

Tri-County Ports Region Ecosystem Briefing

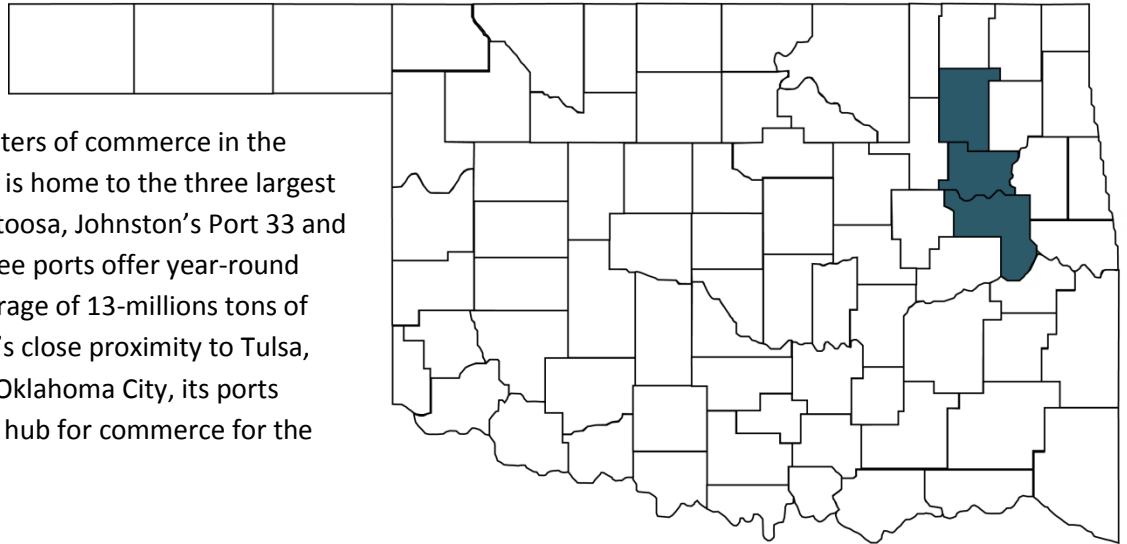
April 2014

Overview:

The Oklahoma Tri-County Ports Region, in this briefing, is comprised of the following counties: Muskogee, Rogers, and Wagoner.

The Tri-County Ports

Region is one of the vital centers of commerce in the state of Oklahoma. This area is home to the three largest ports in the state; Port of Catoosa, Johnston's Port 33 and Port of Muskogee. These three ports offer year-round service and transport an average of 13-millions tons of cargo a year. Given this area's close proximity to Tulsa, and being a few hours from Oklahoma City, its ports should continue to make it a hub for commerce for the foreseeable future.



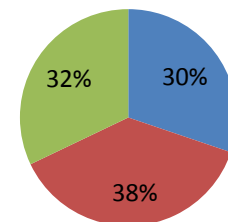
Demographics of the Tri-County Ports Region

Muskogee, Rogers and Wagoner counties combine for a population, according to the 2012 Census estimate, of 233,993. The largest city in the region is Muskogee with a 2012 Census estimated population of 38,981.

- Rogers is the most populated county in the region with 88,367. This county is made up of the following more significant population areas: Catoosa, Claremore, Chelsea and Inola. Rogers also encompasses some of the suburban sprawl from the greater Tulsa area.
- Though it possesses the largest city in the region, Muskogee is the least populated county at 70,596 while Wagoner's population is 75,030 (both figures from Census 2012 estimates).
- While the region is only made up by 3 counties, the 3 counties account for 6.1% of the total state population (3,815,780). In addition to Rogers, Wagoner's population is also boosted by its location in the greater Tulsa area.

Tri-County Ports Region % of Population by County

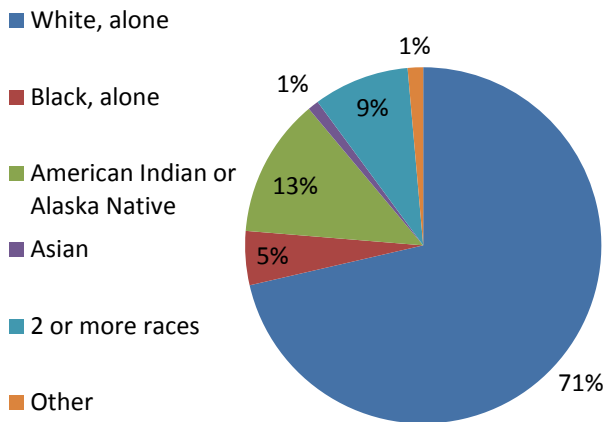
■ Muskogee ■ Rogers ■ Wagoner



Source: Census Quick Facts

Population Breakdown by Race/Ethnicity:

Tri-County Ports Region % of Pop. by Race



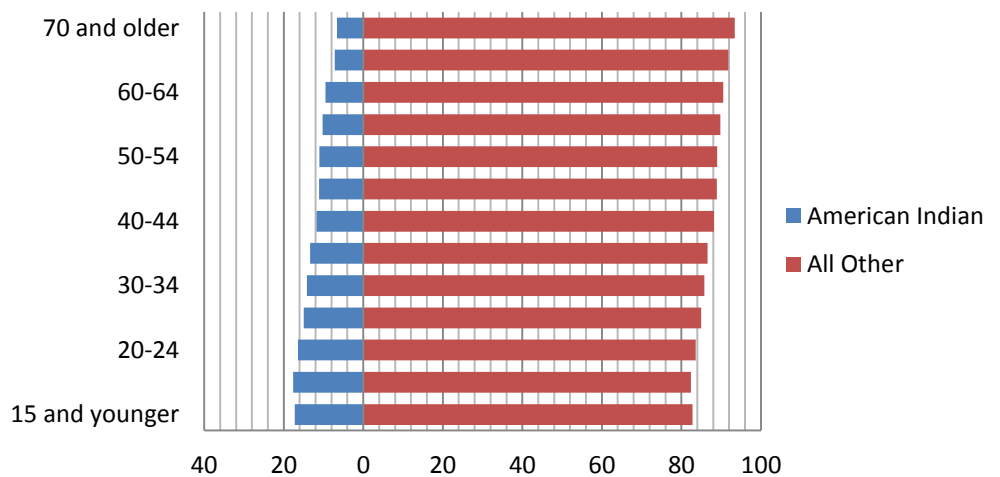
Source: ACS 2008-2012

- Over 71% of the population in the Tri-County Ports Region identifies as, “white, alone.” This is slightly less than the state percentage of 73.5% of total population.
- The American Indian race stands out in this region as having a higher total percentage of population when compared to the rest of the state. In the Tri-County Ports Region, American Indian accounts for 12.6% of total population, statewide that number is 7.3%.
- Hispanics account for 4.8% of the total population in the Tri-County Ports Region. Statewide Hispanic’s account for 9.3% of total population.

