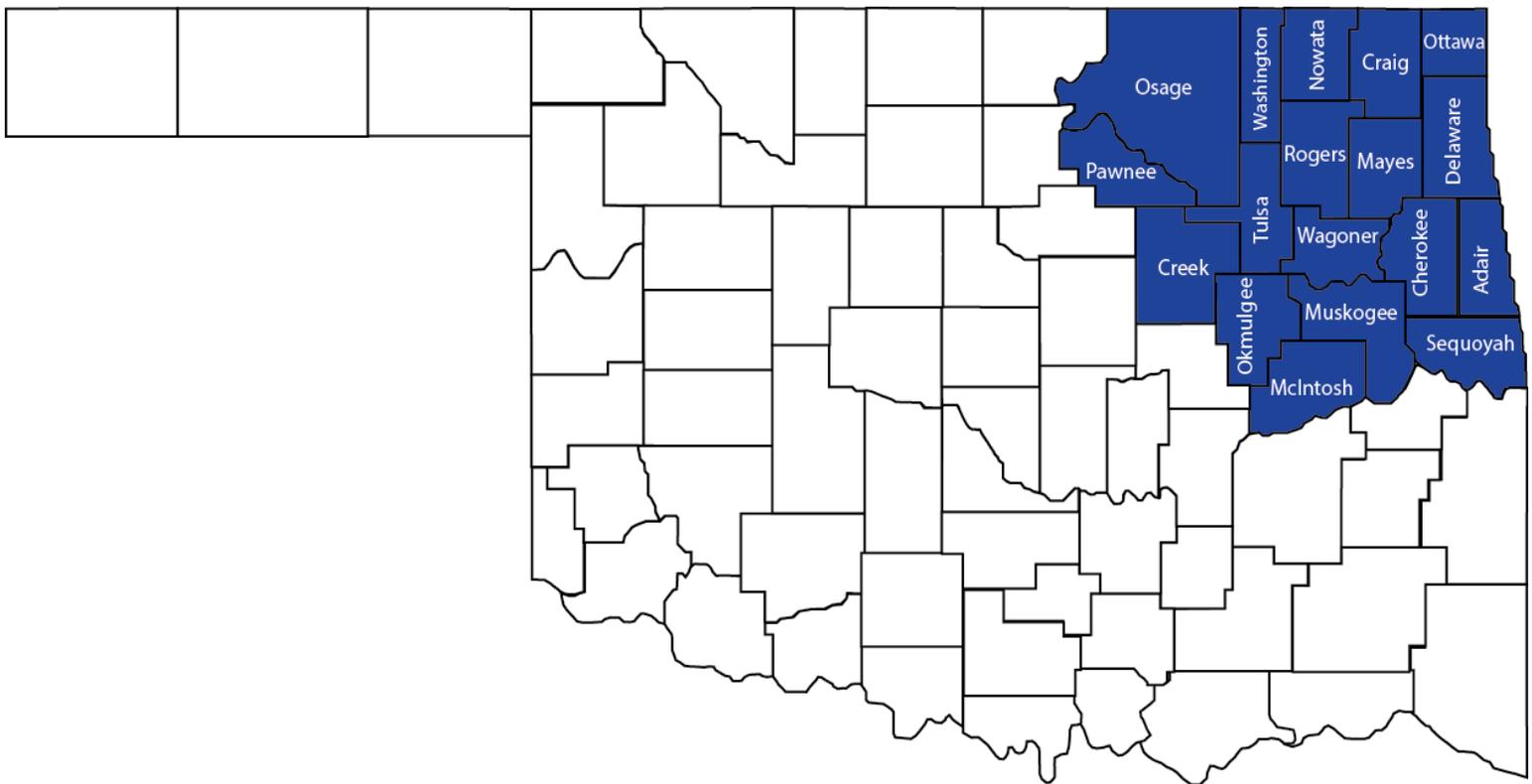


# Northeast Oklahoma Planning Region

April 2016

## Overview and Purpose

The Workforce Innovation and Opportunity Act (WIOA) represents a commitment to workforce development for individual and national economic growth. WIOA seeks to increase opportunities for individuals, especially those facing barriers to employment, and invests in the imperative connection between education and the career preparation. Planning regions have been created based on state labor market areas, regional economic development areas, and funding mechanisms for educational centers including colleges, universities, and CareerTechs. One primary purpose of the planning regions is to foster necessary partnerships that reduce costs and meet training needs of Oklahoma's workforce. Planning regions allow to more effectively prioritize training for in-demand occupations unique to the area, while streamlining efficiency. The Northeast Oklahoma Planning Region is comprised of eighteen counties: Adair, Cherokee, Craig, Creek, Delaware, Mayes, McIntosh, Muskogee, Nowata, Okmulgee, Osage, Ottawa, Pawnee, Rogers, Tulsa, Wagoner, and Washington.

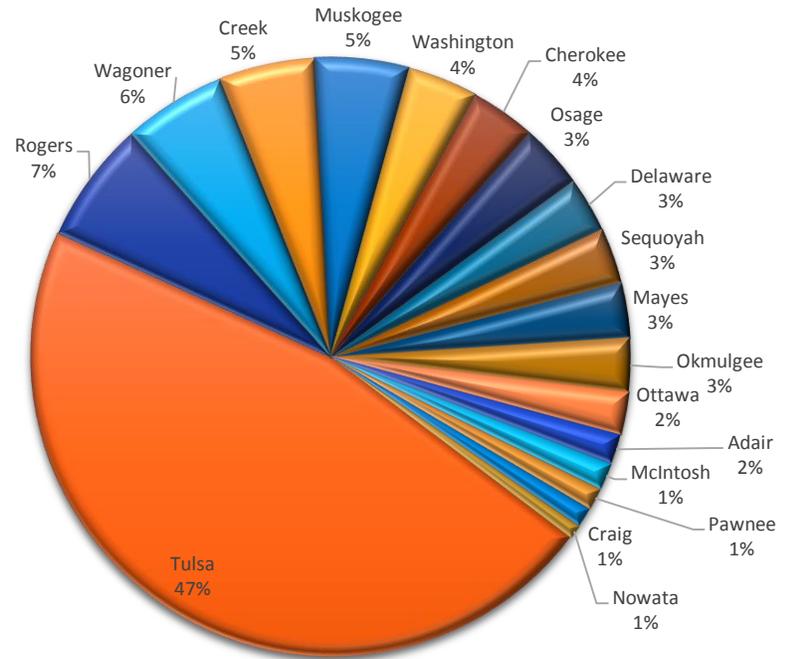


## Population of the NE Oklahoma Planning Region

The Northeast Planning Region counties combine for an estimated population of 1,374,000. This accounts for 35% of the total state population. Tulsa is the largest city in the region with an estimated population of 399,700.

