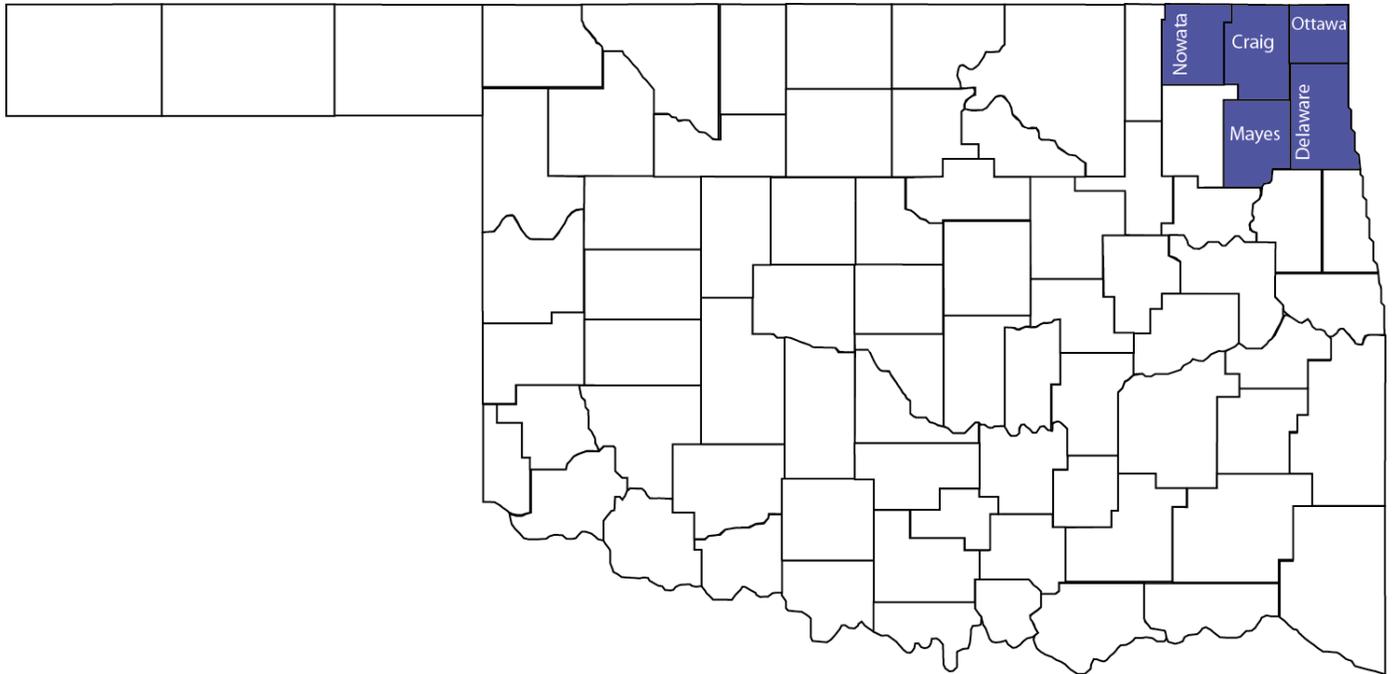


Northeastern Oklahoma Ecosystem Briefing

September 2014

Overview

The Northeastern Oklahoma Ecosystem is comprised of five counties: Craig, Delaware, Mayes, Nowata, and Ottawa.

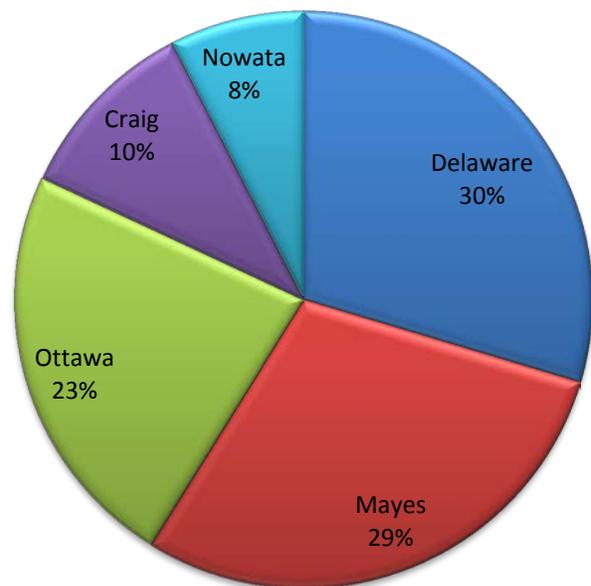


Population of Northeastern Oklahoma

Craig, Delaware, Mayes, Nowata, and Ottawa counties combine for an estimated population of 139,653. Northeastern Oklahoma is home to approximately 3.6% of the population in the state. Miami is the largest city in the region with an estimated population of 13,758.

- According to the 2013 Census estimate, Delaware County is the most populated county in the region with an estimated population of 41,377. Mayes County is a close second with 40,804 people.
- Nowata County is the least populated county in the region, with an estimated population of 10,555.
- Since 2010, three of the counties in the region have experienced population decline. Craig County at -2.4%; Mayes County at -1.1%; and Delaware County at -0.3%
- Ottawa County experienced the highest growth at 1.2% while Nowata County saw growth of 0.2%

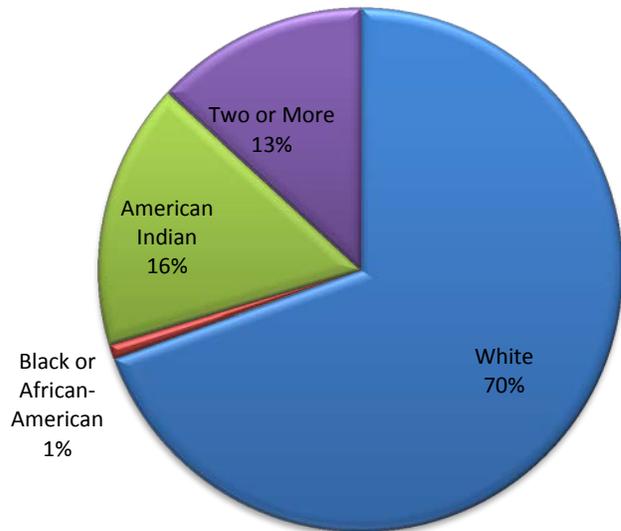
Northeastern Oklahoma Percentage of Population by County



Source: ACS 2008-2012

Northeastern Oklahoma Population Breakdown by Race:

- 68.3% of residents in Northeastern Oklahoma identify themselves as White. This is below the statewide average of 75.5%.
- With 22,642 people, American Indian is the second most populous group in Northeastern Oklahoma. They account for 16.2% of the population.
- Two or More Races consist of 12.9% of the population. Black or African-American, 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 3.1% of the total population in Northeastern Oklahoma, well below the statewide average of 9.6%.

