	3,817,382,364	4,284,068,139	8,781,692,788	5,705,154,596
Lea County	386,484,929	232,004,645	238,435,079	328,651,797	556,783,350	468,158,045
Pct.%	10%	6%	6%	8%	6%	8%
Mining						
State	263,235,071	144,008,208	143,953,138	286,307,230	404,875,184	427,751,013
Lea County	128,480,642	61,796,729	60,903,363	105,119,917	160,975,055	163,705,077
Pct.%	49%	43%	42%	37%	40%	38%



## Fiscal Impacts – Gross Receipts

- In Lea, Mining, Oil & Gas accounts for nearly 1/3<sup>rd</sup> of GRT (30%);
- Construction and Retail Trade were the next largest contributors, accounting for 13.2% and 14.2%, respectively.

Sector	2015	2016	2017	2018	2019	2020	5YR Avg.
21: Mining	128.48	61.80	60.90	105.12	160.98	163.71	113.50
23: Construction	55.95	34.83	32.65	39.33	53.38	66.37	47.09
44-45: Retail Trade	49.60	37.74	36.01	51.55	62.18	65.17	50.37
81: Other Services (ex Pub Admin)	28.01	17.28	16.47	21.98	28.30	28.72	23.46
42: Wholesale Trade	23.42	13.75	15.60	23.71	29.36	26.93	22.13
22: Utilities	14.98	13.42	13.55	14.91	17.47	19.46	15.63
31-33: Manufacturing	24.94	10.59	7.24	11.45	16.32	17.66	14.70
48-49: Transp & Warehousing	14.78	8.95	6.33	9.53	15.88	13.98	11.57
All others	47.59	35.04	51.05	53.11	69.05	68.28	54.02
Total	386.48	232.00	238.44	328.65	556.78	468.16	368.42



## Fiscal Impacts – Gross Receipts (Correlations)

- Not surprisingly, using GRT data, most sectors are highly correlated with the Mining, Oil & Gas sectors;
- More than half exhibit a correlation with the Oil & Gas sector of 0.7 or higher.

Sector	Mining	Sector	Mining
21: Mining	1.00	62: Health Care and Social Assist	0.73
54: Prof, Scien, and Tech Svcs	0.98	31-33: Manufacturing	0.70
44-45: Retail Trade	0.97	99: Unclassified	0.63
81: Other Svcs (ex Pub Admin)	0.97	11: Ag, Forestry, Fishing and Hunting	0.59
72: Accommodation and Food Svcs	0.97	92: Public Administration	0.55
42: Wholesale Trade	0.96	52: Finance and Insurance	0.48
23: Construction	0.92	61: Educational Services	0.48
22: Utilities	0.92	55: Mgmt of Cos and Enterprises	0.45
48-49: Transp & Warehousing	0.91	71: Arts, Entertainment, and Rec	0.38
53: Real Estate Rental and Leasing	0.85	56: Admin Support, Waste Mgmt, Re	-0.02
51: Information	0.83	TOTAL	0.96

## Fiscal Impacts – Per Capita Taxes

- On a per capita basis, citizens of Lea County make a larger contribution to tax revenues than the statewide average;
- The per capita contribution of Lea citizens was 19,089 compared to the statewide contribution of 3,512.

<u>Tax Type</u>	<u>Taxes Paid</u>		<u>Taxes Paid Per Capita</u>	
	<u>NM</u>	<u>Lea</u>	<u>NM</u>	<u>Lea</u>
Severance Tax	1,592.9	851.9	760	11,987
Equipment (Ad Valorem)	53.3	30.6	25	431
GRT	5,705.0	468.0	2,721	6,585
Rentals & Royalties	12.26	6.13	6	86
Total	7,363	1,357	3,512	19,089
Population	NM: 2,096,829		Lea:	71,070

## Opportunities – Sector Growth & Location Quotients (LQ's)

- Using growth rates and Location Quotients over the last 10 years, we found most sectors that make up Lea County are exhibiting strong, robust growth;
- Only a handful of sectors are demonstrating weakness; these are: Arts, Entertainment, and Rec; Educational Services; Information; Manufacturing; and Admin, Support, Waste Management Remediation Services.

Sector	Growth Score	LQ Score
48-49 Transportation & Warehousing	276.37	8.88
72 Accommodation and Food Services	228.31	4.59
11 Agriculture, Forestry, Fishing, and Hunting	200.01	6.39
52 Finance and Insurance	183.08	2.80
55 Management of Companies and Enterprises	156.63	1.69
23 Construction	140.38	6.15
53 Real Estate Rental and Leasing	100.37	4.12
54 Professional, Scientific, and Technical Services	99.50	1.64
22 Utilities	96.36	11.03
44-45 Retail Trade	93.57	4.07
62 Health Care and Social Assistance	82.61	2.46
81 Other Services (ex Public Administration)	63.36	3.79
21 Mining	58.59	150.00
42 Wholesale Trade	29.56	3.25
56 Admin, Support, Waste Mgmt Remed Svcs	-10.35	2.98
31-33 Manufacturing	-72.48	2.41
51 Information	-77.27	1.26
61 Educational Services	-198.32	0.70
71 Arts, Entertainment, and Recreation	-212.62	1.16



## Opportunities – BBER Employment Forecasts

- BBER forecasts employment five years out for the Lea and Eddy counties;
- The greatest forecasted growth over the next 5 years by sector are:
  - Mining
  - Construction
  - Accommodation & Food Services
  - Healthcare
  - Professional & Technical Services
  - Transportation & Warehousing

Sector	2021	2026	Change	Chg.%	Sector	2021	2026	Change	Chg.%
Total Employment	55,150	61,911	6,761	12%	Ag, Forest, Fish & Hunt	741	801	60	8%
Private Employment	47,930	54,253	6,323	13%	Utilities	626	656	30	5%
Mining	10,734	12,496	1,761	16%	Information	301	323	22	7%
Construction	5,238	6,719	1,482	28%	Finance & Insurance	1,153	1,170	16	1%
Accommodation & Food Svcs	4,879	5,943	1,064	22%	Educational Services	254	268	15	6%
Healthcare & Soc Assist	4,866	5,336	471	10%	Arts, Entertainment & Rec	107	118	11	10%
Professional & Tech Svcs	1,888	2,338	450	24%	Mgmt of Cos & Enterprises	274	272	(2)	-1%
Transp & Warehousing	2,845	3,272	426	15%	Retail Trade	6,196	6,114	(82)	-1%
Admin & Waste Svcs	2,583	2,757	174	7%	Government Employment	7,220	7,659	438	6%
Wholesale Trade	1,385	1,532	148	11%	Local Government	5,754	6,197	443	8%
Other Services & Unclassified	1,293	1,419	125	10%	State Government	689	691	2	0%
Manufacturing	1,626	1,702	76	5%	Federal Government	777	770	(7)	-1%
Real Estate, Rental & leasing	941	1,016	76	8%					



<p><b><u>Strengths</u></b></p> <ul style="list-style-type: none"> <li>•Low poverty rates;</li> <li>•Young population (compared to U.S. and NM);</li> <li>•Low unemployment rate (lower than U.S. and NM averages);</li> <li>•Existing industrial and commercial infrastructure: EnergyPlex Park, Lovington Industrial Park, Industrial AirPark;</li> <li>•Good broadband infrastructure;</li> <li>•CTech Center -- good coordination b/w local business and schools;</li> <li>•Manufacturing base not 100% linked to Oil &amp; Gas industry;</li> <li>•Emergent non-Oil &amp; Gas Energy-related opportunities;</li> <li>•Expansion of Health Care facilities;</li> <li>•Sectors experiencing strong employment growth, wage growth and related business strength (relative to national and statewide averages (LQ's)) are: Construction; Agriculture; Transportation &amp; Warehousing; Accommodation and Food Services; Finance and Insurance; Real Estate Leasing; Construction; Utilities; Other Services; Mining, Oil &amp; Gas.</li> </ul>	<p><b><u>Weaknesses</u></b></p> <ul style="list-style-type: none"> <li>•Many sectors exhibit large sensitivities with economic cycle (Coefficient of Variations): Manufacturing, Natural Resources (incl. Oil &amp; Gas), Transportation;</li> <li>•Large changes in unemployment rate due to prominence of economically sensitive sectors;</li> <li>•Sectors experiencing weak to negative employment growth and low Location Quotients: Arts, Entertainment &amp; Rec; Education Services; Information; Admin Support and Waste Remediation; Manufacturing;</li> <li>•BBER job expectations are weak for Finance &amp; Insurance; Management of Companies; and Retail Trade (in part due to COVID);</li> <li>•</li> </ul>
<p><b><u>Opportunities</u></b></p> <ul style="list-style-type: none"> <li>•Personal Income and average wage gains greater than NM and US over last 10 years;</li> <li>•Stronger earnings for Lea County workers, especially when controlling for educational attainment levels;</li> <li>•Sectors exhibiting lower sensitivity to economic cycle: Health Care, Education Services, Finance and Insurance;</li> <li>•IRB's and other economic incentives enabled and utilized;</li> <li>•Could grow Health Care sector with more Health Care related education programs;</li> <li>•Wind energy -- one of best counties in country for wind;</li> <li>•Emergent opportunities for bringing recycled water;</li> <li>•Sectors growing in employment but still weak (LQ's) relative to US and Statewide averages: Professional, Scientific, Technical Services; Management of Companies; Health Care; Retail Trade; Wholesale Trade;</li> <li>•BBER employment estimates are strong for: Mining, Oil &amp; Gas, Construction; Accommodation &amp; Food Services; Health Care; Professional &amp; Technical Services; Transportation &amp; Warehousing;</li> <li>•Non-Oil &amp; Gas Energy opportunities like Uranco;</li> <li>•State interested in expanding Admin Waste and Remediation jobs.</li> </ul>	<p><b><u>Threats</u></b></p> <ul style="list-style-type: none"> <li>•Water shortages;</li> <li>•Regulatory risks (e.g. zero omissions by 2050);</li> <li>•</li> </ul>



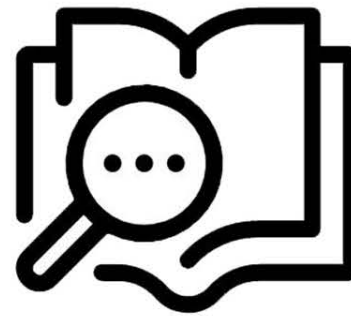
# BUREAU OF BUSINESS & ECONOMIC RESEARCH



ECONOMIC FORECAST



DATA DASHBOARDS



RESEARCH



DATA BANK



**LEA COUNTY BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY FORM**

**LCBCC Meeting Date: Thursday, March 10, 2022**

Submit this summary form & all attachments to the Finance Director [clow@leacounty.net](mailto:clow@leacounty.net) & cc the Executive Coordinator [sstout@leacounty.net](mailto:sstout@leacounty.net) by: **Monday, February 28, 2022**

County Manager Approval [mgallagher@leacounty.net](mailto:mgallagher@leacounty.net) required for all time sensitive issues that do not meet the above deadline.

<b>DATE SUBMITTED</b> mm-dd-yyyy: 01/27/2022	<b>SUBMITTED BY</b> Name, Title, Dept: Chip Low, Finance Director	
<b>SUBJECT:</b> Presentation of Lea County Economic Analysis	<b>ATTACHMENT(S):</b> Lea County Economic Analysis Report	
<b>NO. OF ORIGINALS FOR SIGNATURE:</b> N/A	<b>ACTION REQUESTED:</b> Discussion Item	
<b>BUDGET LINE ITEM NUMBER:</b> N/A	<b>FISCAL BUDGET YEAR:</b> N/A	
<b>STRATEGIC PLAN</b> Implementation of 5 Year Strategic Plan: Section 2.1: Collaboration & partnership with local communities, agencies and government entities is essential for success. Section 2.3: Continuous communication with the public is beneficial and necessary.		
<b>SUMMARY:</b> Presentation of "Lea County Economic Analysis" prepared by Julian Baca, M.A. and Dr. Michael O'Donnell, PhD (University of New Mexico Bureau of Business & Economic Research)		
<b>Requested Items Needed for Presentation</b> Easels/Laptop/Projector/Etc.: Easel <input type="checkbox"/> If checked, how many: Laptop <input checked="" type="checkbox"/> Projector <input checked="" type="checkbox"/> Other:	<b>See Additional Summary Attached</b> <input type="checkbox"/>	
<b>SUBMITTER'S RECOMMENDATION(S):</b> Presentation	<b>Submitter's Signature</b> Department Director, Etc.	
<b>FINANCE REVIEW</b> Fiscal Impact/Cost:	<b>Reviewed by Finance Director</b>	
<b>LEGAL REVIEW:</b> (Note: Travel does not need legal review)	<b>Reviewed by County Attorney</b>	
<b>COUNTY MANAGER REVIEW:</b>	<b>Approved by County Manager</b> to be Placed on Agenda 	
<b>Item No.</b> <u>0201</u> <b>RECORDING SECRETARY'S USE ONLY ~ COMMISSION ACTION TAKEN</b>		
Approved: _____	Denied: _____	Other: <u>Presentation</u>
Resolution No. _____	Policy No. _____	Ordinance No. _____
Continued To: _____	Referred To: _____	Comments: _____



BUREAU OF BUSINESS  
& ECONOMIC RESEARCH



# Lea County Economic Analysis

Prepared for the Lea County

---

Julian Baca, M.A.

Dr. Michael O'Donnell, PhD

**NOVEMBER 2021 (REV JAN. 2022)**

---

## Executive Summary

The primary driver of the Lea County economy is the Oil & Gas industry; however, there are other industry sectors that also help to support the local economy. Based on 2019 BEA Gross State Product (GSP) data, the Oil & Gas industry, via mining and production activities, accounted for 78% (\$7.2 billion) of the total output for Lea County. The second most important industry after Oil & Gas was the Finance, Insurance, Real estate, Rental and Leasing at 5% of GSP (\$485 million). Again considering GSP, Construction (3%, \$243.4 million), Manufacturing (3%, \$318.6 million), Transportation & Warehousing (3%, \$258.4 million), Government and Government Enterprises (3%, \$298.4 million) combined for 12% (\$1.1 billion).

In terms of employment, Oil & Gas is the largest sector; however, other industry sectors make important contributions. Although the Oil & Gas industry accounts for 4 out of 5 dollars of total output and more than 1 in 5 jobs in Lea, other industry sectors that are important drivers as measured by employment are Retail Trade (3,220 jobs; 12.9%), Health Care (2,742; 11%), Construction (2,131; 8.5%), and Accommodation & Food Services (2,109; 8.4%); these sectors account for 4 out of 10 jobs in Lea.

When considering Gross Receipts Taxes by industry sector, the Oil & Gas industry accounts for nearly 1/3<sup>rd</sup> of revenues generated in Lea County; base level of revenues by 2-digit NAICS for other important sectors are: Construction (13.2%, \$47.1 mm), Retail Trade (14%, \$50.37 mm). Additional sectors making contributions were Other Services (6.6%, \$23.46 mm), Wholesale Trade (6.1%, \$22.13 mm), Utilities (4.5%, \$15.63 mm), Manufacturing (4%, \$14.7 mm), Transportation & Warehousing (3%, \$11.57 mm). The remaining sectors accounted for 15.3% (\$54.02 mm) of revenues. For most current available data, FY2020, Lea Gross Receipts Tax totaled \$468 million.