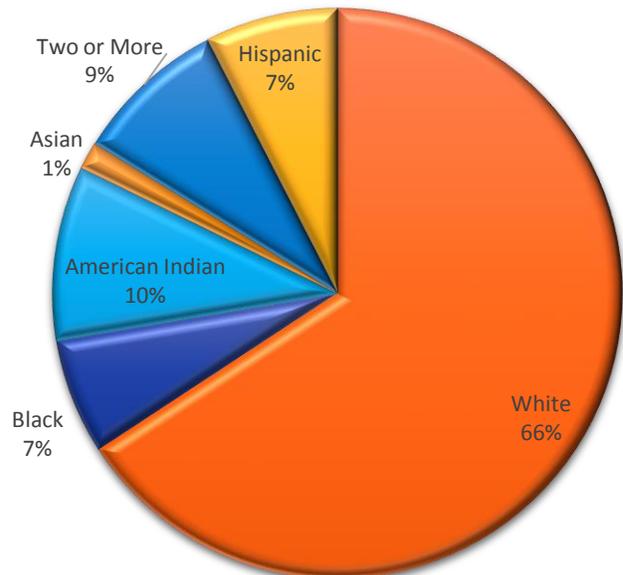
- According to 2015 Census estimates, Tulsa County is the most populous county in the region with an estimated population of 639,240. Rogers County is a distant second with 90,800 people.
- Nowata County is the least populated county in the region, with an estimated population of 10,540.
- Since 2010, the region has experienced varied population growth. Eight of the counties in the region experienced population increase, led by Wagoner County as 4.8%. Nine counties experienced population decline, with Adair losing the most at -3%. Nowata experienced no change in population.
- Six counties in the area (Osage, Ottawa, Nowata, Delaware, Mayes, and Pawnee) experienced a change of +/- one percent.

NE Oklahoma Planning Region Population



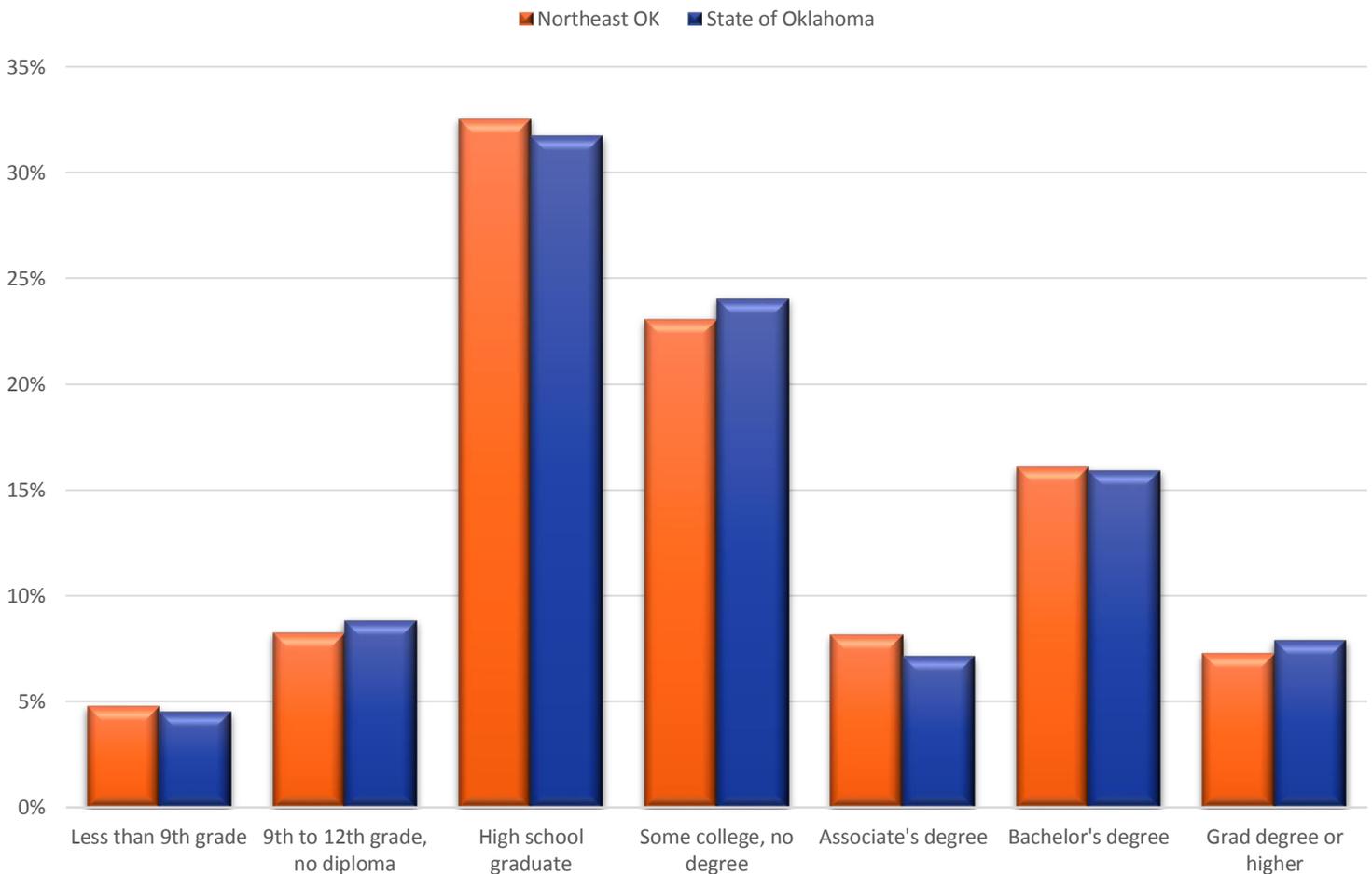
## Northeast Oklahoma Planning Region Population Breakdown by Race:

- 66.7% of residents in the Northeast Oklahoma Planning Region identify themselves as White. This is below the statewide average of 68%.
- With 133,100 people, Native American is the second most populous group in Northeast Oklahoma. They account for 10% of the population.
- Two or More Races consist of 8.6% of the population. Black makes up 6.5% of the population, while Asian makes up 1%. All remaining races account for a negligible percentage of the population.
- Hispanics, which are categorized as an ethnicity by the Census bureau, make up 7.5% of the total population in Northeast Oklahoma.



