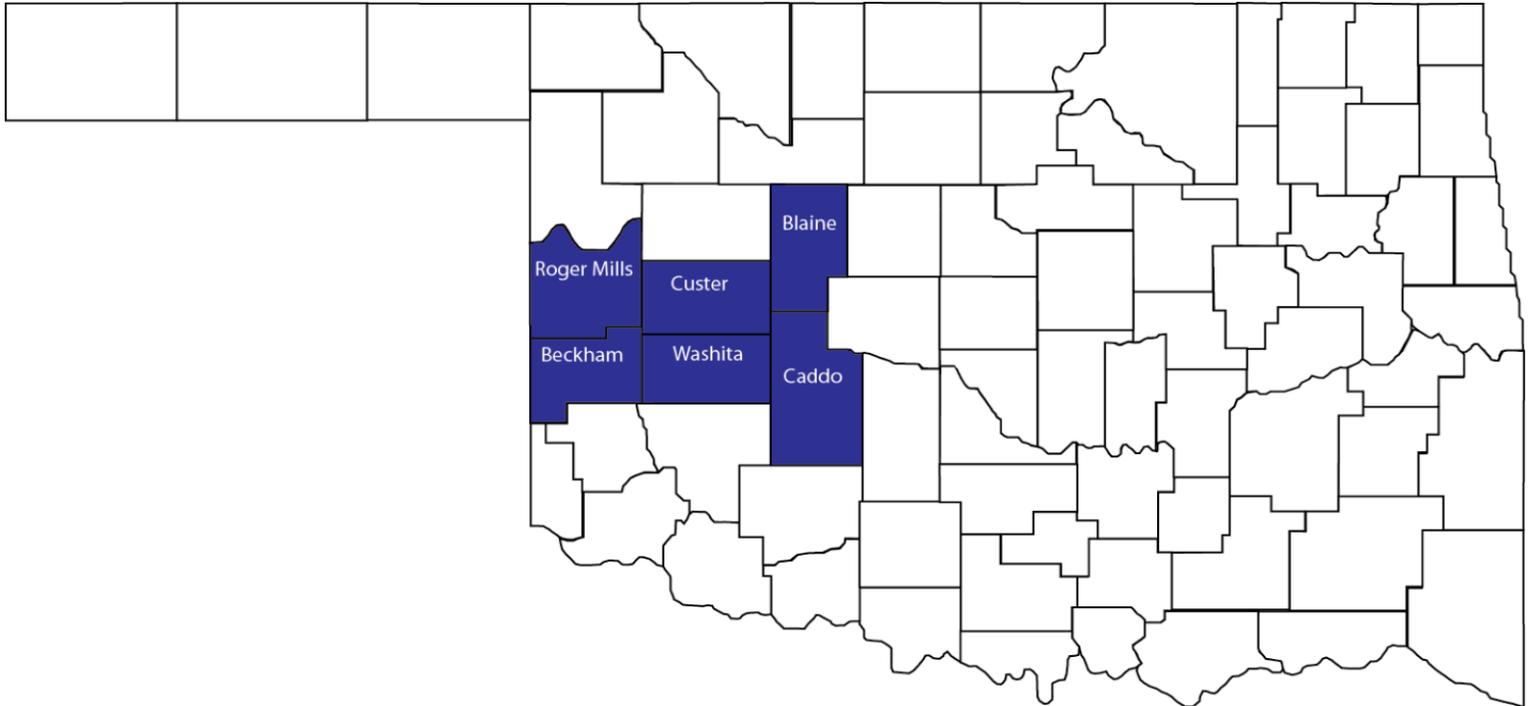


Western Oklahoma Ecosystem Briefing

December 2014

Overview

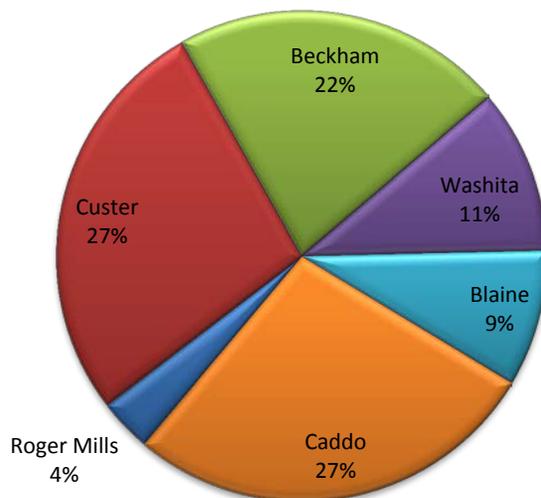
The Western Oklahoma Ecosystem is comprised of six counties: Beckham, Blaine, Caddo, Custer, Roger Mills and Washita.



Population of Western Oklahoma

Beckham, Custer, Roger Mills, and Washita counties combine for an estimated population of 68,430. Western Oklahoma is home to approximately 2% of the population in the state. Elk City is the largest city in the region with an estimated population of 12,600.

Western Oklahoma Percentage of Population by County

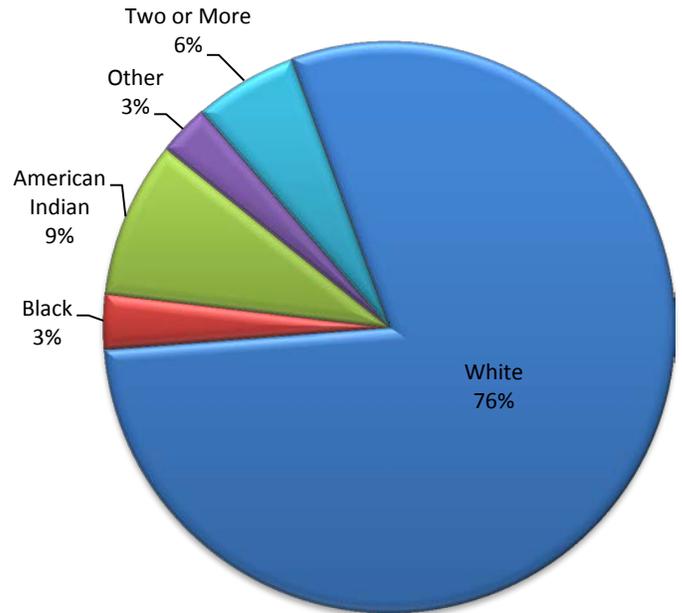


- According to the 2012 Census estimate, Caddo County is the most populous county in the region with an estimated population of 29,590. Custer County a close second with 29,380 people.
- Roger Mills County is the least populated county in the region, with an estimated population of 3,740.
- Since 2010, four of the six counties in the region have experienced positive population growth. Beckham and Custer counties both experienced a population growth of 6.9%. Caddo County saw no change. However, Blaine County saw a decrease of 18.6%.
- Blaine and Roger Mills counties are the least populated counties in the region, and also the only ones where Interstate 40 doesn't intersect.