On a forward basis, BBER completes estimates for the major oil-producing areas of the state: Lea and Eddy Counties. According to these estimates, over the next five years, most employment growth will occur in the Oil & Gas sector for Lea and Eddy counties. Other sectors expected to grow are Construction, Accommodation & Food Services, Healthcare, Professional & Technical Services, and Transportation & Warehousing. Sectors expected to grow at slower rates are Wholesale Trade; Other Services; and Arts, Entertainment & Recreation. Sectors with low growth expectations are Finance & Insurance; Management of Companies; and Retail Trade.

Oil & Gas production in Lea will begin to decline at some point in the future as reserves are drawn down. Regulatory risks and water scarcity are other potential risks/threats to future growth. Yet, local business, education, and economic development leaders are actively working to diversify the local economy. Much of these efforts have culminated in the construction, operation, and oversight of the CTech facility, which seeks to bridge workforce development efforts between the private, public, and education sectors.

Other areas of opportunity and growth are the investment in new infrastructure to make way for the deepening of economic growth opportunities and enabling new ones. Health Care, Natural Resource-related opportunities, and non-Oil & Gas energy development are possible areas of growth for the area.



## TABLE OF CONTENTS

Executive Summary	I
Introduction	5
Demographic Profile	6
Economic Profile	11
Economic Impacts	20
Fiscal Impacts	23
Economic Opportunities	29

## TABLE OF FIGURES

Figure 1: Top 5 States by Crude Oil Production	5
Figure 2: New Mexico Crude Oil Production	6
Figure 3: Population Estimates for NM and Lea County by Components, 2010 & 2019	7
Figure 4: Lea and New Mexico Population by Age Group and Gender, 2019	8
Figure 5: Home Ownership Rates for NM and Lea County, 2015-2019	8
Figure 6: Household Size for NM and Lea, 2019	9
Figure 7: Poverty Rate for NM and Lea by Age Group, 2019	9
Figure 8: Educational Attainment for Population 25 Years and Older	10
Figure 9: New Mexico and Lea County GDP, 2005-2020	11
Figure 10: Lea County GDP by NAICS Sector, 2019	12
Figure 11: New Mexico and Lea County GSP, 2005-2020	12
Figure 12: New Mexico and Lea County Employment, 2011-2020	13
Figure 13: NM and Lea County Employment by NAICS Sector, 2020	13
Figure 14: NM and Lea County Employment Volatility by NAICS Sector, 2020	14
Figure 15: Largest Private and Public Employers in Lea County, 2020	15

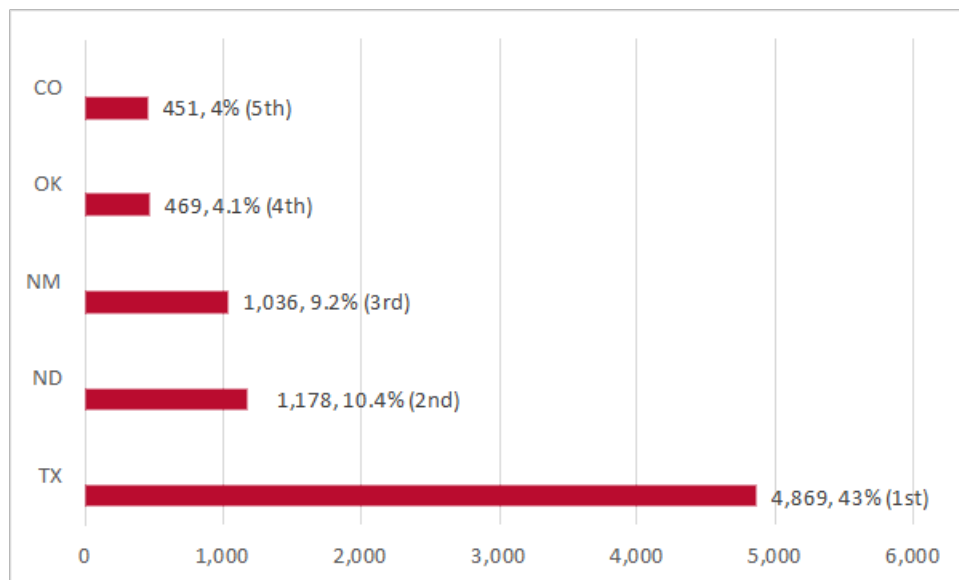
Figure 16: Nominal Personal Income Growth in US, NM and Lea County, 2006-2020 _____	15
Figure 17: Personal Income Per Capita in NM and Lea County, 1999-2020 _____	16
Figure 18: Average Compensation and Cumulative Growth for Lea County and New Mexico, 2001 - 2020 ____	17
Figure 19: Median Earnings by Educational Attainment for Population 25 Years and Older _____	17
Figure 20: Monthly Unemployment Rate for New Mexico and Lea County _____	18
Figure 21: Rig Counts for New Mexico (Red) and Lea County (Grey) _____	18
Figure 22: Number of Sales and Median Sold Price (Px) for Key Markets, 2020 and 2021 _____	20
Figure 23: Home Affordability (Median Values) for NM Counties, NM, and US, 2010 & 2019 _____	20
Figure 24: Direct, Indirect and Induced Economic Impacts _____	21
Figure 25: Employment: Direct, Indirect and Induced Economic Impacts _____	22
Figure 26: Labor Income: Direct, Indirect and Induced Economic Impacts (\$billions) _____	22
Figure 27: Output: Direct, Indirect and Induced Economic Impacts _____	22
Figure 28: Employment, Labor Income, Output Impacts by Top 10 Sectors _____	23
Figure 29: Severance Tax by Type, 2021, \$Millions _____	23
Figure 30: Severance Tax by Type by County, 2021, \$Millions _____	24
Figure 31: Production and Equipment Ad Valorem Tax, 2016-2020, \$Millions _____	24
Figure 32: Tax Obligations in Lea County by Tax Type, 2020 _____	25
Figure 33: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020 _____	25
Figure 34: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020, \$Millions _____	26
Figure 35: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020, Percentage _____	26
Figure 36: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020, Percentage _____	27
Figure 37: Gross Receipts Tax: Lea County Sector Correlations with the Mining, Oil & Gas Sector _____	28
Figure 38: State Land Office Annual Royalties and Rents, 2017-2021 _____	28
Figure 39: Taxes Paid Per Capita for NM and Lea, 2020 _____	29
Figure 40: Location Quotients Using Average Employment for Lea v. NM _____	30
Figure 41: Location Quotients Using Average Weekly Wages for Lea vs. NM _____	31
Figure 42: Location Quotients Using Total Wages for Lea vs. NM _____	32
Figure 43: Location Quotients Using Average Establishments for Lea vs. NM _____	33

Figure 44: LQ Scores and Growth Scores for Wages, Employment, Establishment for Lea vs. NM	34
Figure 45: Lea County 5-Year Employment Forecasts by Sector	34
Figure 46: SWOT (Strengths Weaknesses Opportunities Threats) Analysis for Lea County	37

## Introduction

Lea County is situated on the western part of the Permian Basin, which is one of the most important crude oil producing regions in the country. The Permian accounts for one-third of total production in the United States. Strong production in Lea and Eddy Counties have caused New Mexico to rank third among all other states in the country in production in 2020. Lea County has ranked among the top 3 crude oil producing US counties over the last several years, ranking 1<sup>st</sup> in December 2019 and January 2020<sup>1</sup>.

Figure 1: Top 5 States by Crude Oil Production (1,000 barrels per day), Percent of US Total, and US Rank, 2020

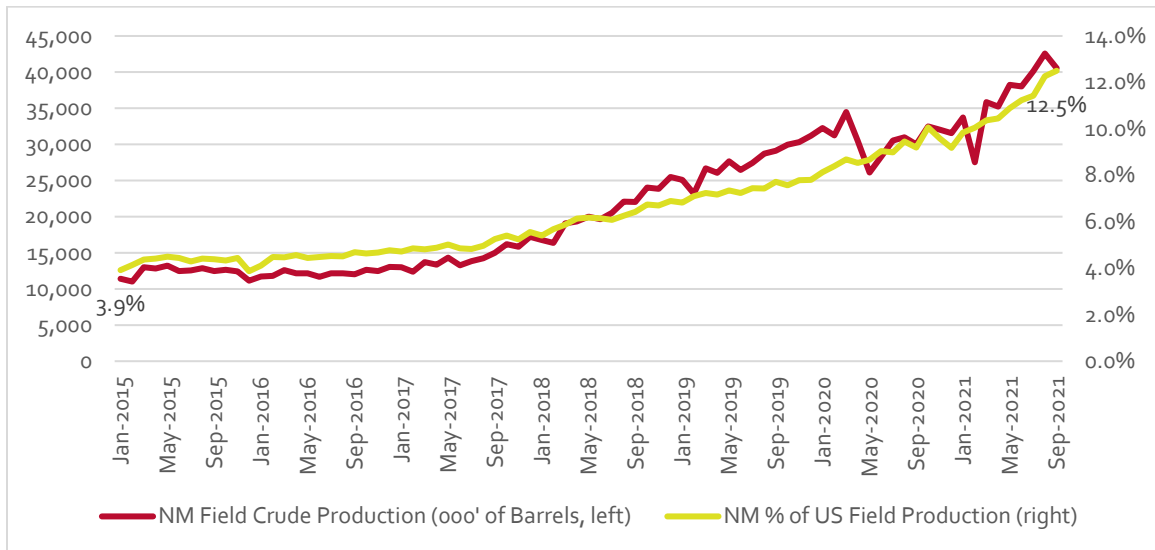


The Oil & Gas sector, which dates back 100 years in this area of the state, is the single largest driver for Lea County as measured by Gross State Product (GSP) and employment. This sector also contributes to the statewide economy in terms of economic output as well as the generation of vital tax revenues that support vital public services like education, funding public works, infrastructure, and public safety expenditures. Oil production has increased substantially over the last several years in New Mexico, with most of this supply coming from the southeastern part of the state where production reached an all-time high, exceeding 42,500 thousand barrels in July 2021. Importantly, whereas New Mexico only accounted for about 3.9% of all US field production in 2015, the state now accounts for roughly 12.5% of all US production. (Figure 2)

<sup>1</sup> <https://www.hobbsnews.com/2020/03/27/lea-county-is-nations-no-1-oil-producer/>



Figure 2. New Mexico Crude Oil Production



Source: Energy Information Administration (EIA)

The present study demonstrates that:

- 1) Lea County is a critical contributor to the NM economy;
- 2) Lea County contributes significantly to the state's finances;
- 3) Lea's robust growth has caused the County to outperform the rest of the state on all key economic and demographic metrics over the last several decades;
- 4) The strength of the Oil & Gas sector has driven the robust growth experienced by Lea.
- 5) Although Lea has experienced the robust growth out of all New Mexico economies, as many elected and business leaders realize, they will have to look for opportunities to diversify and broaden the local economy to allow them to stay on their growth path.

This report is organized into four sections. The first reviews the demographic data for the county in relation to the broader New Mexico economy. Section two examines the economic data from various sources; key sources considered include: Energy Information Administration, Bureau of Economic Analysis, US Census, NM Department for Workforce Solutions, NM Tax & Revenue Department, NM Department of Finance Administration, and proprietary BBER data. Section three and four consider the manner in which Lea County contributes to the broader state economy in terms of fiscal and economic impacts. And the final section reviews quantitative and qualitative data as it relates to potential economic opportunities.

## Demographic Profile

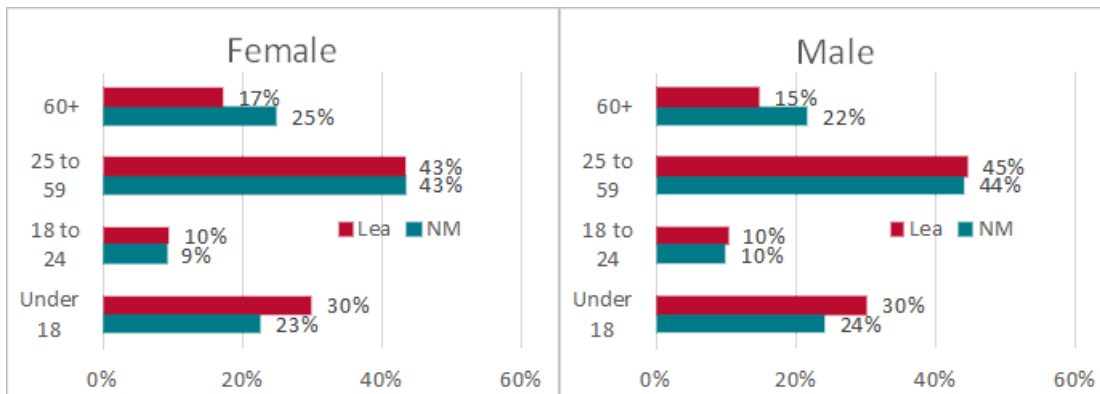
Considering the US Census Bureau's estimates for components of population change (2010-2019), while the populations for most NM counties contracted over the last decade, Lea County grew by roughly 10%, which made Lea the fastest growing county in New Mexico. In contrast, the statewide population grew by 1.6% with Eddy second in growth at 8.6%. Notably, several New Mexico counties experienced contracting populations in the double digits. Natural increases accounted for most of the increase in population, as there were twice as many births (10,032) as the number of deaths (4,735). Net inward migrations (nearly all international) also contributed 1,110. The release of the most recent 2020 decennial Census shows that Lea grew significantly more than the 2019 estimate, reaching 74,455, which shows that the County grew by 15% over the last 10 years. This contrasts with the statewide New Mexico population growing of 2.7% over the same period.

Figure 3: Population Estimates for NM and Lea County by Components, 2010 & 2019

<u>Total</u>	<u>New Mexico</u>	<u>Lea County</u>
2019-2010 Change	32,277	6,343
2019 est	2,096,829	71,070
2010 census	2,064,552	64,727
Natural Increases		
Total	74,679	5,297
Births	236,548	10,032
Deaths	161,869	4,735
Net Migration		
Total	(36,933)	1,110
International	26,589	1,090
Domestic	(63,522)	20
Residual	(116)	65

The Lea County population is younger than the statewide averages with nearly 1/3<sup>rd</sup> of the population in Lea under the age of 18 compared to less than 1/4<sup>th</sup> for NM. The median age in Lea is 32 compared to 38 for NM and the state has a larger percentage of its population over the age of 60 compared to Lea County.