### Educational Attainment in the Northeast Oklahoma Planning Region:

- 87% of people residing in the Northeast Oklahoma Planning Region have attained at least a high school degree. This is slightly above the statewide average of 86.6%.
- As a region, the region has educational attainment very close to the state averages. The Northeast Oklahoma Planning Region has a higher percentage of individuals with “bachelor’s degree”, and “associate’s degree”, but a lower percentage of individuals with “grad degree or higher”, and “some college, no degree”.
- Associate’s is the largest gap of post-secondary educational attainment between region and state averages, at 1%.
- At the secondary level, the Northeast Oklahoma Planning Region has a higher percentage of individuals whose furthest educational attainment is “less than 9<sup>th</sup> grade”, and “high school graduate” compared to the state average.

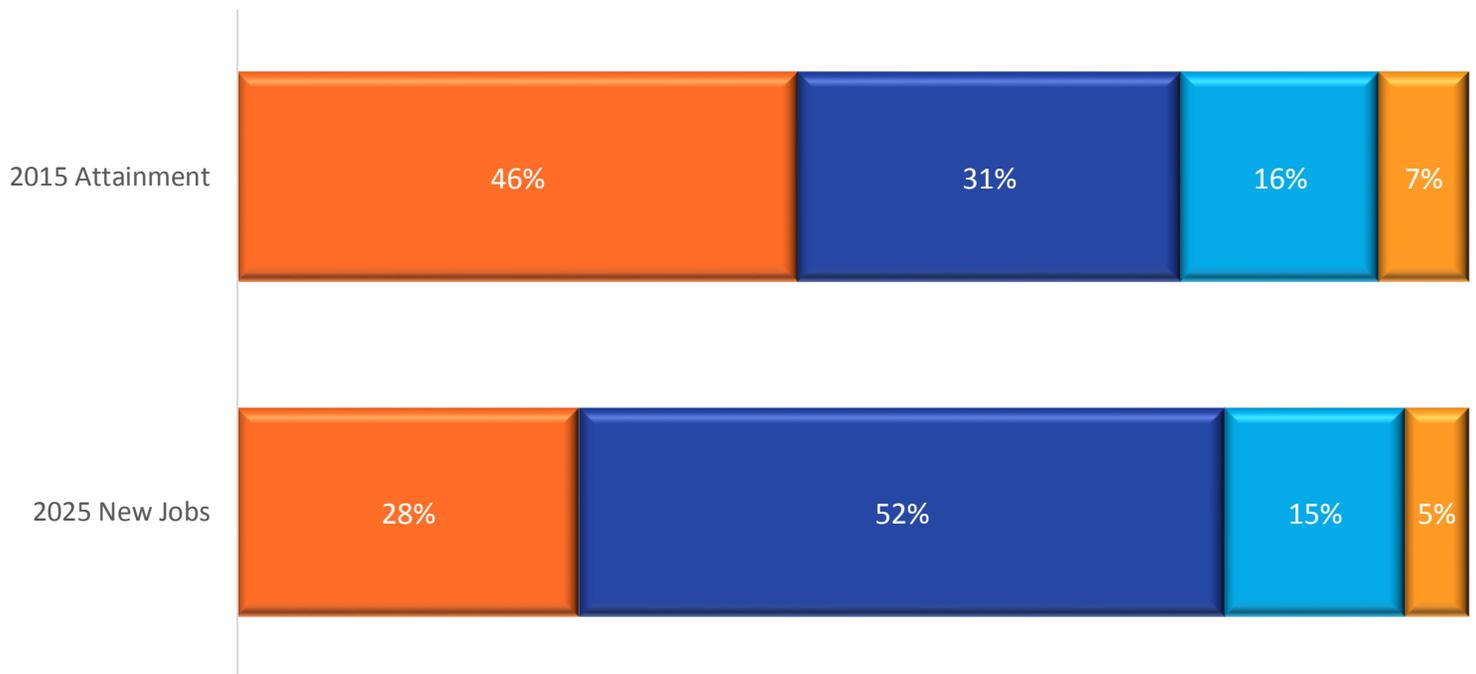


## Northeast Oklahoma Planning Region Education Gap

- By 2025, 28% of all new jobs in the Northeast Oklahoma Planning Region will require a high school degree or less, but 52% will require post-secondary training. Currently only 31% of individuals in the area have some post-secondary training or an associate’s degree. By 2025, 15% of new jobs will require a bachelor’s degree, and 5% will require a graduate degree or higher.
- Based on the projected demand and current educational attainment levels, the Northeast Oklahoma Planning Region has a significant gap in the post-secondary/associate’s degree/certificate level if they want to be able to meet the needs that may emerge in the area.
- There is always opportunity to encourage further education, especially considering the gap in the post-secondary training and those with a high school diploma, or less. That segment of the population could be targeted to become candidates for further education or attaining certificates. Decreasing the number of individuals with high school or less, and increasing numbers of trained post-secondary individuals will lead to better jobs and potential to create wealth.
- There is a slight surplus of individuals in the grad degree or higher category compared with new job requirements for that sector in 2025.

### Northeast Oklahoma Planning Region Educational Gap for Jobs by 2025

■ High School and Less   
 ■ Associates/Certificate/Credential   
 ■ Bachelors   
 ■ Graduate



Source: OK Office of Workforce Development; EMSI 2016.1  
 2025 Estimates based on new jobs created and entry level job requirements

## Northeast Oklahoma Planning Region Educational Assets

Colleges, Universities, and CareerTechs are instrumental in developing the workforce of Northeast Oklahoma. The region is home to several institutions which help supply local businesses and organizations with a workforce that has the necessary labor and skills to be competitive in today's economy.

### CareerTechs

There are eight CareerTechs with eighteen locations in the region:

- **Central Technology Center** (Sapulpa; Drumright)
- **Green County Technology Center** (Okmulgee)
- **Indian Capital Technology Center** (Stillwell; Muskogee; Sallisaw; Tahlequah)
- **Northeast Technology Center** (Kansas; Pryor; Afton; Claremore)
- **Tri County Technology Center** (Bartlesville)
- **Tulsa Technology Center** (Broken Arrow; Owasso; Sand Springs; Memorial Complex; Peoria; Riverside)

