

**Housing Needs Assessment**  
**Seminole County**

**Prepared For:**

Oklahoma Housing Finance Agency  
Oklahoma Department of Commerce  
100 NW 63<sup>rd</sup> Street, Ste. 200  
Oklahoma City, OK 73116

**Effective Date of the Analysis:**

July 1, 2015

This "Statewide Affordable Housing Market Study" was financed in whole or in part by funds from the U.S. Department of Housing and Urban Development as administered by the Oklahoma Department of Commerce and Oklahoma Housing Finance Agency.





December 31, 2015

Mr. Dennis Shockley, Executive Director  
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100 NW 63<sup>rd</sup> Street, Ste. 200  
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SUBJECT:       Housing Needs Assessment  
                  Seminole County  
                  IRR - Tulsa/OKC File No. 140-2015-0080

Dear Mr. Shockley:

As per our Agreement with Oklahoma Housing Finance Agency (OHFA), we have completed a residential housing market analysis (the "Analysis") for use by OHFA and the Oklahoma Department of Commerce (ODOC). Per our Agreement, OHFA and ODOC shall have unrestricted authority to publish, disclose, distribute and otherwise use, in whole or in part, the study and reports, data or other materials included in the Analysis or otherwise prepared pursuant to the Agreement and no materials produced in whole, or in part, under the Agreement shall be subject to copyright in the United States or any other country. Integra Realty Resources – Tulsa/OKC will cause the Analysis (or any part thereof) and any other publications or materials produced as a result of the Agreement to include substantially the following statement on the first page of said document:

This "Statewide Affordable Housing Market Study" was financed in whole or in part by funds from the U.S. Department of Housing and Urban Development as administered by the Oklahoma Department of Commerce and Oklahoma Housing Finance Agency.

Attached hereto, please find the Seminole County Residential Housing Market Analysis. Analyst Kevin Wang personally inspected the Seminole County area during the month of July 2015 to collect the data used in the preparation of the Seminole County Market Analysis. The University of Oklahoma College of Architecture Division of Regional and City Planning provided consultation, assemblage and analysis of the data for the IRR-Tulsa/OKC.

Mr. Dennis Shockley  
Oklahoma Housing Finance Agency  
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This market study is true and correct to the best of the professional's knowledge and belief, and there is no identity of interest between Owen S. Ard, MAI, David A. Puckett, or Integra Realty Resources – Tulsa/OKC and any applicant, developer, owner or developer.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

**Integra Realty Resources - Tulsa/OKC**

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# Introduction and Executive Summary

This report is part of a Statewide Affordable Housing Market Study commissioned by the Oklahoma Department of Commerce (ODOC) in partnership with the Oklahoma Housing Finance Agency (OHFA), as an outgrowth of the 2013 tornado outbreak in Oklahoma. It was funded by the U.S. Department of Housing and Urban Development (USHUD) through the Community Development Block Grant – Disaster Recovery program (CDBG-DR). This study was conducted by a public/private partnership between Integra Realty Resources – Tulsa/OKC, the University of Oklahoma College of Architecture, Division of Regional and City Planning, and DeBruler Inc. IRR-Tulsa/OKC, The University of Oklahoma, and DeBruler Inc. also prepared a prior statewide study in 2001, also commissioned by ODOC in partnership with OHFA.

This study is a value-added product derived from the original 2001 statewide housing study that incorporates additional topics and datasets not included in the 2001 study, which impact affordable housing throughout the state. These topic areas include:

- Disaster Resiliency
- Homelessness
- Assessment of Fair Housing
- Evaluation of Residential Lead-Based Paint Hazards

These topics are interrelated in terms of affordable housing policy, housing development, and disaster resiliency and recovery. Homeless populations are more vulnerable in the event of a disaster, as are many of the protected classes under the Fair Housing Act. Lead-based paint is typically more likely to be present in housing units occupied by low-to-moderate income persons, and can also present an environmental hazard in the wake of a disaster. Effective affordable housing policy can mitigate the impact of natural and manmade disasters by encouraging the development and preservation of safe, secure, and disaster-resilient housing for Oklahoma’s most vulnerable populations.

## **Housing Market Analysis Specific Findings:**

1. The population of Seminole County is projected to grow by 0.18% per year over the next five years, underperforming the State of Oklahoma.
2. Seminole County is projected to need a total of 59 housing units for ownership and 21 housing units for rent over the next five years.
3. Median Household Income in Seminole County is estimated to be \$38,394 in 2015, compared with \$47,049 estimated for the State of Oklahoma. The poverty rate in Seminole County is estimated to be 22.94%, compared with 16.85% for Oklahoma.
4. Homeowner and rental vacancy rates in Seminole County are higher than the state averages.
5. Home values and rental rates in Seminole County are much lower than the state averages.
6. Average sale price for homes in Seminole was \$54,980 in 2015, with an average price per square foot of \$39.73. The average year of construction for homes sold in 2015 is estimated to be 1946.
7. Approximately 37.53% of renters and 16.92% of owners are housing cost overburdened.

**Disaster Resiliency Specific Findings:**

1. Create and maintain the county HMP
2. Apply for grants/funding to develop a county hazard mitigation plan.
3. Continue to apply for grants and pursue funding for more public emergency shelters.
4. Tornadoes (1959-2014): Number:54 Injuries:87 Fatalities:5 Damages (1996-2014): \$1,650,000.00
5. Social Vulnerability: Above the state score; various census tracts, Seminole area, Konawa and eastern portion of the county, have increased social vulnerability scores.
6. Floodplain: Seminole (city) and Wewoka have notable development within or near the floodplain

**Homelessness Specific Findings**

1. Seminole County is located in the Oklahoma Balance of State Continuum of Care.
2. There are an estimated 295 homeless individuals in this area, 154 of which are identified as sheltered.
3. Homeless children under the age of 18 are more likely to be unsheltered than sheltered.
4. Many homeless persons are victims of domestic violence, totaling 75 people.
5. Very few units are available for occupation by families with children (14), and there is a need to grow the number of units that are available for this group of homeless and the children in their care.

**Fair Housing Specific Findings**

1. Units at risk for poverty: 76
2. Units in mostly non-white enclaves: 75
3. Units nearer elevated number of persons with disabilities: 75
4. Units located in a food desert: 123

**Lead-Based Paint Specific Findings**

1. We estimate there are 2,024 occupied housing units in Seminole County with lead-based paint hazards.
2. 1,084 of those housing units are estimated to be occupied by low-to-moderate income households.
3. We estimate that 301 of those low-to-moderate income households have children under the age of 6 present.

**Report Format and Organization**

The first section of this report comprises the housing market analysis for Seminole County. This section is divided into general area information, followed by population, household and income trends and analysis, then followed by area economic conditions. The next area of analysis concerns the housing stock of Seminole County, including vacancy rates, construction activity and trends, and analyses of the homeowner and rental markets. This section is followed by five-year forecasts of

housing need for owners and renters, as well as specific populations such low-to-moderate income households, the elderly, and working families.

The next section of this report addresses special topics of concern:

- Disaster Resiliency
- Homelessness
- Fair Housing
- Lead-Based Paint Hazards

This last section is followed by a summary of the conclusions of this report for Seminole County.



# General Information

## Purpose and Function of the Market Study

The purpose of this market study is to evaluate the need for affordable housing units in Seminole County, Oklahoma. The analysis will consider existing supply and projected demand and overall market trends in the Seminole County area.

## Effective Date of Consultation

The Seminole County area was inspected and research was performed during July, 2015. The effective date of this analysis is July 1, 2015. The date of this report is December 31, 2015. The market study is valid only as of the stated effective date or dates.

## Scope of the Assignment

1. The Seminole County area was inspected during July, 2015. The inspection included visits to all significant population centers in the county and portions of the rural county areas.
2. Regional, city and neighborhood data is based on information retained from national, state, and local government entities; various Chambers of Commerce, news publications, and other sources of economic indicators.
3. Specific economic data was collected from all available public agencies. Population and household information was collected from national demographic data services as well as available local governments. Much data was gathered regarding market specific items from personal interviews.
4. Development of the applicable analysis involved the collection and interpretation of verified data from local property owners/managers, realtors, and other individuals active within the area real estate market.
5. The analyst's assemblage and analysis of the defined data provided a basis from which conclusions as to the supply of and demand for residential housing were made.

## Data Sources

Specific data sources used in this analysis include but are not limited to:

1. The 2000 and 2010 Decennial Censuses of Population and Housing
2. The 2009-2013 American Community Survey (ACS)
3. U.S. Census Bureau Residential Construction Branch, Manufacturing and Construction Division
4. The United States Department of Labor, Bureau of Labor Statistics, including the Local Area Unemployment Statistics and the Quarterly Census of Employment and Wages programs
5. The U.S. Department of Housing and Urban Development, including the Comprehensive Housing Affordability Strategy (CHAS), and the 2013 Picture of Subsidized Households
6. Continuum of Care Assistance Programs

- 
7. The National Oceanic and Atmospheric Administration
  8. Nielsen SiteReports (formerly known as Claritas)
  9. The Oklahoma State Department of Health
  10. The Oklahoma Department of Human Services
  11. The Federal Reserve Bank of Kansas City, Oklahoma City Branch
  12. The Federal Reserve Bank of New York

# Seminole County Analysis

## Area Information

The purpose of this section of the report is to provide a basis for analyzing and estimating trends relating to Seminole County. The primary emphasis is concentrated on those factors that are of significance to residential development users. Residential and commercial development in the community is influenced by the following factors:

1. Population and economic growth trends.
2. Existing commercial supply and activity.
3. Natural physical elements.
4. Political policy and attitudes toward community development.

## Location

Seminole County is located in central Oklahoma, southeast of the Oklahoma City metropolitan area. Wewoka, the county seat, is located in the eastern part of the county, however the City of Seminole is the subject of this analysis. Seminole is located 53 miles east by southeast of Oklahoma City and 88 miles southwest of Tulsa.

Seminole County has a total area of 640 square miles (633 square miles of land, and 8 square miles of water), ranking 61st out of Oklahoma's 77 counties in terms of total area. The total population of Seminole County as of the 2010 Census was 25,482 persons, for a population density of 40 persons per square mile of land.

## Access and Linkages

The county has above-average accessibility to state and national highway systems. Interstate Highway 40 crosses east/west across the far northern section of the county. This 4 lane divided highway allows direct access to Oklahoma City to the west and Fort Smith to the east. State Highway 9 passes east/west through the county and connects Seminole to Norman. In addition, US 377 connects Seminole with Ada and I-40. The county also has an intricate network of county roadways.

Public transportation is provided on a demand-response basis by the Central Oklahoma Transit System (a service of the Central Oklahoma Community Action Agency), with service in Pottawatomie, Seminole, and Oklahoma counties, with medical rides available in Cleveland County. The local market perceives public transportation as average compared to other communities in the region of similar size. However, the primary mode of transportation in this area is private automobiles by far.

Jimmie Austin Seminole Regional Airport is located just north of Seminole. It has a single asphalt runway approximately 5,004 feet in length (and a secondary turf runway 2,000 feet in length), and

averages approximately 23 aircraft operations per day. The nearest full-service commercial airport is Will Rogers World Airport, located approximately 55 miles northwest.

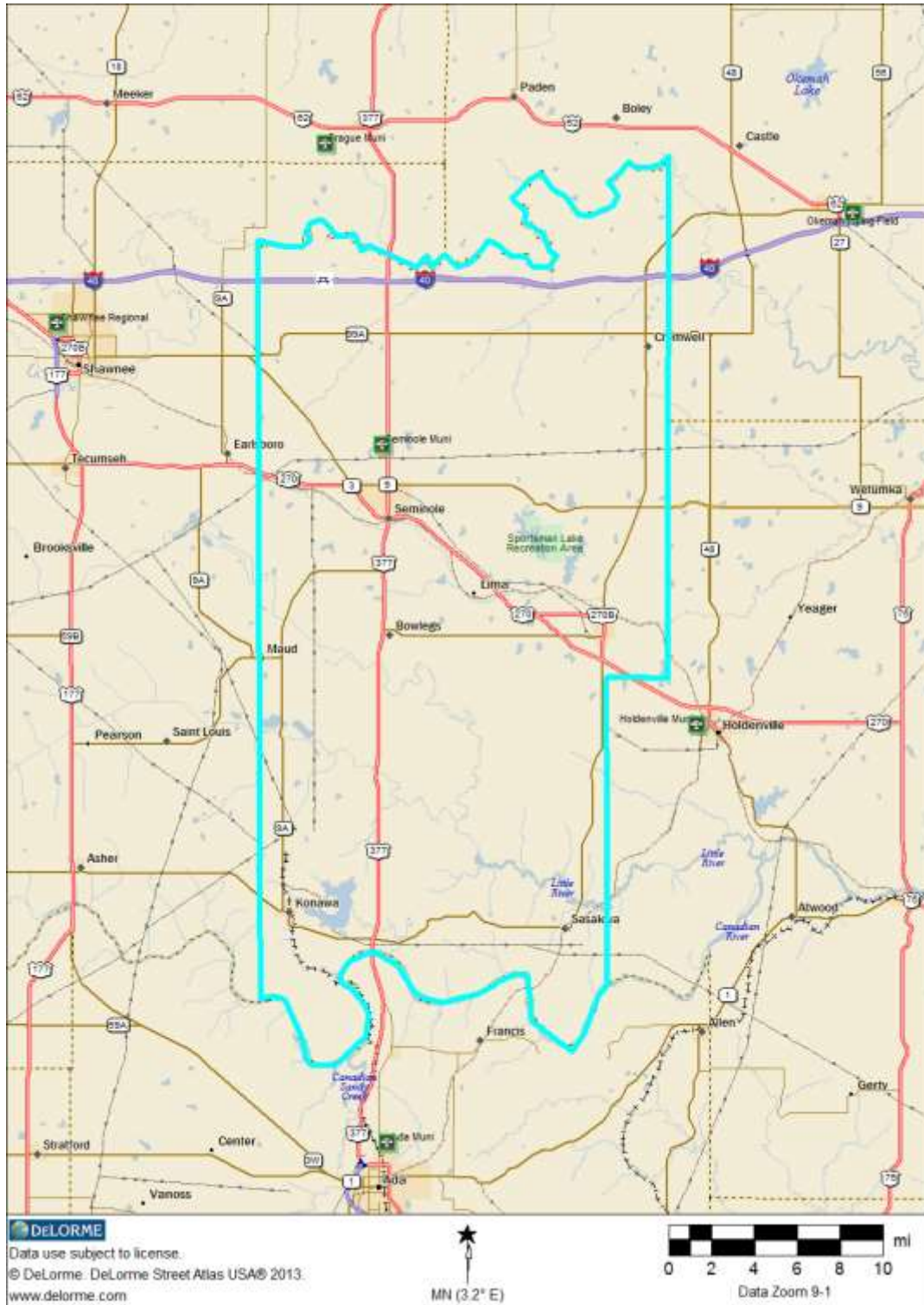
### **Educational Facilities**

Seminole has 6 primary and secondary schools with approximately 1,550 students and 110 teachers according to the Seminole Chamber of Commerce. Seminole is the hometown of Seminole State College and is only 15 minutes from Oklahoma Baptist University and St. Gregory's University in Shawnee. East Central University and the University of Oklahoma are less than 50 miles from Seminole. The Gordon Cooper Vo-tech, Wes Watkins and Pontotoc Co. Technology Centers provide educational services to the community as well.

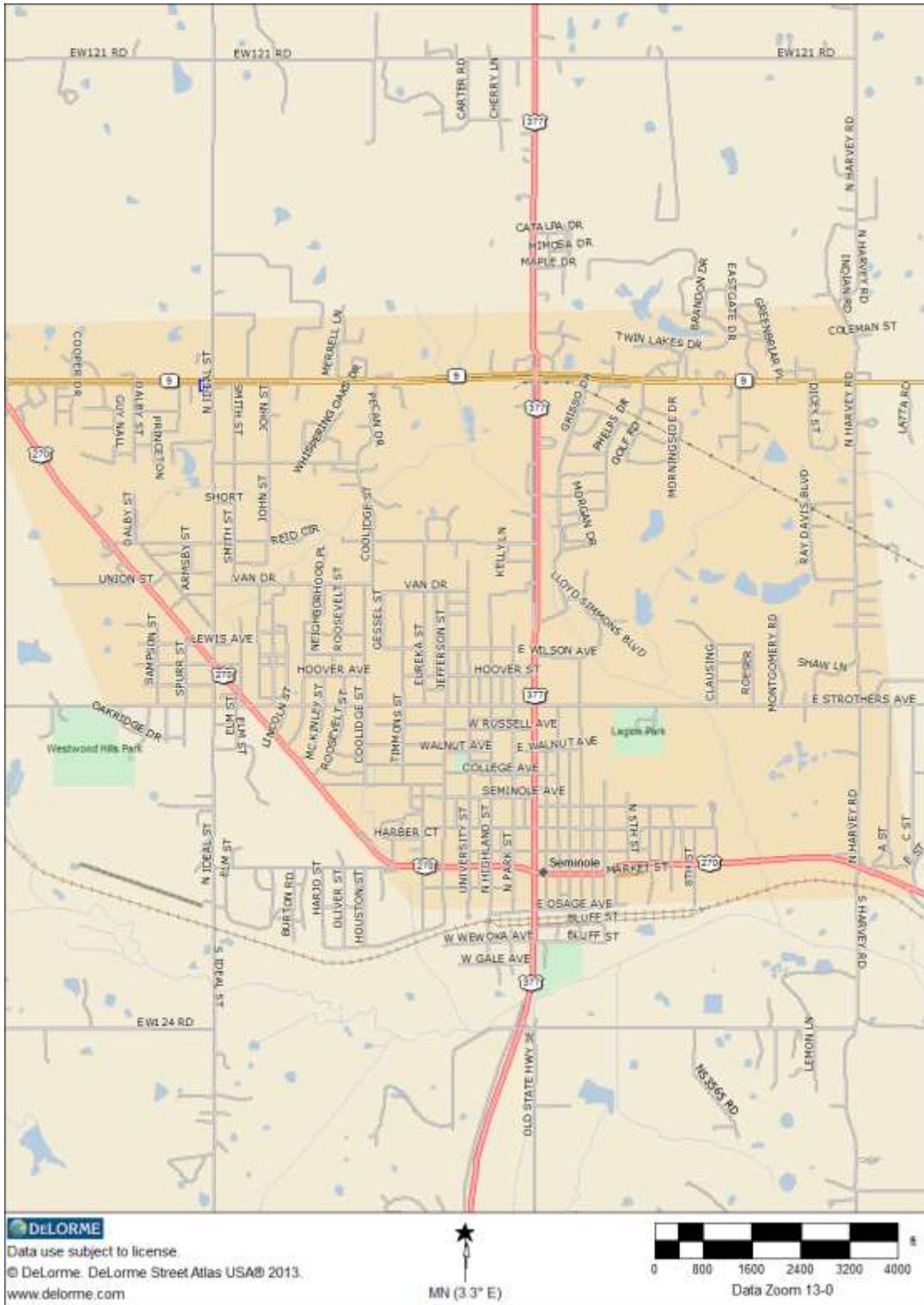
### **Medical Facilities**

Seminole is served by the Seminole Medical Center, a 32-bed state-of-the-art facility built in 1999. J.D. Wood Clinic is located in the hospital, also physician offices and a specialty clinic. The hospital has 14 acute care rooms, 4 intensive care beds, 12 skilled nursing rooms and 2 rooms for labor, delivery, recovery and postpartum care. All patients' rooms are private and include private baths and showers. Two family practice clinics are located adjacent to the hospital. The smaller county communities typically have either small outpatient medical services or doctors officing in the community.

### Seminole County Area Map



### Seminole Area Map



## Demographic Analysis

### Population and Households

The following table presents population levels and annualized changes in Seminole County and Oklahoma. This data is presented as of the 2000 Census, the 2010 Census, with 2015 and 2020 estimates and forecasts provided by Nielsen SiteReports.

<b>Population Levels and Annual Changes</b>							
	2000	2010	Annual	2015	Annual	2020	Annual
	Census	Census	Change	Estimate	Change	Forecast	Change
Seminole	6,899	7,488	0.82%	7,530	0.11%	7,630	0.26%
Seminole County	24,894	25,482	0.23%	25,389	-0.07%	25,623	0.18%
State of Oklahoma	3,450,654	3,751,351	0.84%	3,898,675	0.77%	4,059,399	0.81%

Sources: 2000 and 2010 Decennial Censuses, Nielsen SiteReports

The population of Seminole County was 25,482 persons as of the 2010 Census, a 0.23% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Seminole County to be 25,389 persons, and projects that the population will show 0.18% annualized growth over the next five years.

The population of Seminole was 7,488 persons as of the 2010 Census, a 0.82% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Seminole to be 7,530 persons, and projects that the population will show 0.26% annualized growth over the next five years.

The next table presents data regarding household levels in Seminole County over the same periods of time. This data is presented both for all households (family and non-family) as well as family households alone.

<b>Households Levels and Annual Changes</b>							
<b>Total Households</b>	2000	2010	Annual	2015	Annual	2020	Annual
	Census	Census	Change	Estimate	Change	Forecast	Change
Seminole	2,760	2,899	0.49%	2,946	0.32%	2,981	0.24%
Seminole County	9,575	9,750	0.18%	9,699	-0.10%	9,779	0.16%
State of Oklahoma	1,342,293	1,460,450	0.85%	1,520,327	0.81%	1,585,130	0.84%
<b>Family Households</b>	2000	2010	Annual	2015	Annual	2020	Annual
	Census	Census	Change	Estimate	Change	Forecast	Change
Seminole	1,827	1,849	0.12%	1,901	0.56%	1,921	0.21%
Seminole	6,793	6,722	-0.11%	6,690	-0.10%	6,745	0.16%
State of Oklahoma	921,750	975,267	0.57%	1,016,508	0.83%	1,060,736	0.86%

Sources: 2000 and 2010 Decennial Censuses, Nielsen SiteReports

As of 2010, Seminole County had a total of 9,750 households, representing a 0.18% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Seminole County to have

9,699 households. This number is expected to experience a 0.16% annualized rate of growth over the next five years.

As of 2010, Seminole had a total of 2,899 households, representing a 0.49% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Seminole to have 2,946 households. This number is expected to experience a 0.24% annualized rate of growth over the next five years.

### Population by Race and Ethnicity

The next table presents data regarding the racial and ethnic composition of Seminole County based on the U.S. Census Bureau's American Community Survey.

#### 2013 Population by Race and Ethnicity

Single-Classification Race	Seminole		Seminole County	
	No.	Percent	No.	Percent
Total Population	7,485		25,443	
White Alone	5,441	72.69%	17,411	68.43%
Black or African American Alone	385	5.14%	1,262	4.96%
Amer. Indian or Alaska Native Alone	969	12.95%	4,375	17.20%
Asian Alone	21	0.28%	78	0.31%
Native Hawaiian and Other Pac. Isl. Alone	0	0.00%	8	0.03%
Some Other Race Alone	53	0.71%	277	1.09%
Two or More Races	616	8.23%	2,032	7.99%

Population by Hispanic or Latino Origin	Seminole		Seminole County	
	No.	Percent	No.	Percent
Total Population	7,485		25,443	
Hispanic or Latino	328	4.38%	1,011	3.97%
<i>Hispanic or Latino, White Alone</i>	181	55.18%	460	45.50%
<i>Hispanic or Latino, All Other Races</i>	147	44.82%	551	54.50%
Not Hispanic or Latino	7,157	95.62%	24,432	96.03%
<i>Not Hispanic or Latino, White Alone</i>	5,260	73.49%	16,951	69.38%
<i>Not Hispanic or Latino, All Other Races</i>	1,897	26.51%	7,481	30.62%

Source: U.S. Census Bureau, 2009-2013 American Community Survey, Tables B02001 & B03002

In Seminole County, racial and ethnic minorities comprise 33.38% of the total population. Within Seminole, racial and ethnic minorities represent 29.73% of the population.

### Population by Age

The next tables present data regarding the age distribution of the population of Seminole County. This data is provided as of the 2010 Census, with estimates and forecasts provided by Nielsen SiteReports.



### Seminole County Population By Age

	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
<b>Population by Age</b>	25,482		25,389		25,623			
Age 0 - 4	1,690	6.63%	1,635	6.44%	1,681	6.56%	-0.66%	0.56%
Age 5 - 9	1,831	7.19%	1,685	6.64%	1,619	6.32%	-1.65%	-0.80%
Age 10 - 14	1,926	7.56%	1,829	7.20%	1,667	6.51%	-1.03%	-1.84%
Age 15 - 17	1,109	4.35%	1,128	4.44%	1,134	4.43%	0.34%	0.11%
Age 18 - 20	1,124	4.41%	1,121	4.42%	1,175	4.59%	-0.05%	0.95%
Age 21 - 24	1,057	4.15%	1,318	5.19%	1,478	5.77%	4.51%	2.32%
Age 25 - 34	2,861	11.23%	2,760	10.87%	2,928	11.43%	-0.72%	1.19%
Age 35 - 44	2,951	11.58%	2,806	11.05%	2,736	10.68%	-1.00%	-0.50%
Age 45 - 54	3,588	14.08%	3,308	13.03%	2,900	11.32%	-1.61%	-2.60%
Age 55 - 64	3,248	12.75%	3,297	12.99%	3,309	12.91%	0.30%	0.07%
Age 65 - 74	2,303	9.04%	2,621	10.32%	3,022	11.79%	2.62%	2.89%
Age 75 - 84	1,288	5.05%	1,359	5.35%	1,426	5.57%	1.08%	0.97%
Age 85 and over	506	1.99%	522	2.06%	548	2.14%	0.62%	0.98%
<i>Age 55 and over</i>	<i>7,345</i>	<i>28.82%</i>	<i>7,799</i>	<i>30.72%</i>	<i>8,305</i>	<i>32.41%</i>	<i>1.21%</i>	<i>1.27%</i>
<i>Age 62 and over</i>	<i>4,565</i>	<i>17.92%</i>	<i>4,969</i>	<i>19.57%</i>	<i>5,441</i>	<i>21.23%</i>	<i>1.71%</i>	<i>1.83%</i>
<b>Median Age</b>	38.9		39.3		39.1		0.20%	-0.10%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Seminole County is 39.3 years. This compares with the statewide figure of 36.6 years. Approximately 6.44% of the population is below the age of 5, while 19.57% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 1.83% per year.

### Seminole Population By Age

	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
<b>Population by Age</b>	7,488		7,530		7,630			
Age 0 - 4	576	7.69%	544	7.22%	553	7.25%	-1.14%	0.33%
Age 5 - 9	564	7.53%	565	7.50%	538	7.05%	0.04%	-0.97%
Age 10 - 14	566	7.56%	562	7.46%	551	7.22%	-0.14%	-0.39%
Age 15 - 17	334	4.46%	336	4.46%	349	4.57%	0.12%	0.76%
Age 18 - 20	393	5.25%	353	4.69%	385	5.05%	-2.12%	1.75%
Age 21 - 24	365	4.87%	402	5.34%	431	5.65%	1.95%	1.40%
Age 25 - 34	937	12.51%	943	12.52%	929	12.18%	0.13%	-0.30%
Age 35 - 44	844	11.27%	864	11.47%	888	11.64%	0.47%	0.55%
Age 45 - 54	910	12.15%	853	11.33%	816	10.69%	-1.29%	-0.88%
Age 55 - 64	837	11.18%	855	11.35%	837	10.97%	0.43%	-0.42%
Age 65 - 74	579	7.73%	667	8.86%	764	10.01%	2.87%	2.75%
Age 75 - 84	386	5.15%	389	5.17%	397	5.20%	0.15%	0.41%
Age 85 and over	197	2.63%	197	2.62%	192	2.52%	0.00%	-0.51%
<i>Age 55 and over</i>	<i>1,999</i>	<i>26.70%</i>	<i>2,108</i>	<i>27.99%</i>	<i>2,190</i>	<i>28.70%</i>	<i>1.07%</i>	<i>0.77%</i>
<i>Age 62 and over</i>	<i>1,216</i>	<i>16.24%</i>	<i>1,313</i>	<i>17.43%</i>	<i>1,412</i>	<i>18.51%</i>	<i>1.54%</i>	<i>1.47%</i>
<b>Median Age</b>	35.1		35.7		35.9		0.34%	0.11%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Seminole is 35.7 years. This compares with the statewide figure of 36.6 years. Approximately 7.22% of the population is below the age of 5, while 17.43% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 1.47% per year.

### Families by Presence of Children

The next table presents data for Seminole County regarding families by the presence of children.

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**2013 Family Type by Presence of Children Under 18 Years**


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	Seminole		Seminole County	
	No.	Percent	No.	Percent
Total Families:	1,785		6,515	
Married-Couple Family:	1,087	60.90%	4,433	68.04%
With Children Under 18 Years	425	23.81%	1,564	24.01%
No Children Under 18 Years	662	37.09%	2,869	44.04%
Other Family:	698	39.10%	2,082	31.96%
Male Householder, No Wife Present	201	11.26%	634	9.73%
With Children Under 18 Years	90	5.04%	293	4.50%
No Children Under 18 Years	111	6.22%	341	5.23%
Female Householder, No Husband Present	497	27.84%	1,448	22.23%
With Children Under 18 Years	346	19.38%	748	11.48%
No Children Under 18 Years	151	8.46%	700	10.74%
<hr/>				
Total Single Parent Families	436		1,041	
Male Householder	90	20.64%	293	28.15%
Female Householder	346	79.36%	748	71.85%

Source: U.S. Census Bureau, 2009-2013 American Community Survey, Table B11003

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As shown, within Seminole County, among all families 15.98% are single-parent families, while in Seminole, the percentage is 24.43%.

### Population by Presence of Disabilities

The following table compiles data regarding the non-institutionalized population of Seminole County by presence of one or more disabilities.

### 2013 Age by Number of Disabilities

	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	7,366		25,055		3,702,515	
Under 18 Years:	2,228		6,501		933,738	
With One Type of Disability	145	6.51%	343	5.28%	33,744	3.61%
With Two or More Disabilities	52	2.33%	119	1.83%	11,082	1.19%
No Disabilities	2,031	91.16%	6,039	92.89%	888,912	95.20%
18 to 64 Years:	4,121		14,508		2,265,702	
With One Type of Disability	321	7.79%	1,492	10.28%	169,697	7.49%
With Two or More Disabilities	374	9.08%	1,403	9.67%	149,960	6.62%
No Disabilities	3,426	83.14%	11,613	80.05%	1,946,045	85.89%
65 Years and Over:	1,017		4,046		503,075	
With One Type of Disability	163	16.03%	751	18.56%	95,633	19.01%
With Two or More Disabilities	313	30.78%	1,202	29.71%	117,044	23.27%
No Disabilities	541	53.20%	2,093	51.73%	290,398	57.72%
<b>Total Number of Persons with Disabilities:</b>	<b>1,368</b>	<b>18.57%</b>	<b>5,310</b>	<b>21.19%</b>	<b>577,160</b>	<b>15.59%</b>

Source: U.S. Census Bureau, 2009-2013 American Community Survey, Table C18108

Within Seminole County, 21.19% of the civilian non-institutionalized population has one or more disabilities, compared with 15.59% of Oklahomans as a whole. In Seminole the percentage is 18.57%. Compared with the rest of Oklahoma, Seminole and Seminole County have higher percentages of persons with disabilities.

We have also compiled data for the veteran population of Seminole County by presence of disabilities, shown in the following table:

### 2013 Population by Veteran and Disability Status

	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	5,016		18,411		2,738,788	
Veteran:	463	9.23%	1,861	10.11%	305,899	11.17%
With a Disability	158	34.13%	835	44.87%	100,518	32.86%
No Disability	305	65.87%	1,026	55.13%	205,381	67.14%
Non-veteran:	4,553	90.77%	16,550	89.89%	2,432,889	88.83%
With a Disability	1,013	22.25%	4,011	24.24%	430,610	17.70%
No Disability	3,540	77.75%	12,539	75.76%	2,002,279	82.30%

Source: 2009-2013 American Community Survey, Table C21007

Within Seminole County, the Census Bureau estimates there are 1,861 veterans, 44.87% of which have one or more disabilities (compared with 32.86% at a statewide level). In Seminole, there are an estimated 463 veterans, 34.13% of which are estimated to have a disability.

### Group Quarters Population

The next table presents data regarding the population of Seminole County living in group quarters, such as correctional facilities, skilled-nursing facilities, student housing and military quarters.

#### 2010 Group Quarters Population

	Seminole		Seminole County	
	No.	Percent	No.	Percent
Total Population	7,488		25,482	
Group Quarters Population	285	3.81%	581	2.28%
Institutionalized Population	101	1.35%	354	1.39%
Correctional facilities for adults	4	0.05%	78	0.31%
Juvenile facilities	0	0.00%	0	0.00%
Nursing facilities/Skilled-nursing facilities	97	1.30%	276	1.08%
Other institutional facilities	0	0.00%	0	0.00%
Noninstitutionalized population	184	2.46%	227	0.89%
College/University student housing	176	2.35%	176	0.69%
Military quarters	0	0.00%	0	0.00%
Other noninstitutional facilities	8	0.11%	51	0.20%

Source: 2010 Decennial Census, Table P42

The percentage of the Seminole County population in group quarters is somewhat lower than the statewide figure, which was 2.99% in 2010.

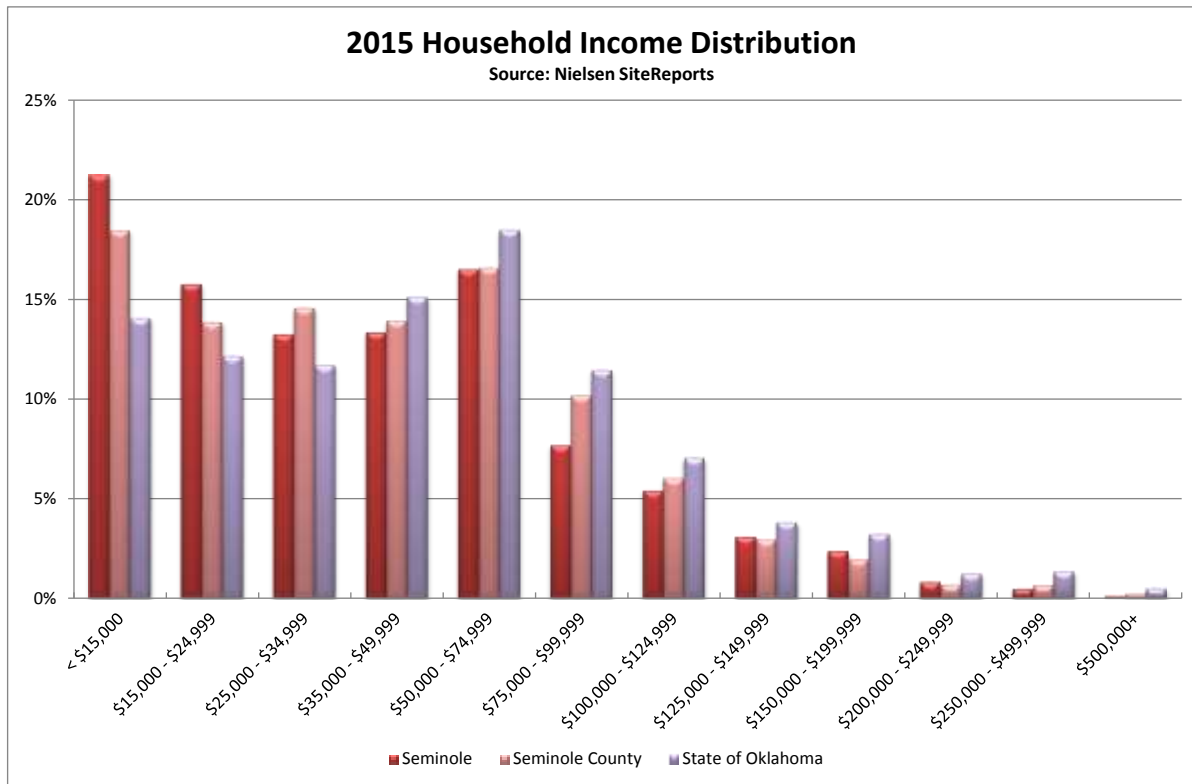
## Household Income Levels

Data in the following chart shows the distribution of household income in Seminole County, as well as median and average household income. Data for Oklahoma is included as a basis of comparison. This data is provided by Nielsen SiteReports for 2015.

<b>2015 Household Income Distribution</b>						
	<b>Seminole</b>		<b>Seminole County</b>		<b>State of Oklahoma</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
<b>Households by HH Income</b>	2,946		9,699		1,520,327	
< \$15,000	626	21.25%	1,789	18.45%	213,623	14.05%
\$15,000 - \$24,999	464	15.75%	1,343	13.85%	184,613	12.14%
\$25,000 - \$34,999	390	13.24%	1,412	14.56%	177,481	11.67%
\$35,000 - \$49,999	393	13.34%	1,350	13.92%	229,628	15.10%
\$50,000 - \$74,999	486	16.50%	1,607	16.57%	280,845	18.47%
\$75,000 - \$99,999	226	7.67%	986	10.17%	173,963	11.44%
\$100,000 - \$124,999	159	5.40%	585	6.03%	106,912	7.03%
\$125,000 - \$149,999	91	3.09%	286	2.95%	57,804	3.80%
\$150,000 - \$199,999	70	2.38%	190	1.96%	48,856	3.21%
\$200,000 - \$249,999	24	0.81%	66	0.68%	18,661	1.23%
\$250,000 - \$499,999	14	0.48%	64	0.66%	20,487	1.35%
\$500,000+	3	0.10%	21	0.22%	7,454	0.49%
<b>Median Household Income</b>	\$34,821		\$38,394		\$47,049	
<b>Average Household Income</b>	\$49,564		\$52,720		\$63,390	

Source: Nielsen SiteReports

As shown, median household income for Seminole County is estimated to be \$38,394 in 2015. By way of comparison, the median household income of Oklahoma is estimated to be \$47,049. For Seminole, median household income is estimated to be \$34,821. The income distribution can be better visualized by the following chart.



**Household Income Trend**

Next we examine the long-term growth of incomes in Seminole County, from the results of the 2000 Census (representing calendar year 1999), through the current 2015 estimates provided by Nielsen SiteReports. This data is then annualized into a compounded annual growth rate to estimate nominal annual household income growth over this period of time. We then compare the rate of annual growth with the rate of inflation over the same period of time (measured using the Consumer Price Index for all urban consumers, South Region, Size Class D, from May 1999 through May 2015). Subtracting the annual rate of inflation from the nominal rate of annual income growth yields a “real” rate of income growth which takes into account the effect of increasing prices of goods and services.

<b>Household Income Trend</b>					
	1999 Median	2015 Median	Nominal	Inflation	Real
	HH Income	HH Income	Growth	Rate	Growth
Seminole	\$25,120	\$34,821	2.06%	2.40%	-0.34%
Seminole County	\$25,568	\$38,394	2.57%	2.40%	0.17%
State of Oklahoma	\$33,400	\$47,049	2.16%	2.40%	-0.23%

Sources: 2000 Decennial Census, Summary File 3, Table P53; Nielsen SiteReports; CPI All Urban Consumers, South Region, Size Class D

As shown, the City of Seminole and the State of Oklahoma as a whole saw negative growth in “real” median household income, once inflation is taken into account (though Seminole County as a whole saw modest growth in real income). It should be noted that this trend is not unique to Oklahoma, but



rather a national trend. Over the same period, the national median household income increased from \$41,994 to \$53,706 (for a nominal annualized growth rate of 1.55%) while the Consumer Price Index increased at an annualized rate of 2.26%, for a “real” growth rate of -0.72%.

### Poverty Rates

Overall rates of poverty in Seminole County and Oklahoma are shown in the following table. This data is included from the 2013 American Community Survey, as well as the 2000 Census to show how these rates have changed over the last decade. We also include poverty rates for single-parent families by gender of householder.

Poverty Rates	2000	2013	Change (Basis Points)	2013 Poverty Rates for Single-Parent Families	
	Census	ACS		Male Householder	Female Householder
Seminole	19.94%	26.77%	683	15.56%	45.09%
Seminole County	20.78%	22.94%	216	32.08%	43.18%
State of Oklahoma	14.72%	16.85%	213	22.26%	47.60%

Sources: 2000 Decennial Census Table P87, 2009-2013 American Community Survey Tables B17001 & B17023

The poverty rate in Seminole County is estimated to be 22.94% by the American Community Survey. This is an increase of 216 basis points since the 2000 Census. Within Seminole, the poverty rate is estimated to be 26.77%. It should be noted that increasing poverty rates over this period of time is a national trend: between the 2000 Census and the 2013 American Community Survey, the poverty rate of the United States increased from 12.38% to 15.37%, an increase of 299 basis points.



## Economic Conditions

### Employment and Unemployment

The following table presents total employment figures and unemployment rates for Seminole County, with figures for Oklahoma and the United States for comparison. This data is as of May 2015.

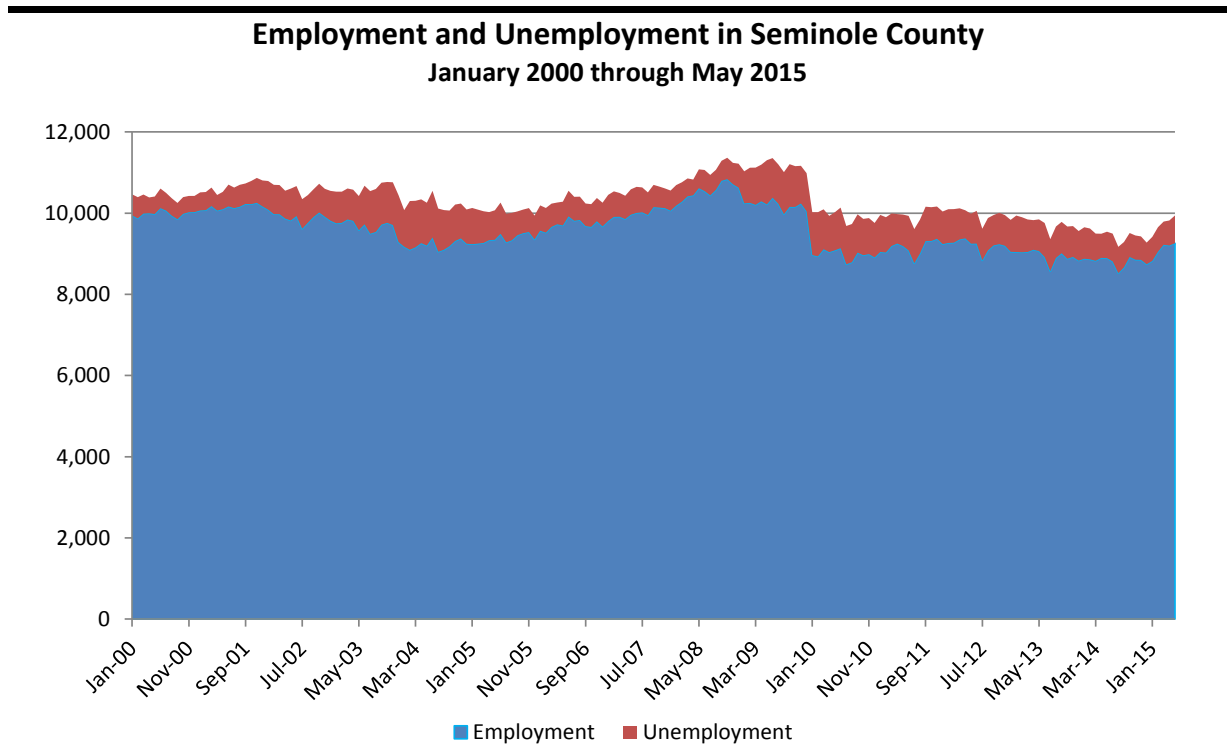
<b>Employment and Unemployment</b>						
	May-2010 Employment	May-2015 Employment	Annual Growth	May-2010 Unemp. Rate	May-2015 Unemp. Rate	Change (bp)
Seminole County	9,085	9,259	0.38%	9.4%	6.9%	-250
State of Oklahoma	1,650,748	1,776,187	1.48%	6.8%	4.4%	-240
United States (thsds)	139,497	149,349	1.37%	9.3%	5.3%	-400

Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Population Survey

As of May 2015, total employment in Seminole County was 9,259 persons. Compared with figures from May 2010, this represents annualized employment growth of 0.38% per year. The unemployment rate in May was 6.9%, a decrease of -250 basis points from May 2010, which was 9.4%. Over the last five years, both the statewide and national trends have been improving employment levels and declining unemployment rates, and Seminole County has underperformed both the state and nation in these statistics, with relatively slower employment growth and higher unemployment rates.

