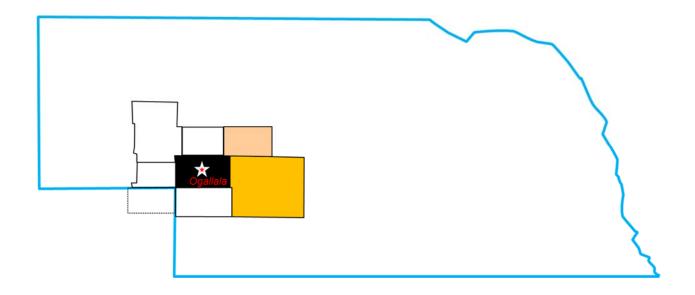
# Target Industry Study, Ogallala and Keith County, Nebraska



September 2019

September 17, 2019

## Target Industry Study, Ogallala and Keith County, Nebraska, September 2019

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## **Executive Summary**

This study identifies a core set of industries as likely candidates for future retention, expansion, and possible recruitment efforts by Keith County Area Development (KCAD). The area included in the study, 2019 Ogallala Study Area, consists of Keith plus seven contiguous counties. One of the seven counties is a core micropolitan, one is an outlying micropolitan county; Keith and the other five counties are classified as rural. Key findings of this report include:

- Continued loss of population erodes an area's tax base, makes it difficult to maintain current employment levels, and places future growth at risk.
- Keith County relies on other counties for substantial numbers of both workers and jobs for its residences; but, overall, experiences a very balanced in- and out-flow of workers, with about 8 more primary jobs than employed residents.
- The current age distribution raises concern about potential, future population growth in the Ogallala Study Area.
- The relatively low percent of residents with a bachelor's or higher degree may limit the study
  area's ability to sustain current higher paying jobs and compete for some business expansions or
  relocations.
- NAICS 62 Health Care and Social Assistance with 4,185 workers is the largest 2-digit, NAICS industry in the 2019 Ogallala Study area. It has experienced the largest positive change in jobs during the latest five-years and has average annual wages, \$47,814, higher than the regional average of \$44,844.
- NAICS 48 Transportation and Warehousing, with 3,263 workers, is the second largest 2-digit, NAICS industry in the 2019 Ogallala Study area. It has average annual wages of \$69,615 that are much higher than the regional average, but the sector has recently experienced a slight decline in workers.
- NAICS 11 Agriculture, Forestry, Fishing and Hunting; NAICS 42 Wholesale Trade; NAICS 48
   Transportation and Warehousing; and NAICS 62 Health Care and Social Assistance have been major drivers of the 2019 Ogallala Study Area's economy.
- Wage data and employment data do not indicate the presence of a strong core of well-paid workers in any specific occupation.

Information on recent and projected labor force, workforce, and industry trends, plus data on occupational and industry wages is used to identify the relative strengths and importance of existing industries and occupations in the study area. Location quotient analysis is used to identify an initial, set of industries for further study as possible future drivers of the study area economy. Shift-share analysis for the recent period 2013-2018 and projected values for the period 2018-2023 is used to identify detailed, 4-digit North American Industrial Classification System (NAICS) code, industries as possible future drivers of the Ogallala Target Area economy. Sales to the core industries by other local businesses are compared to exports and this supply chain analysis identifies possible opportunities for local input substitution.

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The four core 2-digit NAICS industries identified as recent drivers of the area economy in the location quotient analysis are:

- 1) NAICS 11 Agriculture, Forestry, Fishing and Hunting
- 2) NAICS 42 Wholesale Trade
- 3) NAICS 48 Transportation and Warehousing
- 4) NAICS 62 Health Care and Social Assistance

Shift share analysis is used to identify 23 more detailed, 4-Digit NAICS codes industries likely to be highly important to the current and future economic vitality of Keith County. These 23, 4-digit NAICS industries are:

- 1) NAICS 2362 Nonresidential Building Construction
- 2) NAICS 2371 Utility System Construction
- 3) NAICS 2373 Highway, Street, and Bridge Construction
- 4) NAICS 2381 Foundation, Structure, and Building Exterior Contractors
- 5) NAICS 2382 Building Equipment Contractors
- 6) NAICS 4231 Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers
- 7) NAICS 4238 Machinery, Equipment, and Supplies Merchant Wholesalers
- 8) NAICS 4247 Petroleum and Petroleum Products Merchant Wholesalers
- 9) NAICS 4248 Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers
- 10) NAICS 4249 Miscellaneous Nondurable Goods Merchant Wholesalers
- 11) NAICS 4821 Rail Transportation
- 12) NAICS 4841 General Freight Trucking
- 13) NAICS 5221 Depository Credit Intermediation
- 14) NAICS 5222 Nondepository Credit Intermediation
- 15) NAICS 5242 Agencies, Brokerages, and Other Insurance Related Activities
- 16) NAICS 5411 Legal Services
- 17) NAICS 5412 Accounting, Tax Preparation, Bookkeeping, and Payroll Services
- 18) NAICS 6211 Offices of Physicians
- 19) NAICS 6212 Offices of Dentists
- 20) NAICS 6213 Offices of Other Health Practitioners
- 21) NAICS 6214 Outpatient Care Centers
- 22) NAICS 6219 Other Ambulatory Health Care Services
- 23) NAICS 6221 General Medical and Surgical Hospitals

A total of three industries are identified as targets for import substitution:

- 1) NAICS 5621 Waste Collection
- 2) NAICS 6215 Medical and Diagnostic Laboratories
- 3) NAICS 8112 Electronic and Precision Equipment Repair and Maintenance

## Introduction

The purpose of this study is to provide Keith County Area Development (KCAD) with information to be used as part of a process to identify industries for future retention, expansion, and possible recruitment efforts. Additional information that may be used in this targeting process includes insights of KCAD and community members plus possible further investigations conducted by KCAD.

This report contains information on the relative sizes and trends, both recent and projected, of area industries and their labor force, plus information on interactions between the Keith County economy and the economies of counties linked to it by commuting patterns. Industries that are key drivers of Keith County's recent economic growth, that are expected to be future drivers of economic growth, and that appear to have potential to become drivers of the area economy are identified in this study. Also identified are industries that are currently highly important to the area's economic health but may be at risk due to expected declines in overall national employment.

## Methodology

U.S. Census Department's Bureau of the Census and Chmura Economics & Analytics (Chmura JobsEQ) are the primary sources of information for this study. Chmura, a private data vendor, collects and analyzes data from a variety of public and private sources such as the U.S. Census Department, the U.S. Department of Labor, and the U.S. Department of Education. Chmura uses this information to derive estimates of local data suppressed by government agencies to protect proprietary information. Data from Chmura enables a level of analysis that would not be possible in many Nebraska counties due to high levels of data suppression common in areas of relatively small population. Nebraska Public Power District (NPPD) subscribes to Chmura data services and provides this information to wholesale and retail customers as part of its economic development services to these communities.

Data from the U.S. Census Bureau's OnTheMap Application and Chmura's JobsEQ database have been used to identify seven counties closely linked to Keith County based on proximity and commuting patterns. All seven of these counties are adjacent to Keith County.

One of the seven counties, Lincoln County Nebraska, is a Core micropolitan county and one, McPherson, is an outlying micropolitan county. Together these two counties form the North Platte Micropolitan Area. Keith and the remaining five counties are classified as rural. Initial analysis of area demographics, industries, workforces and labor forces data, indicated the eight counties could be combined into a single study area, the 2019 Ogallala Study Area. For this study, data are generally reported for both the 2019 Ogallala Study Area and for Keith County.

Information on recent and projected demographics, labor force, workforce, and industry trends plus data on occupational and industry wages are reported for the 2019 Ogallala Study Area and Keith County. This information is used to identify the relative strengths and importance of existing industries and occupations.

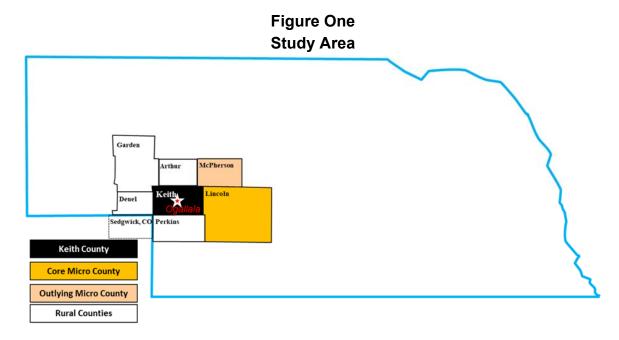
Location quotient analysis, using past, present, and projected future employment and current wages, is used to identify an initial set of industries for further study as possible drivers of the study area economy.

Shift share analysis for the periods 2013-2018 and 2018-2023 is used to classify a set of 4-digit North American Industrial Classification (NAICS) code, industries as: (a) important drivers (Key industries) of area economies, (b) potential drivers (Potential industries) of area economies, (c) important local industries with national trends of declining employment (Mature industries), and (d) Other industries. Typically, industries primarily supporting local population, such as retail trade, construction, personal service, and education, are automatically assigned to the Other industries category. Because of Keith County's large tourism industry, these industries were subjected to a more rigorous evaluation.

Lastly, sales to Key industries and to industries identified as having the potential to become key industries (Potential industries) by businesses outside the study area are compared to exports by similar local businesses. This supply chain analysis identifies possible opportunities for local input substitution.

## Study Area Identification and Commuting Patterns

The geographic area selected for this study is based upon commuting data from the U.S. Census Bureau's OnTheMap Application and Chmura JobsEQ. As shown in Figure One below and Table One on the following page, seven counties border Keith County (Arthur, Duel, Garden, Lincoln, McPherson, and Perkins, in Nebraska and Sedgwick in Colorado). Lincoln County is a Core micropolitan county and McPherson County is an Outlying micropolitan county that together make up the North Platte, Nebraska Micropolitan Area. Keith and the remaining four counties (Arthur, Deuel, Garden and Perkins in Nebraska plus Sedgwick in Colorado) are classified as rural.



Source: U.S. Census Bureau, OnTheMap Application, http://onthemap.ces.census.gov.

As shown in Table One below, Keith County was the location of primary jobs for 61.55 percent, 1,545, of the county's 2,510 resident workers in 2017. The seven adjacent counties provide primary jobs for 13.35 percent, 335, of Keith County's residents in 2017. Lincoln County, the core micropolitan county, provided jobs for 8.49 percent, 213, of Keith County's residents in 2017.

Also shown in Table One, Keith County provided 61.36 percent of the workers for primary jobs within the county. The seven other counties in Table One provided, 304 or 12.07 percent of workers. Table One shows Keith County was a net importer of labor and had 8 or 0.3 percent more primary jobs within the county than employed residents. Data from Table One, suggests Keith County relies on other counties for substantial numbers of both workers and jobs for its residences; but, overall, experiences a very balanced in- and out-flow of workers.

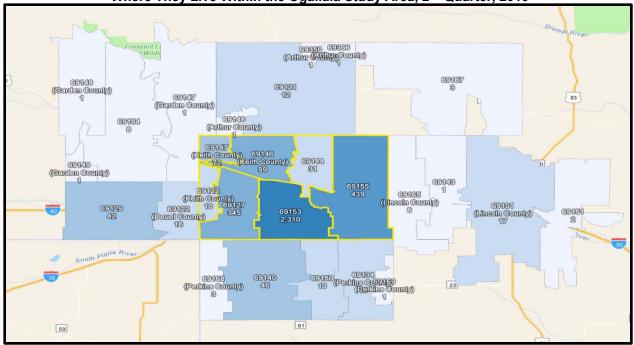
Table One
Worker Inflows and Resident Outflows 2017

		eith County ers Live	Where Keith County Residents are Employed		
Nebraska County	Number	Percent	Number	Percent	
Keith County, NE	1,545	61.36%	1,545	61.55%	
Lincoln County, NE	144	5.72%	213	8.49%	
Perkins County, NE	81	3.22%	71	2.83%	
Deuel County, NE	50	1.99%	22	0.88%	
Garden County, NE	13	0.52%	17	0.68%	
Arthur County, NE	9	0.36%	3	0.12%	
McPherson County, NE	7	0.28%	0	0.00%	
Sedgwick County, CO	0	0.00%	9	0.36%	
All Other Locations	669	26.57%	630	25.10%	
Total	2,518	100.00%	2,510	100.00%	

Source: U.S. Census Bureau, OnTheMap Application, <a href="http://onthemap.ces.census.gov">http://onthemap.ces.census.gov</a>

Figure Two below, shows the number of workers employed in Keith County and living with the Ogallala Study Area in the 2<sup>nd</sup> Quarter of 2019 by the workers Zip Code Tabulation Area (ZCTA)<sup>1</sup> of residence. The largest source of Keith County workers, 2,310, is the Ogallala, Nebraska ZCTA and the largest source of Keith County workers from the other seven counties, 46, is the Grant, Nebraska ZCTA.

