

**Housing Needs Assessment**  
**Pottawatomie 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 15, 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  
                  Pottawatomie County  
                  IRR - Tulsa/OKC File No. 140-2015-0076

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 Pottawatomie County Residential Housing Market Analysis. Analyst Forrest Bennett personally inspected the Pottawatomie County area during the month of July 2015 to collect the data used in the preparation of the Pottawatomie 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 IRR-Tulsa/OKC.

Mr. Dennis Shockley  
Oklahoma Housing Finance Agency  
December 31, 2015  
Page 2

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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# Table of Contents

<b>Introduction and Executive Summary</b>	<b>1</b>	Housing Units Number of Bedrooms and Tenure	32
<b>General Information</b>	<b>4</b>	Housing Units Tenure and Household Income	32
Purpose and Function of the Market Study	4	Housing Units by Year of Construction and Tenure	34
Effective Date of Consultation	4	Substandard Housing	35
Scope of the Assignment	4	Vacancy Rates	36
Data Sources	4	Building Permits	37
<b>Pottawatomie County Analysis</b>	<b>6</b>	New Construction Activity	38
Area Information	6	Homeownership Market	39
Access and Linkages	6	Housing Units by Home Value	39
Educational Facilities	7	Pottawatomie County Median Home Values by Census Tract	40
Medical Facilities	7	Median Home Values by Census Tract – Shawnee Detail	41
Demographic Analysis	11	Home Values by Year of Construction	42
Population and Households	11	Shawnee Single Family Sales Activity	42
Population by Race and Ethnicity	12	Tecumseh Single Family Sales Activity	43
Population by Age	13	Foreclosure Rates	45
Families by Presence of Children	16	Rental Market	46
Population by Presence of Disabilities	17	Gross Rent Levels	46
Group Quarters Population	18	Shawnee Rental Survey Data	47
Household Income Levels	19	Rental Market Vacancy – Shawnee	49
Household Income Trend	20	Tecumseh Rental Survey Data	52
Poverty Rates	21	Rental Market Vacancy – Tecumseh	52
<b>Economic Conditions</b>	<b>22</b>	Summary of HUD Subsidized Properties	54
Employment and Unemployment	22	<b>Projected Housing Need</b>	<b>59</b>
Employment Level Trends	22	Consolidated Housing Affordability Strategy (CHAS)	59
Unemployment Rate Trends	23	Cost Burden by Income Threshold	59
Employment and Wages by Industrial Supersector	24	Substandard Conditions / Overcrowding by Income Threshold	61
Working Families	27	Cost Burden by Household Type	64
Major Employers	28	Housing Problems by Household Type	66
Commuting Patterns	29		
<b>Housing Stock Analysis</b>	<b>31</b>		
Existing Housing Units	31		
Housing by Units in Structure	31		

# Table of Contents

Housing Problems by Race / Ethnicity	68	Fair Housing	115
CHAS Conclusions	70	Summary	115
Overall Anticipated Housing Demand	72	Key Findings:	115
Shawnee Anticipated Demand	72	Recommendations:	115
Tecumseh Anticipated Demand	72	Appendix 1: County affordable housing	
Pottawatomie County Anticipated Demand	73	Summaries	130
Housing Demand – Population Subsets	74	Lead-Based Paint Hazards	134
Housing Needs by Income Thresholds	74	Pottawatomie County Findings	136
Elderly Housing Needs	74		
Housing Needs for Persons with Disabilities / Special Needs	74	<b>Conclusions</b>	<b>147</b>
Housing Needs for Veterans	75		
Housing Needs for Working Families	75	<b>Addenda</b>	
Population Subset Conclusions	75	A. Acknowledgments	
		B. Qualifications	
<b>Special Topics</b>	<b>77</b>		
Pottawatomie County Disaster Resiliency Assessment	78		
C.0 Comprehensive Plans & Hazard Mitigation Plans	78		
C.2.1.1. Historical Data on Natural Disasters and Other Hazards	79		
C.2.1.2; C.2.1.6; C.2.1.7; C.2.1.8 Shelters from Disaster Event	94		
C.2.1.3 Public Policy and Governance to Build Disaster Resiliency	94		
C.2.1.4 Local Emergency Response Agency Structure	94		
C.2.1.5 Threat & Hazard Warning Systems	95		
Social Vulnerability	96		
Homelessness	101		
By Continuum of Care	101		
A Snap Shot of Homelessness in the State	104		
Rural Areas	108		
At Risk For Homelessness	110		
Findings and Recommendations	112		

# 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 Pottawatomie County is projected to grow by 0.75% per year over the next five years, slightly underperforming the State of Oklahoma.
2. Pottawatomie County is projected to need a total of 744 housing units for ownership and 291 housing units for rent over the next five years.
3. Median Household Income in Pottawatomie County is estimated to be \$45,608 in 2015, compared with \$47,049 estimated for the State of Oklahoma. The poverty rate in Pottawatomie County is estimated to be 18.63%, compared with 16.85% for Oklahoma.
4. Homeowner and rental vacancy rates in Pottawatomie County are lower than the state averages.
5. Home values and rental rates in Pottawatomie County are also lower than the state averages.
6. Median sale price for homes in Shawnee was \$112,150 in 2015, with a median price per square foot of \$70.87. The median sale price to list price ratio was 97.2%, with median days on market of 46 days.

7. Median sale price for homes in Tecumseh was \$79,950 in 2015, with a median price per square foot of \$64.49. The median sale price to list price ratio was 96.6%, with median days on market of 46 days.
8. Approximately 37.82% of renters and 17.42% of owners are housing cost overburdened.

**Disaster Resiliency Specific Findings:**

1. Tornadoes (1959-2014): Number:61 Injuries:321 Fatalities:15 Damages (1996-2014): \$2,590,000.00
2. Social Vulnerability: Below state score at the county level; The census tracts near Shawnee and Tecumseh have elevated scores for social vulnerability
3. Floodplain: Tecumseh, Bethel Acres, Shawnee, McCloud, and many of the rural areas have close proximity to floodplain areas.

**Homelessness Specific Findings**

1. Pottawatomie 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: 1,009
2. Units in mostly non-white enclaves: 587
3. Units nearer elevated number of persons with disabilities: 954
4. Units located in a food desert: 284

**Lead-Based Paint Specific Findings**

1. We estimate there are 4,446 occupied housing units in Pottawatomie County with lead-based paint hazards.
2. 1,973 of those housing units are estimated to be occupied by low-to-moderate income households.
3. We estimate that 642 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 Pottawatomie 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 Pottawatomie 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 as 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 Pottawatomie 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 Pottawatomie County, Oklahoma. The analysis will consider existing supply and projected demand and overall market trends in the Pottawatomie County area.

## Effective Date of Consultation

The Pottawatomie County area was inspected and research was performed during July, 2015. The effective date of this analysis is July 15, 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 Pottawatomie 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

# Pottawatomie County Analysis

## Area Information

The purpose of this section of the report is to provide a basis for analyzing and estimating trends relating to Pottawatomie 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

Pottawatomie County is located in central Oklahoma. The county is bordered on the north by Lincoln County, on the east by Seminole County, on the south by McClain and Pontotoc counties, and on the west by Oklahoma and Cleveland counties. The Pottawatomie County Seat is Shawnee, which is located in the north central part of the county. This location is approximately 101 miles southwest of Tulsa and 39.4 miles east of Oklahoma City.

Pottawatomie County has a total area of 793 square miles (788 square miles of land, and 6 square miles of water), ranking 42nd out of Oklahoma's 77 counties in terms of total area. The total population of Pottawatomie County as of the 2010 Census was 69,442 persons, for a population density of 88 persons per square mile of land.

## Access and Linkages

The county has above average accessibility to state and national highway systems. Multiple major highways intersect within Pottawatomie. These are I-40, US-177, US-270, OK-102, OK-270, OK-9, OK-39, OK-59, and OK-9A. The nearest interstate highway is I-40, which crosses through the county. The county also has an intricate network of county roadways.

Public transportation is provided by Central Oklahoma Transit System (COTS) which operates a demand-response service throughout areas of the 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.

Shawnee Regional Airport is located just west of Shawnee. The primary asphalt runway measures 6,000 feet in length. The nearest full-service commercial airport is the Will Rogers World Airport, located approximately 44.2 miles west in Oklahoma City.

**Educational Facilities**

All of the county communities have public school facilities. Shawnee is served by Shawnee Public Schools which operates one high school, one middle school, one academy, four elementary schools, and one early childhood learning center.

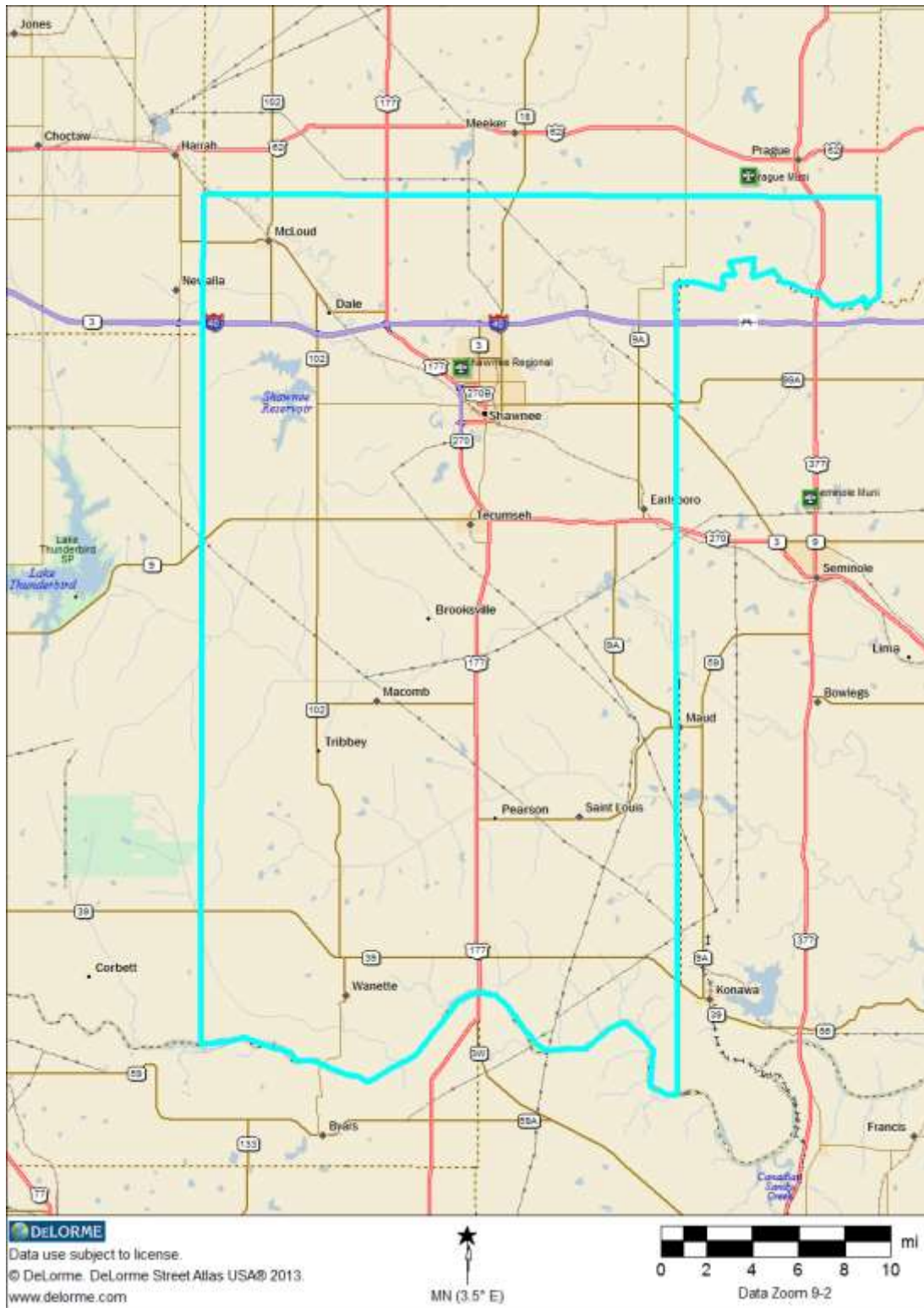
Tecumseh is served by the Tecumseh Public Schools which operates one high school, one middle school, two elementary schools, and one early childhood learning center.

Higher education offerings in and around Pottawatomie County includes Oklahoma Baptist University and St. Gregory's University.

**Medical Facilities**

Medical services are provided throughout the county by St. Anthony Shawnee Hospital and Solara Hospital Shawnee; both hospitals are acute-care and offer surgical, emergency, and in and outpatient's services. Additionally, there are numerous Urgent Cares spread out throughout the county. The smaller county communities typically have either small outpatient medical services or doctor's officing in the community.

### Pottawatomie County Area Map







### Tecumseh Area Map



## Demographic Analysis

### Population and Households

The following table presents population levels and annualized changes in Pottawatomie 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 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Shawnee	28,692	29,857	0.40%	31,634	1.16%	32,755	0.70%
Tecumseh	6,098	6,457	0.57%	6,379	-0.24%	6,513	0.42%
Pottawatomie County	65,521	69,442	0.58%	71,864	0.69%	74,595	0.75%
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 Pottawatomie County was 69,442 persons as of the 2010 Census, a 0.58% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Pottawatomie County to be 71,864 persons, and projects that the population will show 0.75% annualized growth over the next five years.

The population of Shawnee was 29,857 persons as of the 2010 Census, a 0.40% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Shawnee to be 31,634 persons, and projects that the population will show 0.70% annualized growth over the next five years.

The population of Tecumseh was 6,457 persons as of the 2010 Census, a 0.57% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Tecumseh to be 6,379 persons, and projects that the population will show 0.42% annualized growth over the next five years.

The next table presents data regarding household levels in Pottawatomie 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 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Shawnee	11,311	11,619	0.27%	12,311	1.16%	12,778	0.75%
Tecumseh	2,344	2,392	0.20%	2,377	-0.13%	2,417	0.33%
Pottawatomie County	24,540	25,911	0.55%	26,822	0.69%	27,857	0.76%
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 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Shawnee	7,306	7,376	0.10%	7,909	1.41%	8,221	0.78%
Tecumseh	1,655	1,663	0.05%	1,683	0.24%	1,711	0.33%
Pottawatomie County	17,730	18,227	0.28%	18,889	0.72%	19,638	0.78%
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, Pottawatomie County had a total of 25,911 households, representing a 0.55% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Pottawatomie County to have 26,822 households. This number is expected to experience a 0.76% annualized rate of growth over the next five years.

As of 2010, Shawnee had a total of 11,619 households, representing a 0.27% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Shawnee to have 12,311 households. This number is expected to experience a 0.75% annualized rate of growth over the next five years.

As of 2010, Tecumseh had a total of 2,392 households, representing a 0.20% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Tecumseh to have 2,377 households. This number is expected to experience a 0.33% 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 Pottawatomie County based on the U.S. Census Bureau's American Community Survey.

### 2013 Population by Race and Ethnicity

Single-Classification Race	Shawnee		Tecumseh		Pottawatomie County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	30,324		6,518		70,144	
White Alone	21,897	72.21%	4,586	70.36%	53,543	76.33%
Black or African American Alone	1,096	3.61%	135	2.07%	1,793	2.56%
Amer. Indian or Alaska Native Alone	4,307	14.20%	963	14.77%	8,661	12.35%
Asian Alone	211	0.70%	14	0.21%	388	0.55%
Native Hawaiian and Other Pac. Isl. Alone	0	0.00%	0	0.00%	54	0.08%
Some Other Race Alone	406	1.34%	0	0.00%	687	0.98%
Two or More Races	2,407	7.94%	820	12.58%	5,018	7.15%

Population by Hispanic or Latino Origin	Shawnee		Tecumseh		Pottawatomie County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	30,324		6,518		70,144	
Hispanic or Latino	1,603	5.29%	220	3.38%	3,073	4.38%
<i>Hispanic or Latino, White Alone</i>	681	42.48%	95	43.18%	1,512	49.20%
<i>Hispanic or Latino, All Other Races</i>	922	57.52%	125	56.82%	1,561	50.80%
Not Hispanic or Latino	28,721	94.71%	6,298	96.62%	67,071	95.62%
<i>Not Hispanic or Latino, White Alone</i>	21,216	73.87%	4,491	71.31%	52,031	77.58%
<i>Not Hispanic or Latino, All Other Races</i>	7,505	26.13%	1,807	28.69%	15,040	22.42%

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

In Pottawatomie County, racial and ethnic minorities comprise 25.82% of the total population. Within Shawnee, racial and ethnic minorities represent 30.04% of the population. Within Tecumseh, the percentage is 31.10%.

### Population by Age

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

<b>Pottawatomie County Population By Age</b>								
	2010	Percent	2015	Percent	2020	Percent	2000 - 2015	2015 - 2020
	Census	of Total	Estimate	of Total	Forecast	of Total	Ann. Chng.	Ann. Chng.
<b>Population by Age</b>	69,442		71,864		74,595			
Age 0 - 4	4,782	6.89%	5,028	7.00%	5,194	6.96%	1.01%	0.65%
Age 5 - 9	4,772	6.87%	4,841	6.74%	5,075	6.80%	0.29%	0.95%
Age 10 - 14	4,885	7.03%	4,869	6.78%	4,894	6.56%	-0.07%	0.10%
Age 15 - 17	2,916	4.20%	3,099	4.31%	3,225	4.32%	1.22%	0.80%
Age 18 - 20	3,380	4.87%	3,320	4.62%	3,482	4.67%	-0.36%	0.96%
Age 21 - 24	3,724	5.36%	4,024	5.60%	4,337	5.81%	1.56%	1.51%
Age 25 - 34	8,565	12.33%	8,944	12.45%	9,139	12.25%	0.87%	0.43%
Age 35 - 44	8,522	12.27%	8,507	11.84%	8,705	11.67%	-0.04%	0.46%
Age 45 - 54	9,766	14.06%	9,149	12.73%	8,530	11.44%	-1.30%	-1.39%
Age 55 - 64	8,195	11.80%	8,793	12.24%	9,089	12.18%	1.42%	0.66%
Age 65 - 74	5,678	8.18%	6,571	9.14%	7,673	10.29%	2.96%	3.15%
Age 75 - 84	3,226	4.65%	3,481	4.84%	3,809	5.11%	1.53%	1.82%
Age 85 and over	1,031	1.48%	1,238	1.72%	1,443	1.93%	3.73%	3.11%
<i>Age 55 and over</i>	<i>18,130</i>	<i>26.11%</i>	<i>20,083</i>	<i>27.95%</i>	<i>22,014</i>	<i>29.51%</i>	<i>2.07%</i>	<i>1.85%</i>
<i>Age 62 and over</i>	<i>11,363</i>	<i>16.36%</i>	<i>12,690</i>	<i>17.66%</i>	<i>14,209</i>	<i>19.05%</i>	<i>2.23%</i>	<i>2.29%</i>
<b>Median Age</b>	37.0		37.1		37.2		0.05%	0.05%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Pottawatomie County is 37.1 years. This compares with the statewide figure of 36.6 years. Approximately 7.00% of the population is below the age of 5, while 17.66% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 2.29% per year.

<b>Shawnee Population By Age</b>								
	2010	Percent	2015	Percent	2020	Percent	2000 - 2015	2015 - 2020
	Census	of Total	Estimate	of Total	Forecast	of Total	Ann. Chng.	Ann. Chng.
<b>Population by Age</b>	29,857		31,634		32,755			
Age 0 - 4	2,257	7.56%	2,340	7.40%	2,409	7.35%	0.72%	0.58%
Age 5 - 9	2,017	6.76%	2,267	7.17%	2,353	7.18%	2.36%	0.75%
Age 10 - 14	1,959	6.56%	2,067	6.53%	2,249	6.87%	1.08%	1.70%
Age 15 - 17	1,107	3.71%	1,320	4.17%	1,378	4.21%	3.58%	0.86%
Age 18 - 20	1,899	6.36%	1,687	5.33%	1,747	5.33%	-2.34%	0.70%
Age 21 - 24	2,059	6.90%	1,902	6.01%	1,976	6.03%	-1.57%	0.77%
Age 25 - 34	3,895	13.05%	4,373	13.82%	4,164	12.71%	2.34%	-0.97%
Age 35 - 44	3,302	11.06%	3,611	11.41%	4,007	12.23%	1.81%	2.10%
Age 45 - 54	3,875	12.98%	3,662	11.58%	3,367	10.28%	-1.12%	-1.67%
Age 55 - 64	3,172	10.62%	3,555	11.24%	3,664	11.19%	2.31%	0.61%
Age 65 - 74	2,248	7.53%	2,622	8.29%	3,067	9.36%	3.13%	3.18%
Age 75 - 84	1,493	5.00%	1,557	4.92%	1,632	4.98%	0.84%	0.95%
Age 85 and over	574	1.92%	671	2.12%	742	2.27%	3.17%	2.03%
<i>Age 55 and over</i>	<i>7,487</i>	<i>25.08%</i>	<i>8,405</i>	<i>26.57%</i>	<i>9,105</i>	<i>27.80%</i>	<i>2.34%</i>	<i>1.61%</i>
<i>Age 62 and over</i>	<i>4,693</i>	<i>15.72%</i>	<i>5,246</i>	<i>16.58%</i>	<i>5,798</i>	<i>17.70%</i>	<i>2.25%</i>	<i>2.02%</i>
<b>Median Age</b>	34.3		34.7		35.3		0.23%	0.34%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Shawnee is 34.7 years. This compares with the statewide figure of 36.6 years. Approximately 7.40% of the population is below the age of 5, while 16.58% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 2.02% per year.

<b>Tecumseh Population By Age</b>								
	2010	Percent	2015	Percent	2020	Percent	2000 - 2015	2015 - 2020
	Census	of Total	Estimate	of Total	Forecast	of Total	Ann. Chng.	Ann. Chng.
<b>Population by Age</b>	6,457		6,379		6,513			
Age 0 - 4	497	7.70%	516	8.09%	525	8.06%	0.75%	0.35%
Age 5 - 9	508	7.87%	485	7.60%	502	7.71%	-0.92%	0.69%
Age 10 - 14	510	7.90%	498	7.81%	482	7.40%	-0.48%	-0.65%
Age 15 - 17	336	5.20%	304	4.77%	322	4.94%	-1.98%	1.16%
Age 18 - 20	227	3.52%	266	4.17%	287	4.41%	3.22%	1.53%
Age 21 - 24	281	4.35%	324	5.08%	355	5.45%	2.89%	1.84%
Age 25 - 34	846	13.10%	791	12.40%	755	11.59%	-1.34%	-0.93%
Age 35 - 44	777	12.03%	768	12.04%	808	12.41%	-0.23%	1.02%
Age 45 - 54	836	12.95%	768	12.04%	724	11.12%	-1.68%	-1.17%
Age 55 - 64	703	10.89%	706	11.07%	718	11.02%	0.09%	0.34%
Age 65 - 74	509	7.88%	530	8.31%	587	9.01%	0.81%	2.06%
Age 75 - 84	309	4.79%	306	4.80%	310	4.76%	-0.19%	0.26%
Age 85 and over	118	1.83%	117	1.83%	138	2.12%	-0.17%	3.36%
<i>Age 55 and over</i>	<i>1,639</i>	<i>25.38%</i>	<i>1,659</i>	<i>26.01%</i>	<i>1,753</i>	<i>26.92%</i>	<i>0.24%</i>	<i>1.11%</i>
<i>Age 62 and over</i>	<i>1,029</i>	<i>15.93%</i>	<i>1,048</i>	<i>16.43%</i>	<i>1,112</i>	<i>17.08%</i>	<i>0.36%</i>	<i>1.20%</i>
<b>Median Age</b>	35.3		35.1		35.4		-0.11%	0.17%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Tecumseh is 35.1 years. This compares with the statewide figure of 36.6 years. Approximately 8.09% of the population is below the age of 5, while 16.43% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 1.20% per year.

### Families by Presence of Children

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

<b>2013 Family Type by Presence of Children Under 18 Years</b>							
	Shawnee		Tecumseh		Pottawatomie County		
	No.	Percent	No.	Percent	No.	Percent	
Total Families:	7,407		1,559		18,095		
Married-Couple Family:	4,961	66.98%	1,150	73.77%	13,480	74.50%	
With Children Under 18 Years	1,998	26.97%	560	35.92%	5,166	28.55%	
No Children Under 18 Years	2,963	40.00%	590	37.84%	8,314	45.95%	
Other Family:	2,446	33.02%	409	26.23%	4,615	25.50%	
Male Householder, No Wife Present	589	7.95%	45	2.89%	1,290	7.13%	
With Children Under 18 Years	355	4.79%	29	1.86%	738	4.08%	
No Children Under 18 Years	234	3.16%	16	1.03%	552	3.05%	
Female Householder, No Husband Present	1,857	25.07%	364	23.35%	3,325	18.38%	
With Children Under 18 Years	1,140	15.39%	176	11.29%	1,937	10.70%	
No Children Under 18 Years	717	9.68%	188	12.06%	1,388	7.67%	
Total Single Parent Families	1,495		205		2,675		
Male Householder	355	23.75%	29	14.15%	738	27.59%	
Female Householder	1,140	76.25%	176	85.85%	1,937	72.41%	

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

As shown, within Pottawatomie County, among all families 14.78% are single-parent families, while in Shawnee, the percentage is 20.18%. In Tecumseh the percentage of single-parent families is 13.15%.

### Population by Presence of Disabilities

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

2013 Age by Number of Disabilities								
	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	29,795		6,328		67,884		3,702,515	
Under 18 Years:	7,514		1,801		17,315		933,738	
With One Type of Disability	250	3.33%	54	3.00%	587	3.39%	33,744	3.61%
With Two or More Disabilities	126	1.68%	16	0.89%	182	1.05%	11,082	1.19%
No Disabilities	7,138	95.00%	1,731	96.11%	16,546	95.56%	888,912	95.20%
18 to 64 Years:	18,203		3,751		40,811		2,265,702	
With One Type of Disability	1,752	9.62%	247	6.58%	3,565	8.74%	169,697	7.49%
With Two or More Disabilities	1,386	7.61%	228	6.08%	3,015	7.39%	149,960	6.62%
No Disabilities	15,065	82.76%	3,276	87.34%	34,231	83.88%	1,946,045	85.89%
65 Years and Over:	4,078		776		9,758		503,075	
With One Type of Disability	897	22.00%	183	23.58%	2,169	22.23%	95,633	19.01%
With Two or More Disabilities	1,127	27.64%	190	24.48%	2,342	24.00%	117,044	23.27%
No Disabilities	2,054	50.37%	403	51.93%	5,247	53.77%	290,398	57.72%
<b>Total Number of Persons with Disabilities:</b>	<b>5,538</b>	<b>18.59%</b>	<b>918</b>	<b>14.51%</b>	<b>11,860</b>	<b>17.47%</b>	<b>577,160</b>	<b>15.59%</b>

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

Within Pottawatomie County, 17.47% of the civilian non-institutionalized population has one or more disabilities, compared with 15.59% of Oklahomans as a whole. In Shawnee the percentage is 18.59%. In Tecumseh the percentage is 14.51%.

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

2013 Population by Veteran and Disability Status								
	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	21,123		4,527		49,377		2,738,788	
Veteran:	2,301	10.89%	438	9.68%	6,135	12.42%	305,899	11.17%
With a Disability	904	39.29%	136	31.05%	2,321	37.83%	100,518	32.86%
No Disability	1,397	60.71%	302	68.95%	3,814	62.17%	205,381	67.14%
Non-veteran:	18,822	89.11%	4,089	90.32%	43,242	87.58%	2,432,889	88.83%
With a Disability	4,242	22.54%	712	17.41%	8,748	20.23%	430,610	17.70%
No Disability	14,580	77.46%	3,377	82.59%	34,494	79.77%	2,002,279	82.30%

Source: 2009-2013 American Community Survey, Table C21007

Within Pottawatomie County, the Census Bureau estimates there are 6,135 veterans, 37.83% of which have one or more disabilities (compared with 32.86% at a statewide level). In Shawnee, there are an estimated 2,301 veterans, 39.29% of which are estimated to have a disability. Within Tecumseh the number of veterans is estimated to be 438 (31.05% with a disability).

## Group Quarters Population

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

### 2010 Group Quarters Population

	Shawnee		Tecumseh		Pottawatomie County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	29,857		6,457		69,442	
Group Quarters Population	1,670	5.59%	172	2.66%	3,053	4.40%
Institutionalized Population	468	1.57%	172	2.66%	1,802	2.59%
Correctional facilities for adults	206	0.69%	0	0.00%	1,245	1.79%
Juvenile facilities	13	0.04%	92	1.42%	105	0.15%
Nursing facilities/Skilled-nursing facilities	249	0.83%	80	1.24%	452	0.65%
Other institutional facilities	0	0.00%	0	0.00%	0	0.00%
Noninstitutionalized population	1,202	4.03%	0	0.00%	1,251	1.80%
College/University student housing	1,110	3.72%	0	0.00%	1,117	1.61%
Military quarters	0	0.00%	0	0.00%	0	0.00%
Other noninstitutional facilities	92	0.31%	0	0.00%	134	0.19%

Source: 2010 Decennial Census, Table P42

The percentage of the Pottawatomie County population in group quarters is somewhat higher than the statewide figure, which was 2.99% in 2010. This is due to the student populations of Oklahoma Baptist University and St. Gregory's University, as well as inmates at the Mabel Bassett Correctional Center in McCloud.