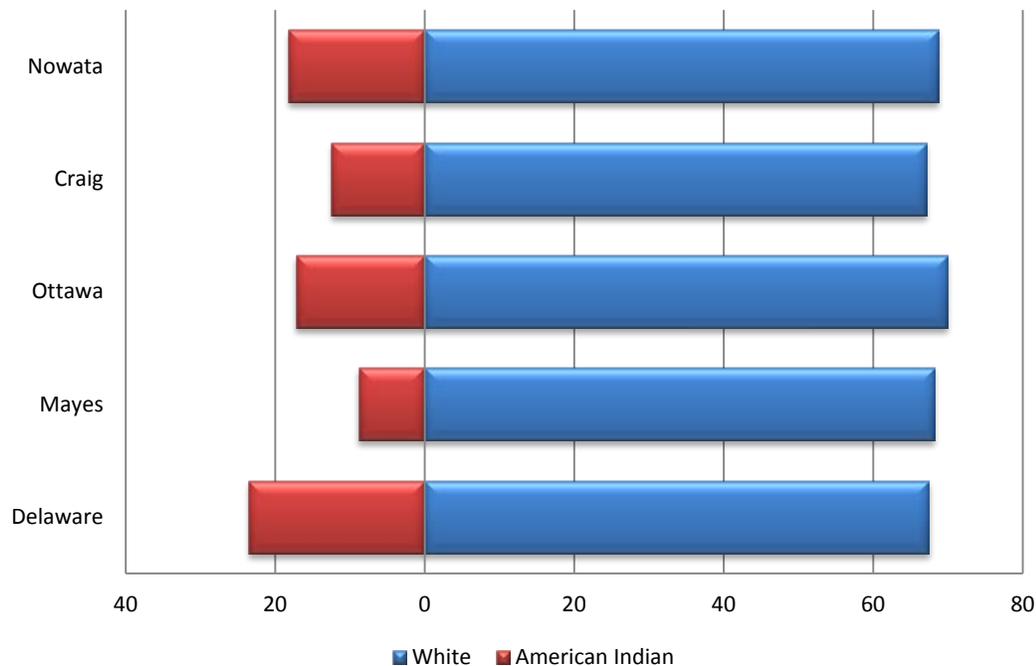


Source: ACS 2008-2012

The American Indian Population in Northeastern Oklahoma

- Native Americans are the second most populous racial group in Northeast Oklahoma accounting for 22,642 people.
- Delaware County has the most Native American residents at 9,707 and the highest percentage of Native Americans in the region at 23.5%.
- There are eight Native American tribes based in Northeast Oklahoma: the Miami Nation in Miami (Ottawa County); the Shawnee Tribe in Miami; the Seneca-Cayuga Tribe of Oklahoma in Miami; the Peoria Tribe of Indians of Oklahoma in Miami; the Ottawa Tribe in Miami; the Quapaw Tribe in Miami; the Modoc Tribe in Miami; and the Wyandotte Nation in Wyandotte (Ottawa County).

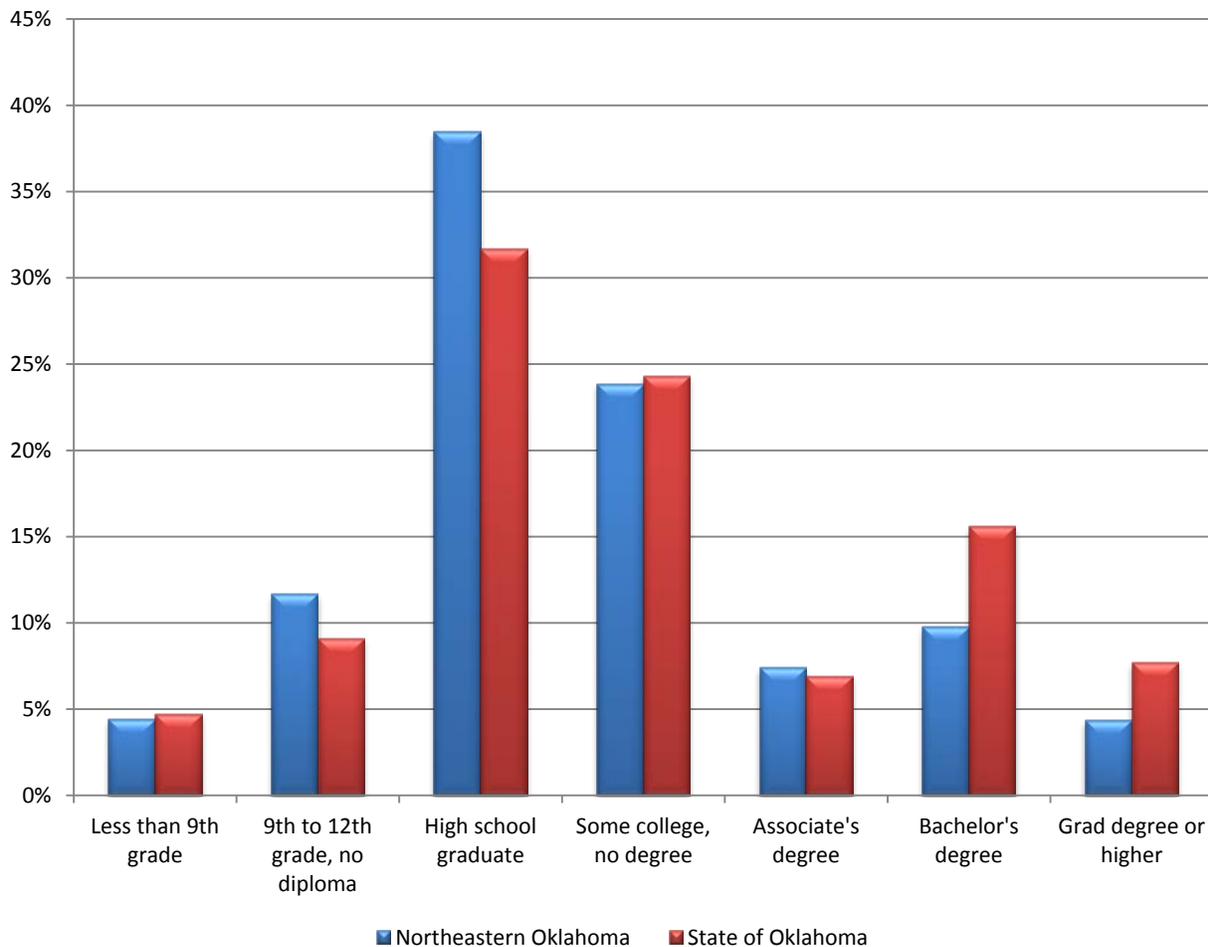
Comparison of American Indian to White, alone population in Northeastern Oklahoma, by percentage



Source: ACS 2008-2012

Educational Attainment in Northeastern Oklahoma:

- 83.9% of people residing in Northeastern Oklahoma have attained at least a high school diploma.
- Northeastern Oklahoma lags behind the state averages in each category of post-secondary educational attainment, with the exception of Associate’s degree.
- In terms of the furthest level of educational attainment, Northeastern Oklahoma has a lower level of “Less than 9th grade”, but higher levels of “9th to 12th grade”, and “High school graduate” than the state average.
- “Some college, no degree”, and “Associate’s degree” are very comparable to state averages. However, “Bachelor’s degree” and “Grad degree or higher” are much lower than state averages.