Source: Census Quick Facts

Western Oklahoma Population Breakdown by Race:

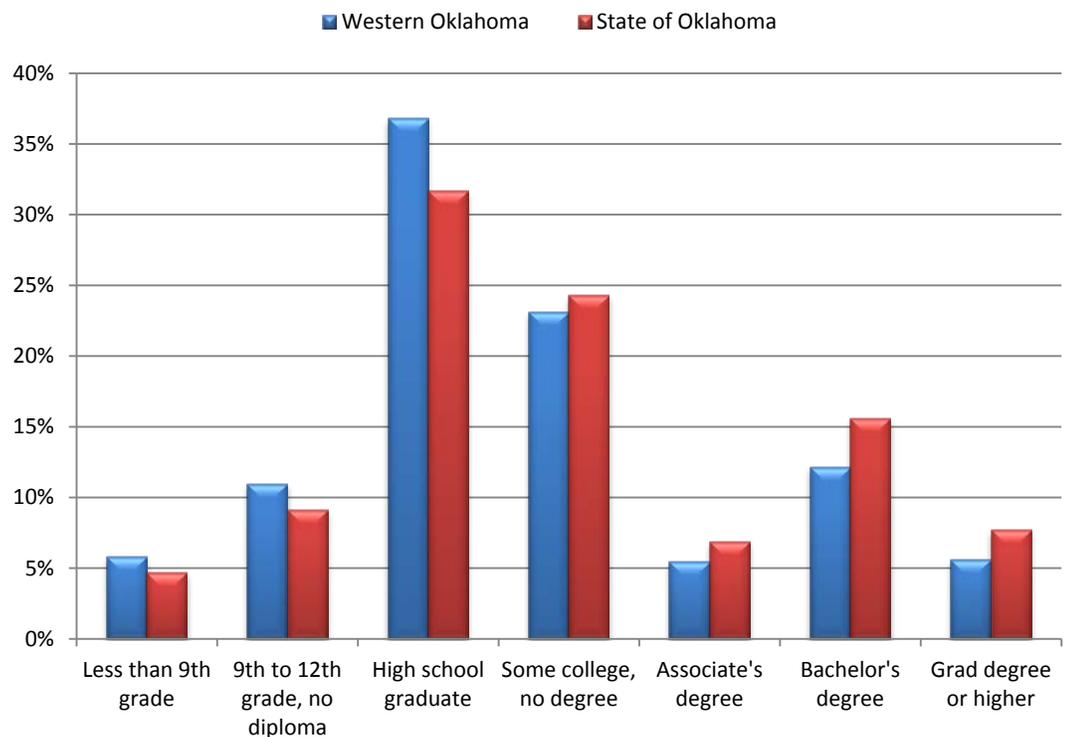
- 75.6% of residents in Western Oklahoma identify themselves as White. This is comparable to the statewide average of 75.5%.
- With 9,290 people, American Indian is the second most populous group in Western Oklahoma. They account for 8.4% of the population.
- Two or More Races consist of 5.5% of the population. Native Hawaiian or Pacific Islander and Asian accounts for a negligible percentage of the population.
- Hispanics, which are categorized as an ethnicity by the Census bureau, make up 10.1% of the total population in Western Oklahoma, just above the statewide average of 9.6%.



Educational Attainment in Western Oklahoma:

Source: ACS 2008-2012

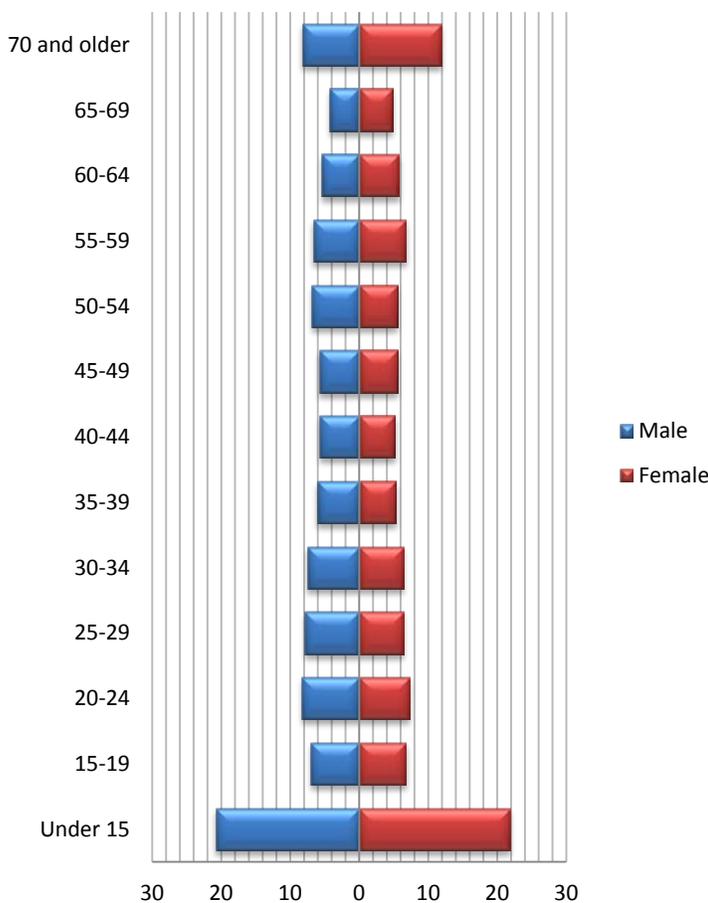
- 83.2% of people residing in Western Oklahoma have attained at least a high school diploma.
- Western Oklahoma lags behind the state averages in each category of post-secondary educational attainment.
- Although Western Oklahoma does have lower post-secondary educational attainment than state averages, as a whole, the gap is not large between the two.
- Bachelor's degree is the largest gap of post-secondary educational attainment between region and state averages, at 3.4%.
- In terms of the furthest level of educational attainment, Western Oklahoma has higher levels of "Less than 9th grade", "9th to 12th grade", and "High school graduate" than the state average. The largest gap appears at the High school graduate level.



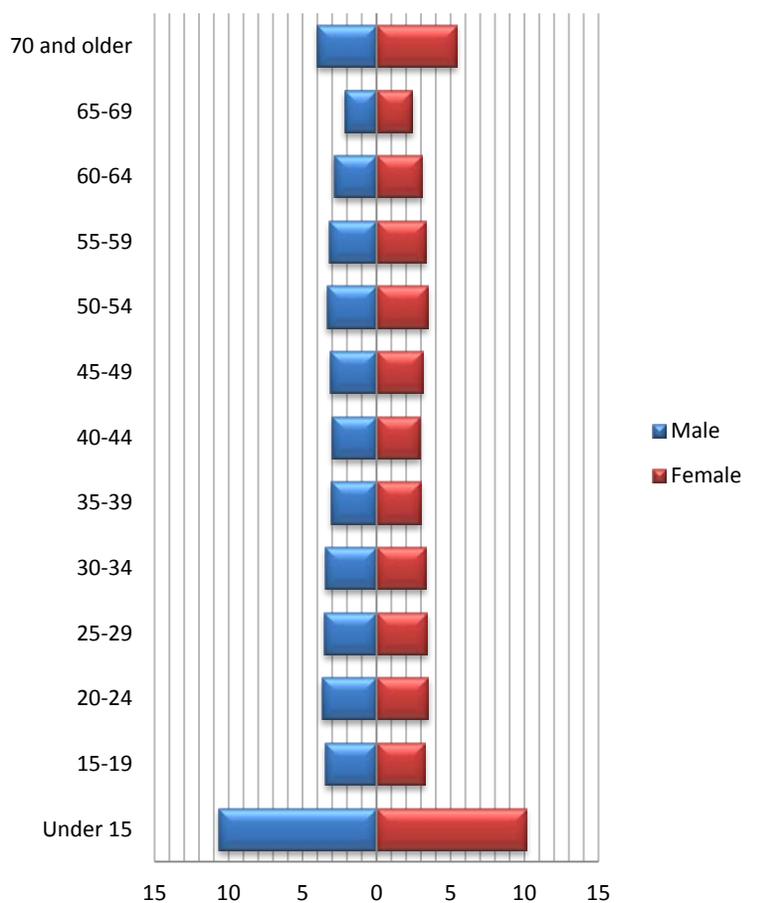
Age and Sex Data in Western Oklahoma:

- According to EMSI’s second quarter of 2014 population estimate, there are 107,590 people living in Western Oklahoma. Of that, there are 55,085 men and 52,505 women. 51.2% of the population in Western Oklahoma is male, while 48.8% is female.
- Statewide, EMSI calculates a population of 3,867,960. Of that, 49.6% are women, while men make up 50.4% of the population. In real numbers that comes out to 1,917,845 women and 1,950,115 men.
- The general trend in population figures is consistent when comparing the Western Oklahoma to the rest of the state. The population pyramids show similar bulge areas, specifically amongst youth and baby boomer age ranges, with both charts showing smaller percentages of individuals aged 35-49.
- Western Oklahoma’s hourglass shape is a little more pronounced than the state average.
- The 20-24 age bracket is the largest cohort in Western Oklahoma, followed closely by the 25-29 bracket.

