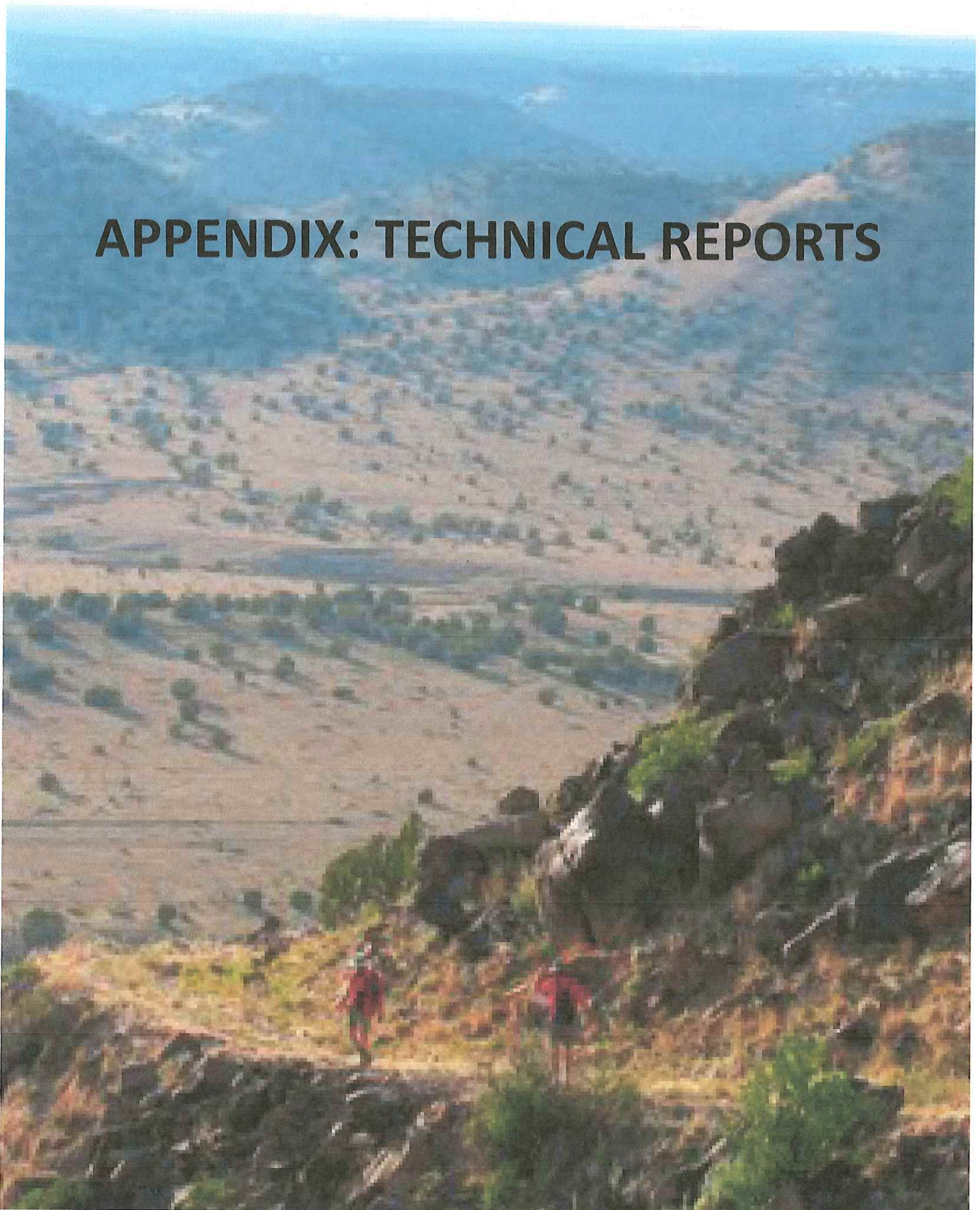


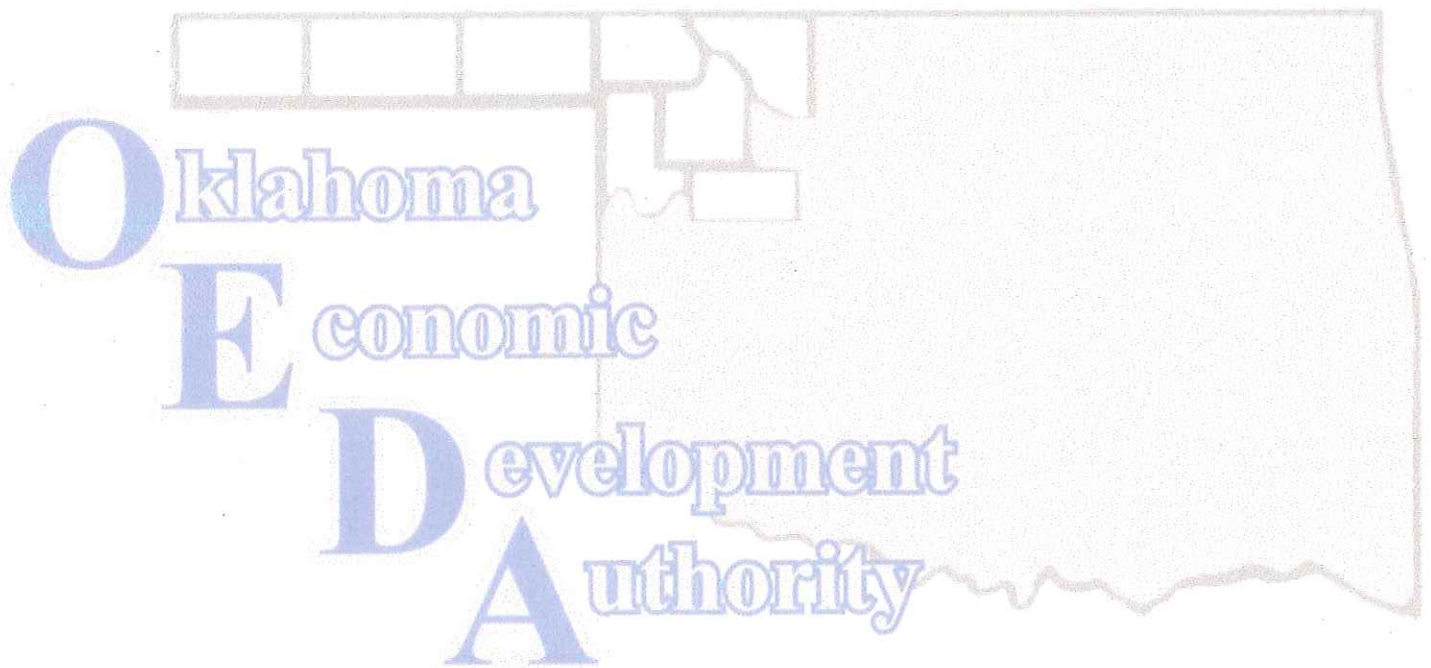
# APPENDIX: TECHNICAL REPORTS





## CEDS COMMITTEE AND SUPPORT STAFF

CJ Rose	Beaver County	Justin Carnagey	Executive Director
Ruby Gore	Cimarron County	Miles Layne	CIP/GIS coordinator
David Trimble	Dewey County	Dee Ann Gray	Financial Accountant
Richard Chapman	Ellis County	Kimberly Terry	Comm Dev Coordinator
Gary Nielsen	Harper County	Jennifer Miller	Workforce Brd Staff
Jack Strain	Texas County		
Elvia Hernandez	Texas County		
Yvonne Thilsted	Woods County		
Vernie Matt	Woodward County		



Following is the SWOT analysis conducted by the Regional Planning Area including the Northwestern Oklahoma Workforce Board (NOWB). As Fiscal Agent, OEDA staff attended the meeting and participated in the regional planning self assessment and SWOT analysis for Western Oklahoma.

**Northwestern Oklahoma Workforce Board (NOWB)** implements the roles and responsibilities established in the WIOA of 2014 and the Governor of Oklahoma. Recently certified as a regional partnership and collaboration, this 17 county Board of Directors seeks out resolutions to the workforce needs of the communities in Northwestern Oklahoma. Because of the ever changing economic landscape, the NOWB, under the direction of business and industry, is continually striving to meet the needs of regional economic development by determining demand occupations, providing multiple easily accessible entries to the workforce development system, identifying industries at risk or in decline for the purpose of determining transferable skills, and developing career ladders and lattices upon which our emerging pipeline of workers may climb.

The NOWB develops strategies for increasing the number of qualified applicants for the jobs currently in demand while laying the groundwork for skills development to meet the needs of new and emerging industries. Positioned to convene and engage partners, the NOWB provides an avenue facilitating discussions about workforce development issues and brokering services.

Nemkahni Group, Ltd.  
123 Rosewood Drive  
Chickasha, OK 73018

November 29, 2016

Oklahoma Office of Workforce Development  
Office of the Secretary of Education and Workforce Development  
900 North Portland Avenue  
Oklahoma City, OK 73107

**Subject: An Independent Report on Regional Planning Self-Assessments and SWOT Analysis for Western Oklahoma**

The South Central, Southwest and Northwestern Workforce Boards met, as directed by the Oklahoma Office of Workforce Development (OOWD), to conduct a series of regional planning sessions for the thirty-three (33) counties of Western Oklahoma. These sessions provided the Regional Planning Self-Assessments and SWOT Analysis for the Western Oklahoma Regional Planning Area.

There were three requirements from the Oklahoma Office of Workforce Development stated in the Second Milestone requirement of the Regional Planning Process. These requirements were:

- a.) Provide a participant signature list for the Regional Planning Process for Milestone #2,
- b.) Conduct and provide results of a Regional Self-Assessment survey (provided by OOWD),
- c.) Conduct and provide responses from a Regional SWOT Analysis exercise

#### **I. Participant Accountability**

The Chief Elected Officials and Workforce Board Chairs of the three current workforce investment areas notably led and participated in the combined, regional planning process; as did a reasonable cross-section of board membership and state and local agency representatives. Participants/Respondents are listed at Appendix A.

#### **II. Regional Planning Self-Assessment Survey Results**

The Regional Planning Self-Assessment Survey was provided by the Oklahoma Office of Workforce Development and covered three general areas: Governance, Business Services and Job Seeker Services. These three general areas were further broken down into areas of measurement by Phase, Priority of Action and Training Requirement.

Regional Planning Self-Assessment numerical survey results for all Western Oklahoma respondents/participants are provided at Appendix B.

### **III. Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis Responses**

A standard, four-quadrant SWOT process was used. The top sections, above the line, of the SWOT results, were the Regional Planning Group's top ideas/suggestions in each category. Below the lines are additional, supporting ideas/suggestions that were contributed in their written submissions. All of the ideas/suggestions were focused towards improving the workforce and economic development posture of the 33 counties of Western Oklahoma in the aggregate.