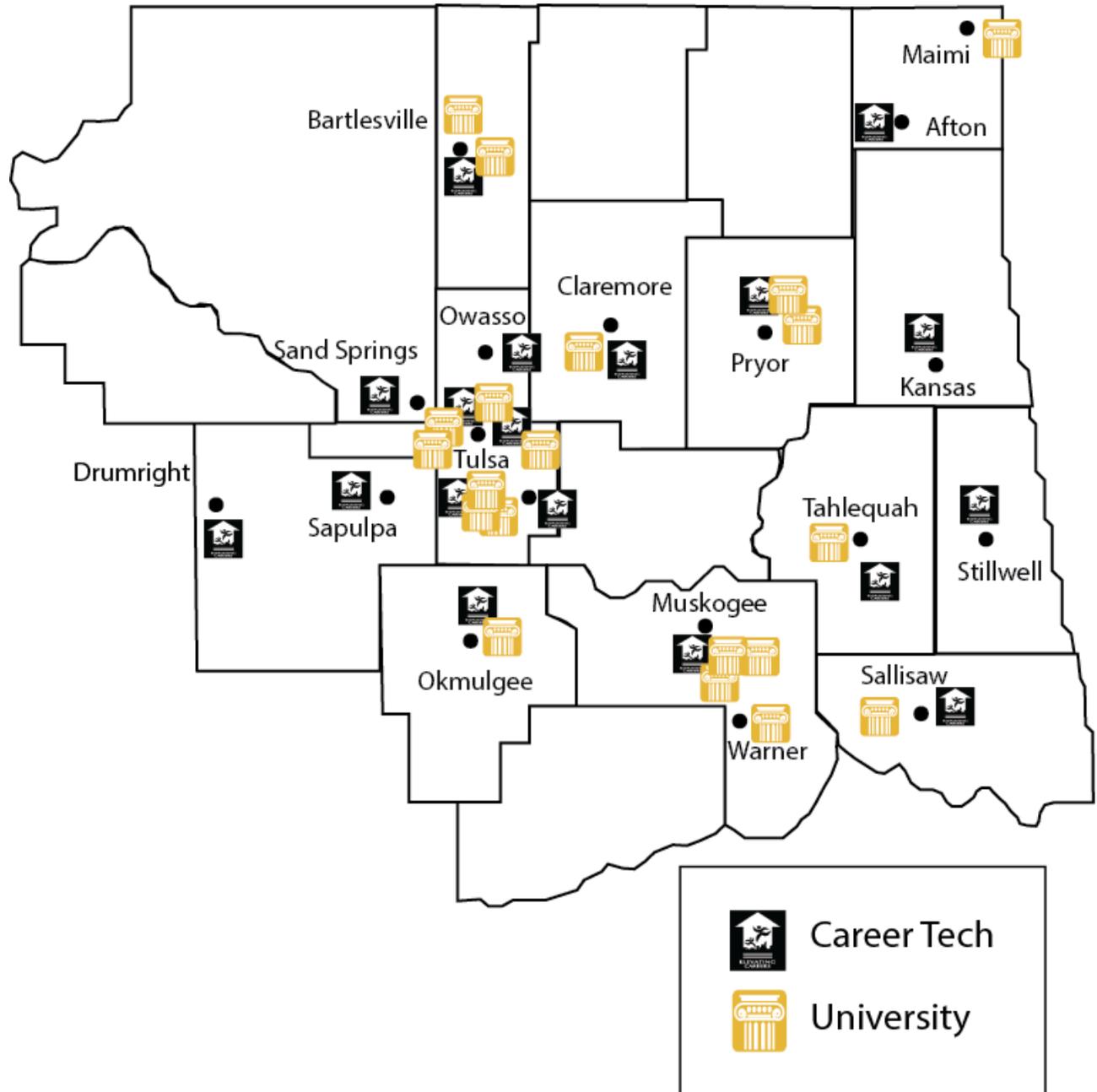
Source: Oklahoma CareerTech

### Colleges and Universities

There are eighteen colleges and universities in the region:

- **Bacone College** (Muskogee)
- **Carl Albert State College** (Sallisaw)
- **Connors State College** (Muskogee; Warner)
- **Langston University** (Tulsa)
- **Northeastern Oklahoma A&M** (Miami)
- **Northeastern Oklahoma State University** (Tahlequah; Muskogee; Broken Arrow)
- **Oklahoma State University for Health Science** (Tulsa)
- **Oklahoma State University - IT** (Okmulgee; Pryor)
- **Oklahoma State University** (Tulsa)
- **Oklahoma Wesleyan University** (Bartlesville)
- **Oral Roberts University** (Tulsa)
- **Phillips Theological Seminary** (Tulsa)
- **Rogers State University** (Pryor; Claremore; Bartlesville)
- **St. Gregory's University** (Tulsa)
- **Tulsa Community College** (Tulsa)
- **University of Oklahoma** (Tulsa)
- **University of Phoenix** (Tulsa)
- **University of Tulsa** (Tulsa)