Figure 4: Lea and New Mexico Population by Age Group and Gender, 2019



We also considered housing, poverty, and education statistics for the region. We found that Lea owner occupancy has trended slightly lower over the last five years, falling from 69.5% in 2015 to 66.8% by 2019. (Figure 4) This may be due to the nature of oil & gas work, many of the workers not relocating their families, but instead seeking temporary housing. The data also show that the number of people per household is higher in Lea with 1 in 3 households having 4 or more residents compared to 1 in 5 statewide. (Figure 5)

Figure 5: Home Ownership Rates for NM and Lea County, 2015-2019

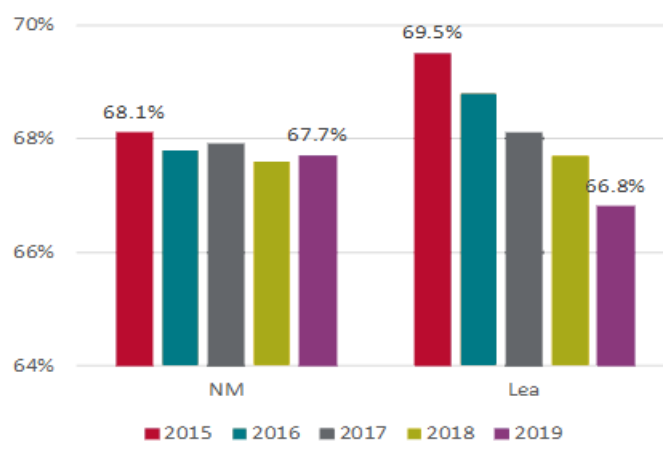
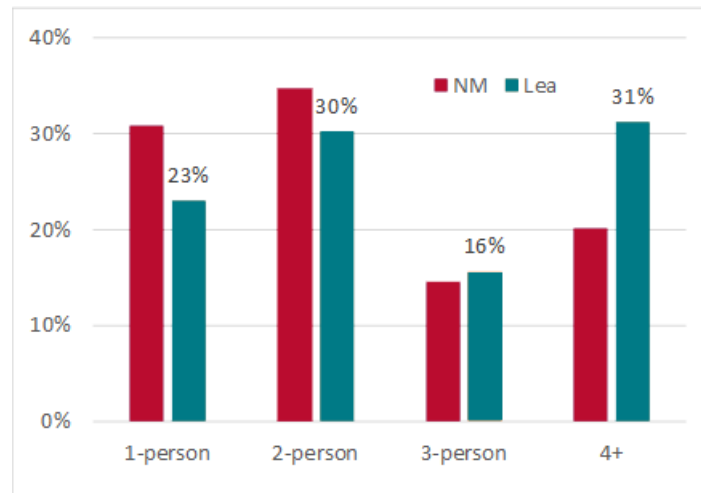


Figure 6: Household Size for NM and Lea, 2019



Lea County has lower poverty rates for children under 18 and the working age population (18 to 64); seniors, people 65+ in Lea experience a slightly higher poverty rate than the statewide average. (Figure 7) Nearly 3 in 5 people in Lea County have some high school or a diploma compared to 2 in 5 for NM and the US. College educational attainment levels are slightly lower for Lea compared to the US and NM. Hobbs superintendent, Gene Strickland, observes that because high school seniors can start working in the oil fields at the age of 18, many leave school before finishing to begin making money. (Figure 8)

Figure 7: Poverty Rate for NM and Lea by Age Group, 2019

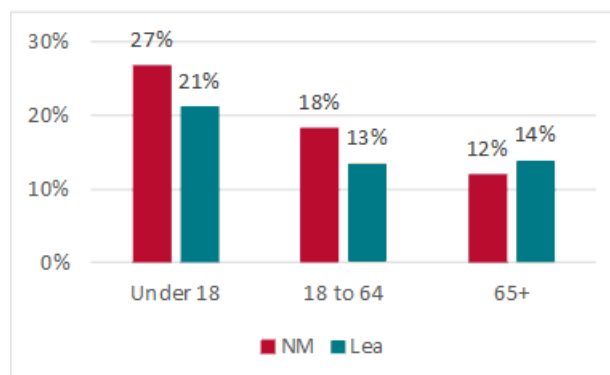
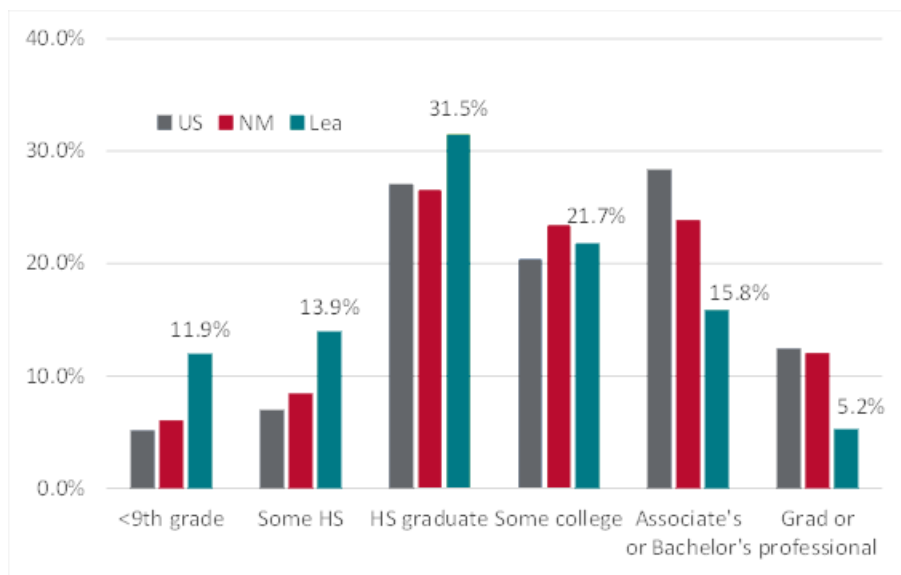




Figure 8: Educational Attainment for Population 25 Years and Older



## Economic Profile

New Mexico Gross State Product (GSP), an important measure of economic activity, totaled \$95.731 billion in 2020. Lea County contributed \$9.292 billion, or 9.4% of the total state output. Considering GSP data over the last 15 years, the state has grown at a rate of roughly 1% per year. Lea, the fastest growing county in New Mexico, expanded by 8% per year over the same time period. Lea County's contribution to the statewide GSP expanded over the last 15 years from 4% to over 9% by 2019. (Figure 8)

Figure 9: New Mexico and Lea County GDP, 2005-2020

	<u>NM</u>	<u>Lea</u>	<u>Lea/NM</u>	<u>NM Gr. Rt.</u>	<u>Lea Gr. Rt.</u>
2001	72,027	3,080.27	4.3%		
2002	74,242	3,161.87	4.3%	3.1%	2.6%
2003	77,088	3,020.75	3.9%	3.8%	-4.5%
2004	82,785	3,194.60	3.9%	7.4%	5.8%
2005	83,794	3,392.12	4.0%	1.2%	6.2%
2006	85,852	4,181.45	4.9%	2.5%	23.3%
2007	86,475	4,588.95	5.3%	0.7%	9.7%
2008	85,938	4,486.06	5.2%	-0.6%	-2.2%
2009	87,637	4,566.34	5.2%	2.0%	1.8%
2010	87,054	4,447.02	5.1%	-0.7%	-2.6%
2011	87,225	4,793.39	5.5%	0.2%	7.8%
2012	87,645	5,325.39	6.1%	0.5%	11.1%
2013	86,625	5,569.35	6.4%	-1.2%	4.6%
2014	89,372	6,069.67	6.8%	3.2%	9.0%
2015	91,680	6,568.44	7.2%	2.6%	8.2%
2016	91,714	6,054.18	6.6%	0.0%	-7.8%
2017	91,772	6,420.70	7.0%	0.1%	6.1%
2018	93,871	7,546.59	8.0%	2.3%	17.5%
2019	98,766	9,291.72	9.4%	5.2%	23.1%
2020	95,731	Annual Growth Rate:		2%	7%

BBER also considered the composition of GSP in Lea County by industry sector, which shows that the Mining, quarrying, and oil and gas extraction sector accounts for roughly half of Lea County GSP. As the BEA data shows, other important sectors are Finance, insurance, and real estate (7%), Government (5%), Transportation and warehousing (4%), Construction (4%), and Manufacturing (4%). These sectors combined for 25% of GSP in 2019 in Lea County. The remaining sectors each account for 1-3% and combined for 19% of total GDP for the county.

Figure 10: Lea County GDP by NAICS Sector, 2019

<u>Industry Sector</u>	<u>\$thous 2019</u>	<u>Pct. %</u>
All industry total	9,291,716	
Private industries	9,030,971	97%
Agriculture, forestry, fishing and hunting	181,531	2%
Mining, quarrying, and oil and gas extraction	7,202,498	78%
Utilities	221,981	2%
Construction	243,413	3%
Manufacturing	318,573	3%
Wholesale trade	155,764	2%
Retail trade	229,469	2%
Transportation and warehousing	258,437	3%
Information	46,137	0%
Finance, insurance, real estate, rental, and leasing	485,035	5%
Professional and business services	176,823	2%
Ed services, health care, and social assistance	144,505	2%
Arts, entertain, recreation, accommodation, and food	126,592	1%
Other services (except government and government	86,043	1%
Government and government enterprises	298,451	3%

We assessed the most economically sensitive sectors by calculating Coefficient of Variations of BEA GSP data over the last 20 years. Using these data, we found that the most volatile sectors are related to manufacturing, natural resources and mining, arts & entertainment, transportation and utilities, management of companies, and construction. The lowest volatility sectors are education, health care, government, finance and insurance.

Figure 11: New Mexico and Lea County GSP, 2005-2020

<u>High Volatility</u>	<u>CV</u>	<u>Low Volatility</u>	<u>CV</u>
Manufacturing	0.624	Professional and business services	0.251
Natural resources and mining	0.610	Retail trade	0.199
Arts, entertainment, and recreation	0.533	Finance and insurance	0.195
Transportation and utilities	0.514	Wholesale trade	0.142
Mining, quarrying, and oil and gas extraction	0.508	Other services (ex gov)	0.091
Management of companies and enterprises	0.456	Ed svcs, health care, and social assist	0.069
Construction	0.443	Government	0.057
Agriculture, forestry, fishing and hunting	0.410	Health care and social assistance	0.050
Information	0.361	Educational services	0.046

*(Bureau of Economic Analysis)*

Given the highly cyclical nature of the global commodity markets, Lea County experiences large swings in employment, which contributes to large changes in the unemployment rate. Having said that, Lea County's unemployment rate was lower than the statewide average in 7 of the last ten years by as many as 2.5 points.

Figure 12: New Mexico and Lea County Employment, 2011-2020

	Labor Force		Employed		Unemployed		Unemp Rate		
	NM	Lea	NM	Lea	NM	Lea	NM	Lea	Diff.
2020	943,287	29,545	863,874	26,281	79,413	3,264	8.4%	11.0%	2.6%
2019	960,239	31,433	911,926	30,138	48,313	1,295	5.0%	4.1%	-0.9%
2018	947,642	30,186	900,803	28,936	46,839	1,250	4.9%	4.1%	-0.8%
2017	946,386	28,068	888,865	26,250	57,521	1,818	6.1%	6.5%	0.4%
2016	944,245	27,967	880,515	25,359	63,730	2,608	6.7%	9.3%	2.6%
2015	938,300	30,113	876,206	28,224	62,094	1,889	6.6%	6.3%	-0.3%
2014	931,950	30,890	870,570	29,550	61,380	1,340	6.6%	4.3%	-2.3%
2013	929,410	29,488	865,207	28,173	64,203	1,315	6.9%	4.5%	-2.4%
2012	928,762	28,373	863,937	27,061	64,825	1,312	7.0%	4.6%	-2.4%
2011	925,108	27,121	858,165	25,666	66,943	1,455	7.2%	5.4%	-1.8%

In New Mexico, the largest sectors as measured by private sector employment are Health Care, Retail Trade, and Accommodation & Food Services. These three sectors account for 96,176, 89,446, and 68,185 jobs, respectively, or more than 4 out of 10 (44.5%) private sector jobs statewide. The Mining, Oil & Gas sector is the most important by far in Lea, alone accounting for more than 1 in 5 jobs (22.5%). Lea County's Oil & Gas sector also accounts for 26.6% of jobs in this sector statewide. Other important sectors in the county as measured by employment are Retail Trade (3,220 jobs; 12.9%), Health Care (2,742; 11.0%), Construction (2,131; 8.5%), and Accommodation & Food Services (2,109; 8.4%); these sectors account for 4 out of 10 jobs in Lea.

Figure 13: NM and Lea County Employment by NAICS Sector, 2020

Geography	Employment		Percent		
	NM	Lea	NM	Lea	Diff.
Ag, Forestry, Fish, Hunt	8,304	473	1.5%	1.9%	-0.2%
Mining, Oil & Gas	21,100	5,621	3.7%	22.5%	18.8%
Utilities	3,939	297	0.7%	1.2%	0.5%
Construction	37,840	2,131	6.6%	8.5%	1.9%
Manufacturing	31,851	767	5.6%	3.1%	-2.5%
Wholesale Trade	21,420	1,040	3.8%	4.2%	0.4%
Retail Trade	89,446	3,220	15.7%	12.9%	-2.8%
Transp and Warehousing	18,083	1,186	3.2%	4.7%	1.6%
Information	13,009	343	2.3%	1.4%	-0.9%
Finance and Insurance	20,934	639	3.7%	2.6%	-1.1%
Real Estate, Rental, Leasing	9,304	477	1.6%	1.9%	0.3%
Prof, Scientific, Technical Svcs	53,797	984	9.4%	3.9%	-5.5%
Mgmt of Cos	5,029	187	0.9%	0.7%	-0.1%
Admin, Support, Waste Mgmt, Remed	37,125	1,579	6.5%	6.3%	-0.2%
Educational Services	8,360	161	1.5%	0.6%	-0.8%
Health Care	96,176	2,742	16.9%	11.0%	-5.9%
Arts, Entertainment, and Recreation	6,846	229	1.2%	0.9%	-0.3%
Accommod & Food Svcs	68,185	2,109	12.0%	8.4%	-3.5%
Other Services (ex-PA)	19,469	804	3.4%	3.2%	-0.2%



We also developed estimates using employment data by NAICS sector to identify “High” and “Low” volatility sectors. Again, manufacturing, natural resources and mining related, arts & entertainment, management, construction, and agriculture exhibited the highest variability. Low volatility sectors education related, health care, government, finance and insurance, wholesale trade.

Figure 14: NM and Lea County Employment Volatility by NAICS Sector, 2020

<u>Sector</u>	<u>CV</u>	<u>Sector</u>	<u>CV</u>
Transportation and warehousing	0.356	Admin, support, waste mgmt & remed	0.101
Manufacturing	0.346	Wholesale trade	0.079
Arts, entertainment, and recreation	0.314	Finance and insurance	0.075
Construction	0.287	Retail trade	0.072
Mining, quarrying, and oil and gas	0.243	Military	0.059
Management of companies and enterp	0.240	Other services (ex gov)	0.057
Accommodation and food services	0.237	State and local	0.039
Utilities	0.215	Educational services	0.038
Forestry, fishing, and related activities	0.185	Government	0.035
Real estate and rental and leasing	0.180	Health care and social assistance	0.027
Prof, scientific, and technical services	0.174		

*Source: Bureau of Economic Analysis.*

We also considered the largest individual employers in Lea by utilizing public and proprietary sources. According to these data, public entities are among the largest employers with Hobbs Municipal School district accounting for over 1,290 jobs, North-Lea Hospital District in Lovington (545), City of Hobbs (532), and Lea County (379), Lea Regional Medical Center (305) all making important contributions. The largest private employers are Walmart (380), Geo Group (312), Albertson’s (300), Watson (280), McDonald’s (240), and Urenco (235).