Western Oklahoma Age/Sex Data by Percentage of Population



Oklahoma Age/Sex Data by Percentage of Population

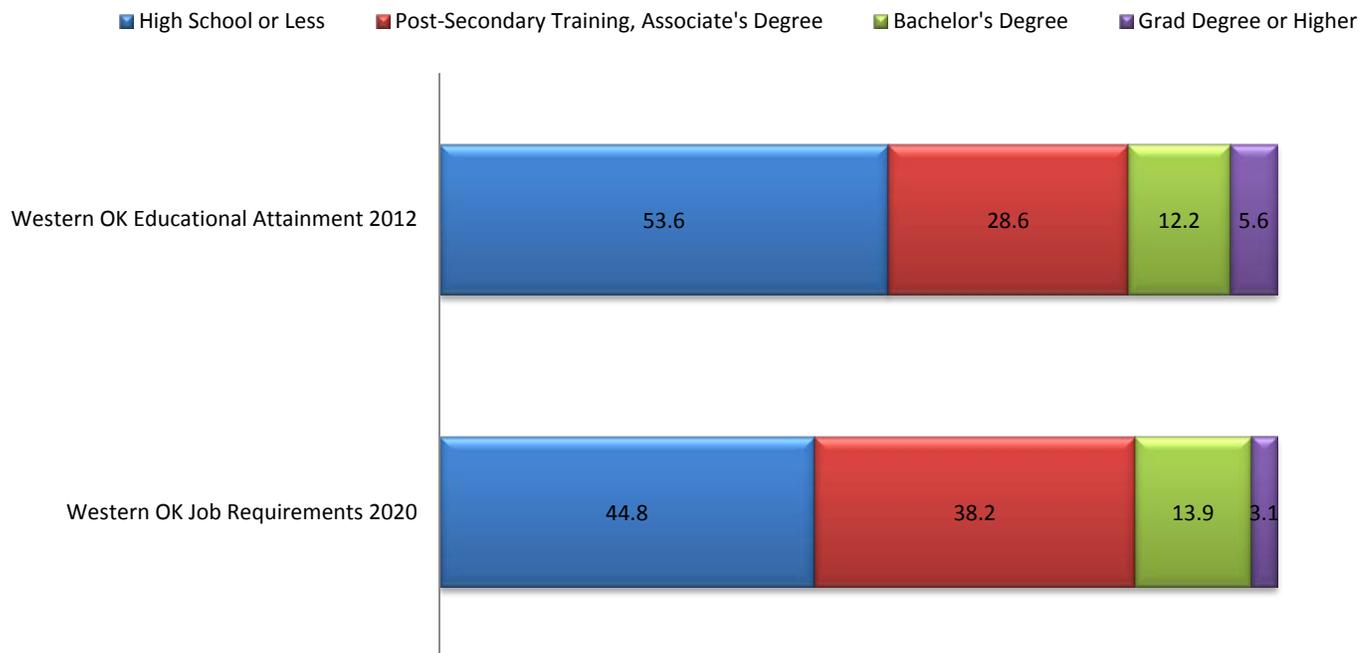


Source: EMSI 2014.3

Western Oklahoma Education Gap

- By current projections, in 2020, 44.8% of jobs in Western Oklahoma will require a high school degree or less, and 38.2% will require post-secondary training—currently 28.6% of individuals in East Central Oklahoma have some post-secondary training.
- If projected trends continue, by 2020 there will be a gap for jobs that require post-secondary training or an Associate’s Degree, and a surplus of individuals with a high school degree or less to fill jobs that require a high school education level. Fortunately, there are colleges and universities in the region to provide necessary skills to residents and help alleviate the training gap.
- There will be a smaller gap in jobs requiring a Bachelor’s degree than post-secondary training.
- There is a small surplus of individuals in the Grad Degree or Higher category compared with job requirements for that sector in 2020

Western Oklahoma Educational Gap for Jobs by 2020



Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2014.3 Class of Worker; US Census Quick Facts

Western Oklahoma Educational Assets

CareerTechs, colleges and universities in Western Oklahoma are instrumental in developing the regions workforce. They are assets that allow the region and the rest of the state to supply organizations and companies with the labor and skills necessary to keep them operational and competitive in a global economy.

CareerTechs

Western Technology Center

- (Burns Flat, Sayre, Weatherford)

Caddo-Kiowa Technology Center

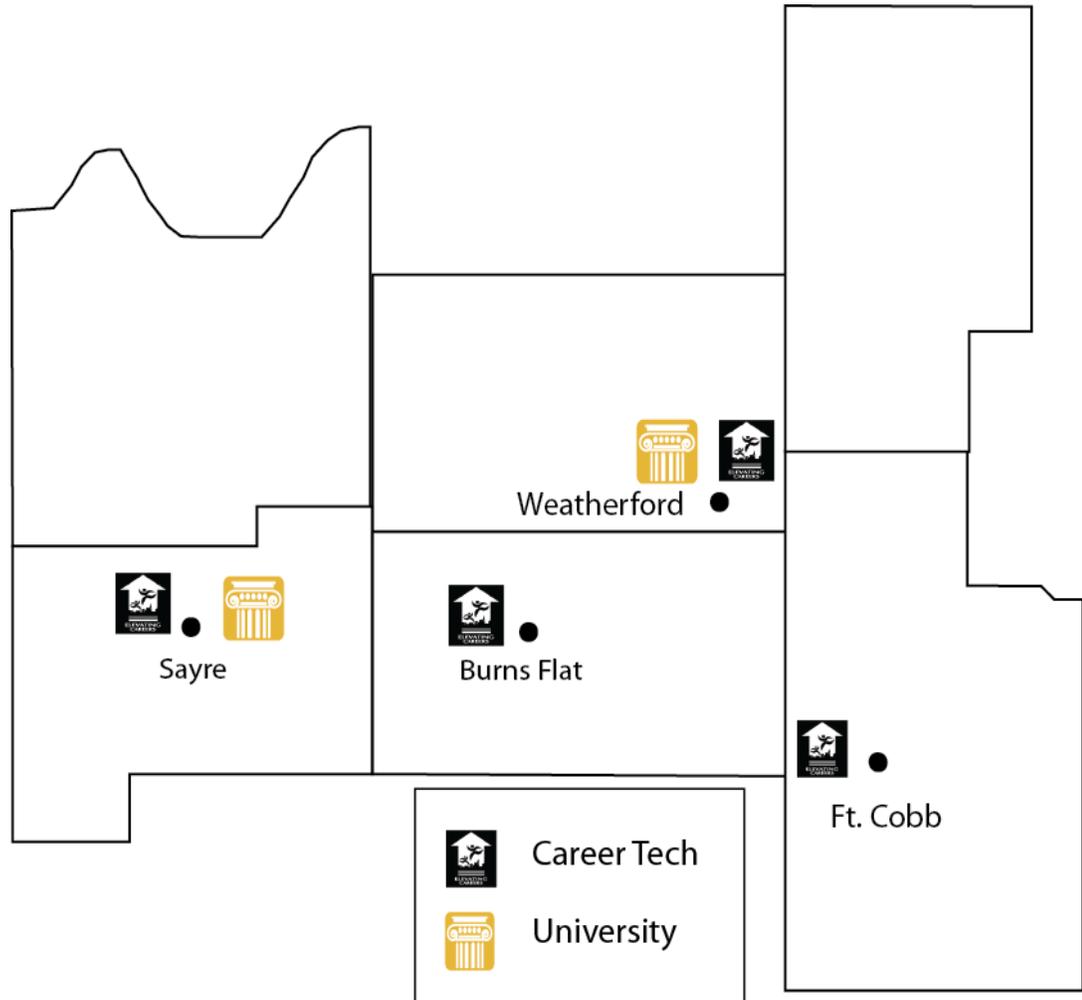
- (Ft. Cobb)

Colleges and Universities

In addition to the Career Techs in the region, there is one university in the region, with two locations.