Figure Two
Workers Employed in Keith County ZCTAs and
Where They Live Within the Ogallala Study Area, 2<sup>nd</sup> Quarter, 2019



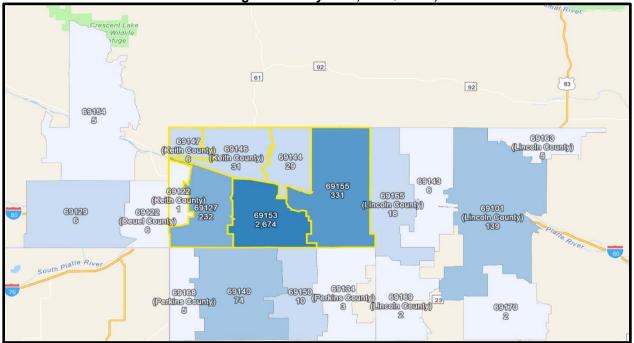
Source: Chmura JobsEQ.

Figure Three on the following page, shows the number of workers living in Keith County and where they are employed within the Ogallala Study Area in the 2<sup>nd</sup> Quarter of 2019 by the Zip Code Tabulation Area of their place of employment. The largest number of Keith County residents, 2,674, are employed in the Ogallala, Nebraska ZCTA. The largest number of Keith County residents working outside the county, 139, are employed in the North Platte, Nebraska ZCTA.

ZCTA is a geographic location like but not necessarily the same as a postal zin code are

<sup>&</sup>lt;sup>1</sup> A ZCTA is a geographic location like but not necessarily the same as a postal zip code area. In rural areas, both ZCTAs and postal zip code areas often extend beyond the corporate limits of incorporated places.

Figure Three
Residents of Keith County ZCTAs and Where They are Employed
Within the Ogallala Study Area, 2<sup>nd</sup> Quarter, 2019



Source: Chmura JobsEQ

## Study Area – Labor Force<sup>2</sup>

The size, skills composition, and recent and projected trends of an area's labor force are critical to a community's efforts to retain, grow, and attract businesses that offer superior compensation packages. An evaluation of a region's current and potential employee pool is a critical step in identifying industries that will be a good fit and promote future growth.

The traditional definition of a labor force is the people living within an area, e.g., Keith County or 2019 Ogallala Study Area residents, 16-years of age or older that are either working or actively seeking employment. The labor force may work at locations within or outside their area of residence. In addition to the traditional definition of labor force, the U.S. Department of Labor publishes information on discouraged workers and underemployed workers at the state and national levels.

This section provides information on the demographic characteristics of the Ogallala Study Area and Keith County's populations and labor force.

<sup>2</sup> Unless otherwise noted, data reported in this section is from Chmura Jobs EQ, "*Economic Overview, 2019 Ogallala Target Study Areas,*" September 12, 2019.

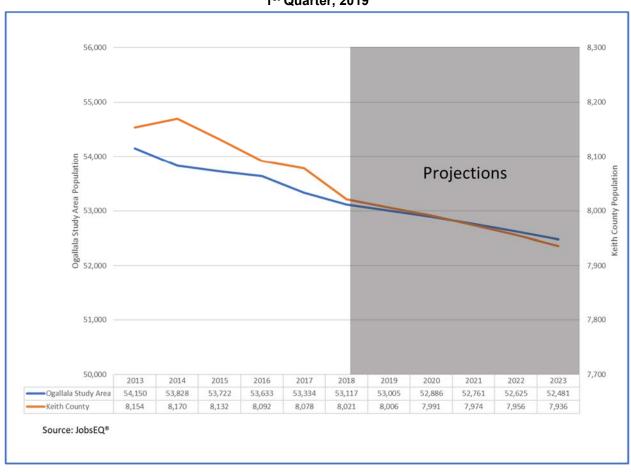
#### **Population Growth and Components of Growth**

Typical of most western Nebraska areas, both Keith County and the eight-county, 2019 Ogallala Study Area have experienced recent population declines as shown in Figure Four. From 2013 to 2018, the 2019 Ogallala Study Area population declined from 54,150 to 53,117. This was an average decline of 207 persons per year or 0.4 percent per year. During the same five-year period, Keith County's population declined from 8,154 to 8,021 or an average of 27 persons per year or 0.3 percent per year.

Projections through 2023 indicate continued but slower population decline. The Ogallala Study Area population is projected to decline by 127 person per year or 0.2 percent during the next five-year period. Keith County population is projected to decline by 17 persons per year or 0.2 percent per year. Continued loss of population erodes an area's tax base, makes it difficult to maintain current employment levels, and places future growth at risk.

Figure Four
Residents of Keith County ZCTAs and Where They are Employed
Within the Ogallala Study Area,

1st Quarter, 2019



#### **Population Age Profile**

The age distribution of its population is another important factor in assessing the ability of an area to support future business and economic growth. Table Three contains information on the size and distribution of population by study area for important age groups.

As shown in Table Two, the median age in both the 2019 Ogallala Study Area, 43.0, and Keith County, 49.7, is much older than the Nebraska average of 36.3. The proportions of the Ogallala Study population under 25 years of age, 29.8 percent, and under 55 years of age, 64.9 percent are both much lower than the corresponding Nebraska values of 34.8 percent and 72.7 percent. This age distribution raises concern about potential, future population growth in the Ogallala Study Area.

Table Two
Age Distribution & Median Age,
Ogallala Study Area, Keith County & Nebraska,
2013-2015 American Community Survey, 5-Year Estimate

		Percent		Value			
	Ogallala Study Area	Keith County, Nebraska	Nebraska	2019 Ogallala Target Study Area	Keith County, Nebraska	Nebraska	
Under 18	23.00%	20.00%	24.80%	12,342	1,628	469,819	
18 to 24	6.80%	6.10%	10.00%	3,660	494	190,260	
25 to 34	11.00%	8.90%	13.40%	5,907	725	253,947	
35 to 44	11.60%	10.00%	12.10%	6,222	809	229,310	
45 to 54	12.50%	13.70%	12.40%	6,695	1,111	234,079	
55 to 64	15.00%	15.40%	12.60%	8,035	1,255	237,908	
65 to 74	10.50%	14.60%	8.10%	5,626	1,184	152,726	
75, and Over	9.60%	11.40%	6.60%	5,139	923	125,872	
Under 25	29.80%	26.10%	34.80%	16,002	2,122	660,079	
Under 55	64.90%	58.70%	72.70%	34,826	4,767	1,377,415	
55 and Over	35.10%	41.40%	27.30%	18,800	3,362	516,506	
Median Age <sup>2</sup>	_	_	<u> </u>	43.0	49.7	36.3	

#### **Population Educational Attainment Profile**

An area's ability to support current and future industry expansions and attract new business formations or relocations is heavily dependent on the quality and quantity of workers and their current skill sets. Much of the data on workers' skills is collected from the local workforce, often these workers reside in areas different than the county, e.g., Keith County, or region being studied. Until recently, this lack of information about the skills of the resident population has made educational attainment the default metric for evaluation of the potential skills and quality of an area's labor force. This information is often supplemented with interviews of local employers to ascertain the availability and quality of important skills. Recently, estimates of the occupations of area residents have become available and are reported in the "Major Occupations and Wages" section of this report.

As shown in Table Three below, Keith County and the 2019 Ogallala Study Area have high percentages of residents 25 years of age and older with at least a high school diploma. However, the percent of residents 25 years of age and older with a bachelor's or higher degree in both Keith County, 23.1 percent, and the Ogallala Study Area, 25.2 percent, are both well below the Nebraska average of 32.8 percent. This relatively low percent of residents with a bachelor's or higher degree may limit the study area's ability to sustain current higher paying jobs and compete for some business expansions or relocations.

Table Three
Educational Attainment, Age 25-64,
Ogallala Study Area, Keith County & Nebraska,
2013-2015 American Community Survey, 5-Year Estimate

	Percent Value					
Attainment Level	2019 Ogallala Target Study Area	Keith County, Nebraska	Nebraska	2019 Ogallala Target Study Area	Keith County, Nebraska	Nebraska
No High School Diploma	6.20%	7.90%	8.60%	1,661	308	82,142
High School Graduate	27.00%	28.30%	23.40%	7,250	1,102	223,804
Some College, No Degree	28.20%	23.10%	23.50%	7,576	899	224,439
Associate's Degree	15.50%	15.60%	11.70%	4,166	609	111,550
Bachelor's Degree	15.80%	18.30%	22.20%	4,245	712	211,974
Postgraduate Degree	7.30%	6.90%	10.60%	1,961	270	101,335

## Study Area – Workforce

While data about an area's labor force describe the characteristics of residents, analysis of an area's workforce provides information about workers at local businesses, regardless of where they live. Analysis of workforce data provides insights into the types of businesses that have been and are likely to be successful within a region. Table Four below provides information on the relative size as measured by 2<sup>nd</sup> Quarter 2019 employment, compensation paid, and the most recent five-year change in employment for very broad categories of Keith County businesses.

As shown in Table Four below, NAICS 62 Health Care and Social Assistance, with 4,185 workers, is the largest 2-digit, NAICS industry in the 2019 Ogallala Study area, has experienced the largest positive change in jobs during the latest five-years, and has average annual wages, \$47,814, higher than the regional average of \$44,844. NAICS 48 Transportation and Warehousing, with 3,263 workers, is the second largest 2-digit, NAICS industry in the 2019 Ogallala Study area, has average annual wages, \$69,615, much higher than the regional average, but has recently experienced a slight decline in workers. NAICS 22 Utilities has the highest average annual wages, \$91,974, but a small, 343, and declining number of jobs.

Table Four
2019 Ogallala Study Area Workforce (Local Jobs) Employment,
Average Wages and 5-Year Job Change by Industry
Preliminary Data, 2019 Q2

			5-Year	Change
		Avg Ann		-
NAIGO		Wages	Job "	<b>A</b> 0/
NAICS	Jobs	(\$)	Change #	Ann. %
NAICS 62 Health Care and Social Assistance	4,185	47,814	156	0.008
NAICS 48 Transportation and Warehousing	3,263	69,615	-60	-0.004
NAICS 44 Retail Trade	3,090	25,840	-426	-0.026
NAICS 72 Accommodation and Food Services	2,439	16,013	-60	-0.005
NAICS 11 Agriculture, Forestry, Fishing and Hunting	1,904	80,893	-24	-0.002
NAICS 61 Educational Services	1,824	38,986	-128	-0.013
NAICS 92 Public Administration	1,587	41,139	-2	0.000
NAICS 23 Construction	1,248	42,547	-53	-0.008
NAICS 42 Wholesale Trade	1,071	50,512	21	0.004
NAICS 81 Other Services (except Public Administration)	1,057	26,050	-46	-0.009
NAICS 52 Finance and Insurance	805	56,698	-8	-0.002
NAICS 31 Manufacturing	675	34,932	-32	-0.009
NAICS 54 Professional, Scientific, and Technical Services	565	42,458	-43	-0.014
NAICS 56 Administrative and Support and Waste Management	444	27,028	-57	-0.024
and Remediation Services				
NAICS 22 Utilities	343	91,974	-54	-0.029
NAICS 51 Information	275	37,811	-41	-0.028
NAICS 71 Arts, Entertainment, and Recreation	261	16,102	47	0.041
NAICS 53 Real Estate and Rental and Leasing	226	38,621	-9	-0.008
NAICS 55 Management of Companies and Enterprises	107	64,243	-13	-0.022
NAICS 21 Mining, Quarrying, and Oil and Gas Extraction	12	36,631	-10	-0.112
NAICS Total - All Industries	25,381	44,884	-842	-0.007

Table Five provides a comparison of employment distributions at the 2-digit NAICS level for industries in the 2019 Ogallala Study Area and Nebraska. The largest differences occur within the NAICS 48 Transportation and Warehousing, 2019 Ogallala Study Area, 12.9 percent vs. Nebraska's 5.6 percent, and NAICs 31 Manufacturing, 2019 Ogallala Study Area 2.7 percent vs. Nebraska's 9.5 percent. Table Five also shows the 2019 Ogallala Study Area has relatively high employment when compared to Nebraska in NAICS 44 Retail Trade, 12.2 percent vs. 10.5 percent, and NAICS 72 Accommodation and Food Services, 9.6 percent vs. 7.4 percent.

The presence of the Union Pacific Bailey Yard and Walmart's warehouse in North Platte are major reasons for the large number of employees in the NAICS 48 Transportation and Warehousing industry. Lake McConaughy State Recreational Area near Ogallala along with major commercial development near the interstate in Ogallala and North Platte are major employment drivers for NAICS 44 Retail Trade and NAICS 72 Accommodation and Food Services industries. The relatively high wages paid to production and maintenance workers by non-manufacturing industries may be limiting available labor for the NAICS 31 Manufacturing businesses.