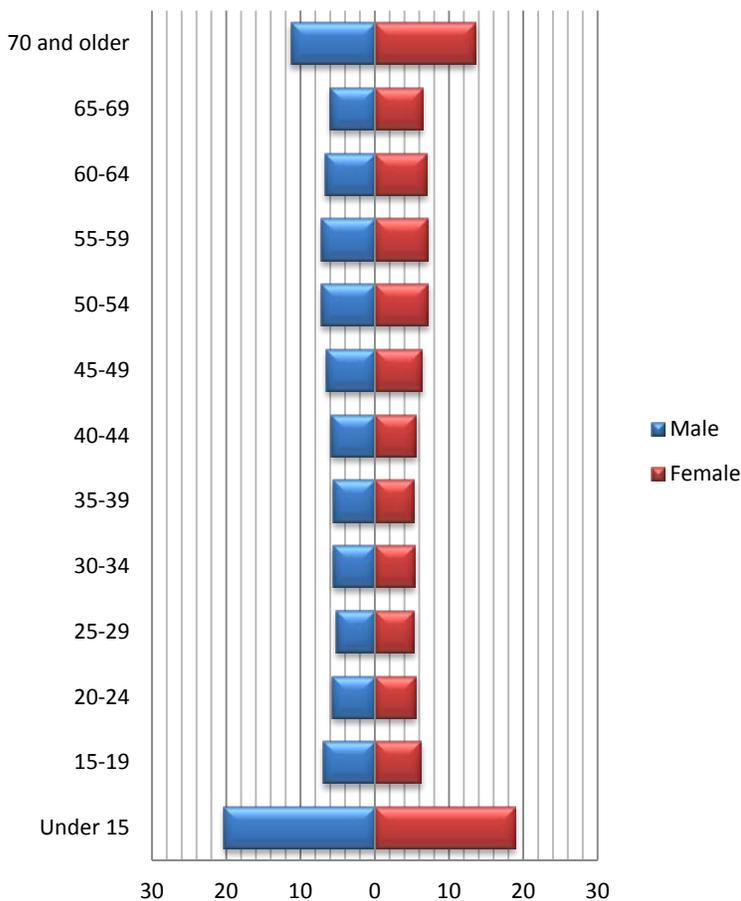


Source: ACS 2008-2012

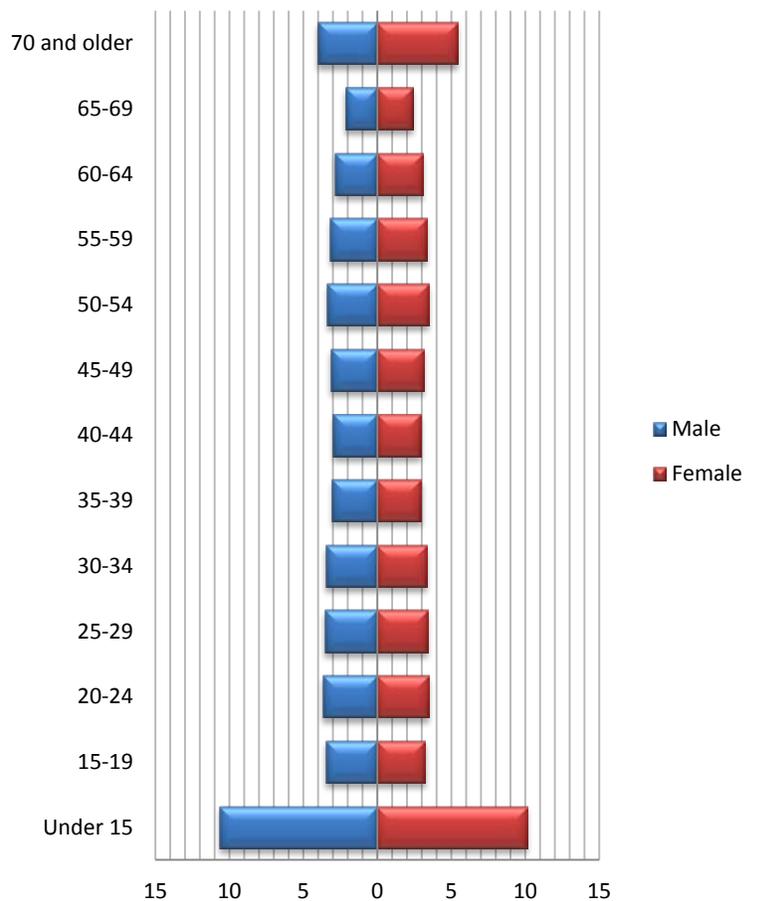
Age and Sex Data in Northeastern Oklahoma:

- According to EMSI’s second quarter of 2014 population estimate, there are 141,604 people living in Northeastern Oklahoma. Of that, there are 70,051 men and 71,554 women. 49.5% of the population in Northeastern Oklahoma is male and 50.5% is female.
- Statewide, EMSI calculates Oklahoma has a population of 3,867,960. Of that, men make up 50.4% of the population, while women make up 49.6%. In real numbers that comes out to 1,950,115 men and 1,917,845 women.
- The general trend in population figures is fairly consistent when comparing the Northeastern 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.
- Northeastern Oklahoma’s hourglass shape is a little more pronounced than the state average. The region has a higher percentage of individuals Under 15 and a smaller percentage of individuals age 25-39.
- The largest age cohort in Northeastern Oklahoma is Under 15.

Northeastern Oklahoma Age/Sex Data by Percentage of Population



Oklahoma Age/Sex Data by Percentage of Population



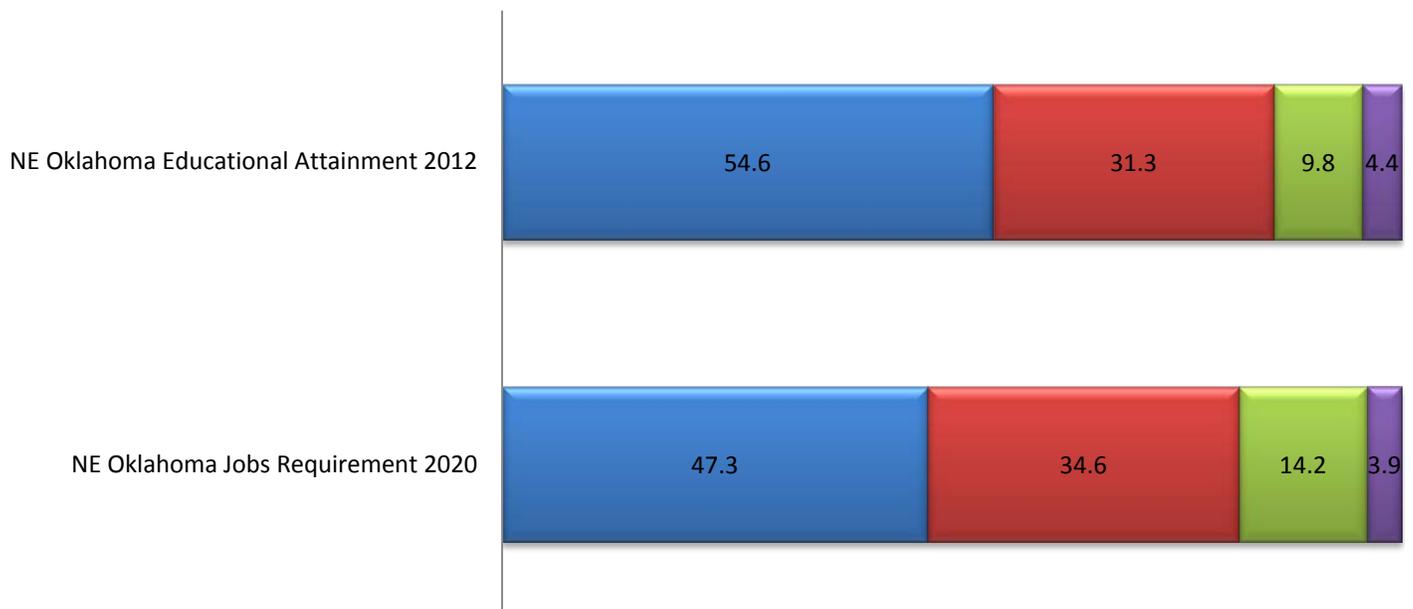
Source: EMSI 2014.2

Northeastern Oklahoma Education Gap

- Based on projected demand, Northeastern Oklahoma will continue to have a large percentage of jobs that require a high school degree or less. However, by 2020 there will be a gap for jobs that require post-secondary training or an Associate’s Degree. Fortunately, there are post-secondary educational centers in the region to provide necessary skills to residents and help alleviate the training gap.
- There is a gap in three of the four sectors listed below. The greatest gap comes in jobs requiring a high school degree or less by 2020. This indicates there will be a higher percentage of people that have high school degrees or less, than jobs available that require a high school degree or less.
- There is a slight surplus of individuals in the Grad Degree or Higher category compared with job requirements for that sector in 2020.