## Household Income Levels

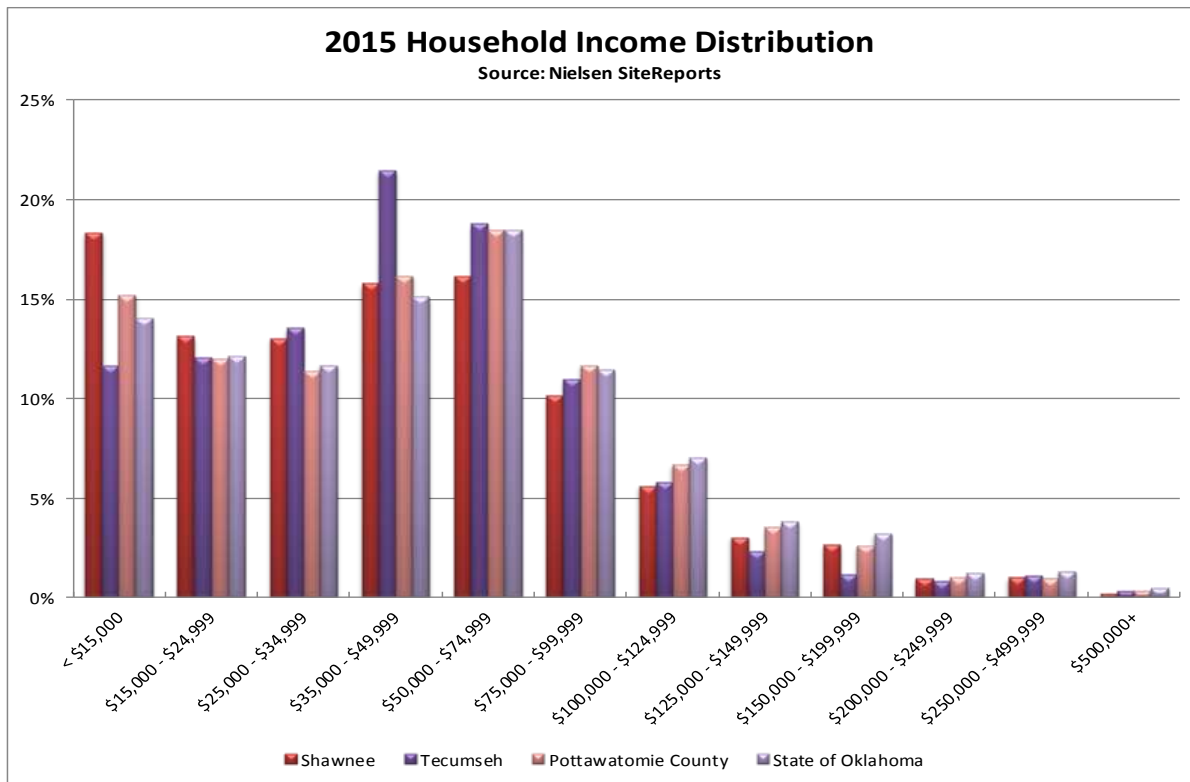
Data in the following chart shows the distribution of household income in Pottawatomie County, as well as median and average household income. Data for Oklahoma is included as a basis of comparison. This data is provided by Nielsen SiteReports for 2015.

<b>2015 Household Income Distribution</b>								
	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<b>Households by HH Income</b>	12,311		2,377		26,822		1,520,327	
< \$15,000	2,256	18.33%	276	11.61%	4,074	15.19%	213,623	14.05%
\$15,000 - \$24,999	1,617	13.13%	286	12.03%	3,223	12.02%	184,613	12.14%
\$25,000 - \$34,999	1,601	13.00%	322	13.55%	3,049	11.37%	177,481	11.67%
\$35,000 - \$49,999	1,940	15.76%	510	21.46%	4,334	16.16%	229,628	15.10%
\$50,000 - \$74,999	1,988	16.15%	446	18.76%	4,951	18.46%	280,845	18.47%
\$75,000 - \$99,999	1,249	10.15%	260	10.94%	3,128	11.66%	173,963	11.44%
\$100,000 - \$124,999	690	5.60%	138	5.81%	1,786	6.66%	106,912	7.03%
\$125,000 - \$149,999	372	3.02%	56	2.36%	948	3.53%	57,804	3.80%
\$150,000 - \$199,999	327	2.66%	28	1.18%	696	2.59%	48,856	3.21%
\$200,000 - \$249,999	119	0.97%	20	0.84%	273	1.02%	18,661	1.23%
\$250,000 - \$499,999	127	1.03%	27	1.14%	269	1.00%	20,487	1.35%
\$500,000+	25	0.20%	8	0.34%	91	0.34%	7,454	0.49%
<b>Median Household Income</b>	\$40,269		\$43,956		\$45,608		\$47,049	
<b>Average Household Income</b>	\$55,244		\$57,036		\$59,762		\$63,390	

Source: Nielsen SiteReports

As shown, median household income for Pottawatomie County is estimated to be \$45,608 in 2015. By way of comparison, the median household income of Oklahoma is estimated to be \$47,049. For Shawnee, median household income is estimated to be \$40,269. In Tecumseh the estimate is \$43,956. The income distribution can be better visualized by the following chart.





**Household Income Trend**

Next we examine the long-term growth of incomes in Pottawatomie 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.

	1999 Median HH Income	2015 Median HH Income	Nominal Growth	Inflation Rate	Real Growth
Shawnee	\$27,659	\$40,269	2.38%	2.40%	-0.02%
Tecumseh	\$27,202	\$43,956	3.04%	2.40%	0.65%
Pottawatomie County	\$31,573	\$45,608	2.33%	2.40%	-0.07%
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, both Pottawatomie County and the State of Oklahoma as a whole saw negative growth in “real” median household income, once inflation is taken into account. It should be noted that this trend is not unique to Oklahoma or Pottawatomie County, 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 Pottawatomie 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.

	2000 Census	2013 ACS	Change (Basis Points)	2013 Poverty Rates for Single-Parent Families	
				Male Householder	Female Householder
Shawnee	17.77%	23.81%	604	31.27%	55.09%
Tecumseh	16.56%	15.01%	-156	0.00%	11.93%
Pottawatomie County	14.61%	18.63%	402	26.69%	48.79%
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 Pottawatomie County is estimated to be 18.63% by the American Community Survey. This is an increase of 402 basis points since the 2000 Census. Within Shawnee, the poverty rate is estimated to be 23.81%. Within Tecumseh, the rate is estimated to be 15.01%. 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 Pottawatomie 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)
Pottawatomie County	28,934	31,596	1.78%	7.0%	4.4%	-260
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

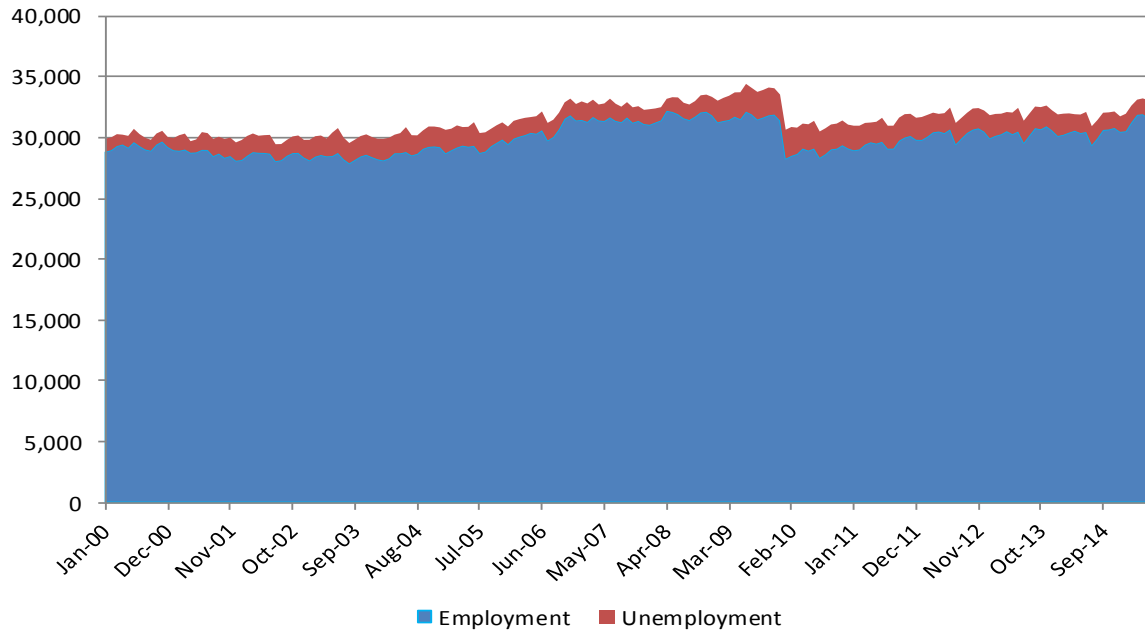
Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Population Survey

As of May 2015, total employment in Pottawatomie County was 31,596 persons. Compared with figures from May 2010, this represents annualized employment growth of 1.78% per year. The unemployment rate in May was 4.4%, a decrease of -260 basis points from May 2010, which was 7.0%. Over the last five years, both the statewide and national trends have been improving employment levels and declining unemployment rates, and Pottawatomie County has outperformed both the state and nation in these statistics.

### Employment Level Trends

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

**Employment and Unemployment in Pottawatomie County  
January 2000 through May 2015**



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

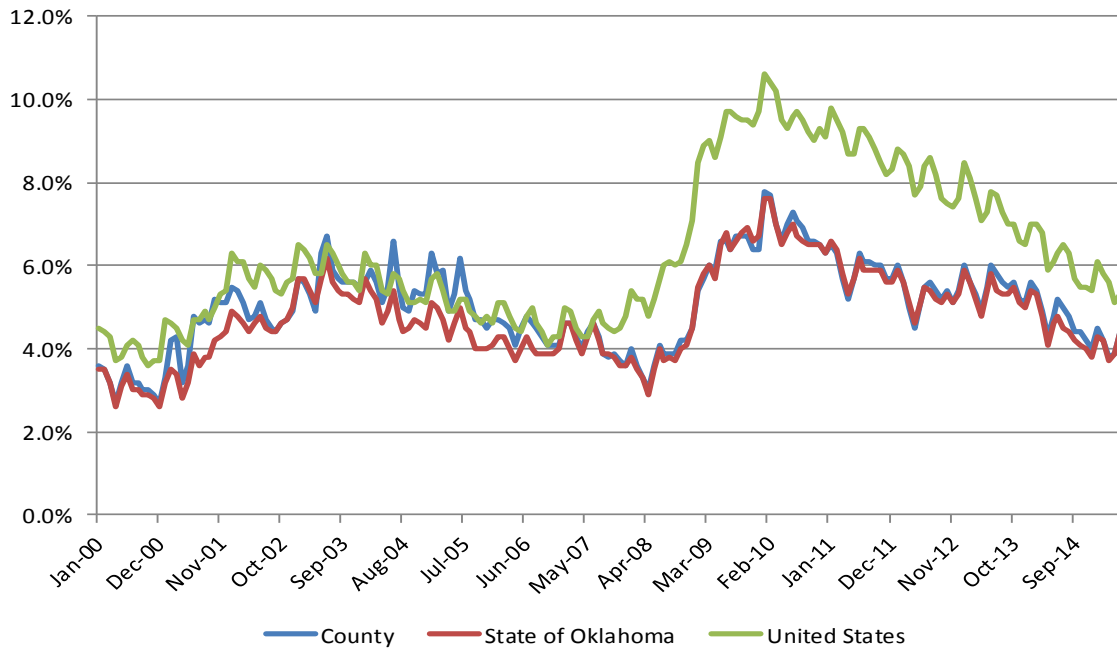
As shown, total employment levels have generally trended upward from 2000 through the 3<sup>rd</sup> quarter of 2008, when employment levels began to decline due to the national economic recession. Employment growth resumed in early 2010, and has continued to grow to its current level of 31,596 persons. The number of unemployed persons in May 2015 was 1,466, out of a total labor force of 33,062 persons.

**Unemployment Rate Trends**

The next chart shows historic unemployment rates for Pottawatomie 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.



**Unemployment Rates in Pottawatomie County, Oklahoma and the United States  
January 2000 through May 2015**



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

As shown, unemployment rates in Pottawatomie 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 4.4%. On the whole, unemployment rates in Pottawatomie County track very well with statewide figures. Compared with the United States, unemployment rates in Pottawatomie County and Oklahoma are and have historically been well below the national average.

**Employment and Wages by Industrial Supersector**

The next table presents data regarding employment in Pottawatomie 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.

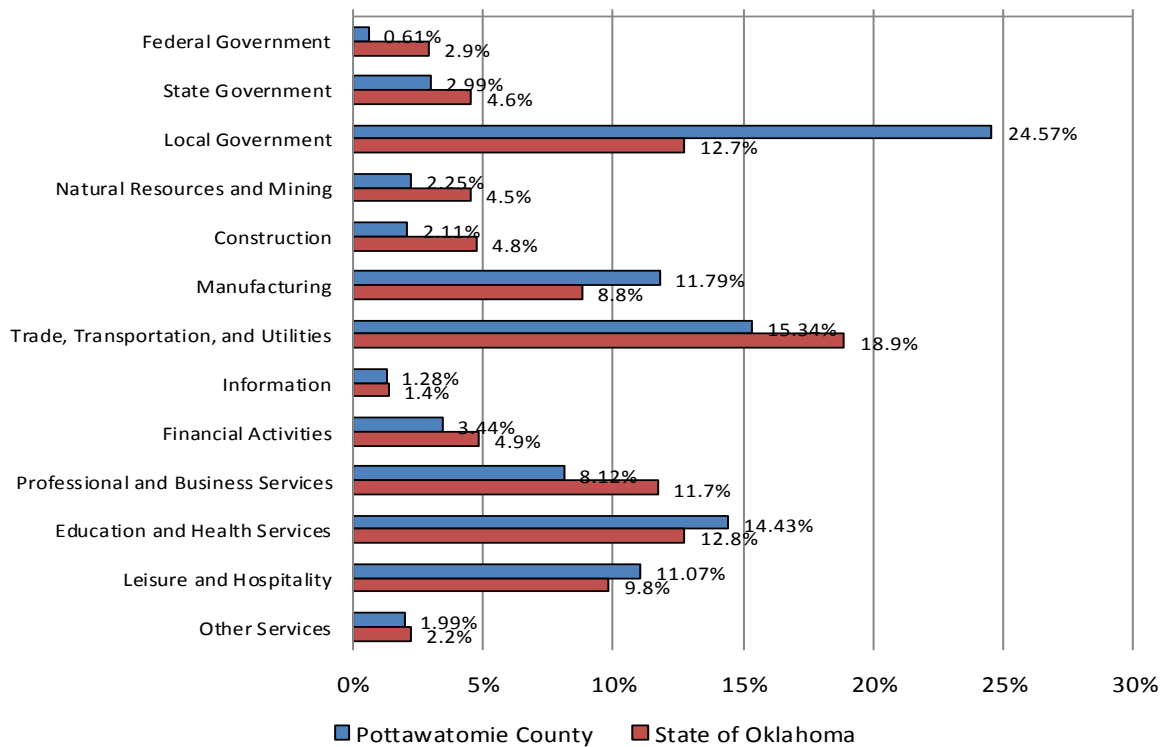


**Employees and Wages by Supersector - 2014**

Supersector	Establishments	Avg. No. of Employees	Percent of Total	Avg. Annual Pay	Location Quotient
Federal Government	18	137	0.61%	\$53,584	0.30
State Government	13	674	2.99%	\$35,816	0.90
Local Government	57	5,533	24.57%	\$31,364	2.44
Natural Resources and Mining	48	506	2.25%	\$72,963	1.48
Construction	132	475	2.11%	\$34,469	0.47
Manufacturing	60	2,655	11.79%	\$48,208	1.33
Trade, Transportation, and Utilities	309	3,453	15.34%	\$29,240	0.80
Information	19	289	1.28%	\$35,256	0.64
Financial Activities	141	775	3.44%	\$37,235	0.61
Professional and Business Services	186	1,828	8.12%	\$32,325	0.58
Education and Health Services	161	3,250	14.43%	\$35,237	0.96
Leisure and Hospitality	120	2,492	11.07%	\$13,629	1.03
Other Services	84	449	1.99%	\$23,442	0.64
<b>Total</b>	<b>1,348</b>	<b>22,517</b>		<b>\$33,062</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 (15.34%) are employed in Trade, Transportation, and Utilities. The average annual pay in this sector is \$29,240 per year. The industry



with the highest annual pay is Natural Resources and Mining, with average annual pay of \$72,963 per year.

The rightmost column of the previous table provides location quotients for each industry for Pottawatomie 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 (Pottawatomie 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 Pottawatomie County, among all industries the largest location quotient is in Local Government, with a quotient of 2.44. Among private employers, the largest is Natural Resources and Mining, with a quotient of 1.48. This sector includes agricultural employment as well as employment in the oil and gas industry.

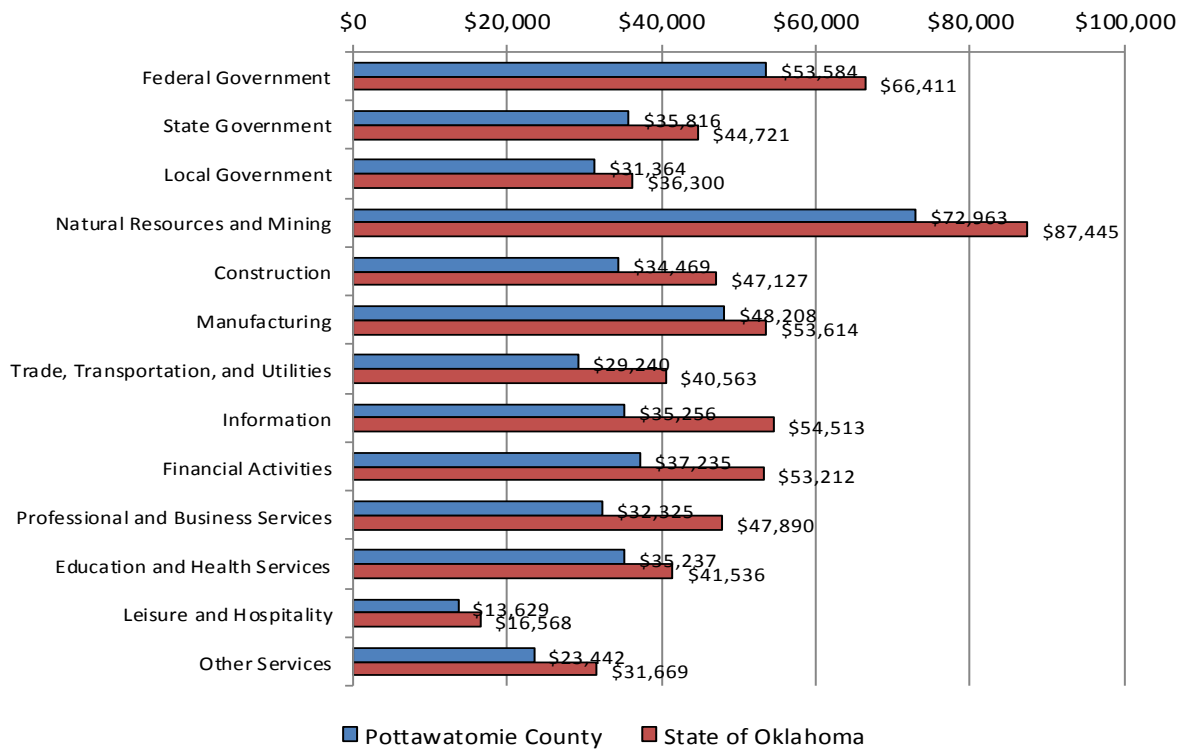
The next table presents average annual pay in Pottawatomie County by industry, in comparison with Oklahoma as a whole and the United States.

### Comparison of 2014 Average Annual Pay by Supersector

Supersector	Pottawatomie County	State of Oklahoma	United States	Percent of State	Percent of Nation
Federal Government	\$53,584	\$66,411	\$75,784	80.7%	70.7%
State Government	\$35,816	\$44,721	\$54,184	80.1%	66.1%
Local Government	\$31,364	\$36,300	\$46,146	86.4%	68.0%
Natural Resources and Mining	\$72,963	\$87,445	\$59,666	83.4%	122.3%
Construction	\$34,469	\$47,127	\$55,041	73.1%	62.6%
Manufacturing	\$48,208	\$53,614	\$62,977	89.9%	76.5%
Trade, Transportation, and Utilities	\$29,240	\$40,563	\$42,988	72.1%	68.0%
Information	\$35,256	\$54,513	\$90,804	64.7%	38.8%
Financial Activities	\$37,235	\$53,212	\$85,261	70.0%	43.7%
Professional and Business Services	\$32,325	\$47,890	\$66,657	67.5%	48.5%
Education and Health Services	\$35,237	\$41,536	\$45,951	84.8%	76.7%
Leisure and Hospitality	\$13,629	\$16,568	\$20,993	82.3%	64.9%
Other Services	\$23,442	\$31,669	\$33,935	74.0%	69.1%
<b>Total</b>	<b>\$33,062</b>	<b>\$43,774</b>	<b>\$51,361</b>	<b>75.5%</b>	<b>64.4%</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, Pottawatomie 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>Shawnee</b>		<b>Tecumseh</b>		<b>Pottawatomie 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>No.</b>	<b>Percent</b>
<b>Total Families</b>	<b>7,407</b>		<b>1,559</b>		<b>18,095</b>		<b>961,468</b>	
With Children <18 Years:	3,493	47.16%	765	49.07%	7,841	43.33%	425,517	44.26%
Married Couple:	1,998	57.20%	560	73.20%	5,166	65.88%	281,418	66.14%
Both Parents Employed	1,208	60.46%	299	53.39%	3,088	59.78%	166,700	59.24%
One Parent Employed	740	37.04%	225	40.18%	1,873	36.26%	104,817	37.25%
Neither Parent Employed	50	2.50%	36	6.43%	205	3.97%	9,901	3.52%
Other Family:	1,495	42.80%	205	26.80%	2,675	34.12%	144,099	33.86%
Male Householder:	355	23.75%	29	14.15%	738	27.59%	36,996	25.67%
Employed	288	81.13%	29	100.00%	578	78.32%	31,044	83.91%
Not Employed	67	18.87%	0	0.00%	160	21.68%	5,952	16.09%
Female Householder:	1,140	76.25%	176	85.85%	1,937	72.41%	107,103	74.33%
Employed	748	65.61%	149	84.66%	1,349	69.64%	75,631	70.62%
Not Employed	392	34.39%	27	15.34%	588	30.36%	31,472	29.38%
Without Children <18 Years:	3,914	52.84%	794	50.93%	10,254	56.67%	535,951	55.74%
Married Couple:	2,963	75.70%	590	74.31%	8,314	81.08%	431,868	80.58%
Both Spouses Employed	1,114	37.60%	201	34.07%	2,834	34.09%	167,589	38.81%
One Spouse Employed	858	28.96%	198	33.56%	2,770	33.32%	138,214	32.00%
Neither Spouse Employed	991	33.45%	191	32.37%	2,710	32.60%	126,065	29.19%
Other Family:	951	24.30%	204	25.69%	1,940	18.92%	104,083	19.42%
Male Householder:	234	23.61%	16	8.38%	552	20.37%	32,243	25.58%
Employed	125	53.42%	16	100.00%	249	45.11%	19,437	60.28%
Not Employed	109	46.58%	0	0.00%	303	54.89%	12,806	39.72%
Female Householder:	717	75.39%	188	92.16%	1,388	71.55%	71,840	69.02%
Employed	334	46.58%	107	56.91%	663	47.77%	36,601	50.95%
Not Employed	383	53.42%	81	43.09%	725	52.23%	35,239	49.05%
<i>Total Working Families:</i>	<i>5,415</i>	<i>73.11%</i>	<i>1,224</i>	<i>78.51%</i>	<i>13,404</i>	<i>74.08%</i>	<i>740,033</i>	<i>76.97%</i>
<i>  With Children &lt;18 Years:</i>	<i>2,984</i>	<i>55.11%</i>	<i>702</i>	<i>57.35%</i>	<i>6,888</i>	<i>51.39%</i>	<i>378,192</i>	<i>51.10%</i>
<i>  Without Children &lt;18 Years:</i>	<i>2,431</i>	<i>44.89%</i>	<i>522</i>	<i>42.65%</i>	<i>6,516</i>	<i>48.61%</i>	<i>361,841</i>	<i>48.90%</i>

Source: 2009-2013 American Community Survey, Table B23007

Within Pottawatomie County, there are 13,404 working families, 51.39% 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 Pottawatomie County area are presented in the following table, as reported by the Shawnee Economic Development Foundation.

### Major Employers in Pottawatomie County

Company	Industry / Description	No. Employees
Citizen Pottawatomie Nation	Tribal government, entertainment	2,164
St. Anthony Shawnee Hospital	Health care	550
Wolverine Tube	Commodity and technical tubing	502
Georg Fischer	Polypropylene fittings	500
Shawnee Public Schools	Education	490
Eaton	Hydraulic motor production	425
Walmart	Retail	400
Absentee Shawnee	Tribal government, entertainment	326
Oklahoma Baptist University	Education	300
TDK Ferrites	Ferrous metal magnets	275
Jindal Films	Thin films production	270
City of Shawnee	City government	264
Shawnee Milling	Grain milling	250
GE Oil and Gas	Pressure relief valves and systems	210
Gateway Pipeline	Pipeline construction	200
Finley & Cook	CPAs and accounting services	199
Trican Well Services	Oil field services	180
St. Gregory's University	Education	170
Gordon Cooper Technology Center	Education	150
Dexter Axle	Heavy duty trailer axle fabrication	140
Unit Liner / Pond Pro	Oil field environmental products	111

Source: Shawnee Economic Development Foundation

As shown, Pottawatomie County has a wide variety of employers in numerous industries, which should provide some degree of insulation from cyclical economic fluctuations.

## Commuting Patterns

### Travel Time to Work

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

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

	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<b>Commuting Workers:</b>	<b>11,919</b>		<b>2,559</b>		<b>27,653</b>		<b>1,613,364</b>	
Less than 15 minutes	6,403	53.72%	805	31.46%	10,202	36.89%	581,194	36.02%
15 to 30 minutes	3,016	25.30%	1,092	42.67%	9,047	32.72%	625,885	38.79%
30 to 45 minutes	1,124	9.43%	393	15.36%	4,274	15.46%	260,192	16.13%
45 to 60 minutes	787	6.60%	168	6.57%	2,291	8.28%	74,625	4.63%
60 or more minutes	589	4.94%	101	3.95%	1,839	6.65%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Within Pottawatomie County, the largest percentage of workers (36.89%) travel fewer than 15 minutes to work. Although Pottawatomie County has an active labor market, some persons living in the area commute to other labor markets in the region, such as Midwest City and Oklahoma City.

### Means of Transportation

Data in the following table presents data regarding means of transportation for employed persons in Pottawatomie County.

<b>Workers 16 Years and Over by Means of Transportation to Work</b>								
	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<b>Total Workers Age 16+</b>	<b>12,631</b>		<b>2,584</b>		<b>28,781</b>		<b>1,673,026</b>	
Car, Truck or Van:	11,292	89.40%	2,534	98.07%	26,629	92.52%	1,551,461	92.73%
<i>Drove Alone</i>	<i>10,041</i>	<i>88.92%</i>	<i>2,433</i>	<i>96.01%</i>	<i>24,137</i>	<i>90.64%</i>	<i>1,373,407</i>	<i>88.52%</i>
<i>Carpooled</i>	<i>1,251</i>	<i>11.08%</i>	<i>101</i>	<i>3.99%</i>	<i>2,492</i>	<i>9.36%</i>	<i>178,054</i>	<i>11.48%</i>
Public Transportation	32	0.25%	0	0.00%	51	0.18%	8,092	0.48%
Taxicab	14	0.11%	0	0.00%	14	0.05%	984	0.06%
Motorcycle	27	0.21%	0	0.00%	63	0.22%	3,757	0.22%
Bicycle	44	0.35%	15	0.58%	68	0.24%	4,227	0.25%
Walked	379	3.00%	0	0.00%	535	1.86%	30,401	1.82%
Other Means	131	1.04%	10	0.39%	293	1.02%	14,442	0.86%
Worked at Home	712	5.64%	25	0.97%	1,128	3.92%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

As shown, the vast majority of persons in Pottawatomie 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 Pottawatomie 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 Census	2010 Census	Annual Change	2015 Estimate	Annual Change
Shawnee	12,651	13,205	0.43%	13,932	1.08%
Tecumseh	2,565	2,664	0.38%	2,660	-0.03%
Pottawatomie County	27,302	29,139	0.65%	30,095	0.65%
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 Pottawatomie County grew by 0.65% per year, to a total of 30,095 housing units in 2015. In terms of new housing unit construction, Pottawatomie County underperformed Oklahoma as a whole between 2010 and 2015.