Source: Oklahoma State Regents of Higher Education

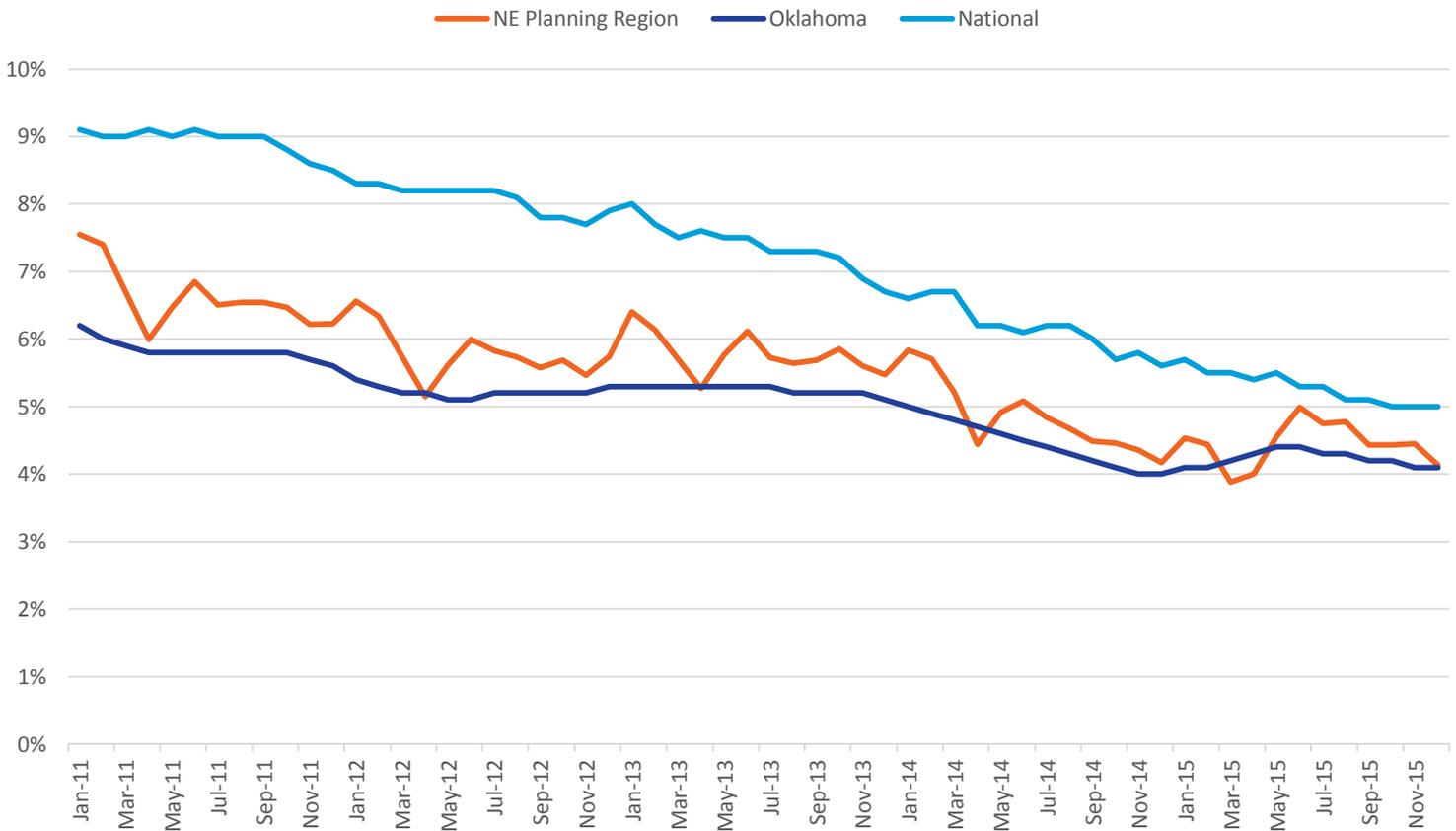


## Economic Data

### Unemployment Rate:

- Since January 2011, the Northeast Oklahoma Planning Region has stayed at or slightly above the state unemployment rate, and generally well below the national unemployment rate. After reaching a peak of 7.5% in January 2011, the Northeast Oklahoma Planning Region unemployment rate has declined, and in December 2015 the unemployment rate was 3.4%.
- The Northeast Oklahoma unemployment rate and the state unemployment rate have remained relatively similar since January 2011. Both the Northeast Oklahoma Planning Region and the state average unemployment rate have stayed below the national average over the five year historical period.
- Both Northeast Oklahoma and the State have maintained a gradual declining trend in unemployment rates since peaking in January 2011.
- If unemployment rates drop too low, employers have a smaller pool of candidates to choose from when hiring. Additionally, low unemployment rates mean fewer job openings for employees looking to change jobs. Fortunately, the region has been able to maintain a healthy unemployment rate.