SWOT Analysis Responses from the Western Oklahoma Regional Planning sessions are provided at Appendix C.

#### **Point of Concern:**

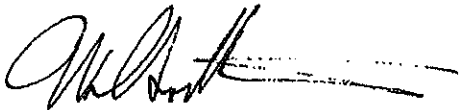
All of the participants from the Western Oklahoma Regional Planning area are concerned with the requirements forthcoming from Milestone #3. Milestone #3 has a completion/submission date of 1 February, 2017. The Governor's Council for Economic and Workforce Development (GCEWD) letter, dated July 1, 2016, indicates that the Regional Planning Areas will have guidance from the State regarding requirements for Milestone #3 not later than 30 days prior to the due date, which would be 1 January 2017. Guidance on Administrative Costs will require interagency agreements that have not been publicly discussed at the GCEWD as of the date of the submission of this report. The next GCEWD meeting date is 27 January 2017, which is just three days ahead of the Milestone #3 suspense date. Three days, is an unacceptable amount of time for such a significant discussion/planning requirement for a 33 county area of Oklahoma.

#### **Conclusion:**

The Western Oklahoma Regional Planning area, consisting of the three Local Area Workforce Boards (South Central, Southwest and Northwestern), completed Regional Planning Milestone #2 with this report. Please direct any questions regarding execution and/or compilation of this report to Wm. Clark Southard, (580) 475-4453 or Email: [clark.southard@live.com](mailto:clark.southard@live.com).

On Behalf of the Western Oklahoma Regional Planning area (Southcentral, Southwest and Northwestern Workforce Boards, their Chief Elected Officials, Board Chairs and Directors).

Very Respectfully Submitted,



Wm. Clark Southard  
Nemkahni Group, Ltd.  
CEO/President

Appendix A – Western Oklahoma Planning Region Participant Roster  
Appendix B – Western Oklahoma Planning Region Self-Assessment Matrix  
Appendix C – Western Oklahoma Planning Region SWOT Analysis Results

## Appendix B - Western Oklahoma Planning Region - Self-Assessment Matrix

	Phase 1	Phase 2	Phase 3	Phase 4	Priority A	Priority B	Priority C	Training Y	Training N
Governance									
1	0	2	4	28	18	1	6	0	31
2	0	7	2	25	17	3	4	1	30
3	8	16	4	5	25	1	3	11	18
4	13	14	3	7	28	4	0	16	12
5	14	11	2	7	26	4	1	12	16
6	12	15	8	0	25	6	1	17	13
7	13	14	7	0	16	15	0	9	20
8	4	17	1	8	25	3	0	11	14
9	20	12	2	0	24	5	0	15	12
10	5	18	3	8	21	9	3	17	9
11	9	18	2	5	22	6	4	17	10
12	14	11	7	2	16	8	4	18	7

[illegible]

	1	2	3	4	A	B	C	Y	N
Job Seeker Services									
1	6	5	11	12	27	2	4	21	5
2	6	6	10	12	16	12	2	13	10
3	7	21	3	3	18	11	3	14	11
4	11	4	9	10	23	7	7	15	10
5	14	10	5	0	16	13	1	20	5
6	12	2	10	10	25	6	2	19	5



Appendix A:

Western Oklahoma Regional Planning Participants Roster – Milestone 2

Name	Organization/Title	Current Local Area/Area
Tim Bingham	CLEO	SW
Dee Bowen	CLEO	SC
CJ Rose	CLEO	NW
Rodney Palesano	Board Chair	SC
Ed Phillips	Board Chair	SW
Dennis Luckinbill	Board Chair	NW
Trina Madden	Board Staff	SC
Carol Sims	Board Staff	SW
Jennifer Miller	Board Staff	NW
Ken Jones	ASCOG-SCSEP	SC
Jo Richter	OESC	SC
Titus Jacobs	VA	OK
Sheryl Kimball	ABE	SW
Carol Estes	Rescare-One Stop Operator	SW and SC
Lara Jernigan	Rescare-Service Provide Title I	SW and SC
Mike Newell	ABE	SC
Mike Brown	SWODA	SW
Melinda Fruendt	DRS	OK
Rhonda Archer	DHS	OK
Justin Carnagey	OEDA	NW
Tammie Jones	DRS	OK
Greg DeMantra	DRS	SC
Nina Green	Board Member	SW
Frank Boswell	OESC	SW
Debora Glasgow	SWODA	SW
Amanda Wills	CDSA	NW
Diedra Williamson	CDSA	NW
Mark Kinnison	DRS	OK
Wendy Bohannon	DRS	SC
Shawn Freie	Board Member	SC
John Spurlock	OESC	SC and SW
Stephen Gable	OESC	SW
Dee Ann Gray	OEDA	NW
Jimmy Curry	AFL-CIO	OK
Rodney Wade	DHS	SC
Misty Wade	ABE-RRTC	SC
Traci Allen	DHS	SC
Rachel Vazquez	DHS	SC
Fred Ikard	DHS	SC
Chanda Partee	DHS	SC
Lisa French	DHS	OK

Melanie Milacek	CDSA	NW
Barbara Schmidt	OESC	NW
Jodi Palmer	OEDA-SCSEP	NW
Chearlene Johnson	Board Member	SC
Steve Myers	IBEW	SW
Jon Merrifield	Board Staff	SW
Ali Bolz	DRS	NW
Lila Logan	CBO	NW
Steve Crank	OESC	NW

DRAFT

## Appendix C – Western Oklahoma Planning Region SWOT Analysis Results

### STRENGTHS

#### Top Findings:

- Small Town Commitments
- Variety of Industries
- Military Facilities (Ft. Sill, Altus AFB, Vance AFB)
- Resourcefulness
- Already have Relationships established
- Strong Partnerships
- Brick and Mortar already exists
- Strong Leadership

---

#### Supporting Findings:

- Career Technology Centers
- Out of the Box Thinking
- Diverse Populations
- Regional Universities
- Agriculture
- Native American Tribes
- Wind Energy and Other Natural Resources
- Local Workforce Offices
- Working already
- Sharing = workforce enhancement
- Customer Focused
- Regional Mindset
- Strong Economic Development agencies

## WEAKNESSES

### Top Findings:

- Limited Transportation
- Large Geographical area – 33 Counties = 43% of Oklahoma w/1 WIB
- Loss of Population / “limited” population (Funding Formulas affected by this)
- Budget Cuts, Funding
- Access to Healthcare – Rural Health Care diminishing
- Lack of Knowledge of other Services/Resources
- Common Performance Measures – Who gets credit
- Accessibility / ADA Compliance
- Market Instability

---

### Supporting Findings:

- Lack of Manufacturing
- Boom or Bust Economy
- Brain Drain
- Marketing
- Territorialism
- Lack of Broadband
- Logistics
- Client Transportation
- Lack of Workforce Personnel
- Lack of affordable housing
- Marketability of workforce system (can't use funds)
- Closure of current resources
- No Draw for young people – Not hip/cool



## OPPORTUNITIES

### Top Findings:

Shared Data Systems

Dual Enrollment w/different funding streams & both meet performance

More opportunities to better serve community because we're working together

Eliminate Duplication

Working / Increased Collaboration with tribes

Political Landscaped Change

Better Trained Case Managers

Opportunities to "Fill in Gaps"

Apprenticeships and OJT

---

### Supporting Findings:

Creative Advertising/Marketing

Job Fairs / Cooperative Agencies

Common Registration/Intake Systems

Dual Enrollment

Educate on all services available / across agencies

Agencies could share performance measures

More resources for employment

More transportation resources

"Team" Case Management

Dual Customer Approach – Biz needs = Job seeker needs

Forced innovative approach mentality

More educated workforce - TAA

Forces us to work more closely

## THREATS

### Top Findings:

- Sanctions for Poor Performance
- Funding Cuts
- Territorialism
- Transient Workers
- Duplication of Services
- Redundancy
- Over dependence on Oil & Gas Industry
- Aging Population
- Not being able to serve everyone

---

### Supporting Findings:

- Lower Commodity Prices
- Unemployment rate versus funding
- Perception that consolidation threatens small communities
- Not being able to provide services across large geographical areas
- Staff burnout with larger, unmanageable areas
- State staffs increasing while field staffs decreasing
- Field morale: Asked to do more, with less; while state staff grows and does less

# OEDA EconOverview

Emsi Q3 2016 Data Set

October 2016

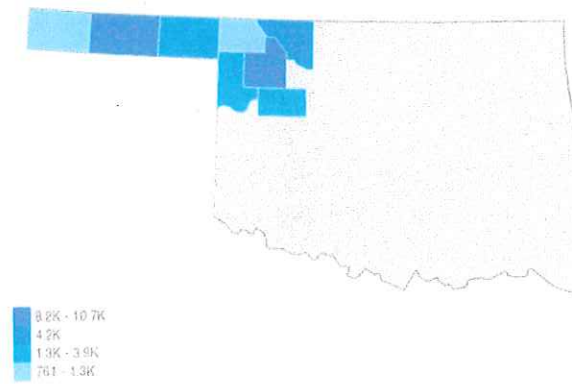
**Northwestern Oklahoma Workforce Board**



1116 19th Street  
Woodward, OK, Oklahoma 73801

## Regional Employment Map

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## Population

**74,631**



















2016 Population

1.9% of State

**5.6%**

Population Growth for the Last 5 Years

State Growth 4.0%

Age Group	2016 Population	% of Population	
Under 5 years	5,449	7.3%	
5 to 9 years	5,345	7.2%	
10 to 14 years	5,335	7.1%	
15 to 19 years	5,152	6.9%	
20 to 24 years	5,442	7.3%	
25 to 29 years	5,019	6.7%	
30 to 34 years	5,169	6.9%	
35 to 39 years	4,822	6.5%	
40 to 44 years	4,351	5.8%	
45 to 49 years	4,054	5.4%	
50 to 54 years	4,588	6.1%	
55 to 59 years	4,740	6.4%	
60 to 64 years	4,233	5.7%	
65 to 69 years	3,323	4.5%	
70 to 74 years	2,603	3.5%	
75 to 79 years	2,170	2.9%	
80 to 84 years	1,454	1.9%	
85 years and over	1,382	1.9%	

## Jobs by Industry













			31,292	54.5%	45.5%
			Total Jobs (2016)	Male (National: 50.8%)	Female (National: 49.2%)
NAICS	Industry	2016 Jobs			
11	Crop and Animal Production	4,914			
21	Mining, Quarrying, and Oil and Gas Extraction	2,591			
22	Utilities	398			
23	Construction	1,642			
31	Manufacturing	882			
42	Wholesale Trade	983			
44	Retail Trade	3,274			
48	Transportation and Warehousing	1,099			
51	Information	434			
52	Finance and Insurance	943			
53	Real Estate and Rental and Leasing	307			
54	Professional, Scientific, and Technical Services	627			
55	Management of Companies and Enterprises	193			
56	Administrative and Support and Waste Management and Remediation Services	754			
61	Educational Services	29			
62	Health Care and Social Assistance	1,654			
71	Arts, Entertainment, and Recreation	103			
72	Accommodation and Food Services	2,383			
81	Other Services (except Public Administration)	1,057			
90	Government	7,024			
99	Unclassified Industry	0			

## Average Earnings by Industry

**\$47,732**

Avg. Earnings (2016)






















75% of Nation Avg.