### Employment Level Trends

The following chart shows total employment and unemployment levels in Seminole County from January 2000 through May 2015, as reported by the Bureau of Labor Statistics, Local Area Unemployment Statistics program.



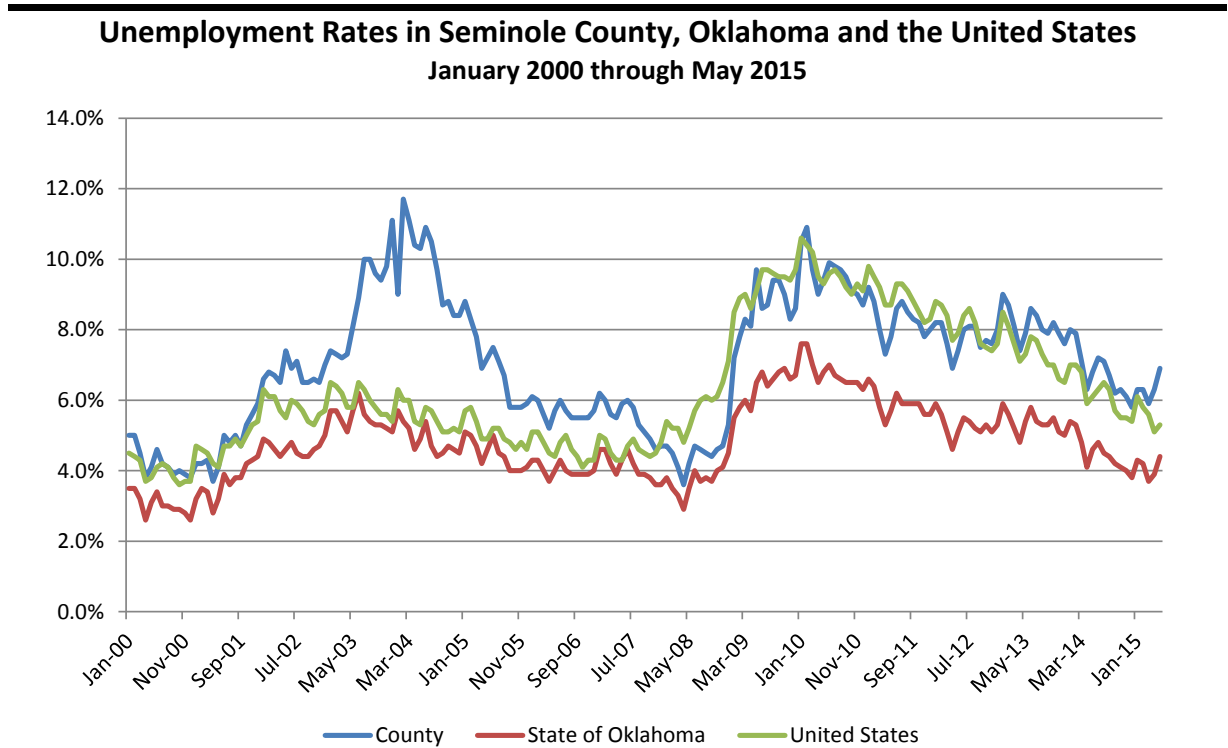
*Source: Bureau of Labor Statistics, Local Area Unemployment Statistics*

As shown, total employment levels have been relatively flat from 2010 through early 2014, but have shown growth over the last year, growing to its current level of 9,259 persons. The number of unemployed persons in May 2015 was 685, out of a total labor force of 9,944 persons.

**Unemployment Rate Trends**

The next chart shows historic unemployment rates for Seminole County, as well as Oklahoma and the United States for comparison. This data covers the time period of January 2000 through May 2015, and has not been seasonally adjusted.





Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Population Survey

As shown, unemployment rates in Seminole County increased moderately from 2000 through 2003, and then generally declined until the 4<sup>th</sup> quarter of 2008 as the effects of the national economic recession were felt. Unemployment rates began to decline again in 2010, to their current level of 6.9%. On the whole, unemployment rates in Seminole County track very well with statewide figures but are typically above the state. Compared with the United States, unemployment rates in Seminole County have been historically similar to the national average, excepting current figures and the period from 2002 through 2007.

### Employment and Wages by Industrial Supersector

The next table presents data regarding employment in Seminole County by industry, including total number of establishments, average number of employees in 2014, average annual pay, and location quotients for each industry compared with the United States. This data is furnished by the Bureau of Labor Statistics, Quarterly Census of Employment and Wages program.

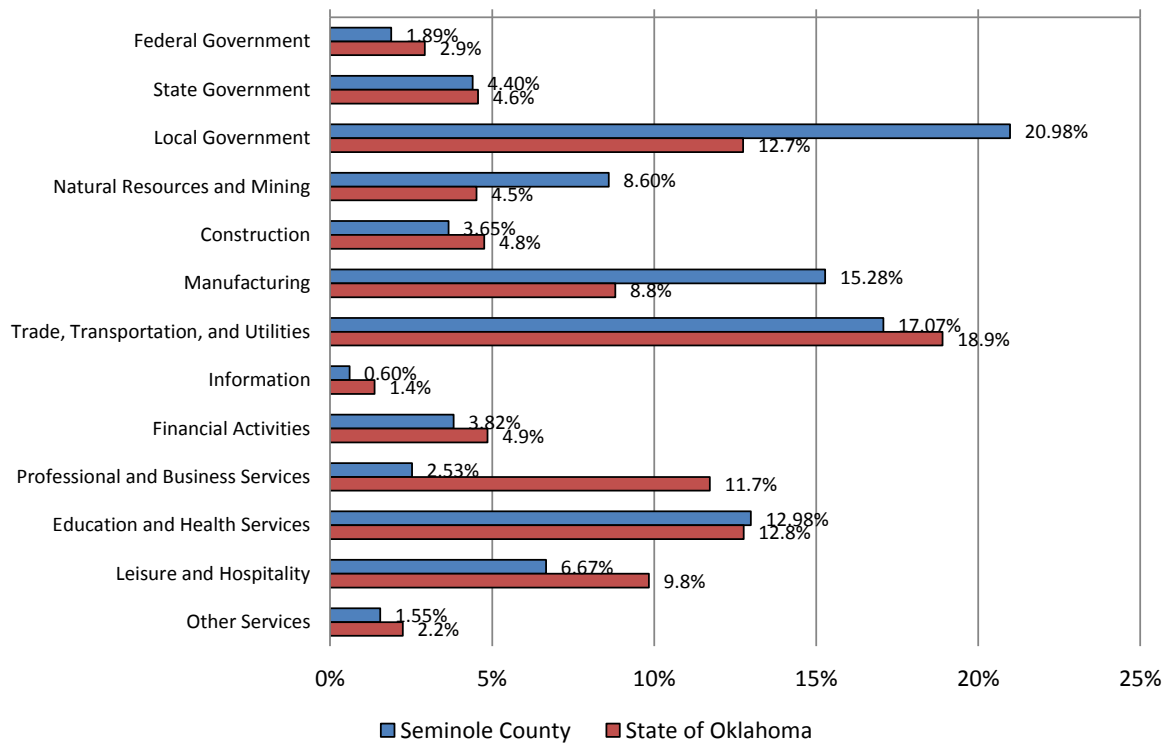


**Employees and Wages by Supersector - 2014**

Supersector	Establishments	Avg. No. of Employees	Percent of Total	Avg. Annual Pay	Location Quotient
Federal Government	10	139	1.89%	\$52,726	0.94
State Government	11	324	4.40%	\$35,981	1.32
Local Government	61	1,545	20.98%	\$30,337	2.08
Natural Resources and Mining	57	633	8.60%	\$58,800	5.67
Construction	42	269	3.65%	\$40,952	0.82
Manufacturing	26	1,125	15.28%	\$40,135	1.72
Trade, Transportation, and Utilities	118	1,257	17.07%	\$35,920	0.89
Information	7	44	0.60%	\$33,964	0.30
Financial Activities	51	281	3.82%	\$34,324	0.68
Professional and Business Services	49	186	2.53%	\$35,952	0.18
Education and Health Services	45	956	12.98%	\$24,998	0.86
Leisure and Hospitality	35	491	6.67%	\$12,747	0.62
Other Services	27	114	1.55%	\$25,456	0.50
<b>Total</b>	<b>537</b>	<b>7,364</b>		<b>\$34,666</b>	<b>1.00</b>

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

**Employment Sectors - 2014**



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages



Among private employers, the largest percentage of persons (17.07%) are employed in Trade, Transportation, and Utilities. The average annual pay in this sector is \$35,920 per year. The industry with the highest annual pay is Natural Resources and Mining, with average annual pay of \$58,800 per year.

The rightmost column of the previous table provides location quotients for each industry for Seminole County, as compared with the United States. Location quotients (LQs) are ratios used to compare the concentration of employment in a given industry to a larger reference, in this case the United States. They are calculated by dividing the percentage of employment in a given industry in a given geography (Seminole County in this instance), by the percentage of employment in the same industry in the United States. For example, if manufacturing in a certain county comprised 10% of total employment, while in the United States manufacturing comprised 5% of total employment, the location quotient would be 2.0:

$$10\% (\text{county manufacturing \%}) / 5\% (\text{U.S. manufacturing \%}) = 2.0$$

Location quotients greater than 1.0 indicate a higher concentration of employment compared with the nation, and suggest that the industry in question is an important contributor to the local economic base. Quotients less than 1.0 indicate that the industry makes up a smaller share of the local economy than the rest of the nation.

Within Seminole County, among all industries the largest location quotient is in Natural Resources and Mining, with a quotient of 5.67.

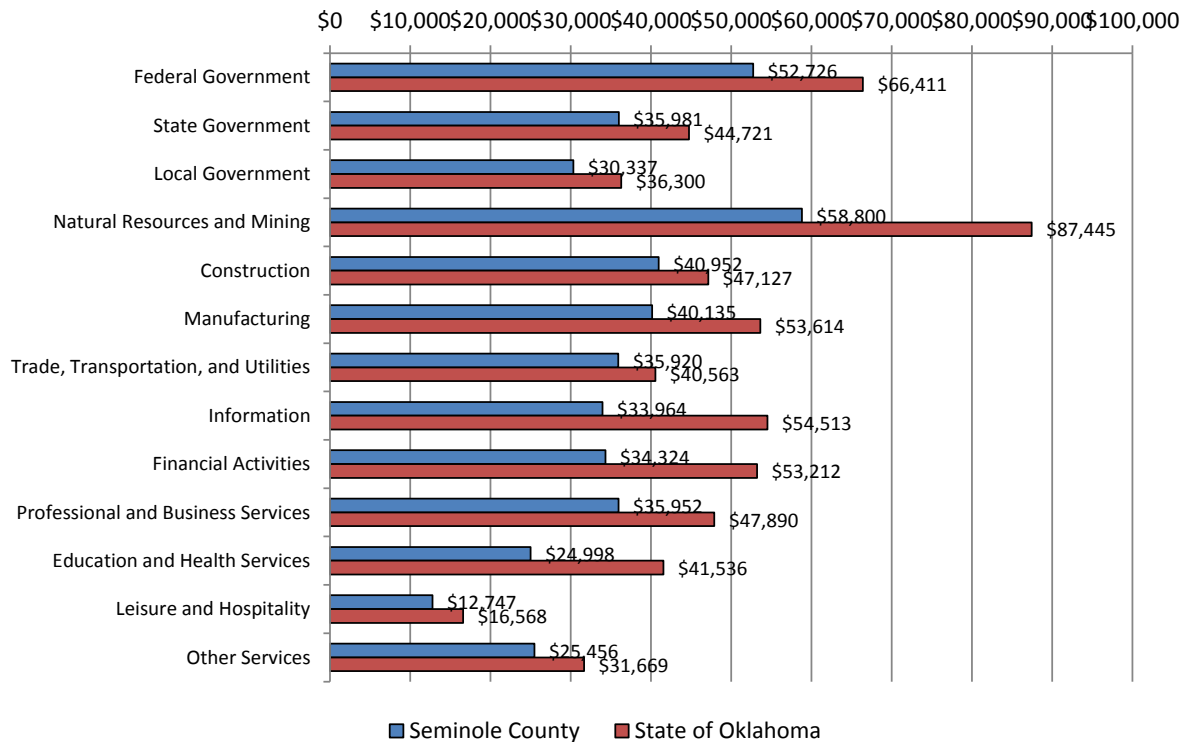
The next table presents average annual pay in Seminole County by industry, in comparison with Oklahoma as a whole and the United States. Without exception, all industrial sectors show lower average pay compared with both the state and nation.

**Comparison of 2014 Average Annual Pay by Supersector**

Supersector	Seminole County	State of Oklahoma	United States	Percent of State	Percent of Nation
Federal Government	\$52,726	\$66,411	\$75,784	79.4%	69.6%
State Government	\$35,981	\$44,721	\$54,184	80.5%	66.4%
Local Government	\$30,337	\$36,300	\$46,146	83.6%	65.7%
Natural Resources and Mining	\$58,800	\$87,445	\$59,666	67.2%	98.5%
Construction	\$40,952	\$47,127	\$55,041	86.9%	74.4%
Manufacturing	\$40,135	\$53,614	\$62,977	74.9%	63.7%
Trade, Transportation, and Utilities	\$35,920	\$40,563	\$42,988	88.6%	83.6%
Information	\$33,964	\$54,513	\$90,804	62.3%	37.4%
Financial Activities	\$34,324	\$53,212	\$85,261	64.5%	40.3%
Professional and Business Services	\$35,952	\$47,890	\$66,657	75.1%	53.9%
Education and Health Services	\$24,998	\$41,536	\$45,951	60.2%	54.4%
Leisure and Hospitality	\$12,747	\$16,568	\$20,993	76.9%	60.7%
Other Services	\$25,456	\$31,669	\$33,935	80.4%	75.0%
<b>Total</b>	<b>\$34,666</b>	<b>\$43,774</b>	<b>\$51,361</b>	<b>79.2%</b>	<b>67.5%</b>

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

**Average Annual Pay - 2014**



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages



In comparison with the rest of Oklahoma, Seminole County has lower average wages in every employment sector without exception.

## Working Families

The following table presents data on families by employment status, and presence of children.

<b>Families by Employment Status and Presence of Children</b>						
	<b>Seminole</b>		<b>Seminole County</b>		<b>State of Oklahoma</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
<b>Total Families</b>	<b>1,785</b>		<b>6,515</b>		<b>961,468</b>	
With Children <18 Years:	861	48.24%	2,605	39.98%	425,517	44.26%
Married Couple:	425	49.36%	1,564	60.04%	281,418	66.14%
Both Parents Employed	231	54.35%	843	53.90%	166,700	59.24%
One Parent Employed	159	37.41%	611	39.07%	104,817	37.25%
Neither Parent Employed	35	8.24%	110	7.03%	9,901	3.52%
Other Family:	436	50.64%	1,041	39.96%	144,099	33.86%
Male Householder:	90	20.64%	293	28.15%	36,996	25.67%
Employed	65	72.22%	206	70.31%	31,044	83.91%
Not Employed	25	27.78%	87	29.69%	5,952	16.09%
Female Householder:	346	79.36%	748	71.85%	107,103	74.33%
Employed	227	65.61%	547	73.13%	75,631	70.62%
Not Employed	119	34.39%	201	26.87%	31,472	29.38%
Without Children <18 Years:	924	51.76%	3,910	60.02%	535,951	55.74%
Married Couple:	662	71.65%	2,869	73.38%	431,868	80.58%
Both Spouses Employed	203	30.66%	877	30.57%	167,589	38.81%
One Spouse Employed	263	39.73%	990	34.51%	138,214	32.00%
Neither Spouse Employed	196	29.61%	1,002	34.93%	126,065	29.19%
Other Family:	262	28.35%	1,041	26.62%	104,083	19.42%
Male Householder:	111	56.63%	341	34.03%	32,243	25.58%
Employed	48	43.24%	149	43.70%	19,437	60.28%
Not Employed	63	56.76%	192	56.30%	12,806	39.72%
Female Householder:	151	57.63%	700	67.24%	71,840	69.02%
Employed	74	49.01%	283	40.43%	36,601	50.95%
Not Employed	77	50.99%	417	59.57%	35,239	49.05%
<i>Total Working Families:</i>	<i>1,270</i>	<i>71.15%</i>	<i>4,506</i>	<i>69.16%</i>	<i>740,033</i>	<i>76.97%</i>
<i>  With Children &lt;18 Years:</i>	<i>682</i>	<i>53.70%</i>	<i>2,207</i>	<i>48.98%</i>	<i>378,192</i>	<i>51.10%</i>
<i>  Without Children &lt;18 Years:</i>	<i>588</i>	<i>46.30%</i>	<i>2,299</i>	<i>51.02%</i>	<i>361,841</i>	<i>48.90%</i>

Source: 2009-2013 American Community Survey, Table B23007

Within Seminole County, there are 4,506 working families, 48.98% of which have children under the age of 18 present. This compares with 51.10% in Oklahoma as a whole.

## Major Employers

Major employers in the Seminole County area are presented in the following table, as reported by the Seminole Chamber of Commerce.

<b>Major Employers in Seminole County</b>			
<b>Company</b>	<b>City</b>	<b>Industry / Description</b>	<b>No. Employees</b>
VF Jeanswear / Wrangler	Seminole	Clothing	350
Wal-Mart	Seminole	Retail	300
Seminole State College	Seminole	Educational Services	225
Sigma	Seminole	Meat Processing	223
Seminole Public Schools	Seminole	Educational Services	181
Commercial Brick	Wewoka	Brick	173
Wewoka Public Schools	Wewoka	Educational Services	170
Oakridge Nursing Home & Home Care House	Wewoka	Health Services	150
Enviro-Systems	Wewoka	Government Services	141
Enviro-Systems	Seminole	Aircraft Air Conditioners	123
Seminole Nation Development Authority	Seminole	Retail / Gaming	118
Seminole Medical Center	Seminole	Health Services	110
Seminole Nation of Oklahoma	Wewoka	Tribal Government	110
Pumping Service	Seminole	Services	100
Coates Roofing	Seminole	Roofing	85
City of Seminole	Seminole	Municipal Services	77
City of Wewoka	Wewoka	Municipal Services	55
Department of Human Services	Wewoka	Government Services	50
Disa-Goff Inc.	Seminole	Airless Blasting Equipment	47
Oklahoma Custom Coating	Seminole	E-Coat	40
Acker Industries / Expanded Solutions	Wewoka	Expanded Metal Products	37

*Source: Seminole Chamber of Commerce*

Seminole County shows a variety of employers in industries such as manufacturing, retail, education and local government services which should provide some degree of insulation from regional or national economic fluctuations.

## Commuting Patterns

### Travel Time to Work

The next table presents data regarding travel time to work in Seminole County.



### Workers 16 Years and Over by Commuting Time to Work

	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
<b>Commuting Workers:</b>	<b>2,416</b>		<b>8,768</b>		<b>1,613,364</b>	
Less than 15 minutes	1,325	54.84%	3,654	41.67%	581,194	36.02%
15 to 30 minutes	655	27.11%	2,742	31.27%	625,885	38.79%
30 to 45 minutes	214	8.86%	1,251	14.27%	260,192	16.13%
45 to 60 minutes	60	2.48%	400	4.56%	74,625	4.63%
60 or more minutes	162	6.71%	721	8.22%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Within Seminole County, the largest percentage of workers (41.67%) travel fewer than 15 minutes to work. It appears that persons living in Seminole County are for the most part employed in Seminole County, and do not commute to other labor markets to a significant extent.

### Means of Transportation

Data in the following table presents data regarding means of transportation for employed persons in Seminole County. As previously noted, private automobiles are the primary means of transportation by far.

### Workers 16 Years and Over by Means of Transportation to Work

	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
<b>Total Workers Age 16+</b>	<b>2,510</b>		<b>9,196</b>		<b>1,673,026</b>	
Car, Truck or Van:	2,350	93.63%	8,465	92.05%	1,551,461	92.73%
<i>Drove Alone</i>	<i>1,982</i>	<i>84.34%</i>	<i>7,564</i>	<i>89.36%</i>	<i>1,373,407</i>	<i>88.52%</i>
<i>Carpooled</i>	<i>368</i>	<i>15.66%</i>	<i>901</i>	<i>10.64%</i>	<i>178,054</i>	<i>11.48%</i>
Public Transportation	0	0.00%	6	0.07%	8,092	0.48%
Taxicab	0	0.00%	0	0.00%	984	0.06%
Motorcycle	0	0.00%	8	0.09%	3,757	0.22%
Bicycle	0	0.00%	0	0.00%	4,227	0.25%
Walked	66	2.63%	179	1.95%	30,401	1.82%
Other Means	0	0.00%	110	1.20%	14,442	0.86%
Worked at Home	94	3.75%	428	4.65%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

As shown, the vast majority of persons in Seminole County commute to work by private vehicle, with a small percentage of persons working from home.

## Housing Stock Analysis

### Existing Housing Units

The following table presents data regarding the total number of housing units in Seminole County. This data is provided as of the 2000 Census, the 2010 Census, with a 2015 estimate furnished by Nielsen SiteReports.

<b>Total Housing Units</b>					
	2000	2010	Annual	2015	Annual
	Census	Census	Change	Estimate	Change
Seminole	3,172	3,408	0.72%	3,505	0.56%
Seminole County	11,146	11,642	0.44%	11,684	0.07%
State of Oklahoma	1,514,400	1,664,378	0.95%	1,732,484	0.81%

Sources: 2000 and 2010 Decennial Censuses, Nielsen SiteReports

Since the 2010, Nielsen estimates that the number of housing units in Seminole County grew by 0.07% per year, to a total of 11,684 housing units in 2015. In terms of new housing unit construction, Seminole County underperformed Oklahoma as a whole between 2010 and 2015.

### Housing by Units in Structure

The next table separates housing units in Seminole County by units in structure, based on data from the Census Bureau's American Community Survey.

<b>2013 Housing Units by Units in Structure</b>						
	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
<b>Total Housing Units</b>	<b>3,494</b>		<b>11,637</b>		<b>1,669,828</b>	
1 Unit, Detached	2,749	78.68%	8,800	75.62%	1,219,987	73.06%
1 Unit, Attached	51	1.46%	137	1.18%	34,434	2.06%
Duplex Units	128	3.66%	352	3.02%	34,207	2.05%
3-4 Units	164	4.69%	266	2.29%	42,069	2.52%
5-9 Units	84	2.40%	120	1.03%	59,977	3.59%
10-19 Units	68	1.95%	92	0.79%	57,594	3.45%
20-49 Units	50	1.43%	62	0.53%	29,602	1.77%
50 or More Units	38	1.09%	38	0.33%	30,240	1.81%
Mobile Homes	162	4.64%	1,763	15.15%	159,559	9.56%
Boat, RV, Van, etc.	0	0.00%	7	0.06%	2,159	0.13%
<b>Total Multifamily Units</b>	<b>532</b>	<b>15.23%</b>	<b>930</b>	<b>7.99%</b>	<b>253,689</b>	<b>15.19%</b>

Source: 2009-2013 American Community Survey, Table B25024

Within Seminole County, 75.62% of housing units are single-family, detached. 7.99% of housing units are multifamily in structure (two or more units per building), while 15.21% of housing units comprise mobile homes, RVs, etc.

Within Seminole, 78.68% of housing units are single-family, detached. 15.23% of housing units are multifamily in structure, while 4.64% of housing units comprise mobile homes, RVs, etc.

### Housing Units Number of Bedrooms and Tenure

Data in the following table presents housing units in Seminole County by tenure (owner/renter), and by number of bedrooms.

#### 2013 Housing Units by Tenure and Number of Bedrooms

	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
<b>Total Occupied Housing Units</b>	<b>2,778</b>		<b>9,327</b>		<b>1,444,081</b>	
<b>Owner Occupied:</b>	<b>1,797</b>	<b>64.69%</b>	<b>6,893</b>	<b>73.90%</b>	<b>968,736</b>	<b>67.08%</b>
No Bedroom	0	0.00%	17	0.25%	2,580	0.27%
1 Bedroom	6	0.33%	142	2.06%	16,837	1.74%
2 Bedrooms	430	23.93%	1,652	23.97%	166,446	17.18%
3 Bedrooms	1,067	59.38%	3,934	57.07%	579,135	59.78%
4 Bedrooms	244	13.58%	1,018	14.77%	177,151	18.29%
5 or More Bedrooms	50	2.78%	130	1.89%	26,587	2.74%
<b>Renter Occupied:</b>	<b>981</b>	<b>35.31%</b>	<b>2,434</b>	<b>26.10%</b>	<b>475,345</b>	<b>32.92%</b>
No Bedroom	100	10.19%	210	8.63%	13,948	2.93%
1 Bedroom	73	7.44%	264	10.85%	101,850	21.43%
2 Bedrooms	417	42.51%	963	39.56%	179,121	37.68%
3 Bedrooms	363	37.00%	885	36.36%	152,358	32.05%
4 Bedrooms	28	2.85%	105	4.31%	24,968	5.25%
5 or More Bedrooms	0	0.00%	7	0.29%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

The overall homeownership rate in Seminole County is 73.90%, while 26.10% of housing units are renter occupied. In Seminole, the homeownership rate is 64.69%, while 35.31% of households are renters.

### Housing Units Tenure and Household Income

The next series of tables analyze housing units by tenure, and by household income. In general, lower income households are more likely to rent than to own, compared with higher income households.

### Seminole County Owner/Renter Percentages by Income Band in 2013

Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
<b>Total</b>	<b>9,327</b>	<b>6,893</b>	<b>2,434</b>	<b>73.90%</b>	<b>26.10%</b>
Less than \$5,000	447	220	227	49.22%	50.78%
\$5,000 - \$9,999	659	284	375	43.10%	56.90%
\$10,000-\$14,999	895	489	406	54.64%	45.36%
\$15,000-\$19,999	631	384	247	60.86%	39.14%
\$20,000-\$24,999	751	526	225	70.04%	29.96%
\$25,000-\$34,999	1,392	928	464	66.67%	33.33%
\$35,000-\$49,999	1,329	1,085	244	81.64%	18.36%
\$50,000-\$74,999	1,495	1,337	158	89.43%	10.57%
\$75,000-\$99,999	834	787	47	94.36%	5.64%
\$100,000-\$149,999	664	626	38	94.28%	5.72%
\$150,000 or more	230	227	3	98.70%	1.30%
<b>Income Less Than \$25,000</b>	<b>3,383</b>	<b>1,903</b>	<b>1,480</b>	<b>56.25%</b>	<b>43.75%</b>

Source: 2009-2013 American Community Survey, Table B25118

Within Seminole County as a whole, 43.75% of households with incomes less than \$25,000 are estimated to be renters, while 56.25% are estimated to be homeowners.

### Seminole Owner/Renter Percentages by Income Band in 2013

Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
<b>Total</b>	<b>2,778</b>	<b>1,797</b>	<b>981</b>	<b>64.69%</b>	<b>35.31%</b>
Less than \$5,000	208	108	100	51.92%	48.08%
\$5,000 - \$9,999	239	68	171	28.45%	71.55%
\$10,000-\$14,999	224	80	144	35.71%	64.29%
\$15,000-\$19,999	277	136	141	49.10%	50.90%
\$20,000-\$24,999	218	134	84	61.47%	38.53%
\$25,000-\$34,999	418	250	168	59.81%	40.19%
\$35,000-\$49,999	401	316	85	78.80%	21.20%
\$50,000-\$74,999	379	336	43	88.65%	11.35%
\$75,000-\$99,999	173	153	20	88.44%	11.56%
\$100,000-\$149,999	161	136	25	84.47%	15.53%
\$150,000 or more	80	80	0	100.00%	0.00%
<b>Income Less Than \$25,000</b>	<b>1,166</b>	<b>526</b>	<b>640</b>	<b>45.11%</b>	<b>54.89%</b>

Source: 2009-2013 American Community Survey, Table B25118

Within Seminole, 54.89% of households with incomes less than \$25,000 are estimated to be renters, while 45.11% are estimated to be homeowners.

## Housing Units by Year of Construction and Tenure

The following table provides a breakdown of housing units by year of construction, and by owner/renter (tenure), as well as median year of construction.

	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
<b>Total Occupied Housing Units</b>	<b>2,778</b>		<b>9,327</b>		<b>1,444,081</b>	
<b>Owner Occupied:</b>	<b>1,797</b>	<b>64.69%</b>	<b>6,893</b>	<b>73.90%</b>	<b>968,736</b>	<b>67.08%</b>
Built 2010 or Later	0	0.00%	75	1.09%	10,443	1.08%
Built 2000 to 2009	91	5.06%	755	10.95%	153,492	15.84%
Built 1990 to 1999	94	5.23%	616	8.94%	125,431	12.95%
Built 1980 to 1989	204	11.35%	1,059	15.36%	148,643	15.34%
Built 1970 to 1979	398	22.15%	1,580	22.92%	184,378	19.03%
Built 1960 to 1969	231	12.85%	725	10.52%	114,425	11.81%
Built 1950 to 1959	267	14.86%	696	10.10%	106,544	11.00%
Built 1940 to 1949	295	16.42%	710	10.30%	50,143	5.18%
Built 1939 or Earlier	217	12.08%	677	9.82%	75,237	7.77%
Median Year Built:		1965		1974		1977
<b>Renter Occupied:</b>	<b>981</b>	<b>35.31%</b>	<b>2,434</b>	<b>26.10%</b>	<b>475,345</b>	<b>32.92%</b>
Built 2010 or Later	29	2.96%	36	1.48%	5,019	1.06%
Built 2000 to 2009	74	7.54%	117	4.81%	50,883	10.70%
Built 1990 to 1999	96	9.79%	207	8.50%	47,860	10.07%
Built 1980 to 1989	84	8.56%	315	12.94%	77,521	16.31%
Built 1970 to 1979	177	18.04%	527	21.65%	104,609	22.01%
Built 1960 to 1969	84	8.56%	223	9.16%	64,546	13.58%
Built 1950 to 1959	146	14.88%	377	15.49%	54,601	11.49%
Built 1940 to 1949	99	10.09%	229	9.41%	31,217	6.57%
Built 1939 or Earlier	192	19.57%	403	16.56%	39,089	8.22%
Median Year Built:		1966		1969		1975
<b>Overall Median Year Built:</b>		<b>1965</b>		<b>1973</b>		<b>1976</b>

Sources: 2009-2013 American Community Survey, Tables B25035, B25036 & B25037

Within Seminole County, 10.54% of housing units were built after the year 2000. This compares with 15.22% statewide. Within Seminole the percentage is 6.98%.

80.64% of housing units in Seminole County were built prior to 1990, while in Seminole the percentage is 86.18%. These figures compare with the statewide figure of 72.78%.

## Substandard Housing

The next table presents data regarding substandard housing in Seminole County. The two most commonly cited figures for substandard housing are a lack of complete plumbing, and/or a lack of a complete kitchen. We have also included statistics regarding homes heated by wood, although this is a

less frequently cited indicator of substandard housing since some homes (particularly homes for seasonal occupancy) are heated by wood but otherwise not considered substandard.

The Census Bureau definition of inadequate plumbing is any housing unit lacking any one (or more) of the following three items:

1. Hot and cold running water
2. A flush toilet
3. A bathtub or shower

Inadequate kitchens are defined by the Census Bureau as housing units lacking any of the three following items:

1. A sink with a faucet
2. A stove or range
3. A refrigerator

### 2013 Substandard Housing Units

	Occupied	Inadequate Plumbing		Inadequate Kitchen		Uses Wood for Fuel	
	Units	Number	Percent	Number	Percent	Number	Percent
Seminole	2,778	27	0.97%	7	0.25%	0	0.00%
Seminole County	9,327	57	0.61%	54	0.58%	246	2.64%
State of Oklahoma	1,444,081	7,035	0.49%	13,026	0.90%	28,675	1.99%

Sources: 2009-2013 American Community Survey, Tables B25040, B25048 & B25052

Within Seminole County, 0.61% of occupied housing units have inadequate plumbing (compared with 0.49% at a statewide level), while 0.58% have inadequate kitchen facilities (compared with 0.90% at a statewide level). It is likely that there is at least some overlap between these two figures, among units lacking both complete plumbing and kitchen facilities.

### Vacancy Rates

The next table details housing units in Seminole County by vacancy and type. This data is provided by the American Community Survey.

<b>2013 Housing Units by Vacancy</b>						
	<b>Seminole</b>		<b>Seminole County</b>		<b>State of Oklahoma</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
<b>Total Housing Units</b>	3,494		11,637		1,669,828	
Total Vacant Units	716	20.49%	2,310	19.85%	225,747	13.52%
For rent	216	30.17%	400	17.32%	43,477	19.26%
Rented, not occupied	41	5.73%	63	2.73%	9,127	4.04%
For sale only	62	8.66%	211	9.13%	23,149	10.25%
Sold, not occupied	26	3.63%	110	4.76%	8,618	3.82%
For seasonal, recreational, or occasional use	100	13.97%	575	24.89%	39,475	17.49%
For migrant workers	0	0.00%	0	0.00%	746	0.33%
Other vacant	271	37.85%	951	41.17%	101,155	44.81%
<b>Homeowner Vacancy Rate</b>	3.29%		2.92%		2.31%	
<b>Rental Vacancy Rate</b>	17.45%		13.81%		8.24%	

Source: 2009-2013 American Community Survey, Tables B25001, B25003 & B25004

Within Seminole County, the overall housing vacancy rate is estimated to be 19.85%. The homeowner vacancy rate is estimated to be 2.92%, while the rental vacancy rate is estimated to be 13.81%.

In Seminole, the overall housing vacancy rate is estimated to be 20.49%. The homeowner vacancy rate is estimated to be 3.29%, while the rental vacancy rate is estimated to be 17.45%.

## Building Permits

The next table presents data regarding new residential building permits issued in Seminole. This data is furnished by the U.S. Census Bureau Residential Construction Branch, Manufacturing and Construction Division. Please note that average costs reported only represent physical construction costs for the housing units, and do not include land prices, most soft costs (such as finance fees), or builder's profit.

## Seminole

### New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	10	\$128,592	0	N/A
2005	12	\$115,592	54	\$60,715
2006	11	\$89,273	10	\$56,793
2007	7	\$93,701	0	N/A
2008	24	\$95,052	0	N/A
2009	13	\$98,149	0	N/A
2010	16	\$94,145	0	N/A
2011	4	\$152,596	11	\$78,187
2012	4	\$76,750	0	N/A
2013	5	\$132,770	0	N/A
2014	3	\$159,763	2	\$86,723

Source: United States Census Bureau Building Permits Survey

In Seminole, building permits for 186 housing units were issued between 2004 and 2014, for an average of 17 units per year. 58.60% of these housing units were single family homes, and 41.40% consisted of multifamily units.

### New Construction Activity

#### For Ownership:

Most new construction in Seminole appears to be occurring in the Lakewood Estates subdivision. A review of public records indicates that most new homes are between 1,700 and 3,200 square feet in size, selling for between \$160,000 and \$220,000 or \$90-\$110 per square foot. Lot prices appear to typically range from \$20,000 to as high as \$50,000. Other new construction in Seminole appears to be constructed on infill lots in established subdivisions.

#### For Rent:

There have not been any significant additions to the Seminole multifamily rental market in several years. The Seminole Nation has proposed construction of a 20-unit affordable rental housing development for seniors age 62 and up. If constructed this development would go far in meeting the affordable housing needs of seniors in the Seminole area.



## Homeownership Market

This section will address the market for housing units for purchase in Seminole County, using data collected from both local and national sources.

### Housing Units by Home Value

The following table presents housing units in Seminole County by value, as well as median home value, as reported by the Census Bureau's American Community Survey.

#### 2013 Housing Units by Home Value

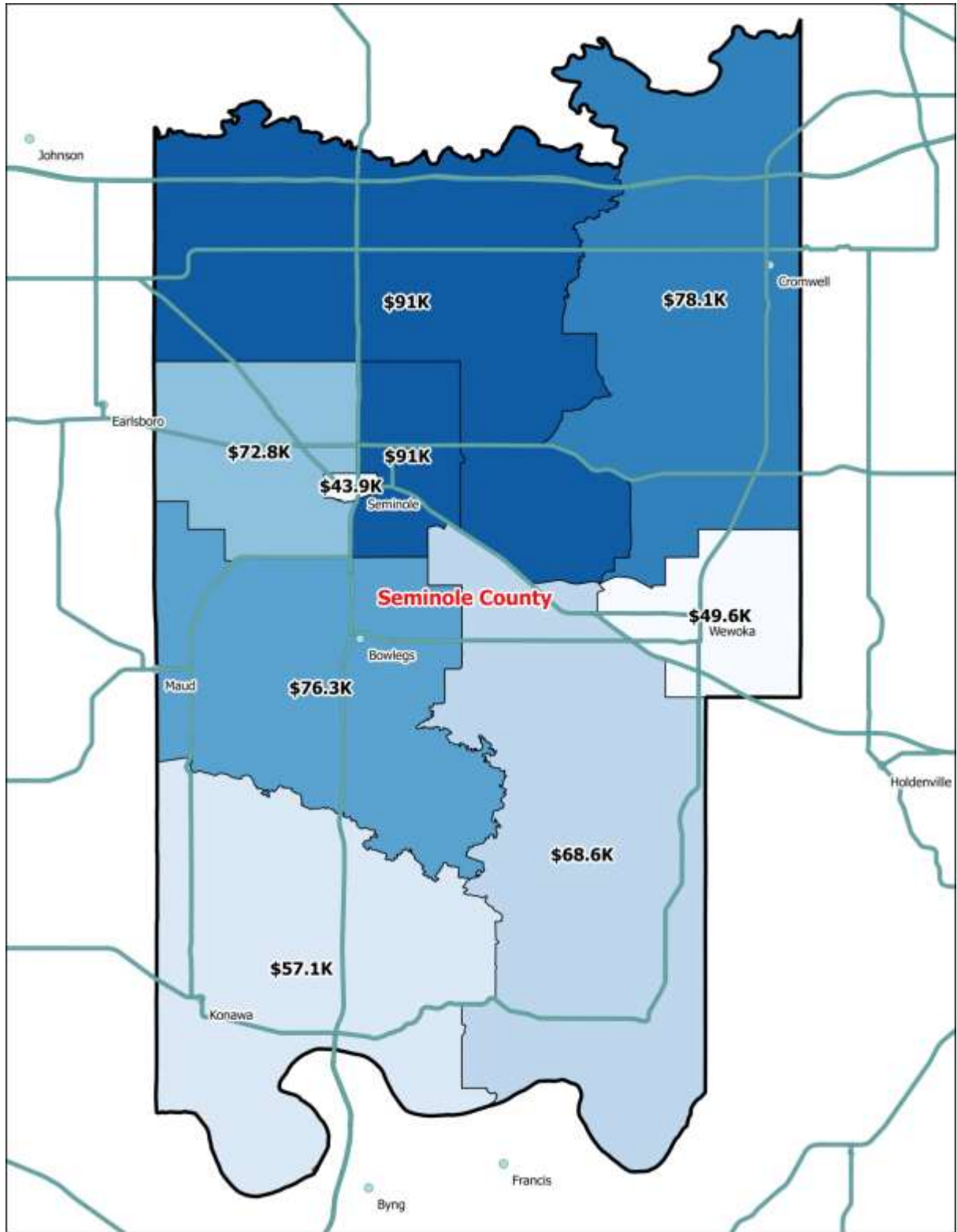
	Seminole		Seminole County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
<b>Total Owner-Occupied Units:</b>	<b>1,797</b>		<b>6,893</b>		<b>968,736</b>	
Less than \$10,000	105	5.84%	263	3.82%	20,980	2.17%
\$10,000 to \$14,999	42	2.34%	240	3.48%	15,427	1.59%
\$15,000 to \$19,999	32	1.78%	183	2.65%	13,813	1.43%
\$20,000 to \$24,999	56	3.12%	256	3.71%	16,705	1.72%
\$25,000 to \$29,999	82	4.56%	329	4.77%	16,060	1.66%
\$30,000 to \$34,999	45	2.50%	310	4.50%	19,146	1.98%
\$35,000 to \$39,999	52	2.89%	230	3.34%	14,899	1.54%
\$40,000 to \$49,999	178	9.91%	628	9.11%	39,618	4.09%
\$50,000 to \$59,999	184	10.24%	524	7.60%	45,292	4.68%
\$60,000 to \$69,999	127	7.07%	457	6.63%	52,304	5.40%
\$70,000 to \$79,999	198	11.02%	498	7.22%	55,612	5.74%
\$80,000 to \$89,999	136	7.57%	508	7.37%	61,981	6.40%
\$90,000 to \$99,999	77	4.28%	352	5.11%	51,518	5.32%
\$100,000 to \$124,999	153	8.51%	561	8.14%	119,416	12.33%
\$125,000 to \$149,999	131	7.29%	410	5.95%	96,769	9.99%
\$150,000 to \$174,999	114	6.34%	378	5.48%	91,779	9.47%
\$175,000 to \$199,999	33	1.84%	212	3.08%	53,304	5.50%
\$200,000 to \$249,999	10	0.56%	206	2.99%	69,754	7.20%
\$250,000 to \$299,999	9	0.50%	121	1.76%	41,779	4.31%
\$300,000 to \$399,999	19	1.06%	121	1.76%	37,680	3.89%
\$400,000 to \$499,999	9	0.50%	34	0.49%	13,334	1.38%
\$500,000 to \$749,999	0	0.00%	28	0.41%	12,784	1.32%
\$750,000 to \$999,999	0	0.00%	3	0.04%	3,764	0.39%
\$1,000,000 or more	5	0.28%	41	0.59%	5,018	0.52%
<b>Median Home Value:</b>	<b>\$69,600</b>		<b>\$70,500</b>		<b>\$112,800</b>	

Sources: 2009-2013 American Community Survey, Tables B25075 and B25077

The median value of owner-occupied homes in Seminole County is \$70,500. This is -37.5% lower than the statewide median, which is \$112,800. The median home value in Seminole is estimated to be \$69,600.

The geographic distribution of home values in Seminole County can be visualized by the following map. The highest home values are found in eastern Seminole, and the north-central and north-western areas of the county, at a median value of \$91,000 per home. The lowest median values are found in older, central areas of Seminole, and the east-central portion of the county around Wewoka.

### Seminole County Median Home Values by Census Tract



## Home Values by Year of Construction

The next table presents median home values in Seminole County by year of construction. Note that missing data fields indicate the Census Bureau had inadequate data to estimate a median value that age bracket.

<b>2013 Median Home Value by Year of Construction</b>			
	<b>Seminole Median Value</b>	<b>Seminole County Median Value</b>	<b>State of Oklahoma Median Value</b>
<b>Total Owner-Occupied Units:</b>			
Built 2010 or Later	-	\$108,000	\$188,900
Built 2000 to 2009	\$68,500	\$83,200	\$178,000
Built 1990 to 1999	\$94,300	\$71,000	\$147,300
Built 1980 to 1989	\$80,500	\$81,300	\$118,300
Built 1970 to 1979	\$91,300	\$82,600	\$111,900
Built 1960 to 1969	\$86,800	\$78,900	\$97,100
Built 1950 to 1959	\$58,100	\$52,400	\$80,300
Built 1940 to 1949	\$53,700	\$54,900	\$67,900
Built 1939 or Earlier	\$43,400	\$47,800	\$74,400

Note: Dashes indicate the Census Bureau had insufficient data to estimate a median value.