Table Five
2019 Ogallala Study Area and Nebraska Workforce Employment,
Total and Percent Distribution, Preliminary Data, 2019 Q2,

	Jobs		Percei	nt Jobs
	2019 Ogallala Study		2019 Ogallala Study	
NAICS	Area	Nebraska	Area	Nebraska
NAICS 62 Health Care and Social Assistance	4,185	149,901	16.5%	14.1%
NAICS 48 Transportation and Warehousing	3,263	59,630	12.9%	5.6%
NAICS 44 Retail Trade	3,090	111,832	12.2%	10.5%
NAICS 72 Accommodation and Food Services	2,439	79,111	9.6%	7.4%
NAICS 11 Agriculture, Forestry, Fishing and Hunting	1,904	32,846	7.5%	3.1%
NAICS 61 Educational Services	1,824	90,800	7.2%	8.5%
NAICS 92 Public Administration	1,587	50,963	6.3%	4.8%
NAICS 23 Construction	1,248	62,636	4.9%	5.9%
NAICS 42 Wholesale Trade	1,071	40,765	4.2%	3.8%
NAICS 81 Other Services (except Public Administration)	1,057	42,548	4.2%	4.0%
NAICS 52 Finance and Insurance	805	58,396	3.2%	5.5%
NAICS 31 Manufacturing	675	101,200	2.7%	9.5%
NAICS 54 Professional, Scientific, and Technical Services	565	51,560	2.2%	4.8%
NAICS 56 Administrative and Support and Waste Management and Remediation Services	444	55,539	1.7%	5.2%
NAICS 22 Utilities	343	7,712	1.4%	0.7%
NAICS 51 Information	275	17,921	1.1%	1.7%
NAICS 71 Arts, Entertainment, and Recreation	261	17,464	1.0%	1.6%
NAICS 53 Real Estate and Rental and Leasing	226	13,056	0.9%	1.2%
NAICS 55 Management of Companies and Enterprises	107	21,803	0.4%	2.0%
NAICS 21 Mining, Quarrying, and Oil and Gas Extraction	12	1,088	0.0%	0.1%

### **Major Occupations and Wages**

The composition of occupations, including associated skill levels, employed within a region is determined by the mix of existing industries. An analysis of average area compensation relative to national averages provides information on the relative skill levels and the attractiveness of an area for retention and growth of industries dependent upon specific skills.

Table Six
2019 Ogallala Study Area Workforce (Local Jobs) and
Labor Force (Resident Jobs) Net In-Commuters, Average Wages and
Average Wages as Percent US Average, Preliminary Data, 2019 Q2,

	Local	Residents Working in	Net In-	Mean Annual	Mean Annual Wage as Percent
Standard Occupational Code	Jobs	Occupation	Commuters	Wage (\$)	US
43-0000 Office and Administrative Support Occupations	3,320	3,385	-65	34,100	0.87
53-0000 Transportation and Material Moving Occupations	2,699	2,648	51	35,000	0.92
41-0000 Sales and Related Occupations	2,547	2,519	28	35,000	0.84
11-0000 Management Occupations	2,261	2,188	73	81,500	0.67
35-0000 Food Preparation and Serving Related Occupations	2,193	2,171	22	24,800	0.97
29-0000 Healthcare Practitioners and Technical Occupations	1,813	1,801	12	73,000	0.89
49-0000 Installation, Maintenance, and Repair Occupations	1,352	1,350	2	44,100	0.9
25-0000 Education, Training, and Library Occupations	1,295	1,286	9	47,200	0.84
47-0000 Construction and Extraction Occupations	1,192	1,121	71	39,900	0.78
37-0000 Building and Grounds Cleaning and Maintenance Occupations	881	848	33	27,700	0.93
39-0000 Personal Care and Service Occupations	880	876	4	26,700	0.95
51-0000 Production Occupations	877	873	4	40,000	1.02
13-0000 Business and Financial Operations Occupations	848	797	51	59,400	0.77
31-0000 Healthcare Support Occupations	742	760	-18	31,500	0.98
45-0000 Farming, Fishing, and Forestry Occupations	609	547	62	33,500	1.15
33-0000 Protective Service Occupations	423	439	-16	42,500	0.88
21-0000 Community and Social Service Occupations	417	398	19	42,900	0.87
15-0000 Computer and Mathematical Occupations	305	296	9	66,100	0.72
27-0000 Arts, Design, Entertainment, Sports, and Media Occupations	259	194	65	37,700	0.64
17-0000 Architecture and Engineering Occupations	192	172	20	72,300	0.83
23-0000 Legal Occupations	153	155	-2	73,100	0.67
19-0000 Life, Physical, and Social Science Occupations	123	117	6	65,500	0.86
00-0000 Total - All Occupations	25,381	24,942	439	42,600	0.82

Source: JobsEQ database.

As shown in Table Six on the previous page, the largest 2-digit, standard occupational code (SOC) category when measured by jobs within the 2019 Ogallala Study Area, 3,320, and area residents working anywhere in the occupation, 3,385, is SOC 43-0000 Office and Administrative Support Occupations. SOC 43-0000 Office and Administrative Support Occupations is also one of only four, 2-digit SOCs with more residents working in the occupation, 65, than there are local jobs available. The large proportion of jobs in SOC 43-0000 Office and Administrative Support Occupations is a very common occurrence as the need for these skills is common to a very large number of industries.

The next five largest occupations when measured by jobs within the 2019 Ogallala Study Area are SOC 53-0000 Transportation and Material Moving Occupations, 2,699; SOC 41-0000 Sales and Related Occupations, 2,547, SOC 11-0000 Management Occupations, 2,261, SOC 35-0000 Food Preparation and Serving Related Occupations, 2,193, and SOC 29-0000 Healthcare Practitioners and Technical Occupations, 1,813. Among the top six occupations, only two have average annual local wages greater than the 2019 Ogallala Study Area average of \$42,600 (SOC 11-0000 Management Occupations \$81,500, and SOC 29-0000 Healthcare Practitioners and Technical Occupations, \$73,000) and none have average wages that exceed their national average. The only 2-digit occupations with local average wages greater than their national average are SOC 45-0000 Farming, Fishing, and Forestry, \$33,500 or 115 percent of the US average and SOC 51-0000 Production, \$40,000 or 102 percent of the US average.

Table Seven on the following page shows employment, average annual wages, and recent employment change by 2-digit SOC. Only three occupations showed positive employment growth in the 2019 Ogallala Study Area during the last five years. Employment grew by 171 workers in SOC 29 0000 Healthcare Practitioners and Technical, by five workers in SOC 13 0000 Business and Financial Operations and by two workers in SOC 33-0000 Protective Service.

Occupational data for the 2019 Ogallala Study area is generally consistent with the distribution of 2-digit industries located within the region. Collectively, NAICS 62 Health Care and Social Assistance, NAICS 48 Transportation and Warehousing, NAICS 44 Retail Trade, and NAICS 72 Accommodation and Food Services employ large numbers of workers within SOC 43-0000 Office and Administrative Support Occupations, SOC 53-0000 Transportation and Material Moving Occupations, SOC 41-0000 Sales and Related Occupations, SOC 11-0000 Management Occupations, 35-0000 Food Preparation and Serving Related Occupations, and SOC 29-0000 Healthcare Practitioners and Technical Occupations. Wage data and employment data does not indicate the presence of a strong core of well-paid workers in any specific occupation.

Table Seven
Ogallala Study Area Workforce (Local Jobs) Employment,
Average Wages and Job Changes Last 5 Years by Industry
Preliminary Data, 2019 Q2

	Current		5-Year H	istory
soc	Employment	Avg Ann Wages	Employment Change	Ann %
SOC 43-0000 Office and Administrative Support	3,320	34,100	-272	-0.016
SOC 53-0000 Transportation and Material Moving	2,699	35,000	-57	-0.004
SOC 41-0000 Sales and Related	2,547	35,000	-180	-0.014
SOC 11-0000 Management	2,261	81,500	-63	-0.005
SOC 35-0000 Food Preparation and Serving Related	2,193	24,800	-86	-0.008
SOC 29-0000 Healthcare Practitioners and Technical	1,813	73,000	171	0.020
SOC 49-0000 Installation, Maintenance, and Repair	1,352	44,100	-37	-0.005
SOC 25-0000 Education, Training, and Library	1,295	47,200	-84	-0.012
SOC 47-0000 Construction and Extraction	1,192	39,900	-52	-0.009
SOC 37-0000 Building and Grounds Cleaning and Maintenance	881	27,700	-6	-0.001
SOC 39-0000 Personal Care and Service	880	26,700	-19	-0.004
SOC 51-0000 Production	877	40,000	-87	-0.019
SOC 13-0000 Business and Financial Operations	848	59,400	5	0.001
SOC 31-0000 Healthcare Support	742	31,500	-25	-0.007
SOC 45-0000 Farming, Fishing, and Forestry	609	33,500	30	0.010
SOC 33-0000 Protective Service	423	42,500	2	0.001
SOC 21-0000 Community and Social Service	417	42,900	-23	-0.010
SOC 15-0000 Computer and Mathematical	305	66,100	-9	-0.006
SOC 27-0000 Arts, Design, Entertainment, Sports, and Media	259	37,700	-28	-0.021
SOC 17-0000 Architecture and Engineering	192	72,300	-20	-0.019
SOC 23-0000 Legal	153	73,100	0	0.000
SOC 19-0000 Life, Physical, and Social Science	123	65,500	-2	-0.004
SOC Total - All Occupations	25,381	42,600	-842	-0.007

## **Analysis of Potential Targets**

As noted in previous sections of this study, the 2-digit NAICS industries NAICS 62 Health Care and Social Assistance, NAICS 48 Transportation and Warehousing, NAICS 44 Retail Trade, and NAICS 72 Accommodation and Food Services make up a large portion of the 2019 Ogallala Study Area economy when measured by employment. Additionally, NAICS 62 Health Care and Social Assistance and NAICS 48 Transportation and Warehousing pay above average wages, and the other two pay below average.

Information in this section provides a more detailed analysis of 2019 Ogallala Study Area industries at the 3- and 4-digit NAICS levels. This information is used to assess the suitability of individual industries as potential targets for retention, expansion, and recruitment efforts.

Excluded from this analysis are industries whose development is usually highly dependent on local population growth. These include Government, Utilities, and the Real Estate and Rental and Leasing industry. The Accommodation and Food Service, Retail Trade, and Construction industries are also usually excluded from further analysis; however, because Ogallala is a major trade and tourism center, these were retained for further analysis. Additionally, only industries with average annual total earnings (wages and benefits) of at least \$40,000, just above the average for Keith County, are included.

#### **Location Quotient (LQ) Analysis**

In this section, LQ analysis is used to identify study area industries that have performed better than the national average. Superior performance by area industries often indicates the presence of substantial competitive advantages or regional strengths. These advantages and/or strengths, such as access to skilled labor or specialized resources, are critical to an industry and provide a rationale for a region's expected future growth.

LQs indicate whether the percentage of total employment<sup>3</sup> by an area industry is greater than the national average (LQ>1), is equal to the national average (LQ=1), or is less than the national average (LQ<1). An LQ>1 often indicates the presence of a comparative advantage within a region.

As shown in Table Nine on the following page, NAICS 11 Agriculture, Forestry, Fishing and Hunting, has the largest LQ, 5.58 followed by NAICS 48 Transportation and Warehousing, 2.86; NAICS 22 Utilities 2.62; NAICS 92 Public Administration, 1.33; NAICS 44 Retail Trade, 1.17; NAICS 62 Health Care and Social Assistance, 1.15; NAICS 42 Wholesale Trade, 1.11; and NAICS 72 Accommodation and Food Services, 1.07. Among these eight NAICS with the largest employment, four (NAICS 11 Agriculture, Forestry, Fishing and Hunting; NAICS 42 Wholesale Trade; NAICS 48 Transportation and Warehousing; and NAICS 62 Health Care and Social Assistance) have average wages exceeding the regional average of \$44,884 and employ more than 1,000 workers. While lower than the regional average, wages for NAICS 92 Public Administration, \$41,139, are slightly above the Keith County average.

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<sup>&</sup>lt;sup>3</sup> In addition to employment, location quotients can be calculated for other factors, such as total sales and taxes. For this report LQs are reported for employment only.

Table Eight
2019 Ogallala Study Area Workforce (Local Jobs) Employment,
Average Wages and Job Changes Last 5 Years by Industry and LQs,
2-Digit NAICS Industries, Preliminary Data, 2019 Q2

NAICS	Industry	Jobs	Wages	Change in Jobs 2014 to 2019	LQ
11	Agriculture, Forestry, Fishing and	1,904	80,893	-24	5.58
21	Hunting Mining, Quarrying, and Oil and Gas	1,904	36,631	-10	0.10
	Extraction		,		
22	Utilities	343	91,974	-54	2.62
23	Construction	1,248	42,547	-53	0.86
31	Manufacturing	675	34,932	-32	0.32
42	Wholesale Trade	1,071	50,512	21	1.11
44	Retail Trade	3,090	25,840	-426	1.17
48	Transportation and Warehousing	3,263	69,615	-60	2.86
51	Information	275	37,811	-41	0.55
52	Finance and Insurance	805	56,698	-8	0.81
53	Real Estate and Rental and Leasing	226	38,621	-9	0.52
54	Professional, Scientific, and Technical Services	565	42,458	-43	0.33
55	Management of Companies and Enterprises	107	64,243	-13	0.28
56	Administrative and Support and Waste Management and Remediation Services	444	27,028	-57	0.27
61	Educational Services	1,824	38,986	-128	0.88
62	Health Care and Social Assistance	4,185	47,814	156	1.15
71	Arts, Entertainment, and Recreation	261	16,102	47	0.51
72	Accommodation and Food Services	2,439	16,013	-60	1.07
81	Other Services (except Public Administration)	1,057	26,050	-46	0.96
92	Public Administration	1,587	41,139	-2	1.33
	Total - All Industries	25,381	44,884	-842	1.00

Source: JobsEQ database.