NAICS	Industry	Avg. Earnings (2016)	
11	Crop and Animal Production	\$44,712	
21	Mining, Quarrying, and Oil and Gas Extraction	\$84,892	
22	Utilities	\$100,730	
23	Construction	\$55,445	
31	Manufacturing	\$71,748	
42	Wholesale Trade	\$66,511	
44	Retail Trade	\$28,163	
48	Transportation and Warehousing	\$69,974	
51	Information	\$52,704	
52	Finance and Insurance	\$56,379	
53	Real Estate and Rental and Leasing	\$45,978	
54	Professional, Scientific, and Technical Services	\$60,959	
55	Management of Companies and Enterprises	\$91,820	
56	Administrative and Support and Waste Management and Remediation Services	\$38,904	
61	Educational Services	\$19,647	
62	Health Care and Social Assistance	\$43,032	
71	Arts, Entertainment, and Recreation	\$13,028	
72	Accommodation and Food Services	\$15,894	
81	Other Services (except Public Administration)	\$27,267	
90	Government	\$44,106	
99	Unclassified Industry	\$14,337	

## Unemployment by Industry

**1,436**

Total Unemployment (5/2016)















NAICS	Industry	Unemployed (5/2016)	% of Regional Unemployment	
11	Crop and Animal Production	42	3%	
21	Mining, Quarrying, and Oil and Gas Extraction	399	28%	
22	Utilities	17	1%	
23	Construction	95	7%	
31	Manufacturing	63	4%	
42	Wholesale Trade	38	3%	
44	Retail Trade	110	8%	
48	Transportation and Warehousing	39	3%	
51	Information	17	1%	
52	Finance and Insurance	20	1%	
53	Real Estate and Rental and Leasing	18	1%	
54	Professional, Scientific, and Technical Services	28	2%	
55	Management of Companies and Enterprises	2	0%	
56	Administrative and Support and Waste Management and Remediation Services	42	3%	
61	Educational Services	2	0%	
62	Health Care and Social Assistance	35	2%	
71	Arts, Entertainment, and Recreation	4	0%	
72	Accommodation and Food Services	54	4%	
81	Other Services (except Public Administration)	51	4%	
90	Government	161	11%	
99	No Previous Work Experience/Unspecified	200	14%	





## Gross Regional Product (GRP)

<b>\$2,310,024,227</b>	<b>\$1,638,805,412</b>	<b>\$285,956,674</b>	<b>\$4,234,786,314</b>
Earnings (2014)	Property Income (2014)	Taxes on Production (2014)	Total GRP (2014)

NAICS	Industry	GRP (2014)	% of Total
11	Crop and Animal Production	\$844,243,775.75	20% 
21	Mining, Quarrying, and Oil and Gas Extraction	\$1,282,439,692.55	30% 
22	Utilities	\$118,438,872.99	3% 
23	Construction	\$182,003,291.60	4% 
31	Manufacturing	\$141,502,736.72	3% 
42	Wholesale Trade	\$139,336,629.61	3% 
44	Retail Trade	\$154,555,808.15	4% 
48	Transportation and Warehousing	\$135,906,398.67	3% 
51	Information	\$49,462,182.74	1% 
52	Finance and Insurance	\$118,409,219.24	3% 
53	Real Estate and Rental and Leasing	\$93,672,584.30	2% 
54	Professional, Scientific, and Technical Services	\$74,854,125.59	2% 
55	Management of Companies and Enterprises	\$13,128,013.53	0% 
56	Administrative and Support and Waste Management and Remediation Services	\$52,654,521.61	1% 

NAICS	Industry	GRP (2014)	% of Total
61	Educational Services	\$1,966,851.96	0%
62	Health Care and Social Assistance	\$83,670,406.51	2%
71	Arts, Entertainment, and Recreation	\$5,804,073.40	0%
72	Accommodation and Food Services	\$60,197,284.47	1%
81	Other Services (except Public Administration)	\$61,740,637.58	1%
90	Government	\$326,157,336.38	8%
	Other Non-Industries	\$294,641,870.58	7%

## Region Exports

**\$6,369,685,265**

Exports (2014)

83% of Supply

NAICS	Industry	Exports (2014)	
11	Crop and Animal Production	\$1,888,952,994	
21	Mining, Quarrying, and Oil and Gas Extraction	\$1,875,477,234	
22	Utilities	\$141,924,275	
23	Construction	\$237,035,560	
31	Manufacturing	\$384,401,878	
42	Wholesale Trade	\$173,673,533	
44	Retail Trade	\$136,502,318	
48	Transportation and Warehousing	\$267,711,256	
51	Information	\$53,414,094	
52	Finance and Insurance	\$112,688,918	
53	Real Estate and Rental and Leasing	\$113,027,476	
54	Professional, Scientific, and Technical Services	\$82,629,379	
55	Management of Companies and Enterprises	\$21,980,401	
56	Administrative and Support and Waste Management and Remediation Services	\$68,085,164	
61	Educational Services	\$806,441	
62	Health Care and Social Assistance	\$49,793,360	
71	Arts, Entertainment, and Recreation	\$4,382,304	
72	Accommodation and Food Services	\$46,858,905	
81	Other Services (except Public Administration)	\$63,295,347	
90	Government	\$647,044,427	



## Region Imports

**\$6,143,502,266**

Imports (2014)

82% of Demand

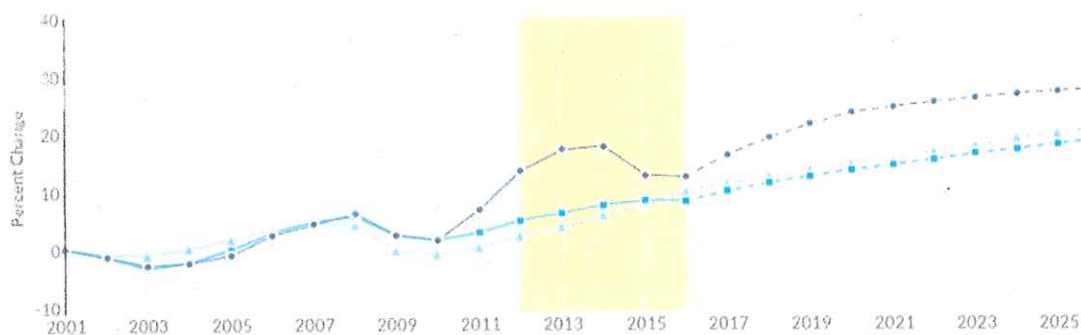
**\$1,358,957,312**

Locally Produced & Consumed (2014)

18% of Demand







NAICS	Industry	Imports (2014)	
11	Crop and Animal Production	\$365,741,573	
21	Mining, Quarrying, and Oil and Gas Extraction	\$152,402,247	
22	Utilities	\$64,710,791	
23	Construction	\$207,281,830	
31	Manufacturing	\$1,325,655,412	
42	Wholesale Trade	\$379,275,666	
44	Retail Trade	\$234,040,879	
48	Transportation and Warehousing	\$206,641,920	
51	Information	\$209,181,153	
52	Finance and Insurance	\$349,242,090	
53	Real Estate and Rental and Leasing	\$169,246,496	
54	Professional, Scientific, and Technical Services	\$302,825,264	
55	Management of Companies and Enterprises	\$114,423,825	
56	Administrative and Support and Waste Management and Remediation Services	\$86,506,099	
61	Educational Services	\$70,118,968	
62	Health Care and Social Assistance	\$413,998,563	
71	Arts, Entertainment, and Recreation	\$52,634,746	
72	Accommodation and Food Services	\$118,485,828	
81	Other Services (except Public Administration)	\$72,897,996	
90	Government	\$1,248,190,919	

## Regional Trends









	Region	2012 Jobs	2016 Jobs	Change	% Change
●	Region	31,597	31,292	-305	-1.0%
●	Oklahoma	1,631,449	1,683,030	51,581	3.2%
●	United States	138,360,995	148,708,259	10,347,264	7.5%

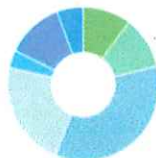
## Growing & Declining Occupations

Occupation	Change in Jobs (2012-2016)	
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	112	
Combined Food Preparation and Serving Workers, Including Fast Food	97	
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	69	
Service Unit Operators, Oil, Gas, and Mining	-116	
Heavy and Tractor-Trailer Truck Drivers	-190	
Roustabouts, Oil and Gas	-248	

## Growing & Declining Industries

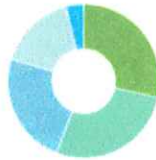
Industry	Change in Jobs (2012-2016)	
Warehouse Clubs and Supercenters	250	
Limited-Service Restaurants	153	
Full-Service Restaurants	135	
Crude Petroleum and Natural Gas Extraction	-147	
Drilling Oil and Gas Wells	-267	
Support Activities for Oil and Gas Operations	-690	

## 2016 Educational Attainment



	Education Level	2016 Population	2016 Percent	
●	Less Than 9th Grade	4,912	10.3%	■
●	9th Grade to 12th Grade	5,315	11.1%	■
●	High School Diploma	16,696	34.8%	■
●	Some College	10,692	22.3%	■
●	Associate's Degree	1,806	3.8%	■
●	Bachelor's Degree	5,851	12.2%	■
●	Graduate Degree and Higher	2,637	5.5%	■

## 2016 Age Cohort Demographics



Age Cohort		2016 Population	2016 Percent	
●	Under 20 years	21,281	28.5%	<div></div>
●	20 to 39 years	20,452	27.4%	<div></div>
●	40 to 59 years	17,733	23.8%	<div></div>
●	60 to 79 years	12,329	16.5%	<div></div>
●	80 years and over	2,836	3.8%	<div></div>

## 2016 Race/Ethnicity Demographics



	Race/Ethnicity	2016 Population	2016 Percent
●	All Other Race/Ethnicities	4,043	5.4% ■
●	American Indian or Alaskan Native, Non-Hispanic	1,531	2.1% ■
●	Black, Non-Hispanic	1,611	2.2% ■
●	White, Hispanic	15,873	21.3% ■
●	White, Non-Hispanic	51,573	69.1% ■



# Appendix A - Data Sources and Calculations

## Industry Data

Emsi industry data have various sources depending on the class of worker. (1) For QCEW Employees, Emsi primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

## Demographic Data

The demographic data in this report is compiled from several sources using a specialized process. Sources include annual population estimates and population projections from the US Census Bureau, birth and mortality rates from the US Health Department, and projected regional job growth.