Source: 2009-2013 American Community Survey, Table 25107

## Seminole Single Family Sales Activity

The next series of tables provides data regarding single family home sales activity in Seminole. This data was furnished by County Records, Inc. from publicly available data. The data is separated by two, three and four bedroom homes, and then total data for all bedroom types.

<b>Seminole Single Family Sales Activity</b>					
<b>Two Bedroom Units</b>					
<b>Year</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>YTD 2015</b>
# of Units Sold	50	54	41	34	23
Average Sale Price	\$33,313	\$72,206	\$35,006	\$26,231	\$20,757
Average Square Feet	1,004	1,108	1,077	980	1,028
Average Price/SF	\$33.18	\$65.17	\$32.50	\$26.77	\$20.19
Average Year Built	1945	1948	1947	1940	1937

Source: Seminole County Assessor, via County Records, Inc.

### Seminole Single Family Sales Activity Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	49	64	62	50	33
Average Sale Price	\$79,141	\$72,986	\$78,585	\$64,124	\$81,339
Average Square Feet	1,563	1,588	1,622	1,524	1,678
Average Price/SF	\$50.63	\$45.96	\$48.45	\$42.08	\$48.47
Average Year Built	1961	1958	1965	1959	1953

Source: Seminole County Assessor, via County Records, Inc.

### Seminole Single Family Sales Activity Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	4	4	7	4	0
Average Sale Price	\$124,500	\$163,750	\$145,571	\$106,250	N/A
Average Square Feet	3,235	2,834	3,566	2,544	N/A
Average Price/SF	\$38.49	\$57.78	\$40.82	\$41.76	N/A
Average Year Built	1978	1947	1963	1952	N/A

Source: Seminole County Assessor, via County Records, Inc.

### Seminole Single Family Sales Activity All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	108	125	111	90	58
Average Sale Price	\$57,704	\$87,219	\$67,060	\$51,578	\$54,980
Average Square Feet	1,336	1,460	1,534	1,351	1,384
Average Price/SF	\$43.19	\$59.74	\$43.72	\$38.18	\$39.73
Average Year Built	1954	1953	1958	1951	1946

Source: Seminole County Assessor, via County Records, Inc.

Between 2011 and 2014, the average sale price declined by -2.77% per year, though it appears the average price has been influenced by a large number of sales of much older homes, typically built prior to 1940. The average sale price in 2015 was \$54,980 for an average price per square foot of \$39.73/SF.

### Foreclosure Rates

The next table presents foreclosure rate data for Seminole County, compiled by the Federal Reserve Bank of New York. This data is effective as of May 2014.

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**Foreclosure Rates**

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<b>Geography</b>	<b>% of Outstanding Mortgages in Foreclosure, May 2014</b>
Seminole County	3.0%
State of Oklahoma	2.1%
United States	2.1%
Rank among Counties in Oklahoma*:	16

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\* Rank among the 64 counties for which foreclosure rates are available

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Source: Federal Reserve Bank of New York, Community Credit Profiles

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According to the data provided, the foreclosure rate in Seminole County was 3.0% in May 2014. The county ranked 16 out of 64 counties in terms of highest foreclosure rates in Oklahoma. This rate compares with the statewide and nationwide foreclosure rates, both of which were 2.1%. It appears Seminole County has been more affected by foreclosures than the rest of Oklahoma as a whole, which likely has some depressing effect on home values in the area.

## Rental Market

This section will discuss supply and demand factors for the rental market in Seminole County, based on publicly available sources as well as our own surveys of landlords and rental properties in the area.

### Gross Rent Levels

The following table presents data regarding gross rental rates in Seminole County. Gross rent is the sum of contract rent, plus all utilities such as electricity, gas, water, sewer and trash, as applicable (telephone, cable, and/or internet expenses are not included in these figures).

<b>2013 Rental Units by Gross Rent</b>						
	<b>Seminole</b>		<b>Seminole County</b>		<b>State of Oklahoma</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
<b>Total Rental Units:</b>	<b>981</b>		<b>2,434</b>		<b>475,345</b>	
With cash rent:	876		2,039		432,109	
Less than \$100	14	1.43%	14	0.58%	2,025	0.43%
\$100 to \$149	0	0.00%	12	0.49%	2,109	0.44%
\$150 to \$199	35	3.57%	64	2.63%	4,268	0.90%
\$200 to \$249	29	2.96%	67	2.75%	8,784	1.85%
\$250 to \$299	31	3.16%	177	7.27%	8,413	1.77%
\$300 to \$349	77	7.85%	192	7.89%	9,107	1.92%
\$350 to \$399	23	2.34%	98	4.03%	10,932	2.30%
\$400 to \$449	88	8.97%	192	7.89%	15,636	3.29%
\$450 to \$499	85	8.66%	157	6.45%	24,055	5.06%
\$500 to \$549	96	9.79%	193	7.93%	31,527	6.63%
\$550 to \$599	109	11.11%	177	7.27%	33,032	6.95%
\$600 to \$649	42	4.28%	176	7.23%	34,832	7.33%
\$650 to \$699	22	2.24%	85	3.49%	32,267	6.79%
\$700 to \$749	40	4.08%	111	4.56%	30,340	6.38%
\$750 to \$799	92	9.38%	141	5.79%	27,956	5.88%
\$800 to \$899	58	5.91%	128	5.26%	45,824	9.64%
\$900 to \$999	24	2.45%	34	1.40%	34,153	7.18%
\$1,000 to \$1,249	11	1.12%	16	0.66%	46,884	9.86%
\$1,250 to \$1,499	0	0.00%	0	0.00%	14,699	3.09%
\$1,500 to \$1,999	0	0.00%	3	0.12%	10,145	2.13%
\$2,000 or more	0	0.00%	2	0.08%	5,121	1.08%
No cash rent	105	10.70%	395	16.23%	43,236	9.10%
<b>Median Gross Rent</b>	<b>\$529</b>		<b>\$512</b>		<b>\$699</b>	

Sources: 2009-2013 American Community Survey, Tables B25063 and B25064

Median gross rent in Seminole County is estimated to be \$512, which is -26.8% less than Oklahoma's median gross rent of \$699/month. Median gross rent in Seminole is estimated to be \$529.

### Median Gross Rent by Year of Construction

The next table presents data from the American Community Survey regarding median gross rent by year of housing unit construction. Note that dashes in the table indicate the Census Bureau had insufficient data to provide a median rent figure for that specific data field.

<b>2013 Median Gross Rent by Year of Construction</b>			
	<b>Seminole Median Rent</b>	<b>Seminole County Median Rent</b>	<b>State of Oklahoma Median Rent</b>
<b>Total Rental Units:</b>			
Built 2010 or Later	\$306	\$400	\$933
Built 2000 to 2009	\$491	\$518	\$841
Built 1990 to 1999	\$556	\$550	\$715
Built 1980 to 1989	\$507	\$530	\$693
Built 1970 to 1979	\$463	\$404	\$662
Built 1960 to 1969	\$688	\$529	\$689
Built 1950 to 1959	\$499	\$477	\$714
Built 1940 to 1949	\$615	\$627	\$673
Built 1939 or Earlier	\$565	\$553	\$651

Note: Dashes indicate the Census Bureau had insufficient data to estimate a median gross rent.

Source: 2009-2013 American Community Survey, Table 25111

The highest median gross rent in Seminole County is among housing units constructed between 1940 and 1949 (likely representing rental houses), which is \$627 per month. In order to be affordable, a household would need to earn at least \$25,080 per year to afford such a unit.

### Seminole Rental Survey Data

The next table shows the results of our rental survey of Seminole. The number of multifamily rental units in Seminole is relatively limited.

<b>Seminole Rental Properties</b>								
<b>Name</b>	<b>Type</b>	<b>Year Built</b>	<b>Bedrooms</b>	<b>Bathrooms</b>	<b>Size (SF)</b>	<b>Rate</b>	<b>Rate/SF</b>	<b>Vacancy</b>
Hillcrest Apartments	Market Rate	1972	Studio	1	392	\$335	\$0.855	12.50%
Hillcrest Apartments	Market Rate	1972	1	1	513	\$385	\$0.750	12.50%
Hillcrest Apartments	Market Rate	1972	2	1	657	\$450	\$0.685	12.50%
Hillcrest Apartments	Market Rate	1972	3	1	851	\$475	\$0.558	12.50%
Hillcrest Apartments	Market Rate	1972	4	1	1,051	\$515	\$0.490	12.50%
Courtyard Apartments	Market Rate	1974	1	1	351	\$400	\$1.140	10.00%
Courtyard Apartments	Market Rate	1974	1	1	522	\$425	\$0.814	10.00%
Courtyard Apartments	Market Rate	1974	2	1	778	\$500	\$0.643	10.00%
Courtyard Apartments	Market Rate	1974	2	1	935	\$500	\$0.535	10.00%
Winding Creek Apartments	Market Rate	2003	1	1	657	\$415	\$0.632	N/A
Winding Creek Apartments	Market Rate	2003	2	1	830	\$515	\$0.620	N/A
Winding Creek Apartments	Market Rate	2003	3	2	1,132	\$650	\$0.574	N/A



Winding Creek Apartments was formerly subject to the Affordable Housing Tax Credit program but has since been removed from the program. In addition to these properties there are two properties in Seminole currently subject to the AHTC program: Brookstone Park (38 affordable rental houses for family occupancy) and Broadway Pointe (46 affordable rental units for senior occupancy). We were unable to reach representatives of these two properties.

On the whole, the rental market in Seminole is relatively stable, with stable to modestly increasing rental rates.

### **Rental Market Vacancy – Seminole**

The overall market vacancy of rental housing units was reported at 17.45% by the Census Bureau as of the most recent American Community Survey. This figure is unusually high and well above the statewide vacancy rate of 8.24%. However, our own survey of apartment properties in Seminole showed the largest communities reporting at least 10% vacancy.



Winding Creek Apartments



Courtyard Apartments



Hillcrest Apartments

## Summary of HUD Subsidized Properties

The following tables present data for housing units and households subsidized by the United States Department of Housing and Urban Development, for Seminole County, the State of Oklahoma, and the United States. This data is taken from HUD's "Picture of Subsidized Households" data for 2013, the most recent year available.

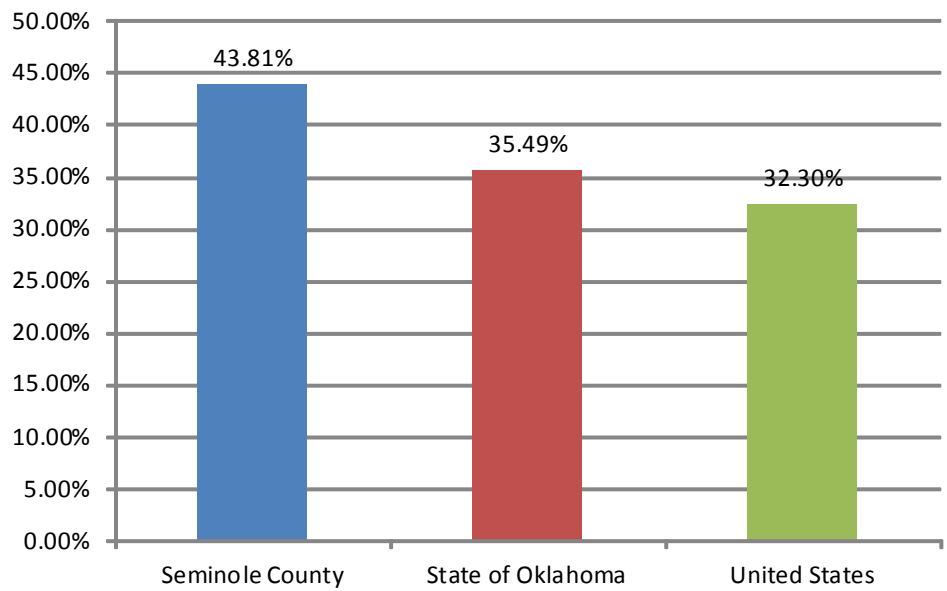
### HUD Programs in Seminole County

Seminole County	# Units	Occupancy Rate	Avg.	Tenant Contribution	Federal Contribution	% of Total Rent
			Household Income			
Public Housing	290	97%	\$10,728	\$215	\$298	41.85%
Housing Choice Vouchers	359	67%	\$9,463	\$282	\$343	45.12%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	0	N/A	N/A	N/A	N/A	N/A
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	0	N/A	N/A	N/A	N/A	N/A
Summary of All HUD Programs	649	80%	\$10,192	\$248	\$317	43.81%
<b>State of Oklahoma</b>						
Public Housing	13,088	96%	\$11,328	\$215	\$371	36.71%
Housing Choice Vouchers	24,651	93%	\$10,766	\$283	\$470	37.57%
Mod Rehab	158	89%	\$7,272	\$129	\$509	20.17%
Section 8 NC/SR	4,756	93%	\$10,730	\$242	\$465	34.24%
Section 236	428	89%	\$8,360	\$192	\$344	35.82%
Multi-Family Other	7,518	91%	\$7,691	\$176	\$448	28.18%
Summary of All HUD Programs	50,599	94%	\$10,360	\$242	\$440	35.49%
<b>United States</b>						
Public Housing	1,150,867	94%	\$13,724	\$275	\$512	34.91%
Housing Choice Vouchers	2,386,237	92%	\$13,138	\$346	\$701	33.04%
Mod Rehab	19,148	87%	\$8,876	\$153	\$664	18.78%
Section 8 NC/SR	840,900	96%	\$12,172	\$274	\$677	28.80%
Section 236	126,859	93%	\$14,347	\$211	\$578	26.74%
Multi-Family Other	656,456	95%	\$11,135	\$255	\$572	30.80%
Summary of All HUD Programs	5,180,467	94%	\$12,892	\$304	\$637	32.30%

Source: U.S. Dept. of Housing and Urban Development, Picture of Subsidized Households - 2013

Among all HUD programs, there are 649 housing units located within Seminole County, with an overall occupancy rate of 80%. It appears that although public housing units in Seminole County are very well occupied, there are a sizable number of unused housing choice vouchers. The average household income among households living in these units is \$10,192. Total monthly rent for these units averages \$565, with the federal contribution averaging \$317 (56.19%) and the tenant's contribution averaging \$248 (43.81%).

**Percentage of Total Rent Paid by Tenant - HUD Subsidized Properties**



Source: 2013 HUD Picture of Subsidized Households

The following table presents select demographic variables among the households living in units subsidized by HUD.



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**Demographics of Persons in HUD Programs in Seminole County**


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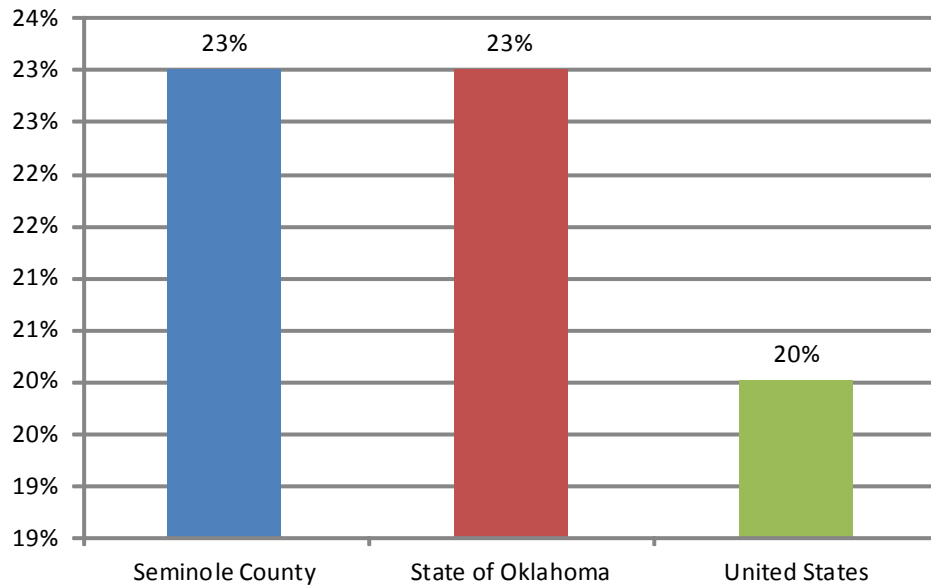
<b>Seminole County</b>	<b># Units</b>	<b>% Single Mothers</b>	<b>% w/ Disability</b>	<b>% Age 62+</b>	<b>% Age 62+ w/ Disability</b>	<b>% Minority</b>
Public Housing	290	20%	33%	41%	60%	26%
Housing Choice Vouchers	359	46%	15%	21%	67%	34%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	0	N/A	N/A	N/A	N/A	N/A
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	0	N/A	N/A	N/A	N/A	N/A
<b>Summary of All HUD Programs</b>	<b>649</b>	<b>32%</b>	<b>23%</b>	<b>33%</b>	<b>59%</b>	<b>30%</b>
<b>State of Oklahoma</b>						
Public Housing	13,088	33%	22%	28%	63%	44%
Housing Choice Vouchers	24,651	46%	25%	17%	77%	60%
Mod Rehab	158	46%	17%	13%	67%	42%
Section 8 NC/SR	4,756	14%	32%	52%	28%	25%
Section 236	428	32%	22%	24%	32%	33%
Multi-Family Other	7,518	42%	12%	22%	25%	47%
<b>Summary of All HUD Programs</b>	<b>50,599</b>	<b>38%</b>	<b>23%</b>	<b>25%</b>	<b>53%</b>	<b>50%</b>
<b>United States</b>						
Public Housing	1,150,867	36%	20%	31%	48%	71%
Housing Choice Vouchers	2,386,237	44%	22%	22%	68%	67%
Mod Rehab	19,148	28%	27%	24%	69%	71%
Section 8 NC/SR	840,900	18%	21%	56%	19%	45%
Section 236	126,859	25%	13%	47%	16%	59%
Multi-Family Other	656,456	31%	13%	44%	16%	63%
<b>Summary of All HUD Programs</b>	<b>5,180,467</b>	<b>36%</b>	<b>20%</b>	<b>33%</b>	<b>40%</b>	<b>64%</b>

Source: U.S. Dept. of Housing and Urban Development, Picture of Subsidized Households - 2013

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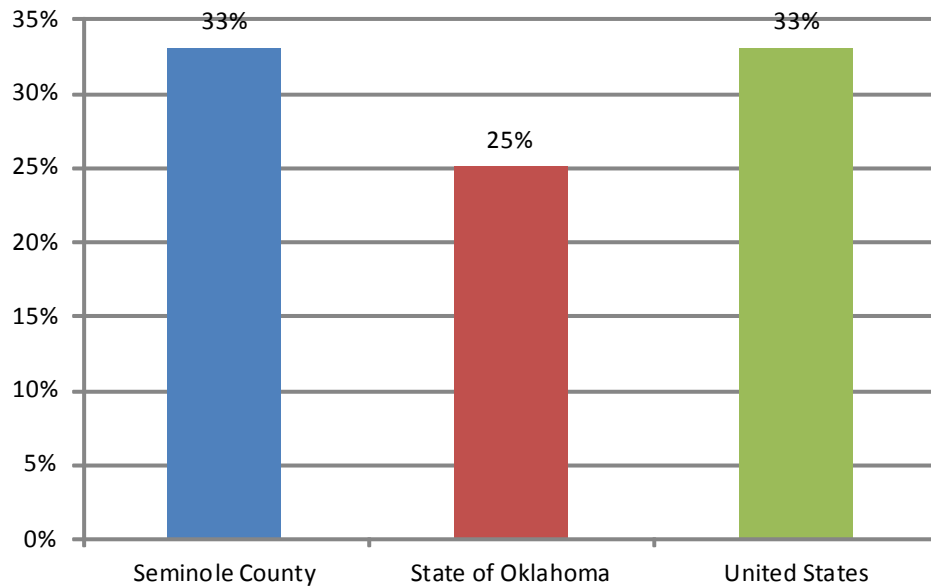
32% of housing units are occupied by single parents with female heads of household. 23% of households have at least one person with a disability. 33% of households have either a householder or spouse age 62 or above. Of the households age 62 or above, 59% have one or more disabilities. Finally, 30% of households are designated as racial or ethnic minorities.

**Percentage of Households with Disabilities - HUD Subsidized Properties**



Source: 2013 HUD Picture of Subsidized Households

**Percentage of Households Age 62+ - HUD Subsidized Properties**



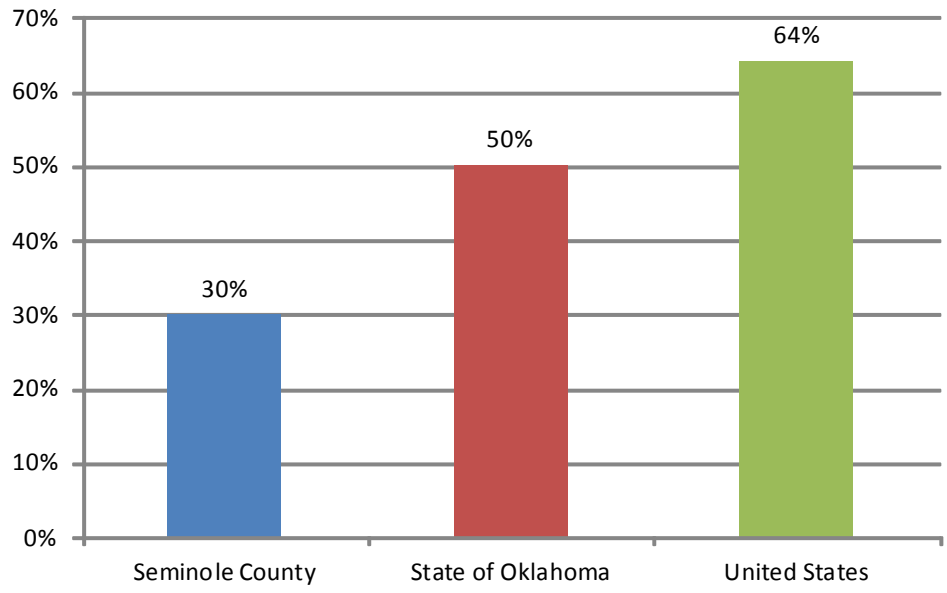
Source: 2013 HUD Picture of Subsidized Households



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**Percentage of Minority Households - HUD Subsidized Properties**

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Source: 2013 HUD Picture of Subsidized Households

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## Projected Housing Need

### Consolidated Housing Affordability Strategy (CHAS)

This section will analyze data from the U.S. Department of Housing and Urban Development's Consolidated Housing Affordability Strategy (CHAS) dataset for Seminole County. This data is typically separated into household income thresholds, defined by HUD Area Median Family Income (HAMFI). HUD Area Median Family Income (HAMFI) is equivalent to Area Median Income (AMI) for the purposes of this report. This data is considered the best indicator of housing need available which separates need into household income thresholds as defined by HUD.

### Cost Burden by Income Threshold

The next table presents CHAS data for Seminole County regarding housing cost burden as a percentage of household income. Renter costs are considered to be the sum of contract rent and any utilities not paid by the landlord (such as electricity, natural gas, and water, but not including telephone service, cable service, internet service, etc.). Homeowner costs include mortgage debt service (or similar debts such as deeds of trust or contracts for deed), utilities, property taxes and property insurance.

Households are considered to be cost overburdened if their housing costs (renter or owner) are greater than 30% of their gross household income. A household is "severely" overburdened if their housing costs are greater than 50% of their gross household income.



**Seminole County : CHAS - Housing Cost Burden by HAMFI**

Household Income / Cost Burden	Owners		Renters	
	Number	Percent	Number	Percent
<b>Income &lt; 30% HAMFI</b>	<b>685</b>		<b>740</b>	
Cost Burden Less Than 30%	175	25.55%	165	22.30%
Cost Burden Between 30%-50%	105	15.33%	105	14.19%
Cost Burden Greater Than 50%	345	50.36%	385	52.03%
Not Computed (no/negative income)	60	8.76%	80	10.81%
<b>Income 30%-50% HAMFI</b>	<b>685</b>		<b>585</b>	
Cost Burden Less Than 30%	465	67.88%	220	37.61%
Cost Burden Between 30%-50%	130	18.98%	340	58.12%
Cost Burden Greater Than 50%	90	13.14%	25	4.27%
Not Computed (no/negative income)	0	0.00%	0	0.00%
<b>Income 50%-80% HAMFI</b>	<b>1,360</b>		<b>630</b>	
Cost Burden Less Than 30%	1,055	77.57%	515	81.75%
Cost Burden Between 30%-50%	220	16.18%	105	16.67%
Cost Burden Greater Than 50%	85	6.25%	10	1.59%
Not Computed (no/negative income)	0	0.00%	0	0.00%
<b>Income 80%-100% HAMFI</b>	<b>580</b>		<b>265</b>	
Cost Burden Less Than 30%	550	94.83%	260	98.11%
Cost Burden Between 30%-50%	25	4.31%	4	1.51%
Cost Burden Greater Than 50%	4	0.69%	0	0.00%
Not Computed (no/negative income)	0	0.00%	0	0.00%
<b>All Incomes</b>	<b>6,910</b>		<b>2,595</b>	
Cost Burden Less Than 30%	5,680	82.20%	1,535	59.15%
Cost Burden Between 30%-50%	635	9.19%	554	21.35%
Cost Burden Greater Than 50%	534	7.73%	420	16.18%
Not Computed (no/negative income)	60	0.87%	80	3.08%

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 8

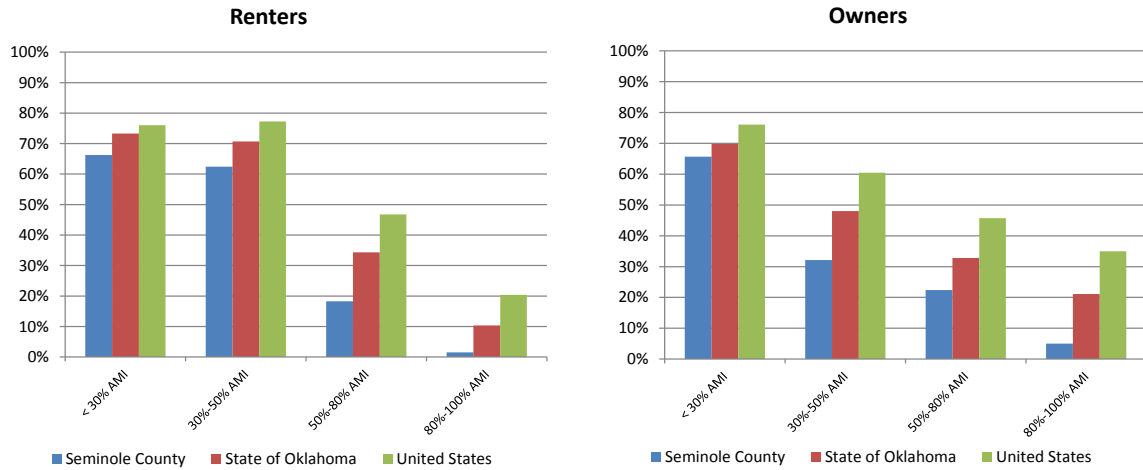
The next table summarizes the data from the previous table for households with cost burden greater than 30% of gross income, followed by a chart comparing these figures for Seminole County with the State of Oklahoma as a whole, and the United States.

**Seminole County : Households by Income by Cost Burden**

Household Income Threshold	Owners		Renters	
	Total	% w/ Cost > 30% Income	Total	% w/ Cost > 30% Income
Income < 30% HAMFI	685	65.69%	740	66.22%
Income 30%-50% HAMFI	685	32.12%	585	62.39%
Income 50%-80% HAMFI	1,360	22.43%	630	18.25%
Income 80%-100% HAMFI	580	5.00%	265	1.51%
All Incomes	6,910	16.92%	2,595	37.53%

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 8

**Households by Income Threshold: Percentage with Housing Cost Over 30% of Income**



Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 6

**Substandard Conditions / Overcrowding by Income Threshold**

The following table summarizes data regarding substandard housing conditions and overcrowding, separated by owner/renter and HAMFI income threshold. Substandard housing conditions are defined by HUD as any housing unit lacking either complete plumbing or a complete kitchen.

A housing unit without “complete plumbing” is any housing unit lacking one or more of the following features (they do not need to all be present in the same room):

1. Hot and cold running water
2. A flush toilet
3. A bathtub or shower

A lack of a complete kitchen is any housing unit lacking any one or more of the three following items:

1. A sink with a faucet
2. A stove or range
3. A refrigerator

Households are considered to be “overcrowded” if the household has more than 1.0 persons per room (note that this definition is “room” including bedrooms, living rooms and kitchens, as opposed to only “bedrooms”), and is “severely overcrowded” if the household has more than 1.5 persons per room.



### Seminole County : CHAS - HAMFI by Substandard Conditions / Overcrowding

Household Income / Housing Problem	Owners		Renters	
	Number	Percent	Number	Percent
<b>Income &lt; 30% HAMFI</b>	<b>685</b>		<b>740</b>	
Between 1.0 and 1.5 Persons per Room	10	1.46%	60	8.11%
More than 1.5 Persons per Room	0	0.00%	15	2.03%
Lacks Complete Kitchen or Plumbing	4	0.58%	15	2.03%
<b>Income 30%-50% HAMFI</b>	<b>685</b>		<b>585</b>	
Between 1.0 and 1.5 Persons per Room	15	2.19%	20	3.42%
More than 1.5 Persons per Room	0	0.00%	20	3.42%
Lacks Complete Kitchen or Plumbing	0	0.00%	4	0.68%
<b>Income 50%-80% HAMFI</b>	<b>1,360</b>		<b>630</b>	
Between 1.0 and 1.5 Persons per Room	35	2.57%	10	1.59%
More than 1.5 Persons per Room	10	0.74%	0	0.00%
Lacks Complete Kitchen or Plumbing	15	1.10%	15	2.38%
<b>Income 80%-100% HAMFI</b>	<b>580</b>		<b>265</b>	
Between 1.0 and 1.5 Persons per Room	25	4.31%	0	0.00%
More than 1.5 Persons per Room	4	0.69%	4	1.51%
Lacks Complete Kitchen or Plumbing	4	0.69%	0	0.00%
<b>All Incomes</b>	<b>6,910</b>		<b>2,595</b>	
Between 1.0 and 1.5 Persons per Room	115	1.66%	100	3.85%
More than 1.5 Persons per Room	39	0.56%	43	1.66%
Lacks Complete Kitchen or Plumbing	28	0.41%	34	1.31%

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 3

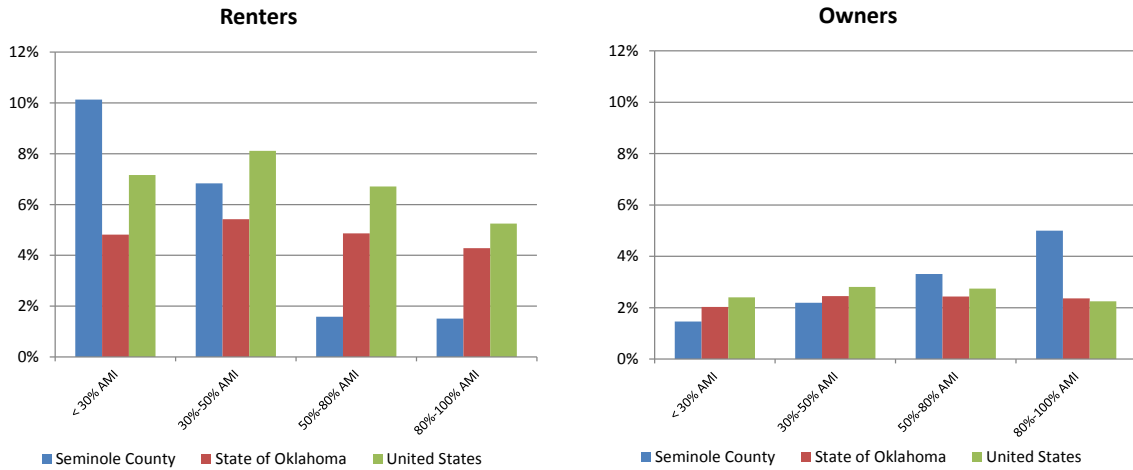
The next table summarizes this data for overcrowding (i.e. all households with greater than 1.0 persons per room), with a chart comparing this data between Seminole County, Oklahoma and the nation.

### Seminole County : Households by Income by Overcrowding

Household Income Threshold	Total	Owners		Renters	
		% > 1.0 Persons per Room	Total	% > 1.0 Persons per Room	Total
Income < 30% HAMFI	685	1.46%	740	10.14%	
Income 30%-50% HAMFI	685	2.19%	585	6.84%	
Income 50%-80% HAMFI	1,360	3.31%	630	1.59%	
Income 80%-100% HAMFI	580	5.00%	265	1.51%	
All Incomes	6,910	2.23%	2,595	5.51%	

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 3

**Households by Income Threshold: Percentage with More than 1.0 Persons per Room**



Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 3

The table following summarizes this data for substandard housing conditions, with a comparison chart between Seminole County, the state and the nation.

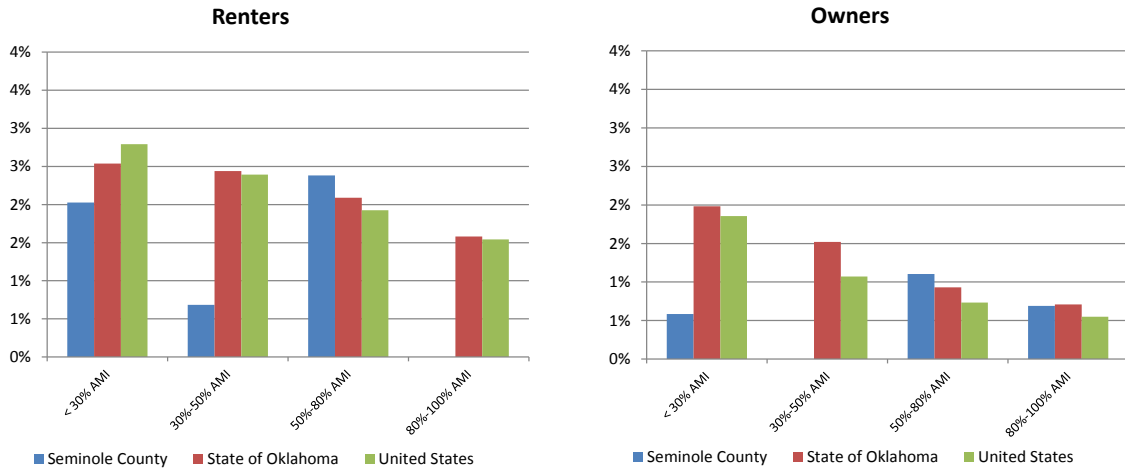
**Seminole County : Households by Income by Substandard Conditions**

Household Size/Type	Total	Owners		Renters	
		% Lacking Kitchen or Plumbing	Total	% Lacking Kitchen or Plumbing	Total
Income < 30% HAMFI	685	0.58%	740	2.03%	
Income 30%-50% HAMFI	685	0.00%	585	0.68%	
Income 50%-80% HAMFI	1,360	1.10%	630	2.38%	
Income 80%-100% HAMFI	580	0.69%	265	0.00%	
All Incomes	6,910	0.41%	2,595	1.31%	

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 3



**Households by Income Threshold: Percentage Lacking Complete Plumbing and/or Kitchen**



Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 3

**Cost Burden by Household Type**

The following table provides a breakdown of households by HAMFI, and by household type and size, and by housing cost burden. The categories of household type provided by HUD are:

- Elderly Family: Households with two persons, either or both age 62 or over.
- Small Family: 2 persons, neither age 62 or over, or families with 3 or 4 persons of any age.
- Large Family: families with 5 or more persons.
- Elderly Non-Family (single persons age 62 or over, or unrelated elderly individuals)
- Non-Elderly, Non-Family: all other households.



**Seminole County : CHAS - Housing Cost Burden by Household Type / HAMFI**

Income, Household Size/Type	Total	Owners		Renters		
		No. w/ Cost > 30%	Pct. w/ Cost > 30%	No. w/ Cost > 30%	Pct. w/ Cost > 30%	
		Income	Income	Income	Income	
<b>Income &lt; 30% HAMFI</b>	<b>685</b>	<b>450</b>	<b>65.69%</b>	<b>740</b>	<b>495</b>	<b>66.89%</b>
Elderly Family	35	15	42.86%	10	10	100.00%
Small Family (2-4 persons)	215	145	67.44%	255	180	70.59%
Large Family (5 or more persons)	20	20	100.00%	95	70	73.68%
Elderly Non-Family	195	120	61.54%	225	135	60.00%
Non-Family, Non-Elderly	220	150	68.18%	150	100	66.67%
<b>Income 30%-50% HAMFI</b>	<b>685</b>	<b>213</b>	<b>31.09%</b>	<b>585</b>	<b>355</b>	<b>60.68%</b>
Elderly Family	120	35	29.17%	20	10	50.00%
Small Family (2-4 persons)	160	49	30.63%	245	145	59.18%
Large Family (5 or more persons)	50	15	30.00%	40	25	62.50%
Elderly Non-Family	290	100	34.48%	180	90	50.00%
Non-Family, Non-Elderly	65	14	21.54%	95	85	89.47%
<b>Income 50%-80% HAMFI</b>	<b>1,360</b>	<b>308</b>	<b>22.65%</b>	<b>630</b>	<b>118</b>	<b>18.73%</b>
Elderly Family	310	55	17.74%	70	14	20.00%
Small Family (2-4 persons)	500	110	22.00%	290	75	25.86%
Large Family (5 or more persons)	180	74	41.11%	55	0	0.00%
Elderly Non-Family	290	45	15.52%	40	4	10.00%
Non-Family, Non-Elderly	85	24	28.24%	180	25	13.89%
<b>Income 80%-100% HAMFI</b>	<b>580</b>	<b>35</b>	<b>6.03%</b>	<b>265</b>	<b>4</b>	<b>1.51%</b>
Elderly Family	155	19	12.26%	15	0	0.00%
Small Family (2-4 persons)	180	4	2.22%	75	4	5.33%
Large Family (5 or more persons)	120	4	3.33%	20	0	0.00%
Elderly Non-Family	75	0	0.00%	20	0	0.00%
Non-Family, Non-Elderly	50	8	16.00%	130	0	0.00%
<b>All Incomes</b>	<b>6,910</b>	<b>1,174</b>	<b>16.99%</b>	<b>2,595</b>	<b>972</b>	<b>37.46%</b>
Elderly Family	1,400	148	10.57%	150	34	22.67%
Small Family (2-4 persons)	3,060	397	12.97%	1,065	404	37.93%
Large Family (5 or more persons)	630	133	21.11%	235	95	40.43%
Elderly Non-Family	1,115	280	25.11%	490	229	46.73%
Non-Family, Non-Elderly	710	216	30.42%	645	210	32.56%

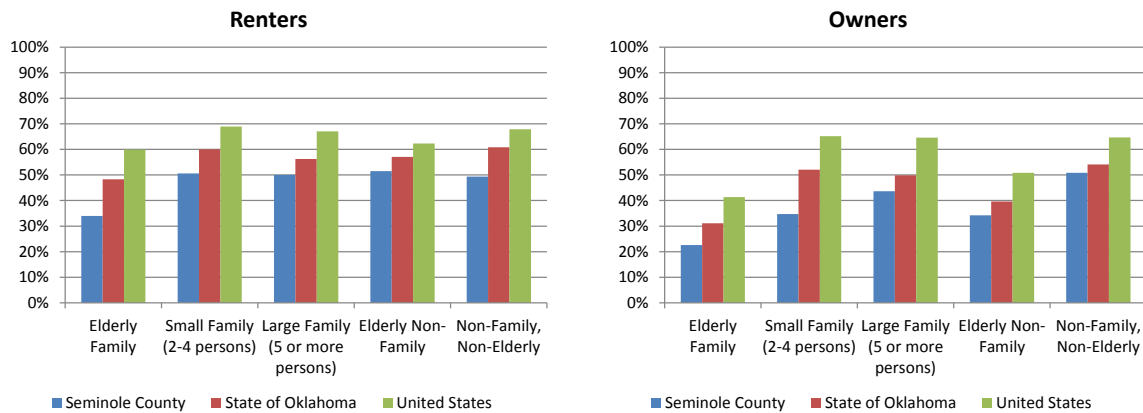
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

**Seminole County : Households under 80% AMI by Cost Burden**

Household Size/Type	Total	Owners		Renters		
		No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
<b>Income &lt; 80% HAMFI</b>	<b>2,730</b>	<b>971</b>	<b>35.57%</b>	<b>1,955</b>	<b>968</b>	<b>49.51%</b>
Elderly Family	465	105	22.58%	100	34	34.00%
Small Family (2-4 persons)	875	304	34.74%	790	400	50.63%
Large Family (5 or more persons)	250	109	43.60%	190	95	50.00%
Elderly Non-Family	775	265	34.19%	445	229	51.46%
Non-Family, Non-Elderly	370	188	50.81%	425	210	49.41%

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

**Households Under 80% of AMI: Percentage Housing Cost Overburdened**



Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

**Housing Problems by Household Type**

The next set of tables presents data by household type and whether or not the household is experiencing **any** housing problems. Housing problems are defined by HUD as any household meeting any of the three following criteria:

1. Housing costs greater than 30% of income (cost-overburdened).
2. Living in a housing unit lacking complete plumbing or a complete kitchen (substandard housing unit).
3. Living in a housing unit with more than 1.0 persons per room (overcrowding).



