Integra Realty Resources
Tulsa/OKC

Housing Needs Assessment
Osage County

Prepared For:
Oklahoma Housing Finance Agency
Oklahoma Department of Commerce
100 NW 63rd Street, Ste. 200
Oklahoma City, OK 73116

Effective Date of the Analysis:
December 8, 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.

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January 28, 2016

Mr. Dennis Shockley, Executive Director
Oklahoma Housing Finance Agency
100 NW 63rd Street, Ste. 200
Oklahoma City, OK 73116

SUBJECT: Housing Needs Assessment
Osage County
IRR - Tulsa/OKC File No. 140-2015-0070

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 Osage County Residential Housing Market Analysis. Analyst Maryam Moradian personally inspected the Osage County area during the month of December 2015 to collect the data used in the preparation of the Osage 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.

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

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

Respectfully submitted,

Integra Realty Resources - Tulsa/OKC

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Introduction and Executive Summary

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

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

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

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

Housing Market Analysis Specific Findings:

1. The population of Osage County is projected to grow by 0.36% per year over the next five years, underperforming the State of Oklahoma.
2. Osage County is projected to need a total of 338 housing units for ownership and 90 housing units for rent over the next five years.
3. Median Household Income in Osage County is estimated to be $42,375 in 2015, compared with $47,049 estimated for the State of Oklahoma. The poverty rate in Osage County is estimated to be 14.49%, compared with 16.85% for Oklahoma.
4. Homeowner and rental vacancy rates in Osage County are lower than the state averages.
5. Home values and rental rates in Osage County are also lower than the state averages.
6. Median sale price for homes in Skiatook was $159,925 in 2015, with a median price per square foot of $90.58. The median sale price to list price ratio was 98.3%, with median days on market of 40 days.
7. Approximately 32.39% of renters and 18.57% of owners are housing cost overburdened.

Disaster Resiliency Specific Findings:

1. Tornadoes (1959-2014): Number: 96 Injuries:334 Fatalities:16 Damages (1996-2014): $2,680,000.00
2. Social Vulnerability: Below state score at the county level; at the census tract level, the western portion of the county, including Pawhuska, has elevated social vulnerability scores
3. Floodplain: Osage County has experienced 71 Flood events from 1950 through 2010 resulting in $992,000 in damage.

Homelessness Specific Findings

1. Osage County is located in the North Central Oklahoma Continuum of Care.
2. There are an estimated 201 homeless individuals in this area, 154 of which are identified as sheltered.
3. There is no record of homeless youth and young adults in this region.
4. The largest subpopulations of homeless in OK 500 include: the chronically homeless (29), chronic substance abusers (23), and domestic violence victims (24).
5. The population of domestic violence victims in this area is disproportionately high.
6. Permanent housing options are significantly limited. More funds should be diverted to meet the long term housing needs of the mentally ill, substance abusers, and victims of domestic violence.

Fair Housing Specific Findings

1. Units at risk for poverty: 538
2. Units in mostly non-white enclaves: 700
3. Units nearer elevated number of persons with disabilities: 1,391
4. Units further than 15 miles from a hospital: 42

Lead-Based Paint Specific Findings

1. We estimate there are 3,295 occupied housing units in Osage County with lead-based paint hazards.
2. 1,675 of those housing units are estimated to be occupied by low-to-moderate income households.
3. We estimate that 471 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 Osage 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 Osage 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 Osage 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 Osage County, Oklahoma. The analysis will consider existing supply and projected demand and overall market trends in the Osage County area.

Effective Date of Consultation

The Osage County area was inspected and research was performed during December, 2015. The effective date of this analysis is December 8, 2015. The date of this report is January 28, 2016. The market study is valid only as of the stated effective date or dates.

Scope of the Assignment

1. The Osage County area was inspected during December, 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

Osage County Analysis

Area Information

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

Osage County is located in northeastern Oklahoma. The county is bordered on the north by Kansas, on the west by Pawnee, Noble, and Kay counties, on the south by Pawnee and Tulsa counties, and on the east by Washington and Tulsa counties. The Osage County Seat is Pawhuska, which is located in the central part of the county. This location is approximately 56.5 miles northwest of Tulsa and 148 miles northeast of Oklahoma City. The largest community in the county, Skiatook, will be the primary focus of this report.

Osage County has a total area of 2,304 square miles (2,246 square miles of land, and 58 square miles of water), ranking 1st out of Oklahoma's 77 counties in terms of total area. The total population of Osage County as of the 2010 Census was 47,472 persons, for a population density of 21 persons per square mile of land.

Access and Linkages

The county has average accessibility to state and national highway systems. Multiple major highways intersect within Osage. These are US-60, OK-99, OK-97, OK-20, OK-11, OK-123, and OK-18. The nearest interstate highway is I-244 approximately 59.3 miles southeast of Pawhuska.

Public transportation is provided by the Cimarron Public Transit, which operates a demand-responsive transportation service. Cimarron operates within Osage County, as well as throughout the surrounding counties. Further, Tulsa Transit operates within the southeastern corner of Osage County due to the proximity of the county borders to the Tulsa area. 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.

The Skiatook Municipal Airport is located southwest of Skiatook. The airport has an asphalt runway and averages 86 aircraft operations per week. Additionally, the Bartlesville Municipal Airport is located

within driving distance of Skiatook. The nearest full service commercial airport is Tulsa International Airport.

Educational Facilities

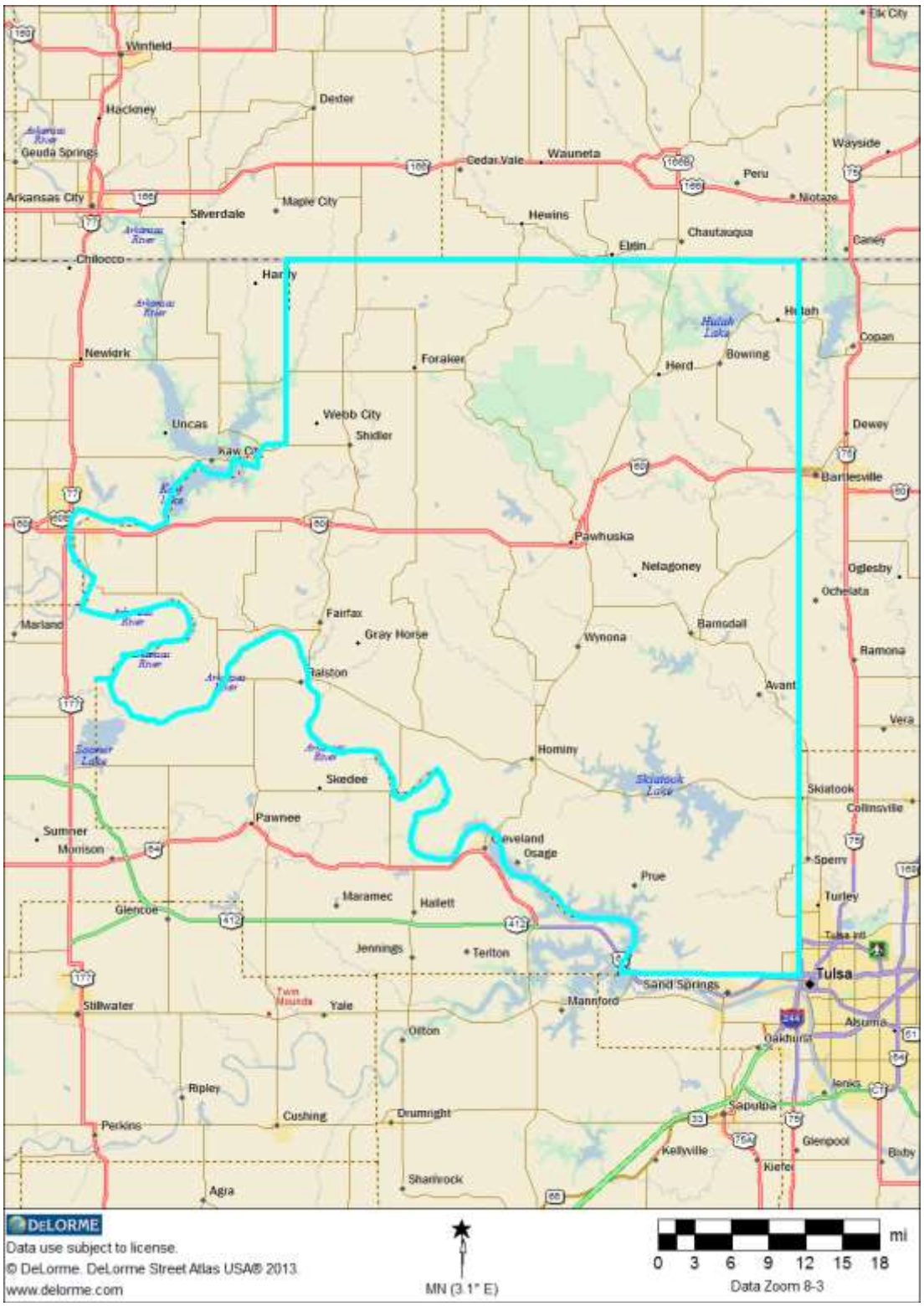
All of the county communities have public school facilities.

Skiatook Public Schools serve the Skiatook area and offer an Early Childhood Learning Center, and one elementary, middle, and high school. There are no higher education offerings within Skiatook; the closest opportunities include the University of Tulsa, Rogers State University, Oral Roberts University and Oklahoma Wesleyan University.

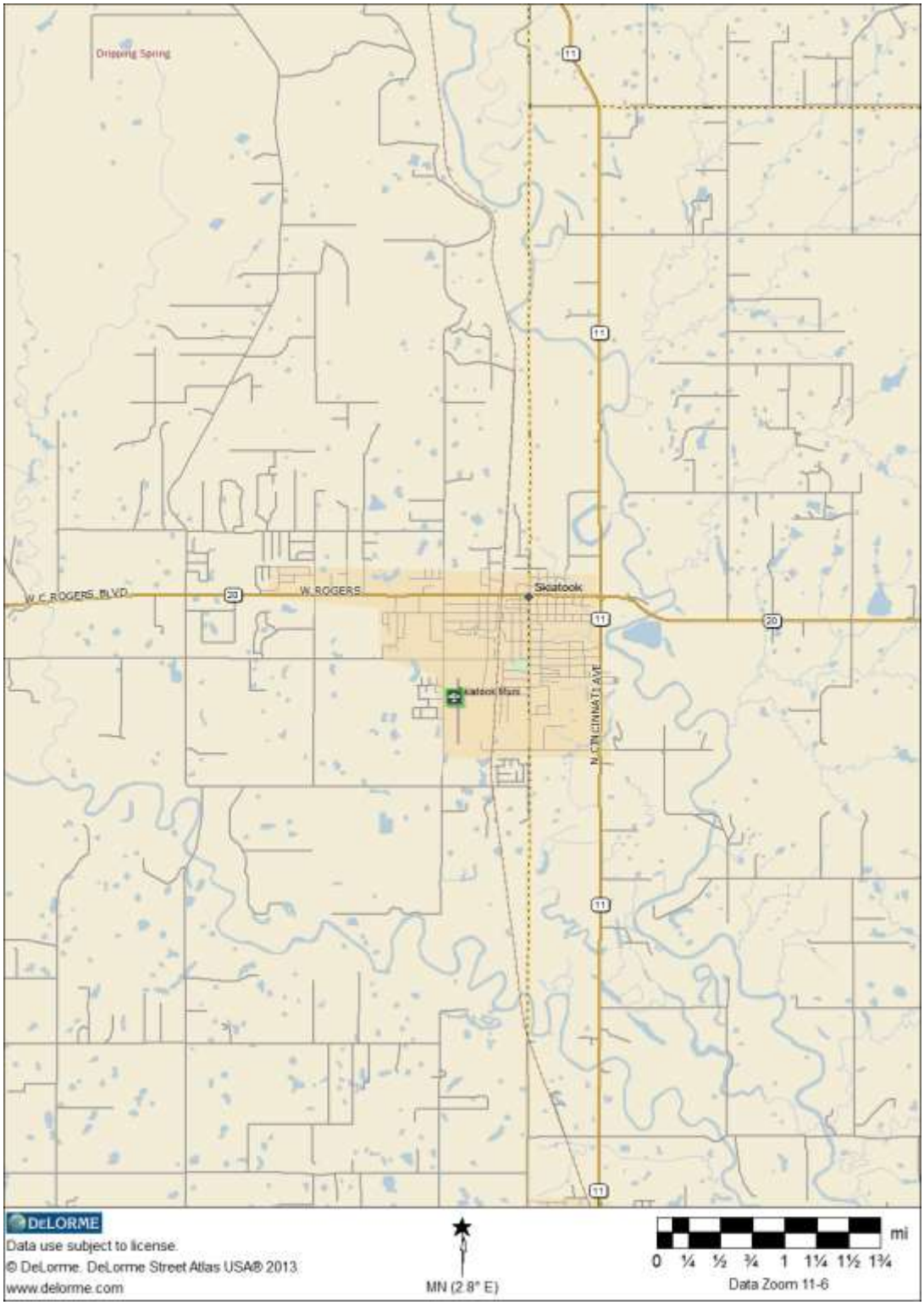
Medical Facilities

Skiatook residents are without major medical facilities within the city limits. The Bailey Medical Center in Owasso is approximately 13 miles east of the city and offers emergency and acute-care. Additionally, Tulsa has a multitude of hospital options within a short driving distance. The smaller county communities typically have either small outpatient medical services or doctor's officing in the community.

Osage County Area Map



Skiatook Area Map



Demographic Analysis

Population and Households

The following table presents population levels and annualized changes in Osage 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.

Population Levels and Annual Changes

	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Skiatook	5,396	7,397	3.20%	8,023	1.64%	8,353	0.81%
Osage County	44,437	47,472	0.66%	48,024	0.23%	48,901	0.36%
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 Osage County was 47,472 persons as of the 2010 Census, a 0.66% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Osage County to be 48,024 persons, and projects that the population will show 0.36% annualized growth over the next five years.

The population of Skiatook was 7,397 persons as of the 2010 Census, a 3.20% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Skiatook to be 8,023 persons, and projects that the population will show 0.81% annualized growth over the next five years.

The next table presents data regarding household levels in Osage 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.

Households Levels and Annual Changes

Total Households	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Skiatook	1,994	2,796	3.44%	2,983	1.30%	3,081	0.65%
Osage County	16,617	18,205	0.92%	18,562	0.39%	18,990	0.46%
State of Oklahoma	1,342,293	1,460,450	0.85%	1,520,327	0.81%	1,585,130	0.84%
Family Households	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Skiatook	1,476	1,989	3.03%	2,168	1.74%	2,241	0.66%
Osage County	12,214	12,972	0.60%	13,245	0.42%	13,572	0.49%
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, Osage County had a total of 18,205 households, representing a 0.92% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Osage County to have 18,562 households. This number is expected to experience a 0.46% annualized rate of growth over the next five years.

As of 2010, Skiatook had a total of 2,796 households, representing a 3.44% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Skiatook to have 2,983 households. This number is expected to experience a 0.65% 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 Osage County based on the U.S. Census Bureau's American Community Survey.

2013 Population by Race and Ethnicity

Single-Classification Race	Skiatook		Osage County	
	No.	Percent	No.	Percent
Total Population	7,602		47,800	
White Alone	5,897	77.57%	31,423	65.74%
Black or African American Alone	2	0.03%	5,386	11.27%
Amer. Indian or Alaska Native Alone	1,233	16.22%	7,049	14.75%
Asian Alone	1	0.01%	83	0.17%
Native Hawaiian and Other Pac. Isl. Alone	0	0.00%	59	0.12%
Some Other Race Alone	27	0.36%	388	0.81%
Two or More Races	442	5.81%	3,412	7.14%
Population by Hispanic or Latino Origin	**Skiatook**		**Osage County**	
	No.	**Percent**	**No.**	**Percent**
Total Population	7,602		47,800	
Hispanic or Latino	31	0.41%	1,447	3.03%
Hispanic or Latino, White Alone	*0*	*0.00%*	*602*	*41.60%*
Hispanic or Latino, All Other Races	*31*	*100.00%*	*845*	*58.40%*
Not Hispanic or Latino	7,571	99.59%	46,353	96.97%
Not Hispanic or Latino, White Alone	*5,897*	*77.89%*	*30,821*	*66.49%*
Not Hispanic or Latino, All Other Races	*1,674*	*22.11%*	*15,532*	*33.51%*

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

In Osage County, racial and ethnic minorities comprise 35.52% of the total population. Within Skiatook, racial and ethnic minorities represent 22.43% of the population.

Population by Age

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

Osage County Population By Age								
	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	47,472		48,024		48,901			
Age 0 - 4	2,904	6.12%	2,632	5.48%	2,724	5.57%	-1.95%	0.69%
Age 5 - 9	3,254	6.85%	2,867	5.97%	2,647	5.41%	-2.50%	-1.58%
Age 10 - 14	3,344	7.04%	3,266	6.80%	2,901	5.93%	-0.47%	-2.34%
Age 15 - 17	2,051	4.32%	2,038	4.24%	2,072	4.24%	-0.13%	0.33%
Age 18 - 20	1,615	3.40%	1,806	3.76%	1,929	3.94%	2.26%	1.33%
Age 21 - 24	1,850	3.90%	2,326	4.84%	2,740	5.60%	4.69%	3.33%
Age 25 - 34	5,275	11.11%	5,187	10.80%	5,593	11.44%	-0.34%	1.52%
Age 35 - 44	5,661	11.92%	5,300	11.04%	5,072	10.37%	-1.31%	-0.88%
Age 45 - 54	7,629	16.07%	6,657	13.86%	5,772	11.80%	-2.69%	-2.81%
Age 55 - 64	6,611	13.93%	7,034	14.65%	7,198	14.72%	1.25%	0.46%
Age 65 - 74	4,363	9.19%	5,459	11.37%	6,507	13.31%	4.58%	3.57%
Age 75 - 84	2,262	4.76%	2,622	5.46%	2,776	5.68%	3.00%	1.15%
Age 85 and over	653	1.38%	830	1.73%	970	1.98%	4.91%	3.17%
Age 55 and over	*13,889*	29.26%	*15,945*	33.20%	*17,451*	35.69%	2.80%	1.82%
Age 62 and over	*8,608*	18.13%	*10,191*	21.22%	*11,442*	23.40%	3.43%	2.34%
Median Age	41.1		42.3		42.6		0.58%	0.14%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Osage County is 42.3 years. This compares with the statewide figure of 36.6 years. Approximately 5.48% of the population is below the age of 5, while 21.22% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 2.34% per year.