## Unemployment Data

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

## Input-Output Data

The input-output model in this report is Emsi's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several Emsi in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

## Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level Emsi earnings by industry.

## Educational Attainment Data

Emsi's educational attainment numbers are based on Emsi's demographic data and the American Community Survey. By combining these sources, Emsi interpolates for missing years and projects data at the county level. Educational attainment data cover only the population aged 25 years or more and indicate the highest level achieved.

## State Data Sources

This report uses state data from the following agencies: Arkansas Department of Workforce Services; Colorado Department of Labor and Employment; Kansas Department of Labor, Labor Market Information Services, Kansas Wage Survey; Oklahoma Employment Security Commission; Texas Workforce Commission

# **OEDA DemoOverview12-16**

Emsi Q3 2016 Data Set

October 2016

**Northwestern Oklahoma Workforce Board**



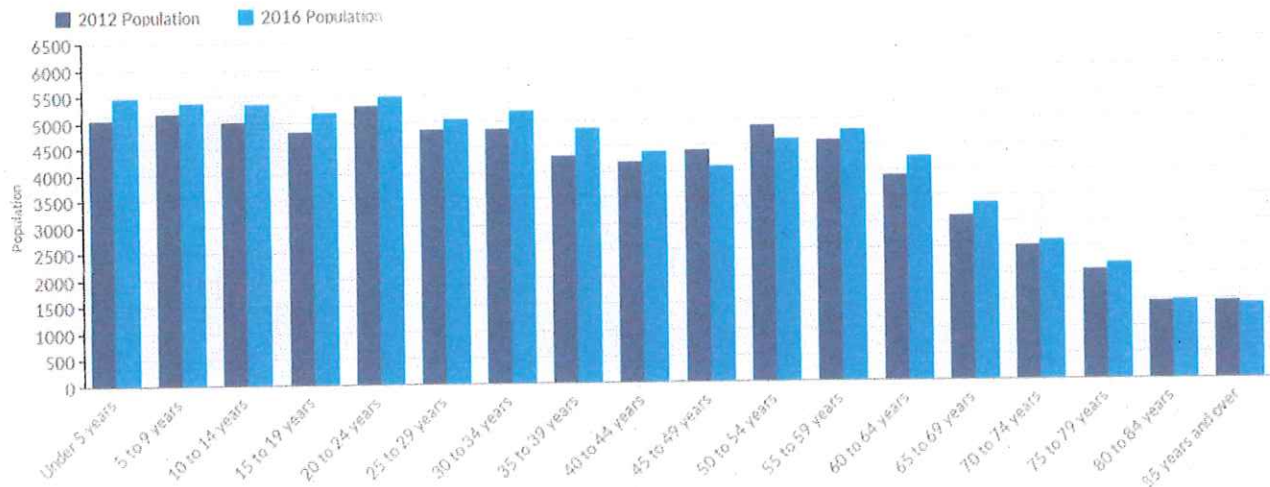
1116 19th Street  
Woodward, OK, Oklahoma 73801

## Cohort Totals

Area	2012 Population	2016 Population	Change	% Change
8 Counties	71,543	74,631	3,088	4%
State	3,817,051	3,937,441	120,390	3%
Nation	314,112,078	323,427,948	9,315,870	3%
Total	318,000,671	327,440,020	9,439,349	3%

*Source: QCEW Employees & Non-QCEW Employees - Emsi 2016.3 Class of Worker*

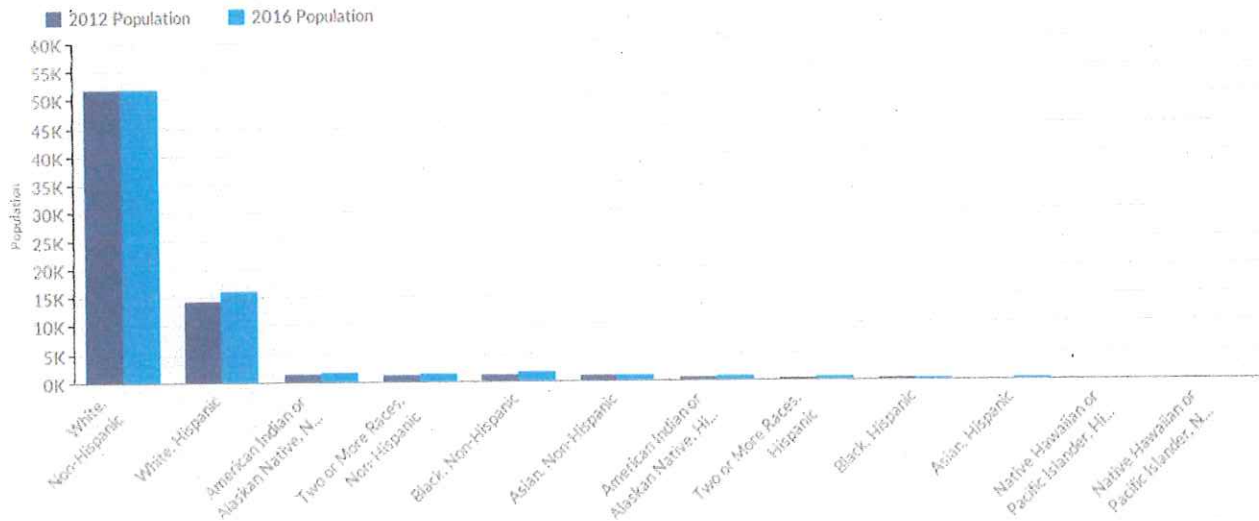
## Population by Age Cohort



Age Cohort	2012 Population	2016 Population	Change	% Change	2012 % of Cohort
Under 5 years	5,038	5,449	411	8%	7.04%
5 to 9 years	5,172	5,345	173	3%	7.23%
10 to 14 years	4,985	5,335	350	7%	6.97%
15 to 19 years	4,806	5,152	346	7%	6.72%
20 to 24 years	5,289	5,442	153	3%	7.39%
25 to 29 years	4,823	5,019	196	4%	6.74%
30 to 34 years	4,809	5,169	360	7%	6.72%
35 to 39 years	4,292	4,822	530	12%	6.00%
40 to 44 years	4,174	4,351	177	4%	5.83%
45 to 49 years	4,384	4,054	-330	-8%	6.13%
50 to 54 years	4,849	4,588	-261	-5%	6.78%
55 to 59 years	4,558	4,740	182	4%	6.37%
60 to 64 years	3,868	4,233	365	9%	5.41%
65 to 69 years	3,089	3,323	234	8%	4.32%
70 to 74 years	2,505	2,603	98	4%	3.50%
75 to 79 years	2,036	2,170	134	7%	2.85%
80 to 84 years	1,432	1,454	22	2%	2.00%
85 years and over	1,431	1,382	-49	-3%	2.00%
Total	71,543	74,631	3,088	4%	100.00%

*Source: QCEW Employees & Non-QCEW Employees - Emsi 2016.3 Class of Worker*

## Population by Race/Ethnicity

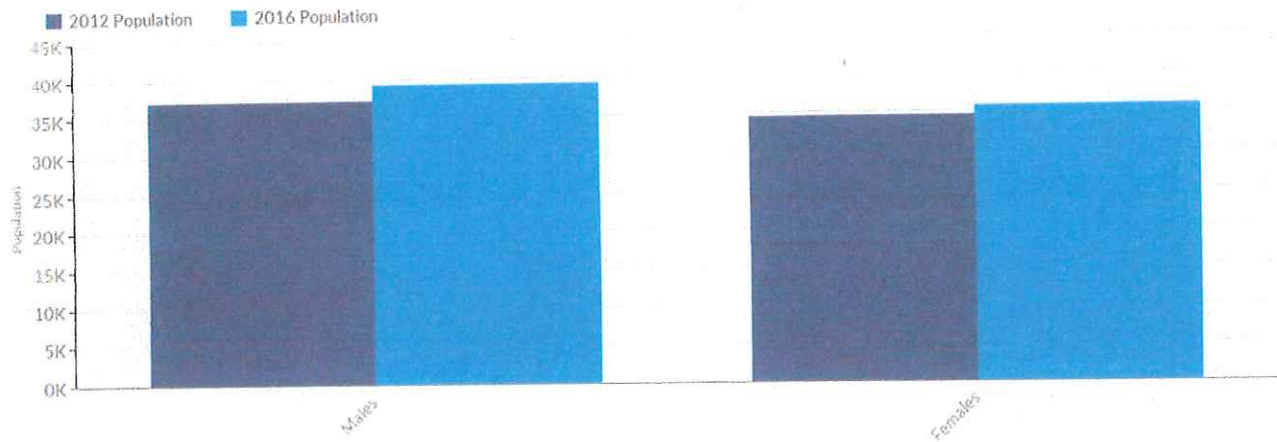


Race/Ethnicity	2012 Population	2016 Population	Change	% Change	2012 % of Cohort
White, Non-Hispanic	51,617	51,573	-44	0%	72.15%
White, Hispanic	14,126	15,873	1,747	12%	19.74%
American Indian or Alaskan Native, Non-Hispanic	1,422	1,531	109	8%	1.99%
Two or More Races, Non-Hispanic	1,175	1,393	218	19%	1.64%
Black, Non-Hispanic	1,160	1,611	451	39%	1.62%
Asian, Non-Hispanic	805	1,001	196	24%	1.13%
American Indian or Alaskan Native, Hispanic	520	606	86	17%	0.73%
Two or More Races, Hispanic	318	419	101	32%	0.44%
Black, Hispanic	190	280	90	47%	0.27%
Asian, Hispanic	106	220	114	108%	0.15%
Native Hawaiian or Pacific Islander, Hispanic	74	88	14	19%	0.10%
Native Hawaiian or Pacific Islander, Non-Hispanic	29	37	8	28%	0.04%
Total	71,543	74,631	3,088	4%	100.00%

Source: QCEW Employees & Non-QCEW Employees - Emsi 2016.3 Class of Worker



## Population by Gender



Gender	2012 Population	2016 Population	Change	% Change	2012 % of Cohort
Males	37,157	39,079	1,922	5%	51.94%
Females	34,385	35,552	1,167	3%	48.06%
Total	71,543	74,631	3,088	4%	100.00%

Source: QCEW Employees & Non-QCEW Employees - Emsi 2016.3 Class of Worker

# Appendix A - Data Sources and Calculations

## Demographic Data

The demographic data in this report is compiled from several sources using a specialized process. Sources include annual population estimates and population projections from the US Census Bureau, birth and mortality rates from the US Health Department, and projected regional job growth.