### Housing by Units in Structure

The next table separates housing units in Pottawatomie 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>								
	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<b>Total Housing Units</b>	<b>13,531</b>		<b>2,636</b>		<b>29,217</b>		<b>1,669,828</b>	
1 Unit, Detached	10,531	77.83%	2,190	83.08%	22,136	75.76%	1,219,987	73.06%
1 Unit, Attached	314	2.32%	0	0.00%	424	1.45%	34,434	2.06%
Duplex Units	453	3.35%	102	3.87%	709	2.43%	34,207	2.05%
3-4 Units	562	4.15%	77	2.92%	687	2.35%	42,069	2.52%
5-9 Units	377	2.79%	65	2.47%	512	1.75%	59,977	3.59%
10-19 Units	334	2.47%	77	2.92%	421	1.44%	57,594	3.45%
20-49 Units	117	0.86%	0	0.00%	123	0.42%	29,602	1.77%
50 or More Units	342	2.53%	0	0.00%	351	1.20%	30,240	1.81%
Mobile Homes	489	3.61%	125	4.74%	3,811	13.04%	159,559	9.56%
Boat, RV, Van, etc.	12	0.09%	0	0.00%	43	0.15%	2,159	0.13%
<b>Total Multifamily Units</b>	<b>2,185</b>	<b>16.15%</b>	<b>321</b>	<b>12.18%</b>	<b>2,803</b>	<b>9.59%</b>	<b>253,689</b>	<b>15.19%</b>

Source: 2009-2013 American Community Survey, Table B25024

Within Pottawatomie County, 75.76% of housing units are single-family, detached. 9.59% of housing units are multifamily in structure (two or more units per building), while 13.19% of housing units comprise mobile homes, RVs, etc.

Within Shawnee, 77.83% of housing units are single-family, detached. 16.15% of housing units are multifamily in structure, while 3.70% of housing units comprise mobile homes, RVs, etc.

Within Tecumseh, 83.08% of housing units are single-family, detached. 12.18% of housing units are multifamily in structure, while 4.74% of housing units comprise mobile homes, RVs, etc.

### Housing Units Number of Bedrooms and Tenure

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

	Shawnee		Tecumseh		Pottawatomie County State of Oklahoma			
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<b>Total Occupied Housing Units</b>	<b>11,693</b>		<b>2,303</b>		<b>25,658</b>		<b>1,444,081</b>	
<b>Owner Occupied:</b>	<b>6,893</b>	<b>58.95%</b>	<b>1,636</b>	<b>71.04%</b>	<b>18,445</b>	<b>71.89%</b>	<b>968,736</b>	<b>67.08%</b>
No Bedroom	24	0.35%	18	1.10%	93	0.50%	2,580	0.27%
1 Bedroom	99	1.44%	11	0.67%	341	1.85%	16,837	1.74%
2 Bedrooms	1,375	19.95%	321	19.62%	3,638	19.72%	166,446	17.18%
3 Bedrooms	4,327	62.77%	954	58.31%	11,462	62.14%	579,135	59.78%
4 Bedrooms	951	13.80%	261	15.95%	2,512	13.62%	177,151	18.29%
5 or More Bedrooms	117	1.70%	71	4.34%	399	2.16%	26,587	2.74%
<b>Renter Occupied:</b>	<b>4,800</b>	<b>41.05%</b>	<b>667</b>	<b>28.96%</b>	<b>7,213</b>	<b>28.11%</b>	<b>475,345</b>	<b>32.92%</b>
No Bedroom	121	2.52%	3	0.45%	135	1.87%	13,948	2.93%
1 Bedroom	962	20.04%	121	18.14%	1,273	17.65%	101,850	21.43%
2 Bedrooms	1,949	40.60%	303	45.43%	2,789	38.67%	179,121	37.68%
3 Bedrooms	1,599	33.31%	201	30.13%	2,653	36.78%	152,358	32.05%
4 Bedrooms	137	2.85%	39	5.85%	317	4.39%	24,968	5.25%
5 or More Bedrooms	32	0.67%	0	0.00%	46	0.64%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

The overall homeownership rate in Pottawatomie County is 71.89%, while 28.11% of housing units are renter occupied. In Shawnee, the homeownership rate is 58.95%, while 41.05% of households are renters. In Tecumseh 71.04% of households are homeowners while 28.96% are renters. Shawnee's ownership rate is unusually low, and this is likely due to the influence of Oklahoma Baptist University and St. Gregory's University.

### Housing Units Tenure and Household Income

The next series of tables analyze housing units by tenure, and by household income.

<b>Pottawatomie County Owner/Renter Percentages by Income Band in 2013</b>					
<b>Household Income</b>	<b>Total Households</b>	<b>Total Owners</b>	<b>Total Renters</b>	<b>% Owners</b>	<b>% Renters</b>
<b>Total</b>	<b>25,658</b>	<b>18,445</b>	<b>7,213</b>	<b>71.89%</b>	<b>28.11%</b>
Less than \$5,000	992	486	506	48.99%	51.01%
\$5,000 - \$9,999	1,444	603	841	41.76%	58.24%
\$10,000-\$14,999	1,840	952	888	51.74%	48.26%
\$15,000-\$19,999	1,722	1,000	722	58.07%	41.93%
\$20,000-\$24,999	1,875	1,117	758	59.57%	40.43%
\$25,000-\$34,999	2,932	1,905	1,027	64.97%	35.03%
\$35,000-\$49,999	3,954	2,895	1,059	73.22%	26.78%
\$50,000-\$74,999	5,090	4,330	760	85.07%	14.93%
\$75,000-\$99,999	2,744	2,352	392	85.71%	14.29%
\$100,000-\$149,999	2,076	1,879	197	90.51%	9.49%
\$150,000 or more	989	926	63	93.63%	6.37%
<b>Income Less Than \$25,000</b>	<b>7,873</b>	<b>4,158</b>	<b>3,715</b>	<b>52.81%</b>	<b>47.19%</b>

Source: 2009-2013 American Community Survey, Table B25118

Within Pottawatomie County as a whole, 47.19% of households with incomes less than \$25,000 are estimated to be renters, while 52.81% are estimated to be homeowners.

<b>Shawnee Owner/Renter Percentages by Income Band in 2013</b>					
<b>Household Income</b>	<b>Total Households</b>	<b>Total Owners</b>	<b>Total Renters</b>	<b>% Owners</b>	<b>% Renters</b>
<b>Total</b>	<b>11,693</b>	<b>6,893</b>	<b>4,800</b>	<b>58.95%</b>	<b>41.05%</b>
Less than \$5,000	563	189	374	33.57%	66.43%
\$5,000 - \$9,999	859	259	600	30.15%	69.85%
\$10,000-\$14,999	981	363	618	37.00%	63.00%
\$15,000-\$19,999	806	396	410	49.13%	50.87%
\$20,000-\$24,999	1,063	512	551	48.17%	51.83%
\$25,000-\$34,999	1,495	824	671	55.12%	44.88%
\$35,000-\$49,999	1,812	1,135	677	62.64%	37.36%
\$50,000-\$74,999	1,878	1,409	469	75.03%	24.97%
\$75,000-\$99,999	1,039	760	279	73.15%	26.85%
\$100,000-\$149,999	799	702	97	87.86%	12.14%
\$150,000 or more	398	344	54	86.43%	13.57%
<b>Income Less Than \$25,000</b>	<b>4,272</b>	<b>1,719</b>	<b>2,553</b>	<b>40.24%</b>	<b>59.76%</b>

Source: 2009-2013 American Community Survey, Table B25118

Within Shawnee, 59.76% of households with incomes less than \$25,000 are estimated to be renters, while 40.24% are estimated to be homeowners.

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**Tecumseh Owner/Renter Percentages by Income Band in 2013**


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Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
<b>Total</b>	<b>2,303</b>	<b>1,636</b>	<b>667</b>	<b>71.04%</b>	<b>28.96%</b>
Less than \$5,000	97	79	18	81.44%	18.56%
\$5,000 - \$9,999	59	43	16	72.88%	27.12%
\$10,000-\$14,999	171	58	113	33.92%	66.08%
\$15,000-\$19,999	210	138	72	65.71%	34.29%
\$20,000-\$24,999	105	63	42	60.00%	40.00%
\$25,000-\$34,999	316	133	183	42.09%	57.91%
\$35,000-\$49,999	512	370	142	72.27%	27.73%
\$50,000-\$74,999	486	421	65	86.63%	13.37%
\$75,000-\$99,999	242	226	16	93.39%	6.61%
\$100,000-\$149,999	80	80	0	100.00%	0.00%
\$150,000 or more	25	25	0	100.00%	0.00%
<b>Income Less Than \$25,000</b>	<b>642</b>	<b>381</b>	<b>261</b>	<b>59.35%</b>	<b>40.65%</b>

Source: 2009-2013 American Community Survey, Table B25118

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Within Tecumseh, 40.65% of households with incomes less than \$25,000 are estimated to be renters, while 59.35% 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.

<b>2013 Housing Units by Tenure and Year of Construction</b>								
	<b>Shawnee</b>		<b>Tecumseh</b>		<b>Pottawatomie 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>No.</b>	<b>Percent</b>
<b>Total Occupied Housing Units</b>	<b>11,693</b>		<b>2,303</b>		<b>25,658</b>		<b>1,444,081</b>	
<b>Owner Occupied:</b>	<b>6,893</b>	<b>58.95%</b>	<b>1,636</b>	<b>71.04%</b>	<b>18,445</b>	<b>71.89%</b>	<b>968,736</b>	<b>67.08%</b>
Built 2010 or Later	86	1.25%	16	0.98%	263	1.43%	10,443	1.08%
Built 2000 to 2009	856	12.42%	101	6.17%	2,756	14.94%	153,492	15.84%
Built 1990 to 1999	537	7.79%	125	7.64%	2,130	11.55%	125,431	12.95%
Built 1980 to 1989	603	8.75%	298	18.22%	2,740	14.85%	148,643	15.34%
Built 1970 to 1979	1,383	20.06%	513	31.36%	4,214	22.85%	184,378	19.03%
Built 1960 to 1969	704	10.21%	179	10.94%	1,780	9.65%	114,425	11.81%
Built 1950 to 1959	1,218	17.67%	123	7.52%	1,867	10.12%	106,544	11.00%
Built 1940 to 1949	476	6.91%	94	5.75%	910	4.93%	50,143	5.18%
Built 1939 or Earlier	1,030	14.94%	187	11.43%	1,785	9.68%	75,237	7.77%
Median Year Built:		1970		1975		1977		1977
<b>Renter Occupied:</b>	<b>4,800</b>	<b>41.05%</b>	<b>667</b>	<b>28.96%</b>	<b>7,213</b>	<b>28.11%</b>	<b>475,345</b>	<b>32.92%</b>
Built 2010 or Later	12	0.25%	14	2.10%	39	0.54%	5,019	1.06%
Built 2000 to 2009	491	10.23%	125	18.74%	833	11.55%	50,883	10.70%
Built 1990 to 1999	516	10.75%	96	14.39%	847	11.74%	47,860	10.07%
Built 1980 to 1989	535	11.15%	60	9.00%	980	13.59%	77,521	16.31%
Built 1970 to 1979	905	18.85%	125	18.74%	1,395	19.34%	104,609	22.01%
Built 1960 to 1969	714	14.88%	54	8.10%	1,008	13.97%	64,546	13.58%
Built 1950 to 1959	775	16.15%	147	22.04%	1,028	14.25%	54,601	11.49%
Built 1940 to 1949	367	7.65%	14	2.10%	442	6.13%	31,217	6.57%
Built 1939 or Earlier	485	10.10%	32	4.80%	641	8.89%	39,089	8.22%
Median Year Built:		1971		1977		1973		1975
<b>Overall Median Year Built:</b>		<b>1970</b>		<b>1975</b>		<b>1976</b>		<b>1976</b>

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

Within Pottawatomie County, 15.16% of housing units were built after the year 2000. This compares with 15.22% statewide. Within Shawnee the percentage is 12.36%. Within Tecumseh the percentage is 11.12%.

73.23% of housing units in Pottawatomie County were built prior to 1990, while in Shawnee the percentage is 78.64%. These figures compare with the statewide figure of 72.78%. In Tecumseh the percentage is 79.29%.

### Substandard Housing

The next table presents data regarding substandard housing in Pottawatomie 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
Shawnee	11,693	25	0.21%	57	0.49%	31	0.27%
Tecumseh	2,303	41	1.78%	3	0.13%	0	0.00%
Pottawatomie County	25,658	135	0.53%	115	0.45%	444	1.73%
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 Pottawatomie County, 0.53% of occupied housing units have inadequate plumbing (compared with 0.49% at a statewide level), while 0.45% 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 Pottawatomie County by vacancy and type. This data is provided by the American Community Survey.

### 2013 Housing Units by Vacancy

	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<b>Total Housing Units</b>	13,531		2,636		29,217		1,669,828	
Total Vacant Units	1,838	13.58%	333	12.63%	3,559	12.18%	225,747	13.52%
For rent	421	22.91%	74	22.22%	594	16.69%	43,477	19.26%
Rented, not occupied	82	4.46%	0	0.00%	88	2.47%	9,127	4.04%
For sale only	200	10.88%	53	15.92%	401	11.27%	23,149	10.25%
Sold, not occupied	40	2.18%	0	0.00%	96	2.70%	8,618	3.82%
For seasonal, recreational, or occasional use	171	9.30%	0	0.00%	339	9.53%	39,475	17.49%
For migrant workers	0	0.00%	0	0.00%	1	0.03%	746	0.33%
Other vacant	924	50.27%	206	61.86%	2,040	57.32%	101,155	44.81%
<b>Homeowner Vacancy Rate</b>	2.80%		3.14%		2.12%		2.31%	
<b>Rental Vacancy Rate</b>	7.94%		9.99%		7.52%		8.24%	

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

Within Pottawatomie County, the overall housing vacancy rate is estimated to be 12.18%. The homeowner vacancy rate is estimated to be 2.12%, while the rental vacancy rate is estimated to be 7.52%.

In Shawnee, the overall housing vacancy rate is estimated to be 13.58%. The homeowner vacancy rate is estimated to be 2.80%, while the rental vacancy rate is estimated to be 7.94%.

In Tecumseh, the overall housing vacancy rate is estimated to be 12.63%. The homeowner vacancy rate is estimated to be 3.14%, while the rental vacancy rate is estimated to be 9.99%.

## Building Permits

The next series of tables present data regarding new residential building permits issued in Shawnee and Tecumseh. 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.

### Shawnee

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

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	94	\$142,072	16	\$69,750
2005	112	\$159,182	140	\$59,590
2006	124	\$125,912	2	\$75,000
2007	49	\$101,924	4	\$50,000
2008	109	\$132,272	2	\$150,000
2009	85	\$138,211	11	\$68,182
2010	77	\$128,859	6	\$62,666
2011	53	\$140,844	149	\$82,377
2012	50	\$152,223	42	\$80,952
2013	64	\$147,367	29	\$68,110
2014	51	\$191,779	0	N/A

Source: United States Census Bureau Building Permits Survey

In Shawnee, building permits for 1,269 housing units were issued between 2004 and 2014, for an average of 115 units per year. 68.40% of these housing units were single family homes, and 31.60% consisted of multifamily units.

## Tecumseh

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

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	15	\$75,167	2	\$95,000
2005	82	\$29,557	0	N/A
2006	12	\$80,627	0	N/A
2007	10	\$138,175	0	N/A
2008	12	\$119,187	7	\$18,571
2009	8	\$110,063	0	N/A
2010	18	\$117,222	0	N/A
2011	1	\$59,000	4	\$59,500
2012	13	\$151,568	0	N/A
2013	6	\$106,155	0	N/A
2014	7	\$119,943	0	N/A

Source: United States Census Bureau Building Permits Survey

In Tecumseh, building permits for 197 housing units were issued between 2004 and 2014, for an average of 18 units per year. 93.40% of these housing units were single family homes, and 6.60% consisted of multifamily units.

### New Construction Activity

#### For Ownership:

New construction is occurring throughout Pottawatomie County. Much new construction is occurring on rural, unplatted acreages or rural subdivisions, or in smaller communities in the county such as McCloud, Dale, and Bethel Acres. Within Shawnee, new home construction is occurring in subdivisions such as Hyatt Addition, Northridge, The Bridges, and Windmill Ridge, primarily in the western and northeastern areas of the city. Within Tecumseh, new construction is occurring primarily in established subdivisions / infill lots.

Although there is some new home construction in the area that is reasonably affordable (priced under \$125,000), much new construction is more expensive. The average sale price for homes constructed since 2014 (and sold after March 2015) is \$203,866 or \$113.15 per square foot, which is well above what could be afforded by a household earning at or less than median household income for Pottawatomie County (\$45,608 in 2015).

#### For Rent:

There have been several notable new rental developments in Shawnee and Tecumseh in recent years, nearly all affordable in nature. Cottage Park was completed in 2013, and added 34 affordable rental housing units for seniors in Shawnee. Stonebridge Senior Housing was very recently completed in Tecumseh, and added 20 affordable rental units for seniors in Tecumseh. In addition, an affordable rental development for families was recently allocated Affordable Housing Tax Credits in Shawnee:

Shawnee Park will add 60 affordable apartment units just northeast of I-40 and Harrison Street, and should be completed in late 2016 or early 2017.

## Homeownership Market

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

### Housing Units by Home Value

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

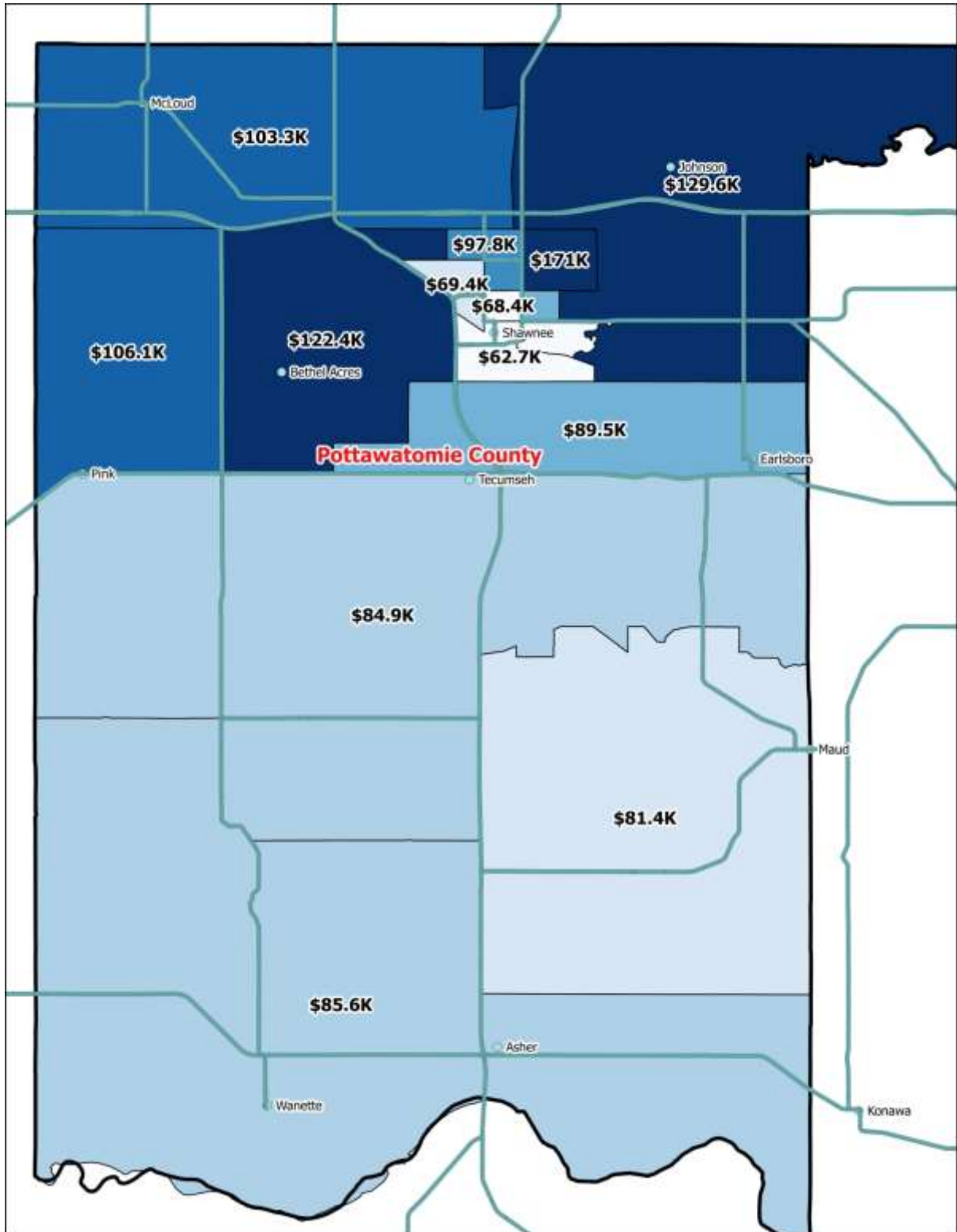
<b>2013 Housing Units by Home Value</b>								
	<b>Shawnee</b>		<b>Tecumseh</b>		<b>Pottawatomie County</b>		<b>State of Oklahoma</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
<b>Total Owner-Occupied Units:</b>	<b>6,893</b>		<b>1,636</b>		<b>18,445</b>		<b>968,736</b>	
Less than \$10,000	212	3.08%	70	4.28%	575	3.12%	20,980	2.17%
\$10,000 to \$14,999	92	1.33%	28	1.71%	354	1.92%	15,427	1.59%
\$15,000 to \$19,999	60	0.87%	0	0.00%	227	1.23%	13,813	1.43%
\$20,000 to \$24,999	92	1.33%	34	2.08%	320	1.73%	16,705	1.72%
\$25,000 to \$29,999	113	1.64%	21	1.28%	299	1.62%	16,060	1.66%
\$30,000 to \$34,999	154	2.23%	17	1.04%	445	2.41%	19,146	1.98%
\$35,000 to \$39,999	122	1.77%	0	0.00%	304	1.65%	14,899	1.54%
\$40,000 to \$49,999	506	7.34%	64	3.91%	964	5.23%	39,618	4.09%
\$50,000 to \$59,999	439	6.37%	137	8.37%	1,057	5.73%	45,292	4.68%
\$60,000 to \$69,999	478	6.93%	305	18.64%	1,291	7.00%	52,304	5.40%
\$70,000 to \$79,999	464	6.73%	156	9.54%	1,147	6.22%	55,612	5.74%
\$80,000 to \$89,999	648	9.40%	174	10.64%	1,503	8.15%	61,981	6.40%
\$90,000 to \$99,999	544	7.89%	128	7.82%	1,143	6.20%	51,518	5.32%
\$100,000 to \$124,999	761	11.04%	130	7.95%	2,453	13.30%	119,416	12.33%
\$125,000 to \$149,999	416	6.04%	63	3.85%	1,303	7.06%	96,769	9.99%
\$150,000 to \$174,999	615	8.92%	63	3.85%	1,687	9.15%	91,779	9.47%
\$175,000 to \$199,999	256	3.71%	74	4.52%	903	4.90%	53,304	5.50%
\$200,000 to \$249,999	380	5.51%	128	7.82%	1,198	6.49%	69,754	7.20%
\$250,000 to \$299,999	220	3.19%	3	0.18%	501	2.72%	41,779	4.31%
\$300,000 to \$399,999	157	2.28%	0	0.00%	366	1.98%	37,680	3.89%
\$400,000 to \$499,999	65	0.94%	27	1.65%	162	0.88%	13,334	1.38%
\$500,000 to \$749,999	67	0.97%	14	0.86%	154	0.83%	12,784	1.32%
\$750,000 to \$999,999	4	0.06%	0	0.00%	26	0.14%	3,764	0.39%
\$1,000,000 or more	28	0.41%	0	0.00%	63	0.34%	5,018	0.52%
<b>Median Home Value:</b>	<b>\$91,200</b>		<b>\$79,100</b>		<b>\$96,400</b>		<b>\$112,800</b>	

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

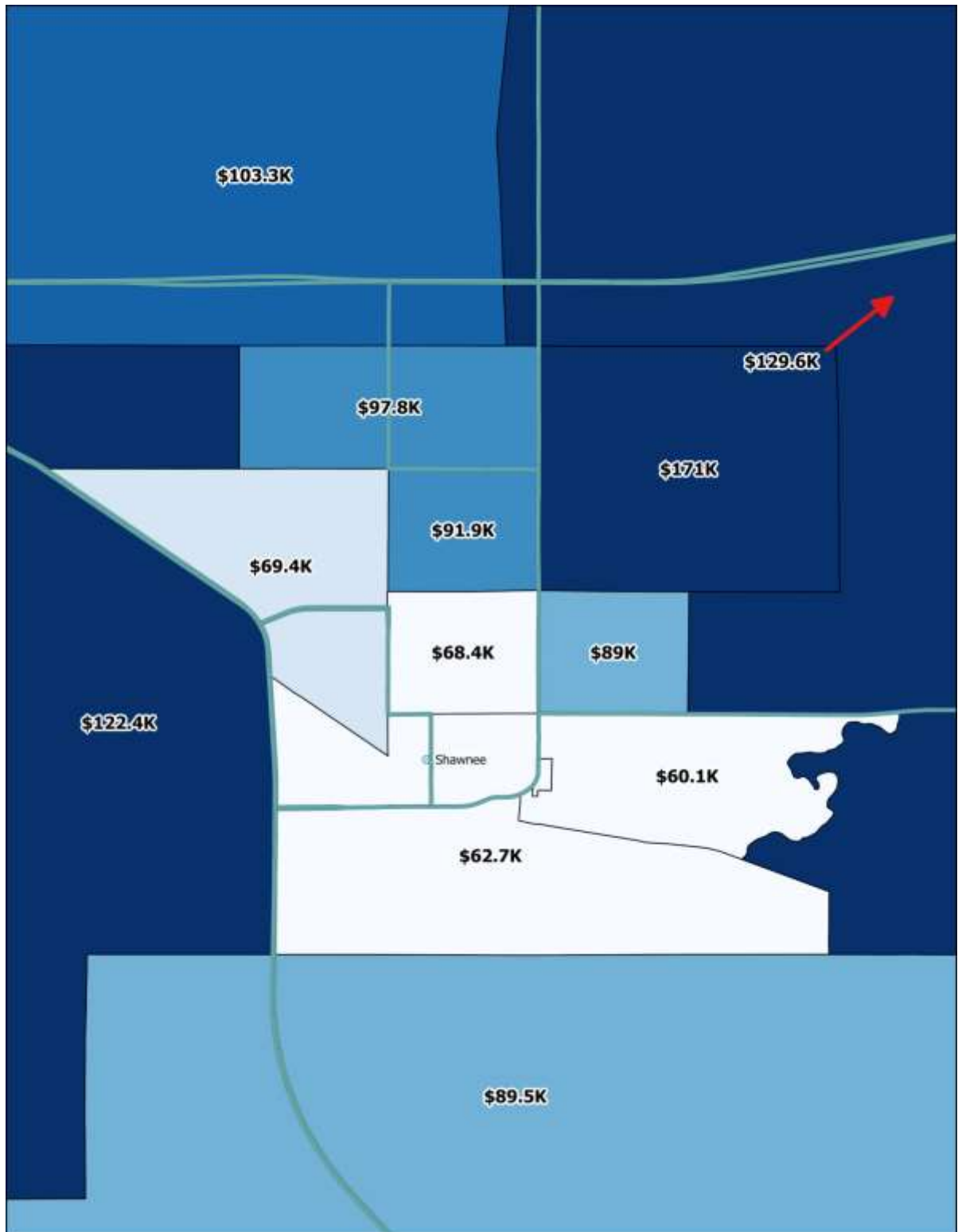
The median value of owner-occupied homes in Pottawatomie County is \$96,400. This is -14.5% lower than the statewide median, which is \$112,800. The median home value in Shawnee is estimated to be \$91,200. The median home value in Tecumseh is estimated to be \$79,100.

The geographic distribution of home values in Pottawatomie County can be visualized by the following map.

### Pottawatomie County Median Home Values by Census Tract



### Median Home Values by Census Tract – Shawnee Detail



## Home Values by Year of Construction

The next table presents median home values in Pottawatomie 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.