**Five Year Unemployment Rate - NE Oklahoma, State, and National**

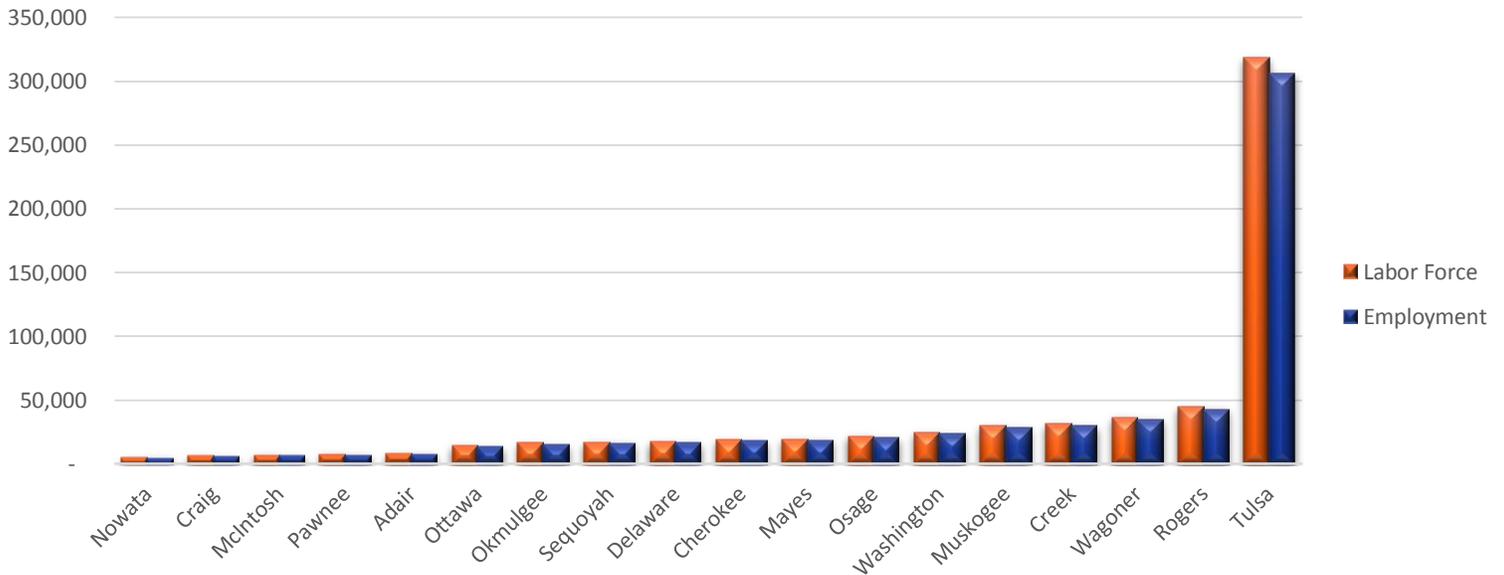


Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

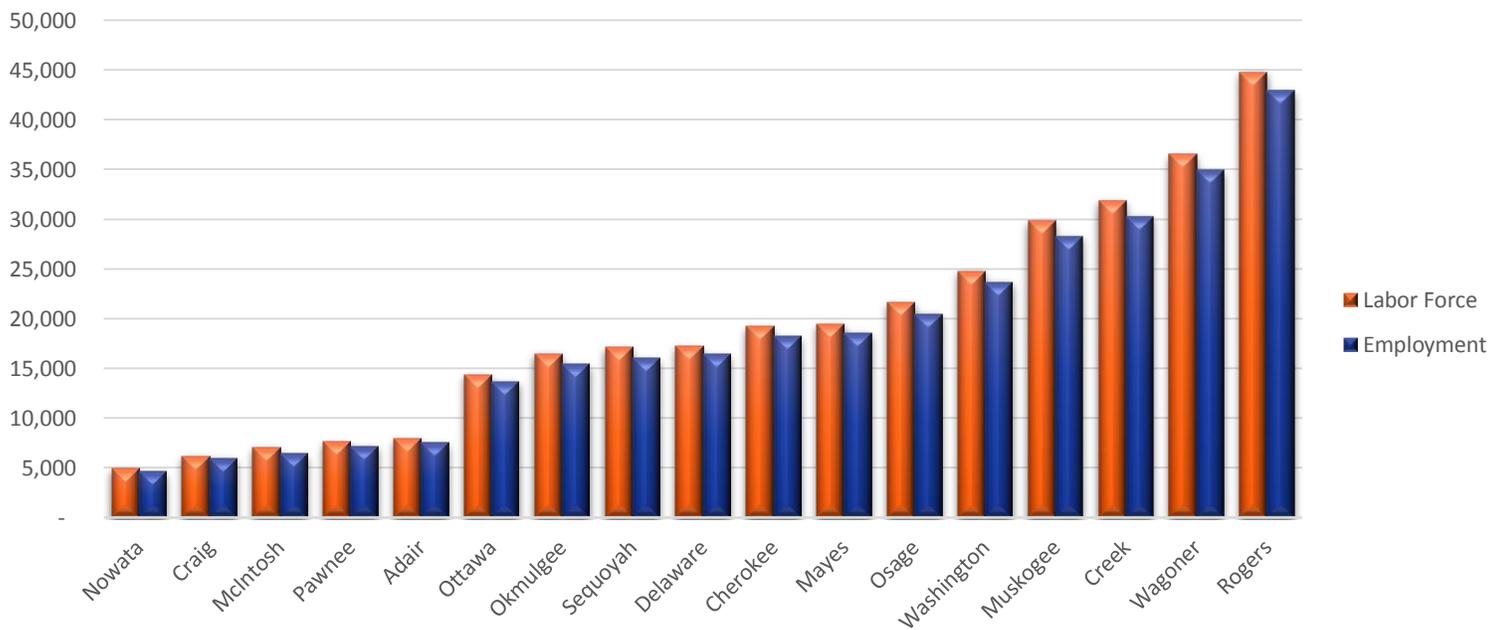
### Total Employment:

- In real numbers - as of January 2016 – 645,270 people in the Northeast Oklahoma Planning Region are in the labor force, and 616,150 are employed. That equates to 95.5% of the labor force in the region is employed.
- Tulsa County possesses the largest population, largest labor force and largest number of people employed in the region. Rogers County has the second largest labor force and number employed – significantly smaller.
- McIntosh County has the third smallest labor force, but has the highest unemployment rate in the region.
- Tulsa County has the largest labor force, but the lowest unemployment rate.

### Total Employment by County in Northeast Oklahoma January 2016



### Total Employment by County in Northeast Oklahoma, without Tulsa County January 2016



Source: BLS; LAUS

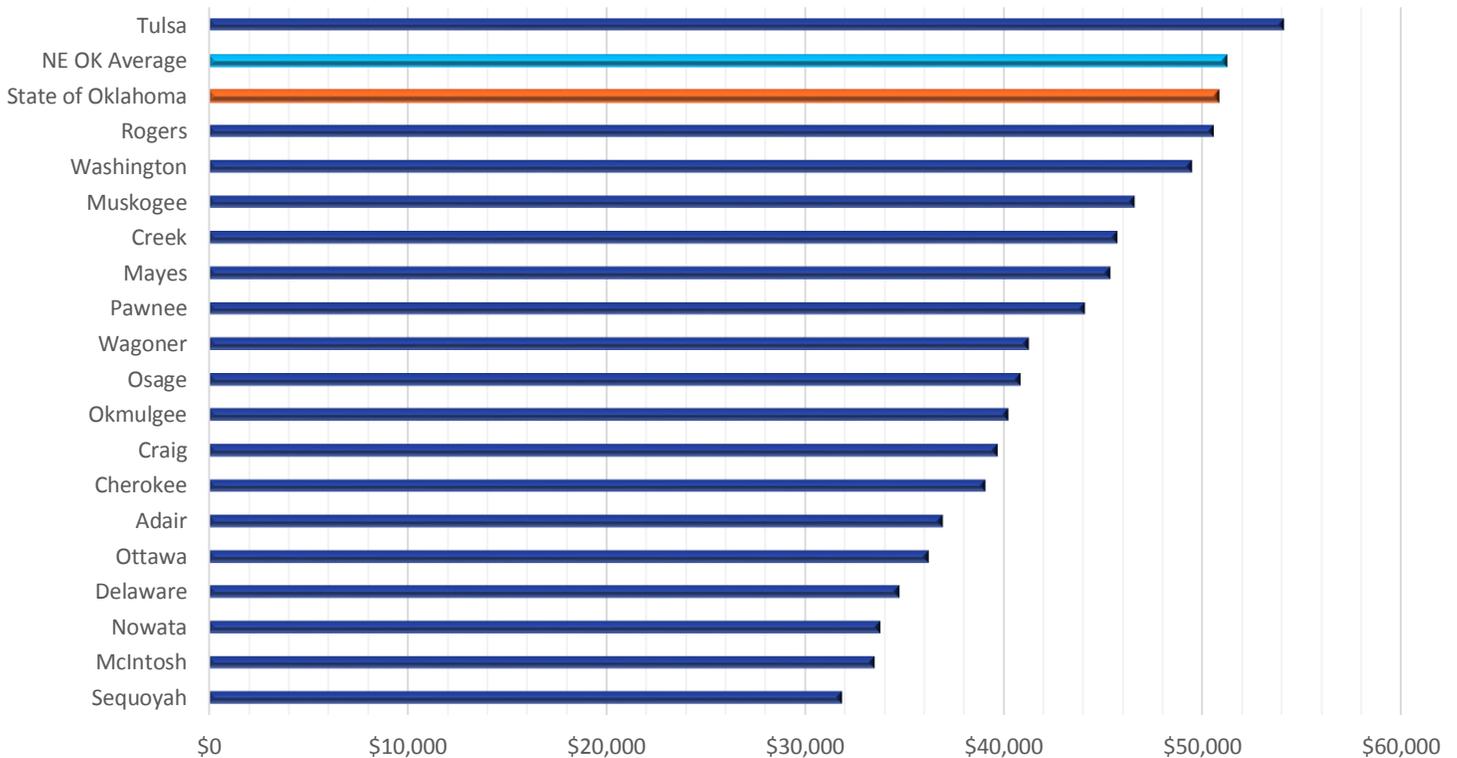
## Top Industries in Northeast Oklahoma

Industry
Government
Health Care and Social Assistance
Retail Trade
Accommodation and Food Services
Manufacturing
Administrative and Support and Waste Management and Remediation Services
Construction
Other Services (except Public Administration)
Professional, Scientific, and Technical Services
Wholesale Trade

Source: EMSI 2016.1

## Wages by County:

- The Northeast Oklahoma Planning Region average wage is \$51,215; this is above the state average of \$50,825 by about \$300. The gap between the Northeast Oklahoma Planning Region counties and the state average ranges from \$3,300 more in Tulsa County to \$18,950 less in Sequoyah County.
- Tulsa County has the highest wages in the region, and higher than the state average and Planning Region average.
- Larger counties in terms of population tend to have higher average wages.