The American Indian Population in the Ports Region:

- As noted above the American Indian accounts for 12.6% of the total population in the Ports Region.
- The American Indian population in the region will likely continue to grow. Through the age of 34 American Indian’s make up 16.4% of the total population. American Indian’s percentage of the population in the region only decreases below state average above the age of 70.
- The Cherokee tribe has the most significant American Indian presence in the region, with much of their enterprise operations being based in Catoosa.
- Other tribes with confirmed presence in the region include the Choctaw and Creek.

American Indian as a % of Population in the Ports Region

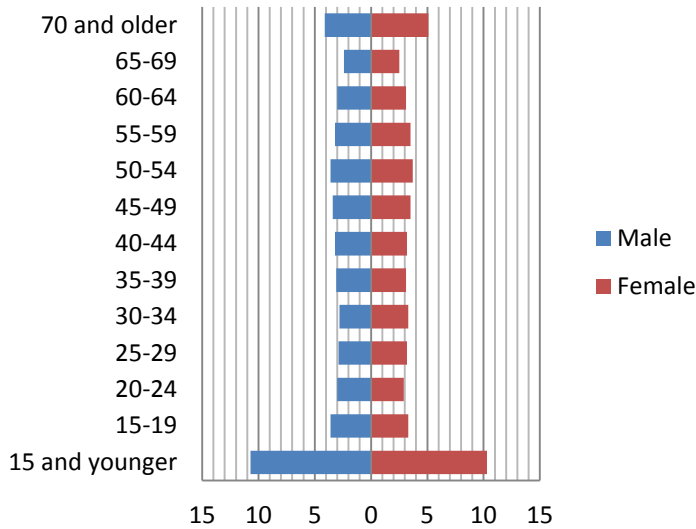


Source: EMSI 2014.1

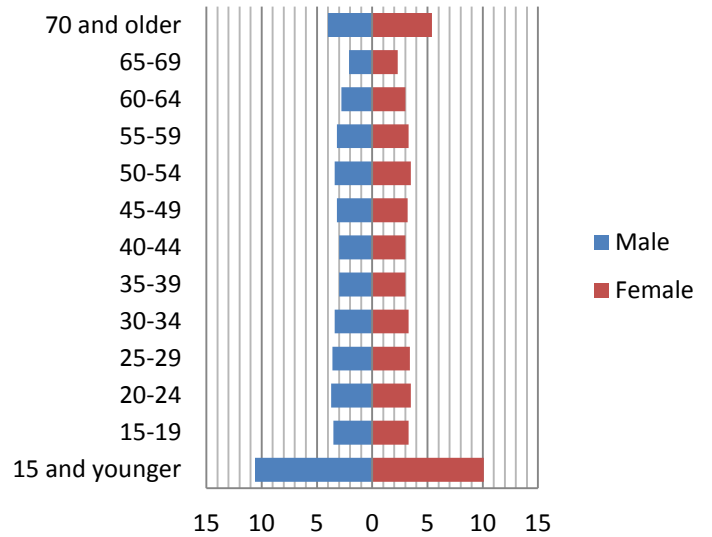
Age and Sex Data for the Tri-County Ports Region:

- Total population for the region is 233,993. 115,636 are men and 118,357 are women. By percentage that means men represent 49.4% with women making up 50.6% of the region’s population.
- The Tri-County Ports Region matches the statewide age/sex percentage breakdown quite closely with men making up 49.6% of the statewide population and women making up 50.4%. The raw numbers break down to 1,898,335 men and 1,932,539 women.

Tri-Count Ports Region Age/Sex Data by Percentage of the Population



Oklahoma Age/Sex Data by Percentage of the Population

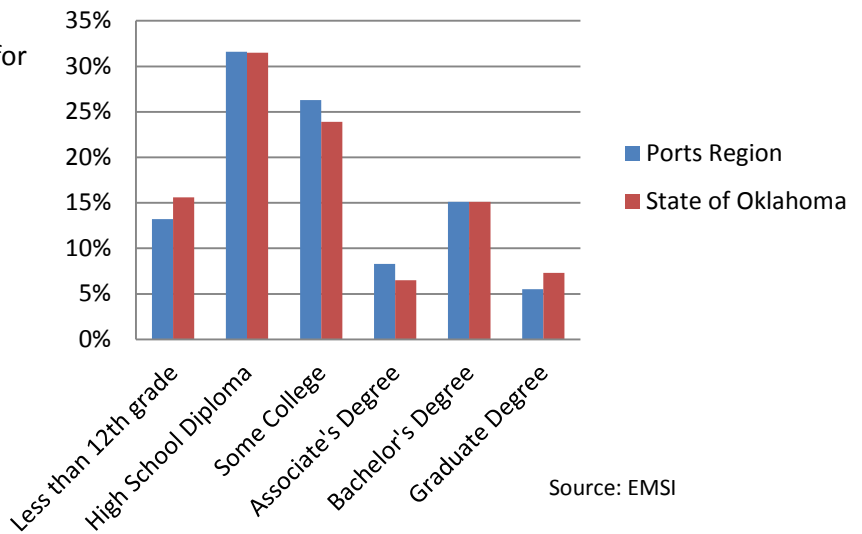


Source: EMSI 2014.1

Educational Attainment in the Tri-County Ports Region:

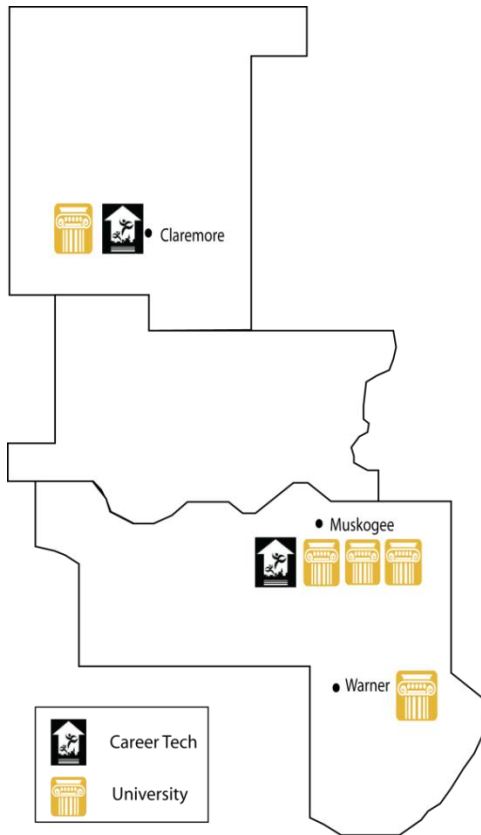
- Over 85% of the population living in the Tri-County Ports Region has attained at least a High School Diploma.
- The Tri-County area outpaces state averages for Certifications and Associate’s degrees. The presence of University’s and Career Techs in the region are likely boosting workforce development in the Tri-County area.
- The Tri-County area matches the statewide attainment rate of Bachelor’s Degrees at 15.1%.
- Given the multitude of institutions in the Tri-County Ports Region that allows students to achieve either a certificate or post-secondary degree, and Governor Fallin’s emphasis on education and Career Tech learning, attainment ought to continue on an upward curve in the region.