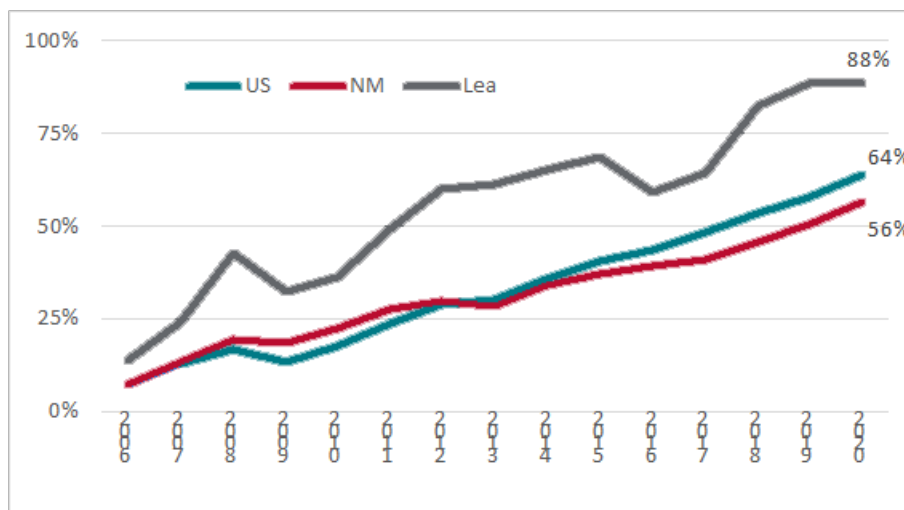
Figure 15: Largest Private and Public Employers in Lea County, 2020

Company Name	Primary SIC Description	Jobs
Hobbs Municipal Schools	Public Schools	1,290
Nor-Lea Hospital District	Hospitals	575
City of Hobbs	Local Government	532
Wal-Mart	Super Market & Grocery	380
Lea County	Local Government	379
Geo Group Correctional Facility	Private Corrections	312
Lea Regional Medical Center	Hospitals	305
Albertson's	Super Market & Grocery	300
Watson	Oil and Gas Pipeline and Related Structures Construction	280
NM Junior College	Public College	252
McDonald's	Restaurant	240
Urenco USA	Other Basic Inorganic Chemical Manufacturing	235
Zia Park Casino & Hotel	Casinos & Resorts	225
Covenant Hospital Hobbs	Hospitals	220
Mewbourne Oil	Crude Petroleum Extraction	175
RMS Foods (BOCA Burger)	All Other Misc Food Manufacturing	150
Ferguson Construction	Land Subdivision & Development, Construction	140
Ramirez & Sons Construction	Land Subdivision & Development, Construction	100

Source: Economic Development Corporation of Lea County.

The strength of the local economy in Lea County, driven by the Oil & Gas sector, has contributed to robust nominal Personal Income growth with this important measure increasing 88% cumulatively from 2006 to 2020. This is evident when comparing Lea data alongside national and statewide Personal Income, which grew by 64% and 56%, respectively.

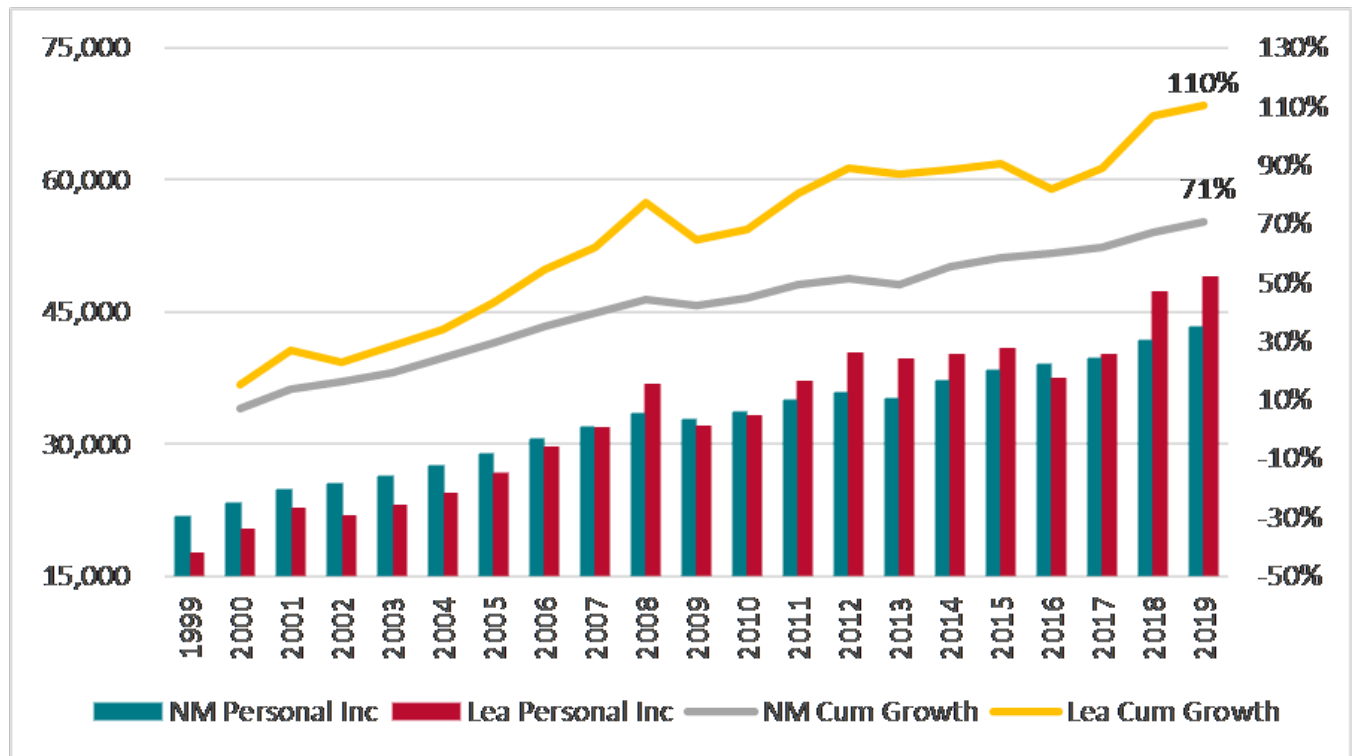
Figure 16: Nominal Personal Income Growth in US, NM and Lea County, 2006-2020



*(Bureau of Economic Analysis)*

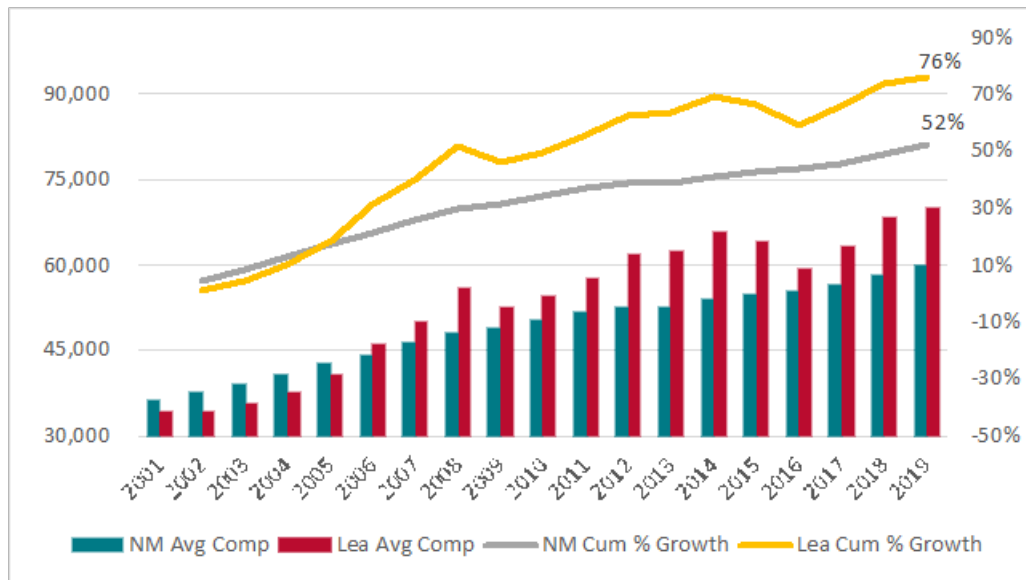
Adjusting for population levels, after lagging the statewide per capita income in the late 1990's and early 2000's, Lea County passed the New Mexico average in the last ten years with this metric standing at \$49,039 for Lea County compared to \$43,268 for New Mexico by 2019 (a differential of roughly \$6,000). Growth in Lea's Personal Income Per Capita was so robust that the cumulative growth surpassed the NM average by nearly 40 percentage points.

Figure 17: Personal Income Per Capita in NM and Lea County, 1999-2020



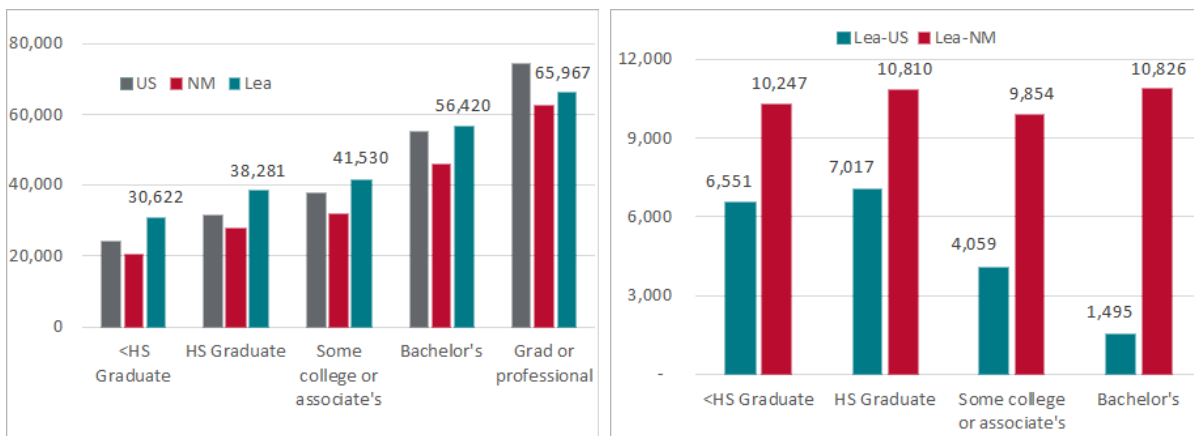
Average Compensation in Lea County exhibits the same trend as the Personal Income data, as growth in total compensation accelerated in the county and surpassed the New Mexico average by the mid-2000's after lagging in the early-2000's. Average compensation in Lea has exceeded the statewide in all of the last fifteen years and the cumulative growth exceeds the statewide rate by 25%.

Figure 18: Average Compensation and Cumulative Growth for Lea County and New Mexico, 2001 - 2020



We also controlled for earnings by educational attainment levels. US Census data show that people in Lea County make more than their counterparts in New Mexico and Nationally for all educational levels except for individuals having earned a Graduate or professional degree. The income advantage of Lea county workers over their New Mexico peers is significant with the differential for all educational attainment levels at roughly \$10,000.

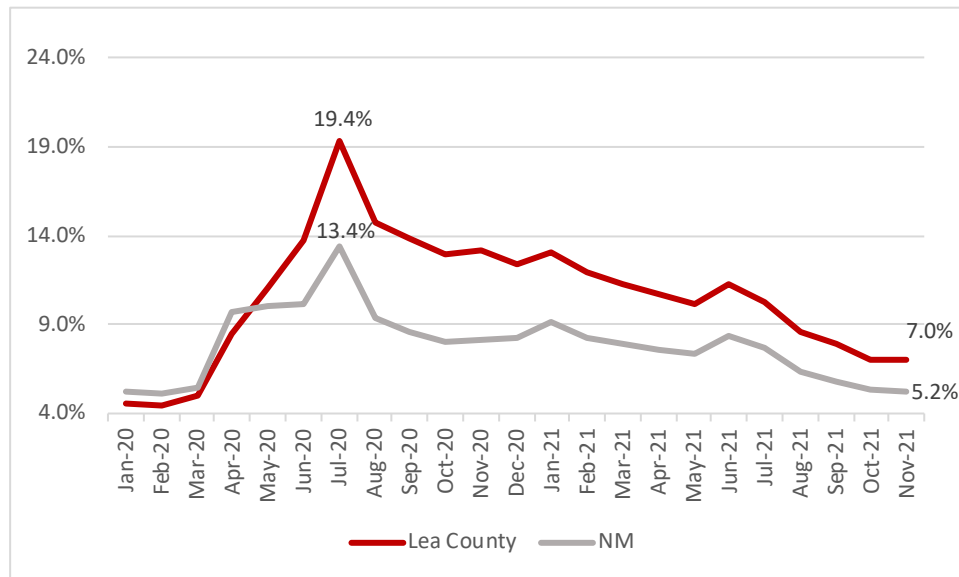
Figure 19: Median Earnings by Educational Attainment for Population 25 Years and Older



The Covid pandemic had a greater impact on Lea County in terms of job losses as measured by the unemployment rate (compared to statewide averages). Whereas unemployment peaked at 13.4% in July 2020 for New Mexico, Lea County reached 19.4%. Although Lea experienced lower unemployment rates than the New

Mexico average prior to the pandemic, the most recent data from November 2021 show the County's rate (7.0%) remained nearly 2 percentage points higher than the state average (5.2%). Of note, total unemployment claims for Lea County reached 5,660 at the peak of the pandemic. Although we do not have sector level unemployment claims by County, if rig counts are at all predictive of broader labor force trends, according to Baker Hughes data the number of rigs in New Mexico declined from 112 at the end of March 2020 to 41 by July of the same year, a 63% decline. Although rig activity has since improved to just below 100 rigs by the end of 2021, drilling activity still has not recovered to pre-pandemic levels. Similarly, New Mexico crude oil production fell by nearly 25% in the period from March 2020 to May of the same year. And while rig counts and employment have not recovered, production is at record levels.

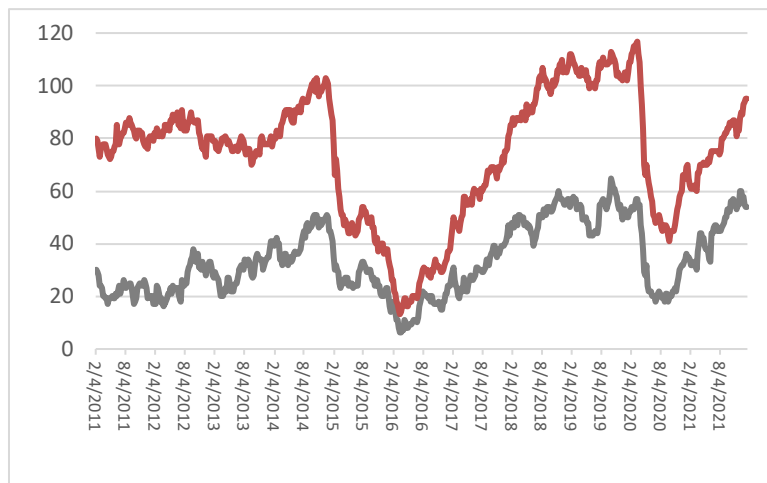
Figure 20: Monthly Unemployment Rate for New Mexico and Lea County, January 2020 to November 2021



Source: NM Department for Workforce Solutions (LAUS).

Figure 21: Rig Counts for New Mexico (Red) and Lea County (Grey)





Source: Baker Hughes.

According to Department for Workforce Solutions, areas of employment expansion over the last 18 months were in the restaurant and health care industries. Texas Roadhouse announced the opening of a new restaurant in Hobbs starting in November 2020 that will employ an estimated 175 workers at full capacity and Nor-Lea Hospital District broke ground on an expansion of the Lea County Health Complex in Hobbs. Currently the clinic has nine healthcare providers and 30 staff and the project will add seven providers and 23 additional staff members.