Northeastern Oklahoma Educational Gap for Jobs by 2020

■ High School or Less ■ Post-Secondary Training, Associate's Degree ■ Bachelor's Degree ■ Grad Degree or Higher



Source: EMSI 2014.2 Class of Worker; US Census Quick Facts

Northeastern Oklahoma Educational Assets

CareerTechs, colleges and universities in Northeastern 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

Northeast Technology Center

- (Pryor, Afton, Kansas)

Colleges and Universities

In addition to the Career Techs in the region, there is one college and one university.

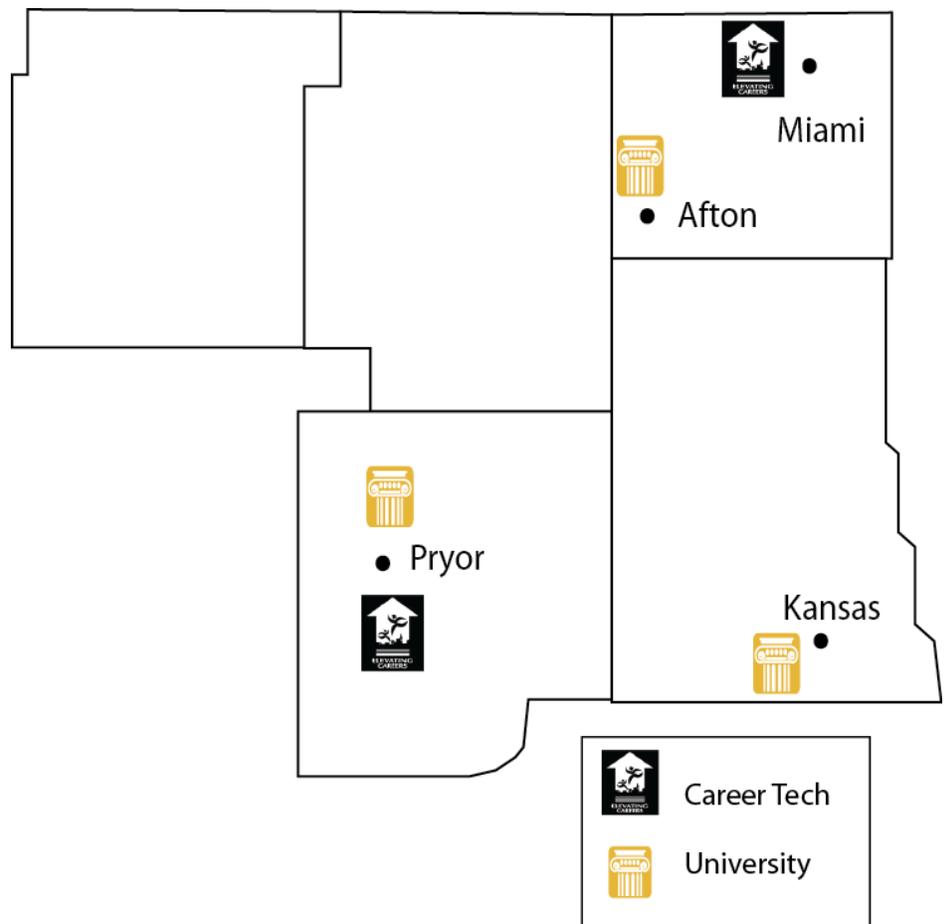
Rogers State University

- (Pryor)

Northeastern Oklahoma College A&M

- (Miami)

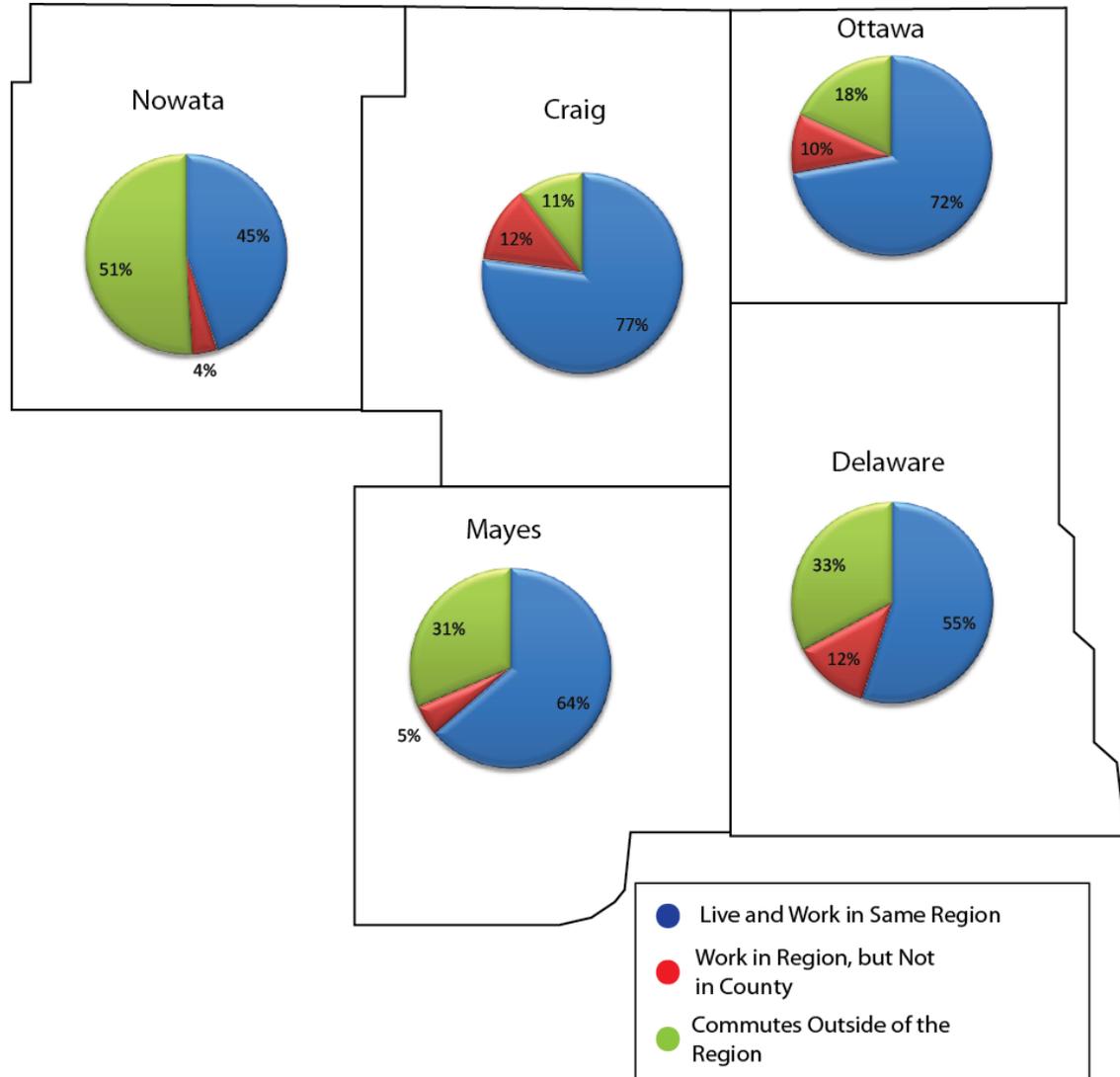
Trend: In 2012-2013 there were 472 Associate's degrees and Certificates awarded in the region.



Source: OK CareerTech; Oklahoma State Regents for Higher Education

Commuter Data

- According to the commuting data, 63.3% of the people in Northeastern Oklahoma work in the county they live, however, nearly a third leave the region when commuting to their workplace.
- All five counties have more than 10% of the population travel outside the region for work.
- Ottawa County is home to the largest city in the region (Miami) but has the second highest percentage of people who live and work in the same region, and the second lowest percentage of people who commute outside of the region.
- More than half of the workforce in Nowata County leaves the region for work.
- As a whole, the majority of people live and work in the same region, however there is a large percentage of people who leave their county or region for work. This data illustrates that while residents would prefer to stay within close distance to their homes when commuting to their workplaces, if there are jobs available outside of their county or region, people will commute.