The information in Table Eight shows industries in NAICS 11 Agriculture, Forestry, Fishing and Hunting; NAICS 42 Wholesale Trade; NAICS 48 Transportation and Warehousing; and NAICS 62 Health Care and Social Assistance have been major drivers of the 2019 Ogallala Study Area's economy. The presence of major trade centers in Ogallala and North Platte and the presence of several tourist attractions, especially Lake McConaughy, require large and above average employment in the NAICS 44 Retail Trade and NAICS 72 Accommodation and Food Services industries. As is typical area, average wages in these two industries are well below the regional and Keith County average. This is due to large numbers of part-time workers and generally low wages within these industries.

Table Nine, below is like Table Eight and provides employment, wage, employment growth and LQ information for 19, 4-digit NAIC industries other than NAICS 92 Public Administration, with average 2019 employment of 50 or more, wages greater than \$40,000 and LQs greater than 1.1. These more narrowly defined industries are sub-sectors of the 2-digit industries in Table Eight with 13 being subsectors of the four 2-digit sectors identified as major drivers of past growth. Industries in NAICS 2211 Electric Power Generation, Transmission and Distribution; NAICS 2373 Highway, Street, and Bridge Construction; NAICS 4442 Lawn and Garden Equipment and Supplies Stores; NAICS 5221 Depository Credit Intermediation; NAICS 6112 Junior Colleges; and NAICS 6117 Educational Support Services are not subsectors of the 2-digit NAICS industries identified as major driver of the regional economy; three of these (NAICS 2211 Electric Power Generation, Transmission and Distribution; NAICS 6112 Junior Colleges; and NAICS 6117 Educational Support Services) have high percentages of government establishments and employees.

Table Nine
2019 Ogallala Study Area Workforce (Local Jobs) Employment,
Average Wages and Job Changes Last 5 Years by Industry and LQs
Select\* 4-Digit NAICS Industries, Preliminary Data, 2019 Q2,

		·			
				Change in Jobs 2014	
NAICS	Industry	Jobs	Wages	to 2019	LQ
1110	Crop Production (Proprietors)	176	112,085	3.92	8
1120	Animal Production (Proprietors)	771	120,983	10.37	-67
1121	Cattle Ranching and Farming	446	42,311	17.54	32
2211	Electric Power Generation, Transmission and Distribution	323	93,279	4.19	-43
2373	Highway, Street, and Bridge Construction	162	53,262	1.99	14
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	80	47,119	1.39	-6
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	226	54,268	1.97	-49
4247	Petroleum and Petroleum Products Merchant Wholesalers	119	61,632	7.16	39
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	54	45,247	1.67	4
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	199	56,370	3.53	34
4442	Lawn and Garden Equipment and Supplies Stores	61	44,045	2.33	-13
4821	Rail Transportation	1,913	84,518	55.99	-191
5221	Depository Credit Intermediation	425	57,089	1.55	-28
6112	Junior Colleges	174	40,145	1.60	-28
6117	Educational Support Services	68	40,195	1.97	-11
6212	Offices of Dentists	180	51,428	1.14	5
6213	Offices of Other Health Practitioners	267	41,107	1.48	85
6219	Other Ambulatory Health Care Services	123	46,372	2.19	-31
6221	General Medical and Surgical Hospitals	1,502	43,872	1.57	130

<sup>\*</sup> Industries other than NAICS 92 Public Administration with average wages greater than \$40,000, Employment greater than 50, employment increases from 2014 to 2019, and LQ greater than 1.10. Source: JobsEQ database.

#### **Shift Share Analysis**

Further analysis and refinement of the study area industries is accomplished using shift share analysis. Shift share analysis decomposes actual or projected changes in a local industry's employment into three components. These are the:

National effect: the local industry's starting employment multiplied by the percent change in national average employment for all industries—this shows the change in local employment attributable to the change in economy-wide employment;

Industry effect: the local industry's starting employment multiplied by the percent change in national employment for the industry minus the national effect—this shows the change in local employment attributable to an industry's employment trends after adjusting for national employment trends; and

Competitive effect: the difference between a local industry's ending and starting employment minus the national effect and the industry effect—this is an indication of the change in local employment attributable to an area's relative advantage or competitiveness.

The following is an example of a shift share decomposition:

- 1. Local Industry A grows by 10.0 percent from 1,000 to 1,100.
- 2. The average of all industry employment change in the U.S. is a 3.0 percent increase; the national effect is 30 or 1,000 times .03.
- 3. Average U.S. growth for Industry A is 5.0 percent.
- 4. The industry effect is .05 (5.0 percent) times 1,000 minus the national effect of 30; this is 50 minus 30 and the industry effect equals 20.
- 5. The competitive effect is 100 minus 30, the national effect, minus 20, the industry effect, and is equal to 50 or 5.0 percent. The industry has grown twice as fast as the average of similar industries across the U.S.

If a local industry's employment changes by the same percentage as the U.S. average for that industry, 5.0 percent in the above example, the competitive effect is zero. The change in employment for a US industry is also referred to as the **expected effect** for a local industry.

If the competitive effect is very strong, a local industry can grow when the national and industry effects are both negative. Likewise, if a national industry is experiencing strong growth, the expected effect can be positive when the national effect is negative. Industries with positive industry and local competitive shift share effects are either key drivers or are likely to become key drivers of the local economy.

The criteria used to evaluate 4-digit NAICS industries are shown in Table Ten on the following page. Industries with a LQ>1, experiencing recent local employment growth, with expected future growth and paying good wages (at least \$40,000 per year) are key to the future growth of a region. Industries with low LQs but increasing levels of local or national employment and good wages may have the potential to become key drivers of the economy. Industries with an LQ>1 and stable or declining local and/or national employment are considered mature or declining industries. Mature or declining industries may command

significant retention efforts when they employ large numbers of area workers. Other combinations of LQs and growth are typically not of interest and are not considered for further analysis in this study.

Table Ten
Initial Classification of Industries by Potential to Drive Local Growth

		Recent	Projected	
Category	LQ	Growth	Growth	Compensation
Key to Future Growth (Key)	1+	+	+	>\$40,000
Potential to Drive Future Growth (Potential)	<1	+	+/-	>\$40,000
Mature or Declining (Mature)	1+	+/-	-/+	>\$40,000
Not Further Considered (Other)	>1/<1	+/-	-/+	> or < \$40,000

Source: Kenneth M. Lemke, PhD, Economist, Nebraska Public Power District.

Table Eleven on the following two pages contains information on employment, average annual wage, LQ, plus recent and forecast employment growth for ten, 4-digit NAICS industries identified as possible "Key" future growth targets, nine industries identified as possible "Potential" future growth targets, and four industries identified as "Mature" or declining targets. These 23 possible industry targets are recommended for further examination and evaluation for future expansion and retention efforts.

The ten Key industry targets are concentrated in three, 4-digit NAICS industries. Five are sub-industries of NAICS 62 Health Care and Social Assistance; three as sub-industries of NAICS 42 Wholesale Trade; and two are sub-industries of NAICS 23 Construction. In the recent past, NAICS 23 Construction was not generally considered to be a possible target industry. High wages, labor shortages, and the need for new construction in many parts of Nebraska have made this industry more important to the growth of local communities.

The nine Potential industry targets are concentrated in five, 4-digit NAICS industries. Three are sub-industries of NAICS 23 Construction; two are sub-industries of NAICS 52 Finance and Insurance; two are sub-industries of NAICS 54 Professional, Scientific, and Technical Services; one is a sub-industry of NAICS 48 Transportation and Warehousing; and one is a sub-industry of NAICS 62 Health Care and Social Assistance.

The four potential Mature industry targets are concentrated in three 2-digit NAICS industries. Two are sub-industries of NAICS 42 Wholesale Trade; and there is one, each in NAICS 48 Transportation and Warehousing and NAICS 52 Finance and Insurance.

Table Eleven
Key, Potential & Mature Target Industries 2019 Ogallala Study Area
Employment, Average Wages, LQ, Job Growth 2014-2019 &
Forecast Job Growth 2019-2024, Preliminary Data, 2019 Q2

					2014	4 - 2019	201	9 - 2024		
NAICS	Industry	Jobs	Wages	LQ	Job Change	Competitive Effect	Job Change	Competitive Effect		
Key Target Industries										
2373	Highway, Street, and Bridge Construction	162	53,262	1.99	14	-1	3	-9		
2381	Foundation, Structure, and Building Exterior Contractors	184	49,814	1.05	-49	-99	0	-10		
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	80	47,119	1.39	-6	-13	-4	-4		
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	226	54,268	1.97	-49	-67	-7	-9		
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	54	45,247	1.67	4	-2	3	-3		
6211	Offices of Physicians	468	96,501	1.05	97	67	23	-24		
6212	Offices of Dentists	180	51,428	1.14	5	-12	7	-9		
6213	Offices of Other Health Practitioners	267	41,107	1.48	85	49	23	-11		
6219	Other Ambulatory Health Care Services	123	46,372	2.19	-31	-50	10	-5		
6221	General Medical and Surgical Hospitals	1,502	43,872	1.57	130	30	-42	-85		
		Po	otential Targ	get Indu	stries					
2362	Nonresidential Building Construction	92	41,411	0.65	1	-16	0	-4		
2371	Construction Utility System Construction	63	51,553	0.69	-7	-24	7	-3		
2382	Building Equipment Contractors	361	42,982	0.94	15	-60	7	-16		
4841	General Freight Trucking	157	63,263	0.81	-2	-17	-5	-8		
5222	Nondepository Credit Intermediation	86	62,952	0.87	14	11	2	-5		

Source: Values calculated by Kenneth M. Lemke, PhD, Economist, Nebraska Public Power District from data in JobsEQ database.

Table Eleven (Continued)
Key, Potential & Mature Target Industries 2019 Ogallala Study Area
Employment, Average Wages, LQ, Job Growth 2014-2019 &
Forecast Job Growth 2019-2024, Preliminary Data, 2019 Q2

	2014 - 2019 2024												
					2014	4 - 2019	201	9 - 2024					
NAICS	Industry	Jobs	Wages	LQ	Job Change	Competitive Effect	Job Change	Competitive Effect					
	Potential Target Industries (Continued)												
5242	Agencies, Brokerages, and Other Insurance Related Activities	186	41,182	0.88	9	-21	-1	-12					
5411	Legal Services	142	47,820	0.71	-11	-14	-6	-8					
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	148	43,760	0.81	-5	-15	-2	-8					
6214	Outpatient Care Centers	143	54,286	0.88	34	-4	17	-6					
		M	lature Targ	et Indus	tries								
4247	Petroleum and Petroleum Products Merchant Wholesalers	119	61,632	7.16	39	35	-20	-7					
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	199	56,370	3.53	34	36	-18	-9					
4821	Rail Transportation	1,913	84,518	55.99	-191	-38	-154	-114					
5221	Depository Credit Intermediation	425	57,089	1.55	-28	-27	-30	-23					

Source: JobsEQ database.

## **Supply Chain Opportunities**

Table Twelve on the following page contains information on three, local area, 4-Digit NAICS industries currently suppling a large portion of the total inputs purchased locally by industries in Table Eleven. These industries may be able to increase their sales to Key, Potential, and Mature area industries and may also be considered potential targets for retention, expansion, and recruitment efforts.

# Table Twelve Potential Target Industries 2019 Ogallala Study Area Employment, Average Wages, LQ, Job Growth 2014-2019 & Forecast Job Growth 2019-2024, Preliminary Data, 2019 Q2

NAICS	Supplier Industries	Employment	Average Annual Wages	LQ	From In- Region Firms	From Out- of-Region Firms
5621	Waste Collection	40	42,438	1.29	\$395,000	\$726,000
6215	Medical and Diagnostic Laboratories	35	69,274	0.76	\$938,000	\$1,016,000
8112	Electronic and Precision Equipment Repair and Maintenance	22	58,400	1.18	\$480,000	\$617,000

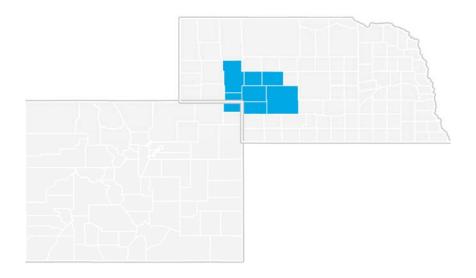
Source: Values calculated by Kenneth M. Lemke, PhD, Economist, Nebraska Public Power District from data in JobsEQ database.

#### Appendices:

- A. Economic Overview 2019 Ogallala Target Study Area
- B. Economic Overview Keith County, Nebraska

# **Economic Overview**

# 2019 Ogallala Target Study Area





September 12, 2019

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## Demographic Profile

The population in the 2019 Ogallala Target Study Area was 53,626 per American Community Survey data for 2013-2017.

The region has a civilian labor force of 27,072 with a participation rate of 63.5%. Of individuals 25 to 64 in the 2019 Ogallala Target Study Area, 23.1% have a bachelor's degree or higher which compares with 32.3% in the nation.