### 2013 Median Home Value by Year of Construction

	Shawnee Median Value	Tecumseh Median Value	Pottawatomie County Median Value	State of Oklahoma Median Value
<b>Total Owner-Occupied Units:</b>				
Built 2010 or Later	\$187,500	-	\$154,300	\$188,900
Built 2000 to 2009	\$170,900	\$140,100	\$147,700	\$178,000
Built 1990 to 1999	\$139,900	\$170,700	\$109,600	\$147,300
Built 1980 to 1989	\$110,500	\$85,800	\$102,400	\$118,300
Built 1970 to 1979	\$103,300	\$80,400	\$103,300	\$111,900
Built 1960 to 1969	\$84,000	\$67,700	\$87,000	\$97,100
Built 1950 to 1959	\$81,500	\$33,700	\$84,200	\$80,300
Built 1940 to 1949	\$61,700	\$58,000	\$66,900	\$67,900
Built 1939 or Earlier	\$67,500	\$72,900	\$73,000	\$74,400

value.

Source: 2009-2013 American Community Survey, Table 25107

## Shawnee Single Family Sales Activity

The following tables show single family sales data for Shawnee, separated between two, three and four bedroom units, as well as all housing units as a whole.

### Shawnee Single Family Sales Activity

#### Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	57	68	57	71	58
Median List Price	\$49,900	\$52,200	\$52,900	\$39,900	\$49,000
Median Sale Price	\$43,500	\$48,500	\$43,000	\$38,000	\$43,250
Sale/List Price Ratio	95.5%	94.9%	91.3%	94.1%	93.4%
Median Square Feet	1,132	1,106	1,001	980	1,037
Median Price/SF	\$41.02	\$45.88	\$46.88	\$38.98	\$43.51
Med. Days on Market	57	36	39	69	47

Source: OKC MLS

**Shawnee Single Family Sales Activity****Three Bedroom Units**

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	286	305	317	336	282
Median List Price	\$113,950	\$112,000	\$119,500	\$119,800	\$119,663
Median Sale Price	\$108,625	\$107,000	\$115,000	\$117,500	\$116,500
Sale/List Price Ratio	97.0%	96.9%	97.0%	98.1%	97.8%
Median Square Feet	1,589	1,537	1,575	1,557	1,554
Median Price/SF	\$70.10	\$67.13	\$74.03	\$74.08	\$74.90
Med. Days on Market	77	65	61	60	41

Source: OKC MLS

**Shawnee Single Family Sales Activity****Four Bedroom Units**

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	49	77	76	84	72
Median List Price	\$175,000	\$179,000	\$164,250	\$180,950	\$173,250
Median Sale Price	\$172,500	\$179,000	\$158,000	\$177,625	\$164,500
Sale/List Price Ratio	97.2%	97.0%	97.9%	97.2%	97.1%
Median Square Feet	2,202	2,248	2,135	2,194	2,230
Median Price/SF	\$81.25	\$79.78	\$67.35	\$79.80	\$74.25
Med. Days on Market	76	92	76	69	74

Source: OKC MLS

**Shawnee Single Family Sales Activity****All Bedroom Types**

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	399	456	459	499	420
Median List Price	\$105,000	\$109,900	\$115,000	\$116,900	\$111,950
Median Sale Price	\$103,000	\$104,300	\$109,500	\$111,500	\$112,150
Sale/List Price Ratio	96.7%	96.6%	96.9%	97.7%	97.2%
Median Square Feet	1,594	1,560	1,584	1,566	1,563
Median Price/SF	\$65.33	\$66.04	\$69.55	\$70.53	\$70.87
Med. Days on Market	75	65	60	62	46

Source: OKC MLS

Between 2011 and year-end 2014, the median list price grew by 2.72% per year. The median sale price was \$112,150 in 2015, for a median price per square foot of \$70.87. The median sale price to list price ratio was 97.2%, with median days on market of 46 days. On the whole, the Shawnee housing market has strengthened over the last five years, with higher home prices, increasing sale to list price ratios, and decreasing marketing times.

**Tecumseh Single Family Sales Activity**

The following tables show single family sales data for Tecumseh, separated between two, three and four bedroom units, as well as all housing units as a whole.



**Tecumseh Single Family Sales Activity****Two Bedroom Units**

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	18	12	14	10	19
Median List Price	\$68,000	\$38,450	\$57,400	\$28,850	\$59,900
Median Sale Price	\$64,000	\$31,750	\$49,450	\$26,938	\$50,600
Sale/List Price Ratio	96.2%	91.8%	94.2%	91.1%	94.5%
Median Square Feet	980	1,124	934	1,020	1,125
Median Price/SF	\$62.45	\$27.35	\$54.12	\$27.74	\$58.59
Med. Days on Market	8	60	73	55	45

Source: OKCMLS

**Tecumseh Single Family Sales Activity****Three Bedroom Units**

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	53	63	71	74	66
Median List Price	\$75,000	\$68,500	\$75,000	\$80,450	\$87,450
Median Sale Price	\$70,000	\$68,500	\$75,000	\$77,950	\$87,500
Sale/List Price Ratio	95.7%	98.1%	97.0%	96.8%	97.3%
Median Square Feet	1,398	1,460	1,508	1,397	1,350
Median Price/SF	\$56.21	\$53.14	\$60.63	\$59.34	\$68.73
Med. Days on Market	29	39	71	58	48

Source: OKCMLS

**Tecumseh Single Family Sales Activity****Four Bedroom Units**

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	8	11	22	11	10
Median List Price	\$92,450	\$85,000	\$118,750	\$78,000	\$112,100
Median Sale Price	\$88,500	\$85,000	\$116,900	\$78,000	\$107,450
Sale/List Price Ratio	97.1%	95.9%	98.2%	100.0%	98.2%
Median Square Feet	1,707	2,100	1,709	1,453	1,676
Median Price/SF	\$55.94	\$38.92	\$69.20	\$55.48	\$53.23
Med. Days on Market	111	78	48	76	36

Source: OKCMLS

### Tecumseh Single Family Sales Activity All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	80	90	111	96	96
Median List Price	\$73,450	\$68,250	\$75,000	\$77,750	\$85,000
Median Sale Price	\$67,750	\$66,250	\$75,000	\$73,250	\$79,950
Sale/List Price Ratio	95.9%	97.2%	96.9%	96.8%	96.6%
Median Square Feet	1,315	1,492	1,473	1,357	1,362
Median Price/SF	\$59.68	\$47.70	\$61.38	\$55.74	\$64.49
Med. Days on Market	23	43	51	62	46

Source: OKCMLS

Between 2011 and year-end 2014, the median list price grew by 1.43% per year. The median sale price was \$79,950 in 2015, for a median price per square foot of \$64.49/SF. The median sale price to list price ratio was 96.6%, with median days on market of 46 days. For the most part, the Tecumseh housing market has strengthened over the last five years, though its home values remain lower than Shawnee's, and marketing time appears to have increased from a low in 2011.

### Foreclosure Rates

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

### Foreclosure Rates

Geography	% of Outstanding Mortgages in Foreclosure, May 2014
Pottawatomie County	3.1%
State of Oklahoma	2.1%
United States	2.1%
Rank among Counties in Oklahoma*:	14

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

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

According to the data provided, the foreclosure rate in Pottawatomie County was 3.1% in May 2014. The county ranked 14 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%.

With among the higher foreclosure rates in the state, it is likely that foreclosures have had some impact on the local housing market. A neighborhood with elevated foreclosure rates can often experience depressed home values with longer marketing times, and potential homebuyers may find it more difficult to secure financing for a home in such a neighborhood.

## Rental Market

This section will discuss supply and demand factors for the rental market in Pottawatomie 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 Pottawatomie 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>								
	Shawnee		Tecumseh		Pottawatomie County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<b>Total Rental Units:</b>	<b>4,800</b>		<b>667</b>		<b>7,213</b>		<b>475,345</b>	
With cash rent:	4,478		592		6,423		432,109	
Less than \$100	24	0.50%	0	0.00%	24	0.33%	2,025	0.43%
\$100 to \$149	55	1.15%	0	0.00%	59	0.82%	2,109	0.44%
\$150 to \$199	56	1.17%	37	5.55%	100	1.39%	4,268	0.90%
\$200 to \$249	102	2.13%	11	1.65%	138	1.91%	8,784	1.85%
\$250 to \$299	100	2.08%	31	4.65%	150	2.08%	8,413	1.77%
\$300 to \$349	114	2.38%	15	2.25%	147	2.04%	9,107	1.92%
\$350 to \$399	160	3.33%	10	1.50%	331	4.59%	10,932	2.30%
\$400 to \$449	184	3.83%	0	0.00%	281	3.90%	15,636	3.29%
\$450 to \$499	261	5.44%	26	3.90%	362	5.02%	24,055	5.06%
\$500 to \$549	410	8.54%	61	9.15%	536	7.43%	31,527	6.63%
\$550 to \$599	273	5.69%	28	4.20%	395	5.48%	33,032	6.95%
\$600 to \$649	509	10.60%	12	1.80%	649	9.00%	34,832	7.33%
\$650 to \$699	415	8.65%	52	7.80%	562	7.79%	32,267	6.79%
\$700 to \$749	351	7.31%	31	4.65%	522	7.24%	30,340	6.38%
\$750 to \$799	248	5.17%	57	8.55%	409	5.67%	27,956	5.88%
\$800 to \$899	357	7.44%	118	17.69%	552	7.65%	45,824	9.64%
\$900 to \$999	423	8.81%	51	7.65%	611	8.47%	34,153	7.18%
\$1,000 to \$1,249	357	7.44%	52	7.80%	497	6.89%	46,884	9.86%
\$1,250 to \$1,499	15	0.31%	0	0.00%	19	0.26%	14,699	3.09%
\$1,500 to \$1,999	32	0.67%	0	0.00%	47	0.65%	10,145	2.13%
\$2,000 or more	32	0.67%	0	0.00%	32	0.44%	5,121	1.08%
No cash rent	322	6.71%	75	11.24%	790	10.95%	43,236	9.10%
<b>Median Gross Rent</b>	<b>\$649</b>		<b>\$721</b>		<b>\$654</b>		<b>\$699</b>	

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

Median gross rent in Pottawatomie County is estimated to be \$654, which is -6.4% less than Oklahoma's median gross rent of \$699/month. Median gross rent in Shawnee is estimated to be \$649. Median rent in Tecumseh is estimated to be \$721.

### 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.

#### 2013 Median Gross Rent by Year of Construction

	Shawnee Median Rent	Tecumseh Median Rent	Pottawatomie Count Median Rent	State of Oklahoma Median Rent
<b>Total Rental Units:</b>				
Built 2010 or Later	\$638	-	\$568	\$933
Built 2000 to 2009	\$662	\$455	\$666	\$841
Built 1990 to 1999	\$552	\$671	\$606	\$715
Built 1980 to 1989	\$585	\$954	\$611	\$693
Built 1970 to 1979	\$589	\$831	\$617	\$662
Built 1960 to 1969	\$694	\$781	\$679	\$689
Built 1950 to 1959	\$744	\$548	\$729	\$714
Built 1940 to 1949	\$676	-	\$663	\$673
Built 1939 or Earlier	\$707	\$343	\$713	\$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 Pottawatomie County is among housing units constructed in Tecumseh between 1980 and 1989 (likely representing rental houses), which is \$954 per month. In order to be affordable, a household would need to earn at least \$38,160 per year to afford such a unit.

### Shawnee Rental Survey Data

The next two tables show the results of our rental survey of Shawnee. The data is divided between market rate properties, and affordable properties of all types (project-based Section 8, Low-Income Housing Tax Credit, USDA Rural Development, etc.)

**Shawnee Rental Properties - Market Rate**

Name	Year Built	Bedrooms	Bathrooms	Size (SF)	Rate	Rate/SF	Vacancy
Cimarron Apartments	1974	1	1	550	\$477	\$0.867	4.00%
Cimarron Apartments	1974	1	1	680	\$537	\$0.790	4.00%
Cimarron Apartments	1974	1	1	740	\$505	\$0.682	4.00%
Cimarron Apartments	1974	1	1	800	\$544	\$0.680	4.00%
Cimarron Apartments	1974	2	1	690	\$562	\$0.814	4.00%
Cimarron Apartments	1974	2	1	840	\$573	\$0.682	4.00%
Cimarron Apartments	1974	3	1	920	\$638	\$0.693	4.00%
Ken Del Apartments	1973	1	1	752	\$500	\$0.665	2.00%
Ken Del Apartments	1973	2	1	926	\$600	\$0.648	2.00%
Ken Del Apartments	1973	2	1	1,290	\$700	\$0.543	2.00%
Ken Del Apartments	1973	3	2	1,350	\$775	\$0.574	2.00%
Ken Del Apartments	1973	2	1	900	\$650	\$0.722	2.00%
Ken Del Apartments	1973	2	2	1,000	\$800	\$0.800	2.00%
Country Grove Apartments	1982	1	1	620	\$475	\$0.766	0.00%
Country Grove Apartments	1982	2	1	840	\$550	\$0.655	0.00%
Villa Chateau	1977	1	1	623	\$540	\$0.867	4.00%
Villa Chateau	1977	2	1	818	\$605	\$0.740	4.00%
Villa Chateau	1977	3	2	1,085	\$690	\$0.636	4.00%

**Shawnee Rental Properties - Affordable**

Name	Type	Year Built	Bedrooms	Bathrooms	Size (SF)	Rate	Rate/SF	Vacancy
Linden & Linden II Apartments	LIHTC - Family	2006	2	1	858	\$535	\$0.624	8.00%
Linden & Linden II Apartments	LIHTC - Family	2006	3	2	1,037	\$607	\$0.585	8.00%
Linden & Linden II Apartments	LIHTC - Family	2006	2	1	934	\$596	\$0.638	8.00%
Linden & Linden II Apartments	LIHTC - Family	2006	3	2	1,107	\$714	\$0.645	8.00%
Chapel Ridge of Shawnee	LIHTC - Family	1998	1	1	675	\$480	\$0.711	3.00%
Chapel Ridge of Shawnee	LIHTC - Family	1998	2	2	930	\$585	\$0.629	3.00%
Chapel Ridge of Shawnee	LIHTC - Family	1998	3	2	1,091	\$659	\$0.604	3.00%
Chapel Ridge of Shawnee	LIHTC - Family	1998	1	1	675	\$540	\$0.800	3.00%
Chapel Ridge of Shawnee	LIHTC - Family	1998	2	2	980	\$645	\$0.658	3.00%
Chapel Ridge of Shawnee	LIHTC - Family	1998	3	2	1,097	\$755	\$0.688	3.00%
Chapel Ridge of Shawnee	LIHTC - Family	1998	4	2	1,545	\$905	\$0.586	3.00%
Legacy Park	LIHTC - Elderly	2005	1	1	608	\$510	\$0.839	0.00%
Legacy Park	LIHTC - Elderly	2005	2	2	918	\$610	\$0.664	0.00%
Aldridge Hotel Apartments	LIHTC - Elderly	1929	1	1	555	\$620	\$1.117	3.30%
Aldridge Hotel Apartments	LIHTC - Elderly	1929	2	1	775	\$735	\$0.948	3.30%
Aldridge Hotel Apartments	LIHTC - Elderly	1929	2	2	1,307	\$735	\$0.562	3.30%
Cottage Park	LIHTC - Elderly	2013	1	1	779	\$491	\$0.630	3.00%
Cottage Park	LIHTC - Elderly	2013	2	2	1,004	\$579	\$0.577	3.00%
Cottage Park	LIHTC - Elderly	2013	2	2	1,004	\$708	\$0.705	3.00%

The previous rent surveys encompass over eight hundred rental units in nine complexes. These properties are located throughout the community and provide a good indication of the availability and rental structure of multifamily property. Concessions such as free rent or no deposit were not evident in the competitive market survey. These inducements appear to have phased out over the market, and appear only sporadically at individual complexes to induce leasing activity in a particular unit type. Review of historical rental data indicates the comparable rental rates have increased in a predominant range of \$10 to \$20 per unit per month annually over the past 36 months. Occupancy levels in the Shawnee area have continued to increase to its present level in the upper 90% range. Rental rates also increased during this same period. The area should continue to show good rental rate and occupancy support due to proximity to the employment centers and limited number of new available units.

**Rental Market Vacancy – Shawnee**

The developments outlined previously report occupancy levels typically above 95%. These occupancy levels are typical of well-maintained and poorly maintained properties alike. The ability of older, physically deteriorating facilities to maintain high occupancy levels reflects the lack of superior alternatives in the Shawnee market. The overall market vacancy of rental housing units was reported at 7.94% by the Census Bureau as of the most recent American Community Survey. Based on our own survey this figure appears reasonable.



Cottage Park



Aldridge Hotel Apartments



Legacy Park



Chapel Ridge of Shawnee



Villa Chateau



Country Grove Apartments





Ken Del Apartments



Cimarron Apartments



Linden & Linden II Apartments



## Tecumseh Rental Survey Data

The next table shows the results of our rental survey of Tecumseh. Very nearly all of the multifamily rental property in Tecumseh is subsidized in some form.

<b>Tecumseh Rental Properties - Affordable</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>
Stonebridge Apartments	LIHTC - Family	2004	1	1	650	\$395	\$0.608	1.30%
Stonebridge Apartments	LIHTC - Family	2004	1	1	850	\$415	\$0.488	1.30%
Stonebridge Apartments	LIHTC - Family	2004	2	1	850	\$465	\$0.547	1.30%
Stonebridge Apartments	LIHTC - Family	2004	2	1	850	\$485	\$0.571	1.30%
Stonebridge Apartments	LIHTC - Family	2004	3	2	1,050	\$555	\$0.529	1.30%
Stonebridge Apartments	LIHTC - Family	2004	3	2	1,050	\$595	\$0.567	1.30%
Tecumseh Public Housing Authority	Public Housing	1982	1	1	N/A	N/A	N/A	0.00%
Tecumseh Public Housing Authority	Public Housing	1982	2	1	N/A	N/A	N/A	0.00%
Tecumseh Public Housing Authority	Public Housing	1982	3	1	N/A	N/A	N/A	0.00%
Tecumseh Public Housing Authority	Public Housing	1982	4	1	N/A	N/A	N/A	0.00%
Town Oaks XIII	USDA - Family	1984	1	1	668	30%	N/A	20.00%
Town Oaks XIII	USDA - Family	1984	2	1	758	30%	N/A	20.00%
Town Oaks XIII	USDA - Family	1984	3	2	979	30%	N/A	20.00%

In addition to these three properties, Stonebridge Senior Apartments was recently completed in Tecumseh, which added 20 tax credit units for seniors in one and two bedroom configurations. Most units in Tecumseh report good occupancy and relatively stable rental rates. There are relatively few market rate rental units in Tecumseh, most market rate properties are either single-family rental houses or very small apartment properties.

### Rental Market Vacancy – Tecumseh

The overall market vacancy of rental housing units was reported at 9.99% by the Census Bureau as of the most recent American Community Survey. This figure includes rental properties of all types, including single-family rental houses. Based on our own survey this figure appears reasonable though affordable properties tend to operate at higher occupancy.



Town Oaks XIII



Stonebridge Apartments



Tecumseh Public Housing Authority

## 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 Pottawatomie 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.

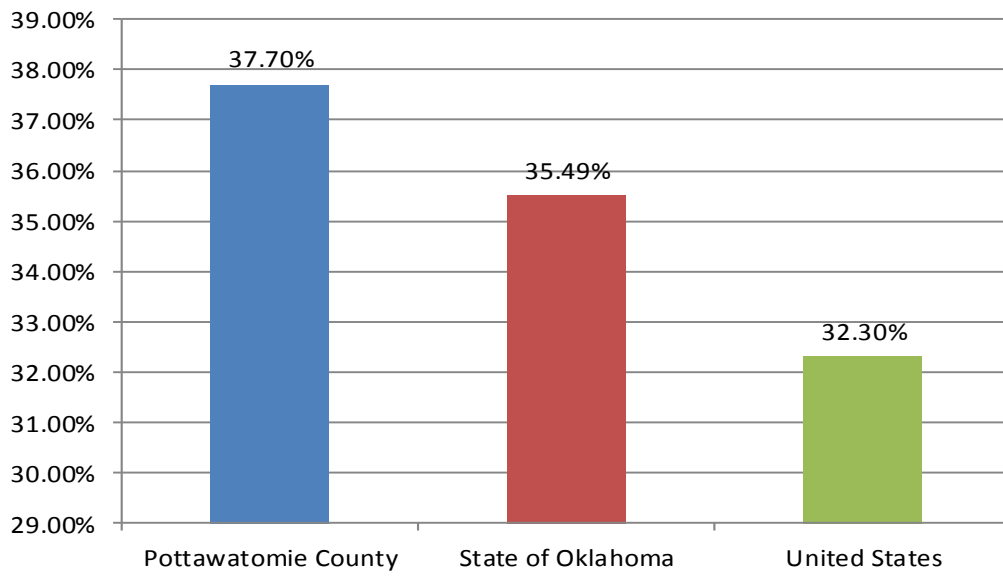
### HUD Programs in Pottawatomie County

<b>Pottawatomie County</b>	<b># Units</b>	<b>Occupancy Rate</b>	<b>Avg. Household Income</b>	<b>Tenant Contribution</b>	<b>Federal Contribution</b>	<b>% of Total Rent</b>
Public Housing	505	97%	\$11,920	\$239	\$366	39.44%
Housing Choice Vouchers	573	98%	\$10,136	\$264	\$478	35.62%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	30	93%	\$11,090	\$240	\$469	33.81%
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	48	93%	\$12,084	\$269	\$222	54.83%
<b>Summary of All HUD Programs</b>	<b>1,156</b>	<b>97%</b>	<b>\$11,032</b>	<b>\$252</b>	<b>\$417</b>	<b>37.70%</b>
<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%
<b>Summary of All HUD Programs</b>	<b>50,599</b>	<b>94%</b>	<b>\$10,360</b>	<b>\$242</b>	<b>\$440</b>	<b>35.49%</b>
<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%
<b>Summary of All HUD Programs</b>	<b>5,180,467</b>	<b>94%</b>	<b>\$12,892</b>	<b>\$304</b>	<b>\$637</b>	<b>32.30%</b>

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

Among all HUD programs, there are 1,156 housing units located within Pottawatomie County, with an overall occupancy rate of 97%. The average household income among households living in these units is \$11,032. Total monthly rent for these units averages \$670, with the federal contribution averaging \$417 (62.30%) and the tenant's contribution averaging \$252 (37.70%).

**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 Pottawatomie County**


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<b>Pottawatomie 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	505	32%	21%	35%	51%	24%
Housing Choice Vouchers	573	56%	16%	18%	47%	31%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	30	0%	100%	7%	100%	3%
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	48	0%	63%	40%	5%	9%
<b>Summary of All HUD Programs</b>	<b>1,156</b>	<b>42%</b>	<b>20%</b>	<b>26%</b>	<b>47%</b>	<b>27%</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

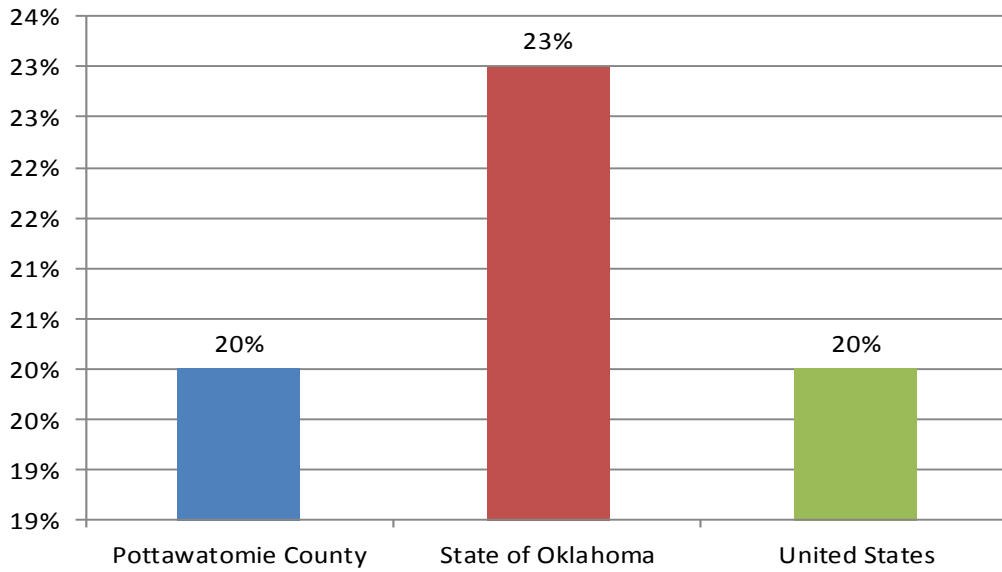
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42% of housing units are occupied by single parents with female heads of household. 20% of households have at least one person with a disability. 26% of households have either a householder or spouse age 62 or above. Of the households age 62 or above, 47% have one or more disabilities. Finally, 27% of households are designated as racial or ethnic minorities.

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

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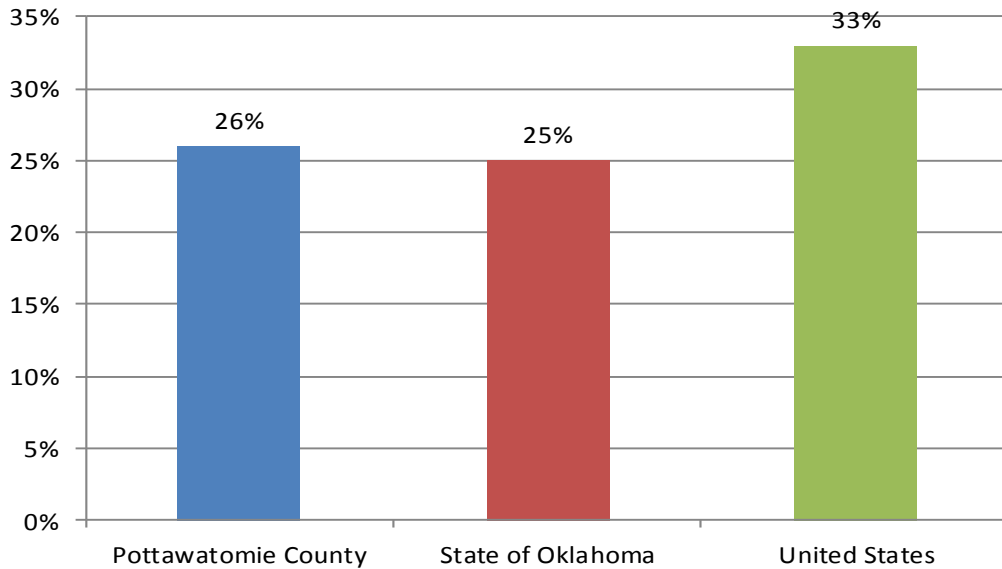
Source: 2013 HUD Picture of Subsidized Households

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

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Source: 2013 HUD Picture of Subsidized Households

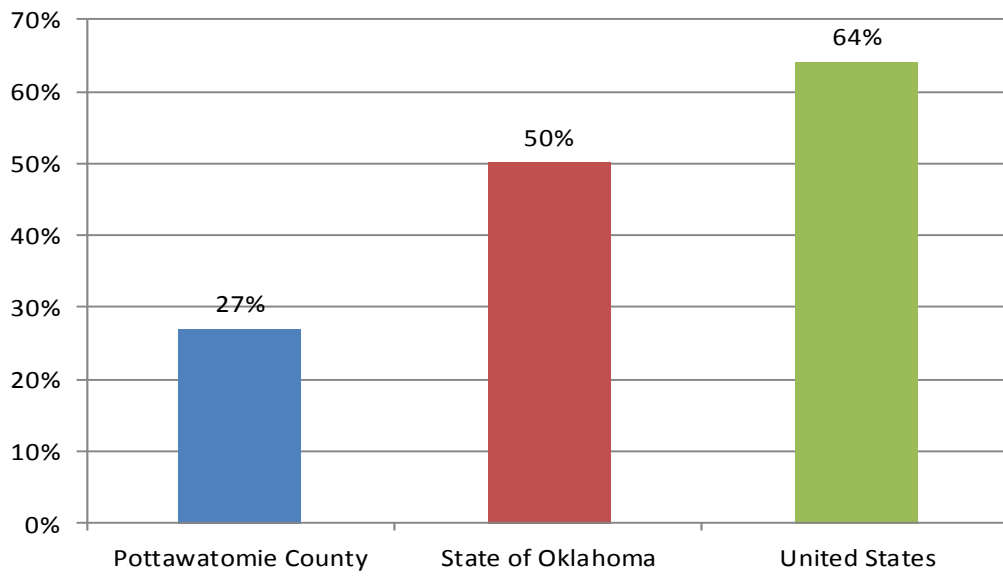
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**Percentage of Minority Households - HUD Subsidized Properties**

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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 Pottawatomie 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 Pottawatomie 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.