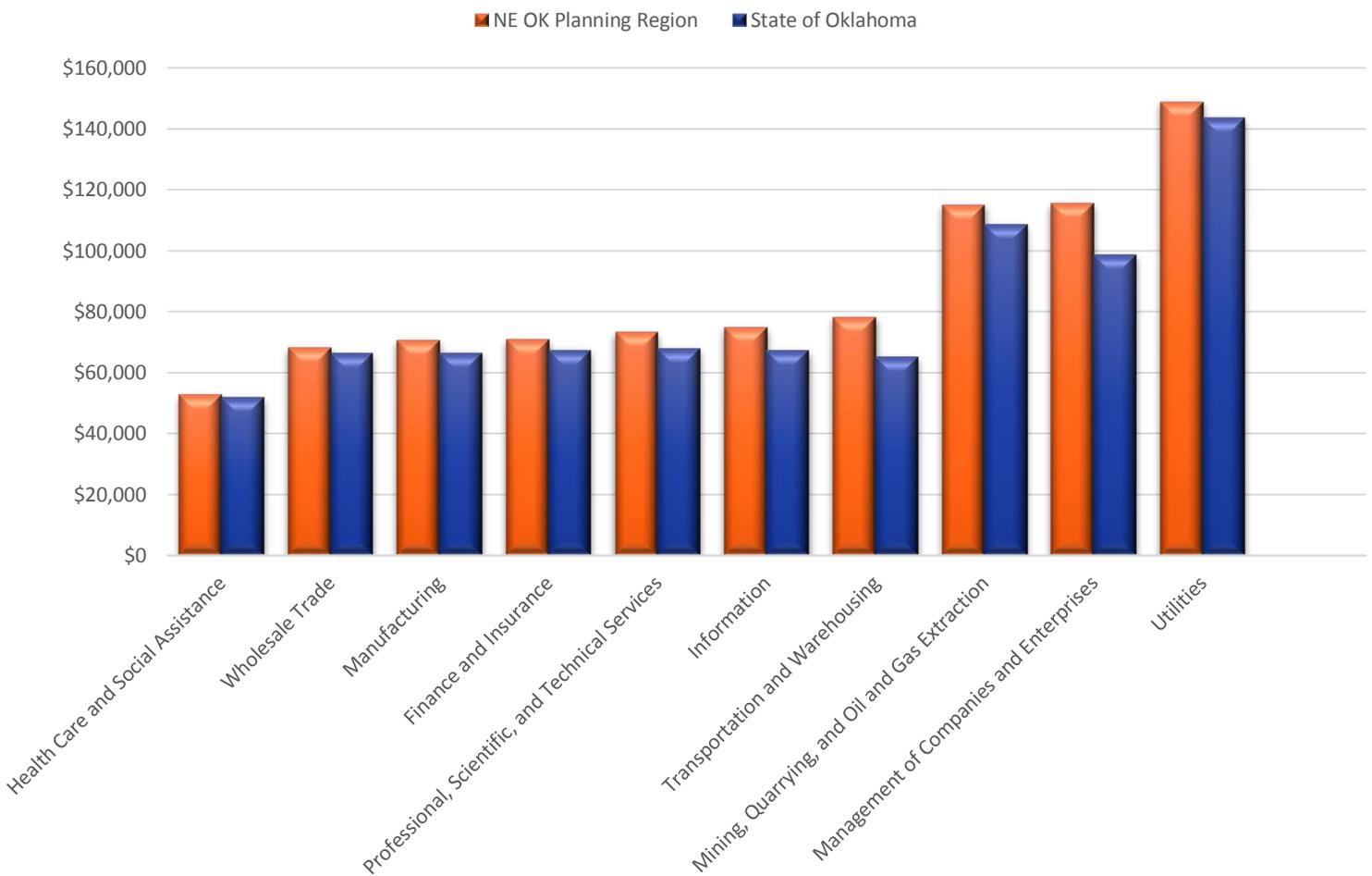


Source: EMSI 2016.1

### Wages by Industry:

- All of the top Industry earnings in the Northeast Oklahoma Planning are higher than state averages. The largest wage difference occurs in the “Management” industry. This position earns \$19,970 more in Northeast Oklahoma than the state average.
- The industries in Northeast Oklahoma that compare closest to state averages are, “Health Care and Social Assistance” and “Wholesale Trade”
- All of the top Industry wage averages in Northeast Oklahoma that are above the state of Oklahoma’s yearly average earnings of \$50,825.

**Average Earnings by Industry in NE Oklahoma and State of Oklahoma**



Source: EMSI 2016.1

## Ecosystems Impact in Northeast 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 2015 job numbers there are 28,640 jobs in the Aerospace & Defense Ecosystem in Northeast Oklahoma with average earnings of approximately \$71,860.

As a projection of demand by 2025, total employment in the Aerospace and Defense ecosystem will increase to 29,680 jobs in Northeast Oklahoma, an increase of 1,040 jobs for the region.

The list below encompasses some of the critical occupations for the Aerospace and Defense ecosystem in Northeast 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	Industry	Median Hourly Earnings	Education Level
55-9999	Military occupations	\$17.11	N/A
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$19.68	Moderate-term on-the-job training
53-2011	Airline Pilots, Copilots, and Flight Engineers	\$45.91	Bachelor's degree
49-3011	Aircraft Mechanics and Service Technicians	\$21.36	Postsecondary non-degree award
17-2051	Civil Engineers	\$38.79	Bachelor's degree
15-1132	Software Developers, Applications	\$30.64	Bachelor's degree
51-4121	Welders, Cutters, Solderers, and Brazers	\$19.34	Moderate-term on-the-job training
17-2141	Mechanical Engineers	\$38.48	Bachelor's degree
51-4041	Machinists	\$17.83	Long-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$23.70	Long-term on-the-job training

Source: EMSI 2016.1

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: Federal Government, scheduled air transportation, aircraft manufacturing and engineering services, among others in Northeast Oklahoma.

## Energy

Based on 2015 job numbers there are 36,240 jobs in the Energy Ecosystem in Northeast Oklahoma with average earnings of \$115,870.