The median household income in the 2019 Ogallala Target Study Area is \$53,427 and the median house value is \$118,971.

#### Summary<sup>1</sup>

	P	ercent		,	Value	
	2019 Ogallala Target	Keith County,		2019 Ogallala Target	Keith County,	
	Study Area	Nebraska	Nebraska	Study Area	Nebraska	Nebraska
Demographics						
Population (ACS)	_	_	_	53,626	8,129	1,893,921
Male	49.5%	50.7%	49.8%	26,561	4,121	943,547
Female	50.5%	49.3%	50.2%	27,065	4,008	950,374
Median Age <sup>2</sup>	_	_	_	43.0	49.7	36.3
Under 18 Years	23.0%	20.0%	24.8%	12,342	1,628	469,819
18 to 24 Years	6.8%	6.1%	10.0%	3,660	494	190,260
25 to 34 Years	11.0%	8.9%	13.4%	5,907	725	253,947
35 to 44 Years	11.6%	10.0%	12.1%	6,222	809	229,310
45 to 54 Years	12.5%	13.7%	12.4%	6,695	1,111	234,079
55 to 64 Years	15.0%	15.4%	12.6%	8,035	1,255	237,908
65 to 74 Years	10.5%	14.6%	8.1%	5,626	1,184	152,726
75 Years, and Over	9.6%	11.4%	6.6%	5,139	923	125,872
Race: White	95.7%	96.5%	87.8%	51,340	7,846	1,663,612
Race: Black or African American	0.9%	0.7%	4.7%	505	57	89,718
Race: American Indian and Alaska Native	0.4%	0.7%	0.8%	193	57	16,012
Race: Asian	0.7%	1.1%	2.2%	366	89	42,208
Race: Native Hawaiian and Other Pacific Islander	0.1%	0.3%	0.1%	35	23	1,524
Race: Some Other Race	0.6%	0.3%	1.9%	335	27	35,276
Race: Two or More Races	1.6%	0.4%	2.4%	852	30	45,571
Hispanic or Latino (of any race)	7.6%	6.8%	10.5%	4,083	549	198,300
Population Growth						
Population (Pop Estimates) <sup>4</sup>	_	_	_	53,117	8,021	1,929,268
Population Annual Average Growth <sup>4</sup>	-0.3%	-0.3%	0.7%	-185	-27	13,289
Economic						
Labor Force Participation Rate and Size (civilian population 16 years and over)	63.5%	63.1%	69.8%	27,072	4,223	1,026,097
Prime-Age Labor Force Participation Rate and Size (civilian population 25-54)	85.1%	88.8%	86.8%	15,999	2,349	619,384
Armed Forces Labor Force	0.1%	0.0%	0.3%	35	0	4,908
Veterans, Age 18-64	6.0%	5.5%	5.4%	1,839	242	61,511
Veterans Labor Force Participation Rate and Size, Age 18-64	80.4%	80.6%	82.5%	1,478	195	50,731

#### Summary<sup>1</sup>

	P	ercent		•	Value	
	2019 Ogallala Target	Keith County,		2019 Ogallala Target	Keith County,	
	Study Area	Nebraska	Nebraska	Study Area	Nebraska	Nebraska
Median Household Income <sup>2</sup>	_	_	_	\$53,427	\$45,078	\$56,675
Per Capita Income	_	_	_	\$29,338	\$27,890	\$29,866
Poverty Level (of all people)	12.4%	13.1%	12.0%	6,493	1,051	220,330
Households Receiving Food Stamps/SNAP	9.7%	6.6%	8.8%	2,270	262	65,900
Mean Commute Time (minutes)	_	_	_	15.5	14.4	18.4
Commute via Public Transportation	0.5%	1.4%	0.7%	121	57	6,629
Educational Attainment, Age 25-64						
No High School Diploma	6.2%	7.9%	8.6%	1,661	308	82,142
High School Graduate	27.0%	28.3%	23.4%	7,250	1,102	223,804
Some College, No Degree	28.2%	23.1%	23.5%	7,576	899	224,439
Associate's Degree	15.5%	15.6%	11.7%	4,166	609	111,550
Bachelor's Degree	15.8%	18.3%	22.2%	4,245	712	211,974
Postgraduate Degree	7.3%	6.9%	10.6%	1,961	270	101,335
Housing						
Total Housing Units	_	_	_	27,770	5,442	824,176
Median House Value (of owner-occupied units) <sup>2</sup>	_	_	_	\$118,971	\$108,400	\$142,400
Homeowner Vacancy	1.0%	1.4%	1.1%	161	37	5,632
Rental Vacancy	6.4%	2.9%	5.5%	533	39	14,875
Renter-Occupied Housing Units (% of Occupied Units)	33.1%	32.5%	34.0%	7,732	1,297	254,216
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	5.8%	6.6%	5.6%	1,359	262	41,622
Social						
Enrolled in Grade 12 (% of total population)	1.4%	0.9%	1.4%	734	73	25,676
Disconnected Youth <sup>3</sup>	0.8%	0.0%	1.6%	20	0	1,632
Children in Single Parent Families (% of all children)	27.9%	39.4%	28.9%	3,267	633	130,133
With a Disability, Age 18-64	11.2%	8.9%	9.3%	3,407	389	104,539
With a Disability, Age 18-64, Labor Force Participation Rate and Size	45.5%	55.5%	52.5%	1,550	216	54,831
Foreign Born	2.1%	2.7%	6.9%	1,102	219	130,660
Speak English Less Than Very Well (population 5 yrs and over)	1.0%	1.8%	5.0%	526	137	88,337

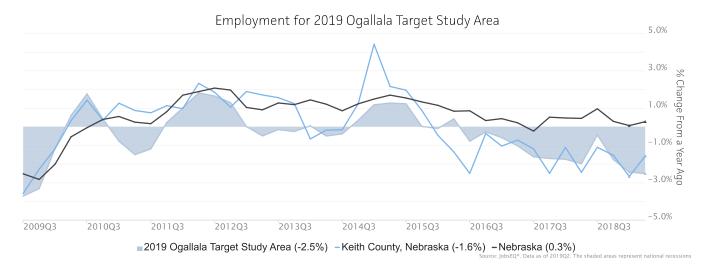
Source: JobsEQ®

<sup>3.</sup> Disconnected Youth are 16-19 year olds who are (1) not in school, (2) not high school graduates, and (3) either unemployed or not in the labor force.

4. Census 2018, annual average growth rate since 2008

## **Employment Trends**

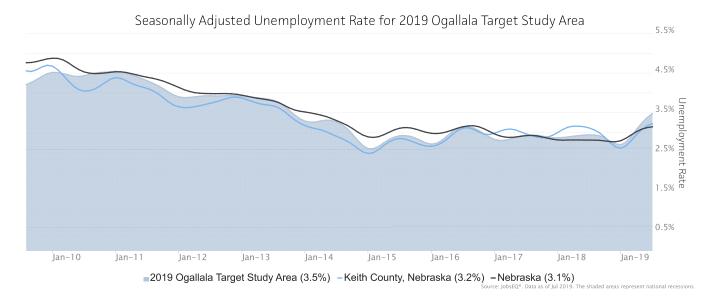
As of 2019Q2, total employment for the 2019 Ogallala Target Study Area was 25,381 (based on a four-quarter moving average). Over the year ending 2019Q2, employment declined 2.5% in the region.



Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q4 with preliminary estimates updated to 2019Q2.

## **Unemployment Rate**

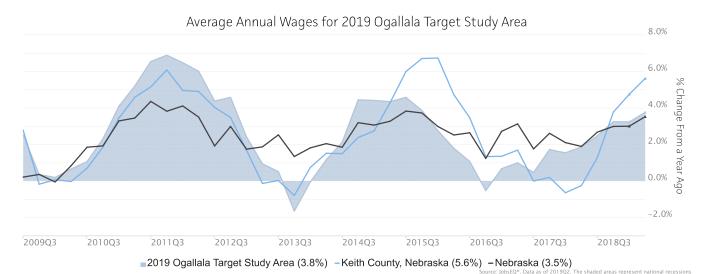
The seasonally adjusted unemployment rate for the 2019 Ogallala Target Study Area was 3.5% as of July 2019. The regional unemployment rate was lower than the national rate of 3.7%. One year earlier, in July 2018, the unemployment rate in the 2019 Ogallala Target Study Area was 2.9%.



Unemployment rate data are from the Local Area Unemployment Statistics, provided by the Bureau of Labor Statistics and updated through July 2019.

## Wage Trends

The average worker in the 2019 Ogallala Target Study Area earned annual wages of \$44,884 as of 2019Q2. Average annual wages per worker increased 3.8% in the region over the preceding four quarters. For comparison purposes, annual average wages were \$57,025 in the nation as of 2019Q2.



Annual average wages per worker data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q4 with preliminary estimates updated to 2019Q2.

# **Cost of Living Index**

The Cost of Living Index estimates the relative price levels for consumer goods and services. When applied to wages and salaries, the result is a measure of relative purchasing power. The cost of living is 9.8% lower in 2019 Ogallala Target Study Area than the U.S. average.

#### **Cost of Living Information**

	<b>Annual Average Salary</b>	Cost of Living Index (Base US)	<b>US Purchasing Power</b>
2019 Ogallala Target Study Area	\$44,884	90.2	\$49,749
Keith County, Nebraska	\$39,175	92.5	\$42,369
Nebraska	\$47,578	91.5	\$51,991
USA	\$57,025	100.0	\$57,025

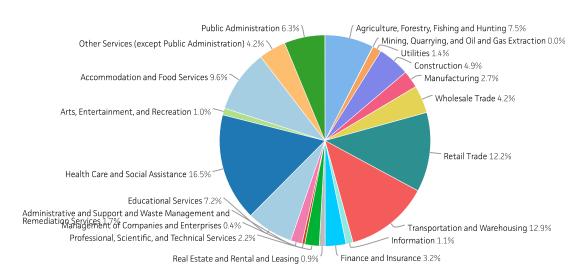
Source: <u>JobsEQ®</u>
Data as of 2019Q2

Cost of Living per C2ER, data as of 2019q2, imputed by Chmura where necessary.

## **Industry Snapshot**

The largest sector in the 2019 Ogallala Target Study Area is Health Care and Social Assistance, employing 4,185 workers. The next-largest sectors in the region are Transportation and Warehousing (3,263 workers) and Retail Trade (3,090). High location quotients (LQs) indicate sectors in which a region has high concentrations of employment compared to the national average. The sectors with the largest LQs in the region are Agriculture, Forestry, Fishing and Hunting (LQ = 5.58), Transportation and Warehousing (2.86), and Utilities (2.62).





Source: JobsEQ®,Data as of 2019Q2

Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q4 with preliminary estimates updated to 2019Q2.

Sectors in the 2019 Ogallala Target Study Area with the highest average wages per worker are Utilities (\$91,974), Agriculture, Forestry, Fishing and Hunting (\$80,893), and Transportation and Warehousing (\$69,615). Regional sectors with the best job growth (or most moderate job losses) over the last 5 years are Health Care and Social Assistance (+156 jobs), Arts, Entertainment, and Recreation (+47), and Wholesale Trade (+21).

Over the next 5 years, employment in the 2019 Ogallala Target Study Area is projected to contract by 653 jobs. The fastest growing sector in the region is expected to be Health Care and Social Assistance with a +0.5% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Health Care and Social Assistance (+96 jobs), Construction (+13), and Administrative and Support and Waste Management and Remediation Services (+1).

			Current		5-Year H	istory		5-Year Foreca			ast		
			Avg Ann		Empl		Total			Empl	Ann %		
NAICS	Industry	Empl	Wages	LQ	Change	Ann %	Demand	Exits	Transfers	Growth	Growth		
62	Health Care and Social Assistance	4,185	\$47,814	1.15	156	0.8%	2,081	975	1,010	96	0.5%		
48	Transportation and Warehousing	3,263	\$69,615	2.86	-60	-0.4%	1,513	719	965	-171	-1.1%		
44	Retail Trade	3,090	\$25,840	1.17	-426	-2.6%	1,940	897	1,134	-91	-0.6%		
72	Accommodation and Food Services	2,439	\$16,013	1.07	-60	-0.5%	1,896	864	1,088	-56	-0.5%		
11	Agriculture, Forestry, Fishing and Hunting	1,904	\$80,893	5.58	-24	-0.2%	956	438	576	-58	-0.6%		
61	Educational Services	1,824	\$38,986	0.88	-128	-1.3%	760	399	429	-68	-0.8%		
92	Public Administration	1,587	\$41,139	1.33	-2	0.0%	654	304	412	-62	-0.8%		
23	Construction	1,248	\$42,547	0.86	-53	-0.8%	628	221	395	13	0.2%		
42	Wholesale Trade	1,071	\$50,512	1.11	21	0.4%	454	204	337	-87	-1.7%		
81	Other Services (except Public Administration)	1,057	\$26,050	0.96	-46	-0.9%	562	270	322	-30	-0.6%		
52	Finance and Insurance	805	\$56,698	0.81	-8	-0.2%	340	142	230	-32	-0.8%		
31	Manufacturing	675	\$34,932	0.32	-32	-0.9%	292	126	214	-48	-1.5%		
54	Professional, Scientific, and Technical Services	565	\$42,458	0.33	-43	-1.4%	237	90	151	-4	-0.1%		
56	Administrative and Support and Waste Management and Remediation Services	444	\$27,028	0.27	-57	-2.4%	257	109	147	1	0.1%		
22	Utilities	343	\$91,974	2.62	-54	-2.9%	131	55	96	-19	-1.1%		
51	Information	275	\$37,811	0.55	-41	-2.8%	89	46	80	-36	-2.7%		
71	Arts, Entertainment, and Recreation	261	\$16,102	0.51	47	4.1%	180	82	100	-2	-0.2%		
53	Real Estate and Rental and Leasing	226	\$38,621	0.52	-9	-0.8%	104	52	61	-9	-0.8%		
55	Management of Companies and Enterprises	107	\$64,243	0.28	-13	-2.2%	46	18	30	-2	-0.4%		
21	Mining, Quarrying, and Oil and Gas Extraction	12	\$36,631	0.10	-10	- 11.2%	5	2	4	-1	-1.5%		
	Total - All Industries	25,381	\$44,884	1.00	-842	-0.7%	13,021	5,859	7,815	-653	-0.5%		

Source: JobsEQ®
Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q4 with preliminary estimates updated to 2019Q2. Forecast employment growth uses national projections adapted for regional growth patterns.