According to Department for Workforce Solutions areas of employment expansion over the last 18 months were in the restaurant and health care industries. Texas Roadhouse announced the opening of a new restaurant in Hobbs starting in November 2020 that will employ an estimated 175 workers at full capacity and Nor-Lea Hospital District broke ground on an expansion of the Lea County Health Complex in Hobbs. Currently the clinic has nine healthcare providers and 30 staff and the project will add seven providers and 23 additional staff members.

Lea County experienced slight median price declines (-7.3%) between 2020 and 2021 although the number of sales increased year over year. This contrasts to statewide trends where prices increased 14.2%. (Figure 21) When considering home affordability metrics, which compare Median Home Values relative to Median Household Income (US Census data), Lea County single family real estate is considerably more affordable than other markets in the state. Whereas the ratio is 2.2 in Lea, the same metric for New Mexico and the US is 3.4 and 3.5, respectively. Importantly, Lea and Eddy rank among the top 5 counties based on this metric. Notably, Lea has seen the second highest growth rate for Median Home Values in the decade ending 2019 with a 52.1% increase, second only to Eddy (71.9%); the statewide and US growth rates in the same period were 8.2% and 15.4%. (Figure 22)

Figure 22: Number of Sales and Median Sold Price (Px) for Key Markets, 2020 and 2021

County	Y/Y % Change	2020 Year To Date		2021 Year To Date	
		Sales	Median Px	Sales	Median Px
Lea County	-7.3%	530	\$ 205,000	573	\$ 190,000
Eddy County	-7.3%	700	\$ 258,838	613	\$ 240,000
Dona Ana	23.5%	1,579	\$ 200,000	2,576	\$ 247,000
<b>New Mexico</b>	<b>14.2%</b>	<b>26,075</b>	<b>\$ 240,000</b>	<b>27,085</b>	<b>\$ 274,000</b>

Source: New Mexico Realtors Association

Figure 23. Home Affordability (Median Values) for NM Counties, NM, and US, 2010 & 2019

Geography	Home Val.	HH Income	Affordability	Geography	Home Val.	HH Income	Affordability
Taos	239,500	38,329	6.2	San Juan	151,200	50,518	3.0
Santa Fe	291,800	61,200	4.8	Luna	86,900	29,360	3.0
San Miguel	135,000	30,946	4.4	Socorro	124,100	42,083	2.9
Lincoln	193,900	46,216	4.2	Valencia	142,600	48,945	2.9
Rio Arriba	167,300	39,952	4.2	Colfax	104,800	36,302	2.9
Catron	175,400	41,910	4.2	Curry	125,000	45,092	2.8
Mora	112,300	28,446	3.9	Roosevelt	118,200	42,702	2.8
Sierra	117,400	29,755	3.9	Otero	112,400	41,988	2.7
Bernalillo	199,300	53,329	3.7	Chaves	108,700	43,359	2.5
Dona Ana	147,400	40,973	3.6	Quay	72,700	29,035	2.5
Harding	102,400	29,375	3.5	Los Alamos	302,800	121,324	2.5
<b>United States</b>	<b>217,500</b>	<b>62,843</b>	<b>3.5</b>	Union	88,000	35,884	2.5
<b>New Mexico</b>	<b>171,400</b>	<b>49,754</b>	<b>3.4</b>	Eddy	155,900	65,328	2.4
Guadalupe	85,000	24,798	3.4	Lea	133,100	60,546	2.2
De Baca	106,300	31,625	3.4	Cibola	84,400	39,413	2.1
Grant	125,100	37,843	3.3	Hidalgo	86,000	42,526	2.0
Torrance	114,300	36,120	3.2	McKinley	64,800	33,834	1.9
Sandoval	200,900	63,802	3.1				

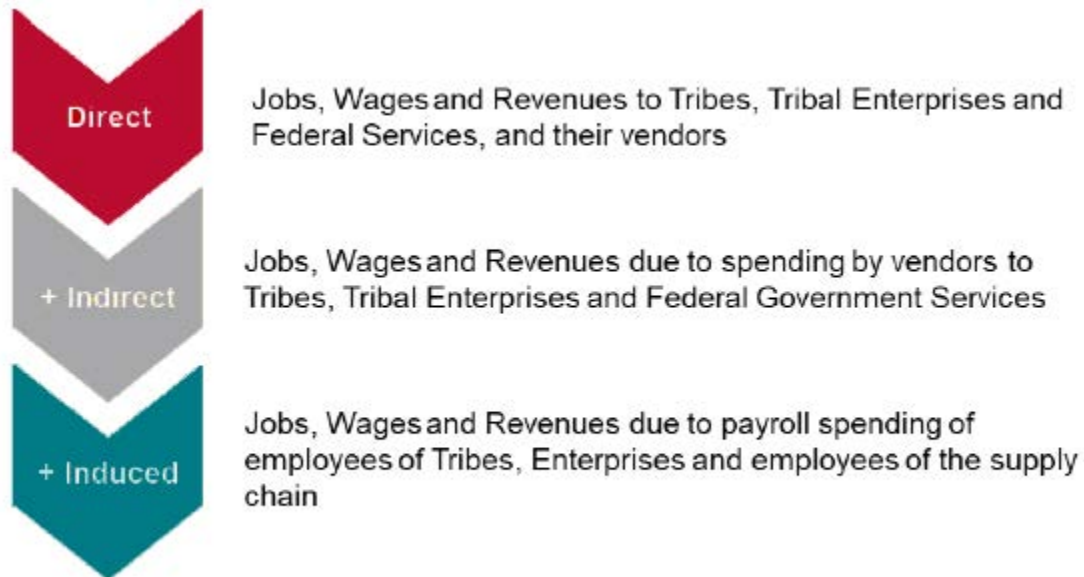
Source: U.S. Census, American Community Survey, 5-Year Estimates, 2015-2019

## Economic Impacts

The purpose of this section is to estimate the direct and indirect impacts of Lea County on the statewide economy. Impacts are measured in terms of employment, labor income, and output (revenues to businesses plus/minus changes to inventory). Figure 19 illustrates the relationship between direct, indirect and induced

economic impacts. Direct employment impacts include persons whose employment is in Lea County. Direct labor income is wages & salaries and benefits, minus federal taxes paid to these employees. Direct output is in-state expenditures by the employers located in Lea and their employees.

Figure 24: Direct, Indirect and Induced Economic Impacts



Input-output multipliers are computed using IMPLAN v3.1. These multipliers are used to estimate the indirect and induced impacts on the New Mexico economy. IMPLAN uses a variety of data sources to estimate these impacts, including Bureau of Labor Statistics (BLS) Covered Employment and Wages; Census Bureau County Business Patterns (CBP); and Bureau of Economic Analysis Regional Economic Accounts (REA).

Indirect economic impacts are the subsequent effects of business-to-business spending. These include impacts of in-state purchases of the Lea County employers and direct employees, as defined above. Induced economic impacts are subsequent effects of employee spending. Combined, the indirect and induced impacts measure the effects of direct spending as money is cycled through the economy. In this report, indirect and induced effects are summarized simply as indirect effects. The multiplier is an estimate of the indirect and induced impacts; in other words, it is an estimate of additional jobs, incomes, and revenues that flow from the initial direct expenditure. Using the IMPLAN model, BBER developed a multiplier that estimates each additional unit of employment, employee compensation, and output per additional unit. To estimate the direct and indirect impacts employment data from the Bureau of Labor Statistics detailed by sector according to the North American Industrial Classification System (NAICS) are used.

According to BBER estimates, Lea County contributed directly approximately 30,000 jobs annually over the last five years to the New Mexico economy and another 22,700 indirect jobs, for a total employment effect of 52,400 jobs. For reference, the total jobs impact is equivalent to the employment for the entire Professional & Technical Services sector statewide.

Figure 25: Employment: Direct, Indirect and Induced Economic Impacts

<u>Impact Type</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>5YR Avg.</u>
Direct Effect	27,410	28,425	31,636	32,888	27,959	29,664
Indirect Effect	9,549	9,857	11,217	11,656	9,597	10,375
Induced Effect	11,330	11,754	13,345	13,917	11,459	12,361
Total Effect	48,288	50,036	56,197	58,460	49,014	52,399
Multiplier	1.76	1.76	1.78	1.78	1.75	1.77

(UNM Bureau of Business & Economic Research)

The following table displays the Labor Income impacts generated in Lea County within the context of the statewide economy over the last five years. Workers in Lea County received an average of \$1.7 billion of direct Labor Income over the period. The associated indirect effect was over \$1 billion and the total effect was \$2.7 billion.

Figure 26: Labor Income: Direct, Indirect and Induced Economic Impacts (\$billions)

<u>Impact Type</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>5YR Avg.</u>
Direct Effect	1.57	1.62	1.84	1.91	1.59	1.70
Indirect Effect	0.50	0.52	0.60	0.63	0.51	0.55
Induced Effect	0.43	0.45	0.51	0.53	0.44	0.47
Total Effect	2.50	2.60	2.95	3.07	2.53	2.73
Multiplier	1.60	1.60	1.61	1.61	1.60	1.60

(UNM Bureau of Business & Economic Research)

The five-year average output (from 2016 to 2020) generated by Lea County was \$5.6 billion, the indirect impacts was \$3.4 billion, and the indirect impact was over \$9 billion. Lea is an important contributor to the economy with the total output effect comparable to the GDP generated by the Professional and Business Services sector in New Mexico.

Figure 27: Output: Direct, Indirect and Induced Economic Impacts

<u>Impact Type</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>5YR Avg.</u>
Direct Effect	5.17	5.36	6.11	6.38	5.17	5.64
Indirect Effect	1.62	1.66	1.89	1.97	1.62	1.75
Induced Effect	1.51	1.55	1.76	1.84	1.51	1.64
Total Effect	8.30	8.57	9.76	10.19	8.30	9.02
Multiplier	1.61	1.60	1.60	1.60	1.61	1.60

(UNM Bureau of Business & Economic Research)

The following figure depicts the top sectors by contribution that Lea has on the state economy. Not surprisingly, Oil & Gas made significant contributions. Related services like Restaurants, Construction, and

Truck transportation also made important contributions. Health and Education services were also important as measured by employment.

Figure 28: Employment, Labor Income, Output Impacts by Top 10 Sectors

<u>Sector</u>	<u>Employment</u>	<u>Labor</u>	<u>Output</u>
Drilling oil and gas wells	5,638	\$499.1	\$1,975.8
Full-service restaurants	3,195	\$67.4	\$143.9
Elementary and secondary schools	2,248	\$88.4	\$135.2
Offices of physicians	2,198	\$185.4	\$274.1
Support activities for oil and gas operations	1,816	\$138.7	\$309.1
Construction of new highways and streets	1,653	\$73.2	\$262.9
Truck transportation	1,571	\$96.3	\$266.9
Wholesale trade	1,517	\$86.7	\$315.1
Employment services	1,377	\$54.6	\$97.1
Other local government enterprises	1,185	\$72.1	\$305.0

\*Labor Income and Output in \$millions

(UNM Bureau of Business & Economic Research)

## Fiscal Impacts

### Fiscal Impacts

The Oil & Gas sector in Lea County is directly and indirectly responsible for considerable tax revenues that support vital public services statewide. There are various tax types that generate these revenues. The Severance Taxes generated by Oil & Gas production accounted for \$1.6 billion in revenues in 2021. Taxes include the Emergency School (Section 7-31 NMSA), Severance (Section 7-29 NMSA), Production, (Section 7-32 NMSA), and Conservation (Section 7-30 NMSA).

Figure 29: Severance Tax by Type, 2021, \$Millions

	2016	2017	2018	2019	2020	2021	5YR Avg.	2021 Pct.%
School	246.88	355.21	538.57	605.16	480.81	624.85	475	39.2%
Severance	272.30	391.26	603.71	694.39	548.52	699.57	535	43.9%
Production	93.35	138.76	206.85	233.78	184.10	233.27	182	14.6%
Conservation	13.80	19.82	30.59	35.18	27.79	35.44	27	2.2%
Total	625.95	904.57	1,379.22	1,568.19	1,240.98	1,592.86	1,219	100%

(NM Tax & Revenue Department)

The Permian Basin, spanning into the southeast part of the state, is the largest and highest oil producing region in the United States, contributing more than 4 million barrels per day. As the following table shows more than



half (53.5%), or \$852 million, of the Severance Tax revenues collected in the state were generated by Lea County. Eddy contributed 40%, and Lea and Eddy account for nearly all Oil & Gas related tax revenues (94%); San Juan and Rio Arriba contribute 5% and the remainder of the state contributes 1%.<sup>2</sup> The “School” and “Severance” taxes collected account for 4 out of 5 tax dollars generated. The Severance accounted for 44%, School accounted for 39%, Production 14.6%, and Conservation 2.2%.

Figure 30: Severance Tax by Type by County, 2021, \$Millions

County	School	Severance	Production	Conservation	Total	Pct.%
Lea	325.62	371.83	135.62	18.84	851.91	53.5%
Eddy	257.18	285.96	82.17	14.49	639.80	40.2%
San Juan	20.41	20.10	7.27	1.02	48.80	3.1%
Rio Arriba	14.27	13.57	5.53	0.69	33.78	2.1%
Other counties	7.37	8.11	2.68	0.41	18.56	1.2%
Total	624.85	699.57	233.27	35.44	1,592.86	100%

(NM Tax & Revenue Department)

Equipment Ad Valorem property tax contributed \$53.3 million in revenues in 2020 according to DFA Property Tax Facts; Lea accounted for \$30 million (57%) while Eddy accounted for \$18 million or 1/3<sup>rd</sup>; other counties contributed the balance of \$4.5 million (8%).<sup>3</sup> The Production revenues show a similar trend with Lea contributing 45.3% of total revenues statewide.

Figure 31: Production and Equipment Ad Valorem Tax, 2016-2020, \$Millions

(Equipment)

County	2016	2017	2018	2019	2020	Pct.%	5YR Avg.
Lea	9.88	9.12	15.96	26.00	30.61	57.5%	18.31
Eddy	7.43	6.43	9.80	15.88	18.21	34.2%	11.55
Other	5.09	3.94	5.49	6.22	4.45	8.4%	5.04
Total	22.41	19.49	31.25	48.10	53.27	100.0%	34.90

(Production)

County	2016	2017	2018	2019	2020	2020 Pct.%	5YR Avg.
Lea	48.79	44.30	67.34	110.25	133.13	45.3%	80.76
Eddy	37.06	31.39	40.66	69.68	83.24	28.3%	52.41
Other	30.29	24.14	27.33	31.05	77.41	26.3%	38.04
Total	116.14	99.84	135.33	210.98	293.78	100.0%	171.21

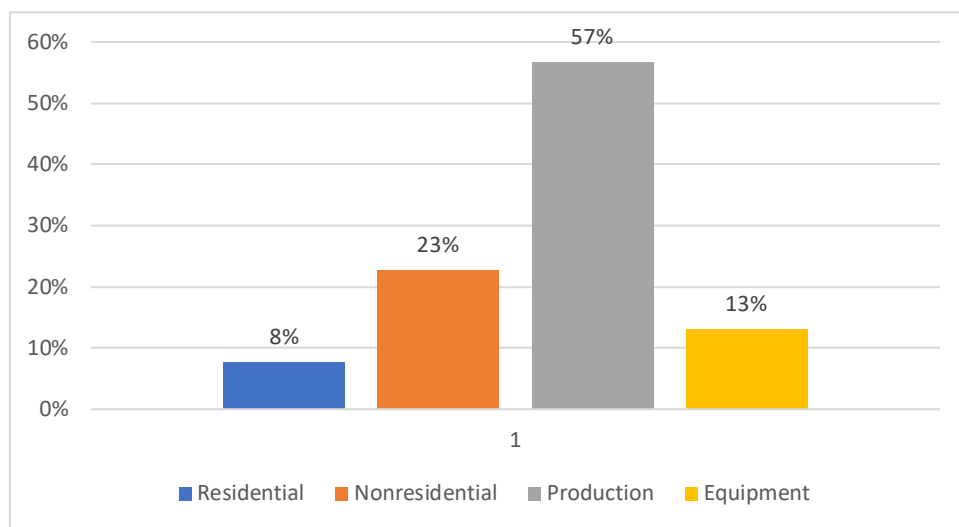
<sup>2</sup> Counties contributing a combined 1% are Chaves, Colfax, Harding, McKinley, Quay, Roosevelt, Sandoval, Union.