Educational Attainment in the Tri-County Ports Region and Statewide



Source: EMSI

The Tri-County Ports Region Educational Assets



Career Techs, colleges and universities in the Tri-County Ports Region of 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.

Career Techs

- **Northeast Technology Center (Claremore):** Northeast educated 12,194 students in FY 2012. The Center offered a total of 1,050 classes. 94% of all full-time students at Northeast who completed their programs found positive placement in jobs or continuing education.
- **Indian Capital Technology Center (Muskogee):** Indian Capital educated 28,331 students in FY 2012. The Center offered 2,699 classes across a wide range of programs. 89% of Indian Capital's full-time students who completed their programs went on to further their education or to a job.

Universities and Colleges

In addition to the Tri-County Ports Region's two career techs, the area is home to four universities/colleges with 5 campus locations.

- Bacone College (Muskogee)
- Connors State College (Muskogee/Warner)
- Northeastern State University (Muskogee)
- Rogers State University (Claremore)

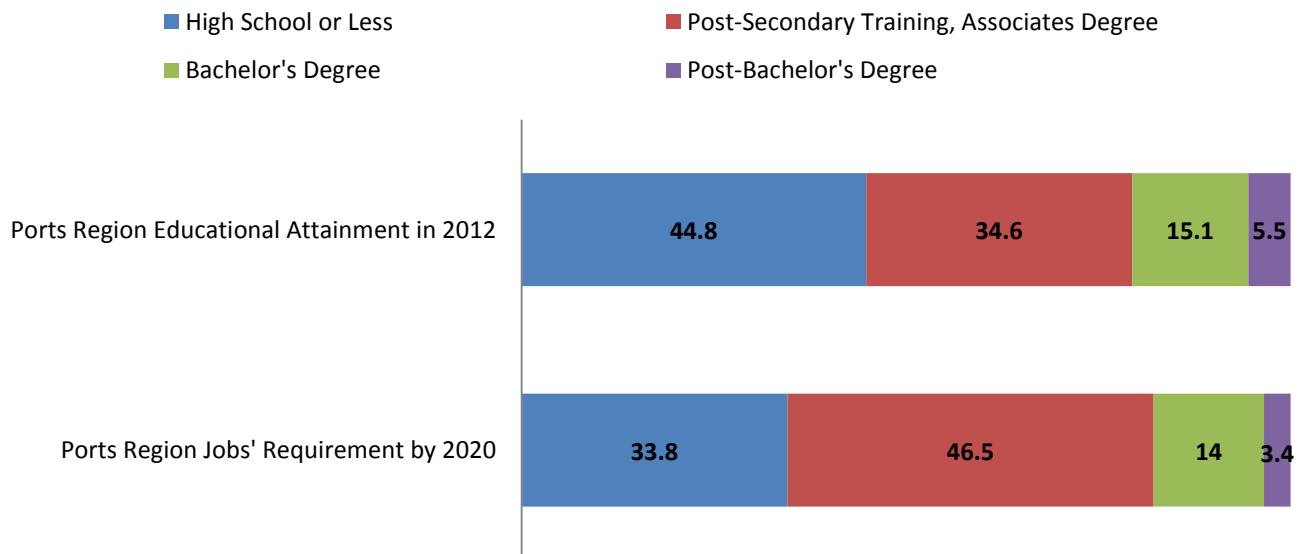
Trend: In 2012-2013 there were 712 Associate's degrees and Certificates awarded at the four universities/colleges in the region. During the same time period, 2,228 Bachelor's degrees or higher level degrees were awarded across the four universities/colleges in the region.

Source: Oklahoma Regents for Higher Education

The Tri-County Ports Region’s Role in Filling the Educational Gap in the State:

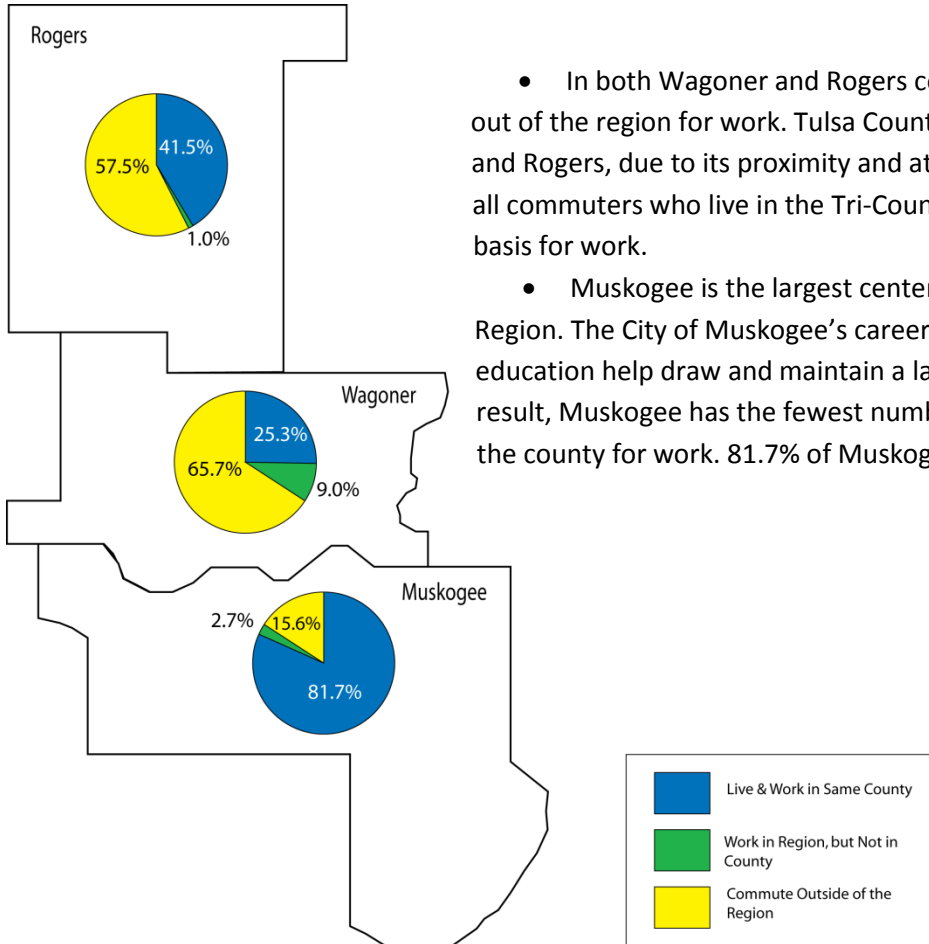
- 44.8% of the Tri-County Ports Region population aged 25 years and older have a maximum educational attainment being a high school diploma.
- Job projections for new jobs by 2020 indicate a high proportion (46.5%) of the jobs will need post-secondary training or an Associate’s degree.
- This gap between current educational attainment and future requirements for jobs in the post-secondary training area represents an opportunity for Career Techs and colleges in the Tri-County Ports Region.
- Individuals in the region who have attained a Bachelor’s or Post-Bachelor’s Degree likely commute to Tulsa due to close proximity and job opportunities requiring that level of education being located there.
- Values in the graph are calculated by the total number of each occupation’s educational requirement, divided by the total number of occupations.