**Seminole County : CHAS - Housing Problems by Household Type and HAMFI**

Income, Household Size/Type	Total	Owners		Total	Renters	
		No. w/ Housing Problems	Pct. w/ Housing Problems		No. w/ Housing Problems	Pct. w/ Housing Problems
<b>Income &lt; 30% HAMFI</b>	<b>685</b>	<b>455</b>	<b>66.42%</b>	<b>740</b>	<b>505</b>	<b>68.24%</b>
Elderly Family	35	15	42.86%	10	10	100.00%
Small Family (2-4 persons)	215	150	69.77%	255	180	70.59%
Large Family (5 or more persons)	20	15	75.00%	95	75	78.95%
Elderly Non-Family	195	125	64.10%	225	140	62.22%
Non-Family, Non-Elderly	220	150	68.18%	150	100	66.67%
<b>Income 30%-50% HAMFI</b>	<b>685</b>	<b>235</b>	<b>34.31%</b>	<b>585</b>	<b>380</b>	<b>64.96%</b>
Elderly Family	120	35	29.17%	20	10	50.00%
Small Family (2-4 persons)	160	55	34.38%	245	160	65.31%
Large Family (5 or more persons)	50	30	60.00%	40	35	87.50%
Elderly Non-Family	290	100	34.48%	180	90	50.00%
Non-Family, Non-Elderly	65	15	23.08%	95	85	89.47%
<b>Income 50%-80% HAMFI</b>	<b>1,360</b>	<b>365</b>	<b>26.84%</b>	<b>630</b>	<b>139</b>	<b>22.06%</b>
Elderly Family	310	60	19.35%	70	15	21.43%
Small Family (2-4 persons)	500	120	24.00%	290	90	31.03%
Large Family (5 or more persons)	180	115	63.89%	55	0	0.00%
Elderly Non-Family	290	45	15.52%	40	4	10.00%
Non-Family, Non-Elderly	85	25	29.41%	180	30	16.67%
<b>Income Greater than 80% of HAMFI</b>	<b>4,180</b>	<b>300</b>	<b>7.18%</b>	<b>635</b>	<b>19</b>	<b>2.99%</b>
Elderly Family	935	45	4.81%	50	0	0.00%
Small Family (2-4 persons)	2,185	130	5.95%	275	4	1.45%
Large Family (5 or more persons)	380	75	19.74%	45	15	33.33%
Elderly Non-Family	340	20	5.88%	45	0	0.00%
Non-Family, Non-Elderly	340	30	8.82%	220	0	0.00%
<b>All Incomes</b>	<b>6,910</b>	<b>1,355</b>	<b>19.61%</b>	<b>2,590</b>	<b>1,043</b>	<b>40.27%</b>
Elderly Family	1,400	155	11.07%	150	35	23.33%
Small Family (2-4 persons)	3,060	455	14.87%	1,065	434	40.75%
Large Family (5 or more persons)	630	235	37.30%	235	125	53.19%
Elderly Non-Family	1,115	290	26.01%	490	234	47.76%
Non-Family, Non-Elderly	710	220	30.99%	645	215	33.33%

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 16

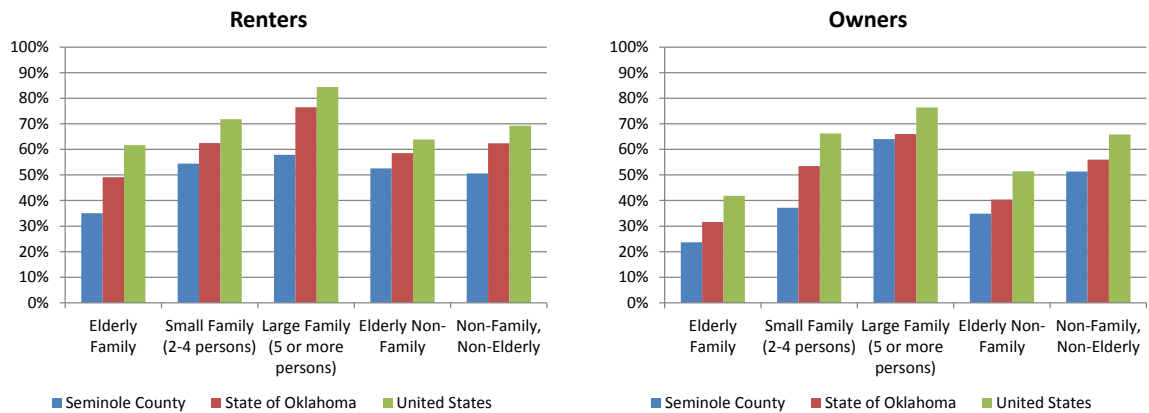


**Seminole County : Households under 80% AMI by Housing Problems**

Household Size/Type	Total	Owners		Renters	
		No. w/ Housing Problems	Pct. w/ Housing Problems	No. w/ Housing Problems	Pct. w/ Housing Problems
<b>Income &lt; 80% HAMFI</b>	<b>2,730</b>	<b>1,055</b>	<b>38.64%</b>	<b>1,955</b>	<b>52.38%</b>
Elderly Family	465	110	23.66%	100	35.00%
Small Family (2-4 persons)	875	325	37.14%	790	54.43%
Large Family (5 or more persons)	250	160	64.00%	190	57.89%
Elderly Non-Family	775	270	34.84%	445	52.58%
Non-Family, Non-Elderly	370	190	51.35%	425	50.59%

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

**Households Under 80% of AMI: Percentage with Housing Problems**



Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

**Housing Problems by Race / Ethnicity**

Data presented in the following tables summarizes housing problems (as previously defined), by HAMFI threshold, and by race/ethnicity, for Seminole County. Under CFR 91.305(b)(1)(ii)(2), racial or ethnic groups have disproportionate need if “the percentage of persons in a category of need who are members of a particular racial or ethnic group in a category of need is at least 10 percentage points higher than the percentage of persons in the category as a whole.”



<b>Seminole County : CHAS - Housing Problems by Race / Ethnicity and HAMFI</b>						
Income, Race / Ethnicity	Total	Owners			Renters	
		No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
<b>Income &lt; 30% HAMFI</b>	<b>685</b>	<b>455</b>	<b>66.4%</b>	<b>740</b>	<b>510</b>	<b>68.9%</b>
White alone, non-Hispanic	440	320	72.7%	470	335	71.3%
Black or African-American alone	39	20	51.3%	105	75	71.4%
Asian alone	0	0	N/A	0	0	N/A
American Indian alone	165	80	48.5%	94	60	63.8%
Pacific Islander alone	4	4	100.0%	0	0	N/A
Hispanic, any race	20	20	100.0%	4	0	0.0%
Other (including multiple races)	24	10	41.7%	70	40	57.1%
<b>Income 30%-50% HAMFI</b>	<b>685</b>	<b>235</b>	<b>34.3%</b>	<b>580</b>	<b>380</b>	<b>65.5%</b>
White alone, non-Hispanic	550	175	31.8%	290	190	65.5%
Black or African-American alone	14	10	71.4%	130	75	57.7%
Asian alone	0	0	N/A	0	0	N/A
American Indian alone	80	30	37.5%	100	85	85.0%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	4	4	100.0%	30	30	100.0%
Other (including multiple races)	40	20	50.0%	40	10	25.0%
<b>Income 50%-80% HAMFI</b>	<b>1,360</b>	<b>365</b>	<b>26.8%</b>	<b>630</b>	<b>135</b>	<b>21.4%</b>
White alone, non-Hispanic	975	260	26.7%	350	70	20.0%
Black or African-American alone	45	25	55.6%	39	4	10.3%
Asian alone	4	0	0.0%	15	0	0.0%
American Indian alone	245	35	14.3%	155	50	32.3%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	40	25	62.5%	14	4	28.6%
Other (including multiple races)	50	20	40.0%	54	4	7.4%
<b>Income 80%-100% HAMFI</b>	<b>580</b>	<b>60</b>	<b>10.3%</b>	<b>259</b>	<b>4</b>	<b>1.5%</b>
White alone, non-Hispanic	480	50	10.4%	175	0	0.0%
Black or African-American alone	0	0	N/A	4	4	100.0%
Asian alone	8	4	50.0%	0	0	N/A
American Indian alone	85	10	11.8%	59	4	6.8%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	0	0	N/A	4	0	0.0%
Other (including multiple races)	15	0	0.0%	25	0	0.0%
<b>All Incomes</b>	<b>6,910</b>	<b>1,350</b>	<b>19.5%</b>	<b>2,584</b>	<b>1,039</b>	<b>40.2%</b>
White alone, non-Hispanic	5,295	985	18.6%	1,595	605	37.9%
Black or African-American alone	263	55	20.9%	293	158	53.9%
Asian alone	27	4	14.8%	19	0	0.0%
American Indian alone	845	175	20.7%	433	199	46.0%
Pacific Islander alone	4	4	100.0%	0	0	N/A
Hispanic, any race	128	53	41.4%	67	34	50.7%
Other (including multiple races)	374	85	22.7%	193	54	28.0%

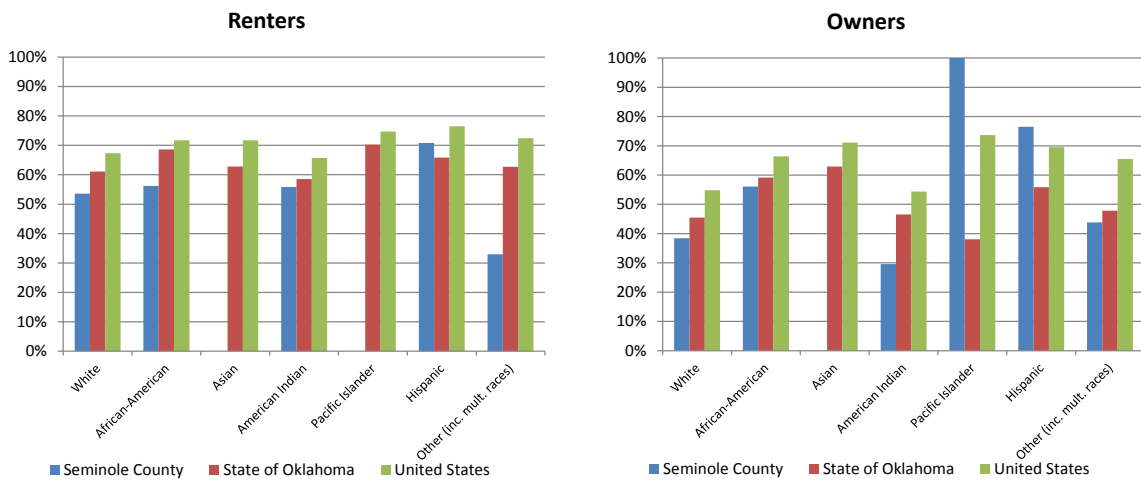
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 1

**Seminole County : Households under 80% AMI by Race/Ethnicity**

Household Size/Type	Total	Owners		Renters	
		No. w/ Housing Problems	Pct. w/ Housing Problems	No. w/ Housing Problems	Pct. w/ Housing Problems
<b>Income &lt; 80% HAMFI</b>	<b>2,730</b>	<b>1,055</b>	<b>38.64%</b>	<b>1,950</b>	<b>52.56%</b>
White alone, non-Hispanic	1,965	755	38.42%	1,110	53.60%
Black or African-American alone	98	55	56.12%	274	56.20%
Asian alone	4	0	0.00%	15	0.00%
American Indian alone	490	145	29.59%	349	55.87%
Pacific Islander alone	4	4	100.00%	0	N/A
Hispanic, any race	64	49	76.56%	48	70.83%
Other (including multiple races)	114	50	43.86%	164	32.93%

Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

**Households Under 80% of AMI: Percentage with Housing Problems by Race**



Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

**CHAS Conclusions**

The previous data notes many areas of need (and severe need) among the existing population of Seminole County. The greatest needs are among households with incomes less than 30% of Area Median Income. Several other areas of note:

- Among households with incomes less than 50% of Area Median Income, there are 855 renter households that are cost overburdened, and 670 homeowners that are cost overburdened.
- Among **elderly** households with incomes less than 50% of Area Median Income, there are 245 renter households that are cost overburdened, and 270 homeowners that are cost overburdened.



- 70.83% of Hispanic renters with incomes less than 80% of Area Median Income have one or more housing problems, and 76.56% of Hispanic homeowners with incomes less than 80% of Area Median Income have one or more housing problems.

## Overall Anticipated Housing Demand

Future demand for housing units in Seminole County can be estimated from population and household growth. Population estimates are based on known factors such as noted increases in the city employment base and indications from demographic services. In this case we have considered data from both the U.S. Census Bureau and Nielsen SiteReports. The estimates of changes in households and population were presented in a previous section of this report. The anticipated future demand is estimated for Seminole, as well as Seminole County as a whole. The calculations are shown in the following tables.

### Seminole Anticipated Demand

Households in Seminole grew at an annually compounded rate of 0.49% from 2000 to 2010. Nielsen SiteReports estimates households have grown 0.32% per year since that time, and that households will grow 0.24% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 0.24% per year in forecasting future household growth for Seminole.

The percentage of owner households was estimated at 64.69% with renter households estimated at 35.31%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

<b>Future Housing Demand Estimates for Seminole</b>						
<b>Year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Household Estimates	2,946	2,953	2,960	2,967	2,974	2,981
Owner %: 64.69%	1,906	1,910	1,915	1,919	1,924	1,928
Renter %: 35.31%	1,040	1,043	1,045	1,048	1,050	1,053
<b>Total New Owner Households</b>						<b>23</b>
<b>Total New Renter Households</b>						<b>12</b>

Based on an estimated household growth rate of 0.24% per year, Seminole would require 23 new housing units for ownership, and 12 units for rent, over the next five years. Annually this equates to 5 units for ownership per year, and 2 units for rent per year, which is reasonably similar to new building permits issued annually over the last several years in Seminole.

### Seminole County Anticipated Demand

Households in Seminole County grew at an annually compounded rate of 0.18% from 2000 to 2010. Nielsen SiteReports estimates households have declined -0.10% per year since that time, and that households will grow 0.16% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 0.16% per year in forecasting future household growth for Seminole County.

The percentage of owner households was estimated at 73.90% with renter households estimated at 26.10%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth

in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

<b>Future Housing Demand Estimates for Seminole County</b>						
<b>Year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Household Estimates	9,699	9,715	9,731	9,747	9,763	9,779
Owner %: 73.90%	7,168	7,180	7,192	7,203	7,215	7,227
Renter %: 26.10%	2,531	2,535	2,539	2,544	2,548	2,552
<b>Total New Owner Households</b>						<b>59</b>
<b>Total New Renter Households</b>						<b>21</b>

Based on an estimated household growth rate of 0.16% per year, Seminole County would require 59 new housing units for ownership, and 21 units for rent, over the next five years. Annually this equates to 12 units for ownership per year, and 4 units for rent per year.

## Housing Demand – Population Subsets

This section will address 5-year forecasted needs and trends for population special population subsets for Seminole County. These forecasts are based on the previously forecasted overall trends for the next five years.

### Housing Needs by Income Thresholds

The first table will address future housing needs and trends for households in Seminole County by income threshold: households within incomes below 30%, 50%, 60% and 80% of Area Median Income, by tenure (owner/renter). These forecasts are primarily based on HUD Consolidated Housing Affordability Strategy data presented previously. Households with incomes below 60% of Area Median Income (AMI) are estimated at 120% of the households at 50% of AMI. Note that these figures are cumulative and should not be added across income thresholds.

<b>Seminole County: 2015-2020 Housing Needs by Income Threshold</b>					
	Owner	Renter			
	Subset %	Subset %	Owners	Renters	Total
Total New Demand: 2015-2020	100.00%	100.00%	59	21	80
Less than 30% AMI	9.91%	28.52%	6	6	12
Less than 50% AMI	19.83%	51.06%	12	11	22
Less than 60% AMI	23.79%	61.27%	14	13	27
Less than 80% AMI	39.51%	75.34%	23	16	39

### Elderly Housing Needs

The next table will address future housing needs and trends for households with elderly persons (age 62 and up). Like the previous table, this data is based on the overall trends previously defined, and the 2008-2012 CHAS data previously discussed (specifically CHAS Table 16). It is further broken down by income threshold and tenure.

<b>Seminole County: 2015-2020 Housing Needs Age 62 and Up</b>					
	Owner	Renter	Elderly	Elderly	Elderly
	Subset %	Subset %	Owners	Renters	Total
Total New Elderly (62+) Demand: 2015-2020	36.40%	24.66%	22	5	27
Elderly less than 30% AMI	3.33%	9.06%	2	2	4
Elderly less than 50% AMI	9.26%	16.76%	5	3	9
Elderly less than 60% AMI	11.11%	20.12%	7	4	11
Elderly less than 80% AMI	17.95%	21.00%	11	4	15

### Housing Needs for Persons with Disabilities / Special Needs

The following table will address future trends and needs for households with at least one household member with at least one disability as identified by HUD CHAS Table 6 (hearing or vision impairments, ambulatory limitations, cognitive limitations, self-care limitations, or independent living limitations). As with the previous tables, this data is also further broken down by income threshold and tenure.



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**Seminole County: 2015-2020 Housing Needs for Persons with Disabilities**


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	Owner Subset %	Renter Subset %	Disabled Owners	Disabled Renters	Disabled Total
Total New Disabled Demand (2015-2020)	40.52%	41.51%	24	9	<b>33</b>
Disabled less than 30% AMI	5.21%	14.86%	3	3	<b>6</b>
Disabled less than 50% AMI	11.14%	28.19%	7	6	<b>12</b>
Disabled less than 60% AMI	13.37%	33.82%	8	7	<b>15</b>
Disabled less than 80% AMI	19.90%	35.52%	12	7	<b>19</b>

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**Housing Needs for Veterans**

This section will address housing needs for households with at least one veteran. This data is not available through HUD's Consolidated Housing Affordability Strategy, so we have instead relied on data from the U.S. Census Bureau, specifically the 2009-2013 American Community Survey, Table C21007. This data is further broken down by tenure, poverty status, and disability status.

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**Seminole County: 2015-2020 Housing Needs for Veterans**


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	Owner Subset %	Renter Subset %	Veteran Owners	Veteran Renters	Veteran Total
Total New Demand (2015-2020)	100.00%	100.00%	59	21	80
Total Veteran Demand	10.11%	10.11%	6	2	<b>8</b>
Veterans with Disabilities	4.54%	4.54%	3	1	<b>4</b>
Veterans Below Poverty	0.91%	0.91%	1	0	<b>1</b>
Disabled Veterans Below Poverty	0.48%	0.48%	0	0	<b>0</b>

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**Housing Needs for Working Families**

The final table addresses housing needs for working families. Working families are in this case defined as families (households with at least two members related by blood or marriage) with at least one person employed. Like the forecasts for veteran needs, this data cannot be extracted from the HUD CHAS tables, so we have again relied on the Census Bureau's American Community Survey (table B23007 in this instance). The data is further broken down by the presence of children (below the age of 18).

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**Seminole County: 2015-2020 Housing Needs for Working Families**


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	Owner Subset %	Renter Subset %	Owners	Renters	Total
Total New Demand (2015-2020)	100.00%	100.00%	59	21	80
Total Working Families	48.31%	48.31%	29	10	<b>39</b>
Working Families with Children Present	23.66%	23.66%	14	5	<b>19</b>

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### Population Subset Conclusions

Based on population and household growth over the next five years, a total of 80 housing units will be needed in Seminole County over the next five years. Of those units:

- 27 will be needed by households earning less than 60% of Area Median Income
- 11 will be needed by households age 62 and up, earning less than 60% of Area Median Income
- 15 will be needed by households with disabilities / special needs, earning less than 60% of Area Median Income
- One will be needed by veterans living below the poverty line
- 19 will be needed by working families with children present

This data suggests a need in Seminole County for housing units that are both affordable and accessible to persons with disabilities / special needs and working families with children present.

## Special Topics

## Seminole County Disaster Resiliency Assessment

The purpose of this section is to assess at the county level key components of disaster resiliency. Housing location and quality as well as planning activities can help reduce impacts from disaster events and allow for faster recovery. Disasters can include tornadoes, extreme weather, high winds, as well as man-made events. These events may largely be inevitable, but the ability to reduce damage and casualties as well recovery can be improved with good planning.

### C.0 Comprehensive Plans & Hazard Mitigation Plans

There are 9 cities and towns within the county. The three key cities within the county are Seminole, Wewoka, and Konawa.

**Comprehensive plans** are the guiding documents for cities of various sizes to address key aspects of their community from land use, transportation, environment, housing, and economic development. The City of Seminole has an adopted comprehensive plan.

The following is language in the plans that addresses land use decisions that reduce placing housing and businesses within historical areas of risk (e.g. flooding) and other supporting actions to increase disaster resiliency.

#### **City of Seminole Comprehensive Plan Elements addressing housing and community resiliency:**

- Seminole 2030 Community Assessment: Flood hazard areas have been identified by the Federal Emergency Management Agency (FEMA) to assist in developing sound plain management measures. Areas having one percent chance of being flooded in any given year, commonly referred to as the 100-year flood, are the base flood for instituting such measures. Seminole is bisected by Magnolia Creek and its adjacent floodplains which limits development but creates opportunities for passive recreation areas and natural resource protection. Flood Insurance Rate Maps (FIRMs) identify the floodplains and floodways in Seminole.
- Emergency Management Services are jointly provided to the City of Seminole and Seminole County from the Seminole County Local Emergency Planning Committee (LEPC).
- Seminole participates in the National Flood Insurance Program (NFIP) and has adopted the 2009 Flood Insurance Rate Map (FIRMs) from the Federal Emergency Management Agency (FEMA).
- Objective LU2.3- Ensure that development around Magnolia Creek, Wewoka Creek, and Sportsman Lake protects that natural environment while serving as a destination and tourism attraction through utilization of buffering and Low Impact Development techniques.
- Objective LU3.3- As part of stormwater management initiatives, protect wetlands through a local wetland ordinance and consideration of wetlands through requiring master plans, zoning ordinances, subdivision and site plan review.
- Objective LU3.5- Develop stormwater management strategies and policies to protect water supplies and reduce the risk of flooding including allowances and incentives for Low Impact Development (LID)

- Objective LU3.11- As part of stormwater management strategies, new parking lots should dedicate 5% of total area to low impact development landscaping and existing parking lots should be retrofitted over the next ten year period or when the use changes, whichever comes first.
- Plan identifies that key challenges for infrastructure are reducing stormwater runoff and that Seminole does not have a plan for managing stormwater.
- Objective IS2.4 -Adopt a stormwater management ordinance that minimizes the amount of sediment and pollutants leaving construction sites.
- Objective IS2.5- Adopt Low Impact Development standards for stormwater management.
- Short Term Work Table Project: Develop a Stormwater Management Plan 2015-2017. Cost Estimated to be \$100K.

Based on the review of the existing and available comprehensive plans for the area, it is recommended that any future comprehensive planning work done include coordination and goals to address disaster resiliency.

The other key plan for a city to manage, mitigate and plan for recovery related to disasters is a **Hazard Mitigation Plan** (or Emergency Management Plan). Often in low density counties, the Hazard Mitigation Plan is done at the county level, though some cities may augment the county plan with a city plan.

The City of Seminole does have their own Emergency Manager and operates their own Hazard Mitigation Plan. Though the current HMP has expired, a new draft of the HMP has been completed, has been sent to the state, and is awaiting adoption. Upon state acceptance, the document will be sent to FEMA for approval.

Seminole County also has their own Hazard Mitigation Plan that is operated by the County Emergency Manager. Though the current HMP has expired, the county has hired an external party to update the HMP for state and FEMA approval. The plan is still in the development stages and has not been submitted to the state for approval.

### **C.2.1.1. Historical Data on Natural Disasters and Other Hazards**

Data on historical damages and casualties is typically collected as part of a **Hazard Mitigation Plan** preparation to determine the appropriate planning measures and actions to take before and after an event.

For the City of Seminole the Hazard Mitigation Plan contains the following historic data on disasters and damages in the city and county:

- Locations and dates of disaster events were listed for all natural hazards relevant to the City of Seminole including: drought, earthquakes, extreme heat/cold, flood, hail, high winds, lightning, tornado, wildfire, and winter storms. This also includes information on all FEMA declared disasters for Seminole County. The city has experienced 22 natural disasters since 1970.
- Property damages. Data for damages and financial loss was not available for all hazards, but was available for flooding (\$2.5 Million for years 2007, 2008, and 2015), high winds (\$150K in 2012

and \$5K in 2005), winter storms (\$80K in property damages for 2007), and wildfires (5,161 acres burned from 2009-2015).

- Casualties were not listed.

The Seminole County Emergency Manager was not aware of whether the new HMP (currently in development stage by external parties) would include historical data of previous disasters, property damages, or fatalities.

The proposed HMP for the City of Seminole (2015-2020) has four key goals with objectives:

Goal 1: Protect life and property

Goal 2: Support emergency services to improve the ability to respond to events and assist in the recovery of the community.

Goal 3: Promote public awareness through partnerships of shared resources and information throughout the community.

Goal 4: Encourage the development and implementation of long-term, cost-effective and environmentally sound mitigation projects that increases the protection on life and property in the City of Seminole.

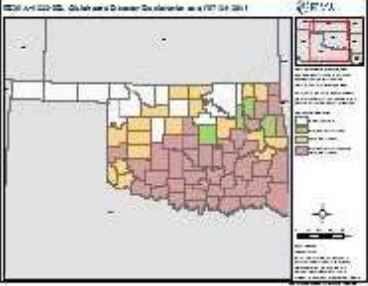

TABLE 2-1

Natural Hazards for the City of Seminole		
Hazard	How reviewed	Why identified
Drought	<ul style="list-style-type: none"> <li>• Oklahoma Climatological Survey</li> <li>• National Climatic Data Center</li> <li>• Public Input Survey</li> </ul>	Temperatures in Oklahoma can easily reach over 100 degrees & persist for many days and weeks.
Earthquake	<ul style="list-style-type: none"> <li>• United States Geological Survey</li> <li>• Oklahoma Geological Survey</li> <li>• Past Historical Records</li> </ul>	Past history, existing fault lines around and near the City of Seminole.
Extreme Heat/Cold	<ul style="list-style-type: none"> <li>• National Weather Service</li> <li>• Oklahoma Climatological Survey</li> <li>• Public Input Survey</li> </ul>	The City of Seminole has prolonged periods of high temperatures and is prone to wide swings of temperature.
Flood	<ul style="list-style-type: none"> <li>• Local Emergency Management Records</li> <li>• Public Input Survey</li> <li>• National Climatic Data Center</li> <li>• National Flood Insurance Program</li> </ul>	There is often flooding in the City of Seminole due to heavy rains.
Hail	<ul style="list-style-type: none"> <li>• National Weather Service</li> <li>• National Climate Data Center</li> <li>• Oklahoma Climatological Survey</li> <li>• Public Input Survey</li> </ul>	The City of Seminole experiences hailstorms during severe thunderstorms sometimes causes severe damage.
High Winds	<ul style="list-style-type: none"> <li>• National Climatic Data Center</li> <li>• Public Input Survey</li> <li>• Oklahoma Climatological Survey</li> <li>• National Weather Service-Norman</li> </ul>	The City of Seminole experiences high winds usually during severe thunderstorms although sometimes occurring without thunderstorm activity.
Lightning	<ul style="list-style-type: none"> <li>• National Climatic Data Center</li> <li>• Public Input Survey</li> <li>• Oklahoma Climatological Survey</li> <li>• National Weather Service-Norman</li> <li>• National Lightning Safety Institute</li> </ul>	The City of Seminole is susceptible to lightning every year associated with thunderstorms.
Tornado	<ul style="list-style-type: none"> <li>• Local Emergency Management Records</li> <li>• Public Input Survey</li> <li>• FEMA Declarations</li> <li>• National Weather Service</li> </ul>	Oklahoma has a distinction as the epicenter of Tornado Alley. The City of Seminole experienced 9 tornadoes since 1954.
Wildfire	<ul style="list-style-type: none"> <li>• Local Emergency Management Records</li> <li>• City of Seminole Fire Dept. Records</li> <li>• Public Input Survey</li> </ul>	Local fire department records reflect a particularly heavy wildfire season in 2011-2012.
	<ul style="list-style-type: none"> <li>• FEMA Declarations</li> </ul>	
Winter Storm	<ul style="list-style-type: none"> <li>• National Weather Service</li> <li>• National Climate Data Center</li> <li>• FEMA Declarations</li> <li>• Sperry-Piltz Utility Ice Damage Index</li> </ul>	Severe winter storms occur regularly in the City of Seminole.

Data on historical damages and casualties is typically collected as part of a **Hazard Mitigation Plan** preparation to determine the appropriate planning measures and actions to take before and after an event.

Historical natural disasters in for Seminole County are documented in the *proposed* City of Seminole Hazard Mitigation Plan (2015-2020). Twenty-six natural disasters have occurred and since 1970 have been formally declared disaster area by FEMA. Typical hazard disasters in the region include flooding, severe storms, tornadoes, and severe winter storms. (*Proposed* Hazard Mitigation Plan for the City of Seminole 2015-2020)

TABLE 2-2

Seminole County Declared Emergency/Disaster History (Excludes Fire Management Assistance History)				
Incident Date	Nature of Disaster	FEMA # Declared Date	Area Affected	Declared Area
May 5-June 22, 2015	Severe Storms, Flooding, Tornadoes	4222  Declared: May 26, 2015	Statewide	
May 18-June 2, 2013	Severe Storms and Tornadoes	4117  Declared: May 20, 2013	Statewide	
Jan 31-Feb 5, 2011	Severe Winter Storm	3316  Declared: Feb 2, 2011	Statewide	No Map Available
May 10-13, 2010	Severe Storms, Tornadoes, and Straight-Line Winds	1917  Declared: May 24, 2010	County wide and surrounding counties	No Map Available
Jan 28-30, 2010	Severe Winter Storm	1883  Declared: Mar 5, 2010	County wide and surrounding counties	No Map Available
Dec 24-25, 2009	Severe Winter Storm	1876  Declared: Feb 25, 2010	County wide and surrounding counties	No Map Available

Jan 28-30, 2010	Severe Winter Storm	3308 Declared: Jan 30, 2010	Statewide	No Map Available
April 9, 2008- April 28, 2008	Severe Storms, Tomadoes, and Flooding	1754 Declared: May 9, 2008	County wide and surrounding counties	No Map Available
Dec 8, 2007- Jan 3, 2008	Severe Winter Storm	1735 Declared: Dec 18, 2007	County wide and surrounding counties	No Map Available
Dec 8, 2007- Jan 3, 2008	Severe Winter Storm	3280 Declared: Dec 10, 2007	Statewide	No Map Available
May 24-June 1, 2007	Severe Storms, Flooding, and Tomadoes	1723 Declared: Aug. 31, 2007	Statewide	No Map Available
Aug 18-Sept 12, 2007	Severe Storms, Tomados, and Flooding	1718 Declared: Aug 24, 2007	County wide and surrounding counties	No Map Available
June 10- July 25, 2007	Severe Storms, Flooding, and Tomados	1712 Declared: July 7, 2007	County wide and surrounding counties	No Map Available
May 4-11, 2007	Severe Storms, Tomados, and Flooding	1707 Declared: June 7, 2007	County wide and surrounding counties	No Map Available
Jan 12-26, 2007	Severe Winter Storms	1678 Declared: Feb 1, 2007	County wide and surrounding counties	No Map Available
Jan 12-26, 2007	Severe Winter Storm and Flooding	EM-3272 Declared: Jan 15, 2007	Statewide	No Map Available
Nov 27, 2005- Mar 31, 2006	Severe Wildfire Threat	DR-1623 Declared: Jan 10, 2006	Statewide	No Map Available
Aug. 29-Oct. 1, 2005	Hurricane Katrina Evacuation	EM-3219 Declared: Sept. 5, 2005	Statewide	No Map Available
May 8-May 30, 2003	Severe Storms and Tomadoes	DR-1465 Declared: May 10, 2003	Statewide	No Map Available



Dec. 25, 2000-Jan. 10, 2001	Severe Winter Storm	DR-1355 Declared: Jan. 5, 2001	Statewide	No Map Available
Feb. 27-May 31, 1996	Fire Emergency	EM-3158 Declared: Feb. 27, 1996	Statewide	No Map Available
May 26-June 11, 1995	Flooding, Severe Storm, Tomado	DR-1058 Declared: June 26, 1995	Statewide	No Map Available
April 14-June 1, 1990	Flooding, Severe Storm, Tomado	DR-866 Declared: May 18, 1990	Unknown	No Map Available
June 10, 1974	Severe Storms and Flooding	DR-441 Declared: June 10, 1974	Unknown	No Map Available
Dec. 19, 1973	Severe Storms and Flooding	DR-409 Declared: Dec. 10, 1973	Unknown	No Map Available
Oct. 14, 1970	Heavy Rains, Tomadoes, Flooding	DR-297 Declared: Oct. 14, 1970	Unknown	No Map Available

**Drought**

Historical Context: “Drought has cyclically been a problem for the state. Drought is often followed by potential for severe flooding due to absorption rates for soils. The City of Seminole is subject to all levels of drought conditions. Although water supplies are pumped from well sites and not a lake, the City of Seminole can be impacted by agricultural losses which severely impact the local economy during times of drought.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

**Table 2-3**

City of Seminole Drought Events 2004-2014 Data from the National Climatic Data Center (NCDC)		
Date	Description	Crop Damage
May 2014- July 2014	While several rainfall events occurred throughout the month, drought conditions remained mostly unchanged across Oklahoma. Despite, several rainfall events, D2 (severe) drought persisted across the city.	Unknown
September 2013	Rainfall ranged from somewhat below to somewhat above average during September in Oklahoma. The northern half of the state generally saw a marginal improvement in drought conditions, while the southern half saw marginal worsening with less rainfall. No drought was present at the beginning of the month, but persistent dry conditions allowed the development of D0 (abnormally dry) drought by the end of the month.	Unknown
July 2012- April 2013	The drought conditions that had affected the City of Seminole earlier in the year returned in late June and early July as little precipitation fell and excessive days of temperatures over 100 degrees dried out vegetation and water levels from lakes and ponds dropped. Numerous grass fires were reported causing fire department resources to spread out across the county. At the end of August all of the City of Seminole was in a D3 (Extreme) drought and had been for over a month.	Unknown
Jan 2011-Mar 2012	Several months of below normal precipitation continued to wreak havoc on Oklahoma's agriculture. Summer	Unknown



	and fall crops, hay forages, and alfalfa were hit hard by the lack of any significant precipitation. Beginning in February and throughout the year, numerous grass fires were reported each month due to the exceptionally dry conditions and very hot temperatures. The effects of the drought lasted until the early months of 2012 when substantial precipitation assisted in relieving the City of Seminole from drought conditions.	
Oct 2006-Jan 2007	Despite some rainfall the drought continued across much of western and central Oklahoma during October. The area was under severe to exceptional (D2-D4) drought conditions throughout the month. The worst conditions were in south central and southeast Oklahoma where drought conditions were in the extreme to exceptional (D3-D4) drought categories. Participation in January improved areas of the state and the moisture that saturated the ground ended the drought effects.	Unknown

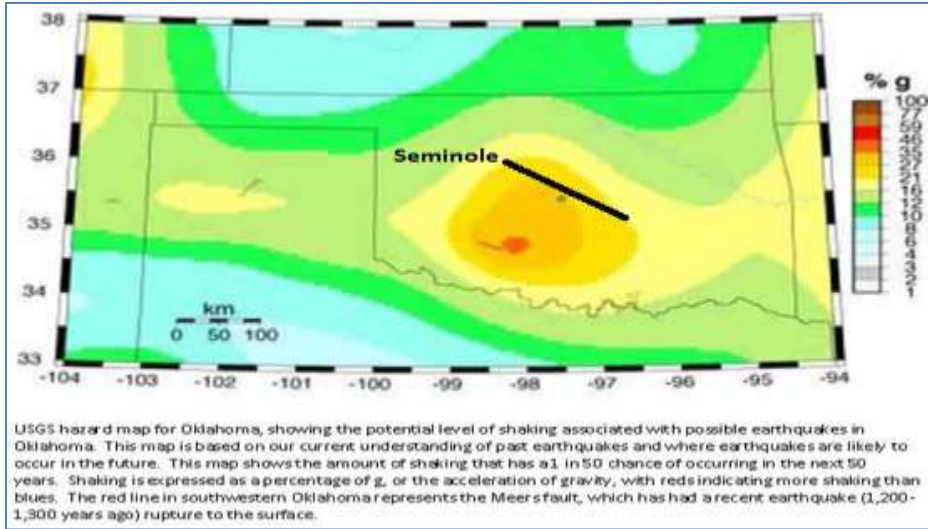
According to the proposed HMP for the City of Seminole, based on past recent history and the seasonal drought outlook from NOAA, the probability of future drought events in the City of Seminole is “LIKELY”. (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

**Mitigation Strategy / Recommendations from HMP:** “Drought is a concern for the City of Seminole due to the major agricultural activity and low water availability. The most vulnerable population in the City of Seminole, in addition to agricultural and drinking water, are those that might require large volumes of water, such as industries, landscapers, fire fighters, and the people dependent upon them.” The HMP Action Projects 34, 35, and 38 (wells, additional water capacity, and xeriscaping) were identified as three approaches to aid in drought mitigation.

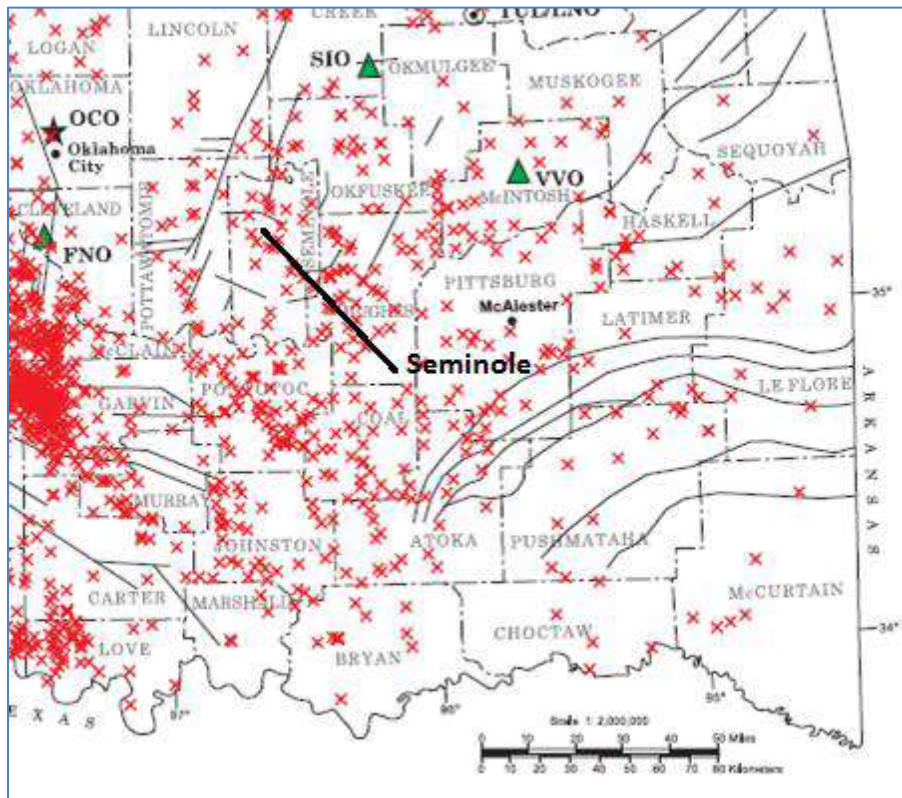
**Earthquake**

Historical Context: Oklahoma is at a moderate risk for an earthquake, as a result of the State’s proximity to the New Madrid Seismic Zone. Past earthquakes near or in the City of Seminole have been slight, with minor to moderate damage to structures in the city. The Oklahoma Geographical Survey Observatory provides a brief history of earthquake activity affecting the City of Seminole. Although listed, the effects of these earthquakes may or may not have been felt in the City of Seminole.





(Proposed City of Seminole Hazard Mitigation Plan 2015-2020)



(Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

Table 2-4

City of Seminole Earthquake Events October 24, 2005-October 24, 2015 Information provided by the Oklahoma Climatological Survey					
Date	Time (UTC)	Depth (km)	Magnitude	Latitude	Longitude
08/09/2015	02:56:18	6.9	3.6	35.439°N	97.109°W
06/12/2015	22:35:38	6.5	3.5	35.558°N	97.125°W
11/30/2014	06:59:56	6.9	3.6	35.538°N	96.771°W
11/13/2014	01:28:31	3.1	3.6	35.350°N	96.539°W
10/20/2014	20:34:16	4.8	3.5	35.417°N	96.558°W
08/18/2014	02:50:09	5.0	3.5	35.372°N	96.487°W
01/09/2014	03:26:53	3.2	3.8	35.542°N	96.773°W
07/24/2013	11:52:05	8.6	3.5	35.373°N	96.481°W
01/04/2013	01:59:20	5.0	3.5	35.380°N	96.515°W
05/10/2012	21:14:31	5.0	3.8	35.510°N	96.781°W
04/16/2012	08:12:00	4.4	3.8	35.530°N	96.759°W
12/31/2011	08:07:17	5.0	3.6	35.391°N	96.520°W
12/25/2011	14:10:41	5.0	3.6	35.398°N	96.530°W
11/08/2011	19:05:18	3.0	3.5	35.526°N	96.770°W
11/08/2011	02:46:57	5.0	4.8	35.531°N	96.788°W
11/06/2011	15:07:07	5.0	3.8	35.484°N	96.856°W
11/06/2011	10:52:35	3.1	3.6	35.537°N	96.779°W
11/06/2011	09:39:57	5.0	3.7	35.469°N	96.865°W
11/06/2011	09:22:04	5.0	3.5	35.485°N	96.844°W
11/06/2011	07:38:31	5.0	3.6	35.517°N	96.834°W
11/06/2011	06:31:11	5.0	3.7	35.479°N	96.859°W
11/06/2011	04:31:50	5.0	3.9	35.522°N	96.776°W
11/06/2011	04:03:42	5.0	4.0	35.521°N	96.771°W
11/06/2011	03:53:10	5.2	5.6	35.532°N	96.765°W
11/05/2011	14:36:30	5.0	3.6	35.518°N	96.778°W
11/05/2011	07:12:45	3.1	4.8	35.550°N	96.764°W
03/22/2010	02:37:18	8.0	3.7	35.556°N	96.750°W
02/27/2010	22:22:27	5.0	4.1	35.553°N	96.752°W

**Mitigation Strategy / Recommendations from HMP:** “Based on available information, the potential impact of earthquakes to the City of Seminole is moderate. Futures felt earthquakes in and around the City of Seminole are likely. Based upon public input and data from the USGS, the potential of damaging earthquakes in the City of Seminole is “Possible.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020) Many action projects were recommended to address earthquake related risks and hazards including: construction standards, earthquake resistant utilities, etc.

### Expansive Soils

**Historical Context:** Expansive soils are one of the nation’s most prevalent causes of damage to buildings and construction. The City of Seminole is located in the cobby loam soil texture of Oklahoma. Residents and city officials my notice cracked foundations, floors, and basement walls which are typical of expansive soils. There is apparent expansive soils damage to buildings in the City of Seminole.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020).

**Mitigation Strategy / Recommendations from HMP:** “The State of Oklahoma does not have disaster information on expansive soils because a disaster declaration has never been declared for an event. The expansive soil hazard develops gradually and is difficult to attribute to a particular damage or issues. No history is available for the City of Seminole as well, although members of the CSHMPT expressed individual knowledge of problems with cracking walls and foundations due to expansive soil conditions. Based upon public input and local construction reports, the potential of expansive soil in the City of Seminole is “LIKELY”. It is possible to build successfully and safely on expansive soils if stable moisture content can be maintained or if the building can be insulated from any soil volume change that occurs.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

**Extreme Heat**

Historical Context: The City of Seminole and the State of Oklahoma are at risk for extreme heat, although temperatures experienced in the City of Seminole do not compare with western Oklahoma that experience 35 – 40 days of temperatures over 100 degrees.

**TABLE 2-5**

City of Seminole Extreme Heat History 2010-2015 <small>Data provided by the Oklahoma Climatological Survey</small>				
Year	Days above 90 degrees	Days above 100 degrees	City of Seminole	
			Fatalities	Injuries
2012	93	34	Unknown	Unknown
2011	109	63	Unknown	Unknown
Average High for July: 93.1 degrees				
Average Number of Days above 90 degrees: 76				

**Mitigation Strategy / Recommendations from HMP:** “The entire state of Oklahoma is at risk for extreme heat. Based on history and public input, the probability of a future extreme heat event in the City of Seminole is “HIGHLY LIKELY. Extreme heat deaths are usually from that group of citizens, although handicapped and very young can sometimes be victims of extreme heat also. In the City of Seminole, various groups will volunteer fans and air conditioners free of charge for people who can’t afford them.” The HMP action projects include measures to address this hazard.(Proposed City of Seminole Hazard Mitigation Plan 2015-2020).

**Flood**

Historical Context: “The City of Seminole is susceptible to severe flooding primarily due to flash flooding affecting primarily low-lying areas throughout the city, although riverine flooding from the Wewoka Big Cree is also possible especially in the central parts of the city.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

There are areas where development in Seminole has encroached on the floodplain and this should be avoided for new housing and development.



Seminole (city)



FEMA's National Flood Hazard Layer <http://fema.maps.arcgis.com/>

Flood Hazard Zones

- 1% Annual Chance Flood Hazard

Bowlegs – town is predominantly outside of prime floodplain risk areas



FEMA's National Flood Hazard Layer <http://fema.maps.arcgis.com/>

Flood Hazard Zones

- 1% Annual Chance Flood Hazard

Wewoka – northern area of town is in close proximity to floodplain.