<sup>3</sup> <https://www.nmdfa.state.nm.us/local-government/budget-finance-bureau/property-taxes/property-tax-facts/>

(New Mexico Department of Finance & Administration)

The strength of property values also is an important predictor for local government and school tax revenues. Strong growth in residential and commercial property growth have contributed to expanding property tax revenues for Lea County; over the last five years Lea has experienced appreciating property values across all types. However, Production contributes more than half (57%) of property tax revenues and Production and Equipment contribute 70% combined. Despite recent stability and growth in Ad Valorem property values, volatility in commodity markets cause significant volatility in these revenues over the longer periods of time (e.g. 5-10 years).

Figure 32: Tax Obligations in Lea County by Tax Type, 2020



(New Mexico Department of Finance & Administration)

The following table depicts the total Gross Receipt Taxes collected by the fiscal year for New Mexico and Lea County; the chart also displays Lea's share of total state taxes paid as well as taxes collected for the Mining sector statewide and for Lea County. These data show that Lea accounts for, roughly, 40-50% of GRT collected in the mining sector and 6-10% of GRT collected statewide depending on the year. The fact that Lea's population (71,010) accounts for 3% of the total state population (2,096,199) and 8% of GRT (in 2020) suggests that the county generates a disproportionate share of Gross Receipts revenues.

Figure 33: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020

	2015	2016	2017	2018	2019	2020
State	3,813,816,289	3,718,391,593	3,817,382,364	4,284,068,139	8,781,692,788	5,705,154,596
Lea County	386,484,929	232,004,645	238,435,079	328,651,797	556,783,350	468,158,045
Pct.%	10%	6%	6%	8%	6%	8%
Mining						
State	263,235,071	144,008,208	143,953,138	286,307,230	404,875,184	427,751,013
Lea County	128,480,642	61,796,729	60,903,363	105,119,917	160,975,055	163,705,077
Pct.%	49%	43%	42%	37%	40%	38%

(UNM BBER Data Base)

The following table demonstrates the relative importance by sector for GRT revenues in Lea, or the base level of GRT revenues by 2-digit NAICS. Mining (Oil & Gas) has accounted for roughly 30% (\$113.5 million) over the last five years, followed by Construction (13.2%, \$47.1 mm) and Retail Trade (14%, \$50.37 mm). These three sectors have accounted for more than half (57%) of Gross Receipts taxes collected (5-year average). Other sectors making contributions were Other Services (6.6%, \$23.46 mm), Wholesale Trade (6.1%, \$22.13 mm), Utilities (4.5%, \$15.63 mm), Manufacturing (4%, \$14.7 mm), Transportation & Warehousing (3%, \$11.57 mm). The remaining sectors accounted for 15.3% (\$54.02 mm) of revenues.

Figure 34: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020, \$Millions

Sector	2015	2016	2017	2018	2019	2020	5YR Avg.
21: Mining	128.48	61.80	60.90	105.12	160.98	163.71	113.50
23: Construction	55.95	34.83	32.65	39.33	53.38	66.37	47.09
44-45: Retail Trade	49.60	37.74	36.01	51.55	62.18	65.17	50.37
81: Other Services (ex Pub Admin)	28.01	17.28	16.47	21.98	28.30	28.72	23.46
42: Wholesale Trade	23.42	13.75	15.60	23.71	29.36	26.93	22.13
22: Utilities	14.98	13.42	13.55	14.91	17.47	19.46	15.63
31-33: Manufacturing	24.94	10.59	7.24	11.45	16.32	17.66	14.70
48-49: Transp & Warehousing	14.78	8.95	6.33	9.53	15.88	13.98	11.57
All others	47.59	35.04	51.05	53.11	69.05	68.28	54.02
Total	386.48	232.00	238.44	328.65	556.78	468.16	368.42

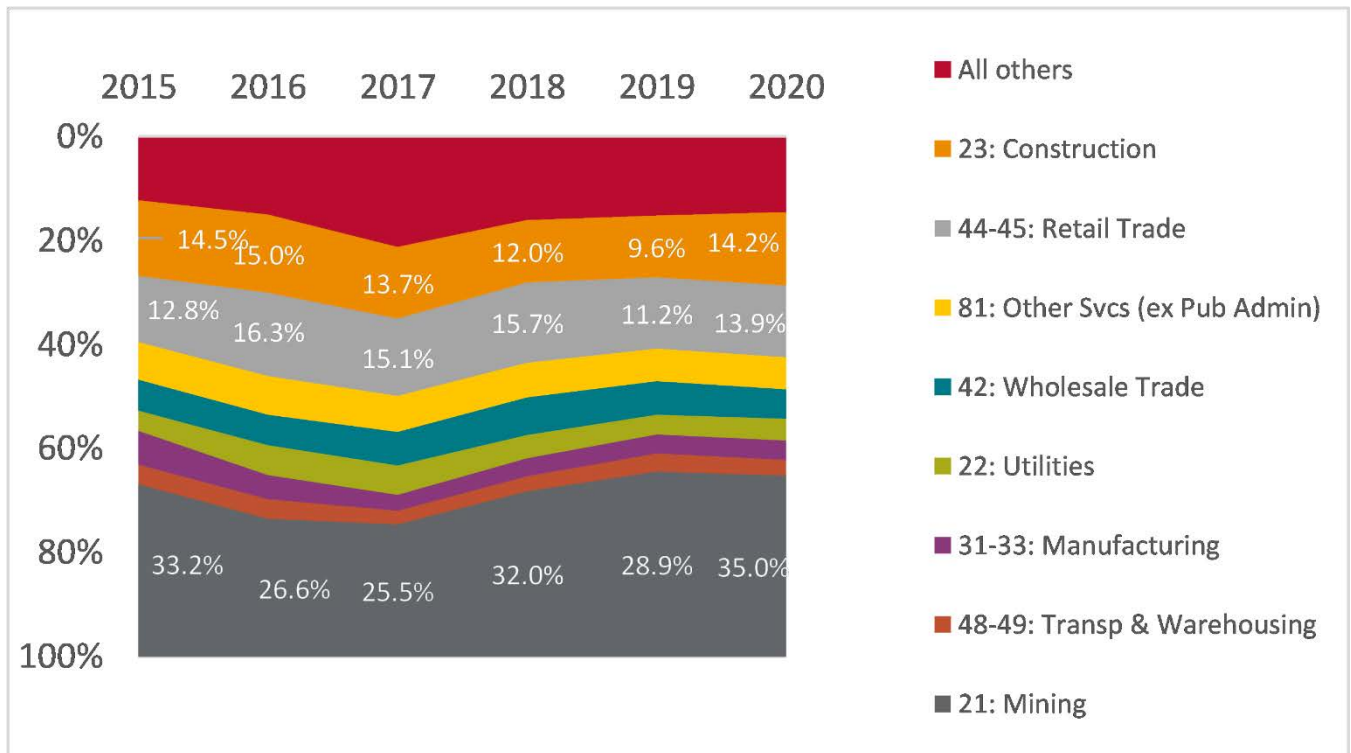
(UNM BBER Data Base)

Figure 35: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020, Percentage

Sector	2015	2016	2017	2018	2019	2020	5YR Avg.
21: Mining	33.2%	26.6%	25.5%	32.0%	28.9%	35.0%	30.2%
23: Construction	14.5%	15.0%	13.7%	12.0%	9.6%	14.2%	13.2%
44-45: Retail Trade	12.8%	16.3%	15.1%	15.7%	11.2%	13.9%	14.2%
81: Other Svcs (ex Pub Admin)	7.2%	7.4%	6.9%	6.7%	5.1%	6.1%	6.6%
42: Wholesale Trade	6.1%	5.9%	6.5%	7.2%	5.3%	5.8%	6.1%
22: Utilities	3.9%	5.8%	5.7%	4.5%	3.1%	4.2%	4.5%
31-33: Manufacturing	6.5%	4.6%	3.0%	3.5%	2.9%	3.8%	4.0%
48-49: Transp & Warehousing	3.8%	3.9%	2.7%	2.9%	2.9%	3.0%	3.2%
All others	12.3%	15.1%	21.4%	16.2%	12.4%	14.6%	15.3%

(UNM BBER Data Base)

Figure 36: NM & Lea County, Gross Taxes, Fiscal Year 2015-2020, Percentage



Source: BBER data compiled by UNM BBER(<https://dev-bber.unm.edu/external/bberdb/>)

We also considered correlations relative to the Oil & Gas sector to test the relative importance of this industry. As the following table shows for Lea County, activity in the Mining sector is highly correlated with Total activity at 0.96; the statewide Total activity correlation with the Mining sector was 0.76. Of the 22 sectors in Lea County, all but 8 exhibit correlations of 0.7 or higher with the Mining sector. Sectors exhibiting low or no correlation were: Admin Support, Waste Management, Remediation (-0.02), Arts, Entertainment, and Recreation (0.38); Management of Companies (0.45); Educational Services (0.48); Finance and Insurance (0.48); Public Administration (0.55).

Figure 37: Gross Receipts Tax: Lea County Sector Correlations with the Mining, Oil & Gas Sector, Gross Taxes, 2015-2020, FY

Sector	Mining	Sector	Mining
21: Mining	1.00	62: Health Care and Social Assist	0.73
54: Prof, Scien, and Tech Svcs	0.98	31-33: Manufacturing	0.70
44-45: Retail Trade	0.97	99: Unclassified	0.63
81: Other Svcs (ex Pub Admin)	0.97	11: Ag, Forestry, Fishing and Hunting	0.59
72: Accommodation and Food Svcs	0.97	92: Public Administration	0.55
42: Wholesale Trade	0.96	52: Finance and Insurance	0.48
23: Construction	0.92	61: Educational Services	0.48
22: Utilities	0.92	55: Mgmt of Cos and Enterprises	0.45
48-49: Transp & Warehousing	0.91	71: Arts, Entertainment, and Rec	0.38
53: Real Estate Rental and Leasing	0.85	56: Admin Support, Waste Mgmt, Re	-0.02
51: Information	0.83	TOTAL	0.96

Source: BBER data compiled by UNM BBER(<https://dev-bber.unm.edu/external/bberdb/>)

BBER also reviewed Royalties and Rents collected by the State Land Office (SLO) assessed in connection with the use of State lands, primarily for Oil & Gas extraction. The SLO does not report data at the county level for where the revenues were generated. However, given roughly half of production in New Mexico is generated by Lea County, we can estimate that half the royalties, rents, and license fees and permits occurred in Lea. For example, the 5-year average was \$23.33 million – half of this is \$11.66 million, and half the \$116 million total revenues generated by the SLO was \$58.3 million

Figure 38: State Land Office Annual Royalties and Rents, 2017-2021

	2017	2018	2019	2020	2021	5YR Avg.
<i>Rentals &amp; Royalties</i>	\$17.37	\$22.72	\$17.88	\$18.04	\$11.44	\$17.49
Sales, Other	\$0.03	\$0.02	\$0.03	\$0.11	\$0.00	\$0.04
Investment Income	\$0.79	\$1.64	\$6.50	\$9.67	\$0.64	\$3.85
Licenses Fees & Permits	\$2.11	\$2.41	\$2.38	\$2.68	\$0.19	\$1.95
Total	\$20.30	\$26.79	\$26.80	\$30.50	\$12.26	\$23.33

(The New Mexico Sunshine Portal)

Researchers also considered the taxes paid by type per capita for Lea and New Mexico. This statistic shows that taxes paid for all types are higher per capita in Lea County versus statewide. The statistic for all taxes is 19,089 for Lea and 3,512 statewide. The Severance Tax and GRT per capita statistics were 760 and 2,721 for New Mexico compared to 11,987 and 6,585 for Lea.



Figure 39: Taxes Paid Per Capita for NM and Lea, 2020

Tax Type	Taxes Paid		Taxes Paid Per Capita	
	NM	Lea	NM	Lea
Severance Tax	1,592.9	851.9	760	11,987
Equipment (Ad Valorem)	53.3	30.6	25	431
GRT	5,705.0	468.0	2,721	6,585
Rentals & Royalties	12.26	6.13	6	86
Total	7,363	1,357	3,512	19,089
Population	NM: 2,096,829		Lea: 71,070	

(New Mexico Department of Finance & Administration) & (The New Mexico Sunshine Portal)

In conversations with economic and financial watchers in Lea County that are responsible for tracking and forecasting economic and fiscal trends, Rig counts have been a key predictor of economic and fiscal outcomes historically. Experience has shown that production levels in the oil and gas sector, which are a function of crude oil prices and volumes ( $P_x \times \text{Volume}$ ), is particularly reliable for forecasting. If these two variables are stable and/or strong, then fiscal revenues are also steady.

## Economic Opportunities

### Economic Opportunities

Lea County asked BBER to provide analysis that can help the county plan strategically regarding economic development, especially in times of scarce resources and constrained budgets. To this end, Location Quotients to assess industry level relative strengths, and SWOT analyses (Strengths Weaknesses Opportunities and Threats) were developed. Researchers collected quantitative data to understand current economic development efforts and to help assess the quantitative analysis.

Location Quotients (LQs) were computed to assess relative strengths and the importance of the sectors that make up the Lea economy. The calculations use employment levels at the county level relative to state and national averages. Location Quotients are analytical statistics that measure a region's industrial specialization to a larger geographic unit. LQ's greater than 1.0 signify relative strength/specialization relative to the broader population (e.g., national averages); LQ's < 1.0 indicate that the industry under question is less strong/developed.