Southwestern Oklahoma State University

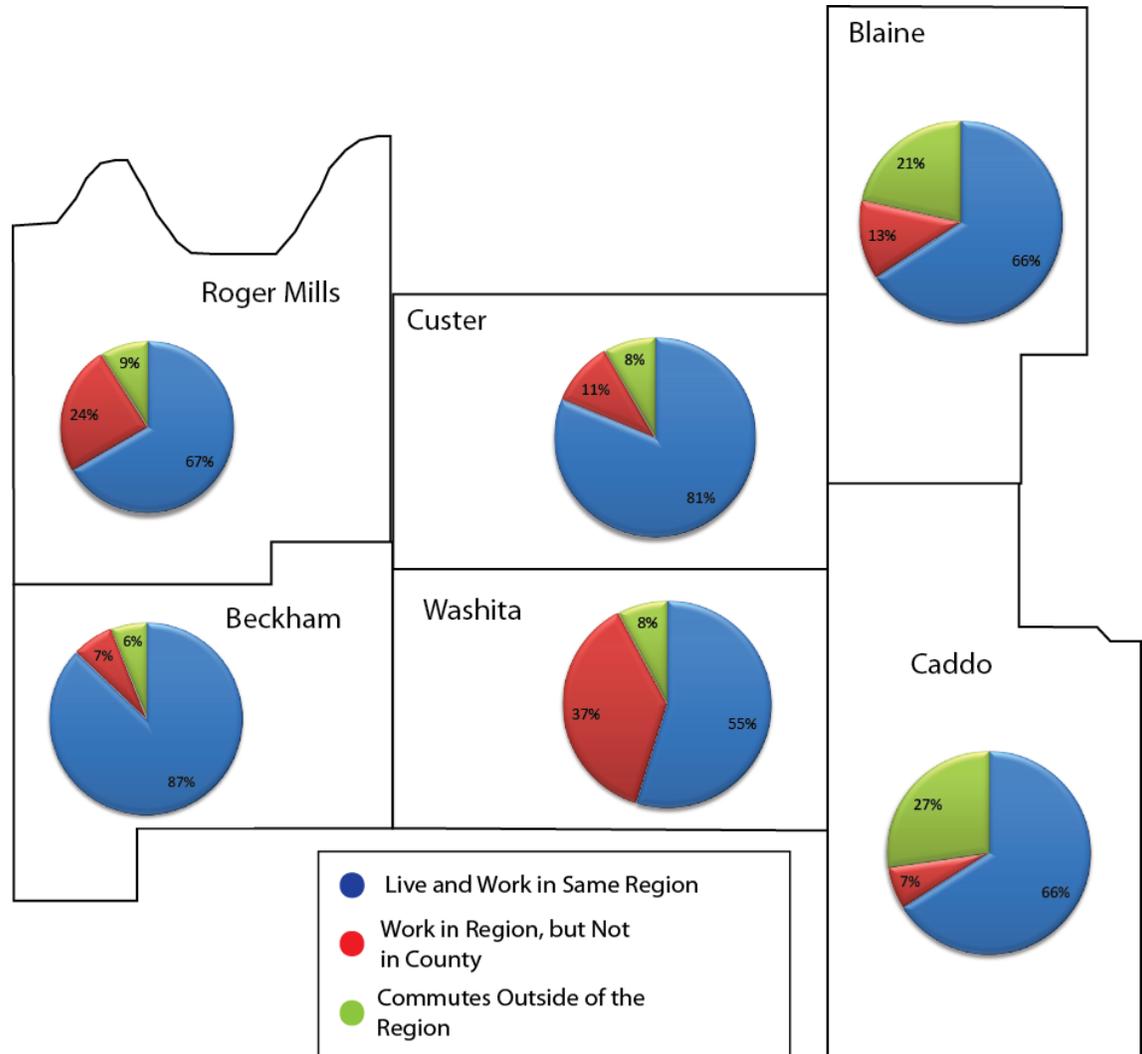
- (Sayre, Weatherford)



Source: OK CareerTech; Oklahoma State Regents for Higher Education

Commuter Data

- According to the commuting data, 74% of the people in Western Oklahoma work in the county they live, and more than 85% stay within the region when commuting to their workplace.
- Blaine and Caddo, the eastern-most counties in the region, each have more than 20% of the population travel outside the region for work.
- Elk City (Beckham County) and Weatherford (Custer County) are the two largest cities in the region. Beckham and Custer counties have the highest percentage of people who live and work in the same region.
- Just under half of the workforce in Washita County either leaves the county or region for work.
- As a whole, a relatively small percentage of people commute outside the region for work. The majority of people either work in the county they live, or travel to neighboring counties in the region for work. This data illustrates that residents would still prefer to stay within close distance to their homes when commuting to their workplaces.



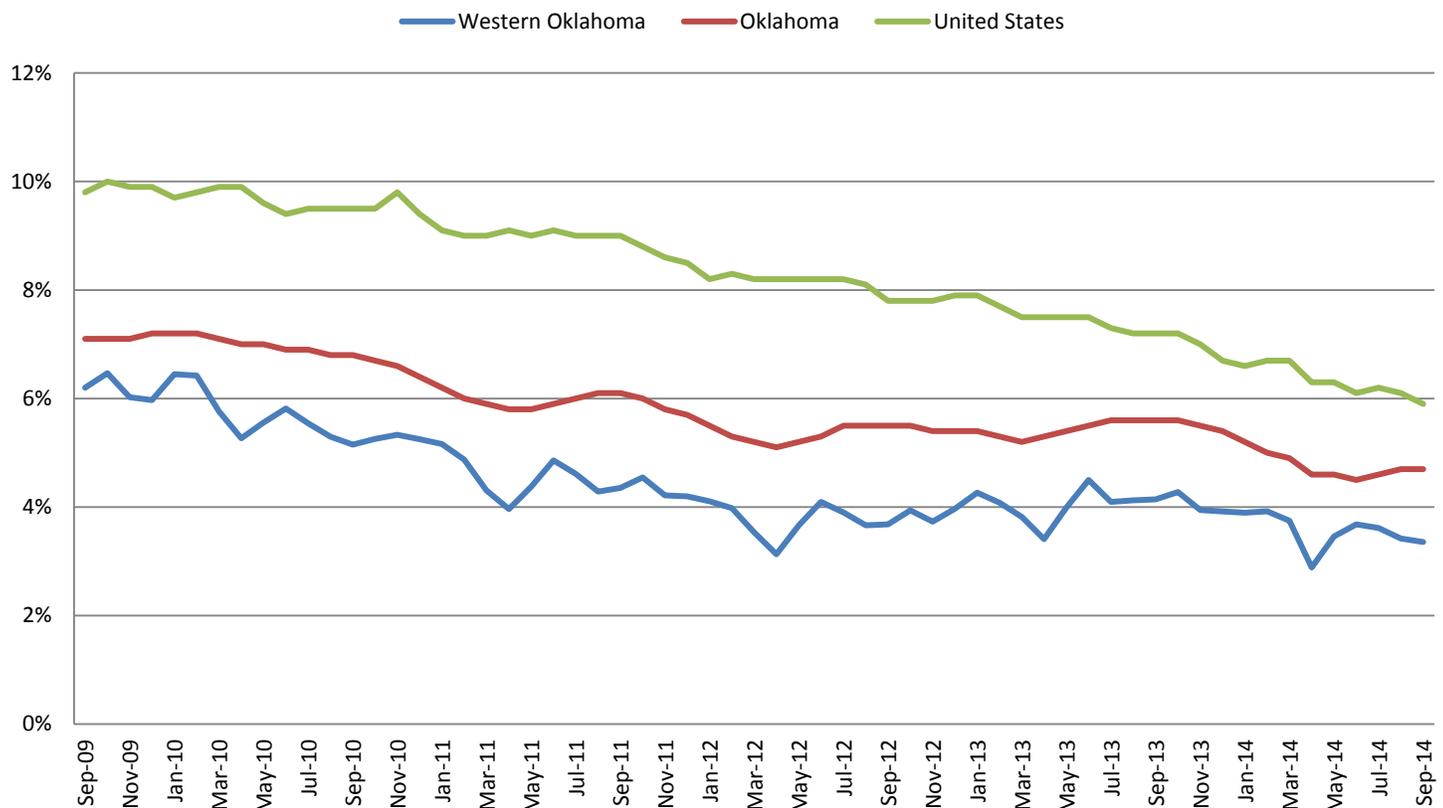
Source: ACS Residence County to Workplace County Flows for the United States and Puerto Rico