FEMA's National Flood Hazard Layer <http://fema.maps.arcgis.com/>

Flood Hazard Zones

■ 1% Annual Chance Flood Hazard

**TABLE 2-6**

City of Seminole Flood Events 1996-2015 <small>Information provided by the National Climatic Data Center (NCDC)</small>		
Date	Location	Description
08 May 2015	Seminole	<b>Flash Flood</b> -Numerous roads flooded and impassable. No damage reported.
19 Aug 2007	Seminole	<b>Flash Flood</b> -Tropical Storm Erin, the fifth named storm of the 2007 Atlantic Hurricane season, developed quickly over the northeast Gulf of Mexico on the 15th, before moving onshore during the morning hours of the 16th. Erin maintained her depression status as it then began to move northeast into southwest Oklahoma between Hollis and Erick during the afternoon hours of Saturday, August 18th. A very tropical airmass was in place along and east of this feature, extending into western and central Oklahoma. Heavy rainfall developed along and east of the center, which moved slowly to the northeast. Three

		to four feet of water accumulated at the Seminole Ford/Mercury car dealership. Numerous city and county roads were closed due to the high water. A 67-year old woman drowned as her car was washed off the roadway into Magnolia Creek.
20 June 2007	Seminole	<b>Flash Flood</b> -A widespread severe thunderstorm event occurred over much of Oklahoma from the 19th into the 20th. A weakly capped airmass, combined with a surface trough oriented northwest to southeast over Oklahoma, and afternoon heating allowed for another round of strong to severe thunderstorms to develop. Several roads were closed due to high water. John's Park was completely flooded.
22 June 2004	Seminole	<b>Flood</b> -The most significant heavy rainfall and flooding event of June occurred on June 19-24. Rainfall totals for the 72-hour period ending at 7:00 am CDT on June 22 reached 2 to 3 inches in a wide swath that included most of northwest, west central, north central, and central Oklahoma. The subsequent heavy runoff produced by these rains generated flash flooding and riverine flooding in northwestern and central Oklahoma.
03 Mar 2004	Seminole	<b>Flood</b> -No damage or injuries reported.
29 June 1999	Seminole	<b>Flood</b> -Periods of heavy rain, amounting to between 3 and 5 inches, fell across much of Seminole County for a 24-hour period from mid-day of the 29th through mid-day of the 30th. Flooding waters damaged several bridges, including the Sandcreek Bridge, washed out 2 roads, and severely damaged 2 others.
23 April 1999	Seminole	<b>Flood</b> -Five to 7 inches of rain fell across portions of central Oklahoma from the 24th through the 26th. In Seminole County Highway 9 was reported to be covered by high water from the Salt Creek 6 miles southwest of Bowlegs, and Sportsman Lake Road near Sportsman Lake in Wewoka was also flooded. Magnolia Creek in Seminole overflowed its banks as well flooding Seminole Municipal Park.
26 April 1998	Seminole	<b>Flash Flood</b> -Widespread 24-hour rainfall totals of 3 to 4 inches caused flash flooding in many areas. Particularly hard-hit were Garvin, Jefferson, Carter, and Seminole Counties. Several streets in northeast Seminole were barricaded due to high water. Several cars were stalled in the high water around town.
13 July 1996	Seminole	<b>Flash Flood</b> -Heavy rains flooded the Seminole Municipal Park, completely submerging the baseball fields and drainage ditches. An old oil storage tank was washed away by flash flood waters into a swollen creek.
11 July 1996	Seminole	<b>Flash Flood</b> -Portions of HWY 3E were under water between Seminole and Bowlegs; numerous streets were closed in Seminole.

**Mitigation Strategy / Recommendations from HMP:** Flooding is major concern for the City of Seminole. A major effort the city has identified to address flooding is the development of a storm water management plan. The City of Seminole Comprehensive Plan highlights many objectives to address storm water management. The HMP action projects include measures to address this hazard.

## Hail

Historical Context: "The City of Seminole and Seminole Public School District are subject to hail storms. Usually associated with severe thunderstorms, all structures, wildlife, livestock, and the entire population is subject to hail damage." (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)



TABLE 2-7

City of Seminole Hail Storm History 2005-2015 (Only events with 1 inch hail or greater are profiled)				
Date	Location	Time	Hail Size (inches)	Damage
31 Mar 2015	Seminole	8:10 PM	1.75	Unknown
31 Mar 2015	Seminole	8:04 PM	1.75	Unknown
30 Mar 2013	Seminole	6:30 PM	1.75	Unknown
03 Feb 2012	Seminole	5:10 PM	1.75	Unknown
11 June 2011	Seminole	3:55 PM	1.00	Unknown
12 May 2011	Seminole	5:45 PM	1.00	Unknown
06 April 2010	Seminole	10:55 PM	1.00	Unknown
09 April 2008	Seminole	4:25 PM	1.00	Unknown
09 April 2008	Seminole	4:25 PM	1.00	Unknown
01 April 2006	Seminole	10:49 PM	1.00	Unknown
13 June 2005	Seminole	4:52 PM	1.00	Unknown

**Mitigation Strategy / Recommendations from HMP:** “Oklahoma and the City of Seminole property and citizens are susceptible to hail storms and will continue to be at risk. The City of Seminole experience several hailstorms a year, some of them causing damage. The entire city is at risk from hail and the probability of future events is “HIGHLY LIKELY”. Public information is critical to minimize the effects of hail. An informed public can prevent some damage and in particular injuries or deaths.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020).The HMP action projects include measures to address this hazard.

### High Winds

Historical Context: “The City of Seminole experiences high winds exposing virtually all structures, infrastructure, and individuals in the city to their effects. According to the Oklahoma Climatological Survey, the City of Seminole experiences an average of 50 thunderstorm days annually some of which will have warnings issued during the event.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

TABLE 2-8

City of Seminole High Wind Events 2005-2015 Information provided by the National Climatic Data Center (NCDC)			
Date	Location	Description	Estimated Damage
29 May 2012	Seminole	A metal canopy was flipped, causing damage to the main airplane hangar at Seminole airport including minor damage to several planes. Several small trees were blown down along with one power pole. Two portable buildings were also destroyed. Monetary damages are estimated.	\$150,000
11 June 2011	Seminole	The front that had waffled over Oklahoma for three four days began slowly lifting north as a warm front. Several areas of showers and thunderstorms developed near and just north of the front. A couple of the storms were able to maintain themselves, developing supercell characteristics, with very large hail and damaging winds.	Unknown
04 July 2005	Seminole	Trees and tree limbs were downed. A few 4th of July fireworks stands were also downed.	\$5,000

**Mitigation Strategy / Recommendations from HMP:** “The City of Seminole will continue to have thunderstorms with high winds, some being severe. There will continue to be damage from thunderstorm high winds. Considering the high winds experienced, the probability of high winds in the City of Seminole is “HIGHLY LIKELY. Oklahoma and the City of Seminole have significant exposure to high wind events. Infrastructure damage most often occurs to transmissions lines and communications facilities; however, occasional damage to structures can arise during downbursts. Unfortunately, early warning for downburst is limited due to the speed in which they develop, although research is ongoing through the National Weather Service (NWS) to increase warning information for the public.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020).The HMP action projects include measures to address this hazard.

### Lightning

Historical Context: ” The National Weather Service publication, Storm Data, records 100 deaths from lightning strikes in Oklahoma between 1959 and 2012, and ranks the state 17th in the nation. The City of Seminole and Seminole Public Schools are vulnerable to lightning. Hundreds of thunderstorm events take place across Oklahoma each year. Most bring welcome precipitation but the lightning that accompanies them occasionally causes damage, injury, or death. The City of Seminole and Seminole Public Schools consider all thunderstorms that produce lightning to be dangerous.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

**Mitigation Strategy / Recommendations from HMP:** “Property damage and possibly injuries from lightning are expected in the City of Seminole especially during thunderstorms. The probability of future lightning events is “HIGHLY LIKELY”. Schools are most susceptible to

lightning during outdoor activities such as sporting activities which often draw large crowds. Public education is important in lessening the effects of lightning by encouraging residents to remain inside or in their cars during lightning events. Additionally early warning research is ongoing through the National Weather Service (NWS) and private organizations to improve notification and threat information to the public.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

### Tornado

**Historical Context:** “The entire state of Oklahoma is at risk for tornadoes including all of the City of Seminole. Oklahoma and the City of Seminole are located in the center of the infamous Tornado Alley. Oklahoma averages 58 tornados annually. National Weather Service documents that the City of Seminole has experienced 9 tornados since 1956.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

TABLE 2-9

City of Seminole Tornado History		
Category	Date	Fugita Scale
Tornado	06/08/1956	F-2
Tornado	06/16/1967	F-0
Tornado	04/19/1968	F-3
Tornado	05/06/1973	F-2
Tornado	11/01/1984	F-1
Tornado	04/29/1985	F-1
Tornado	06/09/1995	F-2
Tornado	05/06/2007	EF-0
Tornado	05/10/2010	EF-3

**Mitigation Strategy / Recommendations from HMP:** “Based on the location of Oklahoma between the warm humid air from the Gulf of Mexico, the arid hot air from New Mexico, and the cool air from the Rocky Mountains, conditions are right as proven by the history of tornados in Oklahoma for tornados to continue to threaten the City of Seminole. Public input and review by the City of Seminole Hazard Mitigation Planning Team agree that the potential for future tornados in and around the City of Seminole is POSSIBLE.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

“Fortunately better construction practices can limit the damage potential from all but the most violent tornados. The residences and businesses of today are more likely to withstand the damaging winds of weaker tornados than those structures built fifty years ago; however there are still many older residential structures in the county and even the stronger modern structures are not immune to major tornados. The inclusion of safe rooms, below ground shelters, and hurricane straps in current construction plans have help mitigate the effects of tornados to both life and property. Additionally, the National Weather Service is also taking steps to improve warning time. The next step in NOAA’s long-time weather radars is phased array radar. Special

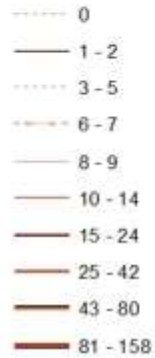
considerations need to be given to all critical facilities important to the survival and response to emergencies in the City of Seminole, as well as highways that might be closed due to debris.” (Proposed City of Seminole Hazard Mitigation Plan 2015-2020).The HMP action projects include measures to address this hazard.

# Social Vulnerability - Impacts on Housing & Disaster Resiliency

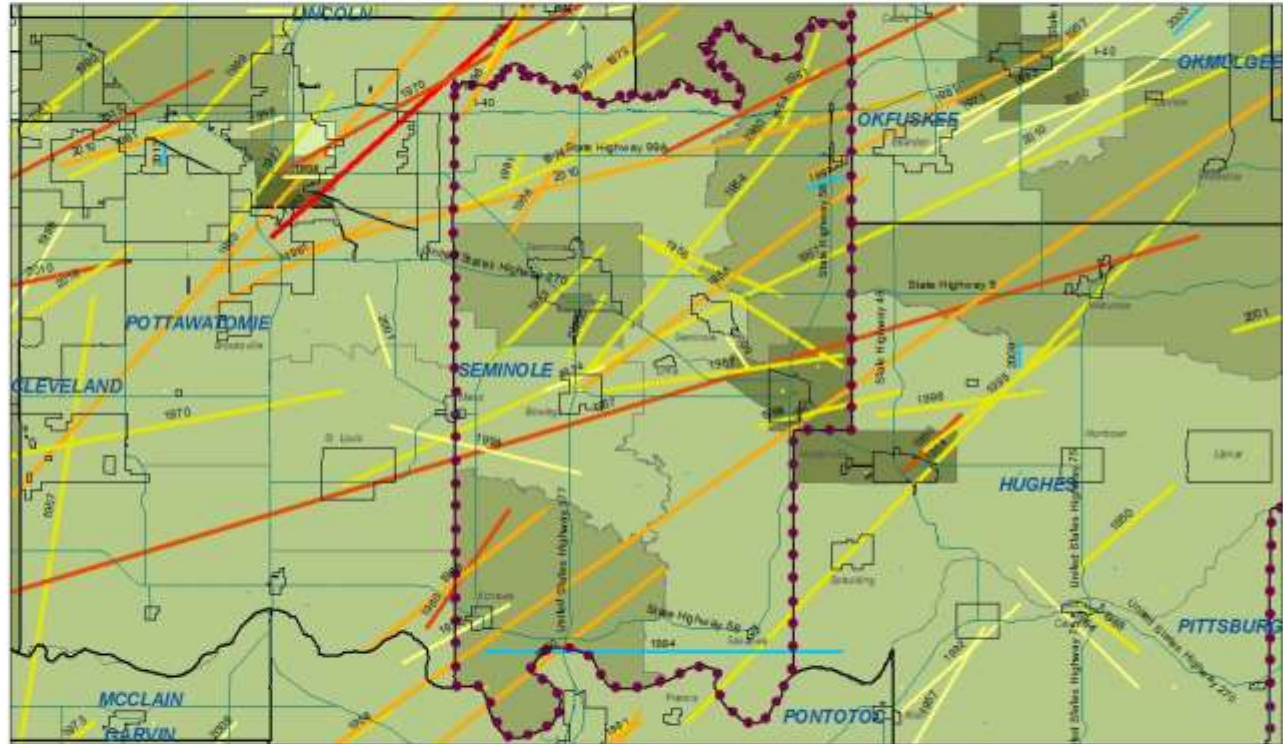
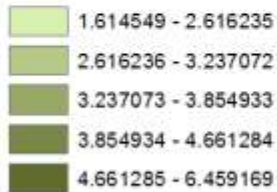
## Tornado Events 1950 - 2014

### Seminole County

**# of fatalities associated with event**



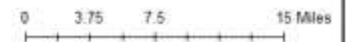
**Social Vulnerability Index**



19XX or 20XX Year of Event Selected County Boundary

Diagonal Multiple Disasters

COUNTY NAME



Sources: Shannon van Zandt, Texas A&M, Hazard Planning materials, and 2009-2013 American Community Survey, Tables B11003, B02001, B17001, B08001, B29044, B29001, B29042, B03001, B09001, B28001, B29056, B17001, B29043, S01001, B13001 & B06001

# Social Vulnerability - Impacts on Housing & Disaster Resiliency

## Tornado Events 1950 - 2014

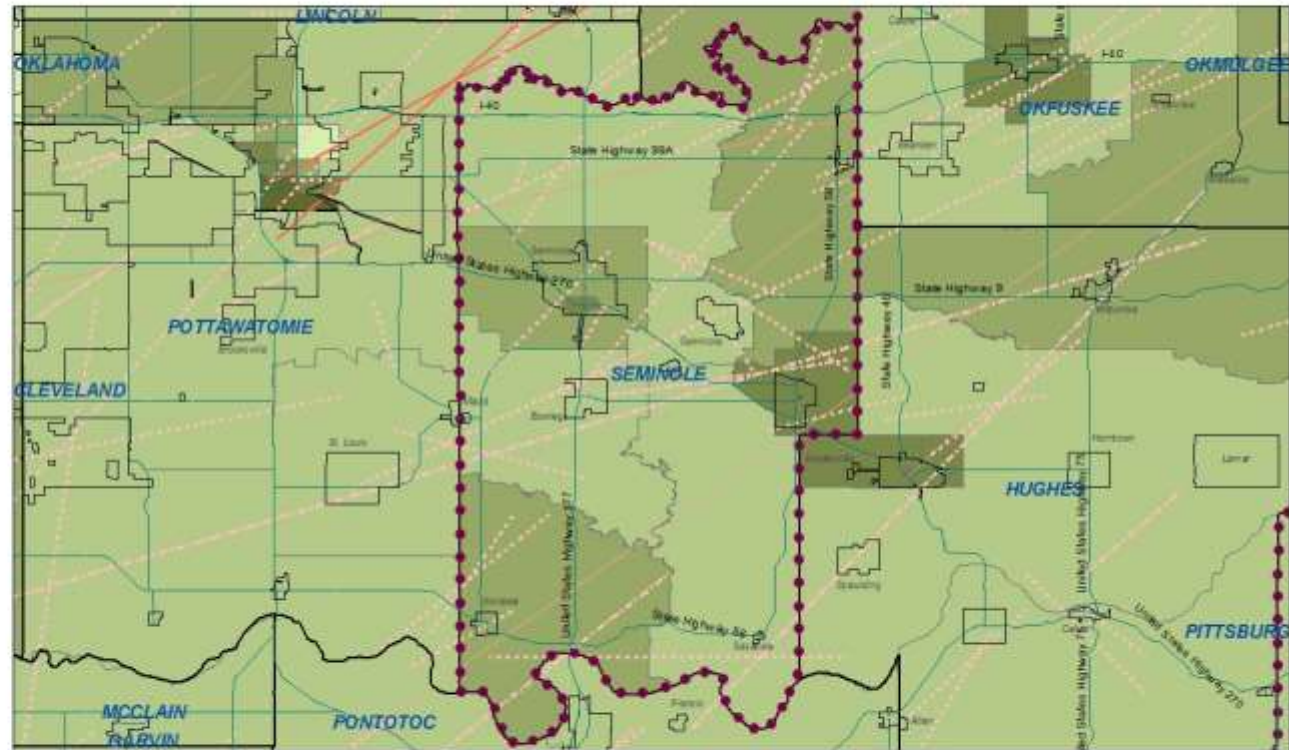
### Seminole County

**# of injuries associated with event**

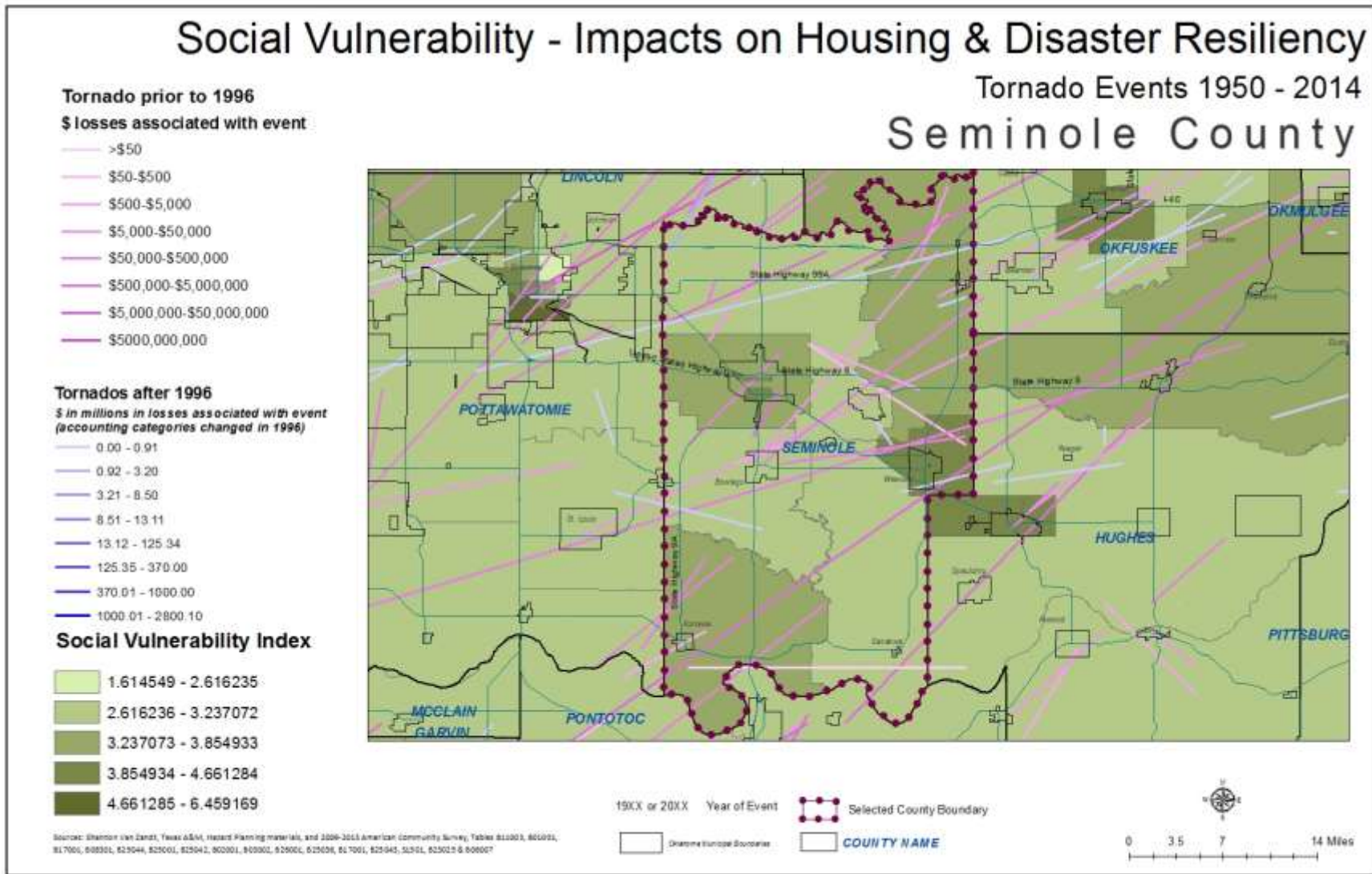
- 0 - 2
- 3 - 8
- 9 - 21
- 22 - 42
- 43 - 68
- 69 - 106
- 107 - 212
- 213 - 583
- 584 - 1150
- 1151 - 1740

**Social Vulnerability Index**

- 1.614549 - 2.616235
- 2.616236 - 3.237072
- 3.237073 - 3.854933
- 3.854934 - 4.661284
- 4.661285 - 6.459169



Sources: Shannon Van Zandt, Texas A&M, Hazard Planning materials, and 2000-2013 American Community Survey, Tables B11003, B01001, B17001, B04001, B23044, B23001, B23043, B02001, B03002, B26001, B23016, B17004, B25043, S1901, B23023 & B06007



### Wildfire

Historical Context: "The City of Seminole has the potential of grass fires and wildfires in and around the city limits and wild land urban interface areas, particularly the areas with high density of red cedars." (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

**TABLE 2-10**

<b>Seminole Fire Department Response Statistics Grass Fire, Brush Fire, Wildland Fire Nov. 2009-Oct. 2015</b>			
<b>Year</b>	<b>Type of Incident</b>	<b>Number of Incidents</b>	<b>Acres Burned</b>
*2009	Grass Fire	2	1.00
2010	Grass Fire, Brush Fire, Wildland Fire	53	359.91
2011	Grass Fire, Brush Fire, Wildland Fire	131	2,449.09
2012	Grass Fire, Brush Fire, Wildland Fire	84	1,882.40
2013	Grass Fire and Brush Fire	30	56.19
2014	Grass Fire, Brush Fire, Wildland Fire	60	91.82
*2015	Grass Fire, Brush Fire, Wildland Fire	46	321.35
<b>Total</b>	<b>Grass Fire, Brush Fire, Wildland Fire</b>	<b>413</b>	<b>5,160.76</b>

\*2009 statistics began in November 2009

\*2015 statistics current as of October 11, 2015

**Mitigation Strategy / Recommendations from HMP:** "Based on past experiences; dry conditions during 10 months of the year, numerous small grass and wildfires; and the wooded areas having a significant amount of tall grasses and weeds, the potential of future grass and wildfires in and around the City of Seminole is "HIGHLY LIKELY". The City of Seminole is susceptible to wildfires. Public information efforts are necessary to help reduce the potential losses of residential and commercial structures in certain areas of the city." (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

### Winter Storm

Historical Context: "The City of Seminole and Seminole Public Schools have the potential for winter snow and ice storms. These events can be extremely paralyzing to the city. Even though the terrain is generally flat these events can still overwhelm the residents and their ability to travel to work, school, or other areas of the county. Along with affecting local activities, winter storms can have negative impact on the City of Seminole as a main transportation artery for central Oklahoma. (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)



TABLE 2-11

City of Seminole Winter Storms 2005-2015 <small>Information provided by the National Climatic Data Center (NCDC)</small>			
Type of Winter Storm	Date	Description	Estimated Damage
Ice Storm	12/20/2013	Freezing rain prevailed through the event with widespread 1/4 to 1/3 inch ice accumulations on trees, power lines and other elevated surfaces.	No recorded damage
Winter Storm	02/08/2011	Two to four inches of snow was measured around Seminole county, including two inches measured in Seminole. Numerous wind gusts over 30 mph were reported for several	No recorded damage
		hours greatly reducing visibilities and causing considerable blowing and drifting of the snowfall.	
Winter Storm	02/01/2011	Eight inches of snow was measured at Seminole. Wind gusts over 40 mph also created considerable blowing and drifting of the snowfall, which reduced visibilities. The event began during the evening hours of 1/31	No recorded damage
Winter Storm	01/31/2011	Thunder sleet, freezing rain, and snow began during the late evening, with wind gusts increasing to over 30 mph by midnight. The majority of the storm occurred on 2/1.	No recorded damage
Ice Storm	01/28/2010	Glaze accumulations averaged around a half of an inch on elevated surfaces, with some areas receiving near 3/4 of an inch. Widespread tree and power line damage was reported across the county, resulting in thousands without power. Several roads had to be closed due to tree limbs and power lines lying across them.	No recorded damage
Blizzard	12/24/2009	Five to eight inches of snow accumulated, with isolated totals up to ten inches. Frequent wind gusts of 50 to 60+ mph created considerable blowing and drifting snow, and greatly reduced visibilities.	No recorded damage
Winter Storm	01/26/2009	Two and a half inches of sleet accumulated in and around Seminole. Much of the total was a result of a band of thundersleet that moved through Seminole county early on the 27th. Prior to the sleet, 3/8 of an inch of ice glaze accumulated.	No recorded damage
Ice Storm	12/09/2007	Widespread tree damage was reported across the county. Numerous traffic accidents occurred as a result of the ice accumulation, which occurred mainly on bridges and other elevated surfaces.	No recorded damage
Winter Storm	01/12/2007	The freezing rain and sleet occurred mainly over central and southwest Oklahoma, with mainly freezing rain over the southeast. The slick and hazardous roads caused many schools remained closed for several days after the winter precipitation had ended.	\$80,000.00 property damage
Winter Storm	11/29/2006	Ice glaze accumulations of up to 1/2 an inch were also reported across parts of central and southern Oklahoma. The winter precipitation caused hazardous travel across the area with numerous accidents reported.	No recorded damage

**Mitigation Strategy / Recommendations from HMP:** “The City of Seminole has an extensive history of winter storms and ice storms. These have ranged in severity from heavy snow to severe ice conditions. Heavy accumulations of ice also bring down trees, electrical wires, telephone poles and lines, and communication towers. Most electric and telephone lines in the City of Seminole are above ground which exposes them to winter weather. Communications and power can be disrupted for days and weeks while utility companies work to repair the extensive damage. In extreme cases, especially those involving elderly, handicapped, or very young, it is necessary to move them to shelters where they can stay until they return home. Even though shelters are provided after a few days, most make arrangements with friends or relatives in

unaffected areas to stay with them”. (Proposed City of Seminole Hazard Mitigation Plan 2015-2020)

“Future mitigation efforts should focus on keeping utility easements clear of vegetation in order to minimize the impact of future severe winter storms and on maintaining effective de-icing and snow clearing activities on roads in and around the City of Seminole”. (Proposed City of Seminole Hazard Mitigation Plan 2015-2020).The HMP action projects include measures to address this hazard.

### **C.2.1.2; C.2.1.6; C.2.1.7; C.2.1.8 Shelters from Disaster Event**

Most cities in Seminole County have online databases of shelters with locations of private shelters.

Interviews with the Seminole City Emergency Manager yielded an estimate total of 350 individual shelters that have been registered and 1 public shelter (a public school, operated by the state) that are documented at the city and/or county level.

Interviews with the Seminole County Emergency Manager yielded an estimated total of 2 public shelters in the major towns in Seminole County. These were identified as churches. The County Emergency Manger was not aware of how many private shelters were listed on the online database for private shelters. It was indicated that these were maintained by the local fire department.

Based on this information and information gained from the interviews more public shelters are needed for the cities in Seminole County, however no estimates were provided.

### **C.2.1.3 Public Policy and Governance to Build Disaster Resiliency**

For the City of Seminole, the comprehensive plan included language and goals for a storm water management plan to address local flooding issues. Most public policies intended to build disaster resiliency focused of flood management practices and stormwater runoff.

### **C.2.1.4 Local Emergency Response Agency Structure**

No current Hazard Mitigation Plans were identified for the county, though two were identified as being updated.

The Emergency Mangers for Seminole County and the City of Seminole both stated that they are the primary contacts in the events of emergencies. They also work in coordination with fire departments, law enforcement, and 911 emergency calls.

The structure for response to address any perceived vulnerabilities in the county will be included in the Hazard Mitigation Plans once they have been completed and accepted by the state and FEMA.

### **C.2.1.5 Threat & Hazard Warning Systems**

The identified Threat & Hazard Warning Systems for Seminole County include:

- Sirens (Numbers of sirens and siren coverage were not found nor included in the *Proposed City of Seminole HMP*)
- Phone notification (Emergency text messages)
- Emergency Broadcast System

**Social Vulnerability**

Based on the research work done by the Texas A&M University Hazard Reduction and Recovery Center, an added component is being included in this section. Social vulnerability can place households at a further disadvantage during and after a disaster. This analysis is assessing for the county the levels of social vulnerability based on demographic indicators to highlight ‘hotspots’ or counties that have higher social vulnerability. That combined with Hazard Mitigation Plans – or lack thereof – can highlight places where additional work is needed to reduce impacts on households.

**Social Vulnerability Analysis - Seminole County**

Base Social Vulnerability Indicators (%)		2nd Order	3rd Order
1.) Single Parent Households	15.98%	0.226	<b>3.511 Social Vulnerability 'Hotspot' or Area of Concern</b>
2.) Population Under 5	6.65%	(Child Care Needs)	
3.) Population 65 or Above	16.63%	0.302	
4.) Population 65 or Above & Below Poverty Rate	13.54%	(Elder Needs)	
5.) Workers Using Public Transportation	0.07%	0.062	
6.) Occupied Housing Units w/o Vehicle	6.10%	(Transportation Needs)	
7.) Housing Unit Occupancy Rate	80.15%	2.607 (Temporary Shelter and Housing Recovery Needs)	
8.) Rental Occupancy Rate	26.10%		
9.) Non-White Population	33.38%		
10.) Population in Group Quarters	2.33%		
11.) Housing Units Built Prior to 1990	80.64%		
12.) Mobile Homes, RVs, Vans, etc.	15.21%		
13.) Poverty Rate	22.94%		
14.) Housing Units Lacking Telephones	3.36%	0.314 (Civic Capacity Needs)	
15.) Age 25+ With Less Than High School Diploma	17.70%		
16.) Unemployment Rate	9.17%		
17.) Age 5+ Which Cannot Speak English Well or Not At All	1.13%		

Sources: Shannon Van Zandt, Texas A&M, Hazard Planning materials, and 2009-2013 American Community Survey, Tables B11003, B01001, B17001, B08301, B25044, B25001, B25042, B02001, B03002, B26001, B25036, B17001, B25043, S1501, B23025 & B06007



# Social Vulnerability Index By County



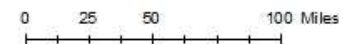
Levels of Social Vulnerability Analysis

Base Social Vulnerability Indicators (Percentages)	2 <sup>nd</sup> Order	3 <sup>rd</sup> Order
1. Single parent households with children/ Total Households	Child care needs	Social vulnerability "Hotspot" or area of concern
2. Population 5 or below/Total Population		
3. Population 65 or above/Total Population		
4. Population 65 or above & below poverty/Pop. 65 or above	Elder needs	
5. Workers using public transportation/Civilian pop. 16+ and employed	Transportation Needs	
6. Occupied housing units without a vehicle / Occupied housing units (Hus)		
7. Occupied housing units / Total housing units	Temporary Shelter and housing Recovery needs	
8. Persons in renter occupied housing units/ Total housing units		
9. Non-white population/Total population		
10. Population in group quarters / Total population		
11. Housing units built 20 years ago / Total housing units		
12. Mobile Homes/Total housing units		
13. Persons in poverty / Total population	Civic Capacity needs	
14. Occupied housing units without a telephone/Total occupied HU		
15. Population above 25 with less than high school/ Total pop above 25		
16. Population 16+ in labor force an unemployed/ Pop in Labor force 16+		
17. Population above 5 that speak English not well or not at all / Pop >5		

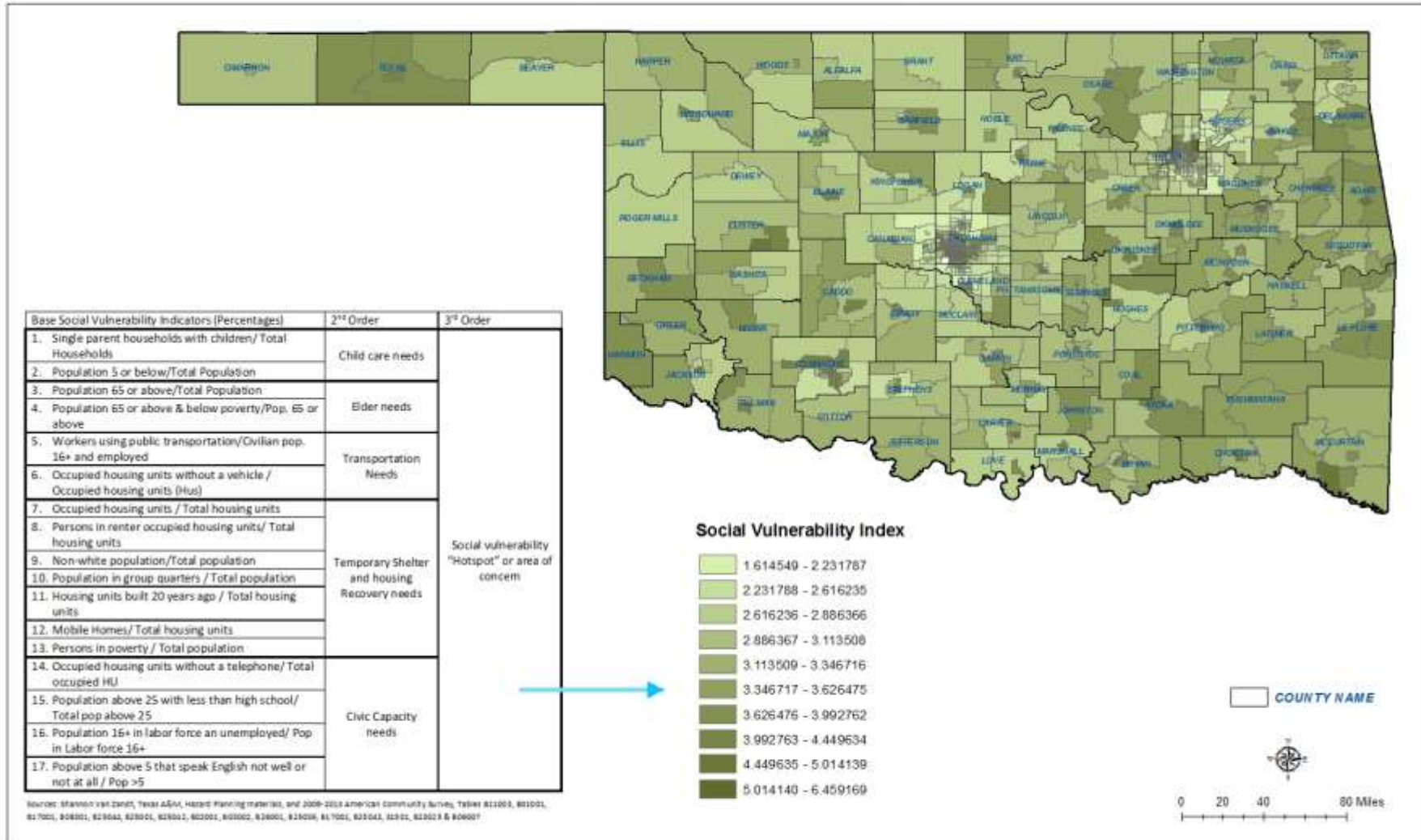
Source: Shannon Van Zandt, Texas A&M, Hazard Planning materials; 2009-2013 American Community Survey, Tables B13003, B01001, B17001, B03001, B07000, B24001, B27001, B28001, B29001, B37001, B38001, B39001, B41001, B42001, B43001, B44001, B45001, B5001, B52001, B53001, B54001, B55001, B56001, B57001, B58001, B59001, B6001, B61001, B62001, B63001, B64001, B65001, B66001, B67001, B68001, B69001, B7001, B71001, B72001, B73001, B74001, B75001, B76001, B77001, B78001, B79001, B8001, B81001, B82001, B83001, B84001, B85001, B86001, B87001, B88001, B89001, B9001, B91001, B92001, B93001, B94001, B95001, B96001, B97001, B98001, B99001

Legend

### Social Vulnerability "Hot Spots"



# Social Vulnerability - Impacts on Housing & Disaster Resiliency



# Social Vulnerability - Impacts on Housing & Disaster Resiliency

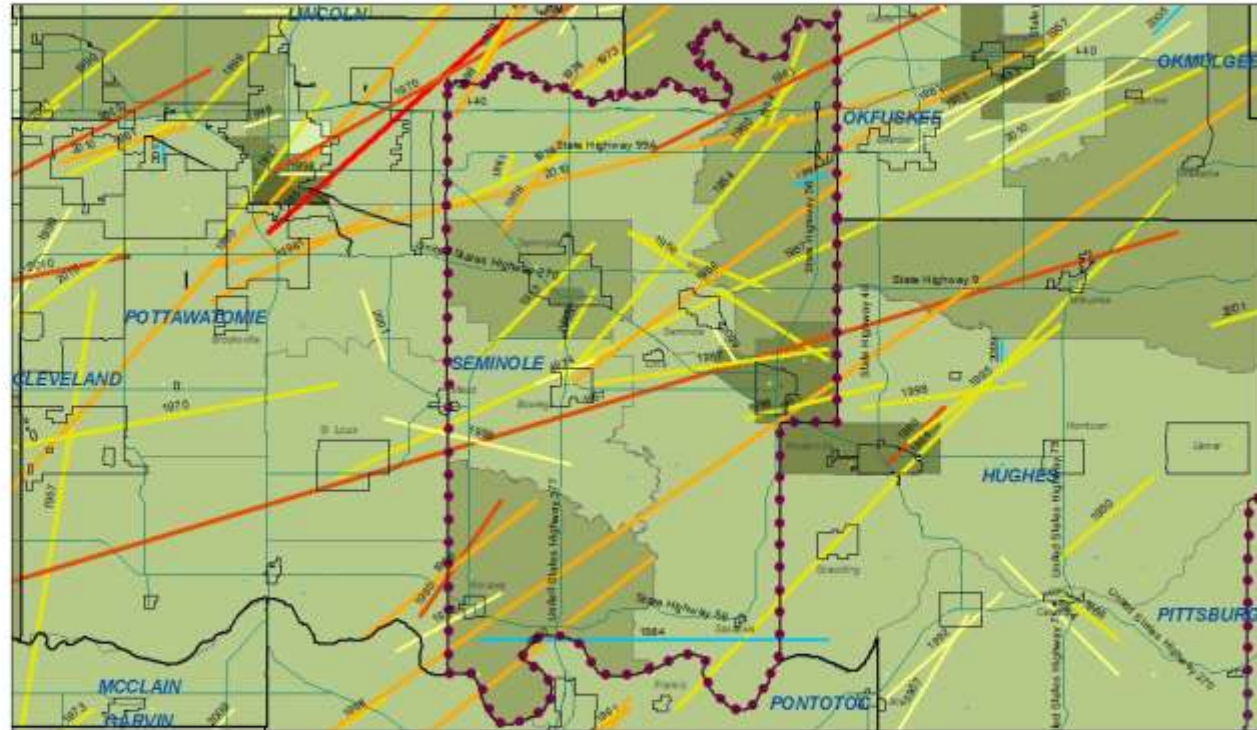
## Tornado Events 1950 - 2014

### Seminole County

**Tornado Magnitude**

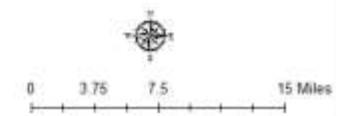


**Social Vulnerability Index**



Source: Shanon van Zandt, Texas A&M, Hazard Planning materials, and 2009-2013 American Community Survey, Tables B11003, B20024, B27001, B08001, B25044, B25047, B03001, B03002, B28001, B29006, B17001, B25045, B15001, B25013 & B08007

19XX or 20XX - Year of Event  
 [Dashed Line] Selected County Boundary  
 [Thin Line] Unincorporated Boundaries  
 [Thick Line] COUNTY NAME



Social vulnerability combined with the devastating impacts of a natural or man-made disaster can compound a household's ability to recover and in fact can place those individuals at an even greater gap or disadvantage prior to the event (Shannon Van Zandt, Texas A&M, Hazard Planning).

This county falls above average per this index for social vulnerability when comparing as a county to other counties in the state. Various census tracts, Seminole area, Konawa and eastern portion of the county, have increased social vulnerability and attention to not placing housing in flood prone areas as well as provisions for tornados (shelters and recovery efforts after an event) should be considered for these areas.

**Recommendations for this county:**

- Continue to update and maintain county and city HMPs and include attention to areas within the county that in addition to physical vulnerability may have compounding social vulnerability factors.
- Efforts to strengthen building codes related to tornadoes and natural disasters should be considered.
- Planning for shelters from disaster events for multifamily, HUD and LIHTC units, in addition to all housing in the community should be incorporated with all efforts to increase housing.
- Continue to apply for grants and pursue funding for more public emergency shelters.

## Homelessness

### By Continuum of Care

Oklahoma is comprised of eight Continuums of Care (CoC). These entities manage the provision of services to the homeless, among other functions. By definition, CoCs involve nonprofit homeless providers; victim service providers; faith-based organizations; governments; businesses; advocates; public housing agencies; school districts; social service providers; mental health agencies; hospitals; universities; affordable housing developers; law enforcement and other organizations that serve the homeless and those at risk of becoming homeless (Continuum of Care Network pamphlet, 2015). These entities are governed by a community plan that helps them deliver services to the homeless and/or to prevent a return to the homeless. CoCs provide a variety of services aimed at outreach, engagement and assessment, including emergency shelter, rapid re-housing, transitional housing, and permanent housing, among others (Continuum of Care Network pamphlet, 2015).

The data below describes the characteristics of those receiving or eligible for the CoC in which Seminole County is located. This data is collected by the CoCs on last day of January each year and reported on an annual basis. It is currently the best source of data available at the State level of understanding the demographics of these populations.

### OK 503 Oklahoma Balance of State

OK 503 represents the regions of Oklahoma that are not included in a regional or local COC's. Essentially, this COC accounts for the "rest" of the state. Most homeless people are sheltered in this data set, but not in statistically significant way. Out of the 198 total homeless households, 112 are sheltered to 86 unsheltered. Similar to that of the Tulsa region, "persons in households without children," above the age of 24 are significantly more homeless (127 to 10 persons age 18 to 24). Of note, "persons in households with at least one adult and one child," children under the age of 18 are more homeless than persons 18 and up. There are 87 homeless children under the age of 18 compared to the 71 combined total of persons above the age of 18. Also, these children are more unsheltered than sheltered. Lastly about this COC data set is that most homeless persons are victims of domestic violence, totaling 75 people. Since this COC accounts for all of the "leftovers" of the state in rural areas that are not included in the other COC's, possessing such a high number of homeless domestic violence victims is not unusual. There is the tendency in these rural areas to have a high amount of domestic violence issues, and homelessness is usually a step away for victims. The next most homeless subpopulation is the chronically homeless coming in at 40 people.