<b>Pottawatomie County : CHAS - Housing Cost Burden by HAMFI</b>				
<b>Household Income / Cost Burden</b>	<b>Owners</b>		<b>Renters</b>	
	Number	Percent	Number	Percent
<b>Income &lt; 30% HAMFI</b>	<b>1,500</b>		<b>1,750</b>	
Cost Burden Less Than 30%	370	24.67%	295	16.86%
Cost Burden Between 30%-50%	270	18.00%	180	10.29%
Cost Burden Greater Than 50%	600	40.00%	1,090	62.29%
Not Computed (no/negative income)	260	17.33%	185	10.57%
<b>Income 30%-50% HAMFI</b>	<b>1,610</b>		<b>1,310</b>	
Cost Burden Less Than 30%	855	53.11%	515	39.31%
Cost Burden Between 30%-50%	505	31.37%	525	40.08%
Cost Burden Greater Than 50%	250	15.53%	270	20.61%
Not Computed (no/negative income)	0	0.00%	0	0.00%
<b>Income 50%-80% HAMFI</b>	<b>2,930</b>		<b>1,645</b>	
Cost Burden Less Than 30%	2,045	69.80%	1,060	64.44%
Cost Burden Between 30%-50%	680	23.21%	535	32.52%
Cost Burden Greater Than 50%	205	7.00%	45	2.74%
Not Computed (no/negative income)	0	0.00%	0	0.00%
<b>Income 80%-100% HAMFI</b>	<b>1,590</b>		<b>755</b>	
Cost Burden Less Than 30%	1,360	85.53%	730	96.69%
Cost Burden Between 30%-50%	195	12.26%	25	3.31%
Cost Burden Greater Than 50%	30	1.89%	0	0.00%
Not Computed (no/negative income)	0	0.00%	0	0.00%
<b>All Incomes</b>	<b>18,395</b>		<b>7,100</b>	
Cost Burden Less Than 30%	14,925	81.14%	4,225	59.51%
Cost Burden Between 30%-50%	2,095	11.39%	1,280	18.03%
Cost Burden Greater Than 50%	1,110	6.03%	1,405	19.79%
Not Computed (no/negative income)	260	1.41%	185	2.61%

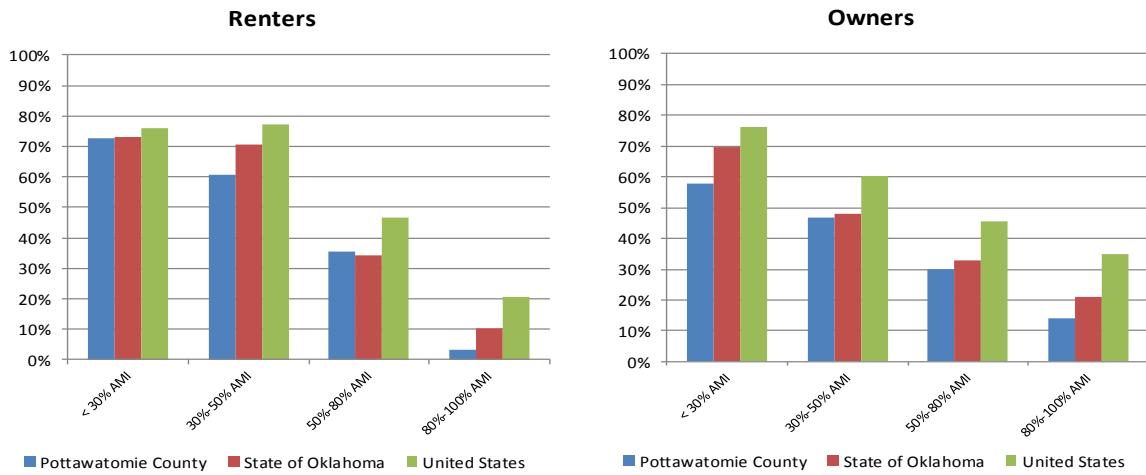
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 8

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 Pottawatomie County with the State of Oklahoma as a whole, and the United States.

<b>Pottawatomie County : Households by Income by Cost Burden</b>				
<b>Household Income Threshold</b>	<b>Owners</b>		<b>Renters</b>	
	Total	% w/ Cost > 30% Income	Total	% w/ Cost > 30% Income
Income < 30% HAMFI	1,500	58.00%	1,750	72.57%
Income 30%-50% HAMFI	1,610	46.89%	1,310	60.69%
Income 50%-80% HAMFI	2,930	30.20%	1,645	35.26%
Income 80%-100% HAMFI	1,590	14.15%	755	3.31%
All Incomes	18,395	17.42%	7,100	37.82%

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.



**Pottawatomie County : CHAS - HAMFI by Substandard Conditions / Overcrowding**

Household Income / Housing Problem	Owners		Renters	
	Number	Percent	Number	Percent
<b>Income &lt; 30% HAMFI</b>	<b>1,500</b>		<b>1,750</b>	
Between 1.0 and 1.5 Persons per Room	90	6.00%	30	1.71%
More than 1.5 Persons per Room	4	0.27%	15	0.86%
Lacks Complete Kitchen or Plumbing	65	4.33%	40	2.29%
<b>Income 30%-50% HAMFI</b>	<b>1,610</b>		<b>1,310</b>	
Between 1.0 and 1.5 Persons per Room	0	0.00%	45	3.44%
More than 1.5 Persons per Room	4	0.25%	0	0.00%
Lacks Complete Kitchen or Plumbing	15	0.93%	4	0.31%
<b>Income 50%-80% HAMFI</b>	<b>2,930</b>		<b>1,645</b>	
Between 1.0 and 1.5 Persons per Room	85	2.90%	65	3.95%
More than 1.5 Persons per Room	10	0.34%	10	0.61%
Lacks Complete Kitchen or Plumbing	20	0.68%	35	2.13%
<b>Income 80%-100% HAMFI</b>	<b>1,590</b>		<b>755</b>	
Between 1.0 and 1.5 Persons per Room	30	1.89%	25	3.31%
More than 1.5 Persons per Room	0	0.00%	15	1.99%
Lacks Complete Kitchen or Plumbing	4	0.25%	25	3.31%
<b>All Incomes</b>	<b>18,395</b>		<b>7,100</b>	
Between 1.0 and 1.5 Persons per Room	385	2.09%	195	2.75%
More than 1.5 Persons per Room	48	0.26%	55	0.77%
Lacks Complete Kitchen or Plumbing	144	0.78%	134	1.89%

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

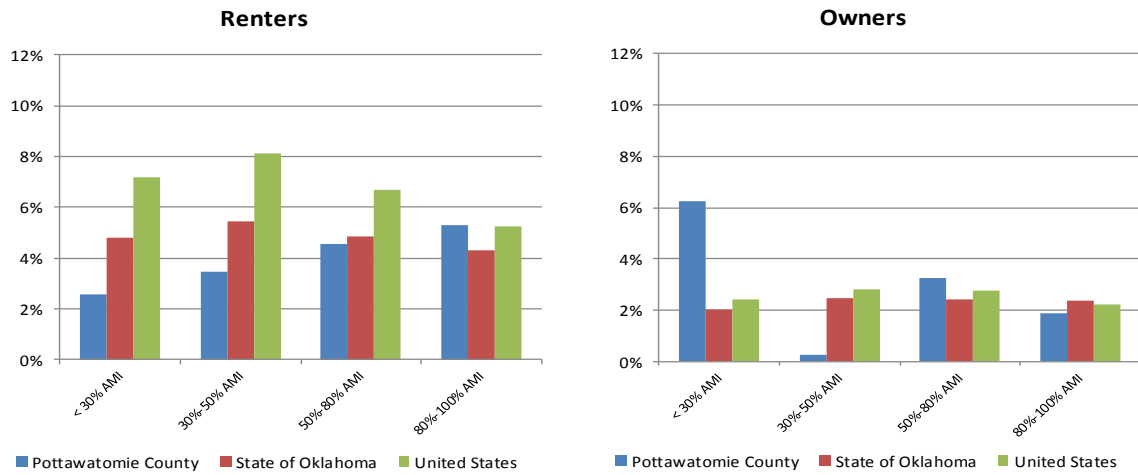
The next table summarizes this data for overcrowding (i.e. all households with greater than 1.0 persons per room), with a chart comparing this data between Pottawatomie County, Oklahoma and the nation.

**Pottawatomie 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	1,500	6.27%	1,750	2.57%	1,750
Income 30%-50% HAMFI	1,610	0.25%	1,310	3.44%	1,310
Income 50%-80% HAMFI	2,930	3.24%	1,645	4.56%	1,645
Income 80%-100% HAMFI	1,590	1.89%	755	5.30%	755
All Incomes	18,395	2.35%	7,100	3.52%	7,100

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 Pottawatomie County, the state and the nation.

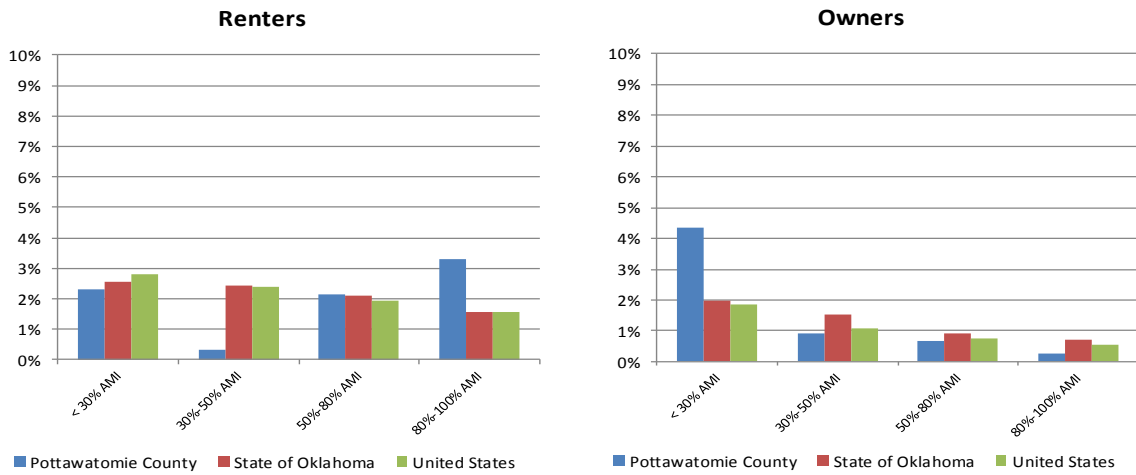
**Pottawatomie County : Households by Income by Substandard Conditions**

Household Size/Type	Total	Owners		Renters	
		% Lacking Kitchen or Plumbing	Total	% Lacking Kitchen or Plumbing	Total
Income < 30% HAMFI	1,500	4.33%	1,750	2.29%	1,750
Income 30%-50% HAMFI	1,610	0.93%	1,310	0.31%	1,310
Income 50%-80% HAMFI	2,930	0.68%	1,645	2.13%	1,645
Income 80%-100% HAMFI	1,590	0.25%	755	3.31%	755
All Incomes	18,395	0.78%	7,100	1.89%	7,100

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.



<b>Pottawatomie County : CHAS - Housing Cost Burden by Household Type / HAMFI</b>						
Income, Household Size/Type	Total	Owners		Total	Renters	
		No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income		No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
<b>Income &lt; 30% HAMFI</b>	<b>1,500</b>	<b>860</b>	<b>57.33%</b>	<b>1,750</b>	<b>1,270</b>	<b>72.57%</b>
Elderly Family	170	95	55.88%	15	15	100.00%
Small Family (2-4 persons)	335	220	65.67%	750	580	77.33%
Large Family (5 or more persons)	190	130	68.42%	135	105	77.78%
Elderly Non-Family	370	235	63.51%	275	225	81.82%
Non-Family, Non-Elderly	435	180	41.38%	570	345	60.53%
<b>Income 30%-50% HAMFI</b>	<b>1,610</b>	<b>755</b>	<b>46.89%</b>	<b>1,310</b>	<b>784</b>	<b>59.85%</b>
Elderly Family	335	115	34.33%	70	49	70.00%
Small Family (2-4 persons)	330	210	63.64%	520	375	72.12%
Large Family (5 or more persons)	70	40	57.14%	175	70	40.00%
Elderly Non-Family	620	230	37.10%	260	110	42.31%
Non-Family, Non-Elderly	250	160	64.00%	285	180	63.16%
<b>Income 50%-80% HAMFI</b>	<b>2,930</b>	<b>884</b>	<b>30.17%</b>	<b>1,645</b>	<b>583</b>	<b>35.44%</b>
Elderly Family	675	115	17.04%	50	19	38.00%
Small Family (2-4 persons)	995	365	36.68%	760	330	43.42%
Large Family (5 or more persons)	200	109	54.50%	115	15	13.04%
Elderly Non-Family	570	75	13.16%	235	69	29.36%
Non-Family, Non-Elderly	490	220	44.90%	485	150	30.93%
<b>Income 80%-100% HAMFI</b>	<b>1,590</b>	<b>222</b>	<b>13.96%</b>	<b>755</b>	<b>25</b>	<b>3.31%</b>
Elderly Family	375	39	10.40%	20	0	0.00%
Small Family (2-4 persons)	810	95	11.73%	415	10	2.41%
Large Family (5 or more persons)	150	10	6.67%	85	0	0.00%
Elderly Non-Family	110	19	17.27%	20	0	0.00%
Non-Family, Non-Elderly	140	59	42.14%	215	15	6.98%
<b>All Incomes</b>	<b>18,395</b>	<b>3,195</b>	<b>17.37%</b>	<b>7,100</b>	<b>2,677</b>	<b>37.70%</b>
Elderly Family	3,640	434	11.92%	245	83	33.88%
Small Family (2-4 persons)	8,605	1,130	13.13%	3,270	1,295	39.60%
Large Family (5 or more persons)	1,635	319	19.51%	580	190	32.76%
Elderly Non-Family	2,250	599	26.62%	865	404	46.71%
Non-Family, Non-Elderly	2,255	713	31.62%	2,130	705	33.10%

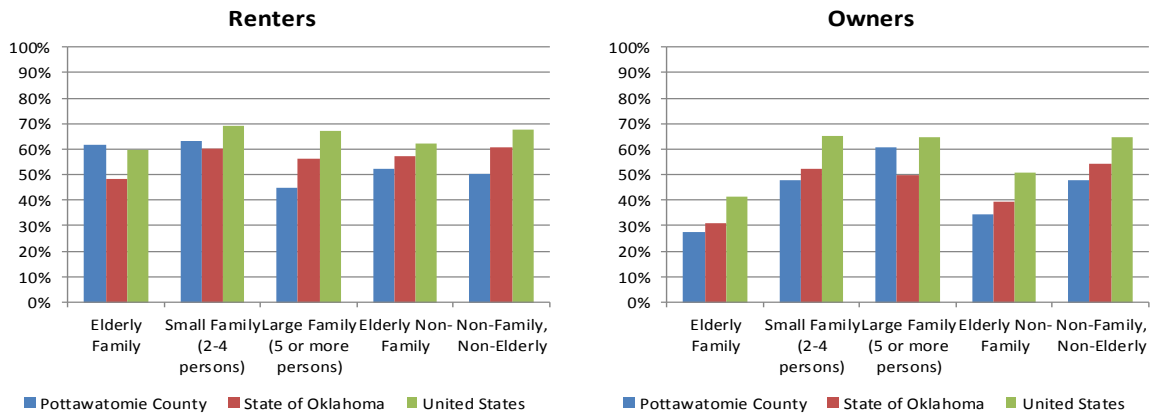
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

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

Household Size/Type	Total	Owners		Renters	
		No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
<b>Income &lt; 80% HAMFI</b>	<b>6,040</b>	<b>2,499</b>	<b>41.37%</b>	<b>4,705</b>	<b>56.05%</b>
Elderly Family	1,180	325	27.54%	135	61.48%
Small Family (2-4 persons)	1,660	795	47.89%	2,030	63.30%
Large Family (5 or more persons)	460	279	60.65%	425	44.71%
Elderly Non-Family	1,560	540	34.62%	770	52.47%
Non-Family, Non-Elderly	1,175	560	47.66%	1,340	50.37%

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).



<b>Pottawatomie County : CHAS - Housing Problems by Household Type and HAMFI</b>						
Income, Household Size/Type	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>1,500</b>	<b>960</b>	<b>64.00%</b>	<b>1,750</b>	<b>1,290</b>	<b>73.71%</b>
Elderly Family	170	100	58.82%	15	15	100.00%
Small Family (2-4 persons)	335	250	74.63%	750	580	77.33%
Large Family (5 or more persons)	190	170	89.47%	135	125	92.59%
Elderly Non-Family	370	240	64.86%	275	220	80.00%
Non-Family, Non-Elderly	435	200	45.98%	570	350	61.40%
<b>Income 30%-50% HAMFI</b>	<b>1,610</b>	<b>755</b>	<b>46.89%</b>	<b>1,310</b>	<b>825</b>	<b>62.98%</b>
Elderly Family	335	115	34.33%	70	50	71.43%
Small Family (2-4 persons)	330	210	63.64%	520	380	73.08%
Large Family (5 or more persons)	70	40	57.14%	175	100	57.14%
Elderly Non-Family	620	230	37.10%	260	110	42.31%
Non-Family, Non-Elderly	250	160	64.00%	285	185	64.91%
<b>Income 50%-80% HAMFI</b>	<b>2,930</b>	<b>985</b>	<b>33.62%</b>	<b>1,645</b>	<b>680</b>	<b>41.34%</b>
Elderly Family	675	125	18.52%	50	15	30.00%
Small Family (2-4 persons)	995	440	44.22%	760	370	48.68%
Large Family (5 or more persons)	200	120	60.00%	115	70	60.87%
Elderly Non-Family	570	75	13.16%	235	70	29.79%
Non-Family, Non-Elderly	490	225	45.92%	485	155	31.96%
<b>Income Greater than 80% of HAMFI</b>	<b>12,350</b>	<b>995</b>	<b>8.06%</b>	<b>2,395</b>	<b>164</b>	<b>6.85%</b>
Elderly Family	2,460	115	4.67%	110	4	3.64%
Small Family (2-4 persons)	6,945	395	5.69%	1,245	35	2.81%
Large Family (5 or more persons)	1,175	270	22.98%	155	65	41.94%
Elderly Non-Family	695	60	8.63%	95	15	15.79%
Non-Family, Non-Elderly	1,080	155	14.35%	790	45	5.70%
<b>All Incomes</b>	<b>18,390</b>	<b>3,695</b>	<b>20.09%</b>	<b>7,100</b>	<b>2,959</b>	<b>41.68%</b>
Elderly Family	3,640	455	12.50%	245	84	34.29%
Small Family (2-4 persons)	8,605	1,295	15.05%	3,275	1,365	41.68%
Large Family (5 or more persons)	1,635	600	36.70%	580	360	62.07%
Elderly Non-Family	2,255	605	26.83%	865	415	47.98%
Non-Family, Non-Elderly	2,255	740	32.82%	2,130	735	34.51%

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

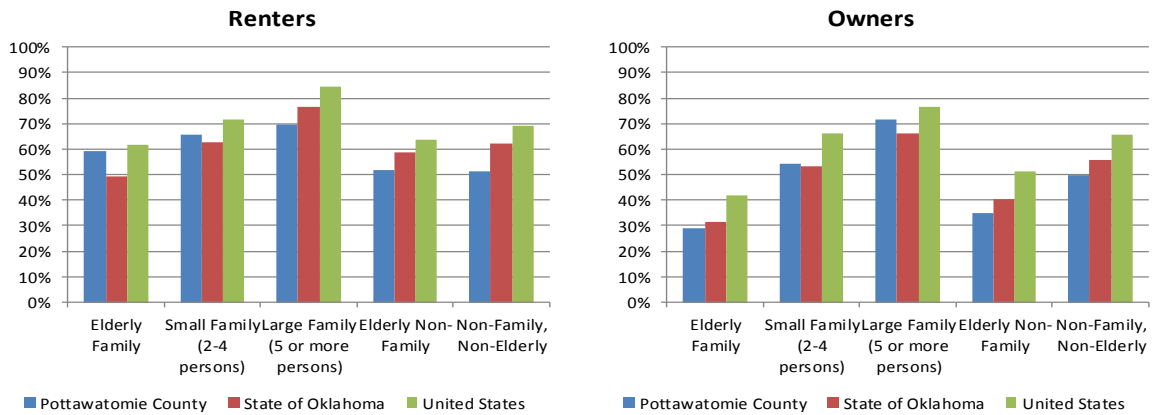


**Pottawatomie County : Households under 80% AMI by Housing Problems**

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>6,040</b>	<b>2,700</b>	<b>44.70%</b>	<b>4,705</b>	<b>59.40%</b>
Elderly Family	1,180	340	28.81%	135	59.26%
Small Family (2-4 persons)	1,660	900	54.22%	2,030	65.52%
Large Family (5 or more persons)	460	330	71.74%	425	69.41%
Elderly Non-Family	1,560	545	34.94%	770	51.95%
Non-Family, Non-Elderly	1,175	585	49.79%	1,340	51.49%

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 Pottawatomie 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>Pottawatomie County : CHAS - Housing Problems by Race / Ethnicity and HAMFI</b>						
<b>Income, Race / Ethnicity</b>	<b>Total</b>	<b>Owners</b>		<b>Renters</b>		
		<b>No. w/ Housing Problems</b>	<b>Pct. w/ Housing Problems</b>	<b>Total</b>	<b>No. w/ Housing Problems</b>	<b>Pct. w/ Housing Problems</b>
<b>Income &lt; 30% HAMFI</b>	<b>1,500</b>	<b>955</b>	<b>63.7%</b>	<b>1,750</b>	<b>1,290</b>	<b>73.7%</b>
White alone, non-Hispanic	1,175	715	60.9%	1,185	880	74.3%
Black or African-American alone	24	20	83.3%	145	115	79.3%
Asian alone	4	0	0.0%	0	0	N/A
American Indian alone	240	185	77.1%	285	205	71.9%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	4	0	0.0%	40	20	50.0%
Other (including multiple races)	59	40	67.8%	95	65	68.4%
<b>Income 30%-50% HAMFI</b>	<b>1,610</b>	<b>760</b>	<b>47.2%</b>	<b>1,310</b>	<b>825</b>	<b>63.0%</b>
White alone, non-Hispanic	1,285	585	45.5%	850	595	70.0%
Black or African-American alone	29	25	86.2%	75	50	66.7%
Asian alone	0	0	N/A	15	15	100.0%
American Indian alone	140	80	57.1%	240	95	39.6%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	65	35	53.8%	80	60	75.0%
Other (including multiple races)	85	35	41.2%	60	10	16.7%
<b>Income 50%-80% HAMFI</b>	<b>2,930</b>	<b>985</b>	<b>33.6%</b>	<b>1,645</b>	<b>680</b>	<b>41.3%</b>
White alone, non-Hispanic	2,395	835	34.9%	1,165	515	44.2%
Black or African-American alone	50	30	60.0%	35	25	71.4%
Asian alone	4	0	0.0%	0	0	N/A
American Indian alone	280	70	25.0%	240	50	20.8%
Pacific Islander alone	0	0	N/A	10	10	100.0%
Hispanic, any race	34	4	11.8%	75	15	20.0%
Other (including multiple races)	160	40	25.0%	120	65	54.2%
<b>Income 80%-100% HAMFI</b>	<b>1,585</b>	<b>260</b>	<b>16.4%</b>	<b>755</b>	<b>90</b>	<b>11.9%</b>
White alone, non-Hispanic	1,285	205	16.0%	540	85	15.7%
Black or African-American alone	25	0	0.0%	4	0	0.0%
Asian alone	0	0	N/A	25	0	0.0%
American Indian alone	160	35	21.9%	129	4	3.1%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	50	10	20.0%	40	0	0.0%
Other (including multiple races)	70	10	14.3%	10	0	0.0%
<b>All Incomes</b>	<b>18,390</b>	<b>3,695</b>	<b>20.1%</b>	<b>7,095</b>	<b>2,955</b>	<b>41.6%</b>
White alone, non-Hispanic	15,430	2,970	19.2%	5,030	2,115	42.0%
Black or African-American alone	233	85	36.5%	304	190	62.5%
Asian alone	42	4	9.5%	69	19	27.5%
American Indian alone	1,565	385	24.6%	1,109	374	33.7%
Pacific Islander alone	15	0	0.0%	10	10	100.0%
Hispanic, any race	413	99	24.0%	280	105	37.5%
Other (including multiple races)	689	150	21.8%	300	140	46.7%

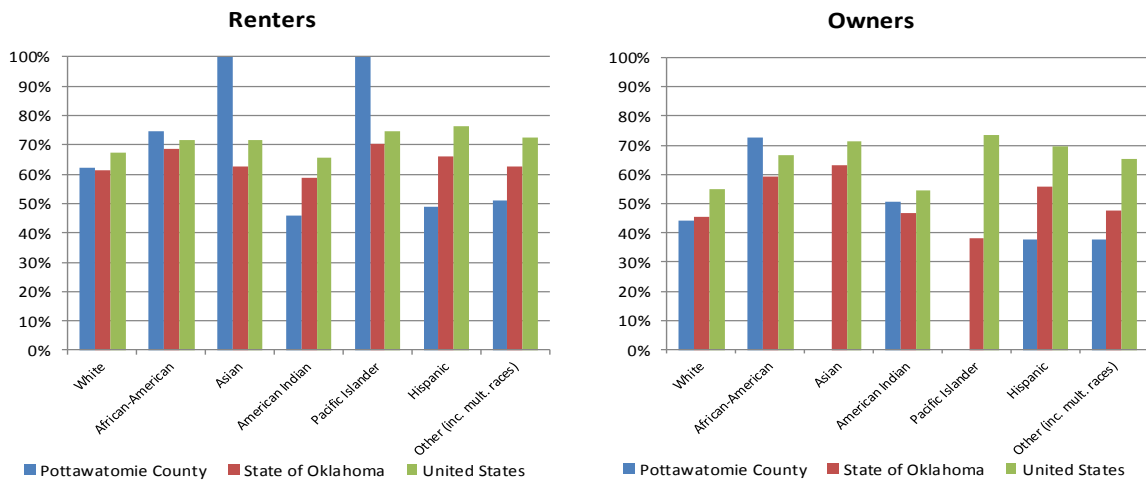
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 1

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

Household Size/Type	Total	Owners		Renters		
		No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
<b>Income &lt; 80% HAMFI</b>	<b>6,040</b>	<b>2,700</b>	<b>44.70%</b>	<b>4,705</b>	<b>2,795</b>	<b>59.40%</b>
White alone, non-Hispanic	4,855	2,135	43.98%	3,200	1,990	62.19%
Black or African-American alone	103	75	72.82%	255	190	74.51%
Asian alone	8	0	0.00%	15	15	100.00%
American Indian alone	660	335	50.76%	765	350	45.75%
Pacific Islander alone	0	0	N/A	10	10	100.00%
Hispanic, any race	103	39	37.86%	195	95	48.72%
Other (including multiple races)	304	115	37.83%	275	140	50.91%

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 Pottawatomie 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 2,065 renter households that are cost overburdened, and 1,625 homeowners that are cost overburdened.
- Among **elderly** households with incomes less than 50% of Area Median Income, there are 399 renter households that are cost overburdened, and 675 homeowners that are cost overburdened.



- 74.51% of African American renters, and 100% of Asian and Pacific Islander renters with incomes less than 80% of Area Median Income have one or more housing problems, and 72.82% of African American homeowners with incomes less than 80% of Area Median Income have one or more housing problems.



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 Tecumseh</b>						
<b>Year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Household Estimates	2,377	2,385	2,393	2,401	2,409	2,417
Owner %: 71.04%	1,689	1,694	1,700	1,706	1,711	1,717
Renter %: 28.96%	688	691	693	695	698	700
<b>Total New Owner Households</b>						<b>28</b>
<b>Total New Renter Households</b>						<b>12</b>

Based on an estimated household growth rate of 0.33% per year, Tecumseh would require 28 new housing units for ownership, and 12 units for rent, over the next five years. Annually this equates to 6 units for ownership per year, and 2 units for rent per year.

### **Pottawatomie County Anticipated Demand**

Households in Pottawatomie County grew at an annually compounded rate of 0.55% from 2000 to 2010. Nielsen SiteReports estimates households have grown 0.69% per year since that time, and that households will grow 0.76% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 0.76% per year in forecasting future household growth for Pottawatomie County.