Skiatook Population By Age	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	7,397		8,023		8,353			
Age 0 - 4	580	7.84%	584	7.28%	612	7.33%	0.14%	0.94%
Age 5 - 9	586	7.92%	614	7.65%	592	7.09%	0.94%	-0.73%
Age 10 - 14	570	7.71%	615	7.67%	620	7.42%	1.53%	0.16%
Age 15 - 17	344	4.65%	360	4.49%	389	4.66%	0.91%	1.56%
Age 18 - 20	268	3.62%	321	4.00%	346	4.14%	3.68%	1.51%
Age 21 - 24	355	4.80%	400	4.99%	469	5.61%	2.42%	3.23%
Age 25 - 34	983	13.29%	1,019	12.70%	993	11.89%	0.72%	-0.52%
Age 35 - 44	953	12.88%	987	12.30%	1,039	12.44%	0.70%	1.03%
Age 45 - 54	1,094	14.79%	1,099	13.70%	1,022	12.24%	0.09%	-1.44%
Age 55 - 64	728	9.84%	913	11.38%	1,038	12.43%	4.63%	2.60%
Age 65 - 74	521	7.04%	621	7.74%	694	8.31%	3.57%	2.25%
Age 75 - 84	323	4.37%	367	4.57%	394	4.72%	2.59%	1.43%
Age 85 and over	92	1.24%	123	1.53%	145	1.74%	5.98%	3.35%
Age 55 and over	*1,664*	22.50%	*2,024*	25.23%	*2,271*	27.19%	3.99%	2.33%
Age 62 and over	*1,062*	14.36%	*1,262*	15.73%	*1,399*	16.75%	3.50%	2.09%
Median Age	35.1		36.0		36.5		0.51%	0.28%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Skiatook is 36.0 years. This compares with the statewide figure of 36.6 years. Approximately 7.28% of the population is below the age of 5, while 15.73% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 2.09% per year.

Families by Presence of Children

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

2013 Family Type by Presence of Children Under 18 Years	Skiatook		Osage County	
	No.	Percent	No.	Percent
Total Families:	1,936		13,203	
Married-Couple Family:	1,301	67.20%	10,208	77.32%
With Children Under 18 Years	604	31.20%	3,474	26.31%
No Children Under 18 Years	697	36.00%	6,734	51.00%
Other Family:	635	32.80%	2,995	22.68%
Male Householder, No Wife Present	219	11.31%	838	6.35%
With Children Under 18 Years	165	8.52%	391	2.96%
No Children Under 18 Years	54	2.79%	447	3.39%
Female Householder, No Husband Present	416	21.49%	2,157	16.34%
With Children Under 18 Years	295	15.24%	1,270	9.62%
No Children Under 18 Years	121	6.25%	887	6.72%
Total Single Parent Families	460		1,661	
Male Householder	165	35.87%	391	23.54%
Female Householder	295	64.13%	1,270	76.46%

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

As shown, within Osage County, among all families 12.58% are single-parent families, while in Skiatook, the percentage is 23.76%.

Population by Presence of Disabilities

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

2013 Age by Number of Disabilities

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	7,562		46,319		3,702,515	
Under 18 Years:	2,233		11,416		933,738	
With One Type of Disability	104	4.66%	684	5.99%	33,744	3.61%
With Two or More Disabilities	25	1.12%	232	2.03%	11,082	1.19%
No Disabilities	2,104	94.22%	10,500	91.98%	888,912	95.20%
18 to 64 Years:	4,450		27,183		2,265,702	
With One Type of Disability	287	6.45%	2,128	7.83%	169,697	7.49%
With Two or More Disabilities	284	6.38%	1,963	7.22%	149,960	6.62%
No Disabilities	3,879	87.17%	23,092	84.95%	1,946,045	85.89%
65 Years and Over:	879		7,720		503,075	
With One Type of Disability	176	20.02%	1,396	18.08%	95,633	19.01%
With Two or More Disabilities	284	32.31%	1,929	24.99%	117,044	23.27%
No Disabilities	419	47.67%	4,395	56.93%	290,398	57.72%
Total Number of Persons with Disabilities:	1,160	15.34%	8,332	17.99%	577,160	15.59%

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

Within Osage County, 17.99% of the civilian non-institutionalized population has one or more disabilities, compared with 15.59% of Oklahomans as a whole. In Skiatook the percentage is 15.34%.

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

2013 Population by Veteran and Disability Status

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	5,329		34,903		2,738,788	
Veteran:	508	9.53%	3,944	11.30%	305,899	11.17%
With a Disability	*158*	*31.10%*	*1,350*	*34.23%*	*100,518*	*32.86%*
No Disability	*350*	*68.90%*	*2,594*	*65.77%*	*205,381*	*67.14%*
Non-veteran:	4,821	90.47%	30,959	88.70%	2,432,889	88.83%
With a Disability	*873*	*18.11%*	*6,066*	*19.59%*	*430,610*	*17.70%*
No Disability	*3,948*	*81.89%*	*24,893*	*80.41%*	*2,002,279*	*82.30%*

Source: 2009-2013 American Community Survey, Table C21007

Within Osage County, the Census Bureau estimates there are 3,944 veterans, 34.23% of which have one or more disabilities (compared with 32.86% at a statewide level). In Skiatook, there are an estimated 508 veterans, 31.10% of which are estimated to have a disability.

Group Quarters Population

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

2010 Group Quarters Population

	Skiatook		Osage County	
	No.	Percent	No.	Percent
Total Population	7,397		47,472	
Group Quarters Population	44	0.59%	1,504	3.17%
Institutionalized Population	43	0.58%	1,429	3.01%
Correctional facilities for adults	0	0.00%	1,290	2.72%
Juvenile facilities	0	0.00%	10	0.02%
Nursing facilities/Skilled-nursing facilities	43	0.58%	129	0.27%
Other institutional facilities	0	0.00%	0	0.00%
Noninstitutionalized population	1	0.01%	75	0.16%
College/University student housing	0	0.00%	0	0.00%
Military quarters	0	0.00%	0	0.00%
Other noninstitutional facilities	1	0.01%	75	0.16%

Source: 2010 Decennial Census, Table P42

The percentage of the Osage County population in group quarters is somewhat higher than the statewide figure, which was 2.99% in 2010. This is due to inmates at the Dick Conner Correctional Center in Hominy.

Household Income Levels

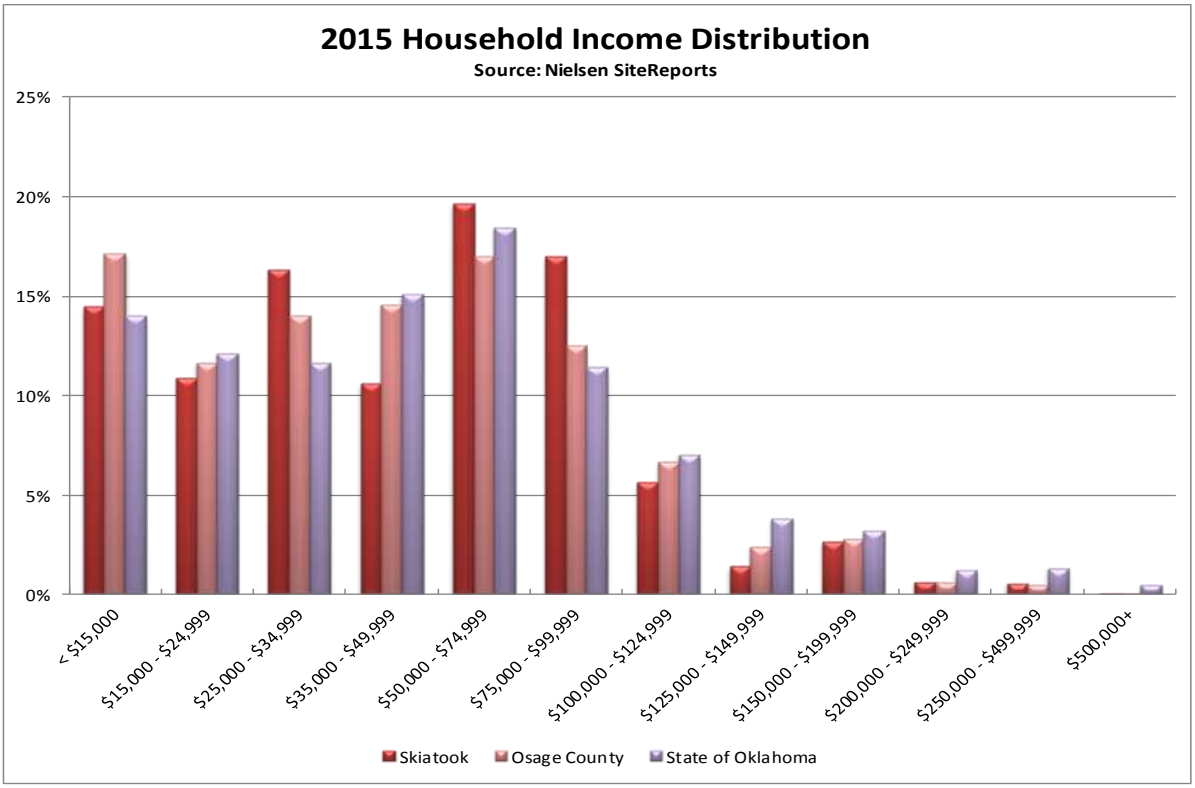
Data in the following chart shows the distribution of household income in Osage County, as well as median and average household income. Data for Oklahoma is included as a basis of comparison. This data is provided by Nielsen SiteReports for 2015.

2015 Household Income Distribution

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Households by HH Income	2,983		18,562		1,520,327	
< $15,000	432	14.48%	3,178	17.12%	213,623	14.05%
$15,000 - $24,999	326	10.93%	2,162	11.65%	184,613	12.14%
$25,000 - $34,999	488	16.36%	2,609	14.06%	177,481	11.67%
$35,000 - $49,999	316	10.59%	2,709	14.59%	229,628	15.10%
$50,000 - $74,999	586	19.64%	3,156	17.00%	280,845	18.47%
$75,000 - $99,999	507	17.00%	2,322	12.51%	173,963	11.44%
$100,000 - $124,999	168	5.63%	1,236	6.66%	106,912	7.03%
$125,000 - $149,999	43	1.44%	446	2.40%	57,804	3.80%
$150,000 - $199,999	79	2.65%	518	2.79%	48,856	3.21%
$200,000 - $249,999	19	0.64%	116	0.62%	18,661	1.23%
$250,000 - $499,999	17	0.57%	96	0.52%	20,487	1.35%
$500,000+	2	0.07%	14	0.08%	7,454	0.49%
Median Household Income	$46,653		$42,375		$47,049	
Average Household Income	$55,867		$54,614		$63,390	

Source: Nielsen SiteReports

As shown, median household income for Osage County is estimated to be $42,375 in 2015. By way of comparison, the median household income of Oklahoma is estimated to be $47,049. For Skiatook, median household income is estimated to be $46,653. The income distribution can be better visualized by the following chart.



Household Income Trend

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

Household Income Trend

	1999 Median HH Income	2015 Median HH Income	Nominal Growth	Inflation Rate	Real Growth
Skiatook	$32,946	$46,653	2.20%	2.40%	-0.20%
Osage County	$34,477	$42,375	1.30%	2.40%	-1.10%
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 Osage 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 Osage 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 Osage County and Oklahoma are shown in the following table. This data is included from the 2013 American Community Survey, as well as the 2000 Census to show how these rates have changed over the last decade. We also include poverty rates for single-parent families by gender of householder.

Poverty Rates

	2000 Census	2013 ACS	Change (Basis Points)	2013 Poverty Rates for Single-Parent Families	
				Male Householder	Female Householder
Skiatook	12.88%	15.96%	308	10.30%	53.22%
Osage County	13.22%	14.49%	126	15.09%	53.70%
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 Osage County is estimated to be 14.49% by the American Community Survey. This is an increase of 126 basis points since the 2000 Census. Within Skiatook, the poverty rate is estimated to be 15.96%. 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 Osage County, with figures for Oklahoma and the United States for comparison. This data is as of May 2015.

Employment and Unemployment

	May-2010 Employment	May-2015 Employment	Annual Growth	May-2010 Unemp. Rate	May-2015 Unemp. Rate	Change (bp)
Osage County	19,645	20,669	1.02%	7.8%	5.2%	-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

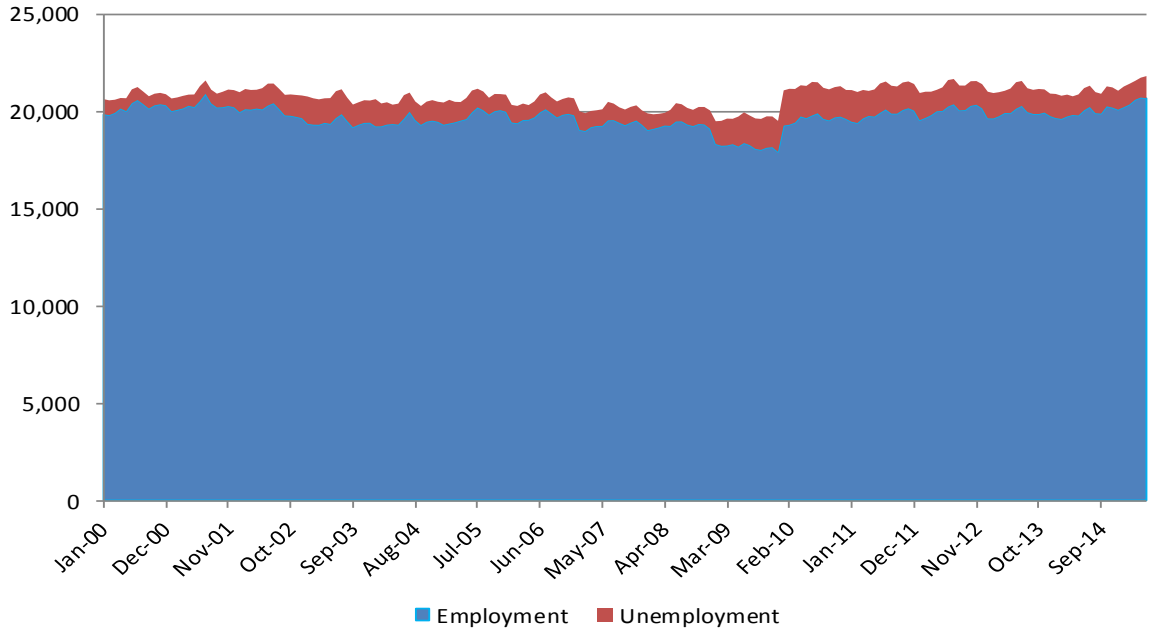
Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Population Survey

As of May 2015, total employment in Osage County was 20,669 persons. Compared with figures from May 2010, this represents annualized employment growth of 1.02% per year. The unemployment rate in May was 5.2%, a decrease of -260 basis points from May 2010, which was 7.8%. Over the last five years, both the statewide and national trends have been improving employment levels and declining unemployment rates, and Osage County has generally mirrored these trends.

Employment Level Trends

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

Employment and Unemployment in Osage County
January 2000 through May 2015



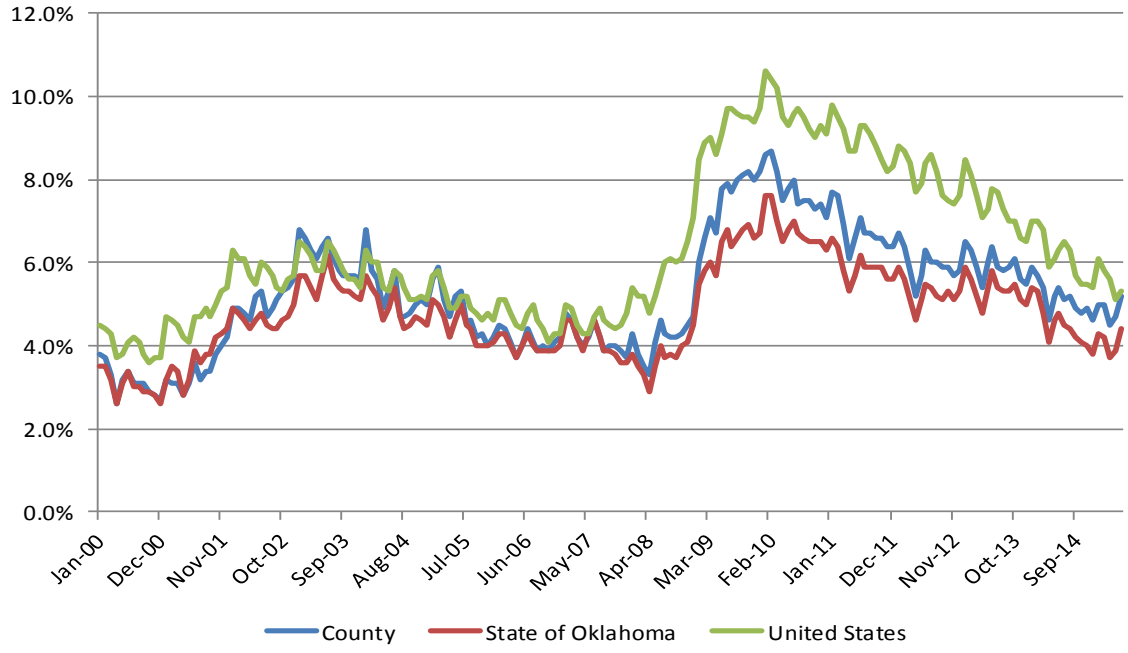
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

As shown, total employment levels have been generally level in Osage County over the last fifteen years. There has been some employment growth within the last twelve months, growing to its current level of 20,669 persons. The number of unemployed persons in May 2015 was 1,142, out of a total labor force of 21,811 persons.

Unemployment Rate Trends

The next chart shows historic unemployment rates for Osage 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 Osage 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 Osage County increased moderately from 2000 through 2003, and then generally declined until the 4th 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 5.2%. On the whole, unemployment rates in Osage County track very well with statewide figures but are frequently somewhat above the state. Compared with the United States, unemployment rates in Osage County and Oklahoma are and have historically been well below the national average.