The majority of housing options available in this region are emergency shelters and transitional housing. These units are all open year around. Very few units are available for occupation by families with children (14). Given the prevalence of victims of domestic violence in this area, there is a need to grow the number of units that are available for this group of homeless and the children in their care.



<b>OK 503 Oklahoma Balance of State</b>	<b>Emergency Shelter(sheltered)</b>	<b>Transitional Housing(sheltered)</b>	<b>Unsheltered</b>	<b>Total</b>
Households without children	85	4	47	136
Households with at least 1 adult & 1 child	19	4	39	62
Households with only children	0	0	0	0
<b>total homeless households</b>	<b>104</b>	<b>8</b>	<b>86</b>	<b>198</b>
<b>Persons in households without children</b>	<b>85</b>	<b>4</b>	<b>48</b>	<b>137</b>
persons age 18-24	3	0	7	10
persons over age 24	82	4	41	127
<b>Persons in households with at least 1 adult &amp; 1 child</b>	<b>55</b>	<b>10</b>	<b>93</b>	<b>158</b>
children under age 18	35	5	47	87
persons age 18-24	2	4	6	12
persons over 24	18	1	40	59
<b>persons in households with only 1 children</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total homeless persons</b>	<b>140</b>	<b>14</b>	<b>141</b>	<b>295</b>
<b>Subpopulations</b>	<b>Sheltered</b>		<b>Unsheltered</b>	<b>Total</b>
Chronically Homeless	8		32	40
Chronically Homeless Individuals	8		16	24
Chronically Homeless Persons in Families	0		16	16
Severely Mentally Ill	7		5	12
Chronic Substance Abuse	9		12	21
Veterans	2		0	2
HIV/AIDS	0		0	0
Victims of Domestic Violence	72		3	75

**CoC Number: OK-503****CoC Name: Oklahoma Balance of State CoC****Summary of all beds reported by Continuum of Care:**

	Family Units <sup>1</sup>	Family Beds <sup>1</sup>	Adult-Only Beds	Child-Only Beds	Total Yr-Round Beds	Seasonal	Overflow / Voucher	Subset of Total Bed Inventory		
								Chronic Beds <sup>2</sup>	Veteran Beds <sup>2</sup>	Youth Beds <sup>2</sup>
<b>Emergency, Safe Haven and Transitional Housing</b>	35	140	39	0	179	0	0	n/a	0	14
Emergency Shelter	16	95	39	0	134	0	0	n/a	0	0
Transitional Housing	19	45	0	0	45	n/a	n/a	n/a	0	14
<b>Permanent Housing</b>	17	34	0	0	34	n/a	n/a	0	0	0
Permanent Supportive Housing*	17	34	0	0	34	n/a	n/a	0	0	0
<b>Grand Total</b>	<b>52</b>	<b>174</b>	<b>39</b>	<b>0</b>	<b>213</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>

**CoC beds reported by Program Type:****Emergency Shelter for Families<sup>1</sup>**

Provider Name	Facility Name	Family Units <sup>1</sup>	Family Beds <sup>1</sup>	Adult-Only Beds	Child-Only Beds	Seasonal	Overflow / Voucher	Total Beds	Subset of Total Bed Inventory		
									Chronic Beds <sup>2</sup>	Veteran Beds <sup>2</sup>	Youth Beds <sup>2</sup>
Family Promise of Shawnee, Inc.	Family Promise	6	13	1	0	0	0	14	n/a	0	0
<b>Total</b>		<b>6</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>n/a</b>	<b>0</b>	<b>0</b>

### **COC Conclusion**

Each of the CoC's represents a unique area. It's important to note that the Point In Time data serves as a baseline. It is likely that the homeless population is much larger than counted. Generally, the State's homeless population is over the age of 24. In some areas of the State, there is a disproportionately high rate of homeless youth. More detailed exploration is necessary to understand the reasons which led them to this State and the needs of homeless youth. Domestic violence victims comprise a significant portion of the homeless population in the State. In some areas, the presence of social service providers for this subpopulation has reduced homeless rates. The same is true with respect to homeless veterans. As anticipated, the majority of the homeless population across the state can be classified as: mentally ill, chronically homeless, and chronic substance abusers. The needs of these difficult to house homeless must remain a priority across the State.

### **A Snap Shot of Homelessness in the State**

Point in Time data was last collected on January 29, 2015 across the State. On that date, counts revealed a homeless populations of more than 3,000 residents. The majority of those counted (2,603 individuals) were classified as households without children. The majority of this group lives in emergency shelters (1,652) or transitional housing (376) with 575 classified as unsheltered.

The number of households with children is seemingly small totaling 343. The vast majority of those in this classification live at emergency shelters (201) or transitional housing (104) with only 38 classified as unsheltered. Homeless service providers in Oklahoma City and Tulsa emphasized that this group was likely undercounted across the State because they are less visible than other categories of homeless. They emphasized that emergency shelters, as presently designed, do not meet the needs of families with children in terms of both privacy and safety.

The Point in Time data reveals less than 100 households comprised of only children. Of these 74 counted households, 35 live in emergency shelters and 39 are unsheltered. This population is likely significantly undercounted as youth who are homeless typically seek to avoid identification for fear of being returned to their homes. These young people often have specific needs for supportive services that are difficult to deliver because the population remains unseen. Homeless advocates in the State hold up Tulsa as a good example of the State for serving homeless youth. OKC's Be the Change is also a leader in identifying and providing needed service to homeless youth in the metropolitan region. The problem of homeless youth is not just isolated to large urban areas. Mid-sized and smaller cities also look for innovative ways to service. Cities like El Reno and Enid have their own drop in centers for homeless youth. Social networks in smaller cities fill similar functions.

Oklahoma City public schools also tracks homeless students within the district. There are homeless students attending 78 elementary and middle schools in Oklahoma City. This data suggests that the majority of the city's homeless students are African American or Hispanic. There are 664 homeless African American students, 724 homeless Hispanic students, and 254 homeless Caucasian students. There are ten high schools in OKC that have reported having homeless students. Douglass and Capitol Hill high schools have the highest homeless student populations. Douglass has 50 homeless African American students. Capitol Hill has 49 homeless Hispanic students. The majority of these students can be classified as "couch homeless" or doubled up, meaning that they are finding

shelter with extended family members, friends, and other non-relatives for a brief amount of time due to hardship.

The majority of Oklahoma's homeless population is over 24 years old. This classification system is not particularly useful in helping to assess the number and needs of the elderly population, which is reported to be a substantial subset of this population.

The Point in Time data categorizes the homeless population into two categories: Hispanic/Latino and Non-Hispanic/Non-Latino. The lion's share of homeless in Oklahoma are Non-Hispanic/Non-Latino (3,528). In Oklahoma City, 62% of the homeless served are classified a Caucasian. Twenty-five percent of the homeless population is African American. Seven percent of the homeless in OKC identify as Native American. Less than one percent of those identified as homeless in OKC are Asian. By contrast, a relative small fraction of the State's homeless population is Hispanic/Latino. The Point in Time data identified a relatively small Hispanic homeless population, including less than 250 individuals. This follows OKC counts that identify 7% of the city's homeless population as Hispanic. Homeless advocates in OKC indicate that social networks, including churches and extended families, keep the number of homeless in the Hispanic population proportionately lower than their Non-Hispanic/Non-Latino counterparts. However, these individual likely classify as "couch homeless" and are in a continued state of being vulnerable to becoming homeless.

The PIC data indicates that are more homeless males (2,237) than females (1,535). This follows national trends. Care should be taken when interpreting this data, as women are less likely to participate in Point in Time counts. There is a growing population of homeless in Oklahoma that identifies as transgender. PIC data identified 5 individuals identifying as transgender. This population is likely much higher and will continue to grow due to family and national attitudes about this population. Transgender populations may require special housing accommodations, especially in the emergency shelter context, to provide for their social and emotional needs.

Another group of homeless individuals that merits special consideration in the distribution of resources is those identified as having special needs. This classification includes persons with "physical, mental or behavioral disabilities, persons with HIV/AIDS and/or persons with alcohol or drug addictions. The Point in Time data estimates that there are nearly 1300 homeless persons with special needs in OKC alone.

The Point in Time data is coarse and does not do an effectively track homeless populations with specific needs, such as those persons who are homeless and living with HIV/AIDS. This special population of homeless is likely growing in Oklahoma. According to the Oklahoma State Department of Health there were an estimated 5,375 cases of persons living with HIV/AIDS by the end of 2013. There were a total of 437 newly diagnosed HIV/AIDS cases in 2013 for the state of Oklahoma. The vast majority of populations living with HIV/AIDS (nearly 72%) reside in urban areas. In OKC alone, the Point in Time data identified at least 25 homeless individuals living with HIV/AIDS. This is likely an undercount. Based on this information and anecdotal data from homeless service providers, special effort must be made to understand the housing, medical, and supportive services needs of homeless persons living with HIV/AIDS.

Shelter is crucial for homeless persons with HIV/AIDS in the management of this illness. However, traditional shelter setting(s) may not be suitable to house this population. Those with suppressed immune systems are vulnerable to the spread of infectious diseases which may be present in open shelters. In addition, shelter personally may not be properly trained in handling AIDS related issues. For these reasons, as well as resources made available by the federal government, homeless persons living with HIV/AIDs are often given housing choice vouchers, created by HOPWA, so that they secure housing on the private market. This can be challenging in constrained rental markets like Norman, for example, where affordable housing options are limited. It is estimated that more than 60 individuals living in OKC with HIV/AIDs are homeless because they have been unable to find a landlord that will accept their housing choice voucher.

**State Name: Oklahoma****Point-in Time Date: 1/29/2015****Summary by household type reported:**

	Sheltered		Unsheltered	Total
	Emergency Shelter	Transitional Housing*		
Households without children <sup>1</sup>	1,652	376	575	2,603
Households with at least one adult and one child <sup>2</sup>	201	104	38	343
Households with only children <sup>3</sup>	35	0	39	74
<b>Total Homeless Households</b>	<b>1,888</b>	<b>480</b>	<b>652</b>	<b>3,020</b>

**Summary of persons in each household type:**

<b>Persons in households without children<sup>1</sup></b>	<b>1,676</b>	<b>397</b>	<b>623</b>	<b>2,696</b>
Persons Age 18 to 24	214	61	110	385
Persons Over Age 24	1,462	336	513	2,311
<b>Persons in households with at least one adult and one child<sup>2</sup></b>	<b>595</b>	<b>293</b>	<b>108</b>	<b>996</b>
Children Under Age 18	373	176	57	606
Persons Age 18 to 24	40	29	13	82
Persons Over Age 24	182	88	38	308
<b>Persons in households with only children<sup>3</sup></b>	<b>38</b>	<b>0</b>	<b>47</b>	<b>85</b>
<b>Total Homeless Persons</b>	<b>2,309</b>	<b>690</b>	<b>778</b>	<b>3,777</b>

**Demographic summary by ethnicity:**

	Sheltered		Unsheltered	Total
	Emergency Shelter	Transitional Housing*		
Hispanic / Latino	154	43	52	249
Non-Hispanic / Non-Latino	2,155	647	726	3,528
<b>Total</b>	<b>2,309</b>	<b>690</b>	<b>778</b>	<b>3,777</b>

**Demographic summary by gender:**

Female	1,004	272	259	1,535
Male	1,302	416	519	2,237
Transgender	3	2	0	5
<b>Total</b>	<b>2,309</b>	<b>690</b>	<b>778</b>	<b>3,777</b>

## Rural Areas

Homelessness in the rural areas of the State is much more difficult to calculate. Given the population density of the State, the majority of services that serve the homeless are concentrated in urban and semi-urban areas. Even if beds are available, many rural homeless lack knowledge about the services or a means to travel to receive the same. As a part of this study, OU students were dispatched into the 77 counties in the State to, among other issues, attempt to understand the degree to which there is rural homelessness in the State. Their qualitative inquiries yielded very little data, in part, because rural homeless is difficult to identify and often ignored. For the purposes of this report, a literature review was prepared on the topic of rural homelessness in the United States. The goals of this academic review is to assist policymakers and service providers in the State in uncovering the dimensions of this illusive population.

In the U.S., the rural homeless population is predominantly Caucasian. This population is comprised of single mothers, widowed wives and husbands, divorced and separated men and women, and young people. A study examining rural homelessness in Ohio found that nearly 40% of those who classify as homeless were divorced, separated, or widowed (First, Richard J., John C. Rife, and Beverly G. Toomey, 1994, pg. 101). Ohio's rural homeless were also relatively young. Close to 80% of homeless population in this study was between the ages of 18 and 39 years old (First et al, 1994, pg. 101). Rural homelessness is often less visible than urban homelessness because these populations commonly take shelter are at a friend's house, in their vehicles, or on abandoned properties. These populations can also be found on "...campgrounds or in hollows, desert canyons, farmers' fields, state parks, and highway rest areas" (Milbourne and Cloke, 2006, pg. 17).

The causes of rural homelessness mirror, in most ways, the plight of the urban homeless. The study of homelessness in rural Ohio revealed family problems and substance abuse issues as primary causes of rural homelessness. The incidence of homelessness resulting from situations of domestic violence is high in rural areas (Cummins et al, 1998). Substance abuse issues are a common cause for homelessness in rural America. The literature reveals that this population tends to be homeless because they have isolated themselves from family and people who want to help (First et al, 1994). In the case of both domestic violence and substance abuse, it is often difficult for these individuals to find shelter and the supportive services they require in rural areas where options are limited, if available at all. The thought of moving to an urban area to find both shelter and supportive services is sometimes not considered at all by these vulnerable populations.

Rural areas are also more prone to the kind of poverty that puts individuals and families at risk for homelessness. The number of people living at or below the poverty line in rural places is higher than anywhere else in the United States (Moore, 2001). The statement "rural homelessness is a microcosm of national economic and political developments" cannot be truer for American rural communities (Vissing, 1996, pg. 103). The disinvestment of small towns and their inability to attract long-term sustainable business development, cripples a small town's economy. In effect, this is a main contributor for why poverty is such a common theme for rural communities. As a result, the State should carefully consider its investments in rural Oklahoma. While there is a need for shelter in these places, the construction of this housing type should be weighed with long term opportunities for employment in the area.

It is not surprising that rural areas typically lack both emergency shelters and temporary housing options. Services that provide temporary housing and provide relief and support services for those who cannot find food are virtually nonexistent in rural communities across the United States (Moore, 2001). Sheltering the homeless is undercapitalized in rural areas because communities do not see a concentration of homeless individuals (Vissing, 1996, pg. 146). As a result, the homeless must satisfice where they are. For instance, for families who are homeless, some of them use a friend's house to store clothes or to seek shelter, while some receive assistance from churches (Cummins et al, 1998). Others migrate to urban areas where services are available and more accessible (Rollinson, Paul A., and John T. Pardeck, 2006).

The absence of affordable housing in rural areas is a root cause of homelessness (Levinson, David, and Marcy Ross, 2007). In fact, it was noticed that many of the people were receiving monetary assistance or previously had some money saved up to spend on housing, but these measures were not enough to keep them afloat (First et al, 1994, pg. 101). Housing costs rise in rural areas typically rise as a result of competition for a limited amount of housing stock. In some rural areas, low income families are spending 70% of their household incomes on housing, sometimes substandard housing (Vissing, 1996, pg. 124). As Levinson et al explain, "housing costs are lower but so are incomes, with the result of placing a heavier rent burden in the community" (Levinson, David, and Marcy Ross, 2007, pg. 45). Renters in rural communities, as a result, are far more susceptible to becoming homeless than their urban or suburban counterparts because they do not have the financial safety net sometimes associated with homeownership (Fitchen, 1991, pg. 193).

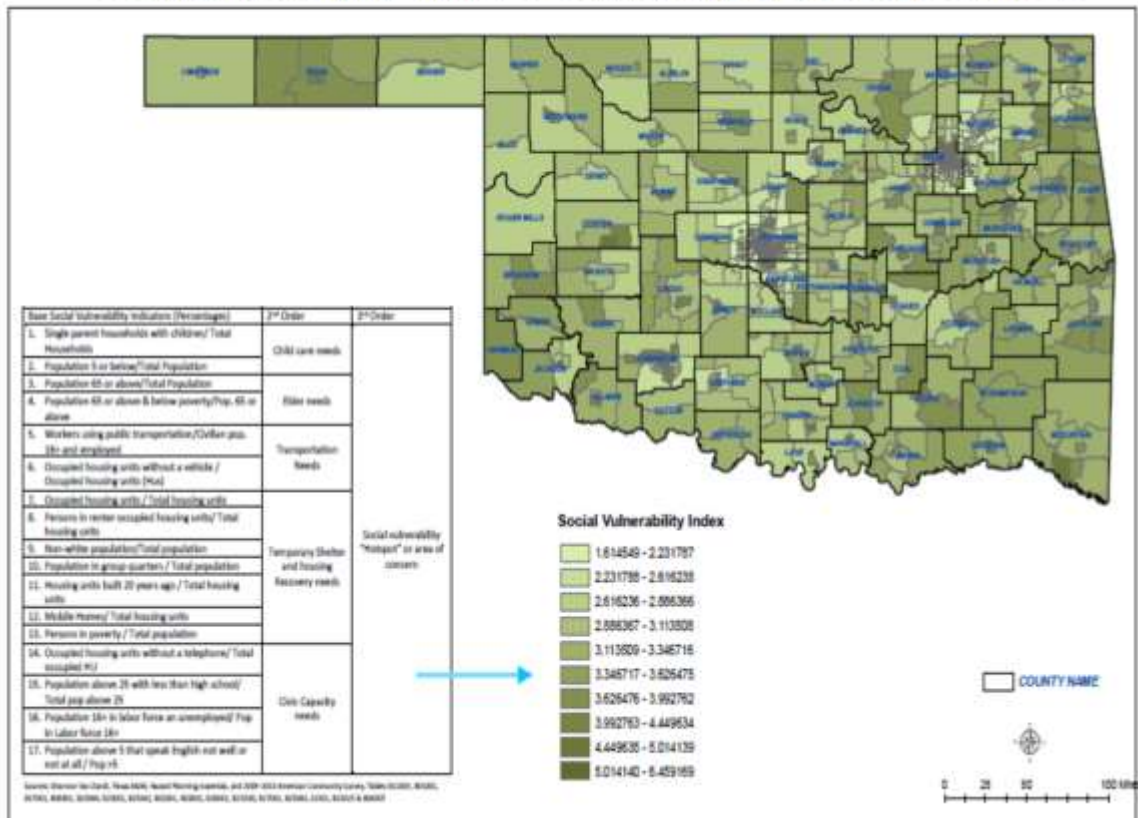
While this brief review of the literature describes the state of homelessness across rural America, many of the lessons learned are easily translated to an Oklahoma context. The condition and supply of affordable housing units is relatively poor in many rural portions of the State. Rent burden, as more fully characterized in the Consolidated Housing Affordability Strategy (CHAS) section of this report, is high. This leaves families living and working in relatively weak economies vulnerable to homelessness. Once homeless, supportive services in these areas are relatively limited, especially for the chronically homeless, those with substance abuse problems, and victims of domestic violence. Services available to these populations in urban areas may not be attractive to individuals and families who are accustomed to life in rural communities. Where practicable, more consideration must be given to providing supportive services and temporary and permanent housing to homeless populations wishing to remain in rural areas.



### At Risk For Homelessness

Poverty is the primary factor that places Oklahoma families at risk of being homeless. There are many factors experienced by those living in poverty which leave residents more or less vulnerable to homelessness. For the purposes of this study, a social vulnerability index has been constructed to measure the likelihood or risk that residents living in poverty might find themselves homeless. This index includes factors such as single headed households, concentration of young and elderly residents, the reliance on public transportation, private vehicle availability, racial composition, housing type, presence or absence of a telephone in the household, amongst other factors. This index is additive and seeks to understand the collective impact of these factors in estimating the vulnerability of a local population. While employed in more significant detail in the section of this report focusing on disaster resiliency, this tool is useful in identifying areas of the State where populations may be most vulnerable to homelessness. The index utilized in this section is different from the one crafted in the Disaster Resiliency chapter of this report in that it estimates social vulnerability at the county level, rather than by census tract. The decision to study vulnerability to homelessness at the county level was made to help policymakers understand, more generally, where resources and economic interventions are most necessary to stave off the potential effects of homelessness. This maps presents vulnerability to homelessness on the county level, depicting the most vulnerable counties in dark green.

### Social Vulnerability - Impacts on Housing & Disaster Resiliency



The Oklahoma families most likely at risk are those living in public and subsidized housing. They live below the poverty line. Even those who are employed, remain vulnerable to homeless because an unexpected expense, like a medical emergency, threatens their ability to pay for their share of rent owed or utilities. A missed payment can easily lead to eviction and homeless.

Through the U.S. Department of Housing and Urban Development, Oklahoma service providers have been vested with more than 24,000 housing choice vouchers. Their spatial distribution is outlined below. Of significance is the size of the waiting lists for public housing units and housing choice vouchers in cities across the State. These individuals are the most vulnerable to being homeless.

		Authorized Vouchers	Public Housing Waiting List	Voucher waiting list
Ada	OK024	110	Unknown	Unknown
Bristow	OK033	87	Unknown	Unknown
Broken Bow	OK006	217	Unknown	Unknown
Fort Gibson	OK118	44	Unknown	Unknown
Henryetta	OK142	115	Unknown	Unknown
Hugo	OK044	178	14	56
Lawton	OK005	92	Unknown	Unknown
McAlester	OK062	73	118	36
Miami	OK027	243	126	179
Muskogee	OK099	843	Unknown	230
Norman	OK139	1,185	Unknown	313
Oklahoma City	OK002	4,219	830	8021
Oklahoma HFA	OK901	10,708	Unknown	11,155
Ponca City	OK111	134	70	148
Seminole	OK032	189	53	44
Shawnee	OK095	497	320	623
Stillwater	OK146	656	550	420
Stilwell	OK067	29	Unknown	Unknown
Tecumseh	OK148	31	90	171
Tulsa	OK073	4,808	4951	5859
Wewoka	OK096	154	Unknown	
Oklahoma		24,612		

## Findings and Recommendations

The chronically homeless population remains high in Oklahoma and follows national trends. While this population does not appear to be growing, the needs of the chronically homeless merit continued attention. Ample emergency shelters and soup kitchens must be made available for these sizable population in both urban and rural contexts. Social service providers should be clustered, to the extent possible, where these groups of homeless populations cluster. Given the future projections for the increase in the number of cold and hot days in the region, social service providers must provide places that allow these individuals to seek refuge from the elements.

Those living with HIV/AIDS tend to underreport their status and needs. Given the cost of medical care these individuals face, the need for permanent and stable housing is critical. Housing providers must work to ensure that there are enough units for this undercounted population. Working with county health care providers, OHFA is much more likely to estimate the size and needs of this population of homeless and potentially homeless persons. Special care must be taken to ascertain the barriers these individuals face when using vouchers to secure housing in the marketplace.

Victims of domestic violence require temporary and transitional housing statewide. CoCs with high supportive services tend to better accommodate the housing needs for these population. Cleveland County provides a good model for the State. However, many homeless victims of domestic violence live in rural areas that are underserved. Efforts must be undertaken to work with social services provides, schools, churches, and the police to help identify these individuals and to lead them to available housing and supportive services.

While not mentioned in the PIC data, estimates must be prepared to calculate the number and needs of homeless populations with felonies. In particular, there has been a rise nationally in the number of homeless sex offenders. Zoning regulations and discrimination from the private market has pushed many registered sex offenders to the periphery of many communities. Given their criminal histories, this population of homeless is harder to house but should not be forgotten for health and safety of these individuals and the communities they inhabit.

The size of the homeless veteran population seems to be decreasing as a result of national initiatives to end homelessness for veterans in Oklahoma. The needs of homeless veterans are highest in areas of the State near VA facilities. Temporary and permanent housing should be constructed at a higher rate in these areas to meet demand. Care should be taken to make certain that the housing constructed is built to meet the psychological needs of veterans, particularly those suffering from PTSD.

Rural homelessness, in general, is a challenge to assess and characterize. The rate of homelessness in rural areas is most likely much higher than annual counts demonstrate. The majority of rural homeless likely find shelter out of public view. Some may shelter in their cars, in undeveloped areas or in the homes of those who allow them to stay. They are not likely to find their way to urban areas given their lack of transportation options and preferences for rural living. Programs that are developed to provide shelter to the rural homeless must be developed to allow sheltering in place where possible. Sheltering in place should only be allowed, however, in places where individuals are likely to be able to find what they need, including opportunities to work.

Very little is known about the age distribution of homeless over the age of 24. It is likely that the homeless population, including those who are chronically homeless, is aging. Elderly homeless individuals have special needs. Counts must be more sensitive to understanding the size and needs of this population. This does not mean arbitrarily building units to house this population unless a need can be demonstrated for the same.

Waiting lists for public housing and section 8 vouchers are high across the State. This is not uncommon to Oklahoma. However, when we are considering the size of the population that is at risk to homelessness, these waiting lists are an important factor to consider. Resources should be spent in a manner which is preventative so that these individuals' and families' needs are met before they become homeless.

The absence of affordable housing alternatives across some parts of the State is the largest threat to homelessness. In markets that are constrained by an aging housing stock or those that are rapidly growing, individuals and families who live on the economic margins are at risk for becoming homeless. Communities must work to ensure that zoning regulations promote the development of housing types serving all income levels, including the providing of temporary and permanent housing to meet the needs of the presently homeless and those at risk for becoming the same. Funding distributions should be targeted to communities with the highest needs who are willing to do what is necessary to meet the needs of the homeless and those at risk for the same.

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## Fair Housing

### Summary

Fair housing addresses discrimination in the provision of housing as well as discrimination in access to opportunities provided by the location of affordable housing. Recent actions by the United States Department of Housing and Urban Development (HUD) and the United States Supreme Court focus our attention on localized access to opportunity.

These findings are intended to aid the Oklahoma Housing Finance Agency (OHFA) determine the location of new affordable housing in relation to vulnerable populations and explore ways to expand the opportunities available to help communities of existing affordable housing achieve self-sufficiency.

### Key Findings:

- 70% of affordable housing units are located in census tracts marked by poverty
- 62% of affordable housing is located in census tracts where a majority of the residents are not white
- 13% of affordable housing units have no access to transit services and 56% have access to limited service, on-demand transit
- 2.6% of affordable housing units have limited access to a hospital
- 7.8% of affordable housing units are located in food deserts

### Recommendations:

Continued efforts to improve the quality of life for affordable housing residents and reduce discrimination associated with affordable housing will likely need to include strategies that integrate new affordable housing as well as support existing communities of affordable housing. This will likely include public policies and funding designed to integrate low-income and workforce housing into a more diverse set of communities. Additionally, those living existing affordable housing communities need increased opportunities to stay in place, become self-sufficient, and participate in determining the future of their neighborhood. OHFA may consider partnering with other state, non-profit, and for-profit agencies to explore strategies for helping communities thrive economically, socially, and environmentally.

### What is Fair Housing?

Fair housing addresses discrimination in the provision of housing as well as discrimination in access to opportunities provided by the location of affordable housing. On one hand, this protects the ability of individuals to obtain housing regardless of personal characteristics such as race, skin color, national origin, gender, familial status, or disability. It also focuses attention on more subtle forms of discrimination that cluster low-income housing in ways that inhibit the ability of communities to access services and amenities that support self-sufficiency and autonomy.

Recent actions by the United States Department of Housing and Urban Development (HUD) and the United States Supreme Court focus our attention on localized access to opportunity. In 2014, HUD released the Affirmatively Furthering Fair Housing (AFFH) rule for public comment. The draft rule

“directs HUD’s program participants to take significant actions to overcome historic patterns of segregation, achieve truly balanced and integrated living patterns, promote fair housing choice, and foster inclusive communities that are free from discrimination” (HUD 2015). In 2015, the United States Supreme Court provided legal support for actions taken to remedy patterns that impede the upward mobility and opportunity of low-income individuals and communities. In the case of Texas Department of Housing and Community Affairs v. The Inclusive Communities Project the court reiterated the need to address disparate impacts in considering the location of affordable housing and reinforced the importance of AFFH (Bostic 2015). Housing discrimination from this perspective is not only felt by individual residents, it can also be the result of actions that work to limit the opportunities to improve the quality of life in local communities.

### Approach

In Oklahoma, a combination of federal and state programs work to support the opportunities provided to individuals and families who rest safely and comfortably in an apartment or home. Here we use publicly available data for units that are part of the Low Income Housing Tax Credit (LIHTC) Program, the Rural Rental Housing Loans, or OHFA administered programs such as Oklahoma Affordable Housing Tax Credit (AHTC), the HOME investment partnership program, the Section 8 Housing Choice Voucher Program, and multi-family bonds. Collectively, these programs represent state efforts to assist individuals who are unable to afford housing.

Indicators of disparate impact vary but seem to contingent upon the contextual characteristics of a particular neighborhood. In an effort to help communities investigate and understand community level disparate impacts, HUD created a Fair Housing Assessment Tool ([http://www.huduser.gov/portal/affht\\_pt.html#affh](http://www.huduser.gov/portal/affht_pt.html#affh)). The assessment tool includes measures on indicators of disparate impacts based on the clustering of potentially vulnerable populations, including:

- Race/Ethnicity of Residents
- National Origin of Residents
- English Proficiency of Residents
- Job Accessibility
- Transit Accessibility
- Level of Poverty
- Environmental Exposure (e.g. pollution, crime, food, health care, etc.)
- Disability

This report uses the Fair Housing Assessment Tool in conjunction with readily available data to initiate a more thorough investigation of the potential for disparate impacts in the state. The findings are intended to aid the Oklahoma Housing Finance Agency regarding future location of new fair housing in relation to vulnerable populations and the future opportunities available to help communities of existing affordable housing achieve self-sufficiency.

### Data

Data for this report are compiled from a variety of sources including the United States Census, the University of Oklahoma Center for Spatial Analysis, and primary data collected as part of ongoing research efforts at the University of Oklahoma. Data are aggregated into census tracts and reported statewide as well as by county (see Appendix 1).

#### 1. Urban/Rural

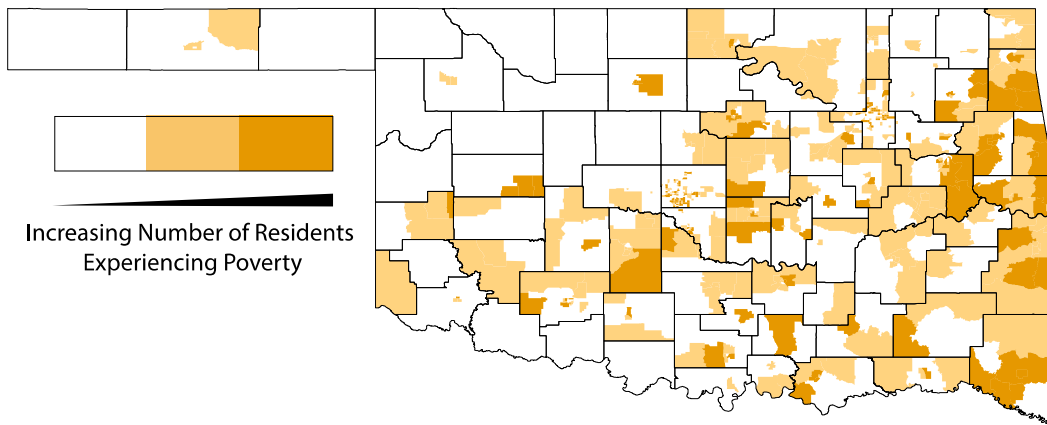
A majority of the affordable housing in Oklahoma is situated in rural communities. Urban communities including Edmond, Lawton, Norman, Oklahoma City, and Tulsa are home to just over 1/3 of the affordable housing units in the state.

	Total Affordable Housing Units	Situated an Urban Setting	Situated in a Rural Setting
OHFA	35,292	11,699 (33.1%)	23,593 (66.9%)
515	5,384	0	5,384 (100%)
LIHTC	23,537	8,255 (35.1%)	15,282 (64.9%)
Total	64,213	19,954 (31.1%)	44,259 (68.9%)



2. Poverty

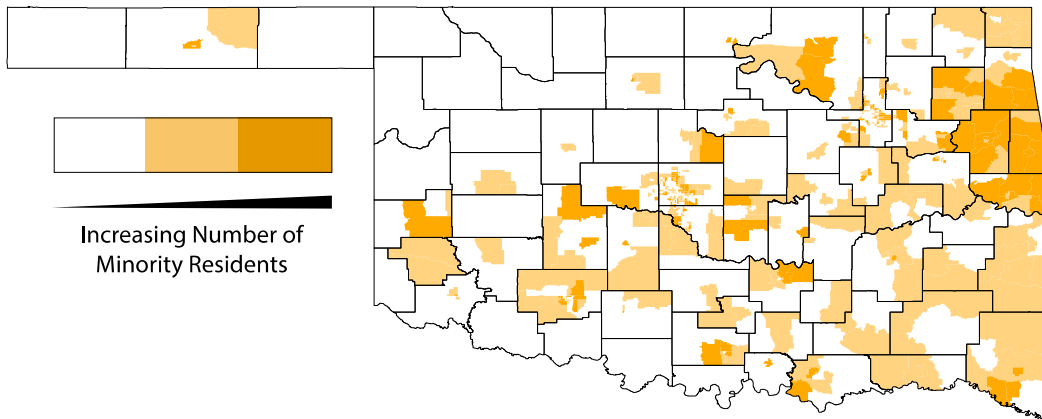
Approximately 70% of affordable housing units in Oklahoma are located in census tracts where the number of residents living in poverty is above the state average. About half of these units are located in areas of extreme poverty, where the number of individuals who are economically vulnerable exceeds 994, more than one standard deviation (411) from the mean (583).



	Total Affordable Housing Units	Situated in Poverty	Situated in Extreme Poverty
OHFA	35,292	12,295 (34.8%)	12,464 (35.3%)
515	5,384	2,093 (38.9%)	1,839 (34.2%)
LIHTC	23,537	7,483 (31.8%)	8,924 (38.0%)
Total	64,213	21,796 (33.9%)	23,227 (36.2%)

### 3. Non-white Enclaves

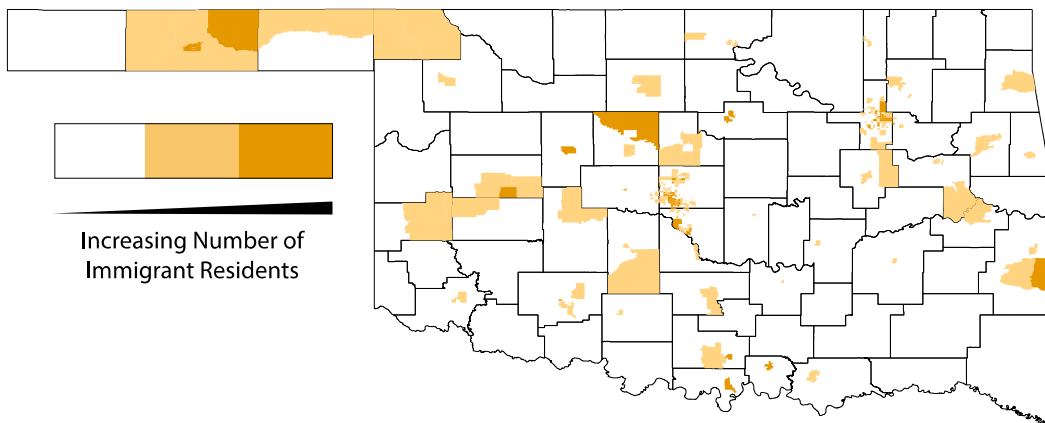
Just over 60% of affordable housing units in Oklahoma are located in census tracts where a majority of the residents are non-white. With just fewer than 24% of the total affordable housing units in census tracts heavily populated with residents who are not white – identified as census tracts where the number of non-white residents is more than 1,595 - one standard deviation (653) greater than the mean (542).



	Total Affordable Housing Units	Situated in Majority Non-White Community	Situated in Heavily Non-White Community
OHFA	35,292	12,814 (36.3%)	7,907 (22.4%)
515	5,384	2,229 (41.4%)	1,288 (23.9%)
LIHTC	23,537	10,285 (43.7%)	5,677 (24.1%)
Total	64,213	25,328 (39.4%)	14,872 (23.2%)

#### 4. Immigrant Enclaves

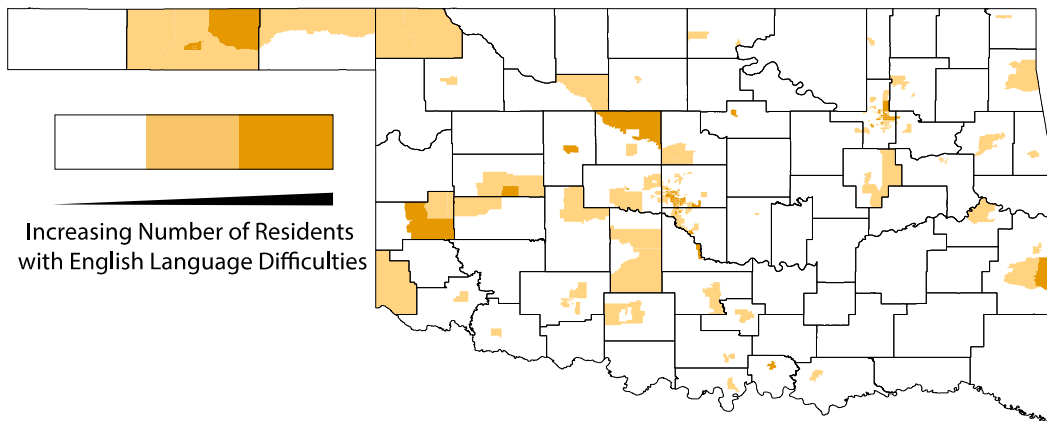
One-third of affordable housing units in Oklahoma are located in census tracts where more than the average number of residents are immigrants. About half of these units are located in areas dense with immigrants, where the number of individuals who are not citizen exceeds 349, more than one standard deviation (219) from the mean (130).



	Total Affordable Housing Units	Situated in Immigrant Enclave	Situated in Heavily Immigrant Enclave
OHFA	35,292	8,114 (23.0%)	3,358 (9.5%)
515	5,384	1,017 (18.9%)	159 (3.0%)
LIHTC	23,537	5,457 (23.2%)	3,364 (14.3%)
Total	64,213	14,588 (22.7%)	6,881 (10.7%)

5. Limited English Proficiency

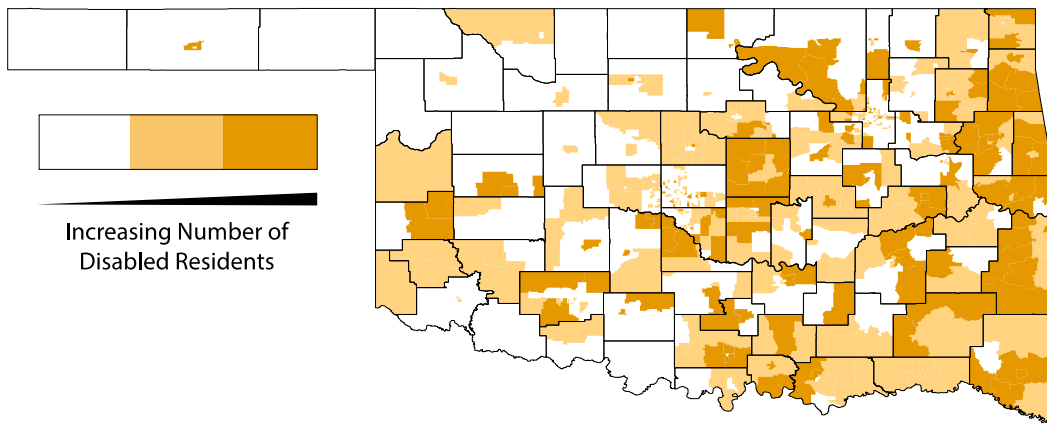
Almost 17,000 existing affordable housing units in Oklahoma are located in census tracts where more residents than average do not speak English very well. A little more than half of these units are located in areas dense with individuals with limited English proficiency, where the number of individuals who speak English less than very well exceeds 380, more than one standard deviation (240) from the mean (140).



	Total Affordable Housing Units	Community with more than average number of Limited English Speakers	Community dense with limited English Speakers
OHFA	35,292	6,250 (17.7%)	3,122 (8.8%)
515	5,384	799 (14.8%)	240 (4.5%)
LIHTC	23,537	4,034 (17.1%)	3,475 (14.8%)
Total	64,213	11,083 (17.3%)	6,837 (10.6%)

6. Disability

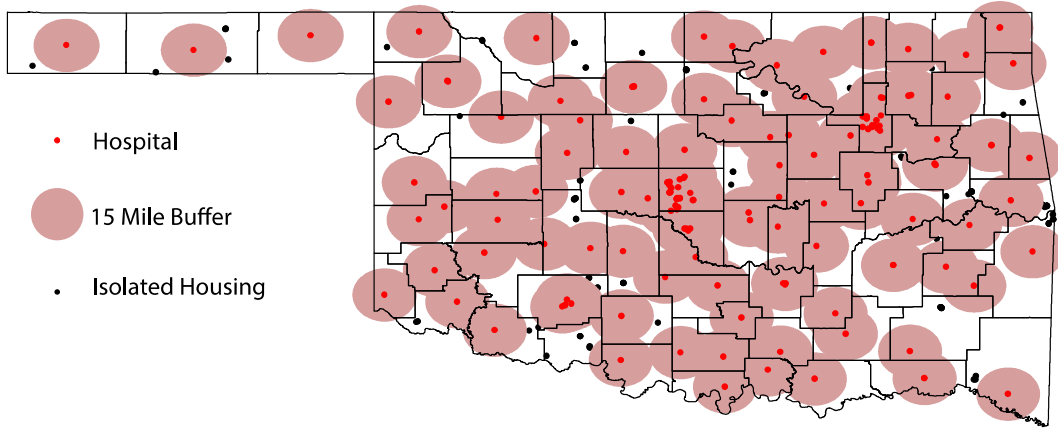
Almost 60% of existing affordable housing units in Oklahoma are located in census tracts where more residents than average have a disability. A little more than half of these units are located in areas dense with individuals with a disability, where the number of individuals who are disabled is greater than 831, more than one standard deviation (289) from the mean (542).



	Total Affordable Housing Units	Community with more than average number of Disabled Residents	Community dense with Disabled Residents
OHFA	35,292	10,098 (28.6%)	10,722 (30.4%)
515	5,384	1,686 (31.3%)	2,594 (48.8%)
LIHTC	23,537	7,074 (30.1%)	6,289 (26.7%)
Total	64,213	18,858 (29.4%)	19,605 (30.5%)

7. Hospitals

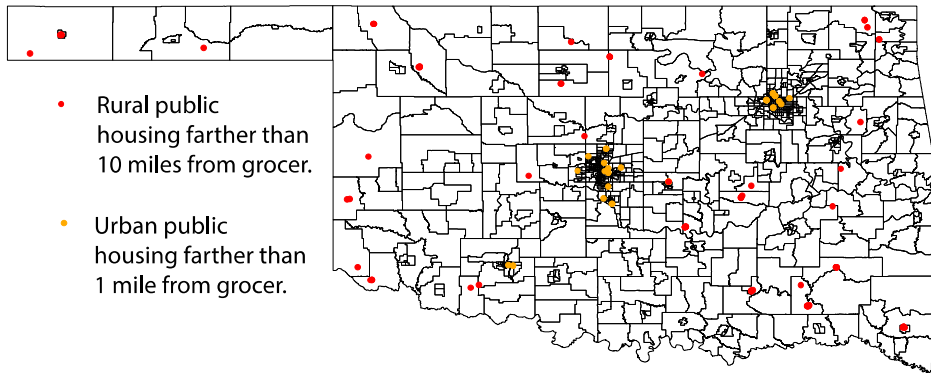
There are no affordable housing units more than 30 miles from a hospital. Approximately 2.6% of affordable housing units are farther than 15 miles from the nearest hospital. As indicated by the larger percentage of Rural Rental Housing Loan units, most of these are located in rural areas.