The percentage of owner households was estimated at 71.89% with renter households estimated at 28.11%, 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 Pottawatomie 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	26,822	27,026	27,231	27,438	27,647	27,857
Owner %: 71.89%	19,282	19,428	19,576	19,725	19,875	20,026
Renter %: 28.11%	7,540	7,598	7,655	7,713	7,772	7,831
<b>Total New Owner Households</b>						<b>744</b>
<b>Total New Renter Households</b>						<b>291</b>

Based on an estimated household growth rate of 0.76% per year, Pottawatomie County would require 744 new housing units for ownership, and 291 units for rent, over the next five years. Annually this equates to 149 units for ownership per year, and 58 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 Pottawatomie 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 Pottawatomie 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>Pottawatomie 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%	744	291	1,035
Less than 30% AMI	8.15%	24.65%	61	72	132
Less than 50% AMI	16.91%	43.10%	126	125	251
Less than 60% AMI	20.29%	51.72%	151	150	301
Less than 80% AMI	32.84%	66.27%	244	193	437

### 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>Pottawatomie 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	32.02%	15.63%	238	45	284
Elderly less than 30% AMI	2.94%	4.08%	22	12	34
Elderly less than 50% AMI	8.13%	8.73%	60	25	86
Elderly less than 60% AMI	9.75%	10.48%	73	30	103
Elderly less than 80% AMI	14.90%	12.75%	111	37	148

### 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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**Pottawatomie 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)	36.41%	35.14%	271	102	<b>373</b>
Disabled less than 30% AMI	4.70%	12.18%	35	35	<b>70</b>
Disabled less than 50% AMI	9.49%	19.93%	71	58	<b>129</b>
Disabled less than 60% AMI	11.39%	23.92%	85	70	<b>154</b>
Disabled less than 80% AMI	15.85%	26.20%	118	76	<b>194</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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**Pottawatomie 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%	744	291	1,035
Total Veteran Demand	12.42%	12.42%	92	36	<b>129</b>
Veterans with Disabilities	4.70%	4.70%	35	14	<b>49</b>
Veterans Below Poverty	1.04%	1.04%	8	3	<b>11</b>
Disabled Veterans Below Poverty	0.56%	0.56%	4	2	<b>6</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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**Pottawatomie 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%	744	291	1,035
Total Working Families	52.24%	52.24%	389	152	<b>541</b>
Working Families with Children Present	26.85%	26.85%	200	78	<b>278</b>

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### Population Subset Conclusions

Based on population and household growth over the next five years, a total of 1,035 housing units will be needed in Pottawatomie County over the next five years. Of those units:

- 301 will be needed by households earning less than 60% of Area Median Income



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

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

## Special Topics

## Pottawatomie 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 14 key cities within the county: Shawnee, Tecumseh, Asher, Bethel Acres, Brooksville, Earlsboro, Johnson, Macomb, Maud, McLoud, Pink, St. Louis, Tribbey, and Wanette. Oklahoma City also has a part of the city in this county. There are also 7 unincorporated communities in the county: Aydelotte, Belmont, Dale, Harjo, Pearson, Romulus, and Sacred Heart.

**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.

Of the 14 key cities, 4 have comprehensive plans that have been adopted: Earlsboro, McLoud, Shawnee, and Tecumseh. Of these plans the following plans contain language in the plan 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.

Earlsboro: not publically available online

McLoud: <http://www.mcloudok.us/Comprehensive%20plan/McLoud%202030%20Comp%20Plan.pdf>

Page 8: "Residential development in floodplain areas should be prohibited. Non-residential development in such areas should be restricted and regulated."

Shawnee: <http://www.shawneeok.org/development/planning/ComprehensivePlan.asp>

Land Use document

Page 18: "Housing in the Uptown District is expected to range from medium to high density with limited commercial retail and office space integrated into development. Floodplains and waterways should be preserved and utilized as a recreational and aesthetic amenity..."

Page 31: Parks and Open Space: "Parks are a desirable use for floodplain areas."

<http://www.shawneeok.org/development/docs/2005ComprehensivePlan/Chapter%204%20Land%20Use%20for%20Web.pdf>

Housing document

Page 17: "More important, modular housing is required to meet local building codes and other related regulations. This is particularly important in Shawnee because of the ability to require increased reinforcement against wind events such as tornadoes and straight line winds."

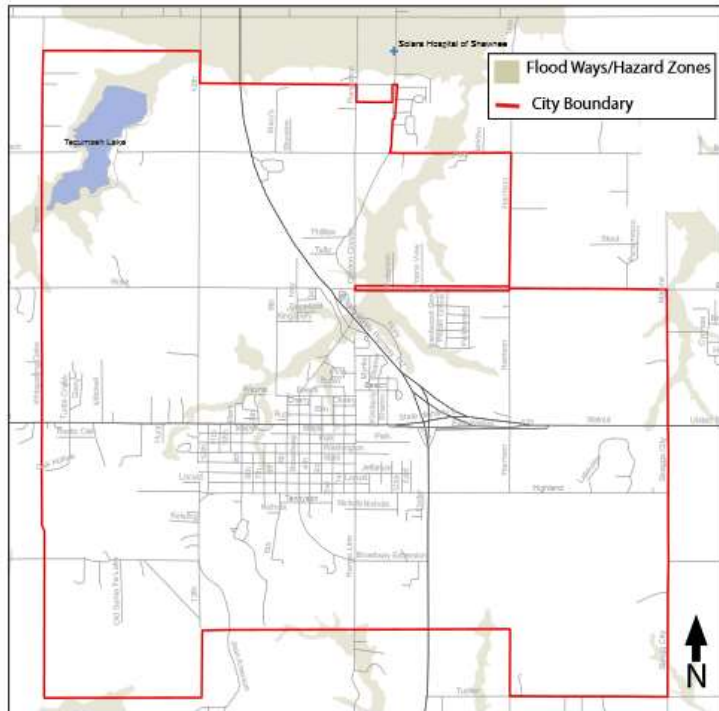
Page 28: "Primary conservation areas represent areas unsuitable for development such as floodways/floodplains, wetlands, steep slopes, or other areas of significance that are deemed inappropriate for development by the City of Shawnee..."

<http://www.shawneeok.org/development/docs/2005ComprehensivePlan/Chapter%205%20Housing%20for%20Web.pdf>

Tecumseh:

<http://static1.1.sqspcdn.com/static/f/391847/19947756/1345493672643/Tecumseh+Comp+Plan.pdf?token=%2Blhpn3mcuPiz5oz2L9kgrrMXtcY%3D>

Page 31: “Objective CR2.3: Restrict development in flood hazard areas and prohibit development in floodways.”



Appendix D Map

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 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.

Pottawatomie County does have a Hazard Mitigation Plan. The plan was approved in 2014 and is currently in review by FEMA.

The following jurisdictions participate in Pottawatomie County’s Hazard Mitigation Plan: The Unincorporated areas of the County, Asher, Bethel Acres, Brooksville, Earlsboro, Johnson, Macomb, Maud, McLoud, Pink, Shawnee, and St. Louis, as well as the public school districts in the County.

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

The Pottawatomie County Hazard Mitigation Plan has five goals for all natural hazards:

1. Protection of lives and property
2. Improved identification and protection of Critical Facilities
3. Prevent repetitive flooding

4. Educate citizens on all potential hazards
5. Improve response capabilities to hazard events

The following table describes the chance a natural hazard may occur:

TABLE 3-2. PROBABILITY OF OCCURRENCE - DEFINITION	
4-HIGHLY LIKELY	Event is probable within the calendar year. Event has a 1 in 1 year chance of occurring.
3-LIKELY	Event is probable within the next three years. Event has up to 1 in 3 year's chance of occurring.
2-POSSIBLE	Event is probable within the next 5 years. Event has up to 1 in 5 year's chance of occurring.
1-UNLIKELY	Event is possible within the next 10 years. Event has up to 1 to 10 years chance of occurring.

**Dam Failure Risks – Risk level: 1**

Historical Context: “There are four major dams in Pottawatomie County and one in the neighboring Cleveland County that could affect Pottawatomie County in the event of a dam failure. All are rated by OWRB as High Hazard. There is no data or other information available that there has ever been a dam breach in Pottawatomie County; however, historical records are sparse and may not contain all events into the early 20<sup>th</sup> century.”

Table 3-5 POTTAWATOMIE COUNTY HAZARDOUS DAM DATA					
Name of Dam Site	Year Completed	Dam Height	Max Storage	Normal Storage	Surface Area
Shawnee Twin Lakes #1	1936	55	36500	22600	1275
Shawnee Twin Lakes #2	1960	50	18900	11400	1100
Wes Watkins Dam	1994	54	40735	14065	1142
Tecumseh Lake Dam	1934/1957	30	2370	1118	127
Thunderbird Lake Dam*	1965	144	106669	1039	5377

\*located in Cleveland County

**Mitigation Strategy / Recommendations for HMP:** “Identify, acquire and remove repetitive loss and repeated flood properties where...most cost effective... Implement structural and non-structural flood mitigation measures for flood prone area... Evaluate and Upgrade Community Warning System. Install outdoor warning devices... Conduct assessment to determine vulnerable special needs population... Develop and distribute public information and education materials... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center. Revise Emergency Action Plans for dams... Installation of monitoring equipment on High Hazard dams. Purchase lighted electronic signs...to warn motorists of potential dangers...”

**Drought – Risk level: 3**

Historical Context: “According to the National Climatic Data Center (NCDC), fifteen drought events affected Pottawatomie County from 2006 to December 2011... Since 2004, Oklahoma and Pottawatomie County have been involved in a steady drought with a few periods of relief.



The most severe was during early 2011 and 2012 when dry conditions caused by the drought resulted in numerous water shortages and wildfires statewide.”

<b>Table 3-8 POTTAWATOMIE COUNTY DROUGHT EVENTS</b> <b>2006-2013</b> <small>Data from the National Climate Data Center (NCDC)</small>	
Date	Description
Oct 2012 -Mar 2013	<p>Drought conditions continued over the southern Plains following a hot and very dry summer. A few beneficial rain events did occur during September, resulting in improving drought conditions in some areas.</p> <p>With lack of any appreciable rainfall during the month of October, drought conditions persisted and/or worsened during the month.</p> <p>Precipitation totals for March 2013 were below normal across most of central and western Oklahoma, resulting in a continuation of the long-term drought.</p>
Jan 2011-Sept 2012	<p>The drought conditions that had affected Pottawatomie County 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 Pottawatomie County was in a D3 (Extreme) drought and had been for over a month.</p>
Oct 2006-Jan 2007	<p>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.</p>

**Mitigation Strategy / Recommendations for HMP:** “Shawnee and Pottawatomie County shall develop...new technologies to assess the probable impact of droughts; development of education programs; and the development of indices and response actions that signal the onset of various stages of drought. The City of Shawnee shall seek additional water reservoir capacity. Develop and distribute public information and education materials... Enhance facilities for the 911 center and the Emergency Operations Center.”

**Earthquake – Risk level:** felt earthquakes: 3; damaging earthquakes: 2

Historical Context: “On average there are about 50 measurable earthquakes each year in Oklahoma with only a few of these with shaking strong enough to be felt. The USGS database shows that there is a 2.087% chance of a major earthquake within 50 miles of Shawnee, Oklahoma within the next 50 years.”

Date	Location	General Description
10/26/2002	17km SE of Shawnee	M5.4 – no damage reported
7/1/2009	1mi SE of McLoud	M3.4 – no injuries or damage reported
10/13/2010	Norman	M4.4 – felt by many in Pottawatomie County but no damage or injuries reported
11/6/2011	21mi NNE of Shawnee	M5.6 – significant damage in the County. Damage to spires on top of Benedictine Hall at St. Gregory’s University; commercial structure in downtown Shawnee; 15 residential structures with minor damage and one residence destroyed; St. Benedicts Church, Romulus Baptist Church, and Eaton Hydraulics; and the Shawnee water treatment facilities and public works building.



<b>Table 3-10 POTTAWATOMIE COUNTY EARTHQUAKE EVENTS</b>					
January 1, 2012-August 31, 2012					
Information provided by the Oklahoma Climatological Survey					
Date	Time	Depth	Magnitude	Latitude	Longitude
August 13 <sup>th</sup>	08:46:40	5.0	1.3	35.4656	-96.8140
August 10 <sup>th</sup>	02:39:23	5.0	1.4	35.4275	-97.0084
August 9 <sup>th</sup>	23:23:25	5.0	1.8	35.4476	-97.0220
July 31 <sup>st</sup>	14:24:11	5.0	1.8	35.4580	-96.7962
June 13 <sup>th</sup>	22:44:32	3.0	3.1	35.4597	-96.7003
June 2 <sup>nd</sup>	22:11:48	5.0	2.3	35.4681	-96.7089
May 30 <sup>th</sup>	22:15:43	5.0	2.5	35.4573	-96.6993
May 16 <sup>th</sup>	13:22:11	5.0	0.9	35.4657	-96.6230
April 29 <sup>th</sup>	11:50:23	5.0	2.0	35.4432	-97.0269
April 16 <sup>th</sup>	10:59:39	5.0	2.1	35.4041	-96.6663
Feb 19 <sup>th</sup>	08:12:39	.2	.6	35.4598	-96.8567
Jan 24 <sup>th</sup>	18:10:05	7.8	2.0	35.3942	-97.0950

*NOTE: Unfortunately the usual source in Oklahoma for accurate Oklahoma earthquake data, the Geological Survey Laboratory at Leonard, Oklahoma, suffered a computer failure and has been out of service for several months. The above information was received from other sources but may not be entirely accurate.*

**Mitigation Strategy / Recommendations for HMP:** “Conduct assessment to determine vulnerable special needs population... Revise building codes to reflect latest guidance for wind resistance and tie downs for mobile homes. Develop and distribute public information and education materials... ...locate utility lines underground and increase trimming of trees affecting utility lines... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center.”

#### **Extreme Heat – Risk level: 3**

**Historical Context:** “Pottawatomie County’s highest temperature on record occurred on August 10, 1936 when the temperature reach 116 degrees Fahrenheit in Shawnee. Pottawatomie County has experienced extreme heat events over the last five years with excessively high temperatures causing significant problems for citizens... The Oklahoma Climatological Survey indicates the Pottawatomie County area averages 10-20 days over 100 degrees during the summer.”

<b>Table 3-12 SIGNIFICANT POTTAWATOMIE COUNTY EXTREME HEAT HISTORY 2009-2012</b>				
Data provided by the Oklahoma Climatological Survey				
Year	Days above 90 degrees	Days above 100 degrees	Pottawatomie County	
			Fatalities	Injuries
2012	93	34	None known	Unknown
2011	109	63	None known	Unknown
NOTE: NCDC website was checked for data but information available was inadequate. NWS Norman was also checked for temperature data but usable data was not found.				
Average High for July: 93.1 degrees Average Number of Days above 90 degrees: 76				

**Mitigation Strategy / Recommendations for HMP:** “Develop and publicize locations of cooling/warming stations for refuge... Conduct assessment to determine vulnerable special needs population... Develop and distribute public information and education materials... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center.”

**Flood – Risk level: 3**

Historical Context: “All of the communities in Pottawatomie County are susceptible to occasional minor street flooding primarily due to flash flooding; however the communities of Bethel Acres, Earlsboro, Shawnee and Tecumseh have been affected by flooding in the past... Tecumseh Middle School and Dale Public Schools have facilities that are located within the FEMA recognized Special Flood Hazard Area...”

Date	Location	General Description
4/30/2000	Earlsboro	Flash flood – isolated areas of wind damage, large hail, lightning damage, and flooding from thunderstorms.
3/3/2004	Entire County	Flood – rainfall amounts of 1.5in to 3.5in. Little River near Tecumseh crested at 15ft, flooding agricultural lands in Pottawatomie and western Seminole Counties.
7/7/2004	Entire County	Flood – An early morning thunderstorm dropped 2in+ of rain, flooding the Little River, which crested 1.8ft above the flood stage.
11/17/2004	Entire County	Flood – Strong thunderstorms dropped 1-2in of rain in west-central parts of the county. The ground was already saturated from previous storms in the year and the Little River flooded. Minor rural flooding occurred.
5/8/2007	Shawnee	Flood – Hardesty Rd and Donna Lane were closed due to a culvert collapsing. Roads were closed between Hwy 102 and Stevens Rd.
6/18/2007	Maud	Flash flood – flooding called for a few evacuations from houses in Maud due to rapidly rising water. Many county roads were closed and monetary damages were estimated.
6/26/2007	Tecumseh, Shawnee, Earlsboro	Flood – Monetary damages were estimated. Tecumseh – 6in of water reported in Kwik Stop. A woman had to be evacuated from her home and water got into the high school, damaging the flooring. Shawnee – 45 <sup>th</sup> St was closed between West Bryant and East Harrison due to high water. 46 single family homes and 7 commercial buildings sustained major



		flood damage. About 60 homes had minor flood damage. Earlsboro – State Hwy 9 was flooded and impassable.
7/10/2007	Shawnee	Flash flood – hail, high winds, and flash flooding reported. Squirrel Creek overflowed its banks, forcing evacuation of campers.
7/30/2007	Shawnee	Flash flood – many roads closed and rising water also entered a few businesses with minor damage reported.
8/19/2007	Tecumseh	Tropical Storm Erin – rainfall amounts exceeded 5in over a large area with some places receiving between 8in and 10in. Many people were rescued by boat and helicopter from homes and cars. Pumps, outlets and fans were damaged at the wastewater treatment plant. Tecumseh High School classrooms had 1in of water in most classrooms. Numerous streets were flooded and closed. No injuries reported at any location
6/14/2010	Bethel Acres	Flash flood – many roads between Bethel Acres and Shawnee had to be closed. One car became stranded in rapidly rising water. Many locations on Hwy 177 and 18 were impassable in Shawnee and Tecumseh. A few swift water rescues were carried out north of Tecumseh when two cars were swept off the road. Several homes were damaged.
4/17/2013	Shawnee	Flash flood – heavy rainfall from several rounds of thunderstorms led to flooding in downtown Shawnee. Numerous streets flooded but no damage reported and no injuries or fatalities occurred.

Tecumseh



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

Bethel Acres



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

Shawnee



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

McCloud



- Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

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

**Mitigation Strategy / Recommendations for HMP:** “Identify, acquire and remove repetitive loss and repeated flood properties where...most cost effective... Implement structural and non-structural flood mitigation measures for flood prone area... Conduct assessment to determine vulnerable special needs population... Develop and distribute public information and education materials... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center. Purchase lighted electronic signs...to warn motorist of potential dangers...”

**Hail – Risk level: 4**

**Historical Context:** “All of Pottawatomie County, including all of the jurisdictions within the county...are subject to hailstorms. Between 2000 and 2013, the NCDL has recorded 119 hail events that have impacted communities in Pottawatomie County.”

Date	Location	General Description
3/24/2004	Shawnee	2.75in
4/21/2004	Shawnee	1.25in – 3in to 2ft deep in some areas. Damaged numerous structures and vehicles. Damage estimates across the OKC metro area were \$100million.
1/8/2008	McLoud	1in
3/31/2008	Tecumseh	1in – some damage
4/3/2008	Macomb	1.75in
11/5/2008	Shawnee, Pink	1.75in – several windows broken at Shawnee Lake. Damage estimated at \$10,000
3/30/2009	Wanette	1in – no damage reported
6/12/2009	Entire County	1.75in

7/8/2009	Wanette	1in
5/16/2010	Shawnee	1in – widespread, significant damage in and around metro area. Many vehicles damaged or totaled and many buildings with roof, window or structural damage. Trees and other vegetation were shredded.
5/19/2010	St. Louis, Macomb	1.75in
4/14/2011	Johnson, Tecumseh, Shawnee	1in
4/22/2011	Tecumseh, Pink	1.25-2.75in
5/12/2011	Earlsboro	1in
8/12/2011	Shawnee, Pink, Earlsboro	1.75in
10/22/2011	Asher, Wanette	1.5-1.75in

**Mitigation Strategy / Recommendations for HMP:** “Evaluate and Upgrade Community Warning System. Install outdoor warning devices... Develop and distribute public information and education materials... ...locate utility lines underground and increase trimming of trees affecting utility lines... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center.”

#### High Winds – Risk level: 4

Historical Context: “Pottawatomie County and its participating jurisdictions...experiences high winds and occasional downbursts during some thunderstorms exposing virtually all structures, infrastructure, and individuals in the county to the effects.”

Date	Location	General Description
7/4/2005	Shawnee	56 knots – estimated damage: \$13,000. Trees and power lines downed and the ceiling at the Shawnee Care Center fell in.
7/21/2006	Maud, Tribbey	56 knots – estimated damage: \$20,000. Power lines downed. Roof of a car wash was blown off.
8/3/2006	Shawnee	56 knots – estimated damage: \$25,000. Many trees and a chain link fence was downed. An outbuilding was blown over and a movie theater sign was splintered.
8/15/2006	Shawnee	61 knots – estimated damage \$50,000. Many trees uprooted and several semi-trucks were rolled.
5/30/2007	Shawnee, North part of County	70 knots – estimated damage: \$207,000. Several power lines and tree limbs downed. The roof of a building at Gordon Cooper Vo-Tech was blown off, and 6 tribal buildings and 7 homes sustained minor damage.
11/5/2008	Shawnee	56 knots – estimated damage: \$10,000. Minor roof damage to three structures in the Shawnee area.
2/10/2009	Tecumseh	56 knots – estimated damage: unavailable. Power lines downed and in Tecumseh part of Hwy 9 had to be closed due to power lines lying on the road. Some fencing and roof damage also reported.
6/7/2009	Shawnee, Tecumseh	61 knots – estimated damage: unavailable. Tree damage and some shingles were blown off several rooftops.
7/8/2009	Tecumseh	61 knots – estimated damage: unavailable. Power lines, utility poles, and trees downed and a sign from a local convenience store was blown over. Most of the town was without power for a short time.



5/10/2010	Wanette	60 knots – estimated damage: unavailable. Roof damage reported to a business just north of Wanette.
5/13/2010	Entire County	56 knots – estimated damage: \$4,000. Several power lines and a tree were downed.
7/13/2011	Tribbey	61 knots – estimated damage: \$9,000. Roof blown off of a barn and several trees blown over.
8/8/2012	Macomb	61 knots – estimated damage: \$2,000. Roof shingles were blown off a house.

**Mitigation Strategy / Recommendations for HMP:** “Construct safe rooms...to protect first responders and the public. Constructs safe rooms on school campuses...to protect students, staff and visitors... Evaluate and Upgrade Community Warning System. Install outdoor warning devices... Conduct assessment to determine vulnerable special needs population... Revise building codes to reflect latest guidance for wind resistance and tie downs for mobile homes. Develop and distribute public information and education materials... ..locate utility lines underground and increase trimming of trees affecting utility lines... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center.”

**Lightning** – Risk level: 4

Historical Context: “All of Pottawatomie County...is vulnerable to lightning.”

<b>Table 3-19 POTTAWATOMIE COUNTY LIGHTNING EVENTS 2000-2012</b> <small>Data provided by the National Climatic Data Center (NCDC)</small>		
Date	Location	Description
06 Nov 2003	Bethel Acres	Lightning caused a house fire near Bethel Acres on Lake Road. Damage estimate: \$15,000.00
19 May 2003	Shawnee	A house was set on fire due to a lightning strike. Damage estimate: \$10,000.00
09 Jul 2001	Shawnee	Lightning struck a house on 11st Street, causing a small fire in the attic. . Damage estimate: \$1,000.00
09 Mar 2000	Asher	Lightning struck an oil tank battery, igniting a fire. Damage estimate: \$2,000.00

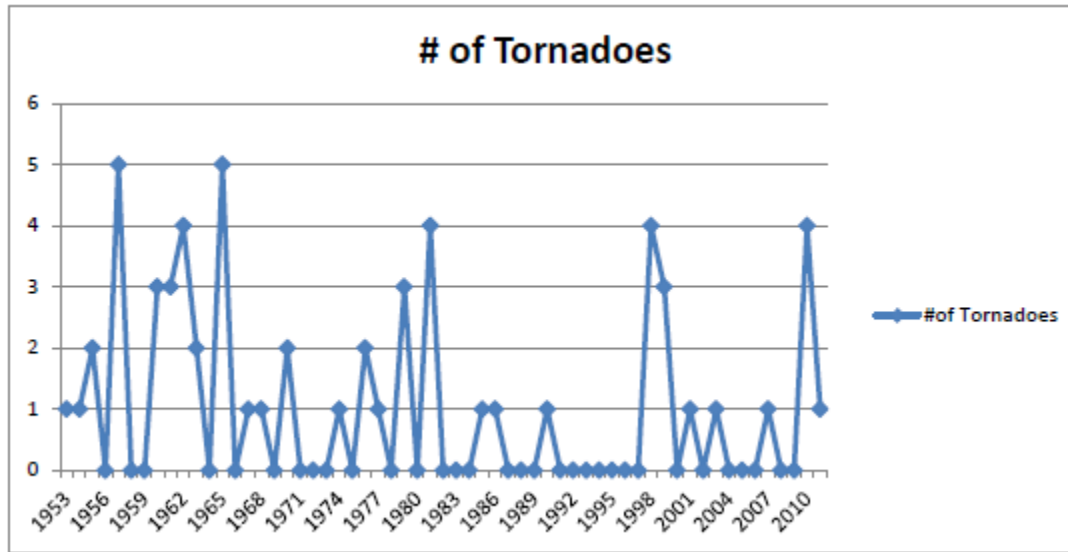
**Mitigation Strategy / Recommendations for HMP:** “Conduct assessment to determine vulnerable special needs population... Develop and distribute public information and education materials... ..locate utility lines underground and increase trimming of trees affecting utility lines... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center.”

**Tornado** – risk level: 3

Historical Context: “The entire State of Oklahoma is at great risk for tornados including all of Pottawatomie County. In one day on May 10, 2010, four tornados ranging from EF2 to EF4 touched down in the county resulting in hundreds of residential structures seriously damaged or destroyed. Since 1875, Pottawatomie County has been affected by seventy-eight tornados...”



Historic data on tornados between 1953-2013 there are 62 tornados documented. There were 315 injuries that occurred connected to these tornados, with 84 of those injuries happening in the October 5<sup>th</sup>, 1970 tornado. There were 15 fatalities connected to tornados during this time period, 5 of which occurred in the May 5<sup>th</sup>, 1960 tornado. Property losses between 1953-1996 ranged from \$7,183,500 to \$71,835,100. Accounting for losses estimated changed in 1996. The losses estimated between 1996-2014 was \$2.5million.



Date	Location	General Description
5/3/1999	Shawnee, Pink	EF1 to 2 – estimated damage: \$1billion. Many structures sustained moderate damage, such as the roof being blown off.
4/11/2001	4mi NW of Maud	EF1
5/7/2007	Entire County	EF0
5/10/2010	NNE of Earlsboro, Pink, Tecumseh	EF3 - estimated damage: unavailable. 3 tornados from this system caused damage in the County.
5/24/2011	McLoud	EF2 – estimated damage: unavailable.

**Mitigation Strategy / Recommendations for HMP:** “Construct safe rooms...to protect first responders and the public. Constructs safe rooms on school campuses...to protect students, staff and visitors... Evaluate and Upgrade Community Warning System. Install outdoor warning devices... Conduct assessment to determine vulnerable special needs population... Revise building codes to reflect latest guidance for wind resistance and tie downs for mobile homes. Develop and distribute public information and education materials... ..locate utility lines underground and increase trimming of trees affecting utility lines... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center. Purchase lighted electronic signs...to warn motorist of potential dangers...”

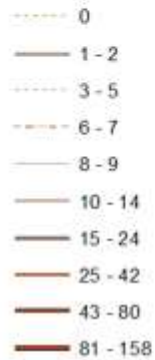
For all the county profiles for this study we are providing maps of the historic tornados mapped over the developed social vulnerability index. This is in addition to the data prepared and summarized from the HMP in this section.