Employment and Wages by Industrial Supersector

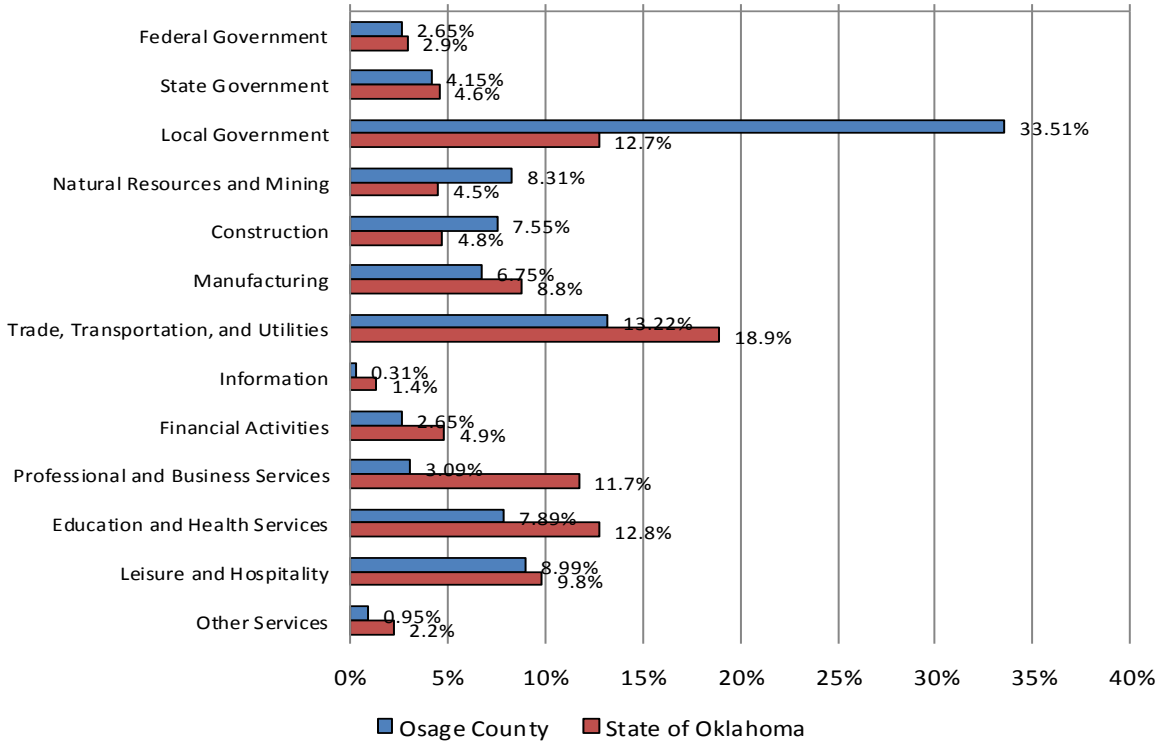
The next table presents data regarding employment in Osage County by industry, including total number of establishments, average number of employees in 2014, average annual pay, and location quotients for each industry compared with the United States. This data is furnished by the Bureau of Labor Statistics, 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	31	182	2.65%	$52,434	1.33
State Government	10	285	4.15%	$38,888	1.25
Local Government	61	2,299	33.51%	$34,612	3.32
Natural Resources and Mining	67	570	8.31%	$50,550	5.48
Construction	67	518	7.55%	$48,414	1.69
Manufacturing	31	463	6.75%	$49,350	0.76
Trade, Transportation, and Utilities	116	907	13.22%	$26,406	0.69
Information	3	21	0.31%	$49,599	0.15
Financial Activities	44	182	2.65%	$37,915	0.47
Professional and Business Services	58	212	3.09%	$37,592	0.22
Education and Health Services	41	541	7.89%	$25,634	0.52
Leisure and Hospitality	43	617	8.99%	$14,543	0.84
Other Services	19	65	0.95%	$27,103	0.31
Total	**588**	**6,860**		**$35,180**	**1.00**

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 (13.22%) are employed in Trade, Transportation, and Utilities. The average annual pay in this sector is $26,406 per year. The industry

with the highest annual pay is Natural Resources and Mining, with average annual pay of $50,550 per year.

The rightmost column of the previous table provides location quotients for each industry for Osage 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 (Osage 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% (county manufacturing %) / 5% (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 Osage County, among all industries the largest location quotient is in Natural Resources and Mining, with a quotient of 5.48. This sector includes agricultural employment, as well as employment in the oil and gas industry.

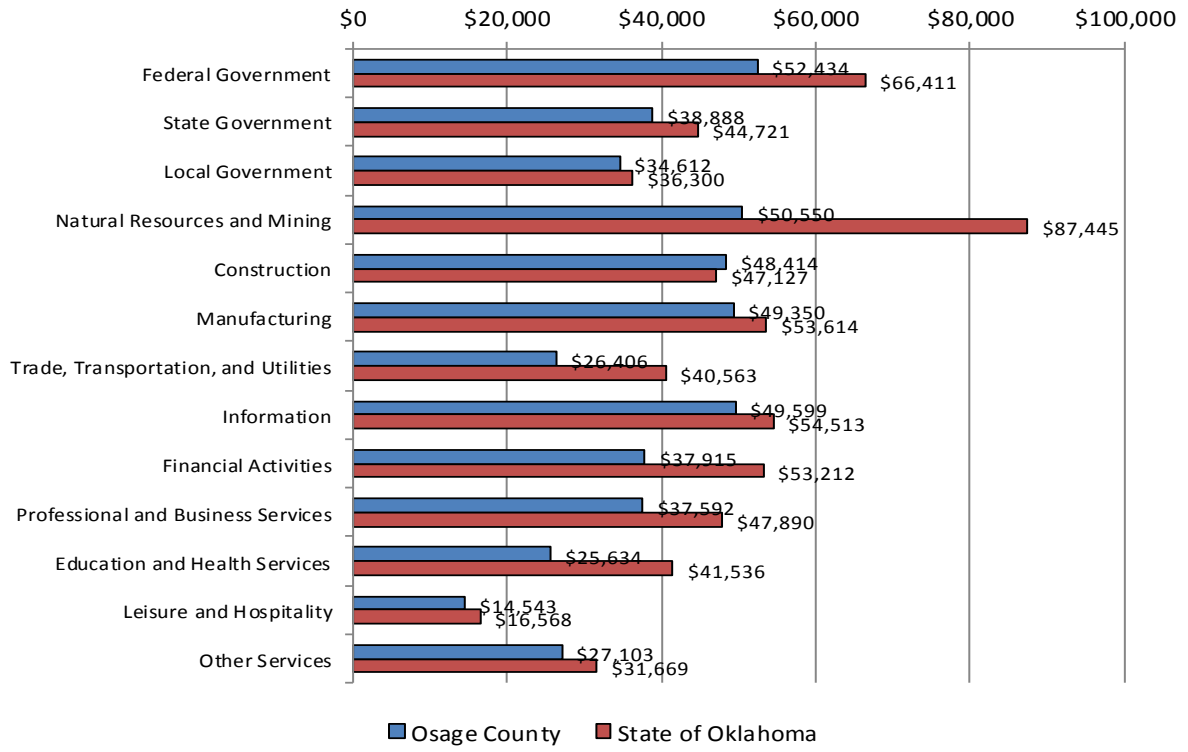
The next table presents average annual pay in Osage County by industry, in comparison with Oklahoma as a whole and the United States.

Comparison of 2014 Average Annual Pay by Supersector

Supersector	Osage County	State of Oklahoma	United States	Percent of State	Percent of Nation
Federal Government	$52,434	$66,411	$75,784	79.0%	69.2%
State Government	$38,888	$44,721	$54,184	87.0%	71.8%
Local Government	$34,612	$36,300	$46,146	95.3%	75.0%
Natural Resources and Mining	$50,550	$87,445	$59,666	57.8%	84.7%
Construction	$48,414	$47,127	$55,041	102.7%	88.0%
Manufacturing	$49,350	$53,614	$62,977	92.0%	78.4%
Trade, Transportation, and Utilities	$26,406	$40,563	$42,988	65.1%	61.4%
Information	$49,599	$54,513	$90,804	91.0%	54.6%
Financial Activities	$37,915	$53,212	$85,261	71.3%	44.5%
Professional and Business Services	$37,592	$47,890	$66,657	78.5%	56.4%
Education and Health Services	$25,634	$41,536	$45,951	61.7%	55.8%
Leisure and Hospitality	$14,543	$16,568	$20,993	87.8%	69.3%
Other Services	$27,103	$31,669	$33,935	85.6%	79.9%
Total	**$35,180**	**$43,774**	**$51,361**	**80.4%**	**68.5%**

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, Osage County has lower average wages in every employment sector, excepting construction which is slightly higher.

Working Families

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

Families by Employment Status and Presence of Children						
	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Families	**1,936**		**13,203**		**961,468**	
With Children <18 Years:	1,064	54.96%	5,135	38.89%	425,517	44.26%
Married Couple:	604	56.77%	3,474	67.65%	281,418	66.14%
Both Parents Employed	334	55.30%	1,982	57.05%	166,700	59.24%
One Parent Employed	270	44.70%	1,316	37.88%	104,817	37.25%
Neither Parent Employed	0	0.00%	176	5.07%	9,901	3.52%
Other Family:	460	43.23%	1,661	32.35%	144,099	33.86%
Male Householder:	165	35.87%	391	23.54%	36,996	25.67%
Employed	154	93.33%	340	86.96%	31,044	83.91%
Not Employed	11	6.67%	51	13.04%	5,952	16.09%
Female Householder:	295	64.13%	1,270	76.46%	107,103	74.33%
Employed	261	88.47%	886	69.76%	75,631	70.62%
Not Employed	34	11.53%	384	30.24%	31,472	29.38%
Without Children <18 Years:	872	45.04%	8,068	61.11%	535,951	55.74%
Married Couple:	697	79.93%	6,734	83.47%	431,868	80.58%
Both Spouses Employed	239	34.29%	2,338	34.72%	167,589	38.81%
One Spouse Employed	235	33.72%	2,354	34.96%	138,214	32.00%
Neither Spouse Employed	223	31.99%	2,042	30.32%	126,065	29.19%
Other Family:	175	20.07%	1,334	16.53%	104,083	19.42%
Male Householder:	54	24.22%	447	21.89%	32,243	25.58%
Employed	12	22.22%	187	41.83%	19,437	60.28%
Not Employed	42	77.78%	260	58.17%	12,806	39.72%
Female Householder:	121	69.14%	887	66.49%	71,840	69.02%
Employed	65	53.72%	410	46.22%	36,601	50.95%
Not Employed	56	46.28%	477	53.78%	35,239	49.05%
Total Working Families:	*1,570*	*81.10%*	*9,813*	*74.32%*	*740,033*	*76.97%*
With Children <18 Years:	*1,019*	*64.90%*	*4,524*	*46.10%*	*378,192*	*51.10%*
Without Children <18 Years:	*551*	*35.10%*	*5,289*	*53.90%*	*361,841*	*48.90%*

Source: 2009-2013 American Community Survey, Table B23007

Within Osage County, there are 9,813 working families, 46.10% 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 Osage County area include the Dick Conner Correctional Center, the Pawhuska public school system, Baker Petrolite, Osage County, and the Osage Nation. Within the Skiatook area, recreational employment related to Lake Skiatook is a key industry.

Commuting Patterns

Travel Time to Work

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

Workers 16 Years and Over by Commuting Time to Work						
	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Commuting Workers:	**3,288**		**19,017**		**1,613,364**	
Less than 15 minutes	1,195	36.34%	6,182	32.51%	581,194	36.02%
15 to 30 minutes	772	23.48%	5,937	31.22%	625,885	38.79%
30 to 45 minutes	959	29.17%	4,321	22.72%	260,192	16.13%
45 to 60 minutes	277	8.42%	1,556	8.18%	74,625	4.63%
60 or more minutes	85	2.59%	1,021	5.37%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Within Osage County, the largest percentage of workers (32.51%) travel fewer than 15 minutes to work. Although Osage County has an active labor market, some of its residents commute to other labor markets, particularly employers in the Tulsa Central Business District which is located just southeast of Osage County's southeastern border.

Means of Transportation

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

Workers 16 Years and Over by Means of Transportation to Work						
	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Workers Age 16+	**3,296**		**19,536**		**1,673,026**	
Car, Truck or Van:	3,163	95.96%	18,471	94.55%	1,551,461	92.73%
Drove Alone	*2,800*	*88.52%*	*16,292*	*88.20%*	*1,373,407*	*88.52%*
Carpooled	*363*	*11.48%*	*2,179*	*11.80%*	*178,054*	*11.48%*
Public Transportation	0	0.00%	81	0.41%	8,092	0.48%
Taxicab	0	0.00%	0	0.00%	984	0.06%
Motorcycle	0	0.00%	24	0.12%	3,757	0.22%
Bicycle	0	0.00%	0	0.00%	4,227	0.25%
Walked	98	2.97%	257	1.32%	30,401	1.82%
Other Means	27	0.82%	184	0.94%	14,442	0.86%
Worked at Home	8	0.24%	519	2.66%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

As shown, the vast majority of persons in Osage 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 Osage County. This data is provided as of the 2000 Census, the 2010 Census, with a 2015 estimate furnished by Nielsen SiteReports.

Total Housing Units

	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change
Skiatook	2,125	3,067	3.74%	3,270	1.29%
Osage County	18,826	21,143	1.17%	21,606	0.43%
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 Osage County grew by 0.43% per year, to a total of 21,606 housing units in 2015. In terms of new housing unit construction, Osage County underperformed Oklahoma as a whole between 2010 and 2015.

Housing by Units in Structure

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

2013 Housing Units by Units in Structure

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	**3,112**		**21,150**		**1,669,828**	
1 Unit, Detached	2,402	77.19%	16,151	76.36%	1,219,987	73.06%
1 Unit, Attached	15	0.48%	199	0.94%	34,434	2.06%
Duplex Units	60	1.93%	381	1.80%	34,207	2.05%
3-4 Units	102	3.28%	294	1.39%	42,069	2.52%
5-9 Units	94	3.02%	233	1.10%	59,977	3.59%
10-19 Units	86	2.76%	110	0.52%	57,594	3.45%
20-49 Units	114	3.66%	194	0.92%	29,602	1.77%
50 or More Units	7	0.22%	127	0.60%	30,240	1.81%
Mobile Homes	232	7.46%	3,440	16.26%	159,559	9.56%
Boat, RV, Van, etc.	0	0.00%	21	0.10%	2,159	0.13%
Total Multifamily Units	**463**	**14.88%**	**1,339**	**6.33%**	**253,689**	**15.19%**

Source: 2009-2013 American Community Survey, Table B25024

Within Osage County, 76.36% of housing units are single-family, detached. 6.33% of housing units are multifamily in structure (two or more units per building), while 16.36% of housing units comprise mobile homes, RVs, etc.

Within Skiatook, 77.19% of housing units are single-family, detached. 14.88% of housing units are multifamily in structure, while 7.46% of housing units comprise mobile homes, RVs, etc.

Housing Units Number of Bedrooms and Tenure

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

2013 Housing Units by Tenure and Number of Bedrooms

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**2,814**		**18,512**		**1,444,081**	
Owner Occupied:	**1,843**	**65.49%**	**14,617**	**78.96%**	**968,736**	**67.08%**
No Bedroom	0	0.00%	21	0.14%	2,580	0.27%
1 Bedroom	29	1.57%	322	2.20%	16,837	1.74%
2 Bedrooms	183	9.93%	2,933	20.07%	166,446	17.18%
3 Bedrooms	1,238	67.17%	8,456	57.85%	579,135	59.78%
4 Bedrooms	301	16.33%	2,365	16.18%	177,151	18.29%
5 or More Bedrooms	92	4.99%	520	3.56%	26,587	2.74%
Renter Occupied:	**971**	**34.51%**	**3,895**	**21.04%**	**475,345**	**32.92%**
No Bedroom	0	0.00%	41	1.05%	13,948	2.93%
1 Bedroom	259	26.67%	822	21.10%	101,850	21.43%
2 Bedrooms	352	36.25%	1,385	35.56%	179,121	37.68%
3 Bedrooms	254	26.16%	1,398	35.89%	152,358	32.05%
4 Bedrooms	94	9.68%	193	4.96%	24,968	5.25%
5 or More Bedrooms	12	1.24%	56	1.44%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

The overall homeownership rate in Osage County is 78.96%, while 21.04% of housing units are renter occupied. In Skiatook, the homeownership rate is 65.49%, while 34.51% of households are renters.

Housing Units Tenure and Household Income

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

Osage County Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	**18,512**	**14,617**	**3,895**	**78.96%**	**21.04%**
Less than $5,000	760	415	345	54.61%	45.39%
$5,000 - $9,999	988	479	509	48.48%	51.52%
$10,000-$14,999	1,350	920	430	68.15%	31.85%
$15,000-$19,999	1,174	686	488	58.43%	41.57%
$20,000-$24,999	886	663	223	74.83%	25.17%
$25,000-$34,999	2,344	1,676	668	71.50%	28.50%
$35,000-$49,999	2,605	2,158	447	82.84%	17.16%
$50,000-$74,999	3,403	2,889	514	84.90%	15.10%
$75,000-$99,999	2,385	2,210	175	92.66%	7.34%
$100,000-$149,999	1,906	1,855	51	97.32%	2.68%
$150,000 or more	711	666	45	93.67%	6.33%
Income Less Than $25,000	**5,158**	**3,163**	**1,995**	**61.32%**	**38.68%**

Source: 2009-2013 American Community Survey, Table B25118

Within Osage County as a whole, 38.68% of households with incomes less than $25,000 are estimated to be renters, while 61.32% are estimated to be homeowners.

Skiatook Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	**2,814**	**1,843**	**971**	**65.49%**	**34.51%**
Less than $5,000	98	85	13	86.73%	13.27%
$5,000 - $9,999	147	74	73	50.34%	49.66%
$10,000-$14,999	237	134	103	56.54%	43.46%
$15,000-$19,999	186	55	131	29.57%	70.43%
$20,000-$24,999	122	54	68	44.26%	55.74%
$25,000-$34,999	449	243	206	54.12%	45.88%
$35,000-$49,999	300	185	115	61.67%	38.33%
$50,000-$74,999	675	441	234	65.33%	34.67%
$75,000-$99,999	362	353	9	97.51%	2.49%
$100,000-$149,999	145	133	12	91.72%	8.28%
$150,000 or more	93	86	7	92.47%	7.53%
Income Less Than $25,000	**790**	**402**	**388**	**50.89%**	**49.11%**

Source: 2009-2013 American Community Survey, Table B25118

Within Skiatook, 49.11% of households with incomes less than $25,000 are estimated to be renters, while 50.89% 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.