## State Data Sources

This report uses state data from the following agencies: Oklahoma Employment Security Commission

# OEDA Highest Ranked Industries

Emsi Q3 2016 Data Set

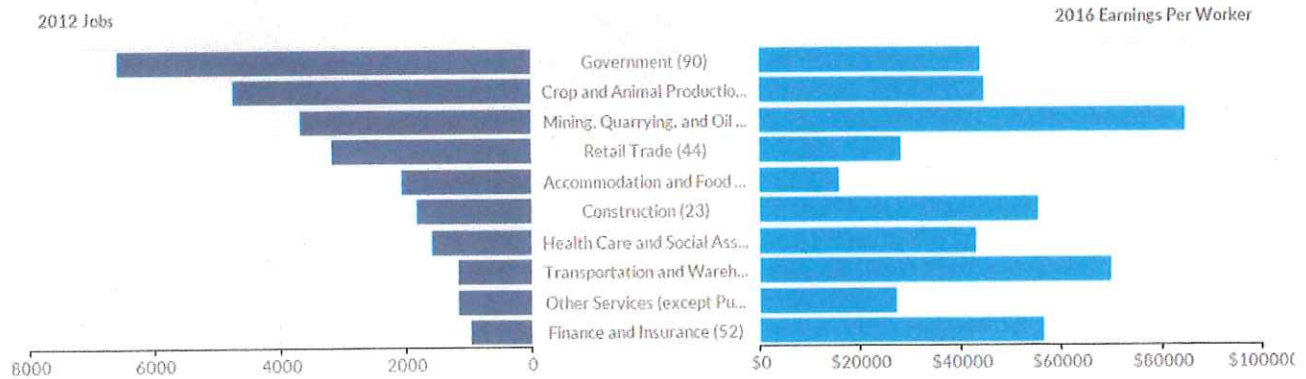
October 2016

**Northwestern Oklahoma Workforce Board**



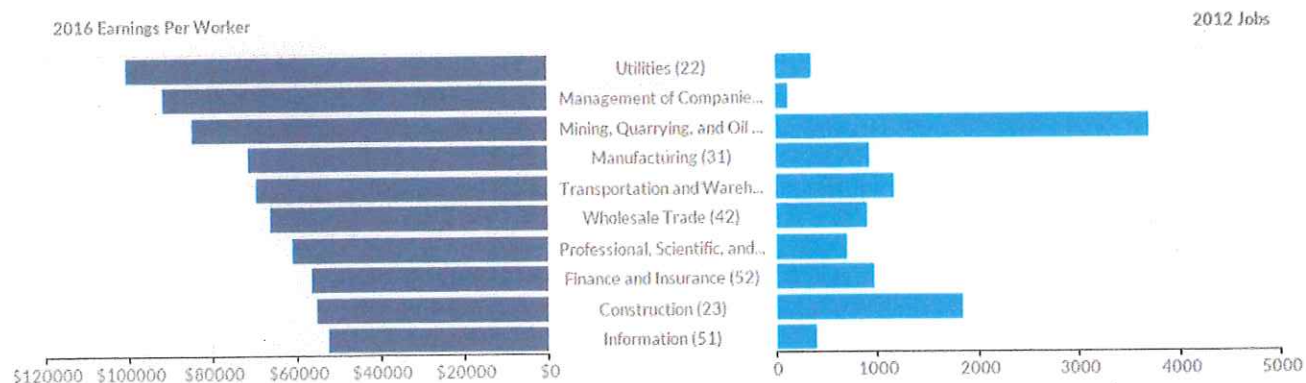
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## Largest Industries



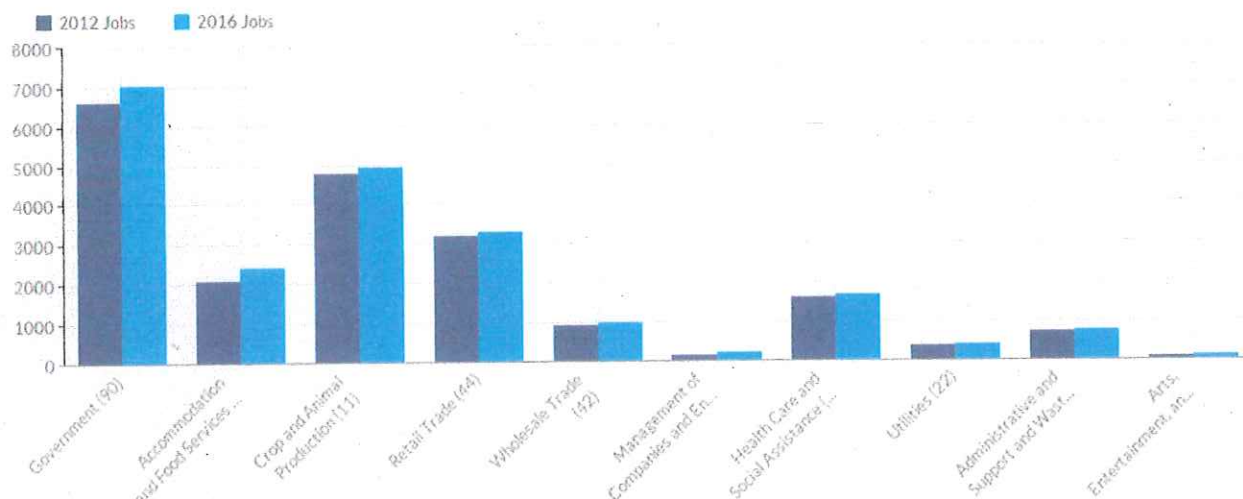
Industry	2012 Jobs	2016 Jobs	Change in Jobs (2012-2016)	% Change	2016 Earnings Per Worker
Government	6,594	7,024	430	7%	\$44,106
Crop and Animal Production	4,752	4,914	162	3%	\$44,712
Mining, Quarrying, and Oil and Gas Extraction	3,697	2,591	-1,106	-30%	\$84,892
Retail Trade	3,188	3,274	86	3%	\$28,163
Accommodation and Food Services	2,077	2,383	307	15%	\$15,894
Construction	1,840	1,642	-198	-11%	\$55,445
Health Care and Social Assistance	1,591	1,654	63	4%	\$43,032
Transportation and Warehousing	1,173	1,099	-75	-6%	\$69,974
Other Services (except Public Administration)	1,166	1,057	-109	-9%	\$27,267
Finance and Insurance	972	943	-29	-3%	\$56,379

## Highest Paying Industries



Industry	2012 Jobs	2016 Jobs	Change in Jobs (2012-2016)	% Change	2016 Earnings Per Worker
Utilities	360	398	38	11%	\$100,730
Management of Companies and Enterprises	122	193	71	58%	\$91,820
Mining, Quarrying, and Oil and Gas Extraction	3,697	2,591	-1,106	-30%	\$84,892
Manufacturing	937	882	-55	-6%	\$71,748
Transportation and Warehousing	1,173	1,099	-74	-6%	\$69,974
Wholesale Trade	907	983	76	8%	\$66,511
Professional, Scientific, and Technical Services	699	627	-72	-10%	\$60,959
Finance and Insurance	972	943	-29	-3%	\$56,379
Construction	1,840	1,642	-198	-11%	\$55,445
Information	408	434	26	6%	\$52,704

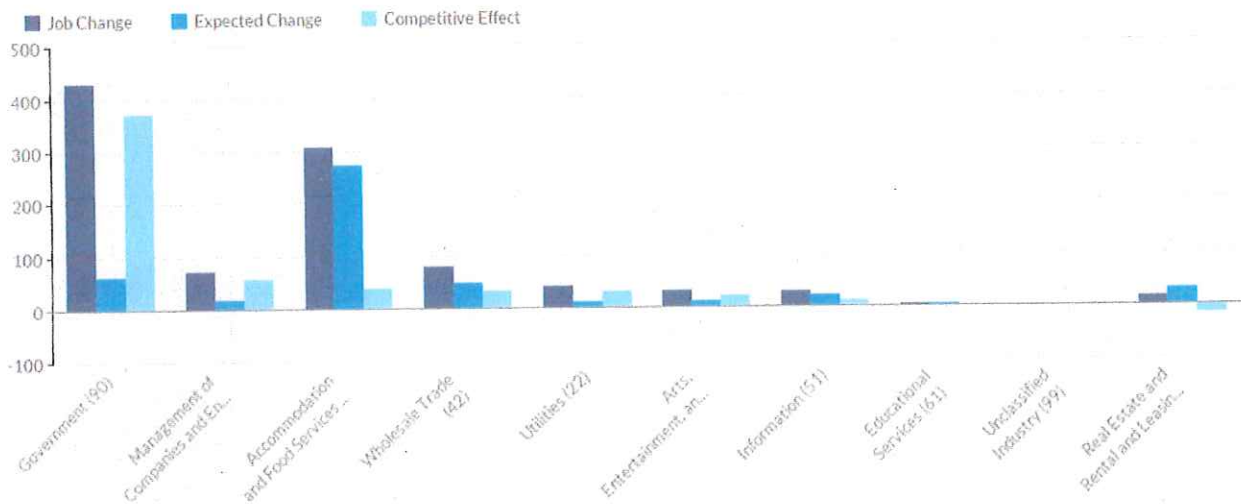
## Fastest Growing Industries



Industry	2012 Jobs	2016 Jobs	Change in Jobs (2012-2016)	% Change	2016 Earnings Per Worker
Government	6,594	7,024	430	7%	\$44,106
Accommodation and Food Services	2,077	2,383	307	15%	\$15,894
Crop and Animal Production	4,752	4,914	162	3%	\$44,712
Retail Trade	3,188	3,274	86	3%	\$28,163
Wholesale Trade	907	983	76	8%	\$66,511
Management of Companies and Enterprises	122	193	71	58%	\$91,820
Health Care and Social Assistance	1,591	1,654	63	4%	\$43,032
Utilities	360	398	38	11%	\$100,730
Administrative and Support and Waste Management and Remediation Services	719	754	35	5%	\$38,904
Arts, Entertainment, and Recreation	75	103	28	37%	\$13,028