## **Occupation Snapshot**

The largest major occupation group in the 2019 Ogallala Target Study Area is Office and Administrative Support Occupations, employing 3,320 workers. The next-largest occupation groups in the region are Transportation and Material Moving Occupations (2,699 workers) and Sales and Related Occupations (2,547). High location quotients (LQs) indicate occupation groups in which a region has high concentrations of employment compared to the national average. The major groups with the largest LQs in the region are Farming, Fishing, and Forestry Occupations (LQ = 3.72), Transportation and Material Moving Occupations (1.54), and Management Occupations (1.45).

Occupation groups in the 2019 Ogallala Target Study Area with the highest average wages per worker are Management Occupations (\$81,500), Legal Occupations (\$73,100), and Healthcare Practitioners and Technical Occupations (\$73,000). The unemployment rate in the region varied among the major groups from 1.1% among Healthcare Practitioners and Technical Occupations to 6.3% among Farming, Fishing, and Forestry Occupations.

Over the next 5 years, the fastest growing occupation group in the 2019 Ogallala Target Study Area is expected to be Personal Care and Service Occupations with a +0.7% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Personal Care and Service Occupations (+33 jobs) and Healthcare Practitioners and Technical Occupations (+20). Over the same period, the highest separation demand (occupation demand due to retirements and workers moving from one occupation to another) is expected in Food Preparation and Serving Related Occupations (1,826 jobs) and Office and Administrative Support Occupations (1,746).

#### Occupation Snapshot in 2019 Ogallala Target Study Area, 2019q21

				(	Current			5-Year H	istory	5-Year Forecast				
soc	Occupation	Empl	Avg Ann Wages <sup>2</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>3</sup>	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
43-0000	Office and Administrative Support	3,320	\$34,100	0.92	97	2.8%	102	-272	- 1.6%	1,566	804	942	-180	-1.1%
53-0000	Transportation and Material Moving	2,699	\$35,000	1.54	82	3.0%	186	-57	- 0.4%	1,318	546	882	-110	-0.8%
41-0000	Sales and Related	2,547	\$35,000	1.01	102	3.9%	250	-180	- 1.4%	1,649	774	960	-85	-0.7%
11-0000	Management	2,261	\$81,500	1.45	24	1.1%	53	-63	- 0.5%	789	450	383	-44	-0.4%
35-0000	Food Preparation and Serving Related	2,193	\$24,800	1.00	115	5.0%	167	-86	0.8%	1,792	811	1,015	-34	-0.3%
29-0000	Healthcare Practitioners and Technical	1,813	\$73,000	1.25	21	1.1%	127	171	2.0%	492	241	232	20	0.2%
49-0000	Installation, Maintenance, and Repair	1,352	\$44,100	1.38	26	1.9%	47	-37	- 0.5%	561	219	389	-47	-0.7%
25-0000	Education, Training, and Library	1,295	\$47,200	0.91	32	2.4%	26	-84	- 1.2%	494	271	259	-37	-0.6%
47-0000	Construction and Extraction	1,192	\$39,900	1.01	50	4.3%	41	-52	- 0.9%	579	206	383	-10	-0.2%
37-0000	Building and Grounds Cleaning and Maintenance	881	\$27,700	1.01	37	4.2%	45	-6	0.1%	510	260	270	-19	-0.4%
39-0000	Personal Care and Service	880	\$26,700	0.79	33	3.6%	27	-19	- 0.4%	678	343	302	33	0.7%
51-0000	Production	877	\$40,000	0.58	22	2.5%	15	-87	- 1.9%	392	166	285	-58	-1.4%
13-0000	Business and Financial Operations	848	\$59,400	0.64	18	2.2%	35	5	0.1%	341	122	241	-21	-0.5%

#### Occupation Snapshot in 2019 Ogallala Target Study Area, 2019q21

				C	Current		5-Year History 5-Year Forecast				5-Year Forecast			
soc	Occupation	Empl	Avg Ann Wages <sup>2</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>3</sup>	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
31-0000	Healthcare Support	742	\$31,500	1.07	20	2.6%	33	-25	- 0.7%	441	211	212	18	0.5%
45-0000	Farming, Fishing, and Forestry	609	\$33,500	3.72	36	6.3%	6	30	1.0%	389	106	322	-39	-1.3%
33-0000	Protective Service	423	\$42,500	0.77	10	2.2%	11	2	0.1%	194	100	109	-16	-0.7%
21-0000	Community and Social Service	417	\$42,900	0.99	8	1.9%	44	-23	1.0%	227	85	139	3	0.1%
15-0000	Computer and Mathematical	305	\$66,100	0.41	6	1.9%	13	-9	- 0.6%	87	26	70	-9	-0.6%
27-0000	Arts, Design, Entertainment, Sports, and Media	259	\$37,700	0.58	5	2.4%	12	-28	- 2.1%	103	50	67	-14	-1.1%
17-0000	Architecture and Engineering	192	\$72,300	0.45	3	1.6%	4	-20	- 1.9%	61	24	44	-7	-0.7%
23-0000	Legal	153	\$73,100	0.72	2	1.4%	2	0	0.0%	43	18	27	-2	-0.3%
19-0000	Life, Physical, and Social Science	123	\$65,500	0.61	2	2.0%	12	-2	- 0.4%	50	16	37	-3	-0.5%
	Total - All Occupations	25,381	\$42,600	1.00	750	2.9%	1,261	-842	- 0.7%	12,764	5,849	7,568	-653	-0.5%

Source: JobsEQ®

Data as of 2019Q2 unless noted otherwise

Note: Figures may not sum due to rounding.

Occupation employment data are estimated via industry employment data and the estimated industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2018Q4, imputed where necessary with preliminary estimates updated to 2019Q2. Wages by occupation are as of 2018 provided by the BLS and imputed where necessary. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

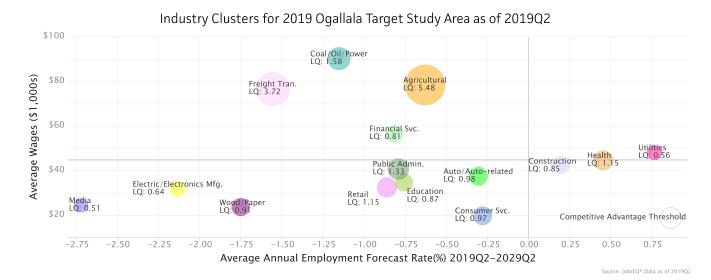
<sup>1.</sup> Data based on a four-quarter moving average unless noted otherwise.

<sup>2.</sup> Occupation wages are as of 2018 and should be taken as the average for all Covered Employment

<sup>3.</sup> Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

## **Industry Clusters**

A cluster is a geographic concentration of interrelated industries or occupations. The industry cluster in the 2019 Ogallala Target Study Area with the highest relative concentration is Agricultural with a location quotient of 5.48. This cluster employs 1,945 workers in the region with an average wage of \$78,432. Employment in the Agricultural cluster is projected to contract in the region about 0.6% per year over the next ten years.



Location quotient and average wage data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics, imputed where necessary, and updated through 2018Q4 with preliminary estimates updated to 2019Q2. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

### **Education Levels**

Expected growth rates for occupations vary by the education and training required. While all employment in the 2019 Ogallala Target Study Area is projected to contract 0.5% over the next ten years, occupations typically requiring a postgraduate degree are expected to grow 0.3% per year, those requiring a bachelor's degree are forecast to contract 0.4% per year, and occupations typically needing a 2-year degree or certificate are expected to contract 0.2% per year.



Annual Average Projected Job Growth by Training Required for 2019 Ogallala Target

Previous work experience, no award (\$53,200)

Long-term training, no exp, no award (\$44,400)

Moderate-term OJT, no exp, no award (\$44,200)

Short-term OJT, no exp, no award (\$28,300)

0.5%

-0.4%

-0.2%

0.2%

-0.6%

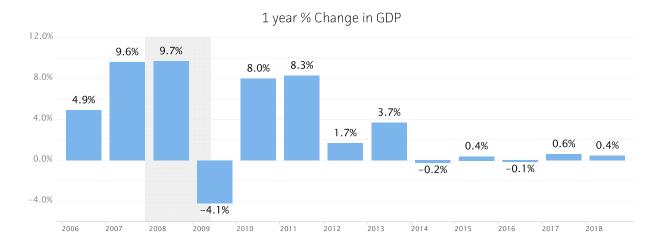
Employment by occupation data are estimates are as of 2019Q2. Education levels of occupations are based on BLS assignments. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

-0.8%

All Levels (\$44,400)

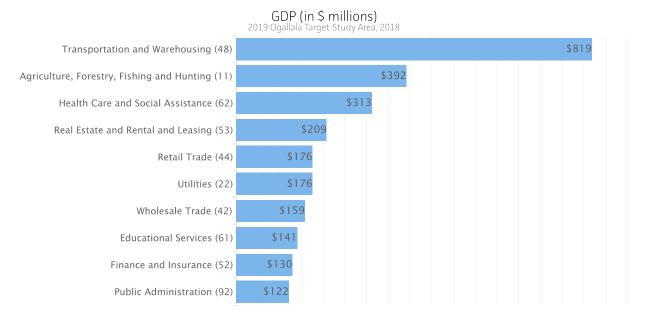
### **Gross Domestic Product**

Gross Domestic Product (GDP) is the total value of goods and services produced by a region. In 2018, nominal GDP in the 2019 Ogallala Target Study Area expanded 0.4%. This follows growth of 0.6% in 2017. As of 2018, total GDP in the 2019 Ogallala Target Study Area was \$3,021,741,000.



Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2018.

Of the sectors in the 2019 Ogallala Target Study Area, Transportation and Warehousing contributed the largest portion of GDP in 2018, \$819,232,000 The next-largest contributions came from Agriculture, Forestry, Fishing and Hunting (\$392,257,000); Health Care and Social Assistance (\$312,672,000); and Real Estate and Rental and Leasing (\$208,561,000).



Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2018.

# **Region Definition**

#### 2019 Ogallala Target Study Area is defined as the following counties:

Sedgwick County, Colorado	Keith County, Nebraska
Arthur County, Nebraska	Lincoln County, Nebraska
Deuel County, Nebraska	McPherson County, Nebraska
Garden County, Nebraska	Perkins County, Nebraska

### **FAQ**

#### What is a location quotient?

A location quotient (LQ) is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

#### What is separation demand?

Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. The total projected demand for an occupation is the sum of the separation demand and the growth demand (which is the increase or decrease of jobs in an occupation expected due to expansion or contraction of the overall number of jobs in that occupation).

#### What is a cluster?

A cluster is a geographic concentration of interrelated industries or occupations. If a regional cluster has a location quotient of 1.25 or greater, the region is considered to possess a *competitive advantage* in that cluster.

#### What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.

#### What is NAICS?

The North American Industry Classification System (NAICS) is used to classify business establishments according to the type of economic activity. The NAICS Code comprises six levels, from the "all industry" level to the 6-digit level. The first two digits define the top level category, known as the "sector," which is the level examined in this report.

#### What is SOC?

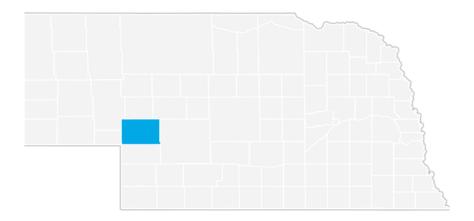
The Standard Occupational Classification system (SOC) is used to classify workers into occupational categories. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 occupation groups. Each occupation group includes detailed occupations requiring similar job duties, skills, education, or experience.

#### About This Report

This report and all data herein were produced by JobsEQ®, a product of Chmura Economics & Analytics. The information contained herein was obtained from sources we believe to be reliable. However, we cannot guarantee its accuracy and completeness.