Economic Data

Unemployment Rate:

- Since September 2009, Western Oklahoma has stayed below the state unemployment rate and considerably below the national unemployment rate. After reaching a peak of 6.4% in January and February 2010, the Western Oklahoma unemployment rate has steadily declined, and as of September 2014 the rate is 3.4%.
- The Western Oklahoma unemployment rate was closest to the state average in late 2009; then a larger gap appeared in 2010. The gap between Western Oklahoma and the state unemployment rate has remained relatively small since 2010. Both Western Oklahoma and the state average unemployment rate has stayed below the national average over the five year historical period.
- Both Western Oklahoma and the State of Oklahoma have maintained a gradual declining trend in unemployment rates since peaking in January and February 2010.
- In each year 2010-2014, Western Oklahoma unemployment rate dropped in April, but then a small, but sharp increase by June, only to decrease again.
- One challenge with an unemployment rate so low is employers have a smaller pool of candidates to choose from when hiring. Additionally, low unemployment rates mean fewer job openings for employees looking for jobs or those looking for new jobs.

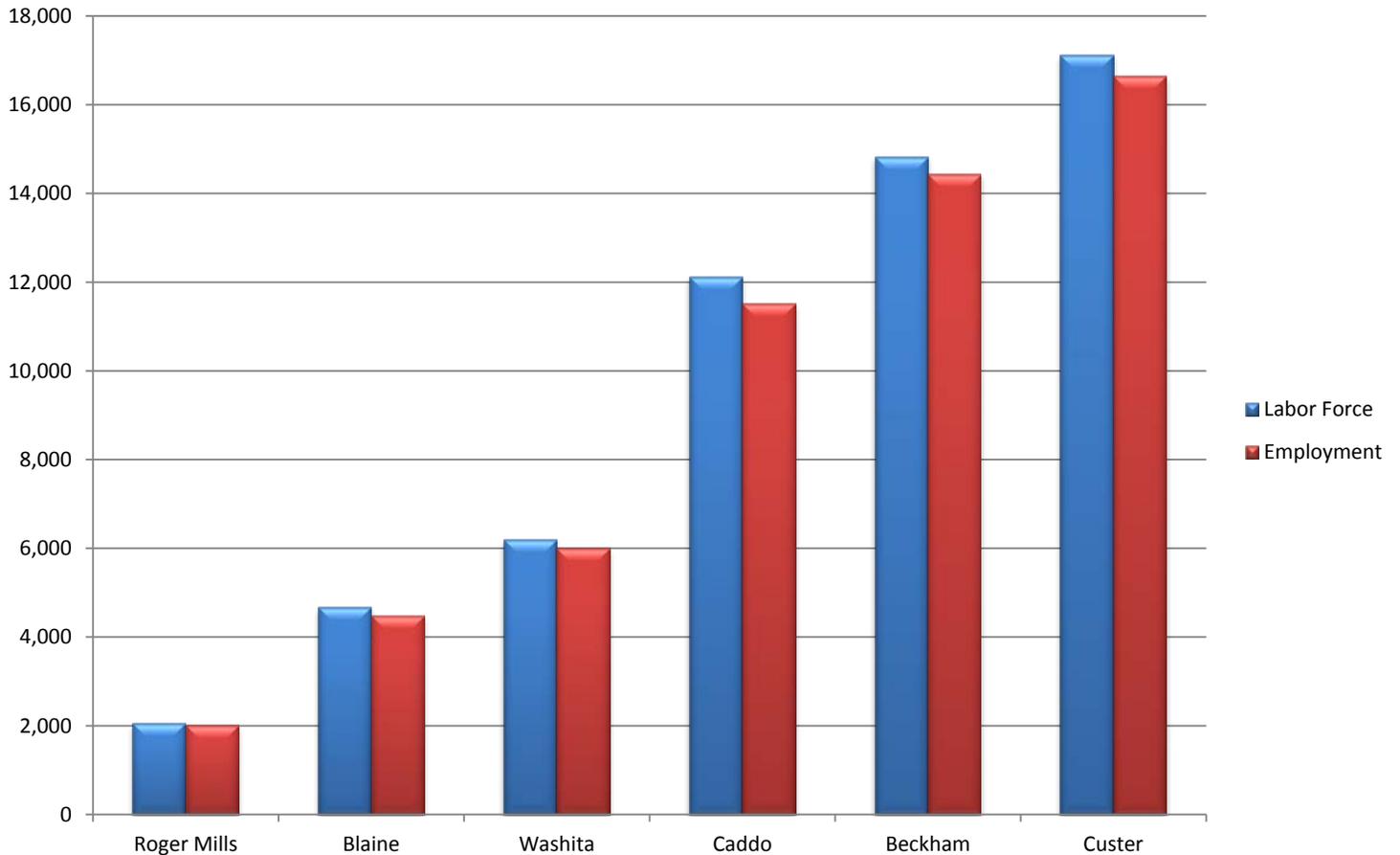
Five Year Unemployment Rate- Western Oklahoma, State and Nationally



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

Total Employment:

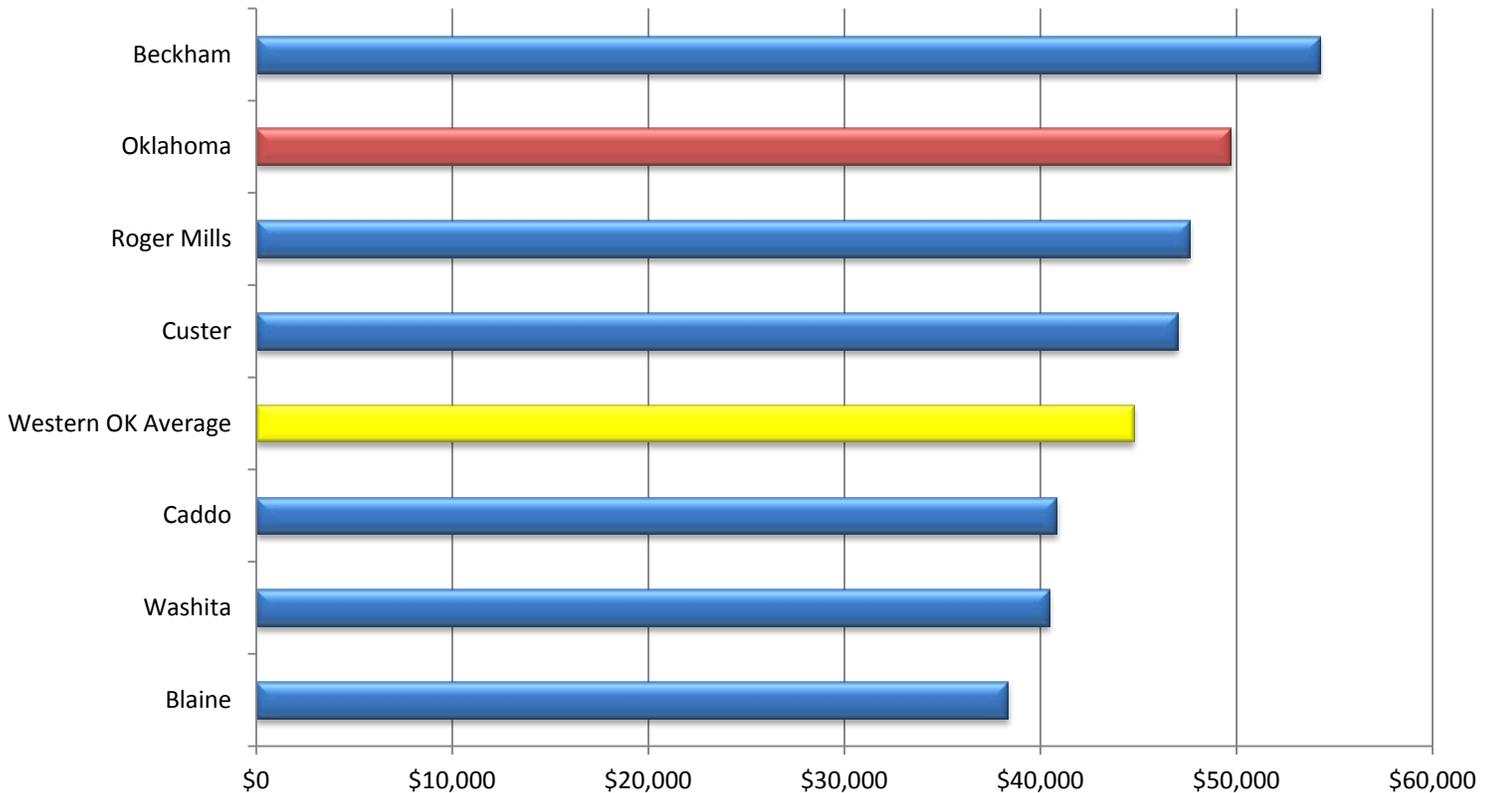
- In real numbers, 57,000 people in Western Oklahoma are in the labor force, and 55,090 are employed. That equates to 96.6% of the labor force in the region is employed.
- Custer and Beckham counties possess the largest population, largest labor force and largest number of people employed in the region.
- Roger Mills County is the smallest county in the region, and has the lowest unemployment rate.
- Caddo County has the highest unemployment rate.



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

Wages by County:

- The Western Oklahoma average wage is \$44,760; this is below the state average of \$49,720 by \$4,960. The gap between the Western Oklahoma counties and the state average ranges from \$4,550 more in Beckham County to \$14,370 less in Blaine County.
- Beckham County has the highest wages in the region, and the lowest unemployment.
- Caddo County is the largest county in the region in terms of population, but has wages lower than the regional average.
- Roger Mills County is the smallest county in the region in terms of population, but has wages higher than the regional average.
- Beckham County is the only county in the region that has wages higher than the state average.

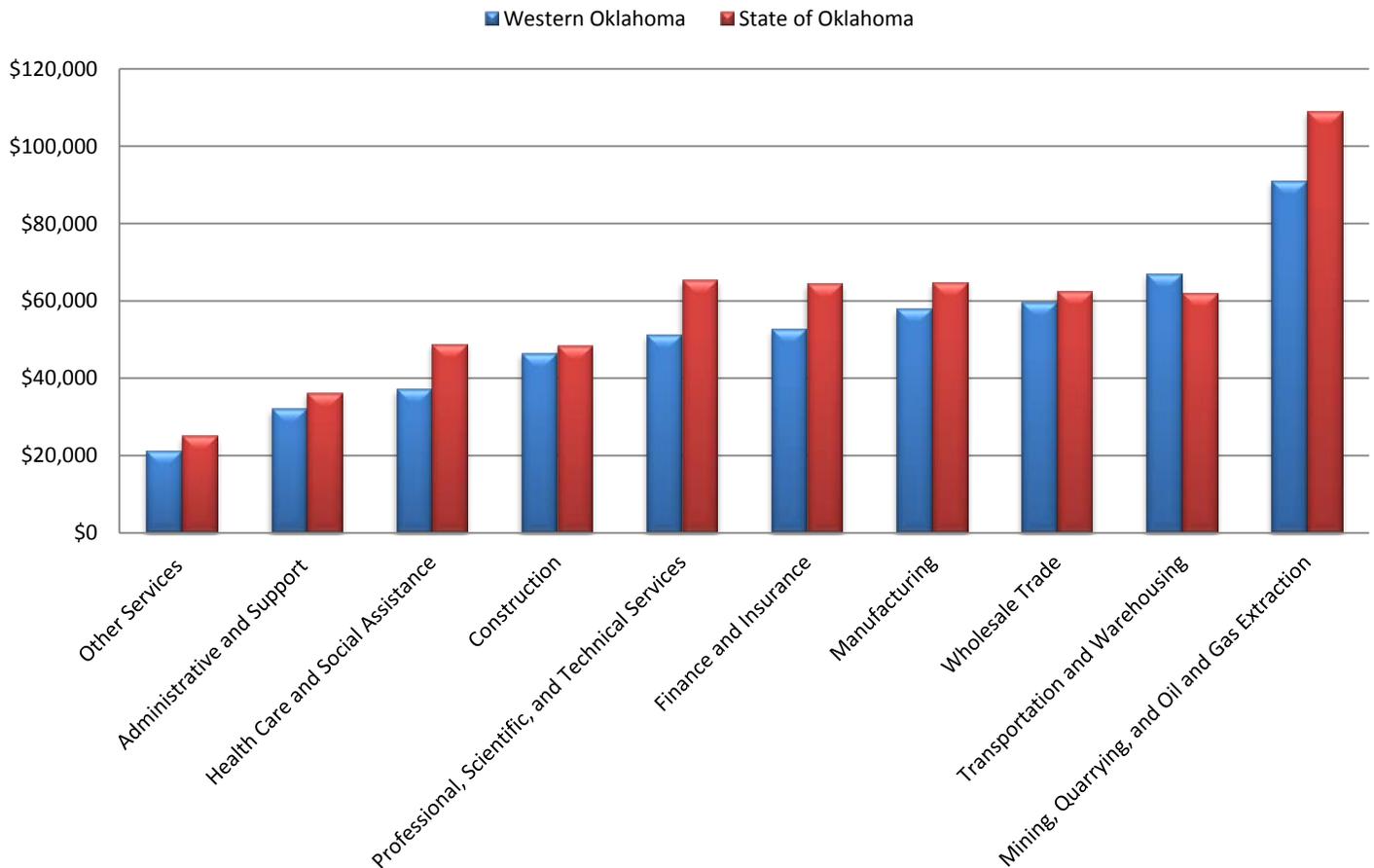


Source: EMSI 2014.3

Wages by Industry:

- Industry earnings in Western Oklahoma for the most part lag behind state averages, albeit most are by small margins. The largest wage difference occurs in the “Mining, Quarrying, and Oil and Gas Extraction” industry. Statewide this position earns \$18,080 more than in Western Oklahoma.
- “Transportation and Warehousing” is the only industry in the region that earns more than the state average.
- The industries in Western Oklahoma that compare closest to state averages are, “Construction”, “Other Services”, and “Wholesale Trade”.
- “Other Services”, “Administrative Support”, “Healthcare and Social Assistance”, and “Construction” are the top industries in Western Oklahoma that are below the state’s yearly average earnings of \$49,720.