Tri-County Ports Region Educational Gap for Jobs



Source: 2008-2012 ACS, EMSI 2013.4

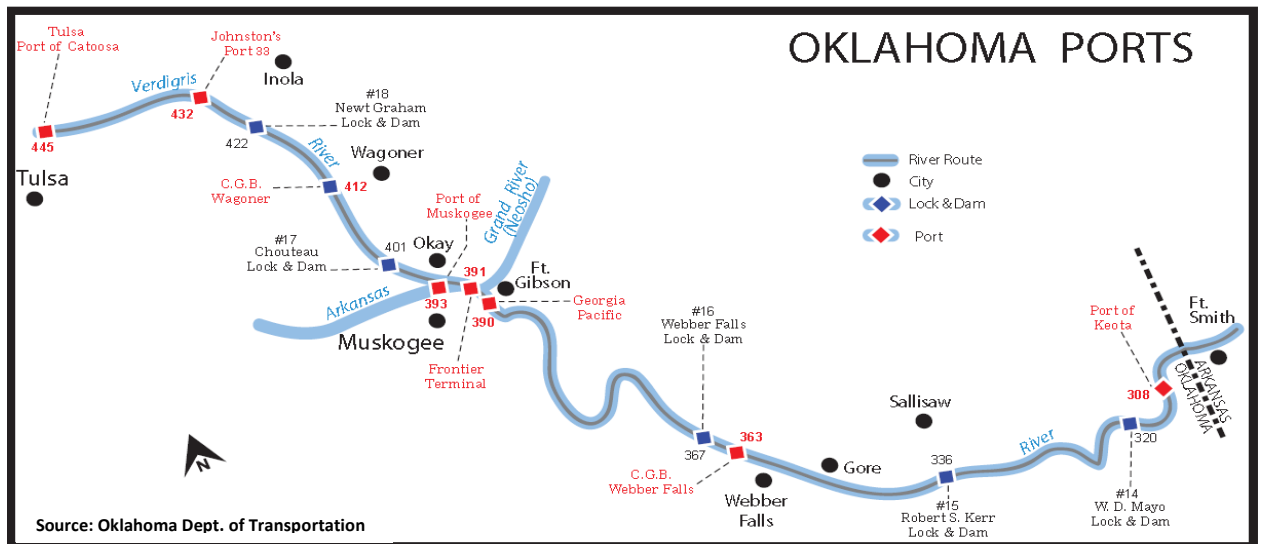
Commuter Data



- In both Wagoner and Rogers counties, the majority of residents commute out of the region for work. Tulsa County is a major pull for the people of Wagoner and Rogers, due to its proximity and attractive job opportunities. In fact, 42.3% of all commuters who live in the Tri-County Ports Region commute to Tulsa on a daily basis for work.
- Muskogee is the largest center of commerce in the Tri-County Ports Region. The City of Muskogee’s career tech and three institutions of higher education help draw and maintain a large working population in the county. As a result, Muskogee has the fewest number of residents who commute outside of the county for work. 81.7% of Muskogeeans both live and work there.

Oklahoma's Ports System

Oklahoma's ports are located on the 440-mile McClellan-Kerr Arkansas River Navigational System, which flows southeast into the Mississippi River and continues to the Gulf of Mexico. This Navigation system is unique because it provides year-round, ice-free barge service with worldwide access. During an average year, 13-million tons of cargo is transported on the McClellan-Kerr by barge. Cargo ranges from sand and rock to fertilizer, wheat, raw steel, refined petroleum products and sophisticated petrochemical processing equipment. Its river flow levels are controlled by the U.S. Army Corps of Engineers, which also operates and maintains the entire system.



The Tri-County Ports Region is home to two large public ports: The Port of Catoosa and the Port of Muskogee. These ports are located in two of Oklahoma's four Foreign Trade Zones. Johnston's Port 33 is the state's largest private port and is located 13 river miles downstream from the Port of Catoosa. There are also several small ports and terminals owned by private companies for their own use. Georgia Pacific operates a port near Muskogee. Consolidated Grain and Barge (C.B.G.) owns facilities on the river in Wagoner, Muskogee and Webber Falls. And Livestock Nutrition owns and operates a small port in Keota in Haskell County.

The three largest ports are highlighted below:

Port of Catoosa

Location: Rogers County; Five miles northeast of Tulsa at the head of the McClellan-Kerr Arkansas River Navigation System.

Managed and Operated By: The City of Tulsa-Rogers County Port Authority.

Facilities:

- Sits on a 2,000 acre industrial park and multi-modal shipping complex.
 - There are 63 industrial facilities within the port employing 4,000 people.
- Each day products are moved through the Port using barge, rail, and truck - often in combination.
 - Over 2.2 million tons of cargo are shipped and received at the port each year.
- Transportation assets include waterfront docks and terminals and the 1.5-mile private channel on which they are located.
- Has a unique roll-on/roll-off low water wharf for transferring over-dimensional or over-weight project cargo and an overhead traveling crane with a 200-ton capacity.

- The Port owns three locomotives serving the terminals and 20 private industry spurs on its 12-mile short-line system. It also owns two switch-boats which move barges between the docks and the fleeting areas along the Port's channel.
- Served by most nationwide trucking contract carriers and averages over 450 trucks per day.

Other Information: Located in Foreign Trade Zone 53.

Johnston's Port 33

Location: Rogers County; Between Tulsa and Inola, Oklahoma.

Managed and Operated By: Bruce Oakley, Inc. (acquired Feb 2014 from Johnston Enterprises)

Facilities:

- Accommodates large and small volumes of dry bulk commodities, including fertilizer, pig iron, glass cullet, coal, petroleum coke, calcined coke, scrap steel, cement, clinker, sand, zinc, alumina, iron oxide, fly ash, mill scale and slag.
- More than 40,000 tons of open bulk material storage on concrete pads, and a 68,000-ton fertilizer storage facility with seven separate load-outs
- Facilities include a 20,000 ton warehouse and drop shoot for truck and barge loading.
- 1.8 million tons are shipped and received annually.
- Five docks are available for simultaneous loading and unloading.