	Total Affordable Housing Units	More than 15 miles to nearest hospital	More than 30 miles to nearest hospital
OHFA	35,292	628 (1.8%)	0
515	5,384	500 (9.3%)	0
LIHTC	23,537	532 (2.3%)	0
Total	64,213	1,660 (2.6%)	0

8. Grocery Stores

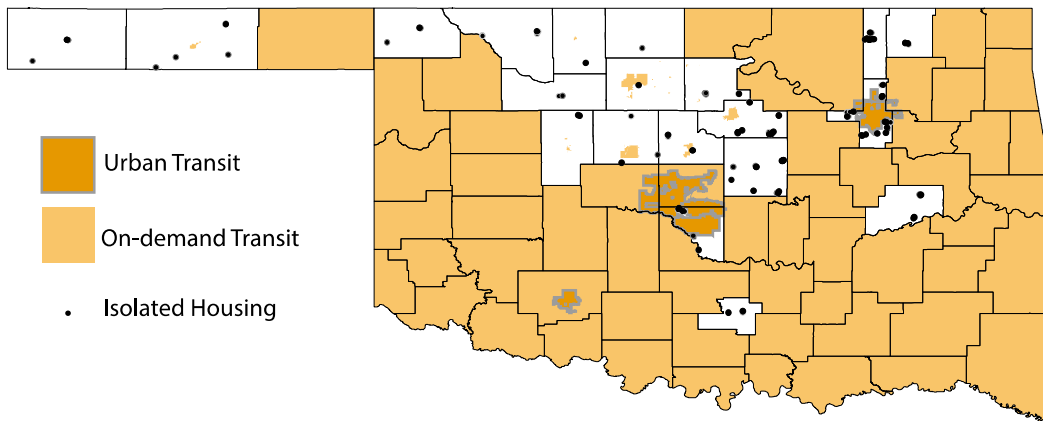
Approximately 7.8% of affordable housing units are in areas that are classified as food deserts. According to the United States Department of Agriculture, food deserts exist in urban environments further than 1 mile from a grocery store and in rural environments further than 10 miles from a grocery store (<https://apps.ams.usda.gov/fooddeserts/foodDeserts.aspx>).



	Total Affordable Housing Units	Urban > 1 Mile from nearest Grocer	Rural > 10 miles to nearest Grocer
OHFA	35,292	1,493 (4.2%)	1,097 (3.1%)
515	5,384	0	466 (8.7%)
LIHTC	23,537	1,175 (5.0%)	769 (3.3%)
Total	64,213	2,668 (4.2%)	2,332 (3.6%)

9. Transit

A little over 69% of affordable housing in Oklahoma is located in a census tract with limited or no access to transit services. This includes 8,367 affordable housing units in areas that lack public transit services all together as well as 36,363 units that are situated in areas that have on-demand transportation services that often have limited operation times and may only serve elderly and disabled populations or those going to a medical appointment.



	Total Affordable Housing Units	No Transit	Urban Transit	On-Demand Transit
OHFA	35,292	4,035 (11.4%)	11,265 (31.9%)	19,992 (56.6%)
515	5,384	767 (14.2%)	0	4,617 (85.8%)
LIHTC	23,537	3,565 (15.1%)	8,217 (34.9%)	11,755 (49.9%)
Total	64,213	8,367 (13.0%)	19,482 (30.3%)	36,363 (56.6%)



**What does this mean for Oklahoma?**

This report suggests a number of possible ways forward for the Oklahoma Housing Finance Agency as it continues to support quality low-income and workforce housing for residents of the state. Across a number of indicators of opportunity, affordable housing in the state clusters in ways that raise concerns about the opportunities available to affordable housing residents in comparison to other residents.

Continued efforts to improve the quality of life for affordable housing residents and reduce discrimination associated with affordable housing will likely need to include strategies that integrate new affordable housing as well as support existing communities of affordable housing. This will likely include public policies and funding designed to integrate low-income and workforce housing into a more diverse set of communities. Additionally, those living existing affordable housing communities need increased opportunities to stay in place, become self-sufficient, and participate in determining the future of their neighborhood. OHFA may consider partnering with other state, non-profit, and for-profit agencies to explore strategies for helping communities thrive economically, socially, and environmentally.

Moving ahead, Oklahoma should be wary of a narrowly focused vision focused solely on the problems of existing affordable housing and the integration of these residents into other communities. The relocation of residents harkens back to the physical and social destruction brought about by urban renewal. Such an approach pits efforts to enhance existing affordable housing through community development against efforts to build a more integrated and diverse society (Goetz 2015). Rather, Oklahoma has the opportunity to work closely with local municipalities to improve the conditions of current affordable housing communities while simultaneously advancing integration of low-income and workforce housing through the construction in new settings.

For future new development, a number of case studies and emerging scholarship on the importance of neighborhood effects provide guidance on possible ways forward for Oklahoma. For instance, in El Paso, Texas a public private partnership between the Housing Authority of the City of El Paso and private developers led to the development of a mixed income housing development. Eastside Crossings (<http://www.hacep.org/about-us/eastside-crossings>) provides 74 traditional affordable housing units, 79 affordable housing units, and 45 market rate units in partnership with the Texas Department of Housing and Community Affairs (Housing Authority of El Paso 2015). In Sacramento, partnership between private developers and the Capital Area Redevelopment Authority resulted in the adaptive reuse of a building listed on the National Register of Historic Buildings into affordable Housing (Vellinga 2015). Located in a dense, walkable, transit-oriented community, the Warehouse Artist Lofts (<http://www.rstreetwal.com>) are home to 116 units, 86 of which are affordable and 13,000 square feet of ground floor retail.

For existing affordable housing, strategies exist to help enhance localized opportunities and build a culture of community participation around housing. Across the nation, there is a need to refocus the discussion away from the deficits found in many communities to look for closely at opportunities (Lens 2015) and to think about the consequences of physical, social, and economic isolation (Clarke, Morenoff, Debbink, Golberstein, Elliott, & Lantz, 2014.).

The Oklahoma Housing Finance Agency may need to collaborate more closely with other governmental agencies to develop comprehensive strategies that not only improve existing housing but also work toward enhancing access to food, recreation, amenities, jobs, and quality schools. By doing so, OHFA could help build the social and physical resiliency of these communities so that residents would be empowered to choose for themselves whether or not they want to stay and be part of their existing community or move elsewhere in search of a better quality of life. A set of tools for doing some of this work is available through Policy Link (<http://www.policylink.org/equity-tools/equitable-development-toolkit/about-toolkit>). For those who are relocated due to circumstances that make staying in place impossible, intensive case management may be required to ensure that these residents avoid pitfalls and thrive in a new environment (Theodos, Popkin, Guernsey, & Getsinger, 2010). But evidence continues to suggest that stability, particularly in the lives of children, is an essential part of ensuring that everyone has the opportunity to succeed and thrive (HUD 2014).

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**Data Sources**

## 2014 American Community Survey Estimates

- Poverty: ACS\_13\_5YR\_S1701 > HC02\_EST\_VC01 > Below poverty level; Estimate; Population for whom poverty status is determined
- Non-white enclaves: ACS\_13\_5YR\_BO2001 > HD01\_VD02 > [Total Population] - Estimate; Total: - White alone
- Immigrant enclaves: ACS\_13\_5YR\_BO5001 > HD01\_VD06 > Estimate; Total: - Not a U.S. citizen
- Limited English Proficiency: ACS\_13\_5YR\_S1601 > HC03\_EST\_VC01 > Percent of specified language speakers - Speak English less than "very well"; Estimate; Population 5 years and over
- Disability: ACS\_13\_5YR\_S1810 > HC02\_EST\_VC01 > with a disability; estimate; total civilian noninstitutionalized population

## University of Oklahoma Center for Spatial Analysis: Data Warehouse

- Hospital locations as of 2008 derived from Oklahoma State Department of Health, Health Care Information Division.

## University of Oklahoma Division of Regional and City Planning

- Grocery store locations retrieved from Internet search conducted by faculty and student research assistants at the University of Oklahoma.
- Transit locations retrieved from Oklahoma Department of Transportation (<http://www.okladot.state.ok.us/transit/pubtrans.htm>) and geocoded by faculty and student research assistants at the University of Oklahoma.

**Appendix 1: County affordable housing Summaries**

County	Total Units	Units at Risk for Poverty	Units in mostly Non-white Enclaves	Units in Community of Immigrants	Units in Limited English Neighborhood	Units nearer Elevated Number of Disabled	Units farther than 15 miles to Hospital	Units located in a Food Desert	Units that lack readily available Transit
Adair	676	676	676	0	0	177	0	0	0
Alfalfa	93	0	0	0	0	0	93	0	23
Atoka	145	121	0	0	0	0	24	145	24
Beaver	0	0	0	0	0	0	0	0	0
Beckham	343	87	228	0	228	315	0	28	0
Blaine	169	0	0	127	127	0	24	0	42
Bryan	1,005	538	501	0	0	501	0	0	0
Caddo	658	292	387	0	0	292	95	0	0
Canadian	1,655	0	248	0	0	0	48	24	0
Carter	1,040	373	938	189	0	972	24	24	24
Cherokee	1,359	986	412	0	0	436	0	13	0
Choctaw	433	312	0	0	0	0	0	0	0
Cimarron	69	0	0	0	0	0	8	69	69
Cleveland	2,389	1,080	194	758	648	601	0	214	718
Coal	71	0	0	0	0	71	0	0	0
Comanche	1,214	200	182	0	0	225	123	151	24
Cotton	114	0	0	0	0	0	114	0	0
Craig	290	0	0	0	0	157	0	72	0
Creek	1,359	163	163	0	0	670	0	0	0
Custer	255	78	0	0	0	172	0	0	0
Delaware	712	695	285	0	0	712	28	0	0
Dewey	75	0	0	0	0	0	16	0	0
Ellis	39	0	0	0	0	0	0	0	0
Garfield	824	683	127	0	0	0	0	52	50

County	Total Units	Units at Risk for Poverty	Units in mostly Non-white Enclaves	Units in Immigrant Enclaves	Units in Limited English Neighborhood	Units nearer Elevated Number of Disabled	Units farther than 15 miles to Hospital	Units located in a Food Desert	Units that lack readily available Transit
Garvin	557	0	0	0	0	265	0	0	0
Grady	758	71	0	0	0	621	71	0	0
Grant	8	0	0	0	0	0	8	8	8
Greer	100	0	0	0	0	0	0	0	0
Harmon	62	0	0	0	0	0	0	2	0
Harper	50	0	0	0	0	0	14	36	50
Haskell	63	0	0	0	0	0	0	0	0
Hughes	341	0	0	0	0	0	0	76	0
Jackson	322	18	18	0	18	0	30	30	0
Jefferson	36	0	0	0	0	0	0	0	0
Johnston	517	493	0	0	0	493	0	0	0
Kay	1,001	196	168	0	0	344	0	0	0
Kingfisher	153	0	0	8	8	0	8	8	40
Kiowa	143	0	0	0	0	0	0	0	0
Latimer	220	0	0	0	0	220	0	0	0
Le Flore	1,050	204	0	0	0	573	166	0	0
Lincoln	705	143	0	0	0	705	42	0	705
Logan	629	0	0	0	0	300	0	0	158
Love	62	0	0	62	0	0	0	0	0
Major	76	0	0	0	0	0	0	0	76
Marshall	134	0	109	109	109	109	0	0	0
Mayes	546	382	218	0	0	382	0	0	0
McClain	346	55	0	0	47	299	0	0	0
McCurtain	767	767	746	0	0	767	57	315	0
McIntosh	488	0	0	0	0	169	0	0	488

County	Total Units	Units at Risk for Poverty	Units in mostly Non-white Enclaves	Units in Community of Immigrants	Units in Limited English Neighborhood	Units nearer Elevated Number of Disabled	Units farther than 15 miles to Hospital	Units located in a Food Desert	Units that lack readily available Transit
Murray	224	95	0	0	0	224	0	0	224
Muskogee	1,572	642	59	0	0	44	48	0	0
Noble	387	0	0	0	0	0	42	30	345
Nowata	229	0	0	0	0	185	0	0	229
Okfuskee	214	169	0	0	0	213	0	1	0
Oklahoma	11,497	3,920	3,518	2,445	2,641	456	0	1,202	25
Okmulgee	663	303	227	0	0	127	0	0	0
Osage	1,544	538	700	0	0	1,391	42	0	0
Ottawa	409	0	0	0	0	96	0	84	0
Pawnee	65	0	0	0	0	0	37	20	0
Payne	1,797	1,209	0	120	120	648	0	0	971
Pittsburg	1,268	0	50	0	0	284	16	16	0
Pontotoc	810	311	286	0	0	336	0	0	0
Pottawatomie	1,715	1,009	587	0	0	954	0	284	0
Pushmataha	381	234	0	0	0	381	147	381	0
Roger Mills	14	0	0	0	0	0	0	14	0
Rogers	973	0	0	0	0	0	36	0	0
Seminole	426	76	75	0	0	75	0	123	0
Sequoyah	1,449	922	922	0	0	726	243	0	0
Stephens	841	0	0	0	0	310	12	0	0
Texas	816	0	372	782	782	372	60	6	75
Tillman	114	0	0	0	0	0	0	0	0
Tulsa	9,868	4,750	1,807	2,281	2,109	1,419	0	1,441	2,220
Wagoner	1,094	691	461	0	0	701	0	0	0
Washington	1,262	0	108	0	0	108	0	0	1,262
Washita	189	0	0	0	0	0	0	0	0

County	Total Units	Units at Risk for Poverty	Units in mostly Non-white Enclaves	Units in Community of Immigrants	Units in Limited English Neighborhood	Units nearer Elevated Number of Disabled	Units farther than 15 miles to Hospital	Units located in a Food Desert	Units that lack readily available Transit
Woods	65	0	0	0	0	0	2	0	65
Woodward	161	0	0	0	0	0	0	60	0



## Lead-Based Paint Hazards

### Findings / Health and Well-being

Lead is known to be highly toxic particularly to young children 5 years of age and under. Excessive exposure results in reduced intelligence, impaired hearing, reduced stature and a host of other negative health effects. It is well documented that a common source of lead exposure for children is lead-based paint in older housing along with the dust and soil it generates. Children are exposed to lead-based paint most commonly by directly eating paint chips or indirectly by ingesting lead-contaminated house dust or soil through normal hand-to-mouth contact.

For purposes of this analysis, the federal definition of “lead-based paint hazard” at 24 CFR Part 35.86 was applied. Under this definition, lead-based paint hazard is defined as, “...any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by the appropriate Federal agency.”

It is noteworthy estimates presented can only be stated as dwellings that “potentially” have LBP hazards because there are no real-time surveys or studies of residential structures built prior to 1978. However, there have been previous estimations provided in the state’s Consolidated Plan.

### Statewide Findings

Using methodology which will be discussed later in this section, we have estimated the number of housing units in Oklahoma with lead-based paint hazards as defined in 24 CFR Part 35.86. Our estimates are shown in the following table.

<b>Lead-Based Paint Hazards in Oklahoma</b>		
	Number	Percent
Total Housing Units	1,432,730	
Total Housing Units with Lead-Based Paint Hazards	240,229	16.8%
Owner-Occupied Units w/LBP Hazards	159,861	66.5%
Renter-Occupied Units w/LBP Hazards	80,368	33.5%
Housing Units w/LBP Hazards Occupied by Low-to-Moderate Income Households	113,931	47.4%
Housing Units w/LBP Hazards with Children < 6 Years of Age Present	37,426	15.6%
Housing Units w/LBP Hazards Occupied by LMI Households and Children < 6 Years of Age Present	19,761	52.8%

Sources: American Healthy Homes Survey Table 5-1 & CHASTables 12 & 13

As shown, we estimate that there are 240,229 housing units in Oklahoma containing lead-based paint hazards, representing 16.8% of Oklahoma’s total housing stock. 66.5% of those units are owner-occupied, while 33.5% are renter-occupied. Of the 240,229 housing units containing lead-based paint hazards, 113,931 units, or 47.4%, are occupied by households with low-to-moderate incomes as defined by HUD. Among all housing units with lead-based paint hazards, 37,426 units have children under the age of six present, and 52.8% of those units, or 19,761 units total, are households with low-to-moderate incomes. Exhibits 2 through 6, found at the end of this section, graphically summarize our statewide findings at a county level.

**Disaster Resiliency/ Economy and Society, Infrastructure and Environment**

While communities strive to address lead-based paint hazards through education and removal when detected in connection with federally funded local housing rehabilitation initiatives, hazard detection and mitigation may have special considerations in terms of disaster resiliency.

Many disasters are accompanied by widespread damage to residential structures often times scattering building material debris across the landscape necessitating removal by heavy equipment and disposal in landfills. When building materials contaminated with lead-based paint become part of non-contaminated debris disposal, it presents an environmental hazard that can span well beyond recovery and rebuilding efforts.

**Leadership and Strategy**

Given the albeit large but finite number of potential housing units with lead hazards, the state and local communities may wish to consider initiatives aimed at reducing and/or eventually eliminating residential lead-based paint hazards, particularly in housing occupied by low and moderate income households with young children present. One such initiative could be the use of the state's various federal and state housing programs' competitive funding selection criteria. By designing rating criteria that specifically awards points to applicants that purposefully seek out properties within counties known to have higher percentages of lead hazards, housing developers along with those engaged in rehabilitation may be incentivized to engage in hazard mitigation.

State and local governments may wish to capitalize on the results of this study by using the data to support competitive applications to the Federal Home Loan Bank Topeka's Affordable Housing Program funding for owner occupied rehabilitation which, among other competitive rating criteria, awards points for the "Abatement of Hazardous Environmental Conditions". Similarly, this report's data may be used to document hazards and need in applications for competitive health care grants offered at the federal level.

Similar to initiatives undertaken by USHUD, the state may want to consider undertaking a real-time sample survey of homes built prior to 1978 across the state's community sizes and counties to more accurately ascertain the extent of the hazard and/or conducting real-time surveys of LBP Risk Assessors licensed by the ODEQ.

**Survey of Previous Lead-based Paint Studies**

Using a combination of US Census Bureau and US Department of Housing and Urban Development Comprehensive Housing Affordability Strategy data and age of housing stock built prior to 1980, the Oklahoma Department of Commerce's, "State of Oklahoma Five-Year E-Consolidated Plan FY 2014 – 2018" estimated 59% of the owner occupied and 65% of the renter occupied housing had the potential of containing lead-based paint. To address lead paint hazards, the Consolidated Plan recommended assessment of hazard presence be conducted at the point dwelling rehabilitation is undertaken and that nonprofits advise persons receiving federal rehabilitating assistance regarding the dangers of lead exposure.

At the national level, between 1998 and 2000, USHUD Office of Health Homes and Lead Hazard Control staff and the National Institute of Environmental Health Sciences conducted a real-time

random sampling of 831 permanently occupied housing units (multifamily, single family and mobile homes) taken from all 50 states and the District of Columbia. The results indicated an estimated 38 million (39% of the 96 million total housing units) of the nation's housing units had lead-based paint hazards. Of that total, 24 million had significant lead hazards with 1.2 million of those units occupied by low income families. It was further estimate that 35% of all low income housing had lead-based paint hazards. The study also noted the prevalence of lead-based paint increases with age of housing. However, most painted surfaces, even in older homes don't have lead paint. Geography was found to be related to the incidence of lead-based paint with the Northeast and Midwest having 2 times the prevalence of lead paint than the South and West. Finally, the study recommends "public-private sector resources be directed units posing the greatest risk" as a preventive measure to avoid lead poisoning.

In April 2011, the U.S. Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control updated its 1998-2000 nationwide report in its publication, "American Healthy Homes Survey, Lead and Arsenic Findings". This report, conducted from June 2005 through March 2006, estimated 37.1 million homes (34.9%) out of a total of 106 million total housing units have lead-based paint somewhere in the building. Of the 65.6 million homes built before 1978, 34.4 million (52%) have lead-based paint. The study reaffirmed the previous finding that the prevalence of lead-based paint is higher in the Northeast and Midwest parts of the United States than South and West. It also confirmed earlier finding that the incidence of lead-based paint increases with age of housing with 86% of the homes built prior to 1940 containing lead. An estimated 3.6 million homes with children less than 6 years of age have lead-based paint hazards of which 1.1 million are low income households. Of the 16.8 million homes with children under the age of 6, 5.7 million (34%) have lead-based paint, about the same incidence of lead-based paint in all homes.

In June 2006, the Oklahoma State Department of Health's Childhood Lead Poisoning Prevention Program (OCLPPP) received a 5-year project grant "Oklahoma Childhood Lead Poisoning Prevention Program Focusing in High Risk Groups". That program focused on communities evidencing high numbers of children 6-72 months of age who are at high risk for lead poisoning.

In order to more effectively target high-risk areas and populations, the OCLPPP identified 21 high-risk target area (HRTA) zip codes (see Exhibit #1) located within Oklahoma, Tulsa, Muskogee, Jackson, Okmulgee, Ottawa, Kay, Garfield, and Hughes counties. These 21 zip codes were narrowed from a list of 57 zip codes out of the state's approximately 700 zip codes that with populations of 5,000 or more persons; greater than or equal to 22% of housing stock built prior to 1950; and, greater than or equal to 18% of children under the age of 6 years living below the poverty level.

The 57 zip codes were further compared and evaluated based on selected characteristics such as EBL cases and proportion of minority population. Zip codes with higher EBL prevalence and/or minority populations (Hispanic/African American/American Indian) were ranked higher and given the designation as HRTA zip codes.

### **Seminole County Findings**

The number of housing units in Seminole County containing lead-based paint hazards can be estimated by applying the percentages of housing units with such hazards reported by the American

Healthy Homes Survey, to the number of occupied homes in Seminole County, by year of construction. The following table presents the percentage of housing units in the Census Bureau South Region based on the AHHS findings.

#### Housing Units in the South Census Region with Lead-Based Paint Hazards by Year of Construction

Year of Construction	No. of Housing Units (000s)	Units w/ LBP Hazards (000s)	Percent of Units w/ LBP Hazards
1978-2005	18,625	664	3.6%
1960-1977	11,724	1,311	11.2%
1940-1959	5,575	2,145	38.5%
1939 or Earlier	3,072	1,947	63.4%
<b>Total</b>	<b>38,996</b>	<b>6,067</b>	<b>15.6%</b>

Source: U.S. Dept. of Housing and Urban Development, American Healthy Homes Survey, Table 5-1

These percentages can then be applied to the number of housing units in Seminole County, by year of construction and by tenure (owner-occupied versus renter-occupied), as reported by HUD's Comprehensive Housing Affordability Strategy (CHAS) data for Seminole County.

#### Total Housing Units in Seminole County with Lead-Based Paint Hazards by Tenure

Total Owner-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	2,553	3.57%	91
1960-1977	1,917	11.18%	214
1940-1959	1,335	38.48%	514
1939 or Earlier	940	63.38%	596
<b>Total</b>	<b>6,745</b>	<b>20.98%</b>	<b>1,415</b>

Total Renter-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	662	3.57%	24
1960-1977	828	11.18%	93
1940-1959	605	38.48%	233
1939 or Earlier	410	63.38%	260
<b>Total</b>	<b>2,505</b>	<b>24.30%</b>	<b>609</b>

Total Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	3,215	3.57%	115
1960-1977	2,745	11.18%	307
1940-1959	1,940	38.48%	746
1939 or Earlier	1,350	63.38%	856
<b>Total</b>	<b>9,250</b>	<b>21.88%</b>	<b>2,024</b>

Sources: American Healthy Homes Survey Table 5-1 & CHAS Table 12

Finally, we can use the same methodology to estimate the number of housing units in Seminole County with lead-based paint hazards, occupied by households with low-to-moderate incomes, by tenure:

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**Housing Units in Seminole County with Lead-Based Paint Hazards by Tenure,  
Occupied by Low-Income Families**


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Owner-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	466	3.57%	17
1960-1977	369	11.18%	41
1940-1959	330	38.48%	127
1939 or Earlier	250	63.38%	158
<b>Total</b>	<b>1,415</b>	<b>24.26%</b>	<b>343</b>

---

Renter-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	318	3.57%	11
1960-1977	387	11.18%	43
1940-1959	380	38.48%	146
1939 or Earlier	185	63.38%	117
<b>Total</b>	<b>1,270</b>	<b>25.04%</b>	<b>318</b>

---

Total Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	784	3.57%	28
1960-1977	756	11.18%	85
1940-1959	710	38.48%	273
1939 or Earlier	435	63.38%	276
<b>Total</b>	<b>2,685</b>	<b>24.63%</b>	<b>661</b>

Sources: American Healthy Homes Survey Table 5-1 & CHAS Table 12

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**Housing Units in Seminole County with Lead-Based Paint Hazards by Tenure,  
Occupied by Moderate-Income Families**


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Owner-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	344	3.57%	12
1960-1977	441	11.18%	49
1940-1959	270	38.48%	104
1939 or Earlier	205	63.38%	130
<b>Total</b>	<b>1,260</b>	<b>23.44%</b>	<b>295</b>

---

Renter-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	169	3.57%	6
1960-1977	171	11.18%	19
1940-1959	100	38.48%	38
1939 or Earlier	100	63.38%	63
<b>Total</b>	<b>540</b>	<b>23.52%</b>	<b>127</b>

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Total Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	513	3.57%	18
1960-1977	612	11.18%	68
1940-1959	370	38.48%	142
1939 or Earlier	305	63.38%	193
<b>Total</b>	<b>1,800</b>	<b>23.47%</b>	<b>422</b>

Sources: American Healthy Homes Survey Table 5-1 & CHAS Table 12

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To conclude, we estimate that there are a total of 2,024 homes in Seminole County containing lead-based paint hazards, 1,415 owner-occupied and 609 renter-occupied. Of the 2,024 homes in the county estimated to have lead-based paint hazards, 661 are estimated to be occupied by households with low-incomes (incomes less than 50% of Area Median Income), and 422 are estimated to be occupied by households with moderate incomes (between 50% and 80% of Area Median Income), for a total of 1,084 housing units in Seminole County with lead-based paint hazards occupied by households with low or moderate incomes.

**Lead-Based Paint Hazards in Homes with Children Present**

Using the same methodology, we can estimate the number of housing units in Seminole County occupied by households with children under the age of six present. For this analysis we apply the lead-based paint hazards percentages from the American Healthy Homes Survey to the data in HUD CHAS Table 13, which details housing units by year of construction, household income, and presence of children under the age of six. The data is presented in the following table:

### Housing Units in Seminole County with Lead-Based Paint Hazards with Children under Age 6 Present Occupied by Low or Moderate-Income Families

Housing Units < 50% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	152	3.57%	5
1940-1977	219	19.98%	44
1939 or Earlier	89	63.38%	56
<b>Total</b>	<b>459</b>	<b>22.98%</b>	<b>105</b>

Housing Units 50%-80% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	100	3.57%	4
1940-1977	185	19.98%	37
1939 or Earlier	65	63.38%	41
<b>Total</b>	<b>350</b>	<b>23.36%</b>	<b>82</b>

Total LMI Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	251	3.57%	9
1940-1977	404	19.98%	81
1939 or Earlier	154	63.38%	98
<b>Total</b>	<b>809</b>	<b>23.14%</b>	<b>187</b>

Total Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	497	3.57%	18
1940-1977	708	19.98%	141
1939 or Earlier	224	63.38%	142
<b>Total</b>	<b>1,429</b>	<b>21.07%</b>	<b>301</b>

Sources: American Healthy Homes Survey Table 5-1 & CHAS Table 13

As shown, we estimate there are 301 housing units in Seminole County with lead-based paint hazards and children under the age of six present, and that 187 of those housing units are occupied by families with low to moderate incomes.

#### Research Footnotes/Sources

Oklahoma Department of Commerce, "State of Oklahoma Five-Year E-Consolidated Plan FY 2014 – 2018"

"The Prevalence of Lead-Based Paint Hazards in U.S. Housing", Environmental Health Perspectives, Volume 110, Number 10, October 2002

U.S. Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, "American Healthy Homes Survey, Lead and Arsenic Findings", April 2011

Oklahoma State Department of Health, Oklahoma Childhood Lead Poisoning Prevention Program Focusing in High Risk Groups"

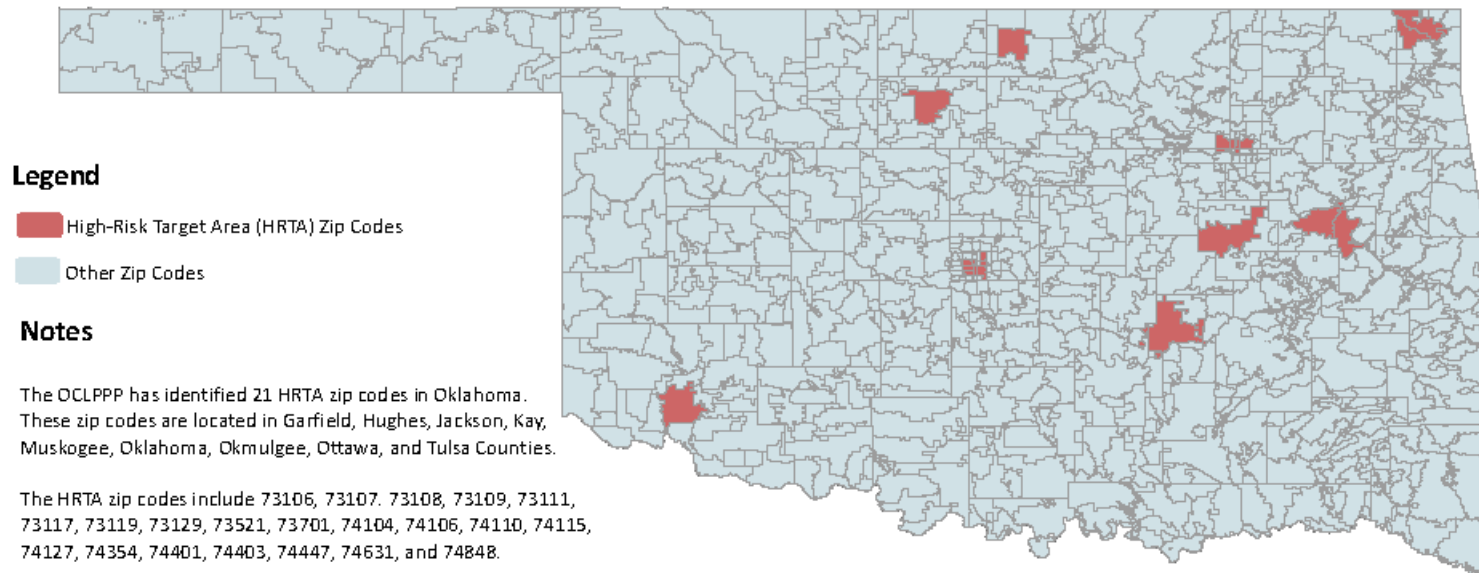
U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy (CHAS), 2007-2011





Exhibit #1

## Map 2: High-Risk Target Areas (HRTA) Zip Codes for Childhood Lead Poisoning



**Legend**

- High-Risk Target Area (HRTA) Zip Codes
- Other Zip Codes

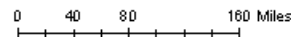
**Notes**

The OCLPPP has identified 21 HRTA zip codes in Oklahoma. These zip codes are located in Garfield, Hughes, Jackson, Kay, Muskogee, Oklahoma, Okmulgee, Ottawa, and Tulsa Counties.

The HRTA zip codes include 73106, 73107, 73108, 73109, 73111, 73117, 73119, 73129, 73521, 73701, 74104, 74106, 74110, 74115, 74127, 74354, 74401, 74403, 74447, 74631, and 74848.

The HRTA zip codes are identified using the following criteria:

- 1- Zip codes having the highest proportion of pre-1950 housing;
- 2- Zip codes having the highest proportion of children under six years of age living in poverty;
- 3- Zip codes having high elevated blood lead level (EBLL) prevalence rate; and
- 4- Zip codes having the highest proportion of minority populations.



Childhood Lead Poisoning Prevention Program  
 Screening and Special Services  
 Prevention and Preparedness Service  
 Oklahoma State Department of Health











## Conclusions

The previous analysis has attempted to describe the state of the residential housing market in Seminole County, Oklahoma. Where possible, information regarding the population centers of the county was included to assess need on a community level. Much of the information is based on demographic information from local authorities and national information services. However, personal interviews were performed with property owners and managers, real estate professionals, and community officials in an effort to substantiate information from the national organizations and understand current market conditions. Several important issues regarding housing have become apparent through this analysis and are identified below.

Seminole County has undergone steady but modest growth over the last fifteen years, in terms of population, households and employment levels. There has been new construction of single family homes for ownership, primarily in the range of \$160,000 and \$220,000 which is well more than could be afforded by a household earning at or less than median household income for Seminole County (estimated to be \$38,394 in 2015).

Seminole County has a relatively moderate rate of renters with high rent costs (37.53%) as well as homeowners with high ownership costs (16.92%). The county's poverty rate is also well above the state, at 22.94% compared with 16.85% statewide.

In terms of disaster resiliency we note that 54 tornadoes have impacted the county between 1959 and 2014, with 87 injuries and 5 fatalities combined. The City of Seminole, and Wewoka, each have notable development in or near floodplains.

Seminole County is located within the Oklahoma Balance of State Continuum of Care (CoC), which provides services to the area's homeless populations among other functions. Throughout the entire Balance of State CoC, there are an estimated 295 homeless persons, 154 of which are estimated to be sheltered. Homeless children under the age of 18 are more likely to be unsheltered than sheltered.

In terms of fair housing issues, many affordable housing units are located in areas at risk for poverty, in primarily non-white enclaves, and in areas with high numbers of persons with one or more disabilities. 123 affordable housing units are considered to be in a food desert.

Due to the age of the county's housing stock, lead-based paint hazards are an issue, with an estimated 2,024 occupied housing units with such hazards, and 301 of those units occupied by low-to-moderate income households with children under the age of 6 present.

In summary, it is apparent that some limited new housing in several categories is required in Seminole County. While the upper end of the market is being satisfied, the lower end of the population that requires rental and moderate cost ownership property has a more limited product available. As the population continues to grow in Seminole County as a whole, this demand will continue to increase. We estimate the county will need 59 housing units for ownership and 21 housing units for rent over the next five years, in order to accommodate projected population and household growth. There is

additional need for either rehabilitation or replacement of existing, older housing; housing with lead-based paint hazards should be a major focus of any such efforts. These units should include a mixture of both market rate rental units, affordable housing units, and housing for ownership affordable to a range of incomes.



## **Addendum A**

### **Acknowledgments**

The Housing Needs Assessment research team extends a special thanks to the following individuals and organizations for their many contributions of data, program information and time that helped make this project possible:

**University of Oklahoma Intern Team**

Derrick “Rhys” Wilson, Eyakem Gulilat, Chase Phillips, Jane Wyrick, Charlotte Adcock, Sam Shreder, Jacquelyn Porter, Amy Wilson, Kevin Wang, Lora Gwartney, Forrest Bennett, Maryam Moradian, Salma Al Nairab

**Federal Agencies**

Federal Reserve Bank of Kansas City-Oklahoma City Branch, Steven Shepelwich

US Federal Emergency Management Agency, Harold Latham

US Department of Housing and Urban Development Oklahoma City Field Office, Jackie McBride

**Oklahoma State Agencies**

Department of Health Karen Fenserly, Susan J. Quigley and Marisa New

Department of Human Services, Connie Schlittler

Department of Emergency Management Dara Hayes

Department of Commerce, Rebekah Zahn-Pittser

**Local Organizations**

Regional Council of Governments and Oklahoma Association of Regional Councils

Continuums of Care Network

Hazard Mitigation Plan personnel/administrators

Community economic development professionals

City Managers and Planners

Community Action Agencies

Chambers of Commerce

Affordable housing developers, owners and investors

Homeless Alliance, Dan Straughan, Sunshine Hernandez



## Addenda

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Pathways, Patrice Pratt

Women's Resource Center, Vanessa Morrison

AIDS Care Fund, Sunshine Schillings

# **Addendum B**

## **Qualifications**



# Owen S. Ard, MAI

## Experience

Senior Managing Director of Integra Realty Resources - Tulsa/OKC, a full service valuation and consulting firm. Actively engaged in real estate valuation and consulting assignments since 1984, Mr. Ard has performed appraisal services consisting of narrative and summary real estate appraisals, ad valorem tax protests, consulting, litigation support services, market and feasibility studies, reviews, market study analyses and appraisals in connection with allocation of tax credits, brokerage services for commercial and residential transactions, property management, and expert litigation testimony. All types of real property are encompassed -apartments, ranches, theaters, hotel/motel, multi-purpose and resort properties, golf courses, high-rise and garden office buildings, manufacturing facilities, warehousing and distribution centers, nursing homes, assisted living facilities, banks, shopping centers and malls, residential subdivisions, industrial parks, and sports arenas. Valuations and market studies have been prepared on proposed, partially completed, renovated and existing structures. Appraisals have been made for condemnation purposes, estates, mortgage financing, equity participation and due diligence support. Clients served include corporations, law firms, financial institutions, investment firms and public/private agencies.

## Professional Activities & Affiliations

Central Oklahoma Chapter, Appraisal Institute (Past Chapter President)  
National Association of Realtors  
Urban Land Institute  
National Council of Affordable Housing Market Analysts  
Appraisal Institute National Committees  
Tulsa Metropolitan Area Planning Commission  
Tulsa Preservation Commission  
Tulsa Local Development Act Review Committee  
Appraisal Institute, Member (MAI)

## Licenses

Oklahoma, Oklahoma General Appraiser License, 11245CGA, Expires April 2018

## Education

B.S.B.A. Degree, Marketing, University of Tulsa, Tulsa, Oklahoma (1984)

Successfully completed numerous real estate related courses and seminars sponsored by the Appraisal Institute, accredited universities and others.

Currently certified by the Appraisal Institute's voluntary program of continuing education for its designated members.

## Qualified Before Courts & Administrative Bodies

District Court of Tulsa County, Oklahoma  
District Court of Oklahoma County, Oklahoma  
District Court of Garfield County, Oklahoma  
Tulsa County Board of Equalization

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# Owen S. Ard, MAI

## Qualified Before Courts & Administrative Bodies (Cont'd)

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United States Federal Bankruptcy Court, Tulsa, Oklahoma  
United States Federal Bankruptcy Court, Minneapolis, Minnesota  
United States Federal Bankruptcy Court, Jackson, Mississippi

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# David A. Puckett

## Experience

Senior Director with Integra Realty Resources - Oklahoma, a full service valuation and consulting firm. Actively engaged in real estate valuation and consulting assignments since May 2002, Mr. Puckett has performed appraisal services consisting of narrative and summary real estate appraisals. All types of real property are encompassed-apartments, garden office buildings, manufacturing and warehouse industrial buildings, mobile home parks, restaurants and retail structures. Valuations and market studies have been prepared on proposed and existing structures. Appraisals have been made for estates, mortgage financing, equity participation and due diligence support. Prior to his employ at Integra Realty Resources - Oklahoma, Mr. Puckett was an employee of the University of Oklahoma Center for Business and Economic Development, working as a data analyst for the All County Affordable Housing Study commissioned by the Oklahoma Department of Commerce. Responsibilities included demographic, economic and real estate data collection from federal, state and local sources, as well as interviews of regional planning district, county and municipal officials, real estate market experts and local economic development experts. Mr. Puckett was responsible for site visits of 23 of the 77 Oklahoma counties, and personally authored 18 of the final reports. As an employee of IRR-Oklahoma, Mr. Puckett also performed the site visits and authored the final reports for four of the nine entitlement cities: Tulsa, Broken Arrow, Shawnee and Lawton. Mr. Puckett has also completed numerous housing market studies for use in applications for Federal Low-Income Housing Tax Credits in Oklahoma, Kansas, Missouri and Arkansas, and has performed market studies and appraisals for use in H.U.D.'s Multifamily Accelerated Processing (M.A.P.) program. Clients served include corporations, financial institutions, investment firms and public/private agencies.

## Professional Activities & Affiliations

Appraisal Institute-Candidate for Designation

## Licenses

Oklahoma, Oklahoma General Appraiser License, 12795CGA, Expires December 2016

## Education

University of Oklahoma, Norman – Bachelor of Arts (Economics)

Successfully completed the following Appraisal Institute courses and seminars:

- Uniform Standards of Professional Appraisal Practice, 15-Hour
- Introduction to Income Capitalization Seminar
- Basic Income Capitalization 310
- Advanced Income Capitalization 510
- Highest and Best Use and Market Analysis 520
- Advanced Sales Comparison and Cost Approaches 530
- Report Writing and Valuation Analysis 540
- Advanced Concepts and Case Studies
- Real Estate Finance Statistics and Valuation Modeling
- Business Practices and Ethics 420

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# Integra Realty Resources, Inc.

## Corporate Profile

Integra Realty Resources, Inc. offers the most comprehensive property valuation and counseling coverage in North America with over 60 independently owned and operated offices located throughout the United States and the Caribbean. Integra was created for the purpose of combining the intimate knowledge of well-established local firms with the powerful resources and capabilities of a national company. Integra offers integrated technology, national data and information systems, as well as standardized valuation models and report formats for ease of client review and analysis. Integra's local offices have an average of 25 years of service in the local market, and virtually all are headed by a Senior Managing Director who is an MAI member of the Appraisal Institute.

A listing of IRR's local offices and their Senior Managing Directors follows:

ATLANTA, GA - Sherry L. Watkins, MAI, FRICS  
AUSTIN, TX - Randy A. Williams, MAI, SR/WA, FRICS  
BALTIMORE, MD - G. Edward Kerr, MAI, MRICS  
BIRMINGHAM, AL - Rusty Rich, MAI, MRICS  
BOISE, ID - Bradford T. Knipe, MAI, ARA, CCIM, CRE, FRICS  
BOSTON, MA - David L. Cary, Jr., MAI, MRICS  
CHARLESTON, SC - Cleveland "Bud" Wright, Jr., MAI  
CHARLOTTE, NC - Fitzhugh L. Stout, MAI, CRE, FRICS  
CHICAGO, IL - Eric L. Enloe, MAI, FRICS  
CINCINNATI, OH - Gary S. Wright, MAI, FRICS, SRA  
CLEVELAND, OH - Douglas P. Sloan, MAI  
COLUMBIA, SC - Michael B. Dodds, MAI, CCIM  
COLUMBUS, OH - Bruce A. Daubner, MAI, FRICS  
DALLAS, TX - Mark R. Lamb, MAI, CPA, FRICS  
DAYTON, OH - Gary S. Wright, MAI, FRICS, SRA  
DENVER, CO - Brad A. Weiman, MAI, FRICS  
DETROIT, MI - Anthony Sanna, MAI, CRE, FRICS  
FORT WORTH, TX - Gregory B. Cook, SR/WA  
GREENSBORO, NC - Nancy Tritt, MAI, SRA, FRICS  
GREENVILLE, SC - Michael B. Dodds, MAI, CCIM  
HARTFORD, CT - Mark F. Bates, MAI, CRE, FRICS  
HOUSTON, TX - David R. Dominy, MAI, CRE, FRICS  
INDIANAPOLIS, IN - Michael C. Lady, MAI, SRA, CCIM, FRICS  
JACKSON, MS - John R. Praytor, MAI  
JACKSONVILLE, FL - Robert Crenshaw, MAI, FRICS  
KANSAS CITY, MO/KS - Kenneth Jagers, MAI, FRICS  
LAS VEGAS, NV - Charles E. Jack IV, MAI  
LOS ANGELES, CA - John G. Ellis, MAI, CRE, FRICS  
LOS ANGELES, CA - Matthew J. Swanson, MAI  
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ORLANDO, FL - Christopher Starkey, MAI, MRICS  
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PHOENIX, AZ - Walter "Tres" Winus III, MAI, FRICS  
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PORTLAND, OR - Brian A. Glanville, MAI, CRE, FRICS  
PROVIDENCE, RI - Gerard H. McDonough, MAI, FRICS  
RALEIGH, NC - Chris R. Morris, MAI, FRICS  
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ST. LOUIS, MO - P. Ryan McDonald, MAI, FRICS  
SALT LAKE CITY, UT - Darrin W. Liddell, MAI, FRICS, CCIM  
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SAN FRANCISCO, CA - Jan Kleczewski, MAI, FRICS  
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SAVANNAH, GA - J. Carl Schultz, Jr., MAI, FRICS, CRE, SRA  
SEATTLE, WA - Allen N. Safer, MAI, MRICS  
SYRACUSE, NY - William J. Kimball, MAI, FRICS  
TAMPA, FL - Bradford L. Johnson, MAI, MRICS  
TULSA, OK - Owen S. Ard, MAI  
WASHINGTON, DC - Patrick C. Kerr, MAI, FRICS, SRA  
WILMINGTON, DE - Douglas L. Nickel, MAI, FRICS  
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**EDUCATION:**

Ph.D. Urban and Regional Planning, Florida State University, Tallahassee, FL, 2004.