As a projection of demand, by 2025 total employment in the Energy ecosystem will grow to 41,060 jobs in Northeast Oklahoma, an addition of 4,820 jobs for the region.

The list below encompasses some of the critical occupations for the Energy ecosystem in Northeast 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	Industry	Median Hourly Earnings	Typical Entry Level Education
51-4121	Welders, Cutters, Solderers, and Brazers	\$19.34	Moderate-term on-the-job training
51-1011	First-Line Supervisors of Production and Operating Workers	\$25.62	Postsecondary non-degree award
47-5013	Service Unit Operators, Oil, Gas, and Mining	\$18.97	Moderate-term on-the-job training
17-2171	Petroleum Engineers	\$63.67	Bachelor's degree
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	\$40.28	Long-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$19.18	Moderate-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$23.70	Long-term on-the-job training
51-4041	Machinists	\$17.83	Long-term on-the-job training
47-5071	Roustabouts, Oil and Gas	\$16.06	Moderate-term on-the-job training
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$23.62	High school diploma or equivalent

Source: EMSI 2016.1

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 crude oil extraction, machine shops, Manufacturing, and support activities for oil & gas extraction.

## Agriculture & Bioscience

Based on 2015 job numbers there are 26,475 jobs in the Agriculture & Bioscience ecosystem in Northeast Oklahoma with average earnings of \$61,210.

As a projection of demand, by 2025 total employment in the Agriculture and Bioscience ecosystem will increase to 26,725 jobs in Northeast Oklahoma, a gain of 250 jobs for the region.

The list below encompasses some of the critical occupations for the Agriculture and Bioscience ecosystem in Northeast 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	Industry	Median Hourly Earnings	Education Level
11-9013	Farmers, Ranchers, and Other Agricultural Managers	\$12.27	High school diploma or equivalent
17-2051	Civil Engineers	\$38.79	Bachelor's degree
51-9196	Paper Goods Machine Setters, Operators, and Tenders	\$21.00	Moderate-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.66	Short-term on-the-job training
29-2056	Veterinary Technologists and Technicians	\$12.25	Associate's degree
11-1021	General and Operations Managers	\$39.99	Bachelor's degree
51-9111	Packaging and Filling Machine Operators and Tenders	\$10.46	Moderate-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$19.18	Moderate-term on-the-job training
29-1131	Veterinarians	\$40.35	Doctoral or professional degree
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$18.23	Postsecondary non-degree award

Source: EMSI 2016.1

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 crop production, professional employer organizations, veterinary services, and engineering services, among others in Northeast Oklahoma.

## Information & Financial Services

Based on 2015 job numbers there are 38,800 jobs in the Information & Financial Services ecosystem in Northeast Oklahoma with average wages of \$81,240.

As a projection of demand, by 2025 total employment in the Information and Financial Services ecosystem will increase to 39,040 jobs in Northeast Oklahoma, an increase of 240 jobs for the region.

The list below encompasses some of the critical occupations for the Information and Financial Services ecosystem in Northeast 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	Industry	Median Hourly Earnings	Education Level
13-2011	Accountants and Auditors	\$28.46	Bachelor's degree
43-3071	Tellers	\$11.81	Short-term on-the-job training
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$15.88	Moderate-term on-the-job training
13-2072	Loan Officers	\$27.33	Bachelor's degree
11-3031	Financial Managers	\$44.41	Bachelor's degree
43-9041	Insurance Claims and Policy Processing Clerks	\$15.86	Moderate-term on-the-job training
11-1021	General and Operations Managers	\$39.99	Bachelor's degree
41-3021	Insurance Sales Agents	\$20.50	Moderate-term on-the-job training
43-4131	Loan Interviewers and Clerks	\$14.64	Short-term on-the-job training
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$32.46	Bachelor's degree

Source: EMSI 2016.1

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, insurance agencies and brokerages, credit unions, and corporate, subsidiary, and regional managing offices, among others.

## Transportation & Distribution

Based on 2015 job numbers there are 42,640 jobs in the Transportation & Distribution ecosystem in the Northeast Oklahoma Planning Region with average earnings of \$73,715.

As a projection of demand, by 2025 total employment in the Transportation and Distribution ecosystem will decrease to 42,270, a loss of 370 jobs for the region.

The list below encompasses some of the critical occupations for the Transportation and Distribution ecosystem in Northeast 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	Industry	Median Hourly Earnings	Education Level
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$18.23	Postsecondary non-degree award
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.66	Short-term on-the-job training
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	\$24.30	Short-term on-the-job training
53-2031	Flight Attendants	\$20.92	Moderate-term on-the-job training
51-2092	Team Assemblers	\$15.20	Moderate-term on-the-job training
53-2011	Airline Pilots, Copilots, and Flight Engineers	\$45.91	Bachelor's degree
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$31.76	Bachelor's degree
53-3033	Light Truck or Delivery Services Drivers	\$13.56	Short-term on-the-job training
43-5071	Shipping, Receiving, and Traffic Clerks	\$14.43	Short-term on-the-job training
49-3011	Aircraft Mechanics and Service Technicians	\$21.36	Postsecondary non-degree award

Source: EMSI 2016.1

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 scheduled passenger air transportation, general freight trucking, courier services, and general warehouse and storage, among others in the region.

## Health Care (Regional Complementary)

Based on 2015 job numbers there are 87,320 jobs in the Health Care ecosystem in the Northeast Oklahoma Planning Region with average wages of \$52,630.

As a projection of demand, by 2025 total employment in the Health Care ecosystem will grow to 103,640 jobs in Northeast Oklahoma, an increase of 16,320 jobs for the region.

The list below encompasses some of the critical occupations for the Health Care ecosystem in Northeast 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	Industry	Median Hourly Earnings	Education Level
29-1141	Registered Nurses	\$28.19	Associate's degree
39-9021	Personal Care Aides	\$9.14	Short-term on-the-job training
31-1014	Nursing Assistants	\$10.58	Postsecondary non-degree award
29-2061	Licensed Practical and Licensed Vocational Nurses	\$18.73	Postsecondary non-degree award
31-1011	Home Health Aides	\$10.85	Short-term on-the-job training
31-9092	Medical Assistants	\$13.92	Postsecondary non-degree award
43-6013	Medical Secretaries	\$13.53	Moderate-term on-the-job training
39-9011	Childcare Workers	\$8.10	Short-term on-the-job training
11-9111	Medical and Health Services Managers	\$37.67	Bachelor's degree
31-9091	Dental Assistants	\$15.45	Postsecondary non-degree award

Source: EMSI 2016.1

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, physician's offices, nursing care facilities, and home health care services, among others.