# Social Vulnerability - Impacts on Housing & Disaster Resiliency

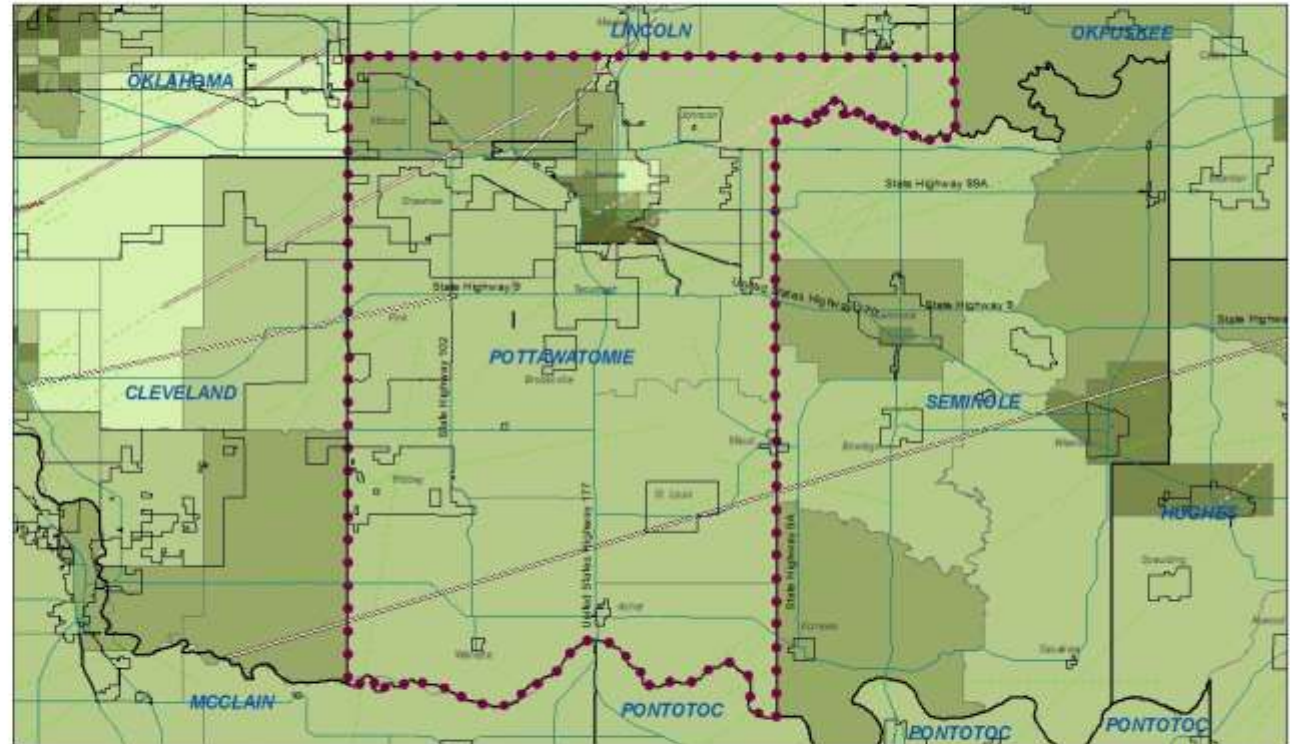
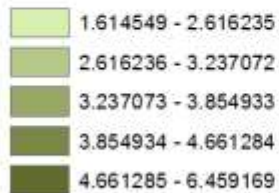
## Tornado Events 1950 - 2014

### Pottawatomie County

**# of fatalities associated with event**



**Social Vulnerability Index**

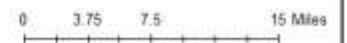


Sources: Shannon Van Zandt, Texas A&M, Hazard Planning materials, and 2009-2011 American Community Survey, Tables B01003, B01001, B17001, B08001, B25044, B25001, B25042, B01001, B01002, B26001, B26009, B17001, B26043, S1501, B23023 & B06007

19XX or 20XX Year of Event Selected County Boundary

State Municipal Boundary

COUNTY NAME





# Social Vulnerability - Impacts on Housing & Disaster Resiliency

## Tornado Events 1950 - 2014

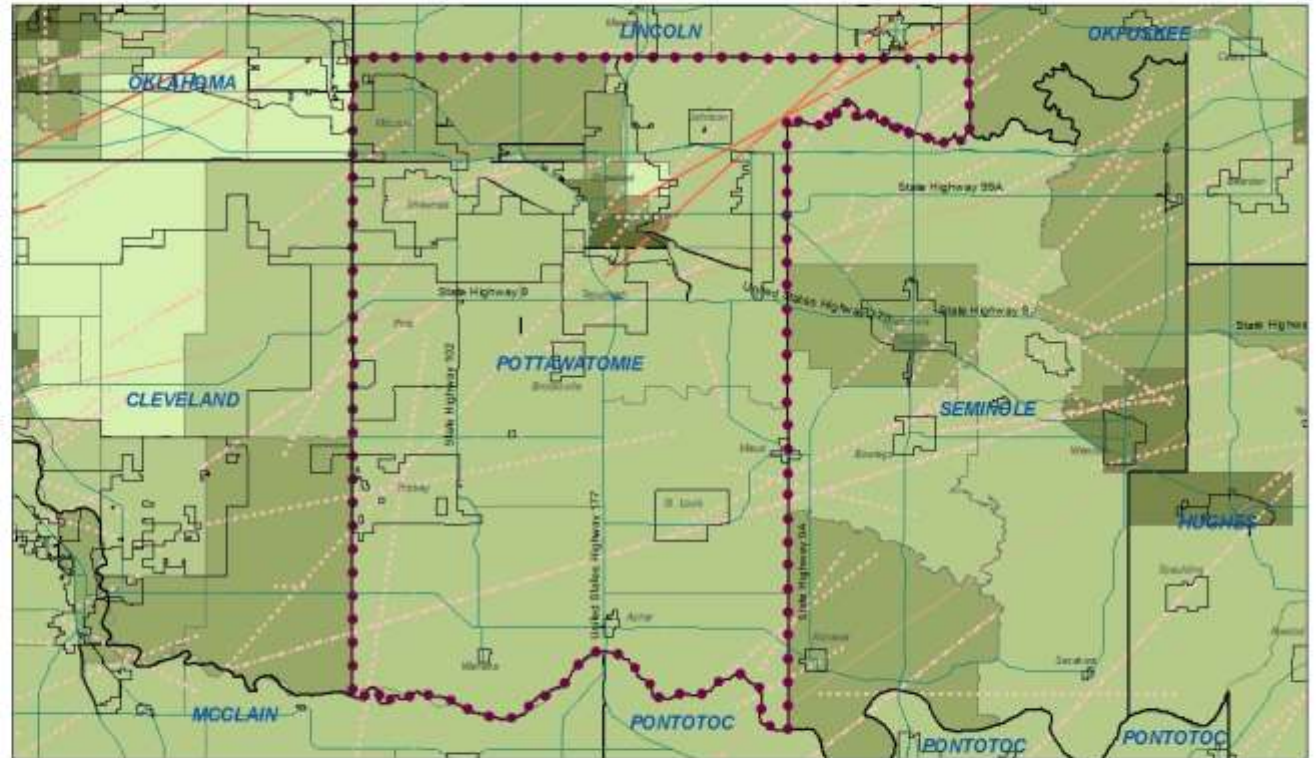
### Pottawatomie County

**# of injuries associated with event**

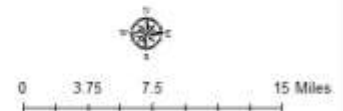
- 0 - 2
- 3 - 8
- 9 - 21
- 22 - 42
- 43 - 68
- 69 - 106
- 107 - 212
- 213 - 583
- 584 - 1150
- 1151 - 1740

**Social Vulnerability Index**

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

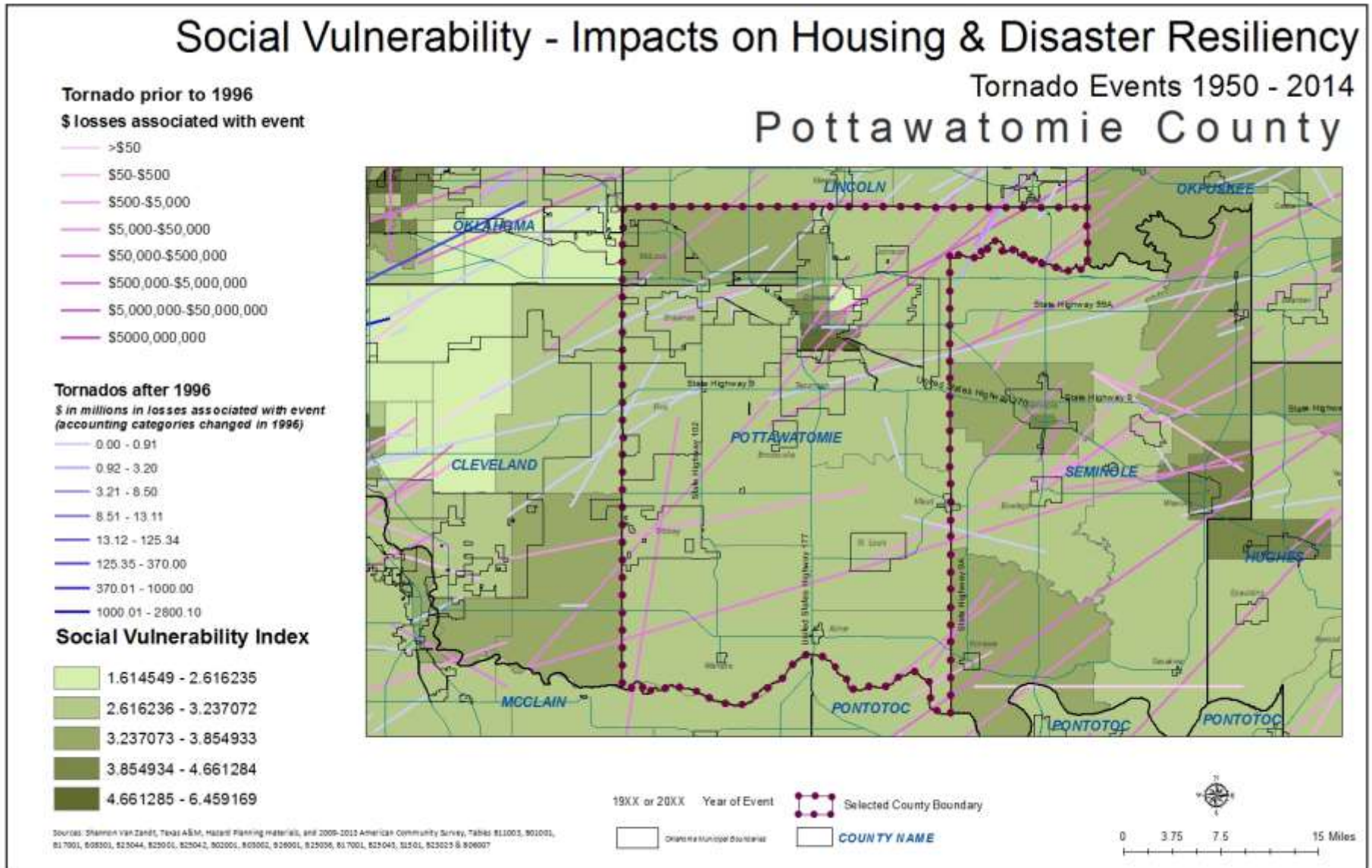


- 19XX or 20XX Year of Event
- Selected County Boundary
- County Name



Source: Shannon Van Zandt, Texas A&M, Hazard Planning materials, and 2009-2010 American Community Survey, Tables B11005, B01001, B17001, B08001, B23044, B29001, B25042, B02001, B03001, B28001, B25056, B17001, B29043, S1901, B25023 & B08007





**Wildfires** – Risk level: 4

Historical Context: “While most of Pottawatomie County is susceptible to grass and wildfire, the southwestern part of the county is the most prone to severe wildfire. In 2009, there were three major wildfires that scorched close to 3000 acres. A fire in July 2011 that began northeast of Asher, OK charred over three square miles over a two-day period and resulted in the response of every fire department in Pottawatomie County.”

Table 3-24 FIRE MANAGEMENT & FM ASSISTANCE DECLARATIONS			
Federal Declaration #	Declaration Date	Incident dates	Location
FM-2953	August 31, 2011	August 31, 2011	Twin Lakes Fire Complex
FM-2872	March 12, 2011	March 12, 2011 to March 15, 2011	Shawnee Fire
FM-2602	January 2, 2006	January 1, 2006	Bethel Acres Fire
FM-2140	March 12, 1996	March 12, 1996	Little Axe Fire
EM-3118	February 27, 1996	February 27, 1996 to May 31, 1996	Oklahoma Fire Emergency

**Mitigation Strategy / Recommendations for HMP:** “Evaluate and Upgrade Community Warning System. Install outdoor warning devices... Conduct assessment to determine vulnerable special needs population... The City of Shawnee shall seek additional water reservoir capacity. Develop and distribute public information and education materials... ..locate utility lines underground and increase trimming of trees affecting utility lines... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center. Purchase lighted electronic signs...to warn motorist of potential dangers...”

**Winter storm** – Risk level: 3

Historical Context: “All of Pottawatomie County and central Oklahoma have the potential for winter snow and ice storms. The winters of 2000-2001, 2006-2007, and 2010-2011 each featured a major ice storm that deposited more than three inches of ice in 24 hours across much of Oklahoma including communities in Pottawatomie County.”

Date	Location	General Description
11/29-30/2006	Entire County	Winter storm – freezing rain, sleet, and snow caused hazardous travel conditions.
1/12-14/2007	Entire County	Winter storm – snow, freezing rain, and sleet closed airports, schools, malls and other businesses.
12/9-11/2007	Entire County	Ice storm – 1in of ice caused worst power outage in OK history. At least 27 people died statewide, mostly due to traffic collisions, though some were due to prolonged cold air exposure or carbon monoxide poisoning. More than 641,000 were without power across the state and it took weeks for power to be restored to everyone.
1/26-	Entire	Winter storm – 1/4in of ice and 3in of sleet caused many minor wrecks.



27/2009	County	
12/24-25/2009	Entire County	Winter storm – estimated damage: \$43,114.25. Snowfall >14in.
1/28-30/2010	Entire County	Ice Storm – estimated damage: \$31,446.76. Roads impassable, search and rescue missions conducted, shelters set up.
1/31/2011 – 2/3/2011	Entire County	Winter Weather – estimated damage: \$119,752.52. Thunder sleet, freezing rain, and snow. Wind gusts over 30mph.
2/8-9/2011	Entire County	Winter Storm – 2-4in of snow. Wind gusts over 25pmh
2/25-26/2013	Entire County	Winter Weather – little to no snow but Shawnee saw about an inch

**Mitigation Strategy / Recommendations for HMP:** “Develop and publicize locations of cooling/warming stations for refuge... Conduct assessment to determine vulnerable special needs population... Develop and distribute public information and education materials... ..locate utility lines underground and increase trimming of trees affecting utility lines... Purchase emergency power generators for critical facilities. Enhance facilities for the 911 center and the Emergency Operations Center. Purchase lighted electronic signs...to warn motorist of potential dangers...”

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

“Many residents of Pottawatomie County have built safe rooms or underground tornado shelters. All of the schools in Pottawatomie County have locations to provide students and staff some protection from tornados but most are not reinforced or specially designed safe rooms meeting FEMA standards.” Action Project 3 calls to “Construct safe rooms as needed to protect first responders and the public. Construct safe rooms on school campuses as needed to protect students, staff and visitors from tornados and high winds.”

McCloud has no public shelters. <http://newsok.com/article/2657072>

Shawnee closed their public storm shelters, the City Hall and Fire Station #3, in 2014. <http://kfor.com/2014/08/23/city-officials-close-shawnee-public-storm-shelters/>

Citizen Potawatomi Nation has secured funding to construct a 2,500 safe room to address tornado hazard to the area (planned to be rated to handle F5 event). Additionally CPN has 3 community shelters (all welcome).

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

The County’s Hazard Mitigation Plan calls for 78 individual Action Plans, dealing with everything from installing storm shelters in schools and critical facilities, to designing and installing better storm sewage systems on individual roads in Shawnee.

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

There is mention of an Emergency Operations Plan that “...coordinates responsibilities to designated departments, agencies, and volunteers in the event of a disaster. This plan provides information on the location of warning sirens and community shelters.” However, this document does not appear to be publically available, as a Google search had no relevant results.

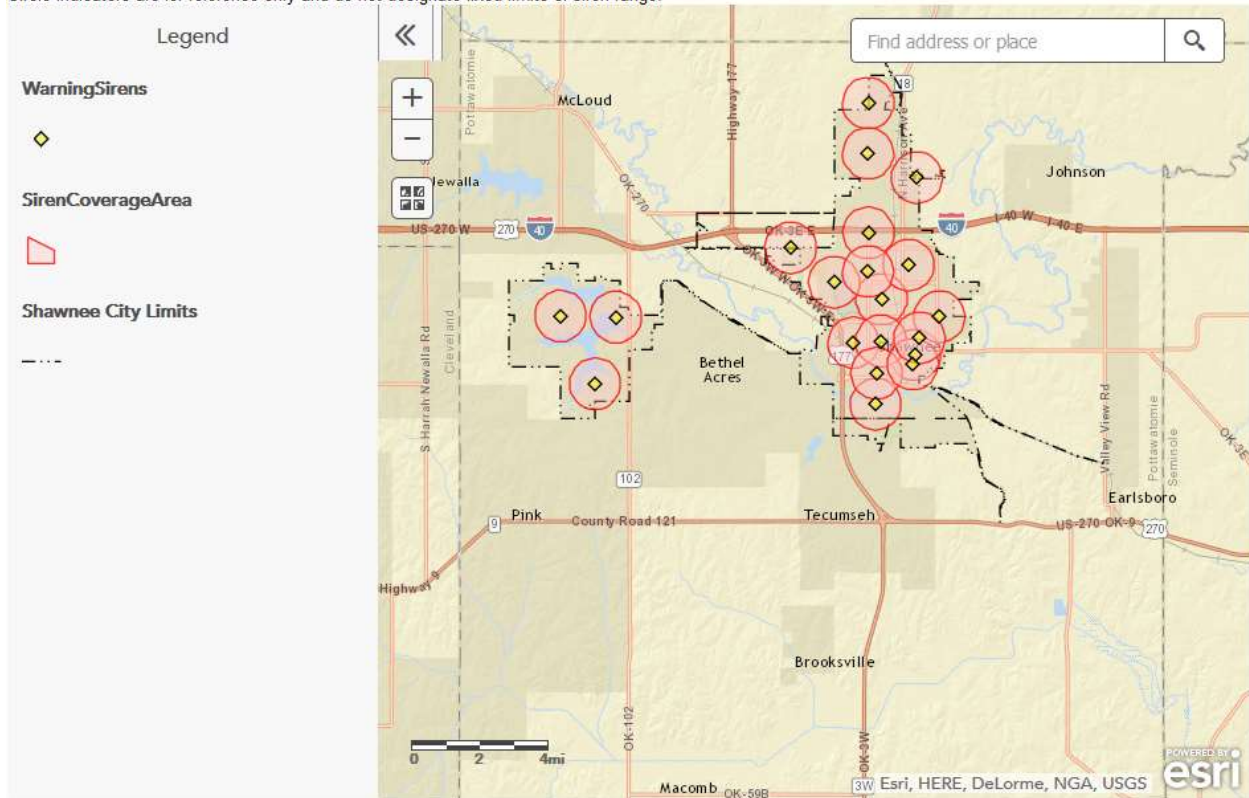
### C.2.1.5 Threat & Hazard Warning Systems

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

- Sirens
- Desire to purchase and distribute NOAA radios to the public, schools and critical facilities (Action Project 21)

#### EMERGENCY SIREN LOCATIONS

Circle indicators are for reference only and do not designate fixed limits of siren range.



<http://www.shawneeok.org/development/Engineering/Default.asp?MUID=27>



## Social Vulnerability

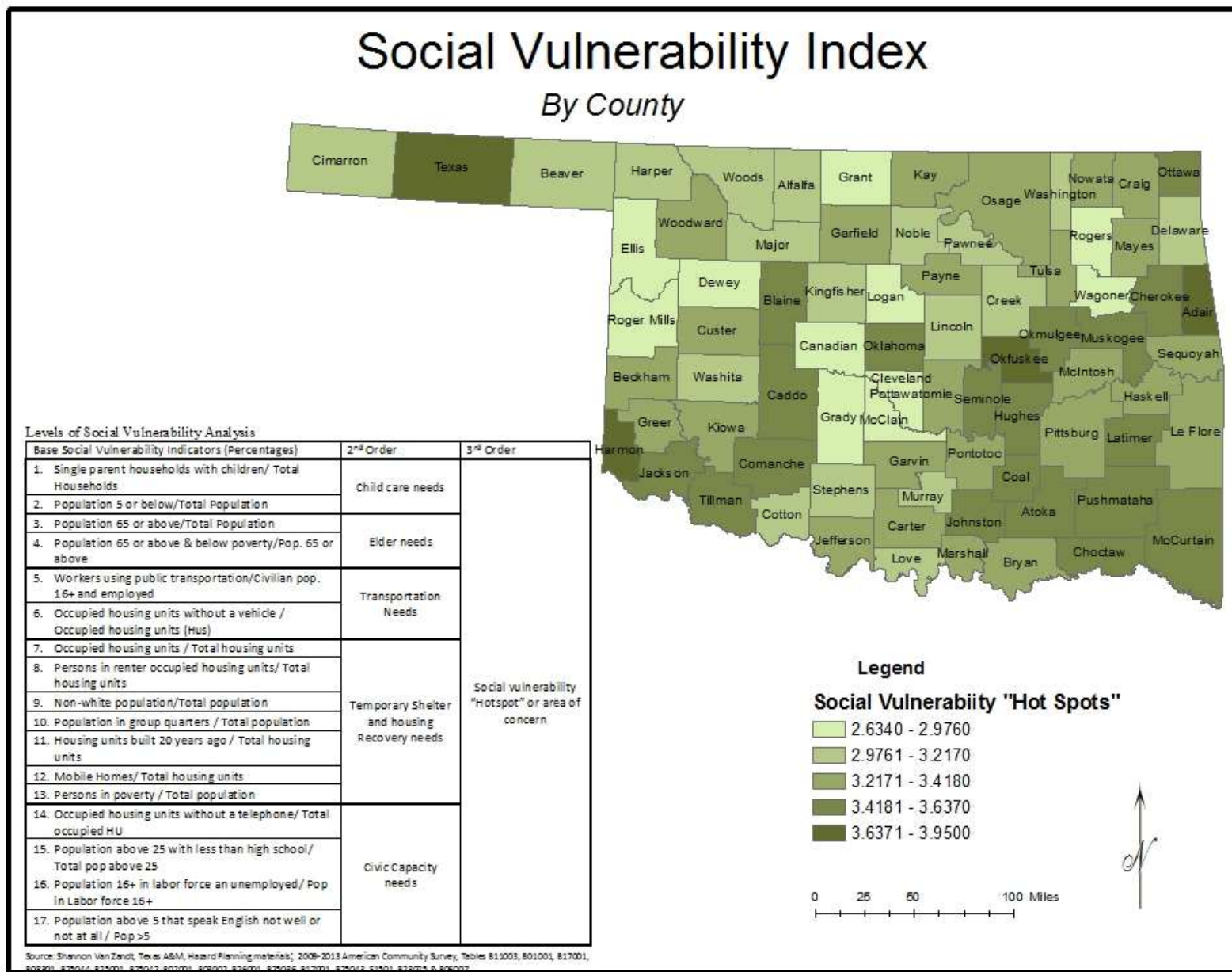
Based on the research work done by the Texas A&M University Hazard Reduction and Recovery Center, an added component is being included in this section. Social vulnerability can place households at a further disadvantage during and after a disaster. This analysis is assessing for the county the levels 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 - Pottawatomie County

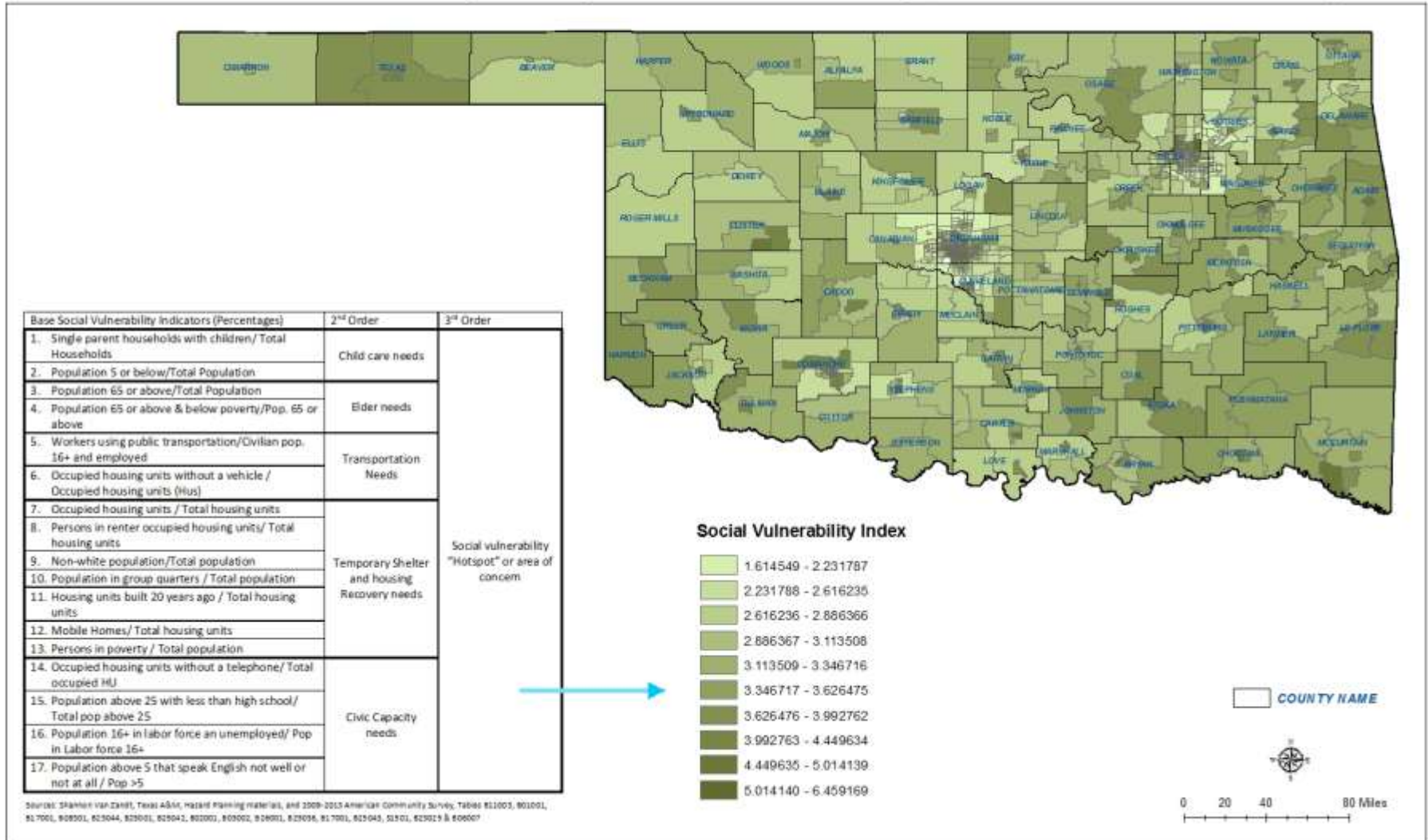
Base Social Vulnerability Indicators (%)	2nd Order	3rd Order
1.) Single Parent Households	14.78%	0.216
2.) Population Under 5	6.85%	(Child Care Needs)
3.) Population 65 or Above	14.62%	0.252
4.) Population 65 or Above & Below Poverty Rate	10.59%	(Elder Needs)
5.) Workers Using Public Transportation	0.18%	0.06
6.) Occupied Housing Units w/o Vehicle	5.87%	(Transportation Needs)
7.) Housing Unit Occupancy Rate	87.82%	2.517 (Temporary Shelter and Housing Recovery Needs)
8.) Rental Occupancy Rate	28.11%	
9.) Non-White Population	25.82%	
10.) Population in Group Quarters	4.89%	
11.) Housing Units Built Prior to 1990	73.23%	
12.) Mobile Homes, RVs, Vans, etc.	13.19%	
13.) Poverty Rate	18.63%	
14.) Housing Units Lacking Telephones	2.69%	0.248 (Civic Capacity Needs)
15.) Age 25+ With Less Than High School Diploma	13.90%	
16.) Unemployment Rate	7.05%	
17.) Age 5+ Which Cannot Speak English Well or Not At All	1.17%	

**3.294**  
**Social Vulnerability**  
**'Hotspot' or Area of**  
**Concern**

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 - Impacts on Housing & Disaster Resiliency









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 below the state score per this index for social vulnerability when comparing as a county to other counties in the state. The census tracts near Shawnee and Tecumseh have elevated scores for social vulnerability.

**Recommendations for this county:**

- Continue to update and maintain the county HMP 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 any effort to increase housing.

## 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 Pottawatomie 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 PIT 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. PIT 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 personnel 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).