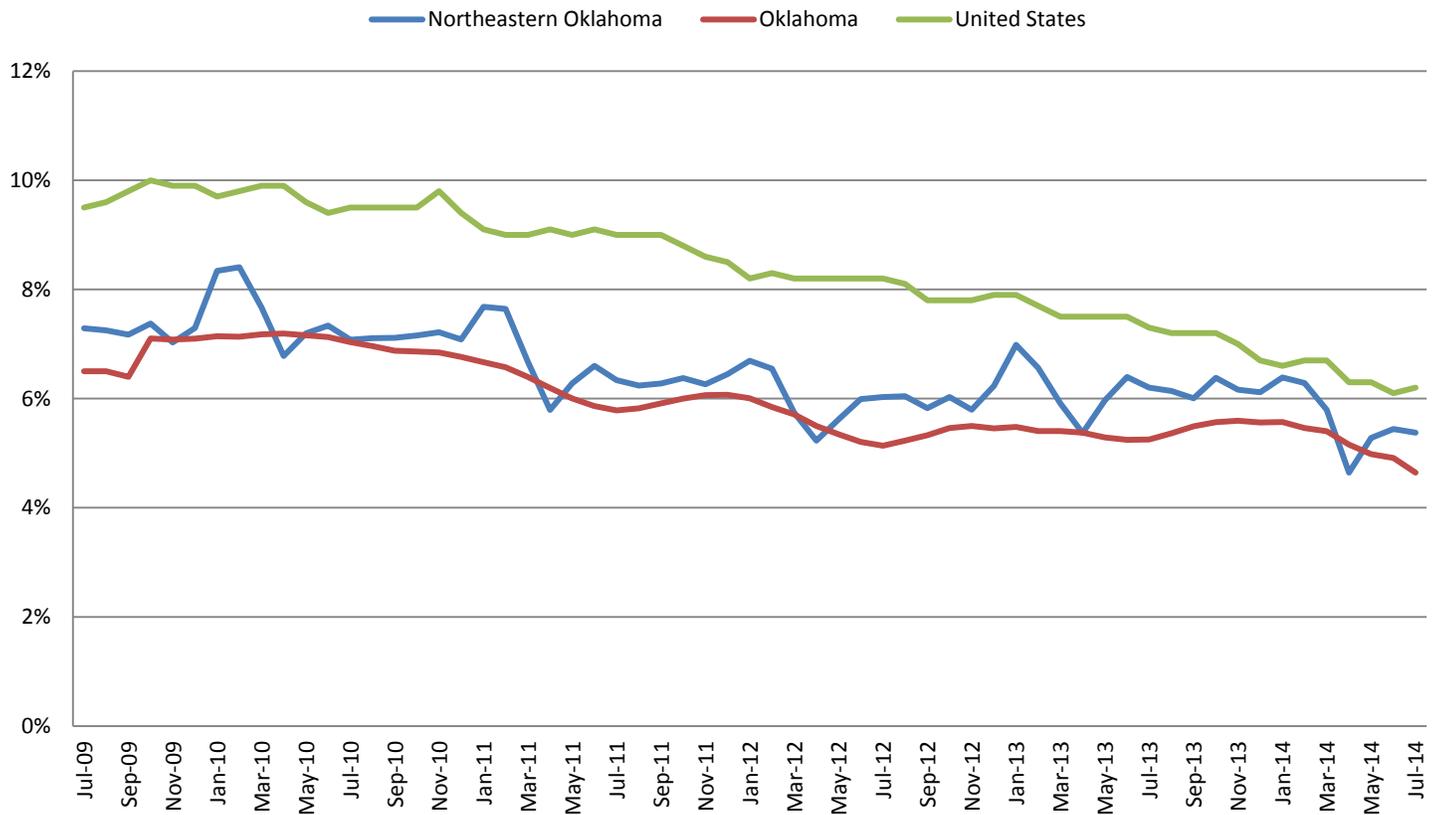
Source: ACS Residence County to Workplace County Flows for the United States and Puerto Rico

Economic Data

Unemployment Rate:

- Since July 2009, Northeastern Oklahoma has stayed close to the statewide unemployment rate. After reaching a peak of 8.4% in February 2010, the Northeastern Oklahoma unemployment rate gradually declined over the five year period. The Northeastern Oklahoma unemployment rate is 5.4% as of July 2014.
- The Northeastern Oklahoma unemployment rate has been consistent with the state average over the five year period, but dropped substantially in 2014. Both Northeastern Oklahoma and the state average unemployment rate have stayed below the national average over the five year period.
- Both Northeastern Oklahoma and the State of Oklahoma have maintained a gradual declining trend in unemployment rates since peaking in February 2010.

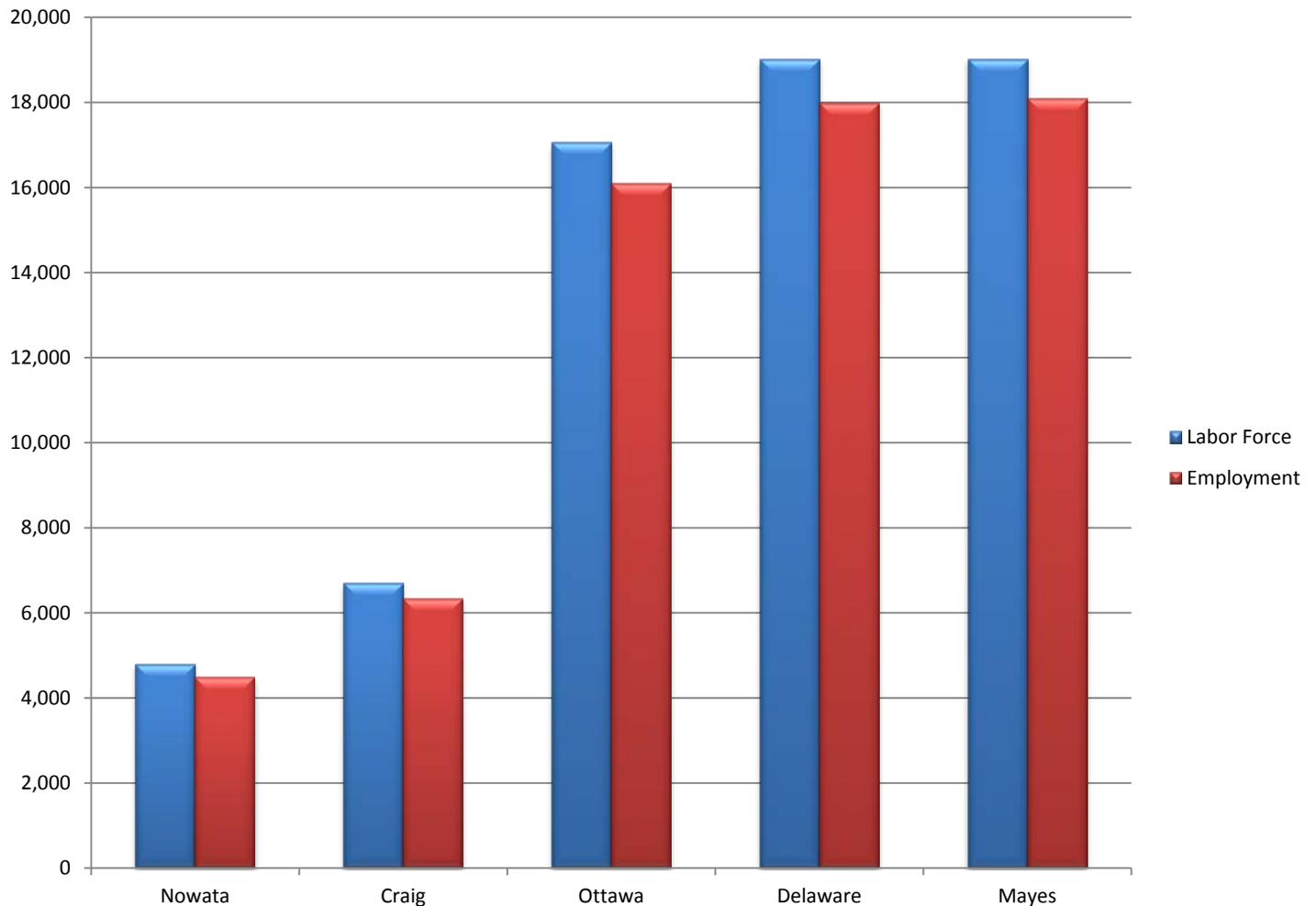
Five Year Unemployment Rate- Northeastern Oklahoma, State of Oklahoma, and Nationally