2013 Housing Units by Tenure and Year of Construction						
	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**2,814**		**18,512**		**1,444,081**	
Owner Occupied:	**1,843**	**65.49%**	**14,617**	**78.96%**	**968,736**	**67.08%**
Built 2010 or Later	0	0.00%	92	0.63%	10,443	1.08%
Built 2000 to 2009	492	26.70%	2,147	14.69%	153,492	15.84%
Built 1990 to 1999	204	11.07%	1,906	13.04%	125,431	12.95%
Built 1980 to 1989	273	14.81%	2,256	15.43%	148,643	15.34%
Built 1970 to 1979	268	14.54%	3,136	21.45%	184,378	19.03%
Built 1960 to 1969	257	13.94%	1,422	9.73%	114,425	11.81%
Built 1950 to 1959	150	8.14%	1,230	8.41%	106,544	11.00%
Built 1940 to 1949	57	3.09%	837	5.73%	50,143	5.18%
Built 1939 or Earlier	142	7.70%	1,591	10.88%	75,237	7.77%
Median Year Built:		1982		1977		1977
Renter Occupied:	**971**	**34.51%**	**3,895**	**21.04%**	**475,345**	**32.92%**
Built 2010 or Later	30	3.09%	30	0.77%	5,019	1.06%
Built 2000 to 2009	75	7.72%	443	11.37%	50,883	10.70%
Built 1990 to 1999	165	16.99%	342	8.78%	47,860	10.07%
Built 1980 to 1989	126	12.98%	668	17.15%	77,521	16.31%
Built 1970 to 1979	198	20.39%	790	20.28%	104,609	22.01%
Built 1960 to 1969	46	4.74%	390	10.01%	64,546	13.58%
Built 1950 to 1959	182	18.74%	472	12.12%	54,601	11.49%
Built 1940 to 1949	101	10.40%	411	10.55%	31,217	6.57%
Built 1939 or Earlier	48	4.94%	349	8.96%	39,089	8.22%
Median Year Built:		1975		1974		1975
Overall Median Year Built:		**1982**		**1977**		**1976**

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

Within Osage County, 14.65% of housing units were built after the year 2000. This compares with 15.22% statewide. Within Skiatook the percentage is 21.22%.

73.21% of housing units in Osage County were built prior to 1990, while in Skiatook the percentage is 65.67%. These figures compare with the statewide figure of 72.78%.

Substandard Housing

The next table presents data regarding substandard housing in Osage 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
Skiatook	2,814	0	0.00%	4	0.14%	55	1.95%
Osage County	18,512	121	0.65%	170	0.92%	648	3.50%
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 Osage County, 0.65% of occupied housing units have inadequate plumbing (compared with 0.49% at a statewide level), while 0.92% 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 Osage County by vacancy and type. This data is provided by the American Community Survey.

2013 Housing Units by Vacancy

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	3,112		21,150		1,669,828	
Total Vacant Units	298	9.58%	2,638	12.47%	225,747	13.52%
For rent	105	35.23%	264	10.01%	43,477	19.26%
Rented, not occupied	19	6.38%	35	1.33%	9,127	4.04%
For sale only	95	31.88%	234	8.87%	23,149	10.25%
Sold, not occupied	0	0.00%	37	1.40%	8,618	3.82%
For seasonal, recreational, or occasional use	0	0.00%	512	19.41%	39,475	17.49%
For migrant workers	0	0.00%	6	0.23%	746	0.33%
Other vacant	79	26.51%	1,550	58.76%	101,155	44.81%
Homeowner Vacancy Rate	4.90%		1.57%		2.31%	
Rental Vacancy Rate	9.59%		6.29%		8.24%	

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

Within Osage County, the overall housing vacancy rate is estimated to be 12.47%. The homeowner vacancy rate is estimated to be 1.57%, while the rental vacancy rate is estimated to be 6.29%.

In Skiatook, the overall housing vacancy rate is estimated to be 9.58%. The homeowner vacancy rate is estimated to be 4.90%, while the rental vacancy rate is estimated to be 9.59%.

Building Permits

The next series of tables present data regarding new residential building permits issued in Skiatook, and unincorporated areas of Osage County. 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.

Skiatook town
New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	49	$118,265	0	N/A
2005	49	$128,265	0	N/A
2006	105	$136,438	0	N/A
2007	127	$125,898	2	$100,000
2008	59	$130,441	6	$73,333
2009	57	$142,474	16	$65,000
2010	53	$122,509	0	N/A
2011	41	$129,912	24	$71,250
2012	51	$171,353	6	$25,000
2013	54	$152,630	0	N/A
2014	44	$166,045	12	$80,417

Source: United States Census Bureau Building Permits Survey

In Skiatook town, building permits for 755 housing units were issued between 2004 and 2014, for an average of 69 units per year. 91.26% of these housing units were single family homes, and 8.74% consisted of multifamily units.

Osage County Unincorporated Area
New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	181	$135,181	0	N/A
2005	105	$137,545	0	N/A
2006	140	$162,428	0	N/A
2007	109	$170,877	0	N/A
2008	85	$190,390	0	N/A
2009	56	$151,323	0	N/A
2010	57	$158,325	0	N/A
2011	61	$148,370	0	N/A
2012	61	$215,105	0	N/A
2013	61	$184,453	0	N/A
2014	68	$190,621	0	N/A

Source: United States Census Bureau Building Permits Survey

In the unincorporated areas of Osage County, building permits for 984 housing units were issued between 2004 and 2014, for an average of 89 units per year. 100.00% of these housing units were single family homes.

New Construction Activity

For Ownership:

Much new housing construction in Osage County is occurring on rural acreages or in rural subdivisions, or in smaller communities such as Sperry, Bowring, Anderson and Prue. Outside of rural areas and smaller communities, most new construction in Osage County is occurring in Skiatook. Within Skiatook, new homes have been recently constructed in the subdivisions Crystal Bay Estates, Seven Lakes, Wills Acres, The Estates at Cross Timbers, East Ridge Estates, Britton Meadows, Copper Hill, The Crossing in Skiatook ,The Orchards Estates, and Village Park, among others.

Although some new homes in Osage County have been relatively affordable (priced under $150,000), many have been higher-end homes priced over $300,000. The average sale price of homes constructed after 2010 in Osage County (and sold after January 2015) is estimated to be $194,273, which is well above what could be afforded by a household earning at or less than median household income for Osage County, estimated to be $42,375 in 2015.

For Rent:

New multifamily rental development in Skiatook has been fairly limited over the last several years. The most recent developments of note were both financed with Affordable Housing Tax Credits: Oak Timbers (60 units for family occupancy) and West Oak Village (40 units for senior occupancy), which were constructed in 2004 and 2003 respectively. Skiatook Retirement Community is a USDA / Tax

Credit facility originally constructed in 1988, but was recently fully renovated. To the best of our knowledge no new multifamily units are currently planned in Skiatook.

Homeownership Market

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

Housing Units by Home Value

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

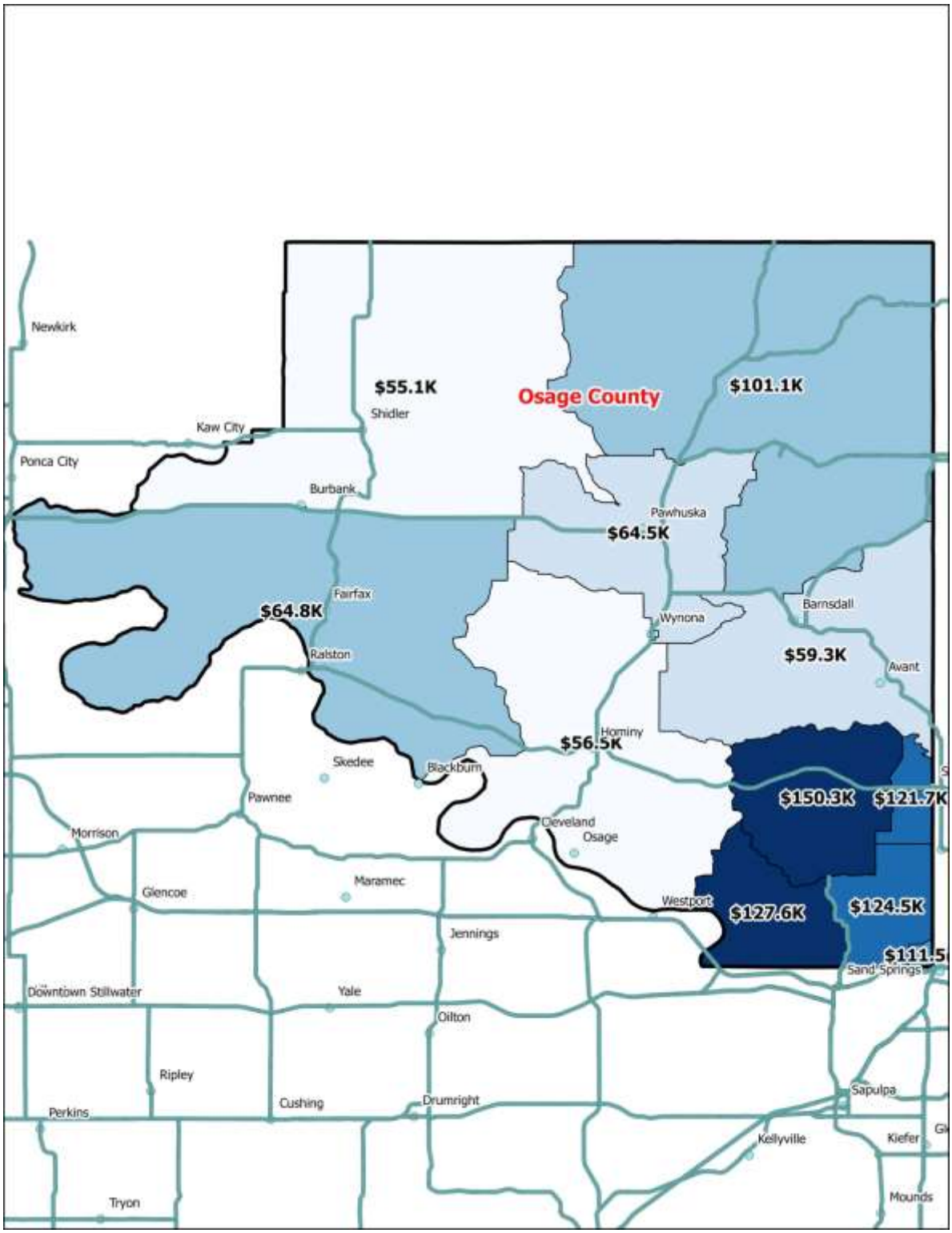
2013 Housing Units by Home Value

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Owner-Occupied Units:	**1,843**		**14,617**		**968,736**	
Less than $10,000	67	3.64%	514	3.52%	20,980	2.17%
$10,000 to $14,999	25	1.36%	327	2.24%	15,427	1.59%
$15,000 to $19,999	12	0.65%	341	2.33%	13,813	1.43%
$20,000 to $24,999	14	0.76%	380	2.60%	16,705	1.72%
$25,000 to $29,999	0	0.00%	372	2.54%	16,060	1.66%
$30,000 to $34,999	41	2.22%	545	3.73%	19,146	1.98%
$35,000 to $39,999	0	0.00%	245	1.68%	14,899	1.54%
$40,000 to $49,999	36	1.95%	827	5.66%	39,618	4.09%
$50,000 to $59,999	46	2.50%	839	5.74%	45,292	4.68%
$60,000 to $69,999	198	10.74%	928	6.35%	52,304	5.40%
$70,000 to $79,999	117	6.35%	919	6.29%	55,612	5.74%
$80,000 to $89,999	145	7.87%	831	5.69%	61,981	6.40%
$90,000 to $99,999	205	11.12%	616	4.21%	51,518	5.32%
$100,000 to $124,999	279	15.14%	1,540	10.54%	119,416	12.33%
$125,000 to $149,999	264	14.32%	1,138	7.79%	96,769	9.99%
$150,000 to $174,999	91	4.94%	1,138	7.79%	91,779	9.47%
$175,000 to $199,999	84	4.56%	688	4.71%	53,304	5.50%
$200,000 to $249,999	89	4.83%	1,079	7.38%	69,754	7.20%
$250,000 to $299,999	81	4.40%	471	3.22%	41,779	4.31%
$300,000 to $399,999	35	1.90%	428	2.93%	37,680	3.89%
$400,000 to $499,999	0	0.00%	126	0.86%	13,334	1.38%
$500,000 to $749,999	0	0.00%	155	1.06%	12,784	1.32%
$750,000 to $999,999	14	0.76%	67	0.46%	3,764	0.39%
$1,000,000 or more	0	0.00%	103	0.70%	5,018	0.52%
Median Home Value:	**$101,400**		**$93,900**		**$112,800**	

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

The median value of owner-occupied homes in Osage County is $93,900. This is -16.8% lower than the statewide median, which is $112,800. The median home value in Skiatook is estimated to be $101,400. The geographic distribution of home values in Osage County can be visualized by the following map.

Osage County Median Home Values by Census Tract



Home Values by Year of Construction

The next table presents median home values in Osage 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

	Skiatook Median Value	Osage County Median Value	State of Oklahoma Median Value
Total Owner-Occupied Units:			
Built 2010 or Later	-	$144,600	$188,900
Built 2000 to 2009	$139,400	$162,600	$178,000
Built 1990 to 1999	$120,700	$128,100	$147,300
Built 1980 to 1989	$69,300	$85,700	$118,300
Built 1970 to 1979	$97,200	$99,200	$111,900
Built 1960 to 1969	$87,300	$84,900	$97,100
Built 1950 to 1959	$70,000	$66,500	$80,300
Built 1940 to 1949	$63,500	$51,100	$67,900
Built 1939 or Earlier	$82,000	$61,500	$74,400

Note: Dashes indicate the Census Bureau had insufficient data to estimate a median value.
Source: 2009-2013 American Community Survey, Table 25107

Skiatook Single Family Sales Activity

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

Skiatook Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	7	7	8	9	6
Median List Price	$75,000	$50,000	$46,950	$60,000	$57,000
Median Sale Price	$70,000	$40,000	$41,000	$59,000	$52,000
Sale/List Price Ratio	98.8%	92.1%	95.7%	92.1%	99.9%
Median Square Feet	1,288	1,180	1,227	1,164	1,104
Median Price/SF	$56.72	$35.23	$38.10	$48.37	$51.19
Med. Days on Market	32	37	41	27	23

Source: Tulsa MLS

Skiatook Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	96	122	133	134	103
Median List Price	$121,849	$137,250	$130,238	$137,925	$135,000
Median Sale Price	$115,699	$134,850	$129,000	$136,500	$133,000
Sale/List Price Ratio	96.3%	97.9%	98.0%	97.7%	98.6%
Median Square Feet	1,447	1,516	1,517	1,528	1,508
Median Price/SF	$78.61	$83.30	$82.95	$85.43	$87.97
Med. Days on Market	54	66	55	67	38

Source: Tulsa MLS

Skiatook Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	39	37	49	38	44
Median List Price	$222,500	$215,000	$199,900	$232,500	$239,475
Median Sale Price	$208,000	$206,000	$195,000	$226,450	$234,950
Sale/List Price Ratio	96.5%	97.0%	97.7%	97.5%	98.0%
Median Square Feet	2,383	2,580	2,281	2,239	2,272
Median Price/SF	$85.16	$84.57	$89.18	$88.33	$97.81
Med. Days on Market	77	58	42	55	57

Source: Tulsa MLS

Skiatook Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	146	169	197	182	160
Median List Price	$135,450	$153,000	$144,900	$148,500	$159,900
Median Sale Price	$134,750	$150,000	$141,000	$141,880	$159,925
Sale/List Price Ratio	96.3%	97.7%	97.9%	97.6%	98.3%
Median Square Feet	1,559	1,621	1,672	1,629	1,618
Median Price/SF	$80.48	$82.77	$84.39	$86.23	$90.58
Med. Days on Market	61	65	49	58	40

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 2.33% per year. The median sale price was $159,925 in 2015, for a median price per square foot of $90.58/SF. The median sale price to list price ratio was 98.3%, with median days on market of 40 days. On the whole, the housing market in Skiatook has strengthened over the last several years, with increasing list and sale prices, increasing sale to list price ratios, and declining marketing times.

Foreclosure Rates

The next table presents foreclosure rate data for Osage 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**
Osage County	4.1%
State of Oklahoma	2.1%
United States	2.1%
Rank among Counties in Oklahoma*:	3

* 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 Osage County was 4.1% in May 2014. The county ranked 3 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 the third highest foreclosure rate in Oklahoma, it is likely that foreclosures have had some negative impact on the Osage County housing market, though there does not appear to be any significant effect on Skiatook's housing market. High rates of foreclosure can have a depressing effect on local home values, lengthening marketing times and making it more difficult for potential homebuyers to secure financing.

Rental Market

This section will discuss supply and demand factors for the rental market in Osage 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 Osage 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).

2013 Rental Units by Gross Rent

	Skiatook		Osage County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Rental Units:	**971**		**3,895**		**475,345**	
With cash rent:	910		3,282		432,109	
Less than $100	0	0.00%	17	0.44%	2,025	0.43%
$100 to $149	0	0.00%	38	0.98%	2,109	0.44%
$150 to $199	16	1.65%	125	3.21%	4,268	0.90%
$200 to $249	4	0.41%	91	2.34%	8,784	1.85%
$250 to $299	0	0.00%	136	3.49%	8,413	1.77%
$300 to $349	3	0.31%	157	4.03%	9,107	1.92%
$350 to $399	13	1.34%	178	4.57%	10,932	2.30%
$400 to $449	90	9.27%	250	6.42%	15,636	3.29%
$450 to $499	138	14.21%	389	9.99%	24,055	5.06%
$500 to $549	31	3.19%	133	3.41%	31,527	6.63%
$550 to $599	42	4.33%	130	3.34%	33,032	6.95%
$600 to $649	111	11.43%	346	8.88%	34,832	7.33%
$650 to $699	17	1.75%	217	5.57%	32,267	6.79%
$700 to $749	74	7.62%	186	4.78%	30,340	6.38%
$750 to $799	89	9.17%	141	3.62%	27,956	5.88%
$800 to $899	42	4.33%	310	7.96%	45,824	9.64%
$900 to $999	29	2.99%	148	3.80%	34,153	7.18%
$1,000 to $1,249	192	19.77%	255	6.55%	46,884	9.86%
$1,250 to $1,499	7	0.72%	17	0.44%	14,699	3.09%
$1,500 to $1,999	0	0.00%	0	0.00%	10,145	2.13%
$2,000 or more	12	1.24%	18	0.46%	5,121	1.08%
No cash rent	61	6.28%	613	15.74%	43,236	9.10%
Median Gross Rent	**$671**		**$599**		**$699**	

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

Median gross rent in Osage County is estimated to be $599, which is -14.3% less than Oklahoma's median gross rent of $699/month. Median gross rent in Skiatook is estimated to be $671.