Port of Muskogee

Location: Muskogee County; River Navigation Mile 393.8

Managed and Operated By:

- The Muskogee City-County Port Authority is in charge of development of the port and is the formal owner/operator.
- Johnston's Terminal Muskogee (now owned by Bruce Oakley) provides barge, truck, and rail trans-loading services in the Port of Muskogee's public terminal area under contract with the Port Authority.

Facilities:

- Consists of both public and private terminals, the Port offers more than 500 acres of industrial land, a 350 foot concrete wharf and 20 mooring dolphins, along more than 3,000 feet of navigable waterfront.
- In 2013, 515 barges carrying more than 793 thousand tons of cargo moved through the Port.
- The port is home to two industrial parks and one mixed-use development:
 - Riverside Industrial Park - Consists of approximately 28 acres, mostly undeveloped, along 280 feet of navigable waterfront.
 - John T. Griffin Industrial Park - A 290-acre fully developed industrial park located at the intersection of US-64 and OK-165.
 - Three Forks Harbor - A safe harbor and mixed-use port development located at River Mile 393L.

Other:

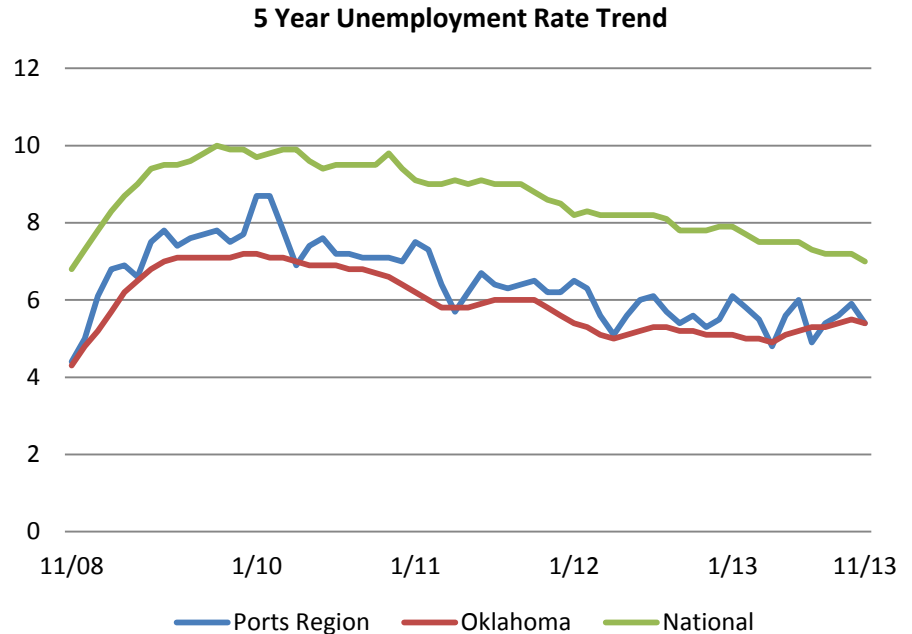
- As many as 14 local industries depend on access to the Port and waterway. These industries have invested more than \$2 billion in their facilities and have created more than 2,500 jobs with a combined payroll in excess \$125 million annually.
- Located in Foreign Trade Zone 164.

Economic Data

The Tri-County Ports Region’s unemployment numbers peaked in 2010 and have declined since, like most parts of the country, as economies of all scale have fought to rebound from the Great Recession.

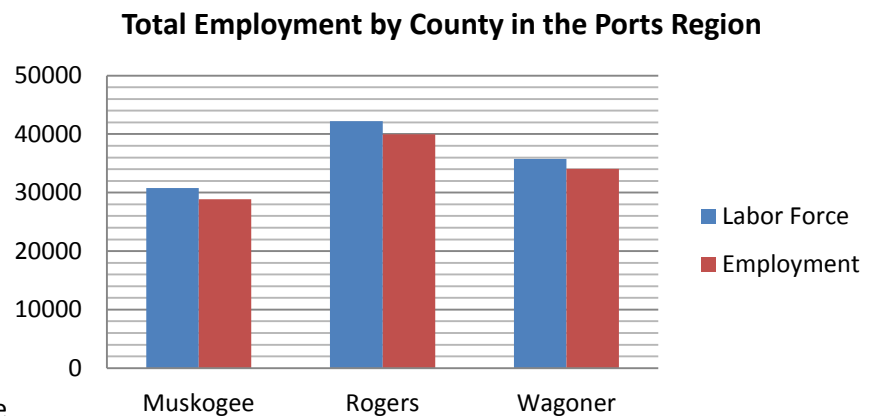
Unemployment Rate:

- The Tri-County Ports Region hit 8.7% unemployment in 2010 and has slowly rebounded since then; their current unemployment rate is 5.4%.
- Even with some of the higher unemployment months the Tri-County Ports Region has still maintained an unemployment rate lower than the national average over the past 5 years.
- The three counties current unemployment rates are as follows: Muskogee 6.3%, Rogers 5.4%, and Wagoner 4.7%.
- As of November 2013 Oklahoma had the 13th lowest unemployment rate in the country, at 5.4%.



Total Employment:

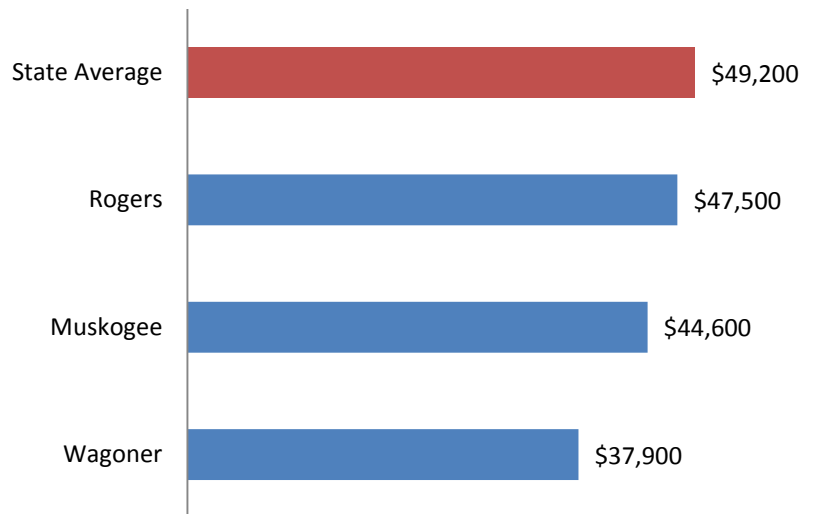
- In raw numbers, of the 108,768 individuals in the labor force 102,882 are employed as of November 2013.
- 94.6% of the population seeking employment in the Ports Region is employed.
- Rogers County possesses both the highest number of individuals in the labor force and highest number of employed persons.
- These employment numbers match up accordingly to each county’s respective population numbers. With Rogers having the highest number of employed, followed by Wagoner then Muskogee.