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

Total Employment:

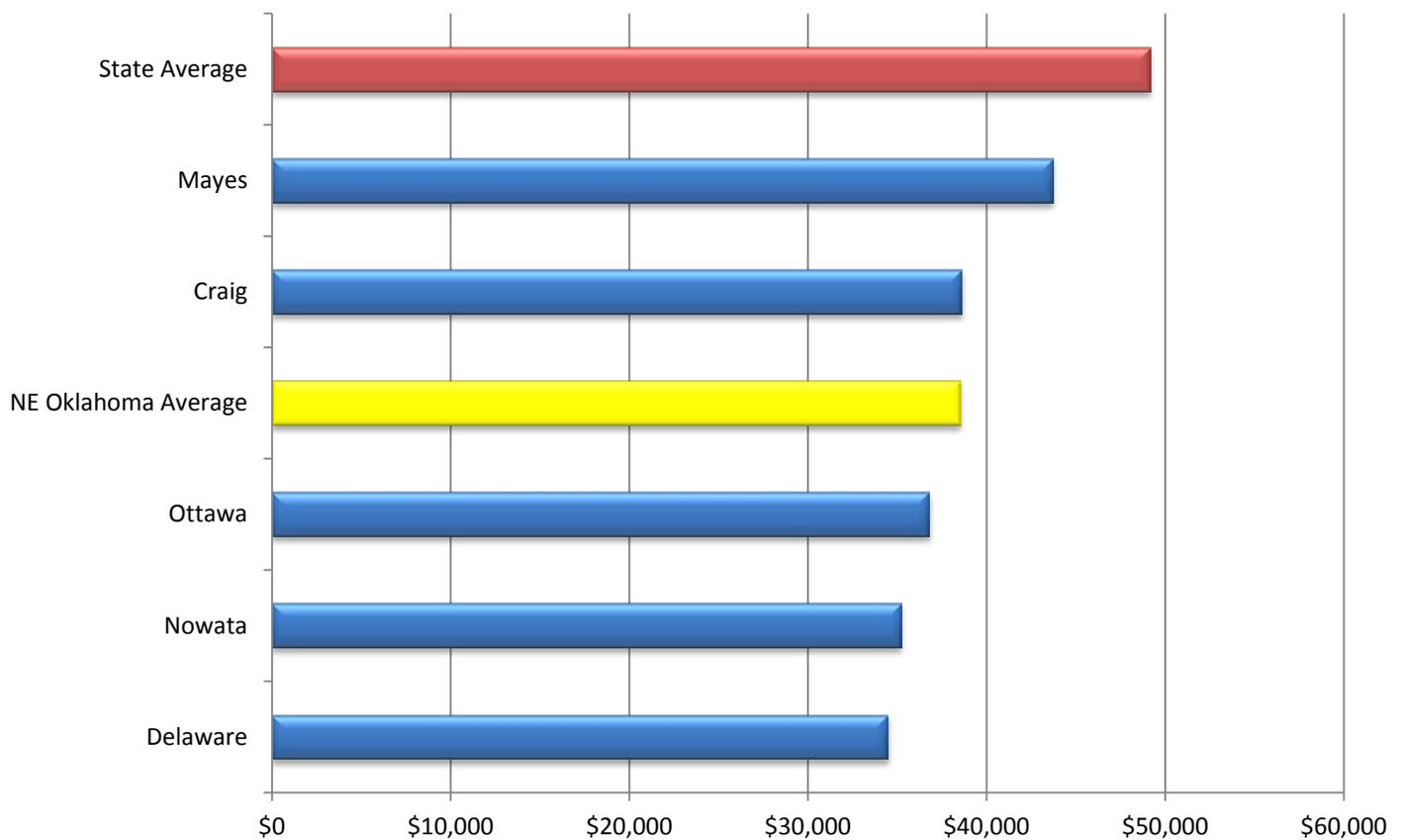
- In real numbers, 66,606 people in Northeastern Oklahoma are in the labor force, and 63,026 are employed. That equates to 94.6% of the labor force in the region is employed.
- Mayes, Delaware, and Ottawa counties possess the largest population, largest labor force and largest number of people employed in the region.
- Nowata County has the smallest labor force in the region, and the highest unemployment rate.



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

Wages by County:

- The Northeastern Oklahoma average wage is \$38,550; this is less than the state average of \$49,150 by \$10,600. The gap between the Northeastern Oklahoma counties and the state average ranges from \$5,450 less in Mayes County to \$14,650 less in Delaware County.
- As a region, the average wages are below the state average.
- Delaware County is the most populous county in the region, but has the lowest average wage.
- Mayes County is the second most populous county in the region, but has the highest average wage.