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

	Skiatook Median Rent	Osage County Median Rent	State of Oklahoma Median Rent
Total Rental Units:			
Built 2010 or Later	-	-	$933
Built 2000 to 2009	$639	$516	$841
Built 1990 to 1999	$725	$759	$715
Built 1980 to 1989	$605	$379	$693
Built 1970 to 1979	$493	$551	$662
Built 1960 to 1969	$930	$650	$689
Built 1950 to 1959	$737	$727	$714
Built 1940 to 1949	$1,108	$640	$673
Built 1939 or Earlier	$950	$542	$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 Osage County is among housing units in Skiatook constructed between 1940 and 1949, which is $1,108 per month. In order to be affordable, a household would need to earn at least $44,320 per year to afford such a unit.

Skiatook Rental Survey Data

The next table shows the results of our rental survey of Skiatook. 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.)

Skiatook Rental Properties								
Name	Type	Year Built	Bedrooms	Bathrooms	Size (SF)	Rate	Rate/SF	Vacancy
Oak Timbers	LIHTC	2004	1	1	670	$445	$0.664	5.00%
Oak Timbers	LIHTC	2004	2	2	836	$525	$0.628	5.00%
Oak Timbers	LIHTC	2004	3	2	1,031	$595	$0.577	5.00%
Cedar Apartments	Market Rate	1985	1	1	432	$400	$0.926	0.00%
Cherokee Heritage	Market Rate	1975	2	1	920	$545	$0.592	0.00%
Cherokee Heritage	Market Rate	1975	3	1	1,000	$670	$0.670	0.00%
Ash Street Apartments	Market Rate	1970	2	1	705	$475	$0.674	0.00%
West Oak Village	LIHTC - Elderly	2003	1	1	545	N/A	N/A	N/A
West Oak Village	LIHTC - Elderly	2003	2	1	780	N/A	N/A	N/A
Skiatook Retirement Community	USDA / LIHTC - Elderly	1988	1	1	688	30%	N/A	N/A
Skiatook Retirement Community	USDA / LIHTC - Elderly	1988	2	1	784	30%	N/A	N/A
Tomco Apartments	USDA - Family	1986	1	1	688	30%	N/A	N/A
Tomco Apartments	USDA - Family	1986	2	1	784	30%	N/A	N/A

The previous rent surveys encompass over two hundred rental units in seven 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 $5 to $10 per unit per month annually over the past 36 months. Occupancy levels in the Skiatook 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 – Skiatook

The developments outlined previously report occupancy levels typically at or 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 Skiatook market. The overall market vacancy of rental housing units was reported at 9.59% by the Census Bureau as of the most recent American Community Survey: this figure includes rental units of all types including single family homes.

Ash Street Apartments

Cherokee Heritage

Cedar Apartments

Oak Timbers

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 Osage 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.

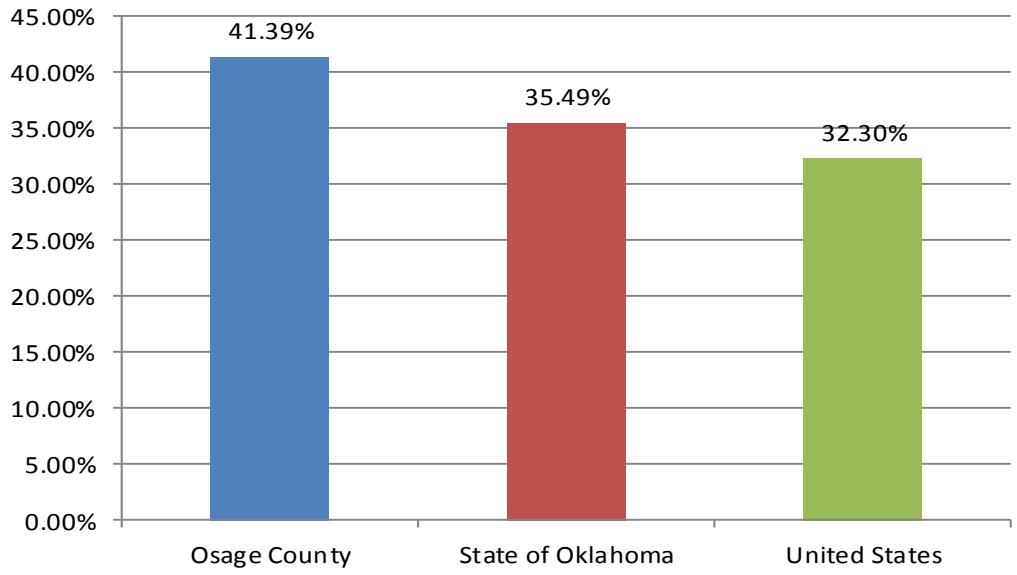
HUD Programs in Osage County

Osage County	# Units	Occupancy Rate	Avg. Household Income	Tenant Contribution	Federal Contribution	% of Total Rent
Public Housing	368	93%	$14,899	$286	$403	41.47%
Housing Choice Vouchers	230	95%	$13,008	$343	$467	42.37%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	0	N/A	N/A	N/A	N/A	N/A
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	73	88%	$7,293	$175	$314	35.86%
Summary of All HUD Programs	671	93%	$13,563	$292	$413	41.39%
State of Oklahoma						
Public Housing	13,088	96%	$11,328	$215	$371	36.71%
Housing Choice Vouchers	24,651	93%	$10,766	$283	$470	37.57%
Mod Rehab	158	89%	$7,272	$129	$509	20.17%
Section 8 NC/SR	4,756	93%	$10,730	$242	$465	34.24%
Section 236	428	89%	$8,360	$192	$344	35.82%
Multi-Family Other	7,518	91%	$7,691	$176	$448	28.18%
Summary of All HUD Programs	50,599	94%	$10,360	$242	$440	35.49%
United States						
Public Housing	1,150,867	94%	$13,724	$275	$512	34.91%
Housing Choice Vouchers	2,386,237	92%	$13,138	$346	$701	33.04%
Mod Rehab	19,148	87%	$8,876	$153	$664	18.78%
Section 8 NC/SR	840,900	96%	$12,172	$274	$677	28.80%
Section 236	126,859	93%	$14,347	$211	$578	26.74%
Multi-Family Other	656,456	95%	$11,135	$255	$572	30.80%
Summary of All HUD Programs	5,180,467	94%	$12,892	$304	$637	32.30%

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

Among all HUD programs, there are 671 housing units located within Osage County, with an overall occupancy rate of 93%. The average household income among households living in these units is $13,563. Total monthly rent for these units averages $705, with the federal contribution averaging $413 (58.61%) and the tenant's contribution averaging $292 (41.39%).

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.

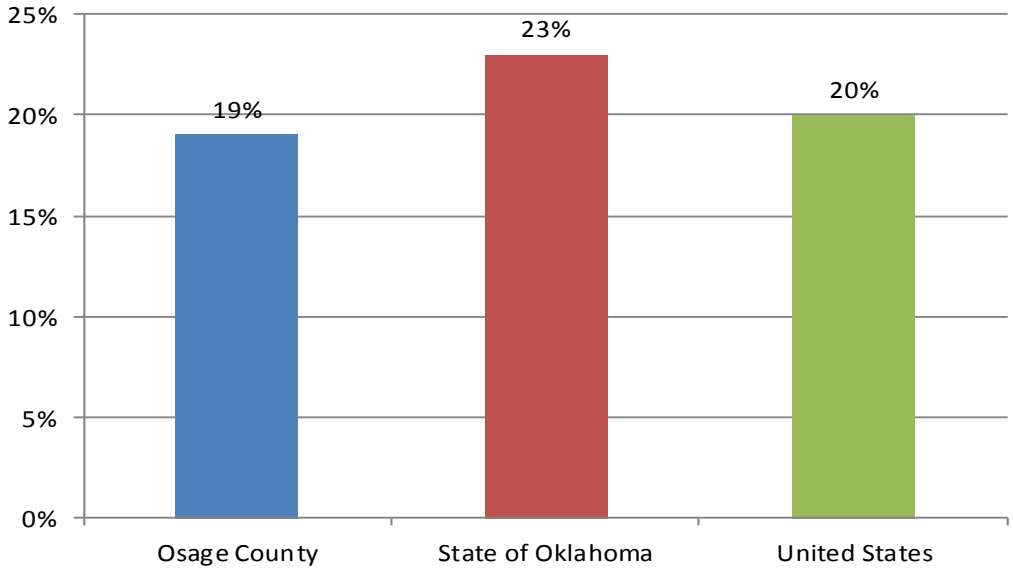
Demographics of Persons in HUD Programs in Osage County

Osage County	# Units	% Single Mothers	% w/ Disability	% Age 62+	% Age 62+ w/ Disability	% Minority
Public Housing	368	43%	16%	32%	49%	51%
Housing Choice Vouchers	230	51%	25%	35%	84%	75%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	0	N/A	N/A	N/A	N/A	N/A
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	73	38%	20%	14%	42%	5%
Summary of All HUD Programs	671	45%	19%	31%	60%	54%
State of Oklahoma						
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%
Summary of All HUD Programs	50,599	38%	23%	25%	53%	50%
United States						
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%
Summary of All HUD Programs	5,180,467	36%	20%	33%	40%	64%

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

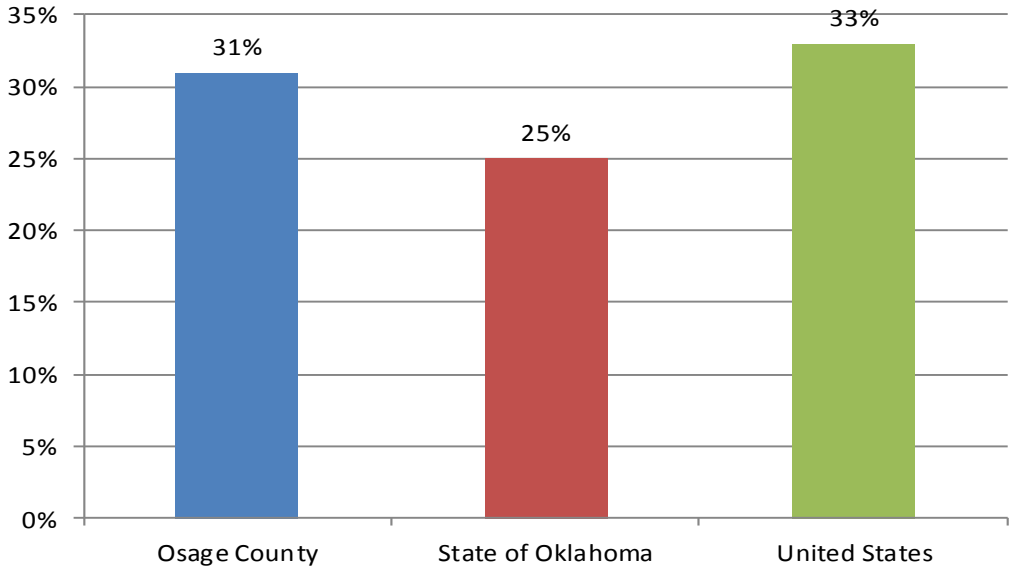
45% of housing units are occupied by single parents with female heads of household. 19% of households have at least one person with a disability. 31% of households have either a householder or spouse age 62 or above. Of the households age 62 or above, 60% have one or more disabilities. Finally, 54% of households are designated as racial or ethnic minorities.

Percentage of Households with Disabilities - HUD Subsidized Properties



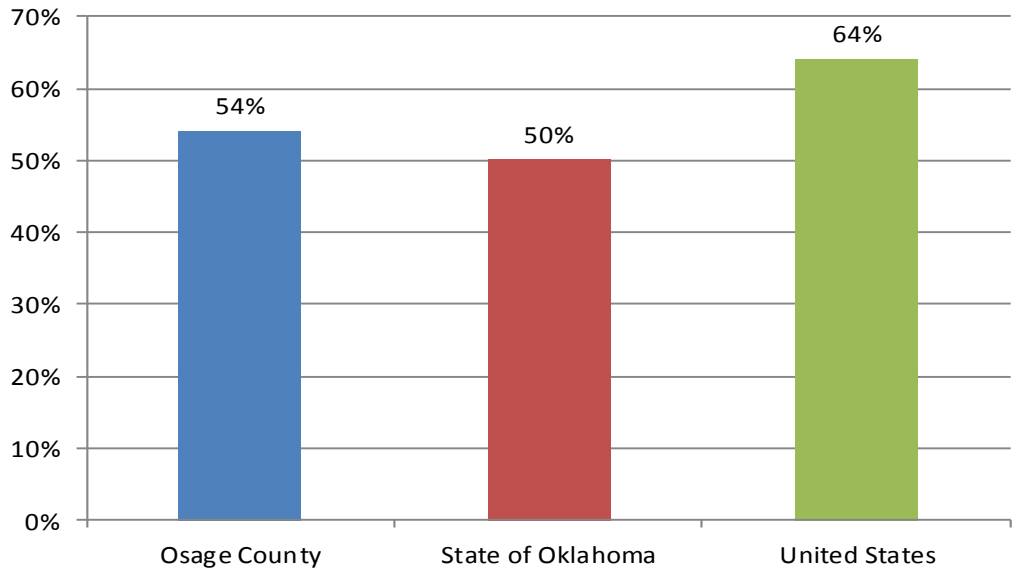
Source: 2013 HUD Picture of Subsidized Households

Percentage of Households Age 62+ - HUD Subsidized Properties



Source: 2013 HUD Picture of Subsidized Households

Percentage of Minority Households - HUD Subsidized Properties



Source: 2013 HUD Picture of Subsidized Households

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 Osage 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 Osage 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.

Osage County : CHAS - Housing Cost Burden by HAMFI

	Owners		Renters	
Household Income / Cost Burden	Number	Percent	Number	Percent
Income < 30% HAMFI	**1,470**		**1,105**	
Cost Burden Less Than 30%	335	22.79%	280	25.34%
Cost Burden Between 30%-50%	255	17.35%	145	13.12%
Cost Burden Greater Than 50%	735	50.00%	475	42.99%
Not Computed (no/negative income)	150	10.20%	205	18.55%
Income 30%-50% HAMFI	**1,540**		**830**	
Cost Burden Less Than 30%	1,055	68.51%	435	52.41%
Cost Burden Between 30%-50%	320	20.78%	195	23.49%
Cost Burden Greater Than 50%	170	11.04%	205	24.70%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 50%-80% HAMFI	**2,890**		**885**	
Cost Burden Less Than 30%	2,185	75.61%	690	77.97%
Cost Burden Between 30%-50%	455	15.74%	195	22.03%
Cost Burden Greater Than 50%	250	8.65%	0	0.00%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 80%-100% HAMFI	**1,480**		**415**	
Cost Burden Less Than 30%	1,300	87.84%	400	96.39%
Cost Burden Between 30%-50%	180	12.16%	15	3.61%
Cost Burden Greater Than 50%	0	0.00%	0	0.00%
Not Computed (no/negative income)	0	0.00%	0	0.00%
All Incomes	**14,705**		**3,810**	
Cost Burden Less Than 30%	11,830	80.45%	2,375	62.34%
Cost Burden Between 30%-50%	1,550	10.54%	550	14.44%
Cost Burden Greater Than 50%	1,180	8.02%	684	17.95%
Not Computed (no/negative income)	150	1.02%	205	5.38%

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

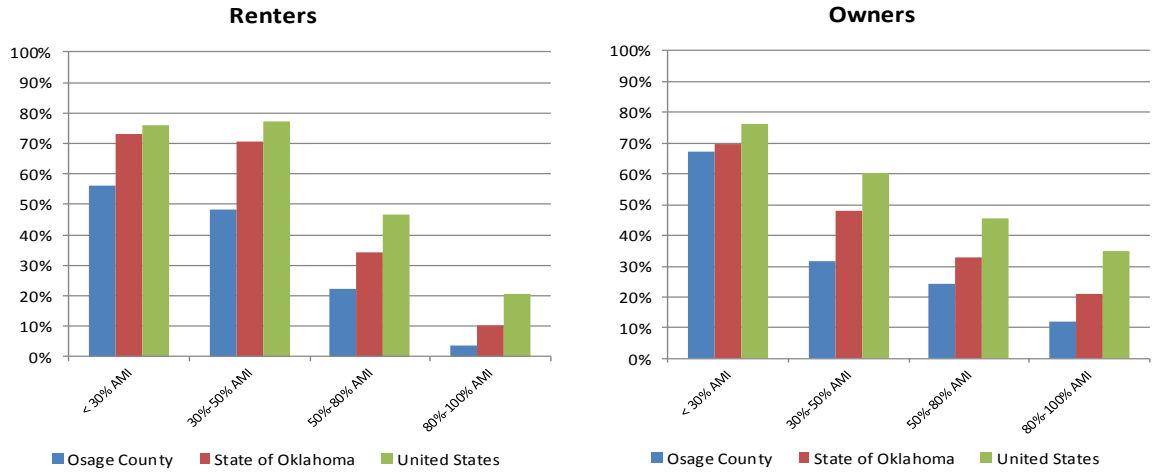
The next table summarizes the data from the previous table for households with cost burden greater than 30% of gross income, followed by a chart comparing these figures for Osage County with the State of Oklahoma as a whole, and the United States.

Osage County : Households by Income by Cost Burden

	Owners		Renters	
Household Income Threshold	Total	% w/ Cost > 30% Income	Total	% w/ Cost > 30% Income
Income < 30% HAMFI	1,470	67.35%	1,105	56.11%
Income 30%-50% HAMFI	1,540	31.82%	830	48.19%
Income 50%-80% HAMFI	2,890	24.39%	885	22.03%
Income 80%-100% HAMFI	1,480	12.16%	415	3.61%
All Incomes	14,705	18.57%	3,810	32.39%

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.