Wages by County and Industry:

- Across all industries the average earnings in the Tri-County Ports Region is \$44,800.
- This is approximately \$4,400 less than the 2013 state average of \$49,200.
- Of the three counties, Rogers currently has the highest earning level. However, being at \$47,500 this annual earning level remains approximately \$1,700 below state average.

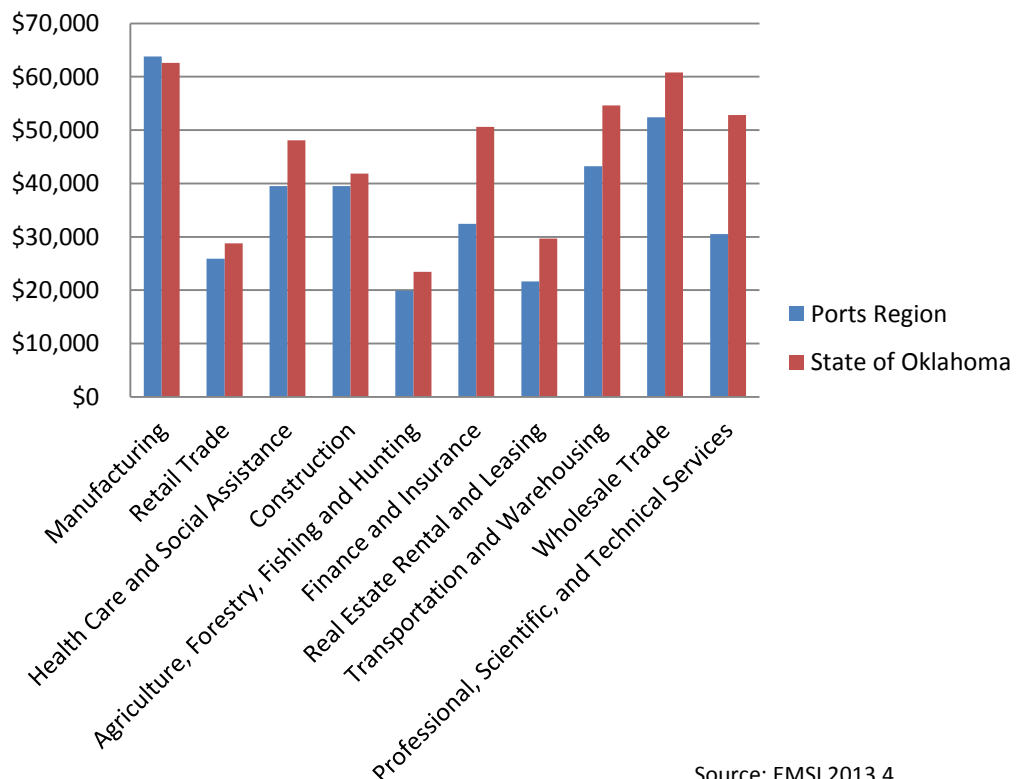
County-by-County Salaries



Source: EMSI 2014.1

- All but one of the major industries in the Tri-County Ports Region has a yearly average earnings amount lower than state average.
- The manufacturing sector in the Tri-County Ports Region is strong both in terms of employment numbers and average yearly earnings at \$63,810.
- A few of the industries that noticeably track lower than state average in the earnings area are: finance and insurance, real estate rental and leasing, and professional, scientific and technical services.
- The Cherokee Tribe has a large presence in the Catoosa area. They boost employment area wide and are a critical component to economic growth and development in the region.

Industry Average Earnings in the Tri-County Ports Region and Statewide



Source: EMSI 2013.4

Major Employers in the Tri-County Ports Region

The Tri-County Ports Region has seen over 20 new businesses or business expansions since 2010. A few noted new and/or expanding companies include: Baker Hughes, AXH Air Coolers, Pelco Structural, Viking Packing Specialist and Vallourec. The table below lists some of the region’s major employers.

Name of Company:	Location:	Industry:	Employees:
Cherokee Nation Enterprises	Catoosa	Casinos	3000-3500
Baker Hughes Oilfield Operations	Claremore	Pump and Pumping Equipment Manufacturing	2500-3000
Muskogee Regional Office	Muskogee	Administration of Veterans’ Affairs	1000-1500
Jack Montgomery VAMC	Muskogee	General Medical and Surgical Hospitals	1000-1500
Georgia Pacific Consumer Products	Muskogee	Paper Mills	750-1000
River Spirit Casino	Muskogee	Casinos	750-1000
Muskogee City Schools Dist I-20	Muskogee	Elementary and Secondary Schools	750-1000
Muskogee Regional Health Center	Muskogee	General Medical and Surgical Hospitals	750-1000
Centrilift	Claremore	Pump and Pumping Equipment Manufacturing	750-1000
Wal-Mart Associates Inc.	Muskogee, Claremore	Warehouse Clubs and Supercenters	750-1000
Dollar Tree Stores Inc.	Muskogee	All Other General Merchandise Stores	500-750
Claremore City Schools I-01	Claremore	Elementary and Secondary Schools	500-750
Med-Corp Plus Inc.	Muskogee	Home Health Care Services	500-750
Rogers State University	Claremore	Colleges, Universities, and Professional Schools	500-750
RCB Bank	Claremore	Commercial Banking	350-500
City of Muskogee	Muskogee	City Government	350-500
Dal-Italia LLC	Muskogee	Clay Building Material and Refractories Manufacturing	350-500
Harsco Corp	Catoosa	Power Boiler and Heat Exchanger Manufacturing	350-500
Sherwood Construction Co Inc.	Catoosa	Highway , Street, and Bridge Construction	350-500
Okla. Department of Veterans Affairs	Claremore	Administration of Veterans Affairs	350-500
Bath & Body Works LLC	Muskogee	Cosmetics, Beauty Supplies, and Perfume Stores	350-500
AXH Air-Coolers	Claremore	Power Boiler and Heat Exchanger Manufacturing	350-500
AFG Acquisition Group LLC	Muskogee	Steel Foundries	350-500
Hibbett Sporting Goods	Muskogee	Sporting Goods Stores	200-350
AHS Claremore Regional Hospital	Claremore	General Medical and Surgical Hospitals	200-350
Cherokee Nation Businesses	Catoosa	Independent Support Services	200-350
Action Temps	Muskogee	Professional Employer Organizations	200-350
The Yaffe Companies Incorporated	Muskogee	Accounting Services	200-350
Cherokee Temps Inc.	Muskogee	Temporary Help Services	200-350
Indian Health Services	Claremore	Administration of Public Health Programs	200-350
City of Claremore	Claremore	Executive City Offices	200-350
Catoosa Public Schools	Catoosa	Elementary and Secondary Schools	200-350
Creek Nation Muskogee Bingo	Muskogee	Other Gambling Industries	200-350
County of Rogers	Claremore	Offices of Government	200-350
Muskogee County	Muskogee	Offices of Government	200-350
INCOR	Muskogee	Home Health Care Services	200-350
Indian Capital Area Vo-Tech	Muskogee	Other Technical and Trade Schools	200-350
GEA Heat Exchangers LLC	Catoosa	Power Boiler and Heat Exchanger Manufacturing	200-350

Source: OneSource/Lexis

Ecosystems Impact in the Tri-County Ports Region 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. 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

As of the end of 2013 there are 1,775 jobs in the Aerospace & Defense Ecosystem in the Tri-County Ports Region with average earnings of \$43,100.