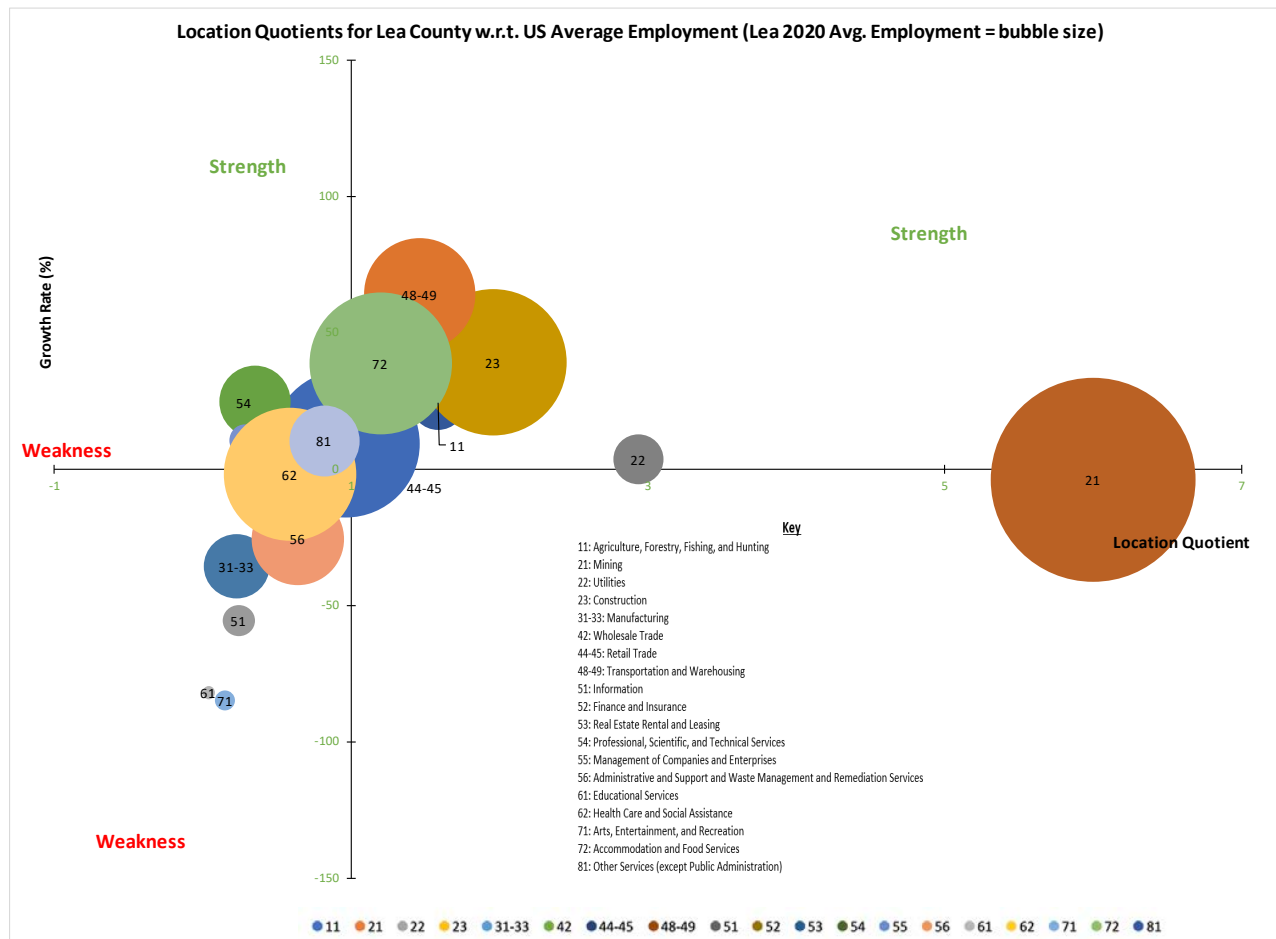
The following charts depict the growth rate of key economic data combined with the LQ's for specific sectors. This analysis assists in identifying the strong sectors as well as the weak sectors as measured by the growth of key economic variables. By highlighting average employment, Figure 33, displays the sectors that are *relatively weak and declining in employment* in the southwest quadrant of the chart; these sectors follow: **Arts, Entertainment and Recreation; Education Services; Information; Administrative Support and Waste Management Remediation; Finance and Insurance; Wholesale Trade.**

Sectors that are *exhibiting growth in employment but are weak relative to national and state averages* fall in the (northwest quadrant). These sectors include: **Professional, Scientific and Technical Services; Management of Companies and Enterprises; Health Care and Social Assistance; Retail Trade.**

Sectors that are *strong as measured by LQ's and exhibiting healthy growth in employment* are (northeast quadrant): **Construction, Agriculture; Transportation & Warehousing; Accommodation and Food Services; and Real Estate and Leasing.** The Oil & Gas industry, although the growth rate is not as high as other sectors, also presents strength and is a continued important opportunity for the region.

Although these sectors may be exhibiting negative growth trends and/or are weak relative to national and state averages, these sectors can also present opportunities for future growth. For example, the LQ for Health Care is just under 1.0 in Lea and yet employment is growing in this sector. Health Care has been identified by many stakeholders in the community as a critical gap and an area of opportunity.

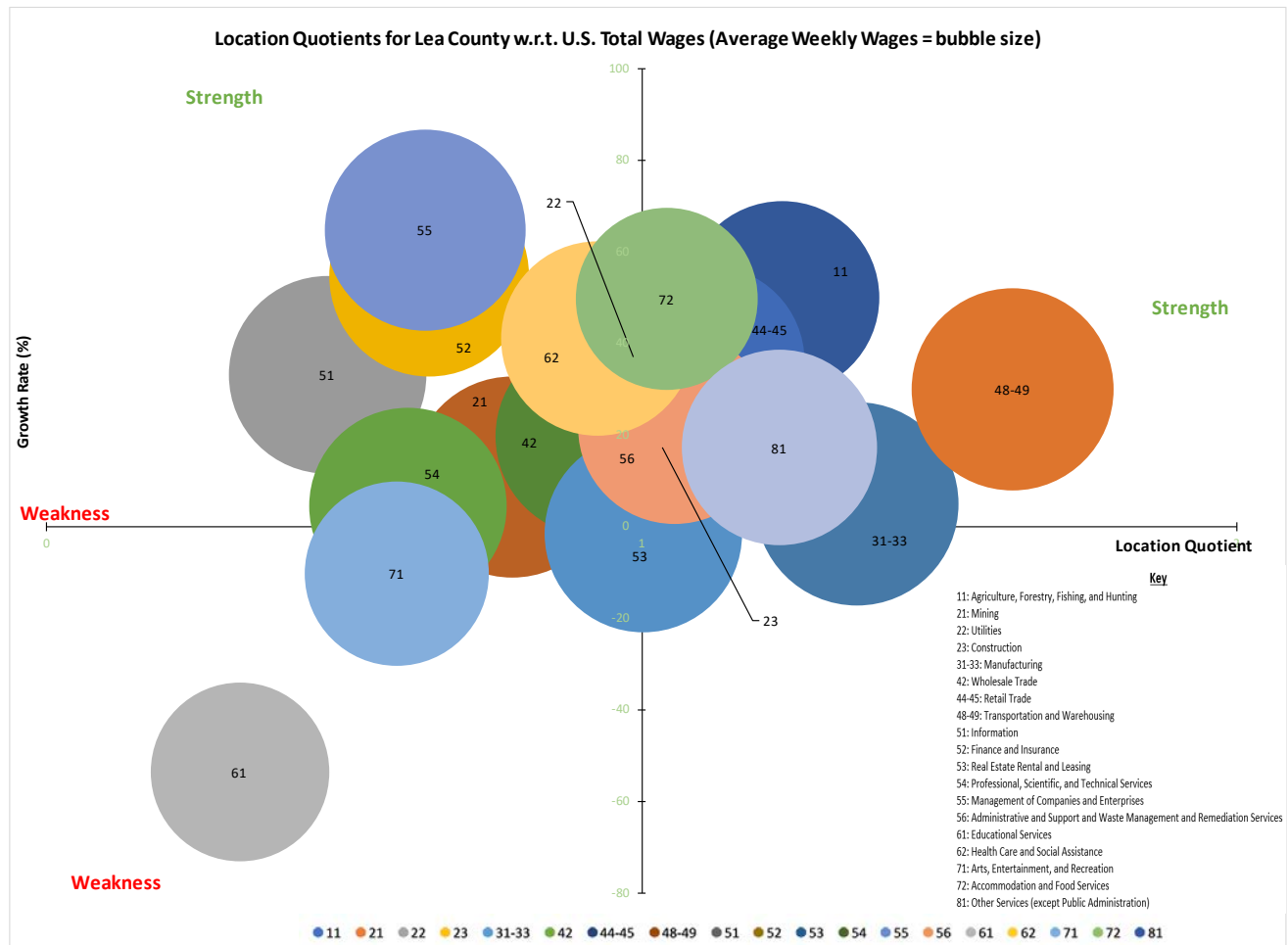
Figure 40: Location Quotients Using Average Employment for Lea v. NM



Source: Bureau of Economic Analysis.

When considering **Average Weekly Wages**, sectors demonstrating strength (LQ's and Wage growth) are Transportation & Warehousing; Agriculture, Forestry, Fishing and Hunting; Retail Trade; Other services; Admin, Support, Waste Management and Remediation; Accommodation and Food Services. Sectors exhibiting areas of opportunity (Wage growth despite low LQ's) are: Management of Companies; Finance and Insurance; Information; Mining; Wholesale Trade; Professional, Scientific and Technical Services. Weak sectors are Educational Services; Arts, Entertainment, and Recreation.

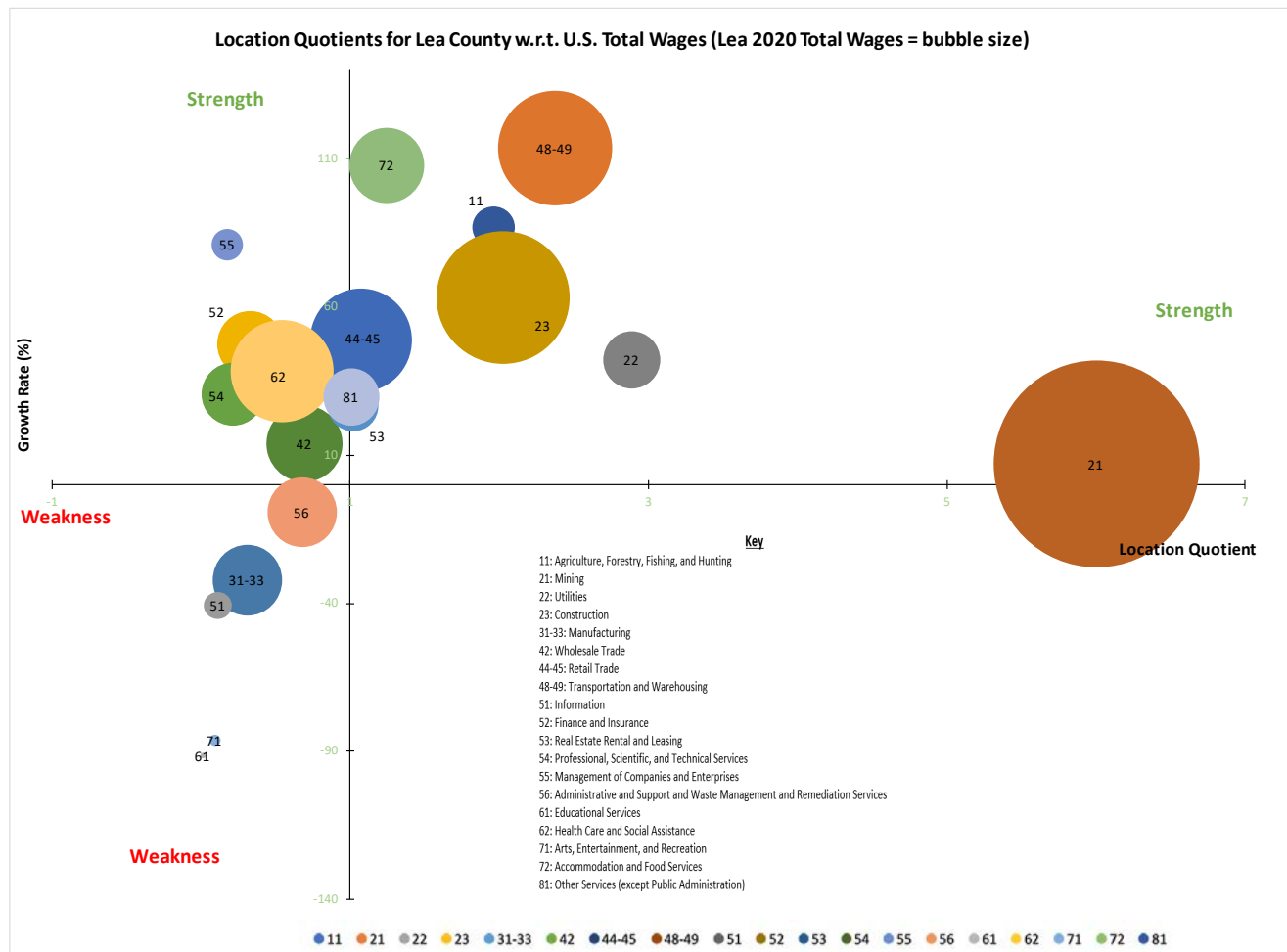
Figure 41: Location Quotients Using Average Weekly Wages for Lea vs. NM



Source: Bureau of Economic Analysis.

When considering **Total Wages**, sectors demonstrating strength (LQ's and Wage growth) are Transportation & Warehousing; Agriculture, Forestry, Fishing and Hunting; Retail Trade; Other services; Construction; Accommodation and Food Services. Sectors exhibiting areas of opportunity (Wage growth despite low LQ's) are: Management of Companies; Finance and Insurance; Real Estate and Leasing; Health Care; Mining; Wholesale Trade; Professional, Scientific and Technical Services. Weak sectors are Educational Services; Arts, Entertainment, and Recreation; Information; Manufacturing.

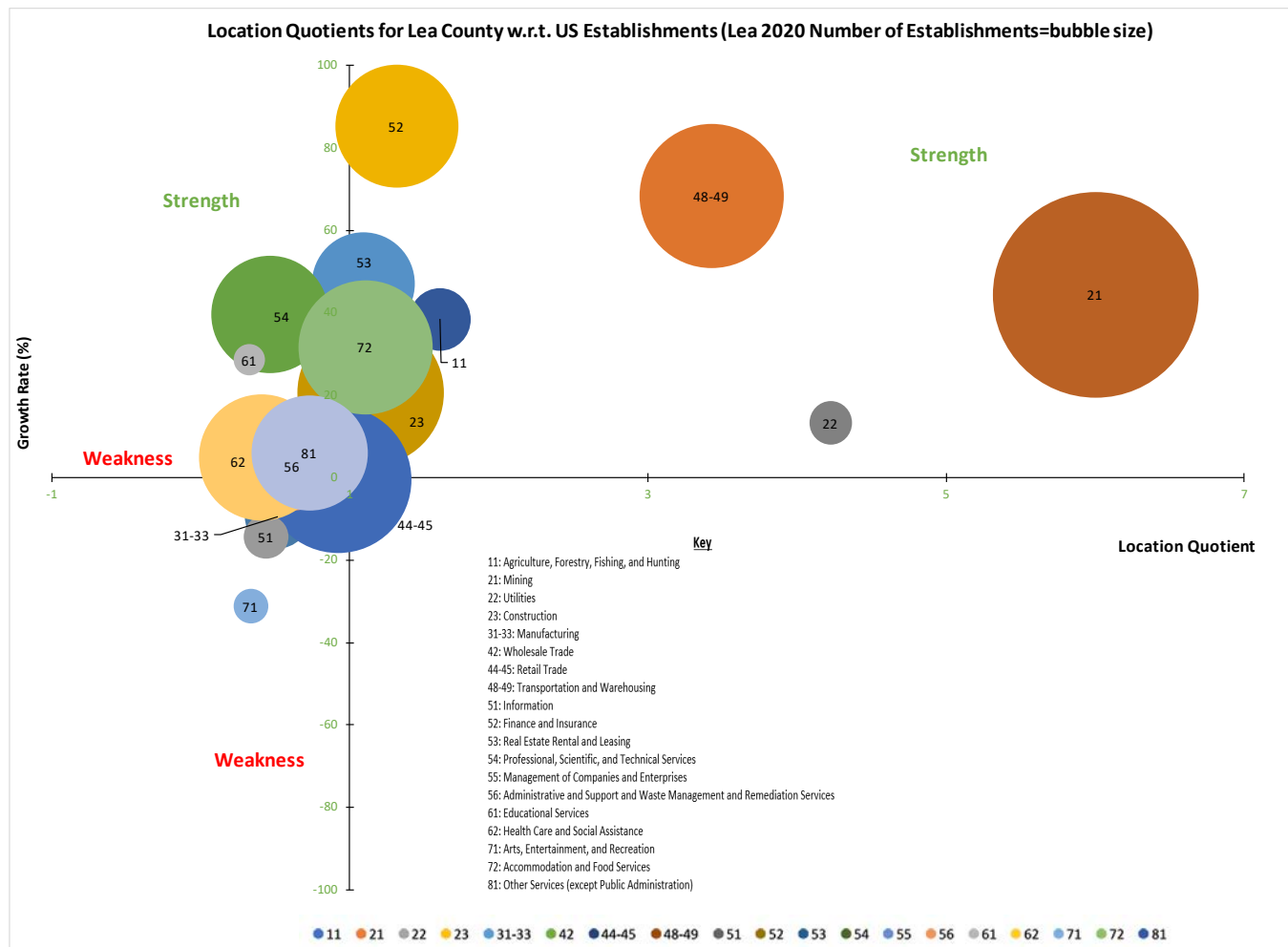
Figure 42: Location Quotients Using Total Wages for Lea vs. NM



Source: Bureau of Economic Analysis.