Osage County : CHAS - HAMFI by Substandard Conditions / Overcrowding				
	Owners		Renters	
Household Income / Housing Problem	Number	Percent	Number	Percent
Income < 30% HAMFI	**1,470**		**1,105**	
Between 1.0 and 1.5 Persons per Room	30	2.04%	20	1.81%
More than 1.5 Persons per Room	0	0.00%	20	1.81%
Lacks Complete Kitchen or Plumbing	20	1.36%	60	5.43%
Income 30%-50% HAMFI	**1,540**		**830**	
Between 1.0 and 1.5 Persons per Room	25	1.62%	70	8.43%
More than 1.5 Persons per Room	4	0.26%	0	0.00%
Lacks Complete Kitchen or Plumbing	40	2.60%	0	0.00%
Income 50%-80% HAMFI	**2,890**		**885**	
Between 1.0 and 1.5 Persons per Room	75	2.60%	20	2.26%
More than 1.5 Persons per Room	10	0.35%	0	0.00%
Lacks Complete Kitchen or Plumbing	35	1.21%	4	0.45%
Income 80%-100% HAMFI	**1,480**		**415**	
Between 1.0 and 1.5 Persons per Room	15	1.01%	4	0.96%
More than 1.5 Persons per Room	4	0.27%	0	0.00%
Lacks Complete Kitchen or Plumbing	4	0.27%	0	0.00%
All Incomes	**14,705**		**3,810**	
Between 1.0 and 1.5 Persons per Room	240	1.63%	114	2.99%
More than 1.5 Persons per Room	22	0.15%	20	0.52%
Lacks Complete Kitchen or Plumbing	68	0.46%	68	1.78%

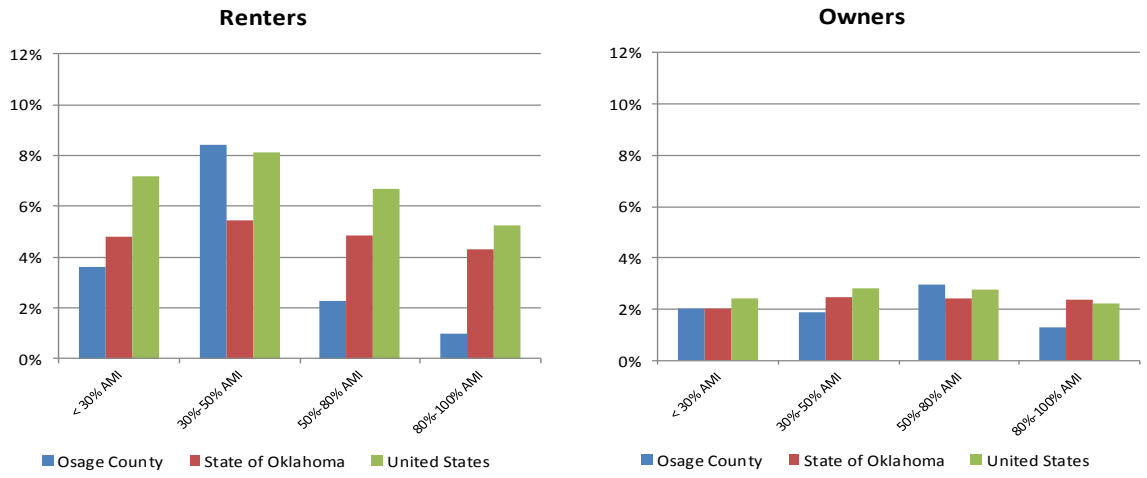
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 3

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 Osage County, Oklahoma and the nation.

Osage County : Households by Income by Overcrowding				
	Owners		Renters	
Household Income Threshold	Total	% > 1.0 Persons per Room	Total	% > 1.0 Persons per Room
Income < 30% HAMFI	1,470	2.04%	1,105	3.62%
Income 30%-50% HAMFI	1,540	1.88%	830	8.43%
Income 50%-80% HAMFI	2,890	2.94%	885	2.26%
Income 80%-100% HAMFI	1,480	1.28%	415	0.96%
All Incomes	14,705	1.78%	3,810	3.52%

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

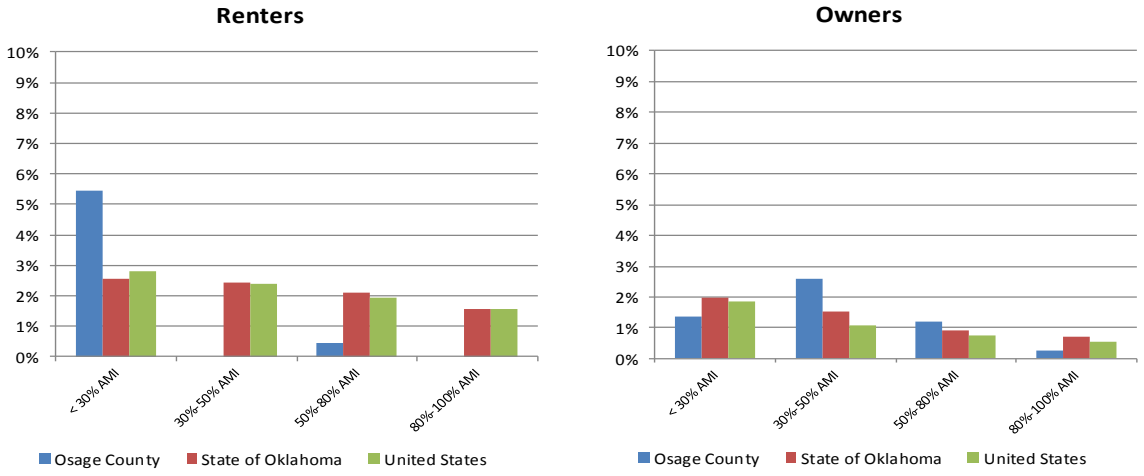
The table following summarizes this data for substandard housing conditions, with a comparison chart between Osage County, the state and the nation.

Osage County : Households by Income by Substandard Conditions

	Owners		Renters	
Household Size/Type	Total	% Lacking Kitchen or Plumbing	Total	% Lacking Kitchen or Plumbing
Income < 30% HAMFI	1,470	1.36%	1,105	5.43%
Income 30%-50% HAMFI	1,540	2.60%	830	0.00%
Income 50%-80% HAMFI	2,890	1.21%	885	0.45%
Income 80%-100% HAMFI	1,480	0.27%	415	0.00%
All Incomes	14,705	0.46%	3,810	1.78%

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.

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

	Owners			Renters		
Income, Household Size/Type	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
Income < 30% HAMFI	**1,470**	**985**	**67.01%**	**1,105**	**615**	**55.66%**
Elderly Family	130	75	57.69%	0	0	N/A
Small Family (2-4 persons)	525	390	74.29%	365	145	39.73%
Large Family (5 or more persons)	50	30	60.00%	45	25	55.56%
Elderly Non-Family	470	260	55.32%	285	140	49.12%
Non-Family, Non-Elderly	295	230	77.97%	415	305	73.49%
Income 30%-50% HAMFI	**1,540**	**490**	**31.82%**	**830**	**400**	**48.19%**
Elderly Family	320	45	14.06%	80	0	0.00%
Small Family (2-4 persons)	415	200	48.19%	290	175	60.34%
Large Family (5 or more persons)	70	30	42.86%	65	40	61.54%
Elderly Non-Family	540	145	26.85%	220	75	34.09%
Non-Family, Non-Elderly	200	70	35.00%	180	110	61.11%
Income 50%-80% HAMFI	**2,890**	**705**	**24.39%**	**885**	**194**	**21.92%**
Elderly Family	795	145	18.24%	70	4	5.71%
Small Family (2-4 persons)	825	185	22.42%	455	135	29.67%
Large Family (5 or more persons)	420	135	32.14%	40	0	0.00%
Elderly Non-Family	450	85	18.89%	70	10	14.29%
Non-Family, Non-Elderly	400	155	38.75%	260	45	17.31%
Income 80%-100% HAMFI	**1,480**	**179**	**12.09%**	**415**	**18**	**4.34%**
Elderly Family	380	30	7.89%	15	0	0.00%
Small Family (2-4 persons)	650	115	17.69%	200	4	2.00%
Large Family (5 or more persons)	155	4	2.58%	30	0	0.00%
Elderly Non-Family	205	20	9.76%	20	10	50.00%
Non-Family, Non-Elderly	95	10	10.53%	150	4	2.67%
All Incomes	**14,705**	**2,724**	**18.52%**	**3,810**	**1,231**	**32.31%**
Elderly Family	3,030	330	10.89%	175	4	2.29%
Small Family (2-4 persons)	6,435	1,100	17.09%	1,710	463	27.08%
Large Family (5 or more persons)	1,545	214	13.85%	210	65	30.95%
Elderly Non-Family	1,990	540	27.14%	620	235	37.90%
Non-Family, Non-Elderly	1,710	540	31.58%	1,110	464	41.80%

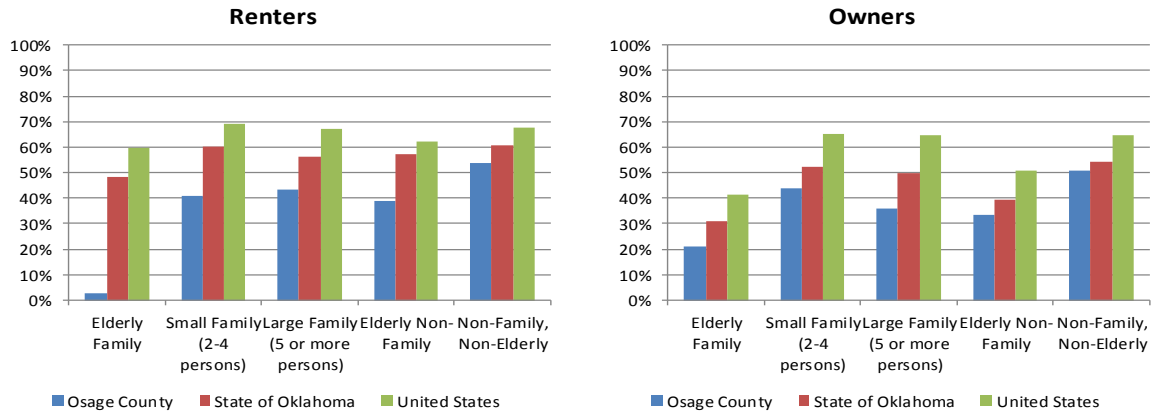
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

Osage County : Households under 80% AMI by Cost Burden

	Owners			Renters		
Household Size/Type	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
Income < 80% HAMFI	**5,900**	**2,180**	**36.95%**	**2,820**	**1,209**	**42.87%**
Elderly Family	1,245	265	21.29%	150	4	2.67%
Small Family (2-4 persons)	1,765	775	43.91%	1,110	455	40.99%
Large Family (5 or more persons)	540	195	36.11%	150	65	43.33%
Elderly Non-Family	1,460	490	33.56%	575	225	39.13%
Non-Family, Non-Elderly	895	455	50.84%	855	460	53.80%

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).

Osage County : CHAS - Housing Problems by Household Type and HAMFI

	Owners			Renters		
Income, Household Size/Type	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 30% HAMFI	**1,470**	**1,000**	**68.03%**	**1,105**	**665**	**60.18%**
Elderly Family	130	70	53.85%	0	0	N/A
Small Family (2-4 persons)	525	390	74.29%	365	145	39.73%
Large Family (5 or more persons)	50	40	80.00%	45	35	77.78%
Elderly Non-Family	470	265	56.38%	285	145	50.88%
Non-Family, Non-Elderly	295	235	79.66%	415	340	81.93%
Income 30%-50% HAMFI	**1,540**	**545**	**35.39%**	**830**	**410**	**49.40%**
Elderly Family	320	45	14.06%	80	0	0.00%
Small Family (2-4 persons)	415	205	49.40%	290	175	60.34%
Large Family (5 or more persons)	70	40	57.14%	65	55	84.62%
Elderly Non-Family	540	155	28.70%	220	70	31.82%
Non-Family, Non-Elderly	200	100	50.00%	180	110	61.11%
Income 50%-80% HAMFI	**2,890**	**790**	**27.34%**	**885**	**219**	**24.75%**
Elderly Family	795	140	17.61%	70	4	5.71%
Small Family (2-4 persons)	825	195	23.64%	455	140	30.77%
Large Family (5 or more persons)	420	210	50.00%	40	15	37.50%
Elderly Non-Family	450	85	18.89%	70	10	14.29%
Non-Family, Non-Elderly	400	160	40.00%	260	50	19.23%
Income Greater than 80% of HAMFI	**8,805**	**680**	**7.72%**	**990**	**28**	**2.83%**
Elderly Family	1,785	70	3.92%	25	0	0.00%
Small Family (2-4 persons)	4,670	375	8.03%	600	10	1.67%
Large Family (5 or more persons)	1,005	100	9.95%	60	4	6.67%
Elderly Non-Family	525	50	9.52%	45	10	22.22%
Non-Family, Non-Elderly	820	85	10.37%	255	4	1.57%
All Incomes	**14,705**	**3,015**	**20.50%**	**3,810**	**1,322**	**34.70%**
Elderly Family	3,030	325	10.73%	175	4	2.29%
Small Family (2-4 persons)	6,435	1,165	18.10%	1,710	470	27.49%
Large Family (5 or more persons)	1,545	390	25.24%	210	109	51.90%
Elderly Non-Family	1,985	555	27.96%	620	235	37.90%
Non-Family, Non-Elderly	1,715	580	33.82%	1,110	504	45.41%

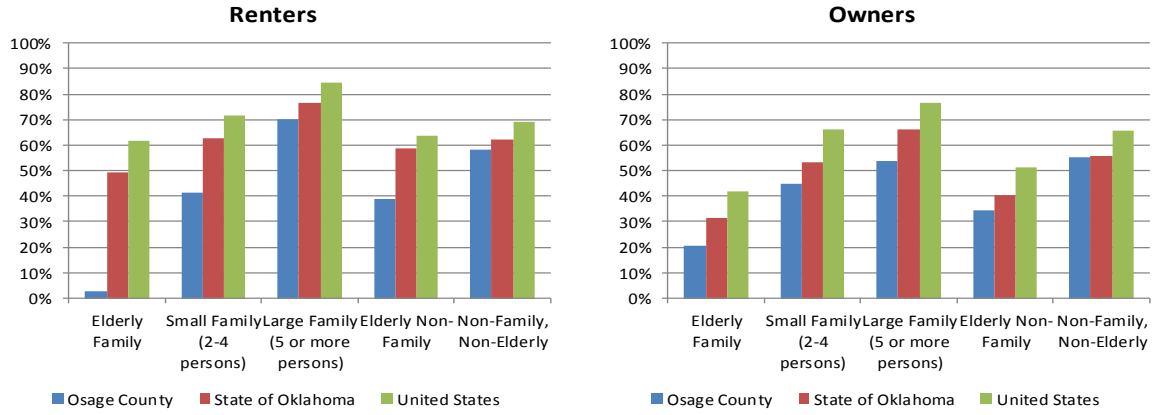
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 16

Osage County : Households under 80% AMI by Housing Problems

	Owners			Renters		
Household Size/Type	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 80% HAMFI	**5,900**	**2,335**	**39.58%**	**2,820**	**1,294**	**45.89%**
Elderly Family	1,245	255	20.48%	150	4	2.67%
Small Family (2-4 persons)	1,765	790	44.76%	1,110	460	41.44%
Large Family (5 or more persons)	540	290	53.70%	150	105	70.00%
Elderly Non-Family	1,460	505	34.59%	575	225	39.13%
Non-Family, Non-Elderly	895	495	55.31%	855	500	58.48%

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 Osage 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.”

Osage County : CHAS - Housing Problems by Race / Ethnicity and HAMFI

	Owners			Renters		
Income, Race / Ethnicity	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 30% HAMFI	**1,470**	**1,000**	**68.0%**	**1,100**	**665**	**60.5%**
White alone, non-Hispanic	850	560	65.9%	685	430	62.8%
Black or African-American alone	135	95	70.4%	225	165	73.3%
Asian alone	0	0	N/A	0	0	N/A
American Indian alone	395	260	65.8%	140	40	28.6%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	4	0	0.0%	29	25	86.2%
Other (including multiple races)	84	80	95.2%	29	10	34.5%
Income 30%-50% HAMFI	**1,545**	**545**	**35.3%**	**835**	**415**	**49.7%**
White alone, non-Hispanic	1,085	325	30.0%	485	295	60.8%
Black or African-American alone	150	60	40.0%	165	100	60.6%
Asian alone	0	0	N/A	15	15	100.0%
American Indian alone	190	100	52.6%	100	0	0.0%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	40	25	62.5%	29	4	13.8%
Other (including multiple races)	85	40	47.1%	35	0	0.0%
Income 50%-80% HAMFI	**2,890**	**790**	**27.3%**	**890**	**220**	**24.7%**
White alone, non-Hispanic	2,080	550	26.4%	480	60	12.5%
Black or African-American alone	280	185	66.1%	145	145	100.0%
Asian alone	4	0	0.0%	0	0	N/A
American Indian alone	330	25	7.6%	145	15	10.3%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	40	10	25.0%	40	0	0.0%
Other (including multiple races)	155	20	12.9%	75	0	0.0%
Income 80%-100% HAMFI	**1,485**	**210**	**14.1%**	**415**	**20**	**4.8%**
White alone, non-Hispanic	1,185	155	13.1%	185	15	8.1%
Black or African-American alone	100	15	15.0%	45	0	0.0%
Asian alone	4	0	0.0%	0	0	N/A
American Indian alone	110	40	36.4%	100	0	0.0%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	50	0	0.0%	40	0	0.0%
Other (including multiple races)	30	0	0.0%	44	4	9.1%
All Incomes	**14,715**	**3,015**	**20.5%**	**3,814**	**1,324**	**34.7%**
White alone, non-Hispanic	10,800	1,885	17.5%	2,289	804	35.1%
Black or African-American alone	1,320	435	33.0%	584	410	70.2%
Asian alone	12	0	0.0%	15	15	100.0%
American Indian alone	1,645	470	28.6%	575	55	9.6%
Pacific Islander alone	0	0	N/A	15	0	0.0%
Hispanic, any race	224	65	29.0%	138	29	21.0%
Other (including multiple races)	709	160	22.6%	193	14	7.3%

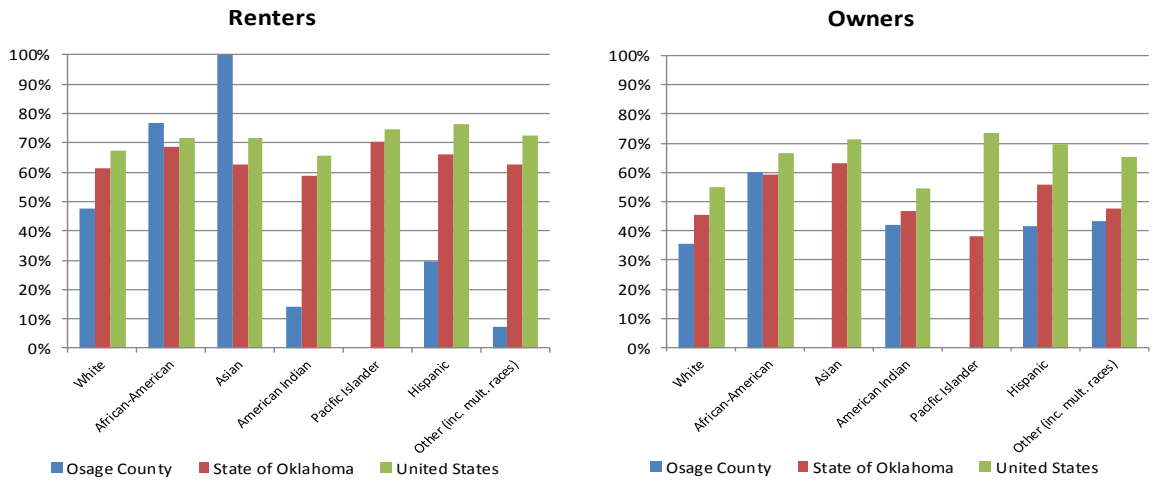
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 1

Osage County : Households under 80% AMI by Race/Ethnicity

		Owners			Renters	
Household Size/Type	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 80% HAMFI	**5,905**	**2,335**	**39.54%**	**2,825**	**1,300**	**46.02%**
White alone, non-Hispanic	4,015	1,435	35.74%	1,650	785	47.58%
Black or African-American alone	565	340	60.18%	535	410	76.64%
Asian alone	4	0	0.00%	15	15	100.00%
American Indian alone	915	385	42.08%	385	55	14.29%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	84	35	41.67%	98	29	29.59%
Other (including multiple races)	324	140	43.21%	139	10	7.19%

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 Osage 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 1,020 renter households that are cost overburdened, and 1,480 homeowners that are cost overburdened.
- Among **elderly** households with incomes less than 50% of Area Median Income, there are 215 renter households that are cost overburdened, and 525 homeowners that are cost overburdened.