As a projection of demand, by 2020 total employment in the Aerospace and Defense ecosystem will grow to 1,808 jobs in the Tri-County Ports Region.

The list below encompasses some of the critical occupations for the Aerospace and Defense ecosystem in the Ports Region. 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	Description	Median Hourly Earnings	Education Level
17-3013	Mechanical Drafters	\$24.19	Associate's degree
15-1143	Computer Network Architects	\$34.96	Bachelor's degree
17-2141	Mechanical Engineers	\$33.69	Bachelor's degree
17-2112	Industrial Engineers	\$32.84	Bachelor's degree
15-1131	Computer Programmers	\$26.92	Bachelor's degree
51-4041	Machinists	\$17.49	Long-term on-the-job training
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$21.95	Moderate-term on-the-job training
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	\$15.43	Moderate-term on-the-job training
51-2092	Team Assemblers	\$14.20	Moderate-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$17.66	Moderate-term on-the-job training
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$11.76	Moderate-term on-the-job training
49-9043	Maintenance Workers, Machinery	\$16.54	Moderate-term on-the-job training
49-2091	Avionics Technicians	\$35.00	Postsecondary non-degree award
51-4121	Welders, Cutters, Solderers, and Brazers	\$18.53	Postsecondary non-degree award
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$17.78	Postsecondary non-degree award

Source: EMSI 2013.4

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 Engineering Services, Crude Petroleum & Natural Gas Extraction, and Oil & Gas Field Machinery Manufacturers among others in the Tri-County Ports Region.

Agriculture & Bioscience

As of the end of 2013 there are 3,325 jobs in the Agriculture & Bioscience ecosystem in the Tri-County Ports Region with average earnings of \$58,400.

As a projection of demand, by 2020 total employment in the Agriculture and Bioscience ecosystem will grow to 3,694 jobs in the Tri-County Ports Region.

The list below encompasses some of the critical occupations for the Agriculture and Bioscience ecosystem in the Ports Region. 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 Salary	Education Level
19-4031	Chemical Technicians	\$16.78	Associate's degree
17-3023	Electrical and Electronics Engineering Technicians	\$25.14	Associate's degree
17-3026	Industrial Engineering Technicians	\$25.55	Associate's degree
17-3027	Mechanical Engineering Technicians	\$24.29	Associate's degree
19-2031	Chemists	\$32.61	Bachelor's degree
17-2072	Electronics Engineers, Except Computer	\$37.27	Bachelor's degree
17-2112	Industrial Engineers	\$34.84	Bachelor's degree
17-2141	Mechanical Engineers	\$35.99	Bachelor's degree
11-1021	General and Operations Managers	\$32.85	Bachelor's or higher degree, plus work experience
49-3041	Farm Equipment Mechanics and Service Technicians	\$14.53	Long-term on-the-job training
49-9043	Maintenance Workers, Machinery	\$16.54	Moderate-term on-the-job training
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	\$9.16	Short-term on-the-job training
45-2091	Agricultural Equipment Operators	\$10.40	Short-term on-the-job training
11-9013	Farmers, Ranchers, and Other Agricultural Managers	\$9.72	Work experience in a related occupation
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	\$15.04	Work experience in a related occupation

Source: EMSI 2013.4

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, Nitrogenous Fertilizer Manufacturing, and Grain Merchant Wholesalers among others in the Tri-County Ports Region.

Energy

As of the end of 2013 there are 5,775 jobs in the Energy Ecosystem in the Tri-County Ports Region with average earnings of \$75,000.

As a projection of demand, by 2020 total employment in the Energy ecosystem will grow to 6,071 jobs in the Tri-County Ports Region.

The list below encompasses some of the critical occupations for the Energy ecosystem in the Ports Region. 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
17-3023	Electrical and Electronics Engineering Technicians	\$24.27	Associate's degree
17-2112	Industrial Engineers	\$32.84	Bachelor's degree
15-1121	Computer Systems Analysts	\$28.32	Bachelor's degree
15-1133	Software Developers, Systems Software	\$34.63	Bachelor's degree
19-2031	Chemists	\$29.23	Bachelor's degree
11-1021	General and Operations Managers	\$32.85	Bachelor's or higher degree, plus work experience
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$18.17	Long-term on-the-job training
47-5013	Service Unit Operators, Oil, Gas, and Mining	\$16.13	Moderate-term on-the-job training
53-7032	Excavating and Loading Machine and Dragline Operators	\$14.50	Moderate-term on-the-job training
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$23.12	Moderate-term on-the-job training
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	\$14.49	Moderate-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$18.53	Postsecondary non-degree award
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$17.78	Postsecondary non-degree award
53-7051	Industrial Truck and Tractor Operators	\$13.82	Short-term on-the-job training
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	\$22.47	Short-term on-the-job training

Source: EMSI 2013.4

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, and Commercial & Industrial Equipment Maintenance.

Information & Financial Services

As of the end of 2013 there are 2,579 jobs in the Information & Financial Services ecosystem in the Tri-County Ports Region with average wages of \$50,800.

As a projection of demand, by 2020 total employment in the Information and Financial Services ecosystem will grow to 2,670 jobs in the Tri-County Ports Region.

The list below encompasses some of the critical occupations for the Information and Financial Services ecosystem in the Ports Region. 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
13-2011	Accountants and Auditors	\$21.64	Bachelor's degree
13-1051	Cost Estimators	\$23.93	Bachelor's degree
15-1131	Computer Programmers	\$26.92	Bachelor's degree
15-1142	Network and Computer Systems Administrators	\$24.26	Bachelor's degree
15-1121	Computer Systems Analysts	\$28.32	Bachelor's degree
15-1134	Web Developers	\$18.10	Bachelor's degree
15-1133	Software Developers, Systems Software	\$34.63	Bachelor's degree
13-2051	Financial Analysts	\$26.55	Bachelor's degree
15-1141	Database Administrators	\$27.80	Bachelor's degree
15-1143	Computer Network Architects	\$34.96	Bachelor's degree
15-1122	Information Security Analysts	\$28.09	Bachelor's degree
11-1021	General and Operations Managers	\$32.85	Bachelor's or higher degree, plus work experience
13-1111	Management Analysts	\$24.68	Bachelor's or higher degree, plus work experience
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$12.81	Moderate-term on-the-job training

Source: EMSI 2013.4

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 Computer Systems Design, Engineering Services and Wholesale Trade among others.