Average Earnings by Industry in Western Oklahoma and State of Oklahoma



Source: EMSI 2014.3

Major Employers in Western Oklahoma

Listed below are some of the more significant employers in the region. Commerce in Western Oklahoma is not primarily concentrated in any one area; however there are a significant number of health, education, and oil and gas extraction related employers in the area.

Employer	City	Industry
Southwestern Oklahoma State University	Weatherford	Colleges, Universities, and Professional Schools
Northfork Correctional Facility	Sayre	Correctional Institution
Bar S. Foods	Clinton; Elk City	Meat Processors
Western Farmers Electric Co-Op	Anadarko	Fossil Fuel Power Generation
Great Plains Regional Medical Center	Elk City	General Medical and Surgical Hospital
Bureau of Indian Affairs	Anadarko	Government Support
Lucky Star Casino	Clinton	Casino
Clinton Public Schools	Clinton	Elementary and Secondary School
Wal-Mart	Multiple Cities	Warehouse Club and Supercenter
Elk City Public Schools	Elk City	Elementary and Secondary School
Weatherford Public Schools	Weatherford	Elementary and Secondary School
Anadarko Public Schools	Anadarko	Elementary and Secondary School
Superior Fabrication	Elk City	Plate Works Manufacturing
Hutchinson Oil Company	Multiple Cities	Gas Stations and Convenience Stores
ASAP Energy	Weatherford	Petroleum and Petroleum Produce Wholesaler
Oklahoma Department of Veterans Affairs	Clinton	Nursing Care Facilities
USG Company	Southard	Gypsum Product Manufacturing
Sugar Creek Casino	Hinton	Casino
Cudd Pressure Control	Elk City	Support Activities for Oil and Gas
Weatherford Regional Hospital	Weatherford	General Medical and Surgical Hospital
Mountain Country Foods-Oklahoma	Okeene	Dog and Cat Food Manufacturing
City of Elk City	Elk City	Executive Offices
Caddo County	Anadarko	Executive Offices
Casedhole Solutions	Weatherford	Support Activities for Oil and Gas
Schlumberger	Elk City	Support Activities for Oil and Gas
Baker Hughes Oilfield Operations	Clinton	Support Activities for Oil and Gas

Source: EMSI 2014.3, OneSource

Ecosystems Impact in Western Oklahoma on Occupations and Salaries

The Oklahoma Department of Commerce identified five ecosystems in Oklahoma important to the economy to generate wealth, have employment growth potential, or where the state has a competitive advantage (Aerospace and Defense, Energy, Agriculture and Bioscience, Information and Financial Services, and Transportation and Distribution). In each ecosystem, there are critical occupations necessary for future growth and advancement. In addition to the five statewide ecosystems, there are ecosystems at the regional level important for regional economies.

Aerospace & Defense

Based on 2014 job numbers there are 670 jobs in the Aerospace & Defense Ecosystem in Western Oklahoma with average earnings of approximately \$37,750.

As a projection of demand by 2020, total employment in the Aerospace and Defense ecosystem will increase to 700 jobs in Western Oklahoma, an increase of 30 jobs for the region.

The list below encompasses some of the critical occupations for the Aerospace and Defense ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Aerospace and Defense ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
55-9999	Military occupations	\$13.77	N/A
49-9041	Industrial Machinery Mechanics	\$27.10	Long-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$15.79	Moderate-term on-the-job training
51-4041	Machinists	\$14.36	Long-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$13.18	Long-term on-the-job training
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$18.43	Long-term on-the-job training
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	\$31.80	Less than 5 Years
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$16.87	Long-term on-the-job training
15-1132	Software Developers, Applications	\$31.81	Bachelor's degree
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$16.63	Postsecondary non-degree award

Source: EMSI 2014.3

As previously mentioned, the critical occupations above are necessary for the Aerospace & Defense ecosystem to thrive. Just as important, these critical occupations are necessary for other industries as well. Other industries that demand these occupations include as support for Oil and Gas Extraction, Machine Shops, and Machinery Manufacturing, among others in Western Oklahoma.

Energy

Based on 2014 job numbers there are 7,030 jobs in the Energy Ecosystem in Western Oklahoma with average earnings of \$86,430.

As a projection of demand, by 2020 total employment in the Energy ecosystem will grow to 8,740 jobs in Western Oklahoma, an addition of 1,710 jobs for the region.

The list below encompasses some of the critical occupations for the Energy ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Energy ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$18.64	Postsecondary non-degree award
47-5013	Service Unit Operators, Oil, Gas, and Mining	\$19.66	Moderate-term on-the-job training
47-5071	Roustabouts, Oil and Gas	\$16.44	Moderate-term on-the-job training
47-5011	Derrick Operators, Oil and Gas	\$20.38	Short-term on-the-job training
49-9051	Electrical Power-Line Installers and Repairers	\$21.15	Long-term on-the-job training
47-2073	Operating Engineers and Other Construction Equipment Operators	\$17.39	Moderate-term on-the-job training
47-2061	Construction Laborers	\$13.57	Short-term on-the-job training
17-2171	Petroleum Engineers	\$61.54	Bachelor's degree
47-5081	Helpers--Extraction Workers	\$17.55	Moderate-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$27.10	Long-term on-the-job training
53-7073	Wellhead Pumpers	\$17.55	Moderate-term on-the-job training

Source: EMSI 2014.3

As previously mentioned, these occupations are necessary for the Energy ecosystem to thrive. Just as important, they are necessary for other industries as well. Other industries that demand these occupations include General Freight Trucking, Support Activities for Oil and Gas, and Oil & Gas Extraction.

Agriculture & Bioscience

Based on 2014 job numbers there are 2,720 jobs in the Agriculture & Bioscience ecosystem in Western Oklahoma with average earnings of \$49,700.

As a projection of demand, by 2020 total employment in the Agriculture and Bioscience ecosystem will increase to 2,850 jobs in Western Oklahoma, a gain of 130 jobs for the region.

The list below encompasses some of the critical occupations for the Agriculture and Bioscience ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Agriculture and Bioscience ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	\$10.60	Short-term on-the-job training
11-9013	Farmers, Ranchers, and Other Agricultural Managers	\$10.33	5 years or more
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$18.64	Postsecondary non-degree award
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.10	Short-term on-the-job training
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	\$13.72	Short-term on-the-job training
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	\$9.58	Short-term on-the-job training
53-7011	Conveyor Operators and Tenders	\$11.70	Short-term on-the-job training
45-2091	Agricultural Equipment Operators	\$11.99	Short-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$13.18	Long-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$27.10	Long-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.68	Short-term on-the-job training
51-9111	Packaging and Filling Machine Operators and Tenders	\$13.27	Moderate-term on-the-job training

Source: EMSI 2014.3

As previously mentioned, these occupations are necessary for the Agriculture & Bioscience ecosystem to thrive. Just as important, they are necessary for other industries as well. Other industries that demand these occupations include General Freight Trucking, Support Activities for Mining, and Crop Production, among others in Western Oklahoma.

Information & Financial Services

Based on 2014 job numbers there are 1,760 jobs in the Information & Financial Services ecosystem in Western Oklahoma with average wages of \$54,290.