- 76.64% of African American renters with incomes less than 80% of Area Median Income have one or more housing problems, and 60.18% of African American homeowners with incomes less than 80% of Area Median Income have one or more housing problems.
- 100% of Asian renters with incomes less than 80% of Area Median Income have one or more housing problems.

Overall Anticipated Housing Demand

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

Skiatook Anticipated Demand

Households in Skiatook grew at an annually compounded rate of 3.44% from 2000 to 2010. Nielsen SiteReports estimates households have grown 1.30% per year since that time, and that households will grow 0.65% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 0.65% per year in forecasting future household growth for Skiatook.

The percentage of owner households was estimated at 65.49% with renter households estimated at 34.51%, 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.

Future Housing Demand Estimates for Skiatook

Year		2015	2016	2017	2018	2019	2020
Household Estimates		2,983	3,002	3,022	3,041	3,061	3,081
Owner %:	65.49%	1,954	1,966	1,979	1,992	2,005	2,018
Renter %:	34.51%	1,029	1,036	1,043	1,049	1,056	1,063
				Total New Owner Households			**64**
				Total New Renter Households			**34**

Based on an estimated household growth rate of 0.65% per year, Skiatook would require 64 new housing units for ownership, and 34 units for rent, over the next five years. Annually this equates to 13 units for ownership per year, and 7 units for rent per year.

Osage County Anticipated Demand

Households in Osage County grew at an annually compounded rate of 0.92% from 2000 to 2010. Nielsen SiteReports estimates households have grown 0.39% per year since that time, and that households will grow 0.46% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 0.46% per year in forecasting future household growth for Osage County.

The percentage of owner households was estimated at 78.96% with renter households estimated at 21.04%, 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.

Future Housing Demand Estimates for Osage County

Year		2015	2016	2017	2018	2019	2020
Household Estimates		18,562	18,647	18,732	18,818	18,904	18,990
Owner %:	78.96%	14,656	14,723	14,791	14,858	14,926	14,994
Renter %:	21.04%	3,906	3,923	3,941	3,959	3,977	3,996

Total New Owner Households	**338**
Total New Renter Households	**90**

Based on an estimated household growth rate of 0.46% per year, Osage County would require 338 new housing units for ownership, and 90 units for rent, over the next five years. Annually this equates to 68 units for ownership per year, and 18 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 Osage 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 Osage 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.

Osage County: 2015-2020 Housing Needs by Income Threshold

	Owner Subset %	Renter Subset %	Owners	Renters	**Total**
Total New Demand: 2015-2020	100.00%	100.00%	338	90	428
Less than 30% AMI	10.00%	29.00%	34	26	**60**
Less than 50% AMI	20.47%	50.79%	69	46	**115**
Less than 60% AMI	24.56%	60.94%	83	55	**138**
Less than 80% AMI	40.12%	74.02%	136	67	**202**

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.

Osage County: 2015-2020 Housing Needs Age 62 and Up

	Owner Subset %	Renter Subset %	Elderly Owners	Elderly Renters	**Elderly Total**
Total New Elderly (62+) Demand: 2015-2020	34.14%	20.87%	115	19	**134**
Elderly less than 30% AMI	4.08%	7.48%	14	7	**21**
Elderly less than 50% AMI	9.93%	15.35%	34	14	**47**
Elderly less than 60% AMI	11.91%	18.43%	40	17	**57**
Elderly less than 80% AMI	18.40%	19.03%	62	17	**79**

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.

Osage County: 2015-2020 Housing Needs for Persons with Disabilities					
	Owner Subset %	Renter Subset %	Disabled Owners	Disabled Renters	**Disabled Total**
Total New Disabled Demand (2015-2020)	33.63%	35.04%	114	32	**145**
Disabled less than 30% AMI	4.73%	15.49%	16	14	**30**
Disabled less than 50% AMI	9.69%	23.62%	33	21	**54**
Disabled less than 60% AMI	11.63%	28.35%	39	26	**65**
Disabled less than 80% AMI	17.89%	31.10%	60	28	**88**

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.

Osage County: 2015-2020 Housing Needs for Veterans					
	Owner Subset %	Renter Subset %	Veteran Owners	Veteran Renters	**Veteran Total**
Total New Demand (2015-2020)	100.00%	100.00%	338	90	428
Total Veteran Demand	11.30%	11.30%	38	10	**48**
Veterans with Disabilities	3.87%	3.87%	13	3	**17**
Veterans Below Poverty	0.94%	0.94%	3	1	**4**
Disabled Veterans Below Poverty	0.48%	0.48%	2	0	**2**

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).

Osage County: 2015-2020 Housing Needs for Working Families					
	Owner Subset %	Renter Subset %	Owners	Renters	**Total**
Total New Demand (2015-2020)	100.00%	100.00%	338	90	428
Total Working Families	53.01%	53.01%	179	48	**227**
Working Families with Children Present	24.44%	24.44%	83	22	**105**

Population Subset Conclusions

Based on population and household growth over the next five years, a total of 428 housing units will be needed in Osage County over the next five years. Of those units:

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

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

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

Special Topics

Osage 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 as recovery can be improved with good planning.

C.0 Comprehensive Plans & Hazard Mitigation Plans

There are 9 cities and towns within the county including the cities of Barnsdall, Hominy, Pawhuska and Shidler. The City of Pawhuska is the county seat. Towns include Avant, Burbank, Fairfax, Prue, and Winona.

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.

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

City of Pawhuska Comprehensive Plan Elements addressing housing and community resiliency:

Land use Objectives

- Protect County residents from the hazards of flooding.

Parks, Recreation, Trails and Open Space Objectives

- Protect natural open space areas identified as Development Sensitive Conservation Areas to preserve the natural vegetation, wildlife and enjoyment while reducing potential hazards to human life from improperly building on steep slopes with erodible soils or where the hazards of flooding are present.
- Protect the floodplain of area creeks and streams and incorporate the natural amenities of such areas into development where possible in accordance with the County's Floodplain Management Program.

Development of Sensitive and Conservation Areas Objectives

- Compliance with federal, state and local safety regulations such as floodplain programs – Continuing administration of the County's Floodplain Management Program in cooperation with FEMA and the OWRB by the County's Emergency Management Program.

Public Safety: Law Enforcement, Fire and Emergency Medical Services and Multi-Hazard Mitigation Objectives

- Support the area public and quasi-public agencies that function to protect the public health, safety, and welfare of the County to ensure continued high quality services and states of readiness by providing effective, highly trained and motivated law enforcement personnel, fire fighting and fire prevention and emergency medical services personnel and equipment.
- Incorporate the adopted Multi-Hazard Mitigation Plan into the 2030 Plan and Land Use Planning Program – Implementation by the County Commissioners in coordination with the

County Sheriff's Department, the Osage County Emergency Management Program, Municipal and Rural Fire Departments and the Planning Commission initiated and completed as necessary during the short term of the Planning Period.

Floodplain Stormwater Management and Drainage Objectives

- Protect the public health, safety and welfare by the property administration of the County's floodplain regulations as required by the OWRB and EPA.
- Reduce flooding along area creeks caused by heavy rains by clearing of trees and other obstructions where public access and funding is available.
- Support cities and towns, where possible, in their programs of floodplain management and cleaning of creeks to reduce flooding.
- Adopt the Multi-Hazard Mitigation Plan as an element of the 2030 Plan as a policy guide for land use and development decisions.

Quality of Life Objectives

- Support a high level and quality of law enforcement, fire protection and emergency medical services, and social-health care programs to protect the public health, safety and welfare.

Emergency Operation Plan

Osage County has adopted an emergency Operations Plan (EOP), revisits and readopts it annually, the last readoption in 2011. The EOP was used as a reference in preparing the Hazard Mitigation Plan (HMP). As part of the EOP, critical facilities were identified. These facilities include shelters, police and fire stations, schools, childcare centers, senior citizen centers, hospitals, disability centers, vehicle and equipment storage facilities, emergency operations centers, and city halls.

- **Emergency Operations Center** – Osage County Emergency Management (OCEM) has established emergency operations and procedures. OCEM is responsible for the Emergency Operations Center (EOC) and the coordination of disaster emergency response activities within the community.
- **9-1-1** – Osage County has also implemented a 9-1-1 Emergency Telephone System (E-911).
- **Warning Siren** – Osage County has warning sirens within the cities and towns but not in the outlying areas of the county.

The other key plan for a city to manage, mitigate and plan for recovery related to disasters are county or city **Hazard Mitigation Plans and/or Emergency Management Plans**.

Osage County has a Hazard Mitigation Plan (HMP) that provides guidance related to major risks that impact the area and methods to address and mitigate those risks. The existing HMP was completed with coordination from all communities and school districts within the county.

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

The Osage County Multi Hazard Mitigation Plan Update has the following goals and objections:

Hazard Mitigation Goals	
Goal 1	**General: To protect vulnerable populations and critical facilities from hazards.**
Objectives	
1.	Minimize the loss of life and damage to property and infrastructure from natural and man-made disasters.
2.	Increase public awareness of risks from hazards and implement measures that can be taken to protect families and property from disasters.
3.	Reduce the risk and effects of hazards and minimize disruption in the county.
4.	Identify and protect vulnerable populations from natural man-made hazards.
5.	Identify and protect critical county and community facilities from hazards so that they can continue their missions in the event of a disaster.
Goal 2	**Flood Hazard: To reduce the risk of flood hazard in Osage County**
1.	Identify buildings at risk from the 100-years regulatory flood.
2.	Ensure that development does not increase flooding downstream or have off-site adverse impacts.
3.	Identify and maximize the natural and beneficial uses of the floodplain.
4.	Implement the best flood control measures to reduce vulnerability of flood-prone properties
Goal 3	**Tornado Hazard: To reduce the risk from tornadoes in Osage County**
1.	Encourage building of individual safe rooms and storm shelters.
2.	Educate and encourage the building trades industry about construction standards that are adequate to withstand frequent high winds.
Goal 4	**Hailstorm Hazard: To reduce the risk from hailstorms in Osage County**
1.	Promote construction of hail resistant roofs.
Goal 5	**Lightning Hazard: To reduce the risk from lightning in Osage County**
1.	Reduce loss of life and property, and injury due to lightning by increased public awareness of measures to prevent and reduce damage, including warnings.
Goal 6	**Winter Storm Hazard: To reduce the hazards from winter storms in Osage County**
1.	Reduce property loss and community disruption due to severe winter cold and ice storms.
Goal 7	**High Winds Hazard: To reduce the risk from high winds in Osage County**
1.	Educate and encourage the building trades industry about construction standards that are adequate to withstand frequent high winds.
Goal 8	**Drought Hazard: Reduce the economic impact of drought hazards to Osage County**
1.	Reduce damage to property and building foundations due to drought by improving building codes.
Goal 9	**Wildfire Hazard: To reduce the threat of wildfire hazards and their financial impact in Osage County.**
1.	Develop a County-wide fire response and support group to facilitate the provisioning of water to fires during large fires.
Goal 10	**Expansive Soil Hazard: Reduce structure's susceptibility to soil movement.**
1.	Reduce damage to property and building foundations due to expansive soils by improving

	building codes.
Goal 11	**Earthquake Hazard: To reduce the risk from earthquakes in Osage County**
1.	Educate and encourage the building trades industry about earthquake resistant construction.
Goal 12	**Hazardous Materials Hazard: To reduce the risk from hazardous material storage facilities around Osage County.**
1.	Protect the public from exposure from hazardous materials events from sites within the community.
Goal 13	**Dam Break Hazard; To reduce the risk of a dam break in Osage County.**
1.	Identify dams that could impact the county.
2.	Identify at risk areas.
Goal 14	**Extreme Heat: To reduce the risk from extreme heat in Osage County**
1.	Lessen injury and potential loss of life to citizens during periods of extreme heat through education.

The following are high priority mitigation measures defined by the Osage County, by each of the cities and towns, and by the school districts:

Osage County Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	County Emergency Management	Provide surge protection and uninterruptible power sources for electronic-reliant county facilities, such as the Sheriff Department, County Offices, and Emergency Operations Center
2	County Emergency Management	Develop a plan for Sheriff Department and Fire Department personnel to expand their knowledge and capabilities relative to hazardous materials and events, including meth labs. Also include public education on meth labs.
3	County Emergency Management	Obtain funding for the distribution of educational materials on the hazards of extreme heat to vulnerable populations.
4	County Emergency management	Upgrade the emergency communications network for fire, police, sheriff, 911, ambulance and other emergency operations.
5	County Emergency Management	Develop a public information campaign to promote the advantages of individual fire suppression equipment in residences, including fire extinguishers.
6	County Maintenance Department	Update County equipment and vehicles for combating ice storm damage/adverse conditions to public infrastructure.
7	County Emergency Management	Educate the public about adequate building systems for resistance to tornados and high winds.
8	County Emergency Management	Install window air conditions for elderly shut-ins for whom extreme heat can be a life threatening hazard.
9	County Emergency Management	Identify and plan for hazardous materials and incidents on major transportation routes throughout the county.

10	County Emergency Management	Hazard occurrence data collection.
11	County Emergency Management	Public information on mitigation.
12	County Administration	Window laminates.
13	County Emergency Management	Establish fire breaks in the wildfire urban interface.
14	County Emergency Management	Osage County website – provide information to county residents, particularly on hazards.

Town of Avant Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Town	Provide surge protection and backup power for the Water Treatment Facility, Wastewater Treatment Facility, and Town Hall.
2	Town	Install emergency warning sirens in town.
3	Town	Replace undersized water lines and add fire hydrants.
4	Town	Develop a contingency plan for responding to a massive power outage due to severe winter storms, ice and snow.
5	Town	Acquire snow removal equipment.

City of Barnsdall Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	City Administration	Hazard occurrence data collection.
2	Public Works Department	Replace inadequately sized water lines with lines of sufficient size to provide proper fire protection, and develop a fire department response plan to all developed property within the city.
3	Fire Department	Supply NOAA Weather Radios to all local government buildings, schools, and critical facilities.
4	Police Department and Fire Department	Develop a plan for Barnsdall Police and Fire Department personnel to expand their knowledge and capabilities relative to hazardous materials and events, including meth labs.
5	Electric Department	Develop a contingency plan for responding to a massive power outage due to severe winter storms, ice and snow.
6	Fire Department	Identify and plan for hazardous materials and incidents on major transportation routes, including railroads, and insure Barnsdall Police and Fire personnel are up to date on their hazardous materials training.

Town of Burbank Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Town Administration, Town Emergency Management	Construct a storm shelter in a central location for the community's residents.
2	Town Emergency Management, Town Fire Department	Replace the antique storm siren with an up to date siren or sirens.
3	Town Administration, Public Works Department	Supply NOAA Weather Radios to all local government buildings and critical facilities.
4	Town Fire Department, Town Emergency Management	Communication Equipment – Acquire radio communication equipment including hand held radios.

Town of Fairfax Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Street Department	Purchase snow removal equipment including sand spreader and a snow blade (plow).
2	City Administration	Initiate a water conservation plan.
3	Police and Fire Departments	Provide safe rooms in the Police Department and the Fire Department Stations to protect the community’s first responsders.
4	Police Department and Public Works Authority	Provide surge protection and backup power for the Police Department and the Water Treatment Facility.

City of Hominy Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	City Emergency Management	Expand outdoor warning siren network.
2	Hominy Fire Department	Purchase Communication Equipment including pagers, hand-held radios and radio system upgrade.
3	Hominy Emergency Management	Install reverse 911 telephone system.
4	Hominy Emergency Management	Acquire mobile command center.

City of Pawhuska Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Public Works Department	Repair dam at Lake Pawhuska.
2	Public Works Department	Acquire floodplain properties where acquisition is the most cost effective mitigation measure.
3	Electric Department	Develop a contingency plan for responding to a massive power outage due to severe winter storms, ice and snow.
4	Electric Department	Tree trimming needs around power lines to lessen the probability of tree branches causing power outages due to severe winter storms, ice and snow.
5	Fire Department	Teach City employees the symptoms of common, life-threatening emergencies, for instance, the symptoms of heat disorders, and how to give CPR and first aid.
6	Electric Department	Evaluate and update warning systems.
7	Fire Department	Supply NOAA Weather Radios to all local government buildings, schools and critical facilities.
8	Public Works Department	Update City equipment and vehicles for combating ice storm damage/adverse conditions to public infrastructure.
9	Fire Department	Make sure that fire extinguishers are strategically placed and serviced in all City facilities and vehicles.
10	Public Works Department	Replace inadequately sized water lines with lines of sufficient size to provide proper fire protection.
11	Police Department and Fire Department	Provide backup facilities, including a safe room, at the fire station for the emergency response personnel located at Pawhuska police station.
12	Police Department and Fire Department	Develop a plan for Pawhuska Police and Fire Department personnel to expand their knowledge and capabilities relative to hazardous materials and events, including meth labs.

Town of Prue Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Town and School District	Provide Safe Rooms at the school
2	Public Service Company of Oklahoma and Verdigris Valley Electric	Bury overhead power lines and purchase back-up generators.
3	Town Public Works Authority and Town Fire Department	Replace undersized water lines.
4	Town	Information campaign on the hazards of Extreme Heat and Drought.

City of Shidler Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	City	Install window air conditioners for elderly shut-ins for whom extreme heat can be a life threatening hazard.
2	Police Department	Upgrade the emergency communications network for fire, police, 911, ambulance and other emergency operations.
3	Police Department and Fire Department	Develop a plan for Shidler Police and Fire Department personnel to expand their knowledge and capabilities relative to hazardous materials and events, including meth labs.
4	Fire Department	Supply NOAA Weather Radios to all local government buildings, schools and critical facilities.