When considering **Establishments**, sectors demonstrating strength (LQ's and Wage growth) are Finance and Insurance; Transportation & Warehousing; Real Estate and Leasing; Agriculture, Forestry, Fishing and Hunting; Construction; Mining; Accommodation and Food Services. Sectors exhibiting areas of opportunity (Wage growth despite low LQ's) are: Finance and Insurance; Real Estate and Leasing; Health Care; Education Services; Other Services; Wholesale Trade; Professional, Scientific and Technical Services; Weak sectors are Arts, Entertainment, and Recreation; Information; Manufacturing.

Figure 43: Location Quotients Using Average Establishments for Lea vs. NM



Source: Bureau of Economic Analysis.

The following table summarizes and totals the LQ's and growth rates for average employment, average weekly wages, total wages, and establishments to give us a sense of the strongest sectors in the Lea economy. These calculations capture numerically the information depicted in the previous charts. These calculations show that 3 out of 4 sectors in Lea are growing. **Sectors exhibiting growth are Transportation & Warehousing; Accommodation and Food Services; Agriculture, Forestry, Fishing and Hunting; Finance and Insurance; Management of Companies; Construction; Real Estate Rental and Leasing; Professional, Scientific, and Technical Services; Utilities; Retail Trade; Health Care; Other Services; Mining, Oil & Gas; and Wholesale Trade.** On a relative basis (to US averages), these sectors are also strong. Sectors exhibiting weakness (negative growth as well as relative to national averages) are Admin, Support, Waste Management and Remediation Services; Manufacturing; Information; Educational Services; Arts, Entertainment & Recreation. Given that the state is interested in pursuing additional waste management and remediation, thus this industry is an important opportunity for growth for this part of the state, given the existing base. Although the growth



score for Waste Management is weak, because the New Mexico state government has identified this sector as an area of opportunity for Lea County.

Figure 44: LQ Scores and Growth Scores for Wages, Employment, Establishment for Lea vs. NM

Sector	Growth Score	LQ Score
48-49 Transportation & Warehousing	276.37	8.88
72 Accommodation and Food Services	228.31	4.59
11 Agriculture, Forestry, Fishing, and Hunting	200.01	6.39
52 Finance and Insurance	183.08	2.80
55 Management of Companies and Enterprises	156.63	1.69
23 Construction	140.38	6.15
53 Real Estate Rental and Leasing	100.37	4.12
54 Professional, Scientific, and Technical Services	99.50	1.64
22 Utilities	96.36	11.03
44-45 Retail Trade	93.57	4.07
62 Health Care and Social Assistance	82.61	2.46
81 Other Services (ex Public Administration)	63.36	3.79
21 Mining	58.59	150.00
42 Wholesale Trade	29.56	3.25
56 Admin, Support, Waste Mgmt Remed Svcs	-10.35	2.98
31-33 Manufacturing	-72.48	2.41
51 Information	-77.27	1.26
61 Educational Services	-198.32	0.70
71 Arts, Entertainment, and Recreation	-212.62	1.16

BBER also developed estimates for the oil producing area of the state (Lea and Eddy). BBER estimates that private employment will increase by 6,323 jobs over the next five years. **Most of this growth will come in Mining and Oil & Gas, Construction, Accommodation & Food Services, Healthcare, Professional & Technical Services, and Transportation & Warehousing.** Other sectors BBER expects to exhibit double digit growth are Wholesale Trade; Other Services; and Arts, Entertainment & Recreation. Sectors with **poor growth expectations are Finance & Insurance; Management of Companies; and Retail Trade.** Importantly, most of the declines that BBER estimates are due to COVID.

Figure 45: Lea County 5-Year Employment Forecasts by Sector

Sector	2021	2026	Change	Chg.%	Sector	2021	2026	Change	Chg.%
Total Employment	55,150	61,911	6,761	12%	Ag, Forest, Fish & Hunt	741	801	60	8%
Private Employment	47,930	54,253	6,323	13%	Utilities	626	656	30	5%
Mining	10,734	12,496	1,761	16%	Information	301	323	22	7%
Construction	5,238	6,719	1,482	28%	Finance & Insurance	1,153	1,170	16	1%
Accommodation & Food Svcs	4,879	5,943	1,064	22%	Educational Services	254	268	15	6%
Healthcare & Soc Assist	4,866	5,336	471	10%	Arts, Entertainment & Rec	107	118	11	10%
Professional & Tech Svcs	1,888	2,338	450	24%	Mgmt of Cos & Enterprises	274	272	(2)	-1%
Transp & Warehousing	2,845	3,272	426	15%	Retail Trade	6,196	6,114	(82)	-1%
Admin & Waste Svcs	2,583	2,757	174	7%	Government Employment	7,220	7,659	438	6%
Wholesale Trade	1,385	1,532	148	11%	Local Government	5,754	6,197	443	8%
Other Services & Unclassified	1,293	1,419	125	10%	State Government	689	691	2	0%
Manufacturing	1,626	1,702	76	5%	Federal Government	777	770	(7)	-1%
Real Estate, Rental & leasing	941	1,016	76	8%					

Source: UNM BBER Estimates.

When considering qualitative data, there are several opportunities that are present. The following is a review and discussion collected through interviews and other formal and informal secondary and qualitative sources. Because business and economic leaders in Lea are forward thinking and actively working to chart the future course of the local economy, representatives from the schools, local business leaders, economic developers and members of the community have begun creating a Career and Technical Center (CTech) at Hobbs High School. A \$50 million, 86,000-square-foot, education center that will focus on workforce development for high school students (9th-12th grades) is the culmination of these efforts.

There will be six different career pathways with the goal of helping students be employable upon graduation. The pathways are energy (oil & gas and solar), manufacturing, construction and architecture (carpentry, electricity, HVAC); transportation<sup>4</sup>, culinary arts, Information Technology. The center will serve 2,600 students (1,200 per day) in 2-hour blocks. The program intends to provide paid senior externships. Zeke Kaney, Director of Career and Technical Education at Hobbs Schools, offered that the local businesses involved on the steering committee and as advisory for the 6 career pathways will likely be able to host these externships and other apprenticeship and internship opportunities. The CTech Center is scheduled to open in August 2022 and will offer programs to students in neighboring school districts. According to Strickland, the capacity of the center can be increased by 600 students by re-arranging schedules. The size of the facility can also be increased with ease.

A steering committee composed of education leaders and economic developers seek to have ongoing conversations and to advise on the direction of the center with a 2-3 year horizon. The purview of the committee includes decisions on the retooling of the different pathways. Organizers and advisory groups for the CTech seek to have high school graduates workforce ready by bridging between the local business community and schools. They seek to ensure that the workforce meets the needs of local business by ensuring the correct certifications required by employers.

<sup>4</sup> diesel automotive mechanics(?)

The community colleges play a role by offering programs in relevant career pathways and additional industry-specific certifications demanded by local businesses. The community college system also plays an important role in the proper “tooling” of workers just entering the workforce. For example, some Oil & Gas companies do not employ people younger than 21 years of age – due to insurance issues – and others require a minimum age of 25 years. High school graduates can deepen their skills and qualifications with a couple additional years of technical training and education.

Economic developers in Lea County are in the process of updating their strategic plan as they think about how to broaden the local economy. One area, although manufacturing in the county has historically supported the Oil & Gas industry, they are thinking about how to diversify into other manufacturing types, in addition to Oil & Gas. For example, Lea County has already invested in infrastructure for future business development. Probably the best example of this is the EnergyPlex Park located in Hobbs, which offers 9,600 acres of industrial space. Although the Park’s core competencies are in Oil & Gas related industries, organizers seek to attract light manufacturing, petroleum, nuclear, solar, wind, fabrication, mining, warehousing, R&D, and biofuels. Grassham points out that in Manufacturing, Natural Resources related activities – not necessarily Oil & Gas related -- present the biggest opportunities. For example, Urenco does uranium enrichment and feedstock production for different plants, sourcing materials locally. The Lovington Industrial Park presents opportunities and is located within 2 miles of the city limits. Grassham also points out that more investment in infrastructure – water & sewers, roads, utility services -- is needed to deepen the local economy and scale up current economic development efforts.

One area of strength in infrastructure for Lea is the existence of a locally owned broadband/fiber provider (Leaco), which makes it easier to manage the area’s broadband infrastructure; although Hobbs and Lovington are “gigabit cities” (the per second transmission rate), continued investment will be necessary to keep up with future growth needs. Grassham credits Lea County government for their involvement in growing the broadband infrastructure in the area.

Jennifer Grassham, the Executive Director of the Economic Development Corporation of Lea County (EDCLC) highlights that the expansion of the regional hospital system in Lea and new health care facilities have helped to grow this important sector. Investing in this area can increase the market share in health care by reducing the need for residents to leave the area in order to receive medical treatment and procedures. Grassham points out that many patients travel to Lubbock (TX) for certain treatments and procedures.

We have considered the strengths, weaknesses and the opportunities as it relates to future economic growth for Lea. In conversations and in our scan of the literature and data, we encountered regulatory risks, available land and water constraints.

First, State and Federal regulations that require zero emissions (e.g. by 2050) has real consequences for the Oil & Gas industry. Some have pointed out restrictions on “flaring” would negatively impact small and medium sized Oil & Gas businesses that would have to invest in technologies to meet new targets. In this regulatory environment, only the large firms with wider/healthier margins could keep producing. These small and medium sized companies are particularly important to the local economy in Lea. The fact that Lea County has a large percentage of State land managed by the State Land Office (SLO) also came up. The concern here is that

because of a lack of contiguous, uninterrupted land, there may be constraints on business development and new infrastructure efforts.

Lea is not unique among counties in that water shortages could limit future economic and population growth. However, because Oil & Gas production is water-intensive and because water it is subject to many competing interests in this arid region, this resource is especially taxed. However, there are efforts to address water needs and shortages. One creative solution to access water for local consumption, is a proposed pipeline out of Lubbock, Texas that would transport treated non-potable waste water to Southeastern New Mexico that would be cleaned and used by end users. Palisade Pipeline, a company seeking to complete this project has signed an agreement with Lubbock to purchase 6 million gallons of wastewater per day, which could help offset demands on groundwater supplies.

Upon consideration of various quantitative and qualitative data discussed in the preceding sections, BBER developed the following table to summarize where Lea’s economic Strengths and Opportunities are relative to Weaknesses and Threats. The following suggests a tilt toward Strengths and Opportunities, rather than deficits and areas of concern.

Figure 46: SWOT (Strengths Weaknesses Opportunities Threats) Analysis for Lea County

<p style="text-align: center;"><b><u>Strengths</u></b></p> <ul style="list-style-type: none"> <li>•Low poverty rates;</li> <li>•Young population (compared to U.S. and NM);</li> <li>•Low unemployment rate (lower than U.S. and NM averages);</li> <li>•Existing industrial and commercial infrastructure: EnergyPlex Park, Lovington Industrial Park, Industrial AirPark;</li> <li>•Good broadband infrastructure;</li> <li>•CTech Center -- good coordination b/w local business and schools;</li> <li>•Manufacturing base not 100% linked to Oil &amp; Gas industry;</li> <li>•Emergent non-Oil &amp; Gas Energy-related opportunities;</li> <li>•Expansion of Health Care facilities;</li> <li>•Sectors experiencing strong employment growth, wage growth and related business strength (relative to national and statewide averages (LQ's)) are: Construction; Agriculture; Transportation &amp; Warehousing; Accommodation and Food Services; Finance and Insurance; Real Estate Leasing; Construction; Utilities; Other Services; Mining, Oil &amp; Gas.</li> </ul>	<p style="text-align: center;"><b><u>Weaknesses</u></b></p> <ul style="list-style-type: none"> <li>•Many sectors exhibit large sensitivities with economic cycle (Coefficient of Variations): Manufacturing, Natural Resources (incl. Oil &amp; Gas), Transportation;</li> <li>•Large changes in unemployment rate due to prominence of economically sensitive sectors;</li> <li>•Sectors experiencing weak to negative employment growth and low Location Quotients: Arts, Entertainment &amp; Rec; Education Services; Information; Admin Support and Waste Remediation; Manufacturing;</li> <li>•BBER job expectations are weak for Finance &amp; Insurance; Management of Companies; and Retail Trade (in part due to COVID);</li> <li>•</li> </ul>
<p style="text-align: center;"><b><u>Opportunities</u></b></p> <ul style="list-style-type: none"> <li>•Personal Income and average wage gains greater than NM and US over last 10 years;</li> <li>•Stronger earnings for Lea County workers, especially when controlling for educational attainment levels;</li> <li>•Sectors exhibiting lower sensitivity to economic cycle: Health Care, Education Services, Finance and Insurance;</li> <li>•IRB's and other economic incentives enabled and utilized;</li> <li>•Could grow Health Care sector with more Health Care related education programs;</li> <li>•Wind energy -- one of best counties in country for wind;</li> <li>•Emergent opportunities for bringing recycled water;</li> <li>•Sectors growing in employment but still weak (LQ's) relative to US and Statewide averages: Professional, Scientific, Technical Services; Management of Companies; Health Care; Retail Trade; Wholesale Trade;</li> <li>•BBER employment estimates are strong for: Mining, Oil &amp; Gas, Construction; Accommodation &amp; Food Services; Health Care; Professional &amp; Technical Services; Transportation &amp; Warehousing;</li> <li>•Non-Oil &amp; Gas Energy opportunities like Uranco;</li> <li>•State interested in expanding Admin Waste and Remediation jobs.</li> </ul>	<p style="text-align: center;"><b><u>Threats</u></b></p> <ul style="list-style-type: none"> <li>•Water shortages;</li> <li>•Regulatory risks (e.g. zero omissions by 2050);</li> <li>•</li> </ul>