As a projection of demand, by 2020 total employment in the Information and Financial Services ecosystem will increase to 1,870 jobs in Western Oklahoma, an increase of 110 jobs for the region.

The list below encompasses some of the critical occupations for the Information and Financial Services ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Information and Financial Services ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
43-3071	Tellers	\$10.23	Short-term on-the-job training
13-2011	Accountants and Auditors	\$23.39	Bachelor's degree
13-2072	Loan Officers	\$24.20	Bachelor's degree
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$13.80	Moderate-term on-the-job training
43-4131	Loan Interviewers and Clerks	\$11.73	Short-term on-the-job training
43-4051	Customer Service Representatives	\$12.48	Short-term on-the-job training
11-3031	Financial Managers	\$35.35	Bachelor's degree
43-4141	New Accounts Clerks	\$12.93	Moderate-term on-the-job training
43-9061	Office Clerks, General	\$11.30	Short-term on-the-job training
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$25.61	Bachelor's degree
13-2082	Tax Preparers	\$14.26	Moderate-term on-the-job training

Source: EMSI 2014.3

As previously mentioned, these occupations are necessary for the Information & Financial Services ecosystem to thrive. Just as important, they are necessary for other industries as well. Other industries that demand these occupations include Commercial Banking, Payroll Services, Accountant Offices, and Support Activities for Mining, among others.

Transportation & Distribution

Based on 2014 job numbers there are 3,800 jobs in the Transportation & Distribution ecosystem in Western Oklahoma with average earnings of \$63,570.

As a projection of demand, by 2020 total employment in the Transportation and Distribution ecosystem will increase to 4,420, a gain of 620 jobs for the region.

The list below encompasses some of the critical occupations for the Transportation and Distribution ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Transportation and Distribution ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$18.64	Postsecondary non-degree award
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.10	Less than high school
53-3033	Light Truck or Delivery Services Drivers	\$9.87	High school diploma or equivalent
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$16.87	High school diploma or equivalent
43-5081	Stock Clerks and Order Fillers	\$9.92	Less than high school
53-7051	Industrial Truck and Tractor Operators	\$13.68	Less than high school
53-3031	Driver/Sales Workers	\$11.53	High school diploma or equivalent
53-7011	Conveyor Operators and Tenders	\$11.70	Less than high school
49-9041	Industrial Machinery Mechanics	\$27.10	High school diploma or equivalent
49-9071	Maintenance and Repair Workers, General	\$13.18	High school diploma or equivalent
45-2091	Agricultural Equipment Operators	\$11.99	Less than high school

Source: EMSI 2014.3

As previously mentioned, these occupations are necessary for the Transportation & Distribution ecosystem to thrive. Just as important, they are necessary for other industries as well. Other industries that demand these occupations include Support Activities for Mining, General Freight Trucking, and Petroleum and Petroleum Products Wholesalers, among others.

Health Care (Regional Complementary)

Based on 2013 job numbers there are 4,430 jobs in the Health Care ecosystem in Western Oklahoma with average wages of \$38,740.

As a projection of demand, by 2020 total employment in the Health Care ecosystem will grow to 5,100 jobs in Western Oklahoma, an addition of 670 jobs for the region.

The list below encompasses some of the critical occupations for the Health Care ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Health Care ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
29-1141	Registered Nurses	\$25.69	Associate's degree
31-1014	Nursing Assistants	\$9.31	Postsecondary non-degree award
29-2061	Licensed Practical and Licensed Vocational Nurses	\$16.44	Postsecondary non-degree award
39-9021	Personal Care Aides	\$8.61	Short-term on-the-job training
31-1011	Home Health Aides	\$9.05	Short-term on-the-job training
31-9092	Medical Assistants	\$10.25	Postsecondary non-degree award
43-6013	Medical Secretaries	\$10.66	Moderate-term on-the-job training
29-2052	Pharmacy Technicians	\$12.36	Moderate-term on-the-job training
29-1051	Pharmacists	\$40.74	Doctoral or professional degree
29-2041	Emergency Medical Technicians and Paramedics	\$10.09	Postsecondary non-degree award

Source: EMSI 2014.3

As previously mentioned, these occupations are necessary for the Health Care ecosystem to thrive. Just as important, they are necessary for other industries as well. Other industries that demand these occupations include General and Medical Hospitals, Nursing Care Facilities, and Home Health Care Services, among others.

Construction (Regional Complementary)

Based on 2014 job numbers there are 5,000 jobs in the Construction ecosystem in Western Oklahoma with average wages of \$49,990.

As a projection of demand, by 2020 total employment in the Construction ecosystem will grow to 6,010 jobs in Western Oklahoma, an addition of 1,010 jobs for the region.

The list below encompasses some of the critical occupations for the Construction ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Construction ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
47-2061	Construction Laborers	\$12.36	Short-term on-the-job training
47-2031	Carpenters	\$13.81	Apprenticeship
47-2073	Operating Engineers and Other Construction Equipment Operators	\$16.72	Moderate-term on-the-job training
11-9021	Construction Managers	\$25.02	Moderate-term on-the-job training
47-2152	Plumbers, Pipefitters, and Steamfitters	\$16.87	Apprenticeship
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$18.46	Postsecondary non-degree award
51-4041	Machinists	\$15.68	Long-term on-the-job training
49-9051	Electrical Power-Line Installers and Repairers	\$25.10	Long-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.05	Short-term on-the-job training
47-2111	Electricians	\$19.78	Apprenticeship
47-2051	Cement Masons and Concrete Finishers	\$12.87	Moderate-term on-the-job training
47-2141	Painters, Construction and Maintenance	\$13.08	Moderate-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$15.42	Moderate-term on-the-job training

Source: EMSI 2014.3

As previously mentioned, these occupations are necessary for the Construction ecosystem to thrive. Just as important, they are necessary for other industries as well. Other industries that demand these occupations include General Freight Trucking, Support Activities for Mining, Site Preparation Contractors, and Oil and Gas Pipeline Construction among others in Western Oklahoma.

Manufacturing (Regional Complementary)

Based on 2014 job numbers there are 2,100 jobs in the Manufacturing ecosystem in Western Oklahoma with average wages of \$58,210.

As a projection of demand, by 2020 total employment in the Manufacturing ecosystem will increase to 2,380 jobs in Western Oklahoma, a gain of 280 jobs for the region.

The list below encompasses some of the critical occupations for the Manufacturing ecosystem in Western Oklahoma. However, these occupations are not solely intended to serve the Manufacturing ecosystem, they are driven by demand and individuals with these work backgrounds will have transferable skills to other ecosystems.

SOC	Occupation	Median Hourly Earnings	Education Level
51-4041	Machinists	\$15.68	Long-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$15.42	Moderate-term on-the-job training
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	\$13.44	Short-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$26.50	Long-term on-the-job training
51-2092	Team Assemblers	\$14.44	Moderate-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$17.76	Moderate-term on-the-job training
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	\$13.82	Moderate-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.05	Short-term on-the-job training
51-2041	Structural Metal Fabricators and Fitters	\$16.48	Moderate-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$13.96	Long-term on-the-job training
51-9111	Packaging and Filling Machine Operators and Tenders	\$12.82	Moderate-term on-the-job training
51-9198	Helpers--Production Workers	\$12.83	Short-term on-the-job training
51-3023	Slaughterers and Meat Packers	\$13.10	Short-term on-the-job training

Source: EMSI 2014.3

As previously mentioned, these occupations are necessary for the Manufacturing ecosystem to thrive. Just as important, they are necessary for other industries as well. Other industries that demand these occupations include Support Activities for Mining, Meat Processing, and Oil and Gas Field Machine Manufacturing, among others.