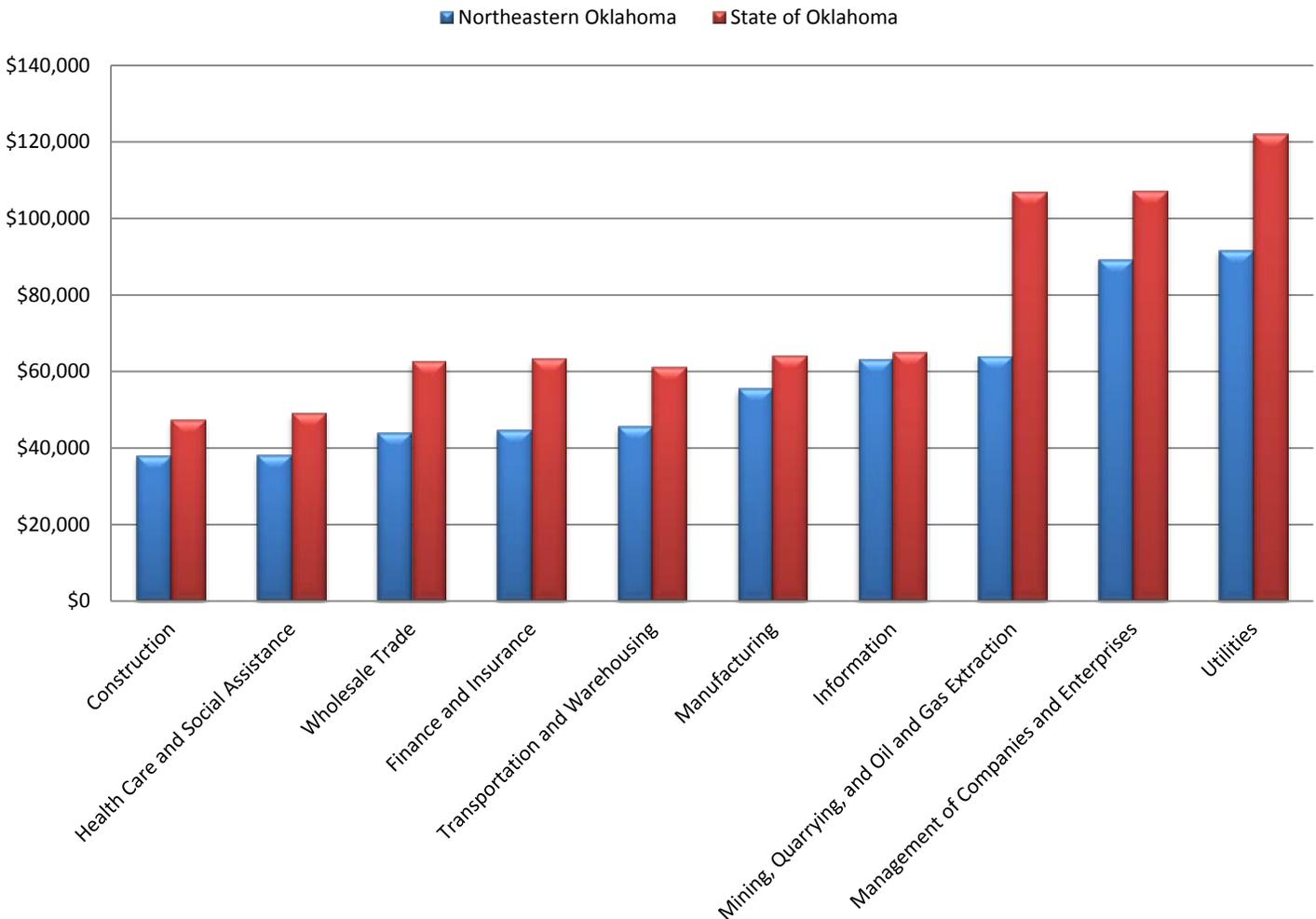


Source: EMSI 2014.2

Wages by Industry:

- All industry earnings in Northeastern Oklahoma lag behind state averages. The largest wage difference occurs in the “Mining, Quarrying, and Oil and Gas Extraction” industry. Statewide this position earns \$43,100 more than in Northeastern Oklahoma.
- The industries in Northeastern Oklahoma that compare closest to state averages are, “Information,” “Manufacturing”, and “Health Care and Social Assistance”.
- “Transportation and Warehousing,” “Finance and Insurance,” “Wholesale Trade,” “Health Care and Social Assistance,” and “Construction” are the top industries in Northeastern Oklahoma that are below the state’s yearly average earnings of \$49,200.

Average Earnings by Industry in Northeastern Oklahoma and State of Oklahoma



Source: ESMI 2014.2

Major Employers in Northeastern Oklahoma

Listed below are some of the more significant employers in the region. Commerce in Northeastern Oklahoma is not primarily concentrated in any one area; however there are a significant number of entertainment, education, and health and social service employers in the area.

Employer	City	Industry
Downstream Casino Resort	Quapaw	Casino Hotel
Cherokee Nation Entertainment	West Siloam Springs	Casino
Peoplelink Staffing	Pryor	Temporary Help Services
Grand River Dam Authority	Vinita	Electric Power Distribution
Indigo Sky Casino	Wyandotte	Casino
Grove Public Schools	Grove	Elementary and Secondary Schools
Pryor Public Schools	Pryor	Elementary and Secondary Schools
Miami Public Schools	Miami	Elementary and Secondary Schools
Craig General Hospital	Vinita	General Medical and Surgical Hospital
Wal-Mart	Miami	Warehouse Clubs and Supercenters
Northeastern Oklahoma A&M College	Miami	Junior College
Wal-Mart	Pryor	Warehouse Clubs and Supercenters
Orchids Paper Products Company	Pryor	Paper Mill
INTEGRIS Baptist Regional Hospital	Miami	General Medical and Surgical Hospital
American Castings, LLC	Pryor	Iron Foundry
Wal-Mart	Grove	Warehouse Clubs and Supercenters
Department of Mental Health and Substance Abuse	Vinita	Psychiatric and Substance Abuse Hospital
Northeast Technology Center	Pryor	Technical and Trade School
Jay Public Schools	Jay	Elementary and Secondary Schools
Buffalo Run Casino	Miami	Casino
Vinita Public Schools	Vinita	Elementary and Secondary Schools

Source: EMSI 2014.2, OneSource

Ecosystems Impact in Northeastern 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 940 jobs in the Aerospace & Defense Ecosystem in Northeastern Oklahoma with average earnings of approximately \$43,000.

As a projection of demand by 2020, total employment in the Aerospace and Defense ecosystem will increase to 920 jobs in Northeastern Oklahoma, a loss of 20 jobs for the region.

The list below encompasses some of the critical occupations for the Aerospace and Defense ecosystem in Northeastern 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	\$15.37	N/A
49-9041	Industrial Machinery Mechanics	\$20.59	Long-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$14.47	Moderate-term on-the-job training
51-4041	Machinists	\$15.17	Long-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$14.83	Moderate-term on-the-job training
51-2092	Team Assemblers	\$13.19	Moderate-term on-the-job training
51-2022	Electrical and Electronic Equipment Assemblers	\$11.81	Short-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$13.15	Long-term on-the-job training
15-1131	Computer Programmers	\$29.07	Bachelor's degree
49-3011	Aircraft Mechanics and Service Technicians	\$23.72	Postsecondary non-degree award

Source: EMSI 2014.2

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 Manufacturing, Wholesale Trade, and Construction, among others in Northeastern Oklahoma.

Energy

Based on 2014 job numbers there are 1,100 jobs in the Energy Ecosystem in Northeastern Oklahoma with average earnings of \$64,700.

As a projection of demand, by 2020 total employment in the Energy ecosystem will grow to 1,330 jobs in Northeastern Oklahoma, an addition of 230 jobs for the region.

The list below encompasses some of the critical occupations for the Energy ecosystem in Northeastern 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	Description	Median Hourly Earnings	Education Level
51-2092	Team Assemblers	\$12.47	Moderate-term on-the-job training
49-9051	Electrical Power-Line Installers and Repairers	\$26.03	Long-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$14.47	Moderate-term on-the-job training
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$15.19	Postsecondary non-degree award
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$13.56	Moderate-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$11.68	Long-term on-the-job training
51-4041	Machinists	\$15.17	Long-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$20.59	Long-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.50	Short-term on-the-job training
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	\$20.08	Long-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.44	Short-term on-the-job training
51-2023	Electromechanical Equipment Assemblers	\$31.33	Short-term on-the-job training
49-9052	Telecommunications Line Installers and Repairers	\$30.54	Long-term on-the-job training
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$14.75	Moderate-term on-the-job training
51-8013	Power Plant Operators	\$29.45	Long-term on-the-job training
43-5041	Meter Readers, Utilities	\$11.19	Short-term on-the-job training

Source: EMSI 2014.2

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, Utility Companies, and heating and air conditioning companies.

Agriculture & Bioscience

Based on 2014 job numbers there are 3,700 jobs in the Agriculture & Bioscience ecosystem in Northeastern Oklahoma with average earnings of \$42,800.

As a projection of demand, by 2020 total employment in the Agriculture and Bioscience ecosystem will increase to 3,580 jobs in Northeastern Oklahoma, a loss of 120 jobs for the region.