J.D./M.U.P. Law and Urban Planning, University of Kansas, Lawrence, KS, 2000.

B.S. Urban Affairs and Theatre Arts, Bradley University, Peoria, IL, 1996.

**RESEARCH INTERESTS:**

The legal aspects of land use, affordable housing, historic preservation and aesthetics regulation at the federal, state, and local level.

**WORK EXPERIENCE:**

Associate Professor and Director of Regional and City Planning, University of Oklahoma (07/12-present)

Assistant Professor with a Joint Appointment in Planning and Law, University of Florida (01/08-6/12)

Director of the Center for Building Better Communities, University of Florida (05/11-06/12)

Assistant Professor and Minor Program Coordinator, Texas A&M University (01/05-12/07)

Lecturer, Rutgers University Bloustein Institute (01/06-present)

Lecturer, Texas A&M University (01/04-12/04)

Adjunct Professor, Florida State University (01/03-12/03)

Graduate Teaching Assistant, Florida State University (05/02-12/03)

Legal Intern, 1000 Friends of Florida (05/02-12/03)

Associate, Holland & Knight LLP (05/00-08/01)

**AWARDS:**

Student Planning Award for the Pinellas County Post Disaster Ordinance Drafting Project from the Florida Chapter of the American Planning Association, Fall, 2011.

Award for Service as the University Liaison to the Florida Chapter of the American Planning Association, Fall, 2010.

Teacher of the year award by the UF Student Planning Association, April, 2010.

Best paper in the real estate valuation category by the Appraisal Institute with Kimberly Geideman and Shan Gao, Fall, 2009.

Excellence in Teach Award by the College of Architecture of Texas A & M University, September, 2005.

Student Planning Award by the Texas Chapter of the American Planning Association, Fall, 2007.

Early Dissertation Research Grant to Study the Effects of Intergenerational Planning on Relocation Grief from the U.S. Department of Housing and Urban Development, November, 2003.

**COURSES TAUGHT:**

Principles and Practice of Urban Planning (graduate level, at the University of Oklahoma)

Land Use Controls (graduate level, at the University of Oklahoma)

Sociology of Housing (graduate level, at the University of Oklahoma with Dean Charles Graham)

Growth Management Powers II (graduate-law course, at the University of Florida)

Growth Management Powers I (graduate-law course, at the University of Florida)

Affordable Housing Law (graduate-law course, at the University of Florida)

Planning History and Theory (graduate level, at the University of Florida and Texas A&M University)

Land Use Planning Law (law school, at the University of Florida College of Law)

Land Development Law (graduate level, at Texas A&M University)  
Historic Preservation Law (graduate level, at Texas A&M University)  
Introduction to Urban Planning (undergraduate level, at Texas A&M University and Florida State University)  
Attorney-Client Communications (undergraduate level, at Florida State University)  
Legal Communications (undergraduate level, at Florida State University)  
Environmental Law (continuing education, at Rutgers University)  
Historic Preservation Law (continuing education, at Rutgers University)  
Ordinance Drafting (continuing education, at Rutgers University)

**PUBLICATIONS:**

**Refereed Journal Articles**

K. Frank, J. Macedo, and **D. Jourdan**, Fostering Rural Adaptive Capacity for Sea Level Rise Planning Using Methods of Community Engagement (pending review- special edition of the Journal of the Community Development Society).

**D. Jourdan** and S. Pilat, Preserving Public Housing: Federal, State and Local Efforts to Preserve the Social and Architectural Forms Associated with Housing for the Poor in the *Journal of Preservation Education and Research* (forthcoming).

Ozor, B., K. Frank, and **D. Jourdan**, Confronting Wicked Problems with Games: How Role-Play Informs Planning for Sea Level Rise in Northeast Florida (pending review).

**Jourdan, D.**, A. Ray, and L. Thompson, Relocating from Subsidized Housing in Florida: Are Residents Moving to Opportunity in *Journal of Housing and Community Development Law* (forthcoming).

**Jourdan, D.**, K. Hurd, W. Gene Hawkins, and K. Winson Geideman, Evidence Based Sign Regulation: Regulating Signage on the Basis of Empirical Wisdom in *The Urban Lawyer*, 45:2, Spring 2014, 327-348.

**Jourdan, D.** S. Van Zandt, and E. Tarleton, Coming home: Resident satisfaction regarding return to a revitalized HOPE VI community in *Cities available at: <http://www.sciencedirect.com/science/article/pii/S0264275113000322>*, 2013.

**Jourdan, D.**, A Response to Mandelker's Free Speech Law for On Premise Signs in *Planning and Environmental Law*, 65:4, 2013, 4-10.

Land Development Law (graduate level, at Texas A&M University)  
Historic Preservation Law (graduate level, at Texas A&M University)  
Introduction to Urban Planning (undergraduate level, at Texas A&M University and Florida State University)  
Attorney-Client Communications (undergraduate level, at Florida State University)  
Legal Communications (undergraduate level, at Florida State University)  
Environmental Law (continuing education, at Rutgers University)  
Historic Preservation Law (continuing education, at Rutgers University)  
Ordinance Drafting (continuing education, at Rutgers University)

**PUBLICATIONS:**

**Refereed Journal Articles**

K. Frank, J. Macedo, and **D. Jourdan**, Fostering Rural Adaptive Capacity for Sea Level Rise Planning Using Methods of Community Engagement (pending review- special edition of the Journal of the Community Development Society).

**D. Jourdan** and S. Pilat, Preserving Public Housing: Federal, State and Local Efforts to Preserve the Social and Architectural Forms Associated with Housing for the Poor in the *Journal of Preservation Education and Research* (forthcoming).

Ozor, B., K. Frank, and **D. Jourdan**, Confronting Wicked Problems with Games: How Role-Play Informs Planning for Sea Level Rise in Northeast Florida (pending review).

**Jourdan, D.**, A. Ray, and L. Thompson, Relocating from Subsidized Housing in Florida: Are Residents Moving to Opportunity in *Journal of Housing and Community Development Law* (forthcoming).

**Jourdan, D.**, K. Hurd, W. Gene Hawkins, and K. Winson Geideman, Evidence Based Sign Regulation: Regulating Signage on the Basis of Empirical Wisdom in *The Urban Lawyer*, 45:2, Spring 2014, 327-348.

**Jourdan, D.** S. Van Zandt, and E. Tarleton, Coming home: Resident satisfaction regarding return to a revitalized HOPE VI community in *Cities available at: <http://www.sciencedirect.com/science/article/pii/S0264275113000322>*, 2013.

**Jourdan, D.**, A Response to Mandelker's Free Speech Law for On Premise Signs in *Planning and Environmental Law*, 65:4, 2013, 4-10.

**Jourdan, D.**, Enhancing HOPE VI Revitalization Processes with Participation, in *Journal of the Community Development Society*, Vol. 39:No. 2, 2008, pp. 75-90.

**Jourdan, D.**, Reducing Pre-Relocation Grief with Participation in a HOPE VI Grant Application Process, in *International Journal of Public Participation*, Vol. 2:No. 2, 2008, pp. 75-92.

**Jourdan, D.**, Mending Fences: Resolving Neighbor Disputes With Squatters Settlements in Belize, in *PACE Institute for Environmental and Regional Studies Proceedings*, Vol. 4, 2004, pp. 135-149.

White, S. M. and **D. Jourdan**, Neotraditional Development: A Legal Analysis, in *Land Use Law and Zoning Digest* (1999).

#### **Books**

Jourdan, D. and E. Strauss. *Planner's Guide to Land Use Law: Planning for Wicked Problems*, NY: Routledge (under contract).

#### **Book Chapters and Entries**

Jamal, T. and **D. Jourdan**. Interdisciplinary Tourism Education in Interdisciplinary Teaching and Learning in Higher Education: theory and practice. *Interdisciplinary Learning and Teaching in Higher Education: theory and practice*. Dr Balasubramanyam Chandramohan and Dr Stephen Fallows (eds.), London: Routledge Falmer. (2008).

**D. Jourdan**. Grounding Theory: Developing New Theory on Intergenerational Participation in Qualitative Methods for Housing Research. *Qualitative Housing Research Methods*. Paul Maquin (ed.), London: Elsevier. (2008).

#### **Non-Refereed Publications**

**Jourdan, D.**, Hawkins, G., Winson-Geideman, K., and R. Abrams. The Model Sign Code. International Sign Association (December, 2008).

Winson-Geideman, K., **D. Jourdan** and S. Gao. The Effects of Adaptive Reuse by the Savannah College of Art & Design on Property Value and Community Change in Savannah, Georgia. *Lincoln Land Institute Working Papers* (December, 2006).

**Jourdan, D.** Bomb Proof Schools. *Plan Canada*. (Fall, 2006).

Van Zandt, S., Jourdan, D., Martin, J., and C. Giusti. Final Report for Beaumont's HOPE VI Project. Prepared for the Beaumont Housing Authority (December 2012)

**Jourdan, D.**, Enhancing HOPE VI Revitalization Processes with Participation, in *Journal of the Community Development Society*, Vol. 39:No. 2, 2008, pp. 75-90.

**Jourdan, D.**, Reducing Pre-Relocation Grief with Participation in a HOPE VI Grant Application Process, in *International Journal of Public Participation*, Vol. 2:No. 2, 2008, pp. 75-92.

**Jourdan, D.**, Mending Fences: Resolving Neighbor Disputes With Squatters Settlements in Belize, in *PACE Institute for Environmental and Regional Studies Proceedings*, Vol. 4, 2004, pp. 135-149.

White, S. M. and **D. Jourdan**, Neotraditional Development: A Legal Analysis, in *Land Use Law and Zoning Digest* (1999).

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Jourdan, D. and E. Strauss. *Planner's Guide to Land Use Law: Planning for Wicked Problems*, NY: Routledge (under contract).

#### **Book Chapters and Entries**

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**D. Jourdan**. Grounding Theory: Developing New Theory on Intergenerational Participation in Qualitative Methods for Housing Research. *Qualitative Housing Research Methods*. Paul Maquin (ed.), London: Elsevier. (2008).

#### **Non-Refereed Publications**

**Jourdan, D.**, Hawkins, G., Winson-Geideman, K., and R. Abrams. The Model Sign Code. International Sign Association (December, 2008).

Winson-Geideman, K., **D. Jourdan** and S. Gao. The Effects of Adaptive Reuse by the Savannah College of Art & Design on Property Value and Community Change in Savannah, Georgia. *Lincoln Land Institute Working Papers* (December, 2006).

**Jourdan, D.** Bomb Proof Schools. *Plan Canada*. (Fall, 2006).

Van Zandt, S., Jourdan, D., Martin, J., and C. Giusti. Final Report for Beaumont's HOPE VI Project. Prepared for the Beaumont Housing Authority (December 2012)

Van Zandt, S., Jourdan, D., Martin, J., and C. Giusti. Interim Report for Beaumont's HOPE VI Project. Prepared for the Beaumont Housing Authority (December 2011).

Van Zandt, S., **Jourdan, D.**, Martin, J., and C. Giusti. Interim Report for Beaumont's HOPE VI Project. Prepared for the Beaumont Housing Authority (December 2009).

Van Zandt, S., **Jourdan, D.**, Martin, J., and C. Giusti. Interim Report for Beaumont's HOPE VI Project. Prepared for the Beaumont Housing Authority (December 2008).

Van Zandt, S., **Jourdan, D.**, Martin, J., and C. Giusti. Baseline Report for Beaumont's HOPE VI Project. Prepared for the Beaumont Housing Authority (December 2007).

Van Zandt, S., **Jourdan, D.**, Martin, J., and C. Giusti. Need and Demand for Affordable Housing in the Brazos Valley. Report to Brazos Valley Affordable Housing Corporation. (June 2006).

**SPONSORED RESEARCH:**

Co-PI, Tribal Climate Change and Extreme Event Response Studies to Identify Vulnerabilities, South Central Climate Science Center, 2014-2015.

PI, Oklahoma City, Sustainability Audit, May 2013-present.

PI, Shimberg Center for Housing Studies, The Lost Properties and Moving To Opportunity, October 2010 – Present.

Investigator and Collaboration Lead, Planning for Sea Level Rise: A Pilot Study to Evaluate and Improve the Development and Delivery of Habitat Vulnerability Assessments and Adaptive Conservation Designs to Coastal Decision Makers, National Estuarine Research Reserve System Science Collaborative, 2011-2014.

Co-PI, Rural Coastal Region Adaptation Planning for Sea Level Rise, Florida Sea Grant, 2012-14.

Co-PI, Development of Sea Level Rise Adaptation Planning Procedures and Tools Using NOAA Sea Level Rise Impacts Viewer, Gulf of Mexico Regional Research Competition, 2012-14.

Co-PI, Impact of Parking Supply and Demand Management on Central Business District (CBD) Traffic Congestion, Transit Performance and Sustainable Land Use, Florida Department of Transportation, January 2010 – October 2011.

A Parameterized Climate Change Projection Model for Hurricane Flooding, Wave Action, Economic Damages, and Population Dynamics, sponsored by NOAA, September 2009-September 2011, Role, Co-Principal Investigator.

HOPE VI Community Services Study for the Redevelopment of Magnolia Gardens in Beaumont, Texas, sponsored by the U.S. Department of Housing and Urban Development and the Beaumont Public Housing Authority, January 2007-December 2011, Role, Co-Principal Investigator.

Preserve America Grant for an Intergenerational Oral History for Hearne, Texas, sponsored by the National Parks Service, January 2007-December 2007, Role, Investigator.

A Hedonic Model of the Effects of Adaptive Reuse on Community Change in Savannah, Georgia, sponsored by the Lincoln Institute of Land Policy, Role, Investigator.

Legal Analysis and Policy Formulation Regarding the Use of Regional Rural Landbanking to Enhance the Development of Affordable Housing Opportunities in Brazos Valley Texas, sponsored by the Brazos Valley Affordable Housing Corporation, January 2007-August 2007, Role, Co-Principal Investigator.

Market Study of the Barriers to the Provision of Affordable Housing in Brazos Valley Texas, sponsored by the Brazos Valley Affordable Housing Corporation, January 2006-August 2006, Role, Co-Principal Investigator.

Comparative Analysis of the Effects of the Location of Big Box Retail on Housing Prices in Urban and Suburban Areas, sponsored by Texas A&M College of Architecture, December 2005-December 2006, Role, Principal Investigator.

**PROFESSIONAL SERVICE AND AFFILIATIONS:**

**Professional Services**

Chair of the Academic Advisory Council for Sign Research and Education (August 2014-present)

Chair of the Planner Outreach Subcommittee for the International Sign Association (January 2014-present)

Appointed to the Alachua County Affordable Housing Advisory Board (April 2010-2011)

University Liaison to the Florida Chapter of the American Planning Association (September 2007-September 2010)

Fellow to the Center for Children and Families at the Levin College of Law (May 2007-2012)

Member of the Law School Honor Code Committee (2009-2010)



Member of the ICCHP Committee (2009-2010)

Member of DCP Faculty Council (2009-2012)

Member of UF Historic Buildings and Structures Committee (2009-2010)

UF Commencement Marshall (2008-2010)

Ad Hoc Member of the Amicus Committee for the American Planning Association  
Fellow for the Center for Heritage Conservation at Texas A&M University (2005-2007).

**Professional Affiliations**

American Planning Association

Oklahoma Chapter of the APA

Association of Collegiate Schools of Planning

Member of the Illinois Bar

**Served as a manuscript and grant proposal reviewer for the following:**

Journal of the Community Development Society

Journal of Planning History

US-China Law Review

UF Journal of Law and Public Policy

Journal of Planning Education and Research

National Science Foundation

**CONFERENCE PRESENTATIONS:**

**International Conferences-Refereed Presentations**

**Jourdan, D.**, K. Hurd, H. G. Hawkins, and K. Winson-Geideman. Evidence-based Sign Regulation: Regulating Signage on the Basis of Empirical Wisdom. Presented at the AESOP-ACSP Conference in Dublin, Ireland, July 2013.

Nolon, J., Call, C., Murtaza, A, and **Jourdan, D.** Property Rights, Political Drama, and Smart Growth: The Challenges of Sustainable Development in 2011. Presented at the National Conference of the American Bar Association in Toronto, August 2011.

**Jourdan, D.**, Wal-Mart in the Garden District- Does the Arbitrary and Capricious Standard of Review Lessen the Right of Citizens to Participate. Presented at the

International Association of Planning Law and Property Rights, Aalborg, Denmark, February, 2008.

**Jourdan, D.** and VanZandt, S, Creating Regional Landbanks to Meet Rural Affordable Housing Needs. Presented at the Joint International Conference of the Association of Collegiate Schools of Planning (ACSP) and the Association of European Planning Schools (AESOP), Chicago, IL, July 2008.

**Jourdan, D.**, Should Children Have the Right to Speak for Themselves: The legal rights of youth to participate in national level policymaking. Presented at the International Conference on the Rights of Children, Ghent, Belgium (2006).

**Jourdan, D.**, Grounding Theory: Developing New Theory on Intergenerational Participation. Presented at the Joint International Conference of the Association of Collegiate Schools of Planning (ACSP) and the Association of European Planning Schools (AESOP), Mexico City, Mexico (2006).

**Jourdan, D.**, Planning to Reduce Worry. Presented at the Making Cities Livable Conference, Venice, Italy (2005).

#### **National Conferences**

**Jourdan, D.** Community Aesthetics and Sign Regulations: How far can a city go to prescribe aesthetics?" Presented at the National Signage Research and Education Conference in Cincinnati, OK, October, 2013.

**Jourdan, D.** and J. Kellaris, Collaborating with City Officials on Urban Signage, Presented at the International Sign Expo, in Las Vegas, NV, April, 2012.

**Jourdan, D.** Evidence-Based Sign Regulation: Regulating Signage on the Basis of Empirical Wisdom. Presented at the National Signage Research and Education Conference in Cincinnati, OK, October, 2012.

**Jourdan, D.**, Ray, A., and Thompson, L. Relocating from Subsidized Housing in Florida: Are Residents Moving to Opportunity? Urban Affairs Association, Pittsburgh, PA, April 2012.

Frank, K., **Jourdan, D.**, Easley, G., and F. Eddleton. Leveraging community historical identity for climate change adaptation planning. Society for American City and Regional Planning History Conference, Baltimore, MD, November 17-20, 2011.

Frank, K., **Jourdan, D.**, and Obonyo, E. Sea level rise adaptation planning for rural coastal areas in Florida. Initiative on Climate Adaptation Research and Understanding through the Social Sciences: Climate Vulnerability and Adaptation (ICARUS II). May 5-8, Ann Arbor, MI, 2011.

Steiner, R., **Jourdan, D.**, Blanco, A., Mackey, J., Hanley, G., Sucar, V., and Shmaltzuyev, M., Understanding the Connection between Parking Management and Transit Usage: A Case Study of Miami and Fort Lauderdale Central Business Districts. Presented at the Association of Collegiate Schools of Planning (ACSP) Conference, Minneapolis. Oct. 13 – 16, 2011.

Steiner, R., Blanco, A. and **Jourdan, D.**, Impact of Parking Supply And Demand Management on Central Business District (CBD) Traffic Congestion. Presented at the Association of Collegiate Schools of Planning (ACSP) Conference. Minneapolis. Oct. 5 – 10, 2010.

**Jourdan, D.** Coming Home: The Relocation Effects of Expedited HOPE VI Revitalization Processes. Presented at the Urban Affairs Association, New Orleans, LA, 2011.

Zhao, J. and **Jourdan, D.** Zoning Variance Administration in Practice: Influencing Factors and Trends. Presented at the ACSP Conference in Minneapolis, MN, November, 2010.

**Jourdan, D.**, Valuing Grief: A Proposal to Compensate Relocated Public Housing Residents for Intangibles. Presented at the ACSP Conference, Washington, D.C., October, 2009.

**Jourdan, D.**, Garvin, E. and Stroud, N. Potential Legal Challenges to Form Based Codes: the Miami 21 Test Case. Presented at the IMLA Conference, Miami, FL, October, 2009.

**Jourdan, D.**, Creating Regional Landbanks to Meet Rural Affordable Housing Needs. Presented at the Joint ACSP/AESOP Conference, Chicago, IL, July 2008.

VanZandt, S. and **Jourdan, D.** Landbanking to Meet Affordable Housing Needs. Presented at the National Conference of the American Planning Association Conference, Las Vegas, NV, April, 2008.

**Jourdan, D.** and Wieters, M. Serious Play: Constructing Learning to Promote Meaningful Dialogue in the Planning Classroom. Presented at the Association of Collegiate Schools of Planning National Conference, Fort Worth, TX, 2006.

Geideman, K. and **Jourdan, D.** Preserving Who's Neighborhood: The Effects of Adaptive Reuse by the Savannah College of Art & Design on Property Value and Community Change in Savannah, Georgia. Presented at the Lincoln Land Institute, Cambridge, MA, 2006.

**Jourdan, D.**, Sentencing Goldilocks. Presented at the Association of Collegiate Schools of Planning National Conference, Kansas City, MO, 2005.

**Jourdan, D.**, Public Housing: Is it Worth Preserving? Presented at the Association of Collegiate Schools of Planning National Conference, Kansas City, MO, 2005.

**Jourdan, D.**, Grieving for a Lost Home?: A Case Study of How Participation in an Intergenerational Planning Process Lessened the Pre-Relocation Grief Effects of Experienced by the Youth and Adult Residents of the McDaniel Glenn Public Housing Community in Atlanta. Presented at the Association of Collegiate Schools of Planning National, Portland, OR, 2004.

**Jourdan, D.**, Mending Fences: Resolving Neighbor Disputes With Squatter Settlements in Belize. Presented at Pace University, NYC, April 2004.

**Jourdan, D.**, Increasing Youth Participation in the Planning Process. Presented at the Association of Collegiate Schools of Planning National Conference, Baltimore, MD, 2002.

#### **National Conferences – Invited Discussant and/or Moderator**

Jourdan, D. Institute for Quality Communities Placemaking Conference in Norman, OK (2013) on the topic of "Healthy, Walkable Communities."

Jourdan, D. Annual Conference of the ACSP in Washington D.C. (2009) on the topic of "Comparative Jurisprudence Relating to Takings and Due Process Law."

Jourdan, D. Joint ACSP/AESOP Conference, Chicago, IL, (2008) on the topic of "Comparative Legal Jurisprudence on Property Rights."

Jourdan, D. Annual Conference of the ACSP in Fort Worth, TX (2006) on the topic of "Researching Wal-Mart."

Jourdan, D. Annual Conference of the ACSP in Kansas City, MO (2005) on the topic of "Research Wal-Mart."

Jourdan, D. Annual Conference of the ACSP in Portland, OR (2004) on the topic of "What Planners Should Know About the Law."

Jourdan, D. Sustainable Campus Planning, Annual Conference of the ACSP in Baltimore, MD (2002).

#### **State Conferences –Presentations by Invitation**

**Jourdan, D.** The New Urbanism: Optimizing Imagination, Creativity, Innovation, and Human Flourishing, Presented at the State Creativity Forum in Oklahoma City, OK, November, 2013.

**Jourdan, D.** So You Want to Take on Your Sign Code, Presented at the State Conference of the Oklahoma Chapter of the American Planning Association in Tahlequah, OK, October, 2013.

Steiner, R., Blanco, A., and **Jourdan, D.** Parking as a Smart Growth Strategy, Presented at the Florida Chapter of the American Planning Association Conference September 2011.

Silver, C. and **Jourdan, D.** Legal Aspects of Sustainable Development, Presented at the Florida Chapter of the American Planning Association Conference, September, 2011.

**Jourdan, D.** The Land Use Revolution: The Tea Party's Influence on Planning Process. Presented at the Annual Conference of the Utah Land Institute, Salt Lake City, Utah, November 2011.

**Jourdan, D.,** Measuring the Winds of Change: the Introduction of Qualitative Research Methods in Planning Processes. Presented at the Annual Conference of the Texas Chapter of the American Planning Association, Corpus Christi, TX (2006).

**REFERENCES AVAILABLE UPON REQUEST**



**K. MEGHAN WIETERS, PH.D., AICP**

University of Oklahoma, Regional & City Planning, 830 Van Vleet Oval - Gould Hall RM 162  
 Norman, OK 73019, kmeghanwieters@ou.edu

**EDUCATION**

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Texas A&M University  
**Ph.D in Urban Regional Science** **2003 – August 2009**  
 Dissertation: "Integrating Walking for Transportation and Physical Activity for Sedentary Office Workers In Texas"

University of Texas at Austin  
**Masters of Science in Community & Regional Planning** **1993-1995**  
 Thesis: "Building a Community: Transit Options in the Land Development Code and Land Development Process"

Trinity University  
**Bachelors of Arts** **1989-1993**  
 Majors: Philosophy, International Studies (concentration on Latin America), Minor: Spanish

**TEACHING**

---

<b>Assistant Professor - University of Oklahoma</b>		<b>Fall 2009 – to present</b>
RCPL 5813 Environmental Planning Methods	RCPL 5013 History and Theory of Urban Planning	
RCPL 5513 Subdivision Planning	RCPL 5823 Rural and Regional Planning	
RCPL 5493 Transportation and Land Use Planning	RCPL 5990 Public Health & Built Environment	

**PREVIOUS RESEARCH POSITIONS & PRACTICE**

---

<b>Texas A&amp;M University</b>	<b>August 2006</b>
Graduate Assistant	<b>May 2009</b>
<b>Texas Transportation Institute</b>	<b>August 2003 –</b>
Graduate Research Assistant	<b>August 2006</b>
<b>City of Austin - Transportation, Planning &amp; Sustainability Department</b>	<b>August 1998 –</b>
Principal Planner / Senior Planner	<b>August 2003</b>
<b>Capital Metropolitan Transportation Authority</b>	<b>April 1994 –</b>
Land Use/Transportation Planner	<b>August 1998</b>

**PUBLICATIONS & REPORTS**

---

Wieters, K M. Office Workers Stuck at their Desks: Built Environment Implications on Walk Trips. Under review – *Health & Place*, April 2014.

Wieters, K M. Advantages of Online Methods in Planning Research: Capturing Walking Habits in Different Built Environments. Under Review -- *Sage Open*, February 2014

Wieters, K M, Kim, J-H, Lee, C. "Assessment of Wearable Global Positioning System Units for Physical Activity Research", *Journal of Physical Activity & Health*, September 2012 (published)

Zietsman, J, Villa, J.C., Forrest, T. L., and Storey, J. M. (2005) "Mexican Truck Idling Emissions at the El Paso - Ciudad Juarez Border Location" Report 473700-00033. Prepared for Southwest Region University Transportation Center.



Zietsman, J., Bubbosh, P., Li, L., Bochner, B., Villa, J. (2005) "National Deployment Strategy for Truck Stop Electrification". Prepared for U.S. Environmental Protection Agency.

Zietsman, J., Bynum, J., Wieters, K., and Bochner, B. (2005) "Reducing School Bus Emissions in Texas". Prepared for Texas Department of Transportation. Proceedings of the 2005 Mid-Continent Transportation Research Symposium.

Wieters, K. and J. Borowiec. (2004) "An Examination of Methods for Increasing On-Airport Revenue". Prepared for Texas Department of Transportation: Aviation Division.

Hard, Ed. et al. (2003) "TxDOT Involvement in the Local Development Process", Report 4429-1.

#### CONFERENCE & INVITED PRESENTATIONS

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Wieters, K, M Wiens, T.O. Bowman. Walkability: A Tool for Promoting Health, Better Planning and Building Community. Presentation at "Planning Oklahoma Together" OKAPA Conference, Tahlequah, OK, October 2013.

Gibson, H and K. Wieters, Talking Green in Red States. Kansas APA Conference, Manhattan, KS October 2013

Wieters, K. Teaching, Learning and Implementing Walkability in Oklahoma City. Oklahoma Service Learning Conference, "The Art of Teaching through Science of Service", Friday November 22, 2013

Wieters, K, D Hess, P Firth. Invited panelist for Pedestrian and Bicycle University Education, Transportation Research Board 82<sup>nd</sup> Annual Meeting, January 13-17, 2013.

Wieters, K, J Fees, and B McCann. Why should we care about those silly pedestrians and bicyclists? Barriers to Adoption of Complete Streets Ordinances in Cowboy Country. Presented paper at the Association of Collegiate Schools of Planning Conference, Cincinnati, OH, 2012

Wieters, K. Office workers – Sedentary by Practice: How can we integrate physical activity as part of daily routines at work. Oklahoma Public Health Association Conference, Health Equity Caucus, April 2012

Wieters, K M, L Fithian, T McCuen, and C Barrett. Teaching How to Manage Competing Interests: Planners, Architects and Construction Science Students Developing a Subdivision Together. Presented paper at the Association of Collegiate Schools of Planning Conference, Salt Lake City, UT; 2011.

Wieters K M. Methodology in assessing walking behavior for office workers using online survey methods. Presented paper at the Association of Collegiate Schools of Planning Conference. Minneapolis, MN; 2010.

Lee C, Wieters M, Giusti C, Lord D. The Environment and Obesity among Latino Adults: A case study exploring the roles of built environments in promoting physical activity and reducing obesity among colonia residents. Inter-University Program for Latino Research. University of Notre Dame; 2010.

Wieters KM, Kim J-H, Lee C. A walk to grab a cup of coffee: Assessment of available research instruments for measuring physical activity. Presented paper at the Association of Collegiate Schools of Planning Conference Chicago, IL; 2008.

Jourdan, D., Wieters, K. "Serious Play: Constructing Learning To Promote Meaningful Dialogue In The Planning Classroom". Co-Presented paper at the Association of Collegiate Schools of Planning Conference. Milwaukee, WI; 2006.

INVITED LECTURES

---

University of Oklahoma  
Department of Geography & Sustainability, Spring Colloquium  
"Walking & Biking: Active Transportation and the Built Environment" January 2014

Kansas State University – Big 12 Fellowship

- The messiness of random sampling spatially Oct. 21, 2013
- Watershed Functions & Impacts from Development Oct. 21, 2013
- Creating an audit tool and operationalizing data Oct. 23, 2013
- Bicycle Facility Design & Planning Oct. 23, 2013
- Observational Methods Oct. 23, 2013
- Pedestrian Planning and Design: How does the environment we live in impact our lives? Oct. 2013
- Office workers – Sedentary by Practice: How can we integrate physical activity as part of daily routines at work – Formal presentation to faculty and students Oct. 2013

Department of Biostatistics and Epidemiology College of Public Health,  
University of Oklahoma Health Sciences Center

- Planning, Built Environment, and Public Health: How does the environment we live in impact our lives? March 11, 2013

GRANT FUNDING

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Received Ed Cline Faculty Development Award (\$1450), Spring 2014  
Received Big 12 Faculty Fellowship Program Award (\$2500) June 2013  
Received College of Architecture IT recipient (\$3450) July 2013  
Sooner Parents Mini-Grant Funding (\$500) for student mentoring –prepared and submitted to assist RCPL Student Planning Association July 2013  
Received Junior Faculty Research (\$7,000) for summer research on rural planning and physical activity opportunities. University of Oklahoma, Summer 2012  
Robert Wood Johnson Active Living Research Dissertation Grant (\$25,000), Texas A&M University, 2007

SERVICE

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*University-Level Service*

- Advisory Committee Course Management Systems (ACCMS) Spring 2013

*College-Level Service*

- Graduate Liaison for Regional & City Planning Division (Fall 2013 – present)
- Graduate Research & Curriculum Committee (Fall 2013 – present)
- RCPL orientation (Fall 2010- present)
- Search committee for new RCPL hires, new LA hire (Summer 2011, Summer 2012, Spring 2013, Spring 2014)
- IT Committee (member since 2012), Chair (Fall 2013-Spring 2014)
- Model Shop Committee (member since 2012-Fall 2013)
- RCPL website (2011- present)
- GHGI committee (Gould Hall Green Initiative) (Fall 2011)
- Co-hosting and arranging guest seminar: Dr. Chanam Lee – "The Built Environment and Disparities in Physical Activity", December 2012.



SERVICE

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*State-level / City-Level Service*

- President – Health Equity Caucus, subgroup of Oklahoma Public Health Association
- APA/AICP member
- Bicycle Advisory Committee, City of Norman – Committee member (Spring 2013 – 2016)

*National-Level Service*

- Secretary/Treasurer of Faculty Women’s Interest Group (FWIG), committee under Association of Collegiate Schools of Planning (ACSP).
- CDC Weight of the Nation Conference planning, Built Environment & Transportation Subcommittee
- Reviewer for Journal of Physical Activity and Health

## Bryce C. Lowery, PhD

### Contact

University of Oklahoma  
 College of Architecture - Division of Regional and City Planning  
 830 Van Vleet Oval  
 Gould Hall 255  
 Norman, OK 73019  
 (405) 325-8953  
 bryce.c.lowery@ou.edu

### Academic Experience

<b>Assistant Professor</b>	2014 - present
<i>College of Architecture – Division of Regional and City Planning</i>	
<i>University of Oklahoma – Norman, OK</i>	

### Education

<b>Doctor of Philosophy</b> – Policy, Planning, and Development <i>Sol Price School of Public Policy</i> <i>University of Southern California - Los Angeles, CA</i>	2014
<i>Dissertation: Social Construction of the Experience Economy: The spatial ecology of outdoor advertising in Los Angeles</i> <b>Jack Dyckman Award - Best Dissertation in Planning &amp; Development</b>	
<i>Committee: David Sloane, PhD Tridib Banerjee, PhD Pierrette Hondagneu-Sotelo, PhD (Sociology)</i>	
<b>Master of Landscape Architecture</b> <i>College of Environmental Design</i> <i>California State Polytechnic University - Pomona, CA</i>	2008
<b>Master of Science</b> – Environmental Policy and Behavior <i>School of Natural Resources and Environment</i> <i>University of Michigan - Ann Arbor, MI</i>	2000
<b>Bachelor of Arts</b> – Economics and Environmental Studies <i>Dornsife College of Letters, Arts, and Sciences</i> <i>University of Southern California - Los Angeles, CA</i>	1996

### Publications

<b>The Prospects and Problems of Integrating Sketch Maps with Geographic Information Systems (GIS) to Understand Environmental Perception: A case study of mapping youth fear in Los Angeles gang neighborhoods</b> <i>Environment and Planning B: Planning and Design</i> 41(2): 251-271. Curtis, J.W., E. Shiao, B. Lowery, D. Sloane, K. Hennigan and A. Curtis	2014
<b>The Prevalence of Harmful Content on Outdoor Advertising in Los Angeles: Land use, community characteristics, and the spatial inequality of a public health nuisance</b> <i>American Journal of Public Health</i> 104(4): 658–664. Lowery, B.C. and D.C. Sloane	2014

### Presentations

**From Regional Center to Sign District:  
Regulating outdoor advertising in Los Angeles, 1881-2012**  
*Association of Collegiate Schools of Planning – Philadelphia, PA – November 1, 2014*  
 with David Sloane

- Do Farmers' Markets Improve the Availability of Healthy Foods for All Communities?**  
**A case study of 19 markets in Los Angeles.**  
*Association of Collegiate Schools of Planning – Philadelphia, PA – October 30, 2014*  
 with Denise Payan, LaVonna Blair-Lewis and David Sloane
- If You See Something, Say Something:**  
**Community response (and non-response) to outdoor advertising regulation in Los Angeles**  
*Council of Educators in Landscape Architecture – Austin, TX – March 29, 2013*
- The Spatial Ecology of Outdoor Advertising in Los Angeles:**  
**The unjust impact of the commercial landscape**  
*Association of Collegiate Schools of Planning – Cincinnati, OH – November 3, 2012*  
 with David Sloane
- Employing Social Network Analysis to Understand the Formation of Sustainable Social Capital**  
*Council of Educators in Landscape Architecture - Tucson, AZ – January 15, 2009*

Teaching Experience

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- Assistant Professor**  
*University of Oklahoma – College of Architecture* 2014-present  
 Subdivision and Site Planning (graduate)  
 Computer Mapping and GIS in Planning (graduate)  
 Comprehensive Planning Studio (graduate)
- Lecturer**  
*University of California, Irvine – School of Social Ecology* 2014  
 Design and Planning Graphics (graduate)
- Teaching Assistant**  
*University of Southern California - Sol Price School of Public Policy* 2008-2013  
 Citizenship and Public Ethics (undergraduate)  
 History of Planning and Development (undergraduate)  
 Planning History and Urban Form (graduate)  
 Smart Growth and Urban Sprawl (graduate)  
 Urban Context for Policy and Planning (undergraduate)  
 Urban Planning and Development (undergraduate)  
 Urban Planning and Social Policy (graduate - online)
- Graduate Student Instructor**  
*University of Michigan - School of Natural Resources and Environment* 1999-2000  
 Introduction to Environmental Policy (undergraduate)  
 Introduction to Natural Resource Management (undergraduate)

Other Experience

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- Research Assistant** 2009 - 2014  
*Sol Price School of Public Policy - University of Southern California*
- Editorial Assistant** – Terry L. Cooper 2011 - 2012  
*The Responsible Administrator;*  
*An Approach to Ethics for the Administrative Role, 6th Edition. 2012.*
- Research Associate** 2005 - 2006  
*Lodestar Management/Research Inc. (now Harder+Company)*
- Project Coordinator** 2004 - 2005  
*Perinatal Advisory Council of Los Angeles County*
- Community Researcher** 2002 - 2004  
*Children's Planning Council - Los Angeles County Board of Supervisors*
- Assistant Director** 2000 - 2002  
*Health DATA Program - UCLA Center for Health Policy Research*

<b>Curriculum Coordinator</b> <i>UCLA Labor, Occupational, Safety and Health Program</i>	2000
<b>Research Coordinator</b> <i>The Wild Thornberry's Television Series</i> <i>Klasky-Csupo Incorporated/Nickelodeon Studios</i>	1996 - 1998
<hr/> <i>Activities and Service</i> <hr/>	
<b>Committee Member</b> <i>University of Oklahoma</i> Anna Siprikova – Master of City and Regional Planning Thesis	2014 - present
<b>Reviewer</b> <i>American Journal of Public Health</i> <i>Council of Educators in Landscape Architecture</i>	
<b>Member</b> <i>American Planning Association</i> <i>American Public Health Association</i> <i>American Society of Landscape Architects</i> <i>Association of American Geographers</i> <i>Environmental Design Research Association</i>	
<b>Member</b> <i>Creating/Making Facilities Coordination Team</i> <i>University of Oklahoma – College of Architecture</i>	2014 - present
<b>Member</b> <i>Billboard and Visual Landscape Visioning Group</i> <i>City of Los Angeles</i>	2013
<b>Area Chairperson</b> <i>Hollywood Hills West Neighborhood Council – Area 2: Cahuenga Pass</i> <i>City of Los Angeles</i>	2010 - 2012
<b>Vice-Chairperson</b>	2010 - 2012
<b>Appointee</b> <i>Cahuenga/Ventura Corridor Specific Plan Review Board</i> <i>City of Los Angeles - Council District 4</i>	2008 - 2012
<b>President</b>	2011 - 2012
<b>Member</b> <i>Cahuenga Pass Property Owners' Association</i>	2000 - 2012

**Byron DeBruler**

DeBruler, Inc.

8200 NE 139th Street

Edmond, OK 73103

United States of America

Phone: 405/396-2032 Cell Phone: 405/202-1610

**BACKGROUND SUMMARY**

Executive Manager with extensive experience in public sector resource design, management and evaluation. Knowledge and skills include: structuring and design of state and local service programs and initiatives, developing written proposals for project financing, identifying community economic development resources and training.

**EXPERIENCE**

**DeBruler, Inc.**

Vice President, Oklahoma City, August 2001 to Present

Provide services including:

- ✓ Researching public and private resources and preparing applications for financial assistance in response to client requests for economic and community development projects.
- ✓ Technical assistance to nonprofits and units of local government regarding federal and state resources and structuring project-beneficial partnerships; preparing strategic and business plans for public and private sector entities.
- ✓ Group facilitation services.
- ✓ Technical training for nonprofits and units of local government regarding federal and state financial assistance programs. Conducting organizational assessments and developing capacity building curriculums.

**Oklahoma Housing Finance Agency**

Team Leader, Housing Development Team, Oklahoma City, July 1998 to July 2001

Provided direct supervision and oversight of sixteen staff engaged in the administration of multiple federal and state affordable housing program resources.

While employed by the agency:

- ✓ Reorganized state's Single Family Mortgage Revenue Bond, Low-income Housing Tax Credit, HOME Investment Partnerships and Housing Trust Fund Programs into a single work unit.
- ✓ Streamlined Low-income Housing Tax Credit Program administrative rules to provide for market responsive design flexibility.
- ✓ Streamlined affordable housing resources by developing a singular application package and process for the agency's affordable housing development resources and established e-information network.
- ✓ Facilitated the development of working partnerships between the state's nonprofit and for-profit housing development organizations and agency's mortgage revenue bond lenders.
- ✓ Financed the development of affordable housing by leveraging public sector development funds with private investments.

- ✓ Facilitated legislative task force on rural affordable housing issues and devised legislative and programmatic actions to spur rural development.
- ✓ Developed, financed and implemented the state's first statewide affordable housing market analysis in partnership with a major university center.
- ✓ Drafted enabling legislation, capitalized and implemented state's Housing Trust Fund.

**Oklahoma Department of Commerce**

Program Manager/Department Head, Oklahoma City, March 1988 to July 1998

- ✓ In response to market-based demand, directed a team of professional agency staff with diverse skills, in the redesign of the state's HOME Investment Partnerships Program from primarily rehabilitation services to the production of rural affordable housing units.
- ✓ Led HOME Program administrative team in the relocation of the Program from its state agency environment to the Oklahoma Housing Finance Agency, a public trust.
- ✓ Leveraged HOME Program development resources with other public and private debt capital to finance the development of rural affordable housing statewide.
- ✓ Formulated and implemented a legislative agenda to enact and capitalizing the state's Housing Trust Fund.
- ✓ Provided daily oversight and administration for several state administered federal programs including: U.S. Department of Energy State Energy Program, Community Development Block Grant, Home Investment Partnerships, Rental Rehabilitation, Solar Energy and Energy Conservation Bank, and State Appropriated Funds for regional councils of government.

**City of Oklahoma City** January 1984 to February 1988

Division Head, Code Inspections Division/Department of Environmental Services

Assistant Superintendent, Utility Services Division/Water Department

Administrative Assistant, Street Maintenance Division, Public Works Department

Management Intern, Personnel Department

**EDUCATION**

Masters of Public Administration, University of Oklahoma 1983

Bachelor of Arts Political Science, University of Oklahoma, 1979