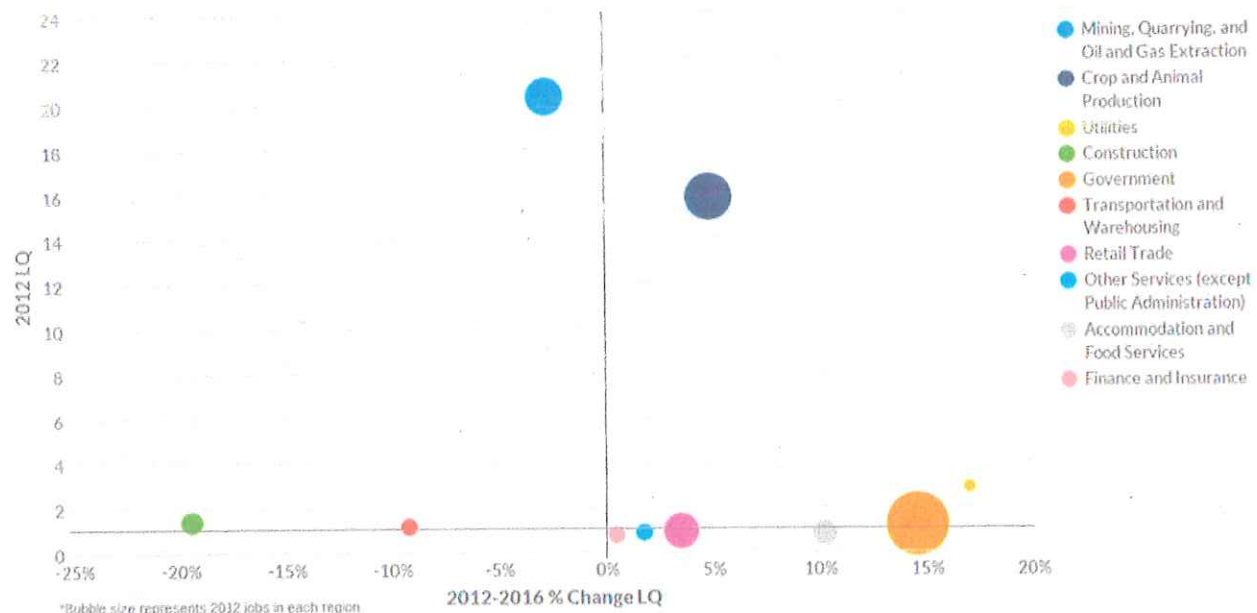


## Most Competitive Industries



Industry	Job Change	Ind Mix Effect	Nat Growth Effect	Expected Change	Competitive Effect	2016 Earnings Per Worker
Government	430	-434	493	59	371	\$44,106
Management of Companies and Enterprises	71	7	9	16	55	\$91,820
Accommodation and Food Services	307	116	155	271	36	\$15,894
Wholesale Trade	76	-23	68	45	31	\$66,511
Utilities	38	-18	27	9	29	\$100,730
Arts, Entertainment, and Recreation	28	5	6	11	18	\$13,028
Information	27	-12	30	18	9	\$52,704
Educational Services	3	0	2	2	1	\$19,647
Unclassified Industry	0	0	0	0	0	\$14,337
Real Estate and Rental and Leasing	14	6	22	28	-14	\$45,978

## Highest Industry Location Quotient



Industry	2012 Jobs	2016 Jobs	% Change	2012 LQ	2016 LQ	% Change LQ	2016 Earnings Per Worker
Mining, Quarrying, and Oil and Gas Extraction	3,697	2,591	-30%	20.28	19.73	-3%	\$84,892
Crop and Animal Production	4,752	4,914	3%	15.79	16.57	5%	\$44,712
Utilities	360	398	11%	2.87	3.36	17%	\$100,730
Construction	1,840	1,642	-11%	1.40	1.12	-19%	\$55,445
Government	6,594	7,024	7%	1.20	1.37	15%	\$44,106
Transportation and Warehousing	1,173	1,099	-6%	1.17	1.06	-9%	\$69,974
Retail Trade	3,188	3,274	3%	0.94	0.97	4%	\$28,163
Other Services (except Public Administration)	1,166	1,057	-9%	0.84	0.86	2%	\$27,267
Accommodation and Food	2,077	2,383	15%	0.77	0.85	10%	\$15,894

Industry	2012 Jobs	2016 Jobs	% Change	2012 LQ	2016 LQ	% Change LQ	2016 Earnings Per Worker
Services							
Finance and Insurance	972	943	-3%	0.75	0.76	0%	\$56,379

# Appendix A - Data Sources and Calculations

## Industry Data

Emsi industry data have various sources depending on the class of worker. (1) For QCEW Employees, Emsi primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

## State Data Sources

This report uses state data from the following agencies: Oklahoma Employment Security Commission

# **OEDA Highest Ranked Occs**

Emsi Q3 2016 Data Set

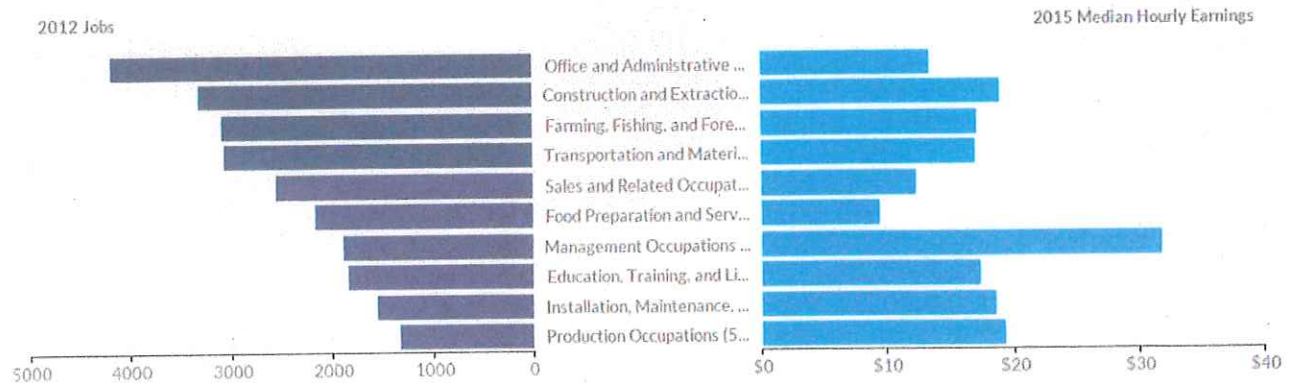
October 2016

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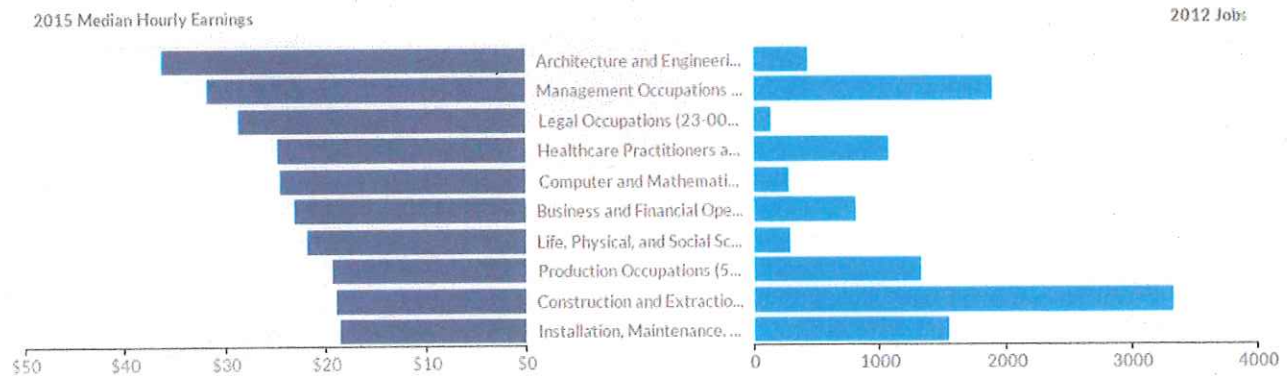
## Largest Occupations



Occupation	2012 Jobs	2016 Jobs	Change in Jobs (2012-2016)	% Change	2015 Median Hourly Earnings
Office and Administrative Support Occupations	4,198	4,132	-66	-2%	\$13.47
Construction and Extraction Occupations	3,330	2,607	-723	-22%	\$19.07
Farming, Fishing, and Forestry Occupations	3,103	3,205	102	3%	\$17.20
Transportation and Material Moving Occupations	3,073	2,822	-250	-8%	\$17.14
Sales and Related Occupations	2,573	2,689	116	5%	\$12.43
Food Preparation and Serving Related Occupations	2,180	2,492	312	14%	\$9.49
Management Occupations	1,904	1,923	20	1%	\$31.85
Education, Training, and Library Occupations	1,846	1,902	56	3%	\$17.44
Installation, Maintenance, and Repair Occupations	1,556	1,558	2	0%	\$18.68
Production Occupations	1,332	1,249	-83	-6%	\$19.38