Transportation & Distribution

As of the end of 2013 there are 4,234 jobs in the Transportation & Distribution ecosystem in the Tri-County Ports Region with average earnings of \$53,000.

As a projection of demand, by 2020 total employment in the Transportation and Distribution ecosystem will shrink to 4,673 in the Tri-County Ports Region. This represents an opportunity for Career Techs and businesses in the region to work diligently with residents in an effort to develop and build a workforce for the long-term future.

The list below encompasses some of the critical occupations for the Transportation and Distribution ecosystem in the Ports Region. 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
13-1081	Logisticians	\$26.93	Bachelor's degree
17-2071	Electrical Engineers	\$33.63	Bachelor's degree
15-1131	Computer Programmers	\$26.92	Bachelor's degree
11-1021	General and Operations Managers	\$32.85	Bachelor's or higher degree, plus work experience
53-7021	Crane and Tower Operators	\$14.54	Long-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$17.66	Moderate-term on-the-job training
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	\$15.43	Moderate-term on-the-job training
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$21.95	Moderate-term on-the-job training
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$17.40	Moderate-term on-the-job training
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$11.24	Moderate-term on-the-job training
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$16.62	Postsecondary non-degree award
49-3011	Aircraft Mechanics and Service Technicians	\$25.48	Postsecondary non-degree award
49-2091	Avionics Technicians	\$35.00	Postsecondary non-degree award
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$15.43	Short-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.82	Short-term on-the-job training

Source: EMSI 2013.4

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 Oil & Gas Operations and Oil & Gas Machinery Manufacturing among others.

Construction(Regional Complementary)

As of the end of 2013 there are 5,846 jobs in the Construction ecosystem in the Tri-County Ports Region with average earnings of \$43,500.

As a projection of demand, by 2020 total employment in the Construction ecosystem will grow to 6,312 jobs in the Tri-County Ports Region.

The list below encompasses some of the critical occupations for the Construction ecosystem in the Ports Region. 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
17-3013	Mechanical Drafters	\$24.19	Associate's degree
11-9021	Construction Managers	\$21.99	Bachelor's degree
17-2141	Mechanical Engineers	\$33.69	Bachelor's degree
17-2051	Civil Engineers	\$39.37	Bachelor's degree
11-1021	General and Operations Managers	\$32.85	Bachelor's or higher degree, plus work experience
47-2031	Carpenters	\$14.26	Long-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$21.65	Long-term on-the-job training
47-2111	Electricians	\$21.41	Long-term on-the-job training
47-2211	Sheet Metal Workers	\$15.86	Long-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$17.66	Moderate-term on-the-job training
47-2073	Operating Engineers and Other Construction Equipment Operators	\$15.36	Moderate-term on-the-job training
51-2041	Structural Metal Fabricators and Fitters	\$17.63	Moderate-term on-the-job training
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$11.76	Moderate-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$18.53	Postsecondary non-degree award
53-7051	Industrial Truck and Tractor Operators	\$13.82	Short-term on-the-job training

Source: EMSI 2013.4

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 Support Activities for Wholesale Trade, Machine Shops and Energy sector related Construction among others.

Health Care(Regional Complementary)

As of the end of 2013 there are 8,005 jobs in the Healthcare ecosystem in the Tri-County Ports Region with average wages of \$39,900.

As a projection of demand, by 2020 total employment in the Health Care ecosystem will grow to 10,117 jobs in the Tri-County Ports Region.

The list below encompasses some of the critical occupations for the Health Care ecosystem in the Ports Region. 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
29-2012	Medical and Clinical Laboratory Technicians	\$15.30	Associate's degree
29-1141	Registered Nurses	\$26.14	Bachelor's degree
13-1051	Cost Estimators	\$23.93	Bachelor's degree
11-1021	General and Operations Managers	\$32.85	Bachelor's or higher degree, plus work experience
13-1111	Management Analysts	\$24.68	Bachelor's or higher degree, plus work experience
29-1069	Physicians and Surgeons, All Other	\$94.98	First professional degree
29-1051	Pharmacists	\$52.70	First professional degree
31-9092	Medical Assistants	\$11.33	Moderate-term on-the-job training
29-2052	Pharmacy Technicians	\$11.56	Moderate-term on-the-job training
49-9043	Maintenance Workers, Machinery	\$16.54	Moderate-term on-the-job training
31-1014	Nursing Assistants	\$10.05	Postsecondary non-degree award
29-2061	Licensed Practical and Licensed Vocational Nurses	\$17.48	Postsecondary non-degree award
29-2041	Emergency Medical Technicians and Paramedics	\$15.38	Postsecondary non-degree award
29-2071	Medical Records and Health Information Technicians	\$14.08	Postsecondary non-degree award
31-1011	Home Health Aides	\$10.53	Short-term on-the-job training

Source: EMSI 2013.4

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 Scientific Research and Development Services and Pharmaceutical and Medicine Manufacturing among others.

Manufacturing(Regional Complementary)

As of the end of 2013 there are 10,618 jobs in the Manufacturing ecosystem in the Tri-County Ports Region with average wages of \$65,500.

As a projection of demand, by 2020 total employment in the Manufacturing ecosystem will grow to 12,459 jobs in the Tri-County Ports Region.

The list below encompasses some of the critical occupations for the Manufacturing ecosystem in the Ports Region. 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
17-2112	Industrial Engineers	\$32.84	Bachelor's degree
17-2141	Mechanical Engineers	\$33.69	Bachelor's degree
51-4041	Machinists	\$17.49	Long-term on-the-job training
49-9041	Industrial Machinery Mechanics	\$21.65	Long-term on-the-job training
51-2092	Team Assemblers	\$14.20	Moderate-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$17.66	Moderate-term on-the-job training
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$14.64	Moderate-term on-the-job training
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$17.40	Moderate-term on-the-job training
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$23.12	Moderate-term on-the-job training
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$11.76	Moderate-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	\$18.53	Postsecondary non-degree award
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$11.03	Short-term on-the-job training
53-7051	Industrial Truck and Tractor Operators	\$13.82	Short-term on-the-job training
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	\$22.47	Short-term on-the-job training
51-1011	First-Line Supervisors of Production and Operating Workers	\$24.16	Work experience in a related occupation

Source: EMSI 2013.4

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 Textile and Fabric Mills and Support Activities for Construction Operations among others.