# **Economic Overview**

# Keith County, Nebraska





August 12, 2019

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## Demographic Profile

The population in Keith County, Nebraska was 8,129 per American Community Survey data for 2013-2017.

The region has a civilian labor force of 4,223 with a participation rate of 63.1%. Of individuals 25 to 64 in Keith County, Nebraska, 25.2% have a bachelor's degree or higher which compares with 32.3% in the nation.

The median household income in Keith County, Nebraska is \$45,078 and the median house value is \$108,400.

#### Summary<sup>1</sup>

		Percent		Value				
	Keith County,	2019 Ogallala Target		Keith County,	2019 Ogallala Target			
	Nebraska	Study Area	Nebraska	Nebraska	Study Area	Nebraska		
Demographics								
Population (ACS)	_	_		8,129	53,626	1,893,921		
Male	50.7%	49.5%	49.8%	4,121	26,561	943,547		
Female	49.3%	50.5%	50.2%	4,008	27,065	950,374		
Median Age <sup>2</sup>	_	_	_	49.7	43.0	36.3		
Under 18 Years	20.0%	23.0%	24.8%	1,628	12,342	469,819		
18 to 24 Years	6.1%	6.8%	10.0%	494	3,660	190,260		
25 to 34 Years	8.9%	11.0%	13.4%	725	5,907	253,947		
35 to 44 Years	10.0%	11.6%	12.1%	809	6,222	229,310		
45 to 54 Years	13.7%	12.5%	12.4%	1,111	6,695	234,079		
55 to 64 Years	15.4%	15.0%	12.6%	1,255	8,035	237,908		
65 to 74 Years	14.6%	10.5%	8.1%	1,184	5,626	152,726		
75 Years, and Over	11.4%	9.6%	6.6%	923	5,139	125,872		
Race: White	96.5%	95.7%	87.8%	7,846	51,340	1,663,612		
Race: Black or African American	0.7%	0.9%	4.7%	57	505	89,718		
Race: American Indian and Alaska Native	0.7%	0.4%	0.8%	57	193	16,012		
Race: Asian	1.1%	0.7%	2.2%	89	366	42,208		
Race: Native Hawaiian and Other Pacific Islander	0.3%	0.1%	0.1%	23	35	1,524		
Race: Some Other Race	0.3%	0.6%	1.9%	27	335	35,276		
Race: Two or More Races	0.4%	1.6%	2.4%	30	852	45,571		
Hispanic or Latino (of any race)	6.8%	7.6%	10.5%	549	4,083	198,300		
Population Growth								
Population (Pop Estimates) <sup>4</sup>	_	_	_	8,021	53,117	1,929,268		
Population Annual Average Growth <sup>4</sup>	-0.3%	-0.3%	0.7%	-27	-185	13,289		
Economic								
Labor Force Participation Rate and Size (civilian population 16 years and over)	63.1%	63.5%	69.8%	4,223	27,072	1,026,097		
Prime-Age Labor Force Participation Rate and Size (civilian population 25-54)	88.8%	85.1%	86.8%	2,349	15,999	619,384		
Armed Forces Labor Force	0.0%	0.1%	0.3%	0	35	4,908		
Veterans, Age 18-64	5.5%	6.0%	5.4%	242	1,839	61,511		
Veterans Labor Force Participation Rate and Size, Age 18-64	80.6%	80.4%	82.5%	195	1,478	50,731		

#### Summary<sup>1</sup>

		Percent		Value				
	Keith County,	2019 Ogallala Target		Keith County,				
	Nebraska	Study Area	Nebraska	Nebraska	Study Area	Nebraska		
Median Household Income <sup>2</sup>	_	_	_	\$45,078	\$53,427	\$56,675		
Per Capita Income	_	_	_	\$27,890	\$29,338	\$29,866		
Poverty Level (of all people)	13.1%	12.4%	12.0%	1,051	6,493	220,330		
Households Receiving Food Stamps/SNAP	6.6%	9.7%	8.8%	262	2,270	65,900		
Mean Commute Time (minutes)	_	_	_	14.4	15.5	18.4		
Commute via Public Transportation	1.4%	0.5%	0.7%	57	121	6,629		
Educational Attainment, Age 25-64								
No High School Diploma	7.9%	6.2%	8.6%	308	1,661	82,142		
High School Graduate	28.3%	27.0%	23.4%	1,102	7,250	223,804		
Some College, No Degree	23.1%	28.2%	23.5%	899	7,576	224,439		
Associate's Degree	15.6%	15.5%	11.7%	609	4,166	111,550		
Bachelor's Degree	18.3%	15.8%	22.2%	712	4,245	211,974		
Postgraduate Degree	6.9%	7.3%	10.6%	270	1,961	101,335		
Housing								
Total Housing Units	_	_	_	5,442	27,770	824,176		
Median House Value (of owner-occupied units) <sup>2</sup>	_	_	_	\$108,400	\$118,971	\$142,400		
Homeowner Vacancy	1.4%	1.0%	1.1%	37	161	5,632		
Rental Vacancy	2.9%	6.4%	5.5%	39	533	14,875		
Renter-Occupied Housing Units (% of Occupied Units)	32.5%	33.1%	34.0%	1,297	7,732	254,216		
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	6.6%	5.8%	5.6%	262	1,359	41,622		
Social								
Enrolled in Grade 12 (% of total population)	0.9%	1.4%	1.4%	73	734	25,676		
Disconnected Youth <sup>3</sup>	0.0%	0.8%	1.6%	0	20	1,632		
Children in Single Parent Families (% of all children)	39.4%	27.9%	28.9%	633	3,267	130,133		
With a Disability, Age 18-64	8.9%	11.2%	9.3%	389	3,407	104,539		
With a Disability, Age 18-64, Labor Force Participation Rate and Size	55.5%	45.5%	52.5%	216	1,550	54,831		
Foreign Born	2.7%	2.1%	6.9%	219	1,102	130,660		
Speak English Less Than Very Well (population 5 yrs and over)	1.8%	1.0%	5.0%	137	526	88,337		

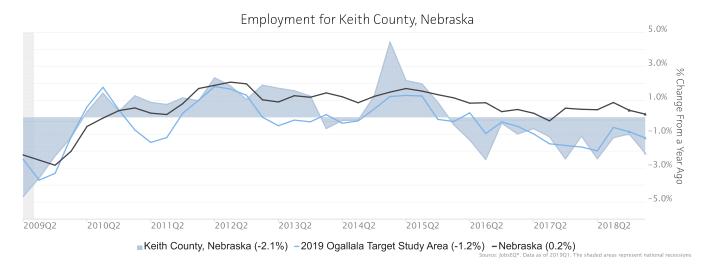
Source: JobsEQ®

<sup>3.</sup> Disconnected Youth are 16-19 year olds who are (1) not in school, (2) not high school graduates, and (3) either unemployed or not in the labor force.

4. Census 2018, annual average growth rate since 2008

## **Employment Trends**

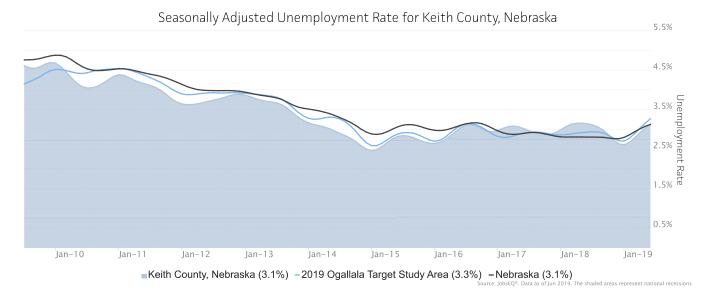
As of 2019Q1, total employment for Keith County, Nebraska was 3,806 (based on a four-quarter moving average). Over the year ending 2019Q1, employment declined 2.1% in the region.



Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q3 with preliminary estimates updated to 2019Q1.

## **Unemployment Rate**

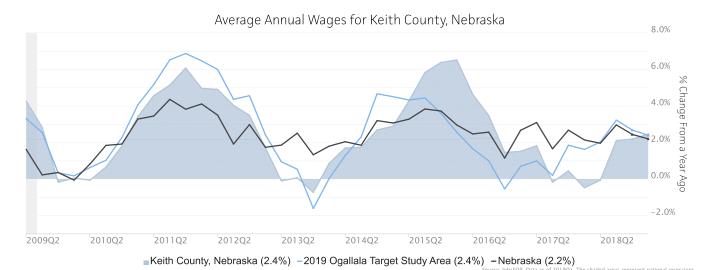
The seasonally adjusted unemployment rate for Keith County, Nebraska was 3.1% as of June 2019. The regional unemployment rate was lower than the national rate of 3.6%. One year earlier, in June 2018, the unemployment rate in Keith County, Nebraska was 3.1%.



Unemployment rate data are from the Local Area Unemployment Statistics, provided by the Bureau of Labor Statistics and updated through June 2019.

## Wage Trends

The average worker in Keith County, Nebraska earned annual wages of \$37,949 as of 2019Q1. Average annual wages per worker increased 2.4% in the region over the preceding four quarters. For comparison purposes, annual average wages were \$55,825 in the nation as of 2019Q1.



Annual average wages per worker data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q3 with preliminary estimates updated to 2019Q1.

# **Cost of Living Index**

The Cost of Living Index estimates the relative price levels for consumer goods and services. When applied to wages and salaries, the result is a measure of relative purchasing power. The cost of living is 18.4% lower in Keith County, Nebraska than the U.S. average.

#### **Cost of Living Information**

	<b>Annual Average Salary</b>	Cost of Living Index (Base US)	<b>US Purchasing Power</b>
Keith County, Nebraska	\$37,949	81.6	\$46,521
2019 Ogallala Target Study Area	\$44,093	86.6	\$50,926
Nebraska	\$46,669	91.4	\$51,033
USA	\$55,825	100.0	\$55,825

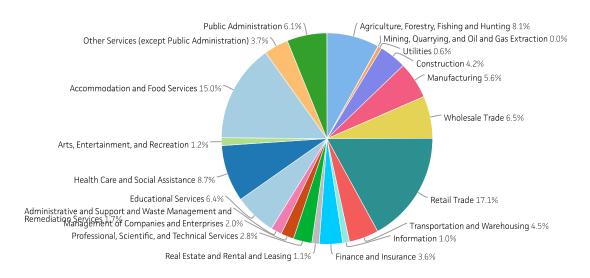
Source: <u>JobsEQ®</u> Data as of 2019Q1

Cost of Living per C2ER, data as of 2019q1, imputed by Chmura where necessary.

### **Industry Snapshot**

The largest sector in Keith County, Nebraska is Retail Trade, employing 650 workers. The next-largest sectors in the region are Accommodation and Food Services (570 workers) and Health Care and Social Assistance (331). High location quotients (LQs) indicate sectors in which a region has high concentrations of employment compared to the national average. The sectors with the largest LQs in the region are Agriculture, Forestry, Fishing and Hunting (LQ = 5.95), Wholesale Trade (1.70), and Accommodation and Food Services (1.66).

#### Total Workers for Keith County, Nebraska by Industry



Source: JobsEQ®,Data as of 2019Q

Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q3 with preliminary estimates updated to 2019Q1.

Sectors in Keith County, Nebraska with the highest average wages per worker are Management of Companies and Enterprises (\$73,411), Agriculture, Forestry, Fishing and Hunting (\$72,817), and Utilities (\$69,181). Regional sectors with the best job growth (or most moderate job losses) over the last 5 years are Retail Trade (+61 jobs), Wholesale Trade (+58), and Accommodation and Food Services (+40).

Over the next 5 years, employment in Keith County, Nebraska is projected to contract by 82 jobs. The fastest growing sector in the region is expected to be Mining, Quarrying, and Oil and Gas Extraction with a +0.9% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Health Care and Social Assistance (+11 jobs), Construction (+2), and Professional, Scientific, and Technical Services (0).