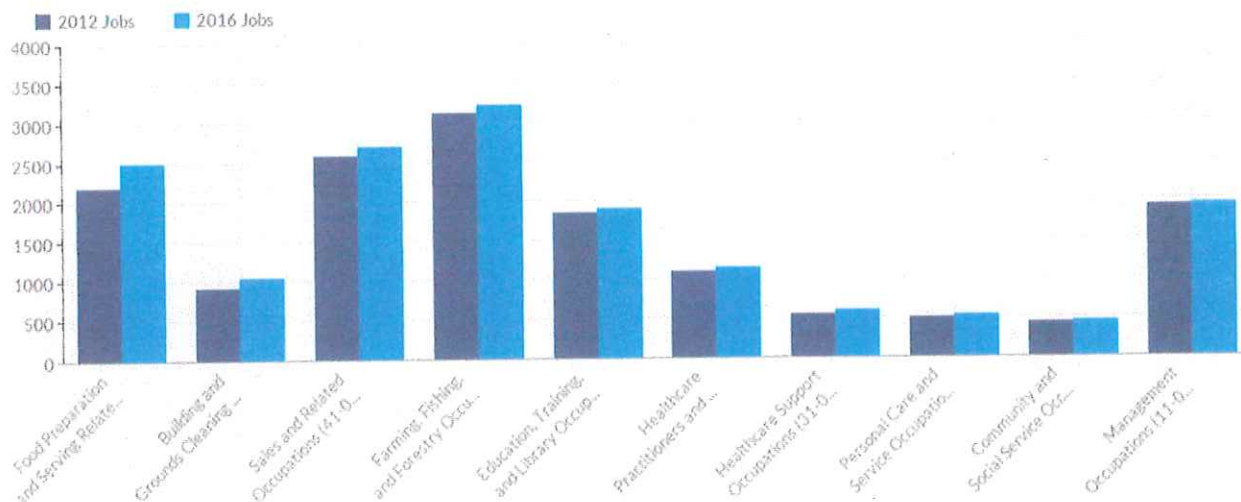


## Highest Paying Occupations



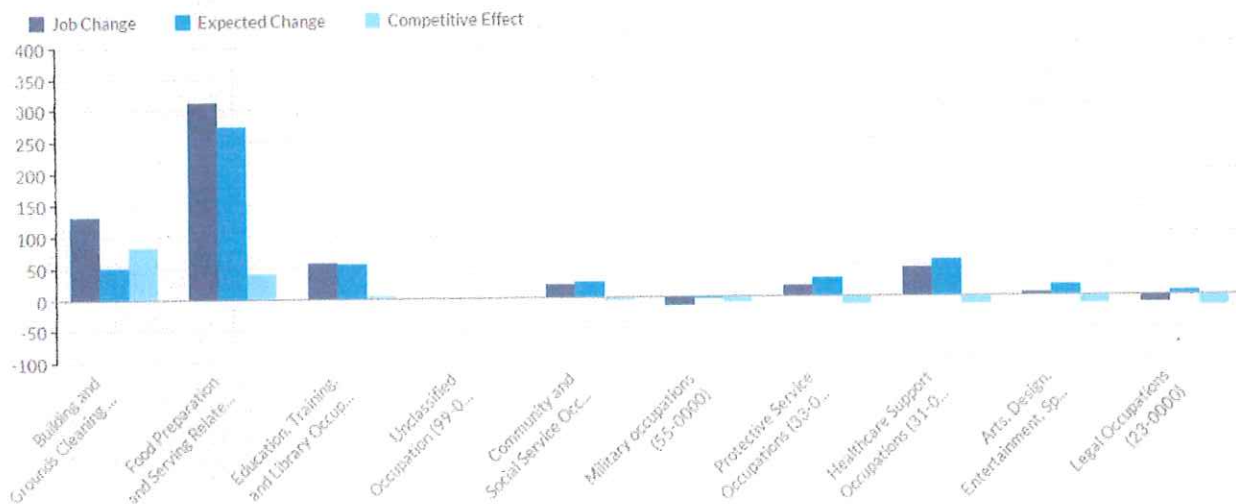
Occupation	2012 Jobs	2016 Jobs	Change in Jobs (2012-2016)	% Change	2015 Earnings Per Worker
Architecture and Engineering Occupations	431	363	-68	-16%	\$36
Management Occupations	1,904	1,923	19	1%	\$32
Legal Occupations	142	130	-12	-8%	\$29
Healthcare Practitioners and Technical Occupations	1,081	1,136	55	5%	\$25
Computer and Mathematical Occupations	284	282	-2	-1%	\$25
Business and Financial Operations Occupations	814	828	14	2%	\$23
Life, Physical, and Social Science Occupations	297	294	-3	-1%	\$22
Production Occupations	1,332	1,249	-83	-6%	\$19
Construction and Extraction Occupations	3,330	2,607	-723	-22%	\$19
Installation, Maintenance, and Repair Occupations	1,556	1,558	2	0%	\$19

## Fastest Growing Occupations



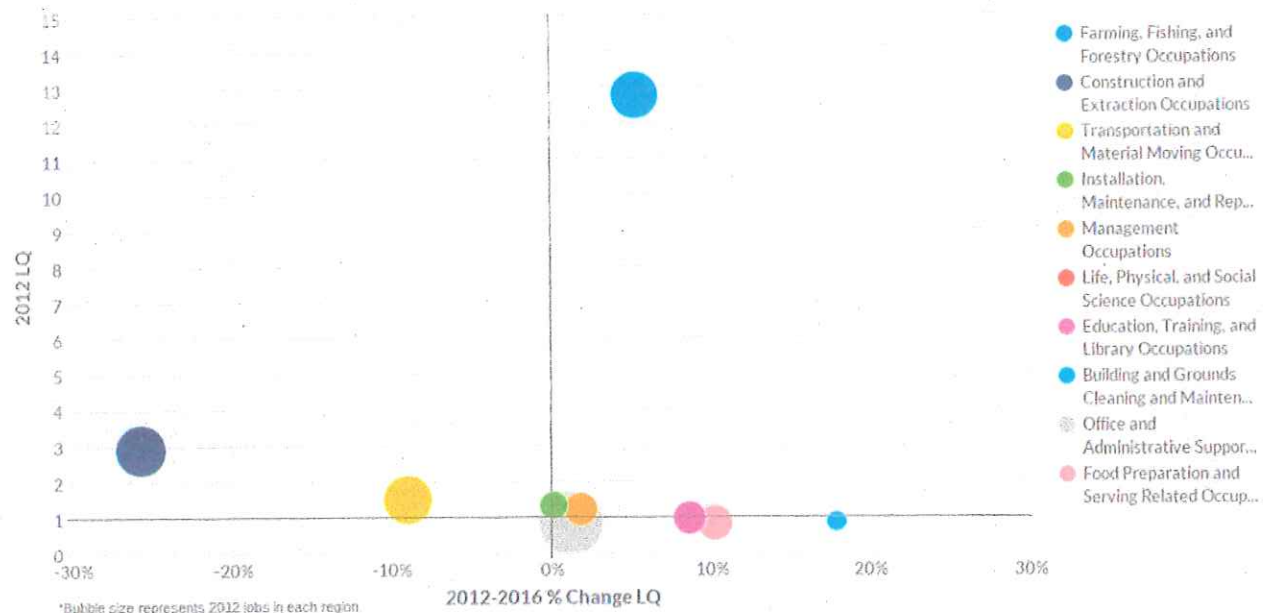
Occupation	2012 Jobs	2016 Jobs	Change in Jobs (2012-2016)	% Change	2015 Median Hourly Earnings
Food Preparation and Serving Related Occupations	2,180	2,492	312	14%	\$9.49
Building and Grounds Cleaning and Maintenance Occupations	906	1,038	132	15%	\$10.00
Sales and Related Occupations	2,573	2,689	116	5%	\$12.43
Farming, Fishing, and Forestry Occupations	3,103	3,205	102	3%	\$17.20
Education, Training, and Library Occupations	1,846	1,902	56	3%	\$17.44
Healthcare Practitioners and Technical Occupations	1,081	1,136	55	5%	\$24.76
Healthcare Support Occupations	541	585	44	8%	\$11.72
Personal Care and Service Occupations	490	515	25	5%	\$10.63
Community and Social Service Occupations	417	437	20	5%	\$16.44
Management Occupations	1,904	1,923	20	1%	\$31.85

## Most Competitive Occupations



Occupation	Job Change	Occ Mix Effect	Nat Growth Effect	Expected Change	Competitive Effect
Building and Grounds Cleaning and Maintenance Occupations	132	-18	68	50	82
Food Preparation and Serving Related Occupations	312	109	163	272	39
Education, Training, and Library Occupations	56	-85	138	53	3
Unclassified Occupation	0	0	0	0	0
Community and Social Service Occupations	20	-7	31	24	-4
Military occupations	-13	-24	21	-3	-9
Protective Service Occupations	14	-18	45	27	-12
Healthcare Support Occupations	44	16	40	56	-13
Arts, Design, Entertainment, Sports, and Media Occupations	2	-2	17	15	-13
Legal Occupations	-12	-6	11	5	-16

## Highest Occupation Location Quotient



Occupation	2012 Jobs	2016 Jobs	% Change	2012 LQ	2016 LQ	% Change LQ	2015 Median Hourly Earnings
Farming, Fishing, and Forestry Occupations	3,103	3,205	3%	12.74	13.41	5%	\$17.20
Construction and Extraction Occupations	3,330	2,607	-22%	2.89	2.14	-26%	\$19.07
Transportation and Material Moving Occupations	3,073	2,822	-8%	1.50	1.36	-9%	\$17.14
Installation, Maintenance, and Repair Occupations	1,556	1,558	0%	1.30	1.31	0%	\$18.68
Management Occupations	1,904	1,923	1%	1.22	1.24	2%	\$31.85
Life, Physical, and Social Science Occupations	297	294	-1%	1.14	1.17	2%	\$21.93
Education, Training, and	1,846	1,902	3%	0.95	1.03	9%	\$17.44

Occupation	2012 Jobs	2016 Jobs	% Change	2012 LQ	2016 LQ	% Change LQ	2015 Median Hourly Earnings
Library Occupations							
Building and Grounds Cleaning and Maintenance Occupations	906	1,038	15%	0.85	1.00	18%	\$10.00
Office and Administrative Support Occupations	4,198	4,132	-2%	0.82	0.83	1%	\$13.47
Food Preparation and Serving Related Occupations	2,180	2,492	14%	0.82	0.90	10%	\$9.49

# Appendix A - Data Sources and Calculations

## Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level Emsi earnings by industry.

## State Data Sources

This report uses state data from the following agencies: Oklahoma Employment Security Commission



# **OEDA EdAttain Overview**

Emsi Q3 2016 Data Set

October 2016

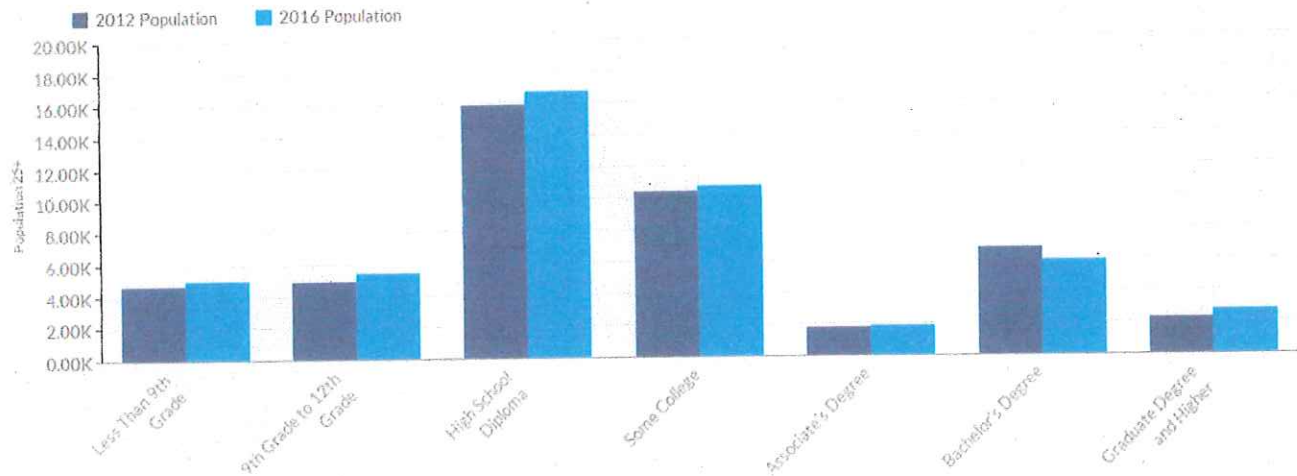
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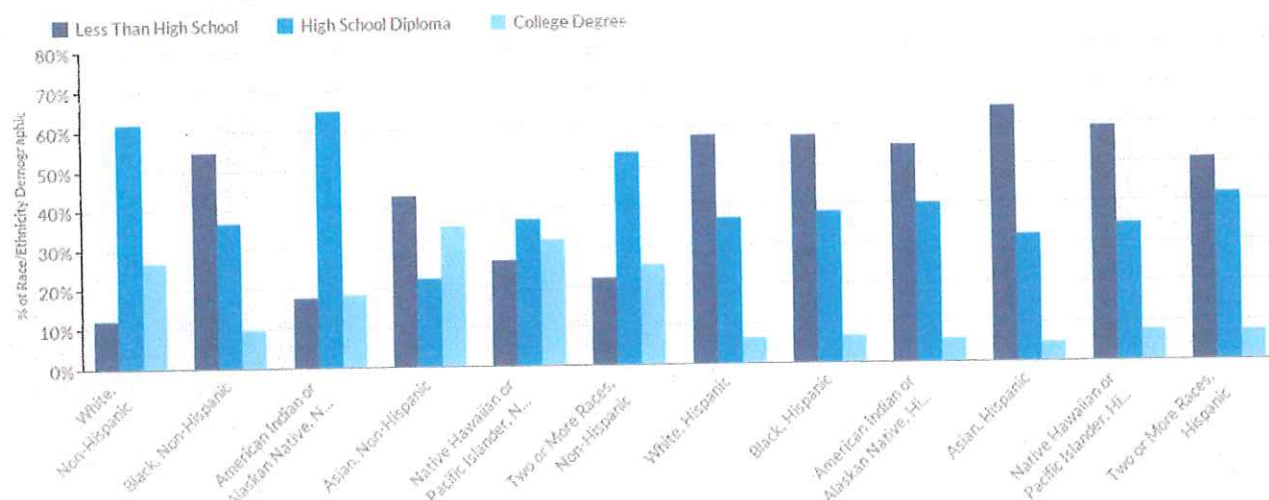