The list below encompasses some of the critical occupations for the Agriculture and Bioscience ecosystem in Northeastern 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	Description	Median Hourly Earnings	Education Level
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	\$10.28	Short-term on-the-job training
11-9013	Farmers, Ranchers, and Other Agricultural Managers	\$11.14	High school diploma or equivalent
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	\$10.29	Short-term on-the-job training
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	\$8.93	Short-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.50	Short-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.44	Short-term on-the-job training
51-9111	Packaging and Filling Machine Operators and Tenders	\$11.24	Moderate-term on-the-job training
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$15.19	Postsecondary non-degree award
49-9071	Maintenance and Repair Workers, General	\$11.68	Long-term on-the-job training
53-7064	Packers and Packers, Hand	\$9.23	Short-term on-the-job training
45-2091	Agricultural Equipment Operators	\$9.98	Short-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$20.59	Long-term on-the-job training

Source: EMSI 2014.2

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 Farm Workers, General Freight and Trucking, and Merchant Wholesalers, among others in Northeastern Oklahoma.

Information & Financial Services

Based on 2014 job numbers there are 1,500 jobs in the Information & Financial Services ecosystem in Northeastern Oklahoma with average wages of \$51,000

As a projection of demand, by 2020 total employment in the Information and Financial Services ecosystem will increase to 1,550 jobs in Northeastern Oklahoma, an increase of 50 jobs for the region.

The list below encompasses some of the critical occupations for the Information and Financial Services ecosystem in Northeastern 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	Description	Median Hourly Earnings	Education Level
43-3071	Tellers	\$9.63	Short-term on-the-job training
13-2072	Loan Officers	\$20.24	Bachelor's degree
13-2011	Accountants and Auditors	\$19.58	Bachelor's degree
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$12.00	Moderate-term on-the-job training
43-4131	Loan Interviewers and Clerks	\$11.78	Short-term on-the-job training
13-1031	Claims Adjusters, Examiners, and Investigators	\$21.82	Long-term on-the-job training
11-3031	Financial Managers	\$26.06	Bachelor's degree
13-2052	Personal Financial Advisors	\$22.00	Bachelor's degree
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	\$21.64	Postsecondary non-degree award
49-9052	Telecommunications Line Installers and Repairers	\$30.54	Long-term on-the-job training
43-3011	Bill and Account Collectors	\$14.30	Moderate-term on-the-job training
41-3021	Insurance Sales Agents	\$19.25	Moderate-term on-the-job training
13-2082	Tax Preparers	\$17.88	Moderate-term on-the-job training

Source: EMSI 2014.2

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, Professional Services, and Telecommunication providers, among others.

Transportation & Distribution

Based on 2014 job numbers there are 2,100 jobs in the Transportation & Distribution ecosystem in Northeastern Oklahoma with average earnings of \$49,000.

As a projection of demand, by 2020 total employment in the Transportation and Distribution ecosystem will increase to 2,200, a gain of 100 jobs for the region.

The list below encompasses some of the critical occupations for the Transportation and Distribution ecosystem in Northeastern 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	Description	Median Hourly Earnings	Education Level
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$15.19	Short-term on-the-job training
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$16.57	Moderate-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.50	Short-term on-the-job training
51-2092	Team Assemblers	\$12.47	Moderate-term on-the-job training
53-3033	Light Truck or Delivery Services Drivers	\$11.30	Short-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$14.47	Moderate-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.44	Short-term on-the-job training
43-5071	Shipping, Receiving, and Traffic Clerks	\$12.09	Short-term on-the-job training
51-4041	Machinists	\$15.17	Long-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$11.68	Long-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$13.56	Moderate-term on-the-job training
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$15.54	Long-term on-the-job training

Source: EMSI 2014.2

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 General Freight Trucking, Manufacturing, and Construction, among others.

Health Care (Regional Complementary)

Based on 2014 job numbers there are 4,320 jobs in the Health Care ecosystem in Northeastern Oklahoma with average wages of \$40,650.

As a projection of demand, by 2020 total employment in the Health Care ecosystem will grow to 5,000 jobs in Northeastern Oklahoma, an addition of 680 jobs for the region.

The list below encompasses some of the critical occupations for the Health Care ecosystem in Northeastern 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	Description	Median Hourly Earnings	Education Level
31-1014	Nursing Assistants	\$9.61	Postsecondary non-degree award
29-1141	Registered Nurses	\$25.24	Associate's degree
31-1011	Home Health Aides	\$10.29	Short-term on-the-job training
39-9021	Personal Care Aides	\$8.50	Short-term on-the-job training
29-2061	Licensed Practical and Licensed Vocational Nurses	\$15.62	Postsecondary non-degree award
37-2012	Maids and Housekeeping Cleaners	\$8.14	Short-term on-the-job training
31-9092	Medical Assistants	\$10.57	Postsecondary non-degree award
43-6013	Medical Secretaries	\$12.57	Moderate-term on-the-job training
11-9111	Medical and Health Services Managers	\$31.05	Bachelor's degree
31-9091	Dental Assistants	\$14.30	Postsecondary non-degree award
31-1013	Psychiatric Aides	\$9.07	Short-term on-the-job training
29-1069	Physicians and Surgeons, All Other	\$84.09	Doctoral or professional degree

Source: EMSI 2014.2

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 Nursing Care Facilities, Home Health Care Services, Hospitals, and Physicians offices, among others.

Construction (Regional Complementary)

Based on 2014 job numbers there are 5,890 jobs in the Construction ecosystem in Northeastern Oklahoma with average wages of \$41,800.

As a projection of demand, by 2020 total employment in the Construction ecosystem will grow to 6,340 jobs in Northeastern Oklahoma, an addition of 450 jobs for the region.

The list below encompasses some of the critical occupations for the Construction ecosystem in Northeastern 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	Description	Median Hourly Earnings	Education Level
47-2061	Construction Laborers	\$11.52	Short-term on-the-job training
47-2031	Carpenters	\$12.62	Apprenticeship
51-4041	Machinists	\$15.17	Long-term on-the-job training
51-2092	Team Assemblers	\$12.47	Moderate-term on-the-job training
47-2111	Electricians	\$20.65	Apprenticeship
47-2152	Plumbers, Pipefitters, and Steamfitters	\$16.92	Apprenticeship
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$15.19	Postsecondary non-degree award
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$18.67	Postsecondary non-degree award
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$13.56	Moderate-term on-the-job training
47-2051	Cement Masons and Concrete Finishers	\$13.27	Moderate-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.44	Short-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$14.47	Moderate-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$11.68	Long-term on-the-job training
47-2221	Structural Iron and Steel Workers	\$15.60	Apprenticeship

Source: EMSI 2014.2

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, Site Preparation Contractors, and Plumbing, Heating, and Air Conditioning Contractors, among others in Northeastern Oklahoma.

Manufacturing (Regional Complementary)

Based on 2013 job numbers there are 5,120 jobs in the Manufacturing ecosystem in Northeastern Oklahoma with average wages of \$55,500.

As a projection of demand, by 2020 total employment in the Manufacturing ecosystem will increase to 5,140 jobs in Northeastern Oklahoma, a gain of 20 jobs for the region.

The list below encompasses some of the critical occupations for the Manufacturing ecosystem in Northeastern 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	Description	Median Hourly Earnings	Education Level
51-2092	Team Assemblers	\$12.47	Moderate-term on-the-job training
51-4041	Machinists	\$15.17	Long-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$13.56	Moderate-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.44	Short-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$14.47	Moderate-term on-the-job training
51-9198	Helpers--Production Workers	\$11.71	Short-term on-the-job training
49-9071	Maintenance and Repair Workers, General	\$11.68	Long-term on-the-job training
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$15.19	Postsecondary non-degree award
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.50	Short-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$20.59	Long-term on-the-job training
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$12.92	Moderate-term on-the-job training
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$25.27	Moderate-term on-the-job training
51-9196	Paper Goods Machine Setters, Operators, and Tenders	\$21.59	Moderate-term on-the-job training

Source: EMSI 2014.2

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 General Freight Trucking, Machine Shops, and General Manufacturing, among others.