		Current 5-Year History		listory	ory 5-Year Forecast						
			Avg Ann		Empl	Empl				Empl	Ann %
NAICS	Industry	Empl	Wages	LQ	Change	Ann %	Demand	Exits	Transfers	Growth	Growth
44	Retail Trade	650	\$25,248	1.63	61	2.0%	423	190	240	-7	-0.2%
72	Accommodation and Food Services	570	\$15,883	1.66	40	1.5%	452	203	255	-7	-0.2%
62	Health Care and Social Assistance	331	\$51,128	0.61	-52	-2.9%	169	78	80	11	0.7%
11	Agriculture, Forestry, Fishing and Hunting	306	\$72,817	5.95	-11	-0.7%	157	71	93	-7	-0.5%
42	Wholesale Trade	247	\$45,011	1.70	58	5.6%	105	47	78	-20	-1.6%
61	Educational Services	245	\$39,506	0.79	-24	-1.9%	102	54	58	-9	-0.8%
92	Public Administration	233	\$31,116	1.30	-10	-0.8%	100	45	61	-6	-0.5%
31	Manufacturing	215	\$29,497	0.68	-47	-3.8%	89	40	68	-19	-1.8%
48	Transportation and Warehousing	172	\$67,706	1.02	21	2.7%	80	38	51	-9	-1.1%
23	Construction	159	\$37,603	0.74	-48	-5.2%	80	28	50	2	0.2%
81	Other Services (except Public Administration)	142	\$24,009	0.86	-22	-2.8%	79	37	44	-2	-0.2%
52	Finance and Insurance	136	\$51,456	0.91	-25	-3.3%	59	24	39	-4	-0.6%
54	Professional, Scientific, and Technical Services	108	\$40,884	0.43	-6	-1.0%	46	17	29	0	0.0%
55	Management of Companies and Enterprises	75	\$73,411	1.32	-12	-2.9%	33	13	21	-1	-0.2%
56	Administrative and Support and Waste Management and Remediation Services	64	\$22,362	0.26	-4	-1.1%	36	16	21	0	-0.1%
71	Arts, Entertainment, and Recreation	45	\$12,149	0.59	5	2.2%	32	14	17	0	0.1%
53	Real Estate and Rental and Leasing	43	\$21,446	0.66	9	4.6%	21	10	12	-1	-0.4%
51	Information	40	\$31,677	0.53	-11	-4.8%	13	7	11	-5	-2.8%
22	Utilities	22	\$69,181	1.12	3	3.1%	10	4	6	0	-0.3%
21	Mining, Quarrying, and Oil and Gas Extraction	1	\$20,193	0.05	-2	- 23.3%	0	0	0	0	0.9%
	Total - All Industries	3,806	\$37,949	1.00	-76	-0.4%	1,973	880	1,174	-82	-0.4%

Source: JobsEQ®
Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2018Q3 with preliminary estimates updated to 2019Q1. Forecast employment growth uses national projections adapted for regional growth patterns.

### **Occupation Snapshot**

The largest major occupation group in Keith County, Nebraska is Sales and Related Occupations, employing 536 workers. The next-largest occupation groups in the region are Food Preparation and Serving Related Occupations (483 workers) and Office and Administrative Support Occupations (479). High location quotients (LQs) indicate occupation groups in which a region has high concentrations of employment compared to the national average. The major groups with the largest LQs in the region are Farming, Fishing, and Forestry Occupations (LQ = 4.68), Food Preparation and Serving Related Occupations (1.48), and Management Occupations (1.47).

Occupation groups in Keith County, Nebraska with the highest average wages per worker are Management Occupations (\$80,600), Architecture and Engineering Occupations (\$71,300), and Legal Occupations (\$70,700). The unemployment rate in the region varied among the major groups from 1.0% among Healthcare Practitioners and Technical Occupations to 6.3% among Farming, Fishing, and Forestry Occupations.

Over the next 5 years, the fastest growing occupation group in Keith County, Nebraska is expected to be Personal Care and Service Occupations with a +0.7% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Personal Care and Service Occupations (+4 jobs) and Healthcare Practitioners and Technical Occupations (+2). Over the same period, the highest separation demand (occupation demand due to retirements and workers moving from one occupation to another) is expected in Food Preparation and Serving Related Occupations (408 jobs) and Sales and Related Occupations (377).

#### Occupation Snapshot in Keith County, Nebraska, 2019q11

					Current			5-Year H	istory			5-Year Fore	ecast	
			Avg Ann			Unempl	Online	Empl	Ann	Total			Empl	Ann %
soc	Occupation	Empl	Wages <sup>2</sup>	LQ	Unempl	Rate	Job Ads <sup>3</sup>	Change	%	Demand	Exits	Transfers	Growth	Growth
41-0000	Sales and Related	536	\$33,600	1.41	20	3.6%	35	48	1.9%	368	171	206	-10	-0.4%
35-0000	Food Preparation and Serving Related	483	\$24,300	1.48	22	4.5%	45	42	1.8%	406	180	228	-3	-0.1%
43-0000	Office and Administrative Support	479	\$32,700	0.88	13	2.5%	10	-16	- 0.6%	233	118	140	-24	-1.0%
11-0000	Management	344	\$80,600	1.47	4	1.0%	6	-17	- 0.9%	124	68	61	-4	-0.3%
53-0000	Transportation and Material Moving	273	\$33,900	1.04	9	3.1%	29	39	3.1%	138	58	91	-12	-0.9%
49-0000	Installation, Maintenance, and Repair	180	\$41,600	1.23	4	1.8%	9	-12	1.3%	79	30	53	-3	-0.4%
25-0000	Education, Training, and Library	175	\$46,200	0.82	4	2.2%	1	-18	- 1.9%	67	36	35	-5	-0.5%
51-0000	Production	162	\$36,900	0.71	5	2.7%	2	-22	- 2.6%	70	31	52	-13	-1.7%
29-0000	Healthcare Practitioners and Technical	160	\$67,900	0.73	2	1.0%	28	-9	- 1.1%	45	22	21	2	0.2%
37-0000	Building and Grounds Cleaning and Maintenance	153	\$26,900	1.17	6	4.0%	8	-4	- 0.5%	91	45	47	-2	-0.2%
47-0000	Construction and Extraction	145	\$38,200	0.82	7	4.2%	4	-36	- 4.4%	72	25	46	0	0.1%
13-0000	Business and Financial Operations	131	\$57,700	0.66	3	1.9%	4	-12	1.8%	54	19	37	-3	-0.4%
45-0000	Farming, Fishing, and Forestry	115	\$33,600	4.68	7	6.3%	1	1	0.1%	74	20	61	-7	-1.2%

#### Occupation Snapshot in Keith County, Nebraska, 2019q11

					Current			5-Year H	istory			5-Year Fore	ecast	
soc	Occupation	Empl	Avg Ann Wages <sup>2</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>3</sup>	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
39-0000	Personal Care and Service	106	\$25,600	0.64	4	3.3%	5	-19	3.3%	82	41	38	4	0.7%
31-0000	Healthcare Support	67	\$30,100	0.65	2	2.3%	5	-5	- 1.5%	41	20	20	2	0.5%
33-0000	Protective Service	59	\$43,400	0.72	1	1.8%	0	-2	- 0.7%	27	13	15	-2	-0.5%
21-0000	Community and Social Service	54	\$41,500	0.85	1	1.7%	4	-6	- 2.2%	31	11	18	2	0.6%
17-0000	Architecture and Engineering	51	\$71,300	0.80	1	1.5%	1	-9	- 3.1%	16	6	11	-2	-0.8%
15-0000	Computer and Mathematical	49	\$66,200	0.44	1	1.6%	3	-9	- 3.2%	14	4	11	-2	-0.7%
27-0000	Arts, Design, Entertainment, Sports, and Media	37	\$36,500	0.55	1	2.1%	0	-7	- 3.2%	15	7	10	-2	-1.2%
23-0000	Legal	30	\$70,700	0.94	0	n/a	1	-3	- 2.1%	9	4	5	0	0.0%
19-0000	Life, Physical, and Social Science	17	\$64,400	0.56	0	n/a	3	0	0.6%	7	2	5	-1	-0.6%
	Total - All Occupations	3,806	\$40,100	1.00	n/a	n/a	204	-76	- 0.4%	2,063	933	1,212	-82	-0.4%

Source: JobsEQ®

Data as of 2019Q1 unless noted otherwise

Note: Figures may not sum due to rounding.

Occupation employment data are estimated via industry employment data and the estimated industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2018Q3, imputed where necessary with preliminary estimates updated to 2019Q1. Wages by occupation are as of 2018 provided by the BLS and imputed where necessary. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

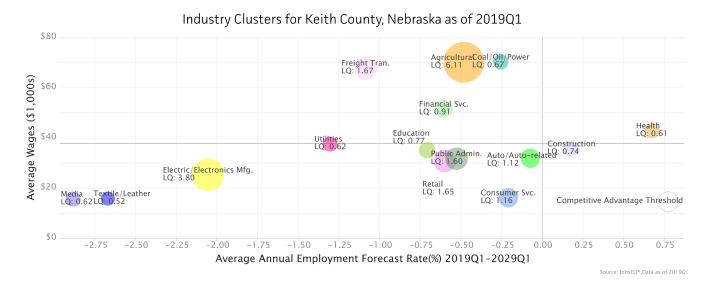
<sup>1.</sup> Data based on a four-quarter moving average unless noted otherwise.

 $<sup>2. \ \, {\</sup>it Occupation wages are as of 2018 and should be taken as the average for all Covered Employment}$ 

<sup>3.</sup> Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

## **Industry Clusters**

A cluster is a geographic concentration of interrelated industries or occupations. The industry cluster in Keith County, Nebraska with the highest relative concentration is Agricultural with a location quotient of 6.11. This cluster employs 327 workers in the region with an average wage of \$70,096. Employment in the Agricultural cluster is projected to contract in the region about 0.5% per year over the next ten years.

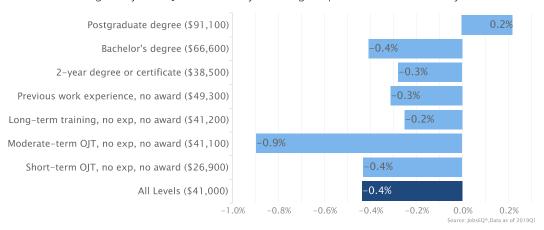


Location quotient and average wage data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics, imputed where necessary, and updated through 2018Q3 with preliminary estimates updated to 2019Q1. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

### **Education Levels**

Expected growth rates for occupations vary by the education and training required. While all employment in Keith County, Nebraska is projected to contract 0.4% over the next ten years, occupations typically requiring a postgraduate degree are expected to grow 0.2% per year, those requiring a bachelor's degree are forecast to contract 0.4% per year, and occupations typically needing a 2-year degree or certificate are expected to contract 0.3% per year.

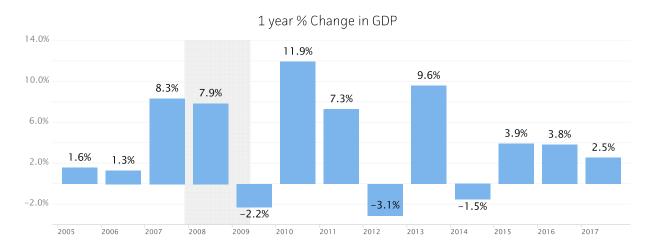
Annual Average Projected Job Growth by Training Required for Keith County, Nebraska



Employment by occupation data are estimates are as of 2019Q1. Education levels of occupations are based on BLS assignments. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

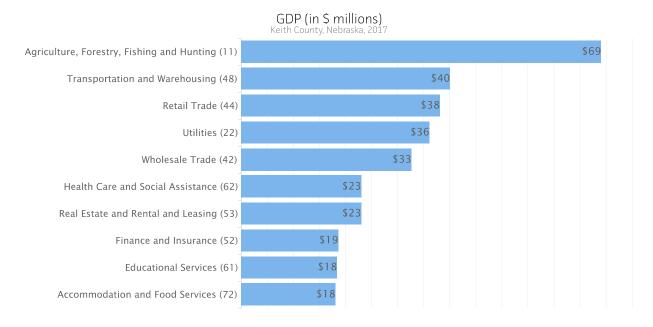
### **Gross Domestic Product**

Gross Domestic Product (GDP) is the total value of goods and services produced by a region. In 2017, nominal GDP in Keith County, Nebraska expanded 2.5%. This follows growth of 3.8% in 2016. As of 2017, total GDP in Keith County, Nebraska was \$386,357,000.



Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2017.

Of the sectors in Keith County, Nebraska, Agriculture, Forestry, Fishing and Hunting contributed the largest portion of GDP in 2017, \$69,128,000 The next-largest contributions came from Transportation and Warehousing (\$40,088,000); Retail Trade (\$38,149,000); and Utilities (\$36,201,000).



Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2017.

# **Region Definition**

#### 2019 Ogallala Target Study Area is defined as the following counties:

Sedgwick County, Colorado	Keith County, Nebraska
Arthur County, Nebraska	Lincoln County, Nebraska
Deuel County, Nebraska	McPherson County, Nebraska
Garden County, Nebraska	Perkins County, Nebraska

### **FAQ**

#### What is a location quotient?

A location quotient (LQ) is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

#### What is separation demand?

Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. The total projected demand for an occupation is the sum of the separation demand and the growth demand (which is the increase or decrease of jobs in an occupation expected due to expansion or contraction of the overall number of jobs in that occupation).

#### What is a cluster?

A cluster is a geographic concentration of interrelated industries or occupations. If a regional cluster has a location quotient of 1.25 or greater, the region is considered to possess a *competitive advantage* in that cluster.

#### What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.

#### What is NAICS?

The North American Industry Classification System (NAICS) is used to classify business establishments according to the type of economic activity. The NAICS Code comprises six levels, from the "all industry" level to the 6-digit level. The first two digits define the top level category, known as the "sector," which is the level examined in this report.

#### What is SOC?

The Standard Occupational Classification system (SOC) is used to classify workers into occupational categories. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 occupation groups. Each occupation group includes detailed occupations requiring similar job duties, skills, education, or experience.

#### **About This Report**

This report and all data herein were produced by JobsEQ®, a product of Chmura Economics & Analytics. The information contained herein was obtained from sources we believe to be reliable. However, we cannot guarantee its accuracy and completeness.