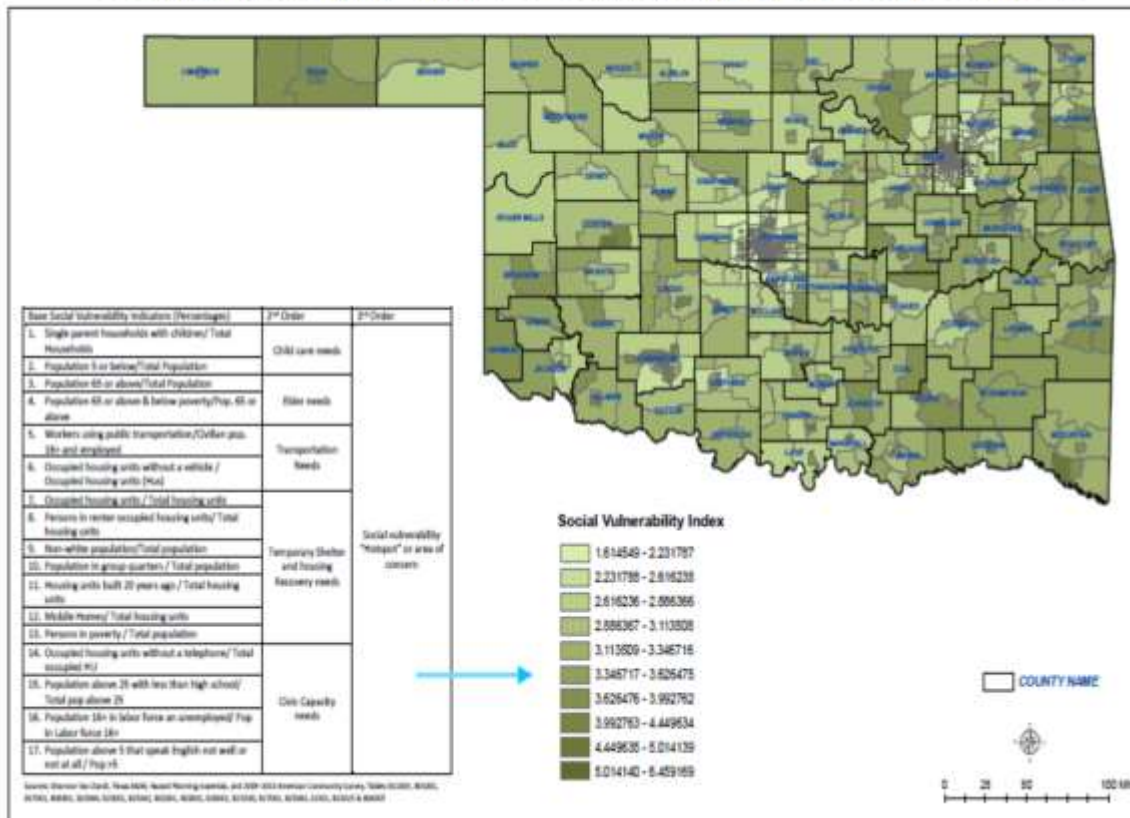
The absence of affordable housing in rural areas is a root cause of homelessness (Levinson, David, and Marcy Ross, 2007). In fact, it was noticed that many of the people were receiving monetary assistance or previously had some money saved up to spend on housing, but these measures were not enough to 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

There remains a significant homeless population in the urban and rural areas of Oklahoma. This population is very likely significantly undercounted in the Point In Time data. Local homeless advocates and service providers are highly aware of this undercount and are using innovative tools to find and serve the homeless. One example of these extra efforts to identify homeless populations is the data being collected by schools about the number of youth who are homeless or “couch” homeless. In this study, the research team also considered those families living at the economic margins and makes the case for the need for funding to support the housing needs of those that live a pay check or two from being homeless.

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 accurately 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 housing and supportive services across the State. CoCs with high supportive services tend to better accommodate the housing needs of 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 providers, 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 PIT 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. This population must not be forgotten by policymakers.

The size of the homeless veteran population is decreasing as a result of national initiatives to end homelessness for veterans in Oklahoma. The needs of homeless veterans appear to be highest in areas of the State near VA facilities. 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 housing for the rural homeless must be developed to allow sheltering in place where possible.

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 construction of affordable 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).

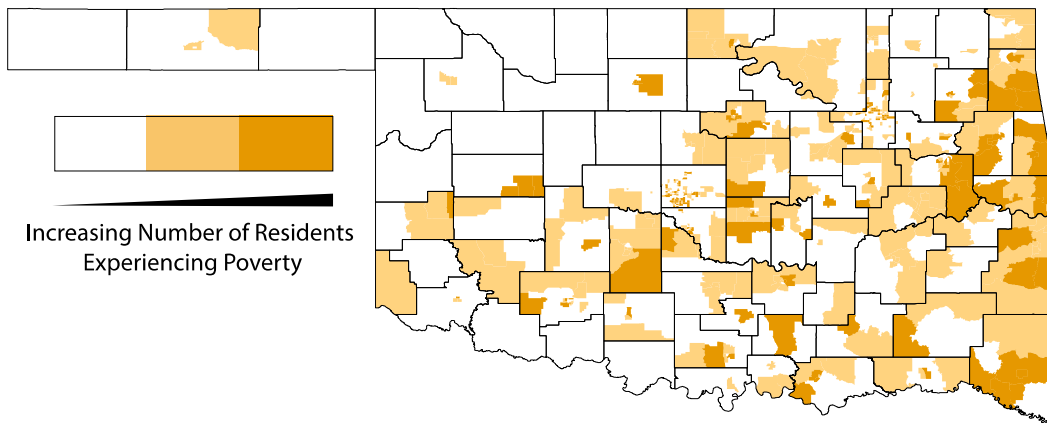
#### 1. Urban/Rural

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

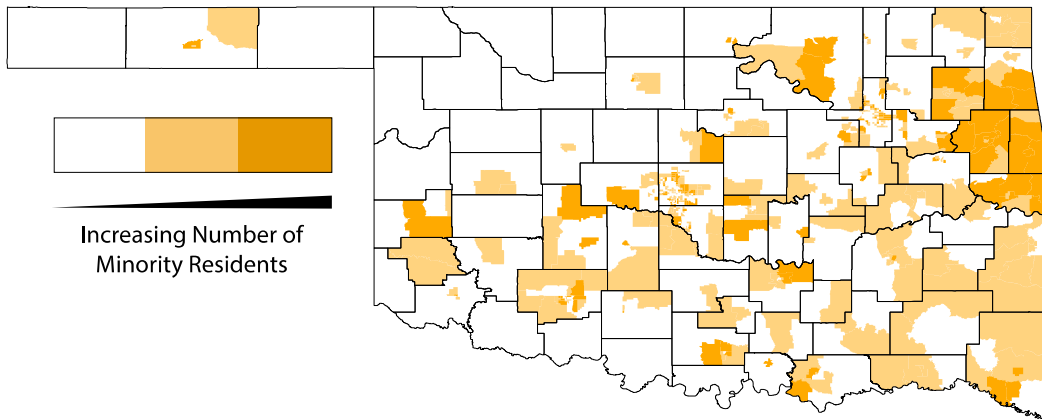
Approximately 70% of affordable housing units in Oklahoma are located in census tracts where the number of residents living in poverty is above the state average. About half of these units are located in areas of extreme poverty, where the number of individuals who are economically vulnerable exceeds 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

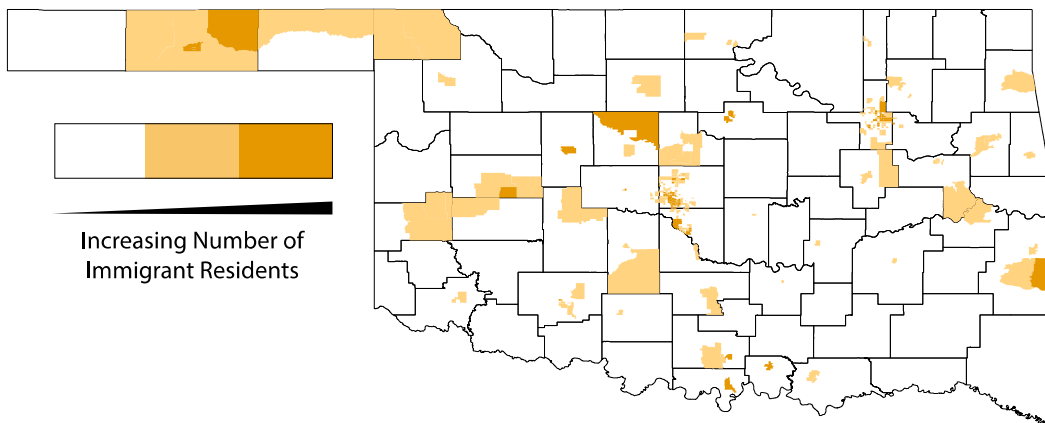
Just over 60% of affordable housing units in Oklahoma are located in census tracts where a majority of the residents are non-white. With just fewer than 24% of the total affordable housing units in census tracts heavily populated with residents who are not white – identified as census tracts where the 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

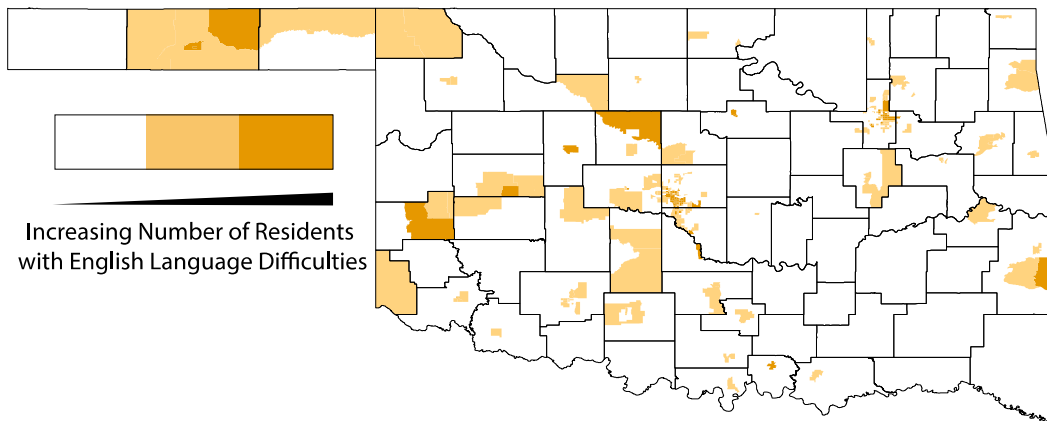
One-third of affordable housing units in Oklahoma are located in census tracts where more than the average number of residents are immigrants. About half of these units are located in areas dense with immigrants, where the number of individuals who are not citizen exceeds 349, more than one standard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

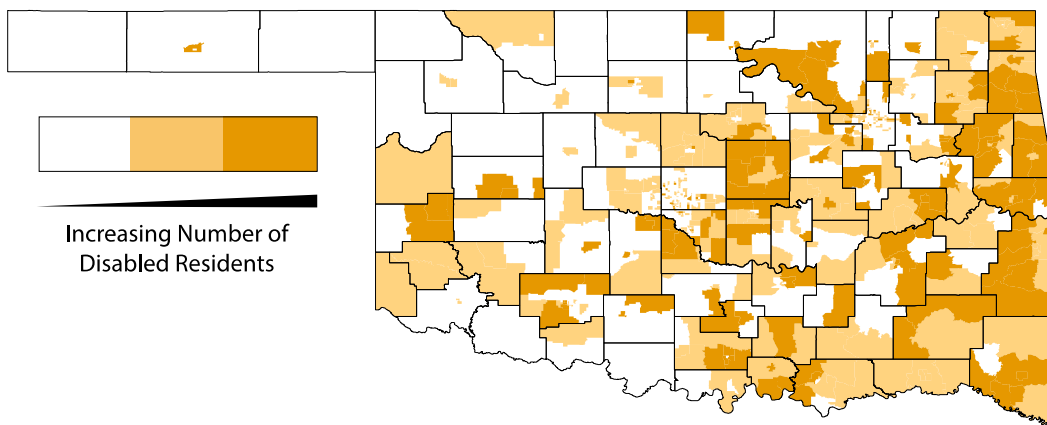
Almost 17,000 existing affordable housing units in Oklahoma are located in census tracts where more residents than average do not speak English very well. A little more than half of these units are located in areas dense with individuals with limited English proficiency, where the number of individuals 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).

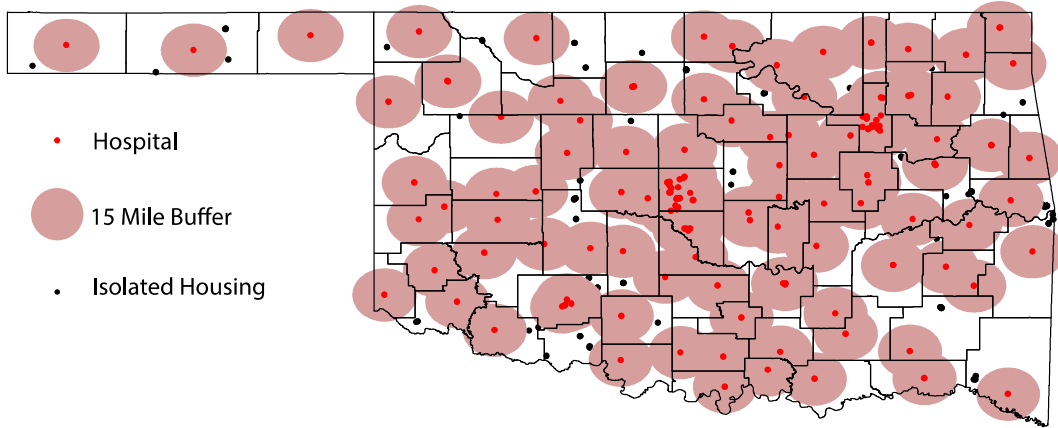


	Total Affordable Housing Units	Community with more than average number of Disabled Residents	Community dense with Disabled Residents
OHFA	35,292	10,098 (28.6%)	10,722 (30.4%)
515	5,384	1,686 (31.3%)	2,594 (48.8%)
LIHTC	23,537	7,074 (30.1%)	6,289 (26.7%)
Total	64,213	18,858 (29.4%)	19,605 (30.5%)



7. Hospitals

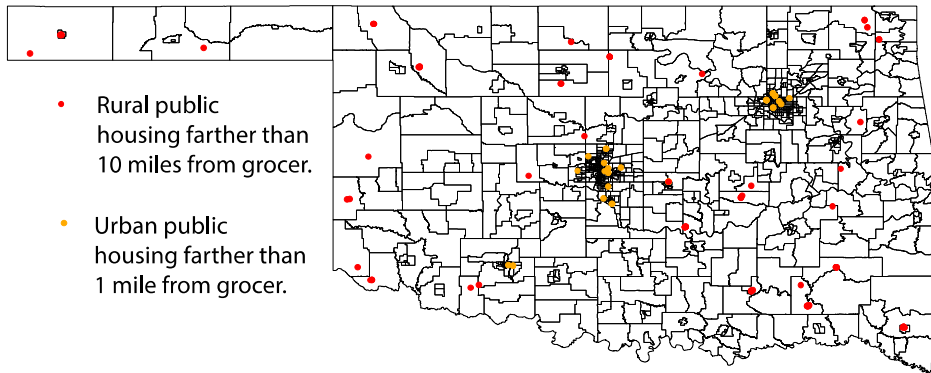
There are no affordable housing units more than 30 miles from a hospital. Approximately 2.6% of affordable housing units are farther than 15 miles from the nearest hospital. As indicated by the larger percentage of Rural Rental Housing Loan units, most of these are located in rural areas.



	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

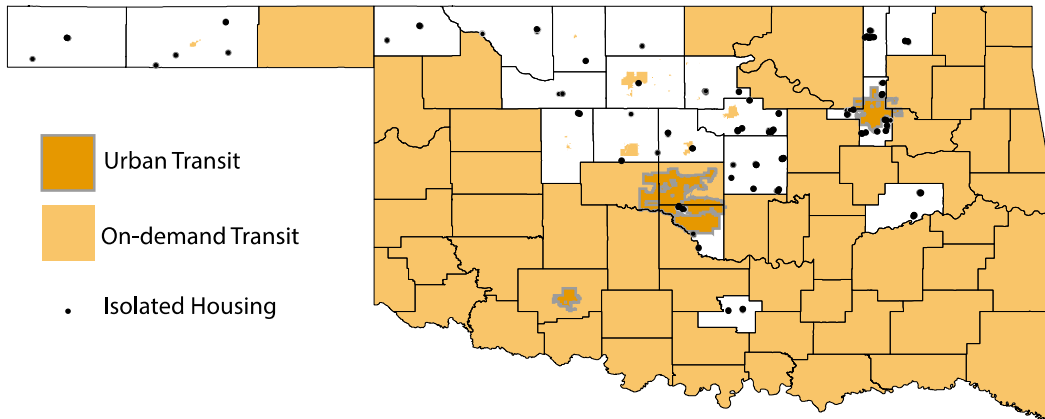
Approximately 7.8% of affordable housing units are in areas that are classified as food deserts. According to the United States Department of Agriculture, food deserts exist in urban environments further than 1 mile from a grocery store and in rural environments further than 10 miles from a grocery store (<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.

### **Pottawatomie County Findings**

The number of housing units in Pottawatomie 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 Pottawatomie 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.

<b>Housing Units in the South Census Region with Lead-Based Paint Hazards by Year of Construction</b>			
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 Pottawatomie 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 Pottawatomie County.

<b>Total Housing Units in Pottawatomie County with Lead-Based Paint Hazards by Tenure</b>			
Total Owner-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	8,187	3.57%	292
1960-1977	5,418	11.18%	606
1940-1959	2,890	38.48%	1,112
1939 or Earlier	1,865	63.38%	1,182
<b>Total</b>	<b>18,360</b>	<b>17.38%</b>	<b>3,192</b>
Total Renter-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	2,912	3.57%	104
1960-1977	2,084	11.18%	233
1940-1959	1,265	38.48%	487
1939 or Earlier	680	63.38%	431
<b>Total</b>	<b>6,940</b>	<b>18.08%</b>	<b>1,254</b>
Total Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	11,099	3.57%	396
1960-1977	7,502	11.18%	839
1940-1959	4,155	38.48%	1,599
1939 or Earlier	2,545	63.38%	1,613
<b>Total</b>	<b>25,300</b>	<b>17.57%</b>	<b>4,446</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 Pottawatomie County with lead-based paint hazards, occupied by households with low-to-moderate incomes, by tenure:



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

Owner-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,146	3.57%	41
1960-1977	774	11.18%	87
1940-1959	580	38.48%	223
1939 or Earlier	390	63.38%	247
<b>Total</b>	<b>2,890</b>	<b>20.68%</b>	<b>598</b>

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Renter-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,431	3.57%	51
1960-1977	770	11.18%	86
1940-1959	430	38.48%	165
1939 or Earlier	280	63.38%	177
<b>Total</b>	<b>2,910</b>	<b>16.49%</b>	<b>480</b>

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Total Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	2,577	3.57%	92
1960-1977	1,544	11.18%	173
1940-1959	1,010	38.48%	389
1939 or Earlier	670	63.38%	425
<b>Total</b>	<b>5,800</b>	<b>18.58%</b>	<b>1,078</b>

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

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

Owner-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,046	3.57%	37
1960-1977	954	11.18%	107
1940-1959	600	38.48%	231
1939 or Earlier	365	63.38%	231
<b>Total</b>	<b>2,965</b>	<b>20.44%</b>	<b>606</b>

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Renter-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	624	3.57%	22
1960-1977	621	11.18%	69
1940-1959	300	38.48%	115
1939 or Earlier	130	63.38%	82
<b>Total</b>	<b>1,675</b>	<b>17.28%</b>	<b>290</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	1,670	3.57%	60
1960-1977	1,575	11.18%	176
1940-1959	900	38.48%	346
1939 or Earlier	495	63.38%	314
<b>Total</b>	<b>4,640</b>	<b>19.30%</b>	<b>896</b>

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

To conclude, we estimate that there are a total of 4,446 homes in Pottawatomie County containing lead-based paint hazards, 3,192 owner-occupied and 1,254 renter-occupied. Of the 4,446 homes in the county estimated to have lead-based paint hazards, 1,078 are estimated to be occupied by households with low-incomes (incomes less than 50% of Area Median Income), and 896 are estimated to be occupied by households with moderate incomes (between 50% and 80% of Area Median Income), for a total of 1,973 housing units in Pottawatomie 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 Pottawatomie 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:

<b>Housing Units in Pottawatomie County with Lead-Based Paint Hazards with Children under Age 6 Present Occupied by Low or Moderate-Income Families</b>			
Housing Units < 50% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	639	3.57%	23
1940-1977	356	19.98%	71
1939 or Earlier	34	63.38%	22
<b>Total</b>	<b>1,029</b>	<b>11.22%</b>	<b>115</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	340	3.57%	12
1940-1977	575	19.98%	115
1939 or Earlier	25	63.38%	16
<b>Total</b>	<b>940</b>	<b>15.19%</b>	<b>143</b>
Total LMI Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	979	3.57%	35
1940-1977	931	19.98%	186
1939 or Earlier	59	63.38%	37
<b>Total</b>	<b>1,969</b>	<b>13.12%</b>	<b>258</b>
Total Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	2,252	3.57%	80
1940-1977	1,834	19.98%	366
1939 or Earlier	309	63.38%	196
<b>Total</b>	<b>4,394</b>	<b>14.62%</b>	<b>642</b>

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

As shown, we estimate there are 642 housing units in Pottawatomie County with lead-based paint hazards and children under the age of six present, and that 258 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

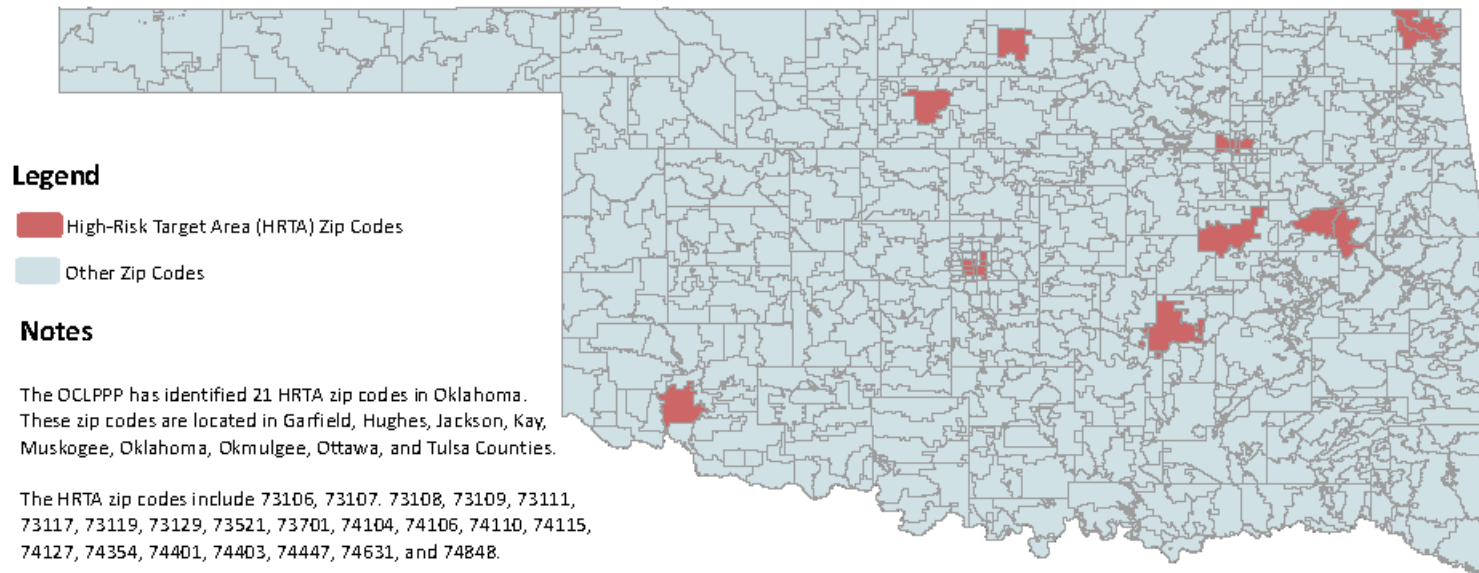
U.S. Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, "American Healthy Homes Survey, Lead and Arsenic Findings", April 2011

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

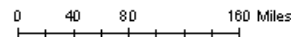
**Notes**

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 Pottawatomie 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.

Pottawatomie County has undergone steady growth over the last fifteen years, in terms of population, households and employment levels. Major drivers of growth in the area include the Citizen Pottawatomie Nation, a diverse manufacturing base, and close proximity to Tinker Air Force Base. New population and employment growth has been met with new housing construction, both for rent and for ownership, and for the most part new housing construction appears to have kept pace with new housing demand. Notable new rental housing developments include Cottage Park and Stonebridge Senior Housing, both affordable rental developments for seniors. Additionally, 60 affordable rental units for families are under construction. There has been new construction of single family homes for ownership, and although some of this construction appears reasonably affordable (priced near \$125,000) the average price of homes constructed since 2014 is estimated to be \$203,866, which is well above what could be afforded by a household earning at or less than median household income for Pottawatomie County (\$45,608 in 2015).

Pottawatomie County has a relatively moderate rate of renters with high rent costs (37.82%) as well as homeowners with high ownership costs (17.42%), in comparison with the rest of the state. The county's poverty rate is also above the state, at 18.63% compared with 16.85% statewide.

In terms of disaster resiliency we note that 61 tornadoes have impacted the county between 1959 and 2014, with 321 injuries and 15 fatalities combined, and that the communities of Tecumseh, Bethel Acres, Shawnee and McLoud have development in close proximity to floodplains.

Pottawatomie 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. In addition, 284 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 4,446 occupied housing units with such hazards, and 642 of those units occupied by low-to-moderate income households with children under the age of 6 present.

In summary, it is apparent that new housing in several categories is required in Pottawatomie County. As the population continues to grow in Pottawatomie County as a whole, this demand will continue to increase. We estimate the county will need 744 housing units for ownership and 291 housing units for rent over the next five years, in order to accommodate projected population and household growth. 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

[oard@irr.com](mailto:oard@irr.com) - 918-492-4844

## Integra Realty Resources Tulsa/OKC

1323 E. 71st. Street  
Suite 105  
Tulsa, OK 74136

T 918-492-4844  
F 918-493-7155

[irr.com](http://irr.com)





# Owen S. Ard, MAI

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

Kansas Board of Tax Appeals  
United States Federal Bankruptcy Court, Tulsa, Oklahoma  
United States Federal Bankruptcy Court, Minneapolis, Minnesota  
United States Federal Bankruptcy Court, Jackson, Mississippi

### Integra Realty Resources

Tulsa/OKC

1323 E. 71st. Street  
Suite 105  
Tulsa, OK 74136

T 918-492-4844  
F 918-493-7155

[irr.com](http://irr.com)



# 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

[dpuckett@irr.com](mailto:dpuckett@irr.com) - 918-492-4844 x104

## Integra Realty Resources

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1323 E. 71st St., Suite 105  
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[irr.com](http://irr.com)



# 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  
LOUISVILLE, KY - Stacey Nicholas, MAI, MRICS  
MEMPHIS, TN - J. Walter Allen, MAI, FRICS

MIAMI/PALM BEACH, FL - Anthony M. Graziano, MAI, CRE, FRICS  
MINNEAPOLIS, MN - Michael F. Amundson, MAI, CCIM, FRICS  
NAPLES, FL - Carlton J. Lloyd, MAI, FRICS  
NASHVILLE, TN - R. Paul Perutelli, MAI, SRA, FRICS  
NEW JERSEY COASTAL - Halvor J. Egeland, MAI  
NEW JERSEY NORTHERN - Matthew S. Krauser, CRE, FRICS  
NEW YORK, NY - Raymond T. Cirz, MAI, CRE, FRICS  
ORANGE COUNTY, CA - Steve Calandra, MAI  
ORLANDO, FL - Christopher Starkey, MAI, MRICS  
PHILADELPHIA, PA - Joseph D. Pasquarella, MAI, CRE, FRICS  
PHOENIX, AZ - Walter "Tres" Winus III, MAI, FRICS  
PITTSBURGH, PA - Paul D. Griffith, MAI, CRE, FRICS  
PORTLAND, OR - Brian A. Glanville, MAI, CRE, FRICS  
PROVIDENCE, RI - Gerard H. McDonough, MAI, FRICS  
RALEIGH, NC - Chris R. Morris, MAI, FRICS  
RICHMOND, VA - Kenneth L. Brown, MAI, CCIM, FRICS  
SACRAMENTO, CA - Scott Beebe, MAI, FRICS  
ST. LOUIS, MO - P. Ryan McDonald, MAI, FRICS  
SALT LAKE CITY, UT - Darrin W. Liddell, MAI, FRICS, CCIM  
SAN DIEGO, CA - Jeff A. Greenwald, MAI, SRA, FRICS  
SAN FRANCISCO, CA - Jan Kleczewski, MAI, FRICS  
SARASOTA, FL - Carlton J. Lloyd, MAI, FRICS  
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  
CARIBBEAN/CAYMAN ISLANDS - James Andrews, MAI, FRICS

### Corporate Office

Eleven Times Square, 640 Eighth Avenue, 15th Floor, Suite A, New York, New York 10036  
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Website: [www.irr.com](http://www.irr.com)



**DAWN EVE JOURDAN, ESQ., PH.D.**

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Director and Associate Professor  
Regional and City Planning  
College of Architecture  
830 Van Vleet Oval, Gould Hall, Room 180  
Norman, OK 73019-4141  
Phone: (405) 325-3502  
Fax: (405) 325-7558  
E-MAIL: Dawn.E.Jourdan-1@ou.edu

**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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**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**

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<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**

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<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**

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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

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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>	
Committee: David Sloane, PhD Tridib Banerjee, PhD Pierrette Hondagneu-Sotelo, PhD (Sociology)	
<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
<i>Activities and Service</i>	
<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

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**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