## Educational Attainment by Level



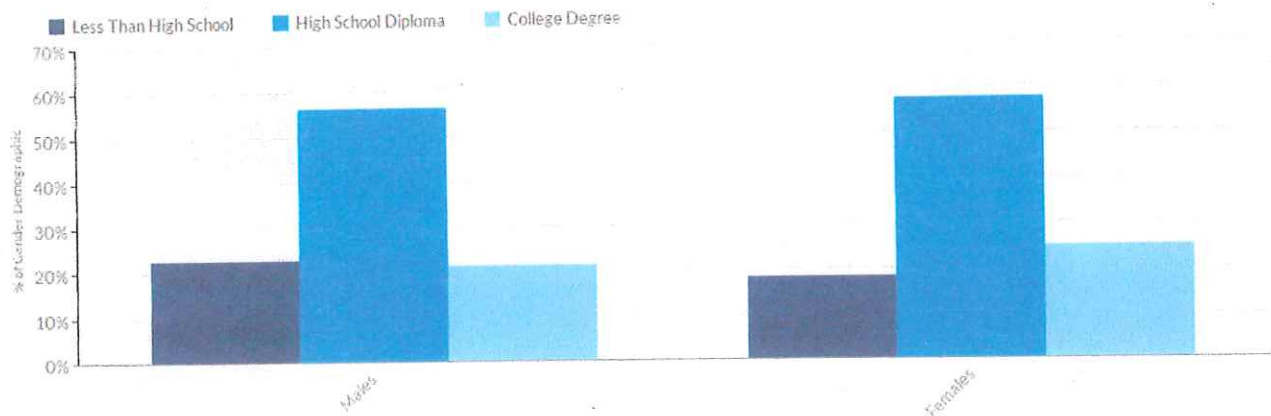
Education Level	2012 Population	2016 Population	2012 % of Population	2012 State % Population	2012 National % Population
Less Than 9th Grade	4,632	4,912	10%	5%	7%
9th Grade to 12th Grade	4,841	5,315	10%	8%	8%
High School Diploma	15,837	16,696	34%	32%	28%
Some College	10,376	10,692	22%	24%	21%
Associate's Degree	1,735	1,806	4%	7%	8%
Bachelor's Degree	6,637	5,851	14%	16%	18%
Graduate Degree and Higher	2,195	2,637	5%	8%	11%
	46,253	47,908	100%	100%	100%

## Educational Attainment by Race/Ethnicity



Race/Ethnicity	2012 Population	2016 Population	2012 Less Than High School	2012 High School Diploma	2012 College Degree
White, Non-Hispanic	36,165	36,102	4,301	22,271	9,593
Black, Non-Hispanic	639	959	347	233	60
American Indian or Alaskan Native, Non-Hispanic	811	878	143	522	146
Asian, Non-Hispanic	480	632	207	105	169
Native Hawaiian or Pacific Islander, Non-Hispanic	19	22	5	7	6
Two or More Races, Non-Hispanic	526	594	114	281	131
White, Hispanic	7,073	8,030	4,062	2,582	428
Black, Hispanic	95	138	54	36	6
American Indian or Alaskan Native, Hispanic	254	306	138	101	14
Asian, Hispanic	22	40	14	7	1
Native Hawaiian or Pacific Islander, Hispanic	41	53	24	14	3
Two or More Races, Hispanic	129	154	65	54	9
	46,253	47,908	9,473	26,213	10,567

## Educational Attainment by Gender



Gender	2012 Population	2016 Population	2012 Less Than High School	2012 High School Diploma	2012 College Degree
Males	23,800	25,004	5,420	13,328	5,051
Females	22,454	22,904	4,054	12,885	5,515
	46,253	47,908	9,473	26,213	10,567

# Appendix A - Data Sources and Calculations

## Educational Attainment Data

Emsi's educational attainment numbers are based on Emsi's demographic data and the American Community Survey. By combining these sources, Emsi interpolates for missing years and projects data at the county level. Educational attainment data cover only the population aged 25 years or more and indicate the highest level achieved.

# **OEDA Unemployment by Occ**

Emsi Q3 2016 Data Set

October 2016

**Northwestern Oklahoma Workforce Board**

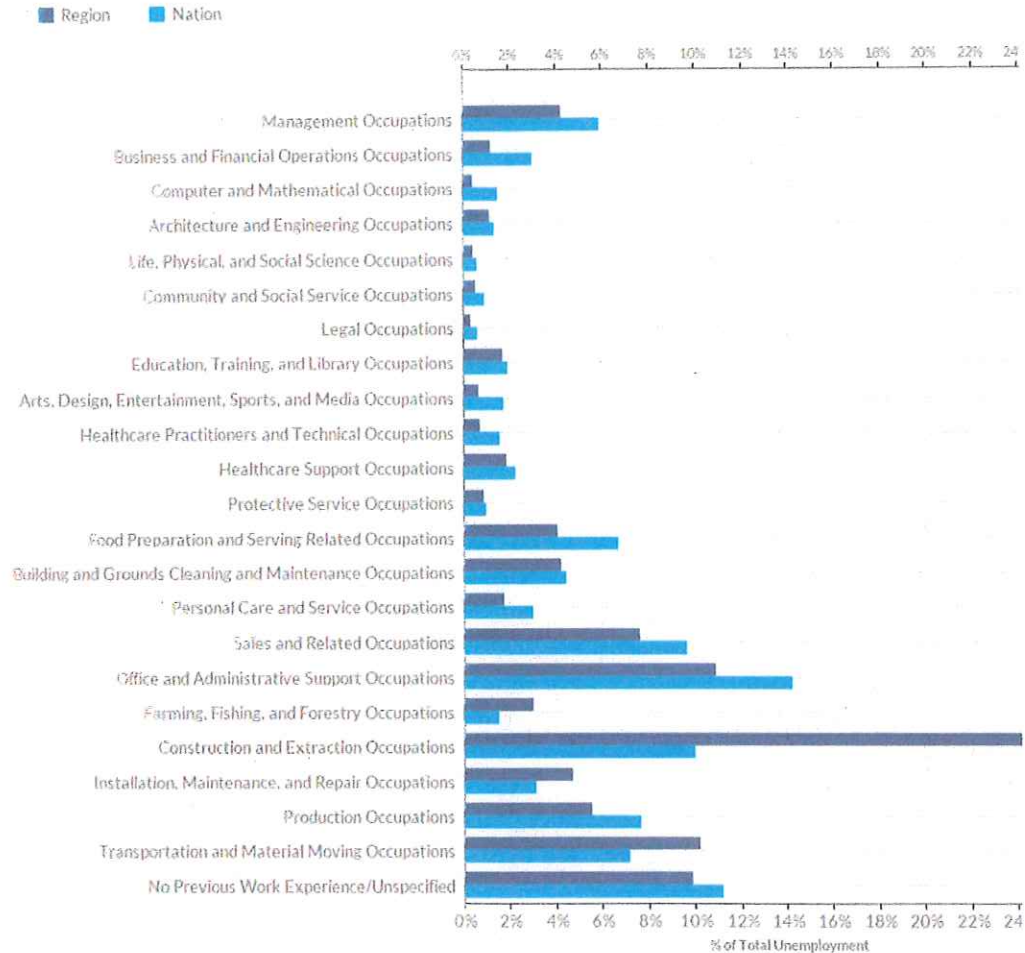


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# Unemployment by Occupation

1,436

Total Unemployment (5/2016)



SOC	Occupation	Unemployed (5/2016)	% of Regional Unemployment	% of National Unemployment
11-0000	Management Occupations	61	4%	6%
13-0000	Business and Financial Operations Occupations	17	1%	3%
15-0000	Computer and Mathematical Occupations	5	0%	1%
17-0000	Architecture and Engineering Occupations	16	1%	1%
19-0000	Life, Physical, and Social Science Occupations	5	0%	1%
21-0000	Community and Social Service Occupations	7	0%	1%

<b>SOC</b>	<b>Occupation</b>	<b>Unemployed (5/2016)</b>	<b>% of Regional Unemployment</b>	<b>% of National Unemployment</b>
23-0000	Legal Occupations	4	0%	1%
25-0000	Education, Training, and Library Occupations	24	2%	2%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	9	1%	2%
29-0000	Healthcare Practitioners and Technical Occupations	10	1%	2%
31-0000	Healthcare Support Occupations	26	2%	2%
33-0000	Protective Service Occupations	12	1%	1%
35-0000	Food Preparation and Serving Related Occupations	58	4%	7%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	60	4%	4%
39-0000	Personal Care and Service Occupations	24	2%	3%
41-0000	Sales and Related Occupations	109	8%	10%
43-0000	Office and Administrative Support Occupations	155	11%	14%
45-0000	Farming, Fishing, and Forestry Occupations	42	3%	1%
47-0000	Construction and Extraction Occupations	360	25%	10%
49-0000	Installation, Maintenance, and Repair Occupations	67	5%	3%
51-0000	Production Occupations	79	6%	8%
53-0000	Transportation and Material Moving Occupations	146	10%	7%
99-0000	No Previous Work Experience/Unspecified	141	10%	11%



# **Appendix A - Data Sources and Calculations**

## **Unemployment Data**

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

## **State Data Sources**

This report uses state data from the following agencies: Oklahoma Employment Security Commission