Town of Wynona Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Public Works Department, Fire Department	Update Town equipment and vehicles for combating ice storm damage/adverse conditions to public infrastructure.
2	Public Works, Town Administration, Fire and Police Departments	Emergency generators to restore power to Town's infrastructure and water wells.
3	Emergency Management Department	Replace antique storm siren with up to date sirens that can be heard throughout the Town.
4	Emergency Management Department	Place a storm shelter for First Responders, Utility Workers, Police and Fire Personnel
5	Town Administration, Emergency Management	Place a Storm Shelter in a centrally located place for the Town's citizens.

Anderson School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Anderson School	Install a backup electrical power system, consisting of a natural gas generator and connection to current electrical system, at school to allow it to be used when total loss of power occurs in the district.
2	Anderson School	Equipment to clean-up, treat, or prevent winter storms from damaging facilities, roadways, parking lots and sidewalks.
3	Anderson School	Install 2-way radios on school buses.

Barnsdall Independent School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Barnsdall Public School	Install outdoor Warning System for playgrounds, bus loading areas, athletic fields and other areas of campus.
2	Barnsdall Public School	Install school safe room.
3	Barnsdall Public School	Install Retro-Fit Metal Roof on Jr./Sr. High School Buildings.

Hominy Independent School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Hominy Schools	Install 2-way radios on school buses.
2	Hominy Schools	Install a new Safe Room in the elementary school that can be used by the community and also serve as the cafeteria.
3	Hominy Schools	Acquire new communication equipment including pagers, hand-held radios and radio system upgrade.
4	Hominy Schools	Train school personnel in the proper procedures for dealing with emergency situations.

McCord School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	McCord Public Schools	Secure School Project – install safety doors, metal walls, cameras, and door scanners.
2	McCord Public Schools	Snow/Ice Removal Equipment – Install electric snow/ice melt carpets; snow/ice box blades; and obtain snow blower.
3	McCord Public Schools	Bio Hazard Prevention – Acquire two chemical suits and cleaners/decontaminations, neutral, disinfectant, stabilizing agents.

4	McCord Public Schools	Install surge protection equipment and uninterruptable power sources for electronic reliant school facilities. 5
5	McCord Public Schools	Install 2 large capacity safe rooms/storm shelters for the residential neighborhood and the school campus.
6	McCord Public Schools	Install sidewalks around the school that are above the flood area.
7	McCord Public Schools	Install a retro fit metal roof on the office and cafeteria buildings.
8	McCord Public Schools	Educate students, parents, and staff with written information, handouts, and pamphlets on hazardous materials.

Osage Hills Elementary School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Osage Hills School	Install retro fit metal roof.
2	Osage Hills School	Install a large capacity safe room/storm shelter on the school grounds.
3	Osage Hills School	Acquire equipment to clean-up, treat, or prevent severe winter storms from damaging facilities, roadway, parking lots, and sidewalks.
4	Osage Hills School	Install outdoor sirens and intercom/early warning system.
5	Osage Hills School/Osage County/Local Fire Department	Secure a reliable water supply (hydrant, storage tank) for volunteer fire departments.

Pawhuska Independent School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Pawhuska Schools Administration	Install a large capacity safe room within each school building.
2	Pawhuska Schools Administration	Upgrade surge protection and uninterruptable power sources for electronic reliant school facilities.
3	Pawhuska Schools	Install emergency warning system for playgrounds, bus loading areas, athletic fields and other areas of campus.
4	Pawhuska Schools	Acquire equipment to clean-up, treat, or prevent severe winter storms from damaging facilities, roadways, parking lots, and sidewalks.

Prue Independent School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Prue Schools Administration	Upgrade the surge protection and uninterruptable power sources for the electronic reliant school facilities.
2	Prue Schools Administration	Install Safe Rooms in schools.

Woodland School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	Woodland Schools	Upgrade intercom system at the district's school buildings.
2	Woodland Schools	Install breakage resistant windows.
3	Woodland Schools	Install lightning rods and surge protectors at school buildings.
4	Woodland Schools	Install 2-way radios on school buses.
5	Woodland Schools	Install storm shelters at all school buildings
6	Woodland Schools	Purchase snow removal equipment

Wynona Independent School District Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	School Administration	Provide equipment and vehicles for combating ice storm damage/adverse conditions to public infrastructure.
2	School Administration	Place a storm shelter at the school for faculty and student use.
3	School Administration	Emergency generators to restore power to school and water wells.

Dam Failure Risks

Historical Context**:** There are 11 dams in Osage County that have a hazard category rating of "high" or "significant". Osage County has not experienced flooding due to a dam failure from 1950 to 2010.

Mitigation Strategy / Recommendations from HMP:
No mitigation measures provided for dam failure risks.

Drought

Historical Context**:** Six major drought events have occurred in Oklahoma over the past 50 years. Osage County has experienced **9 drought** events times from 1950 through 2010. Information regarding losses of property or crop damage is not available.

Mitigation Strategy / Recommendations from HMP: Need to ensure adequate long-term water resources for Osage County. Lack of water is damaging to livestock and crops.

Earthquake

Historical Context**:** According to the National Climatic Data Center (NCDC), there have been no earthquake events in Osage County from 1950 to 2010.

Mitigation Strategy / Recommendations from HMP: Osage County does not consider earthquakes to be a significant threat.

Expansive Soils

Historical Context**:** Specific data is not available for Osage County regarding damage due to expansive soils damage to structures due to expansive soils.

Mitigation Strategy / Recommendations from HMP: No Mitigation measures were provided for expansive soils.

Extreme Heat

Historical Context: According to the National Climatic Data Center, from 1950 to 2010, Osage County experienced **9 Extreme Heat** events. No structural damage was recorded for the heat hazard for the county, **but 5 deaths resulted**.

Mitigation Strategy / Recommendations from HMP: Install window air conditions for elderly shut-ins for whom extreme heat can be a life threatening hazard.

Flood

Historical Context**:** Flooding can be connected to development being permitted too close to stream, rivers and floodplains. Flooding can also have devastating impacts to property owners without flood insurance. Osage County has experienced **71 Flood** events from 1950 through 2010 resulting in $992,000 in damage.

Mitigation Strategy / Recommendations from HMP: Implement the best flood control measures to reduce vulnerability of flood-prone properties.

Hail

Historical Context**:** Osage County has reported **524 Hail Events** from 1950 through 2010, with $423,000 in reported damage.

Mitigation Strategy / Recommendations from HMP:

Install Retro-Fit Metal Roof on public buildings to limit hail damage.

Hazardous Materials

Historical Context: The City of Pawhuska Fire Department responded to 17 hazardous material incidents from 2008 to 2010. Several Osage County Fire Departments have developed Hazardous Materials Standard Operating Guides to provide personnel with guidance and assistance in determining incident levels for response to hazardous materials incidents.

High winds

Historical Context**:** Osage County has experienced **441 High Wind** events from 1950 through 2010 resulting in $996,000 in property damage.

Mitigation Strategy / Recommendations from HMP:

Educate and encourage the building trades industry about construction standards that are adequate to withstand frequent high winds.

Lightning

Historical Context According to the NCDC, Osage County has not reported any lightning strikes during the 61-year period from 1950 through 2010. With frequent wind and thunderstorm activity, it is certain that lightning strikes occurred but were just not reported.

Mitigation Strategy / Recommendations from HMP:

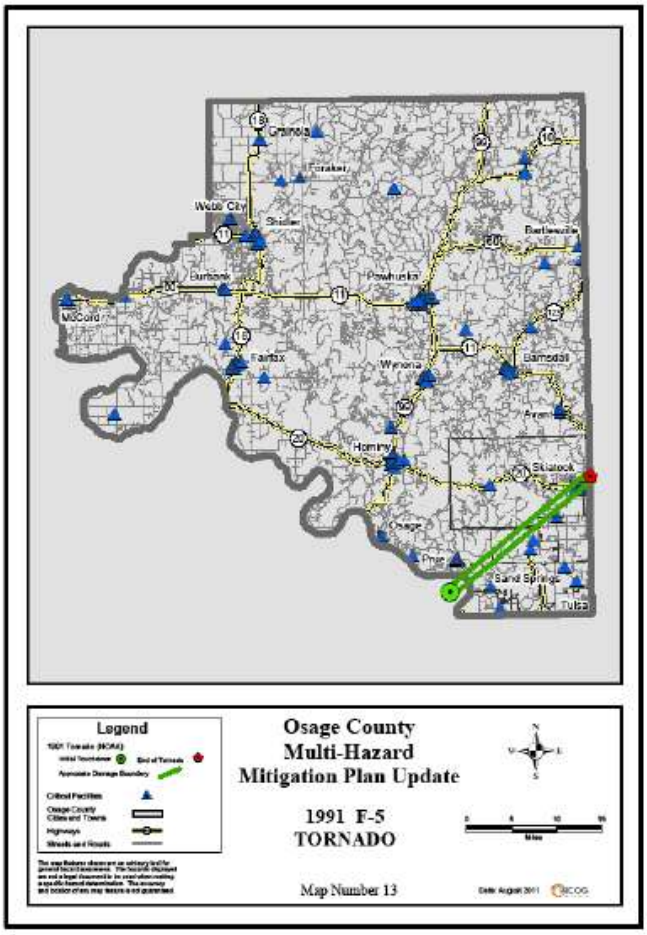
Reduce loss of life and property, and injury due to lightning by increased public awareness of measures to prevent and reduce damage, including warnings.

Tornado

Historical Context: Osage County was hit by an F-5 tornado in 1991 in the southeastern corner of the county. The length of the tornado was approximately 21 miles, its width of impact was reported at 2,550 feet. Overall, Osage County has experienced **73 Tornado** events from 1950 through 2010 resulting in $32,800,000 in property damage.

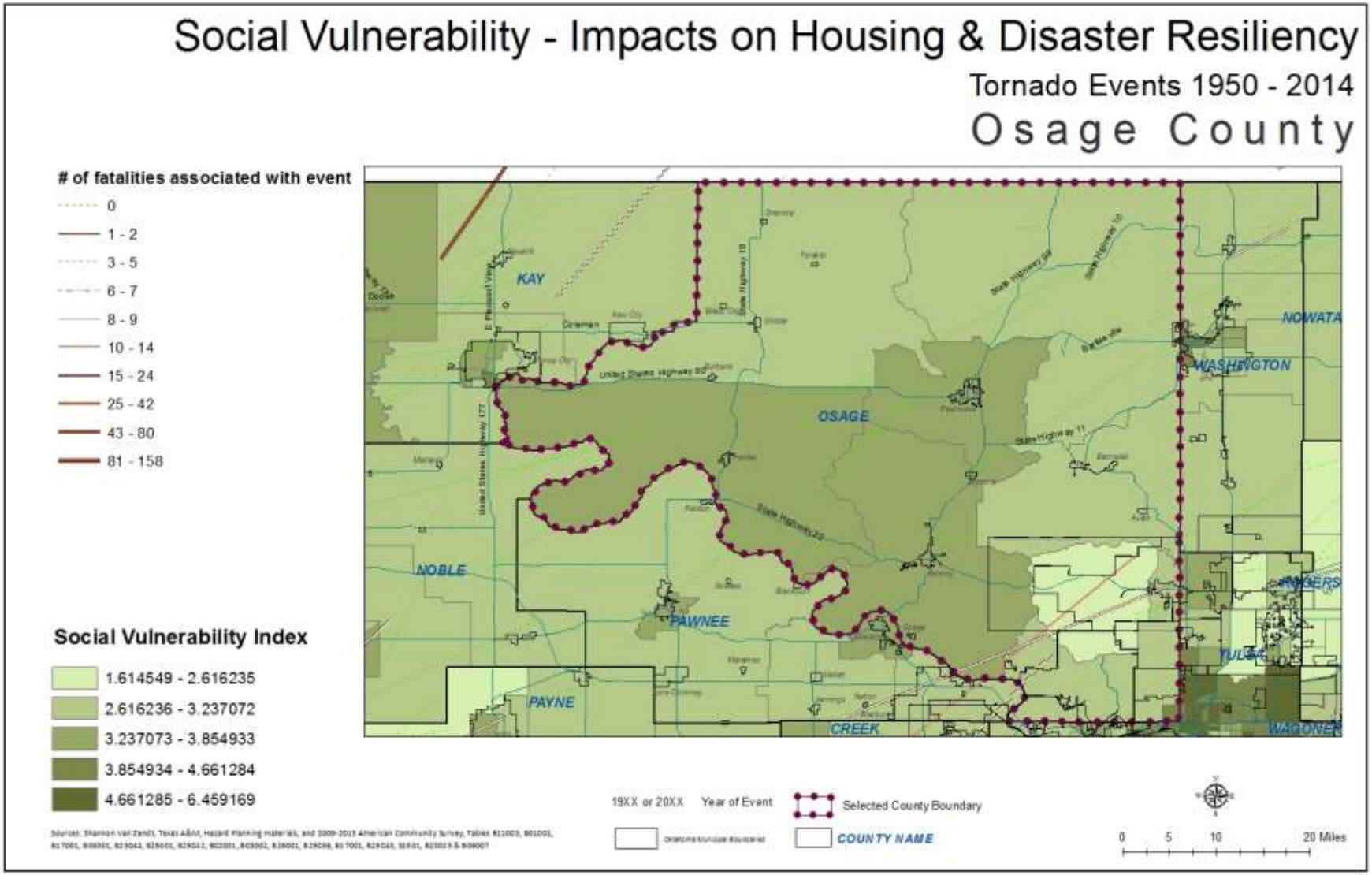
Mitigation Strategy / Recommendations from HMP:

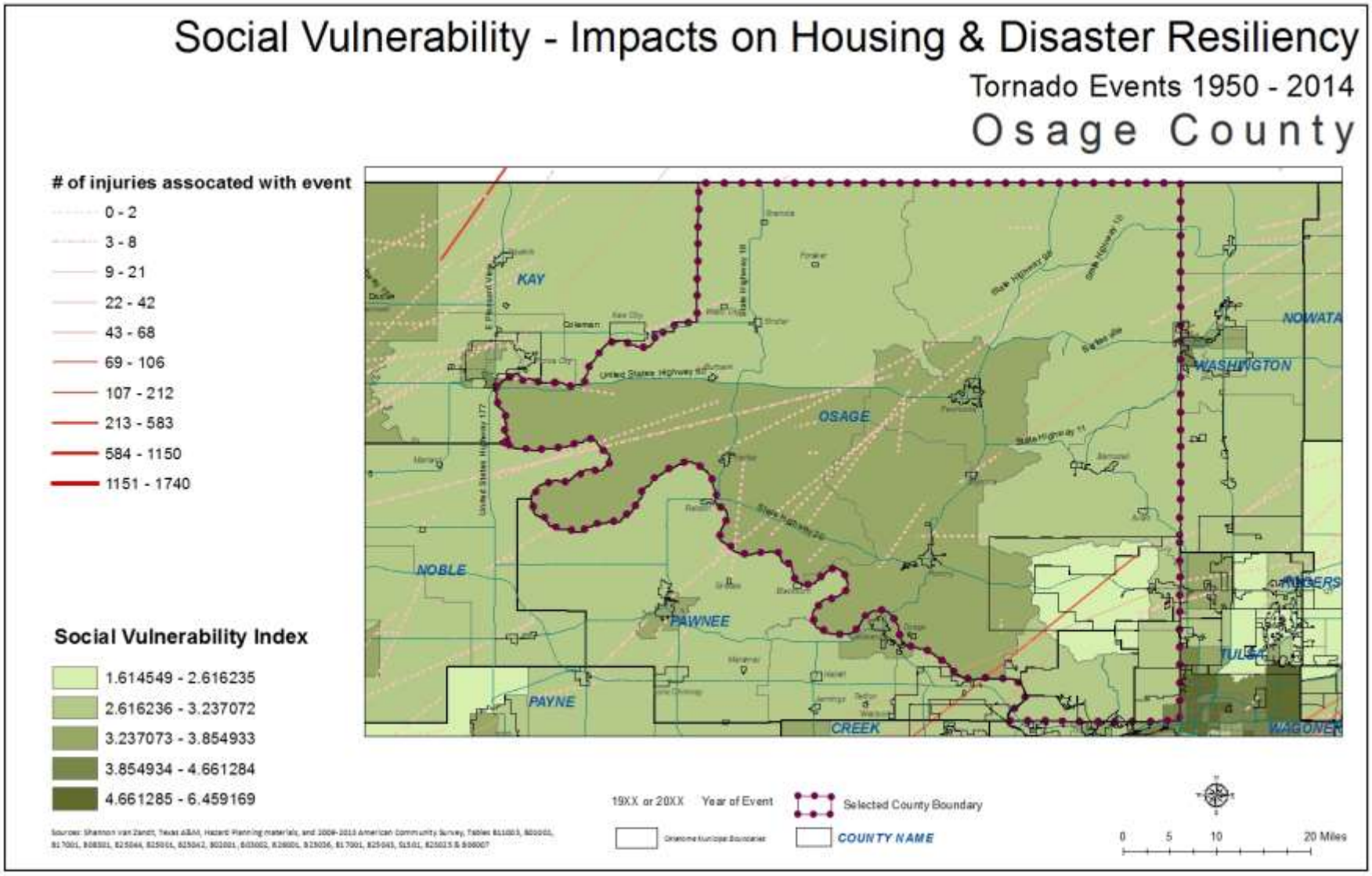
Educate the public about adequate building systems for resistance to tornados and high winds.



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.
NOAA data shows the following historic data on disaster events for the county:

Historic data on tornados between 1950-2014 there are 96 tornados documented. There were 334 injuries that occurred connected to these tornados, with 24 of those injuries happening in the 1991 tornado and 150 injuries occurring in the 1974 tornado. There were 16 fatalities connected to tornadoes during this time period, 14 of which occurred in 1974. Property losses between 1950-1996 ranged from $11,916,553.00 to $119,165,650.00. (The accounting methods used for losses changed in 1996.) The losses estimated between 1996-2014 was $2,680,000.00.


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Osage County
# of fatalities associated with event
0
1 - 2
3 - 5
6 - 7
8 - 9
10 - 14
15 - 24
25 - 42
43 - 80
81 - 158
KAY
NOWATA
WASHINGTON
OSAGE
NOBLE
PAWNEE
PAYNE
CREEK
ROGERS
TULSA
WAGONER
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
0 5 10 20 Miles


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Osage County
# of injuries assocated 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
KAY
NOWATA
WASHINGTON
OSAGE
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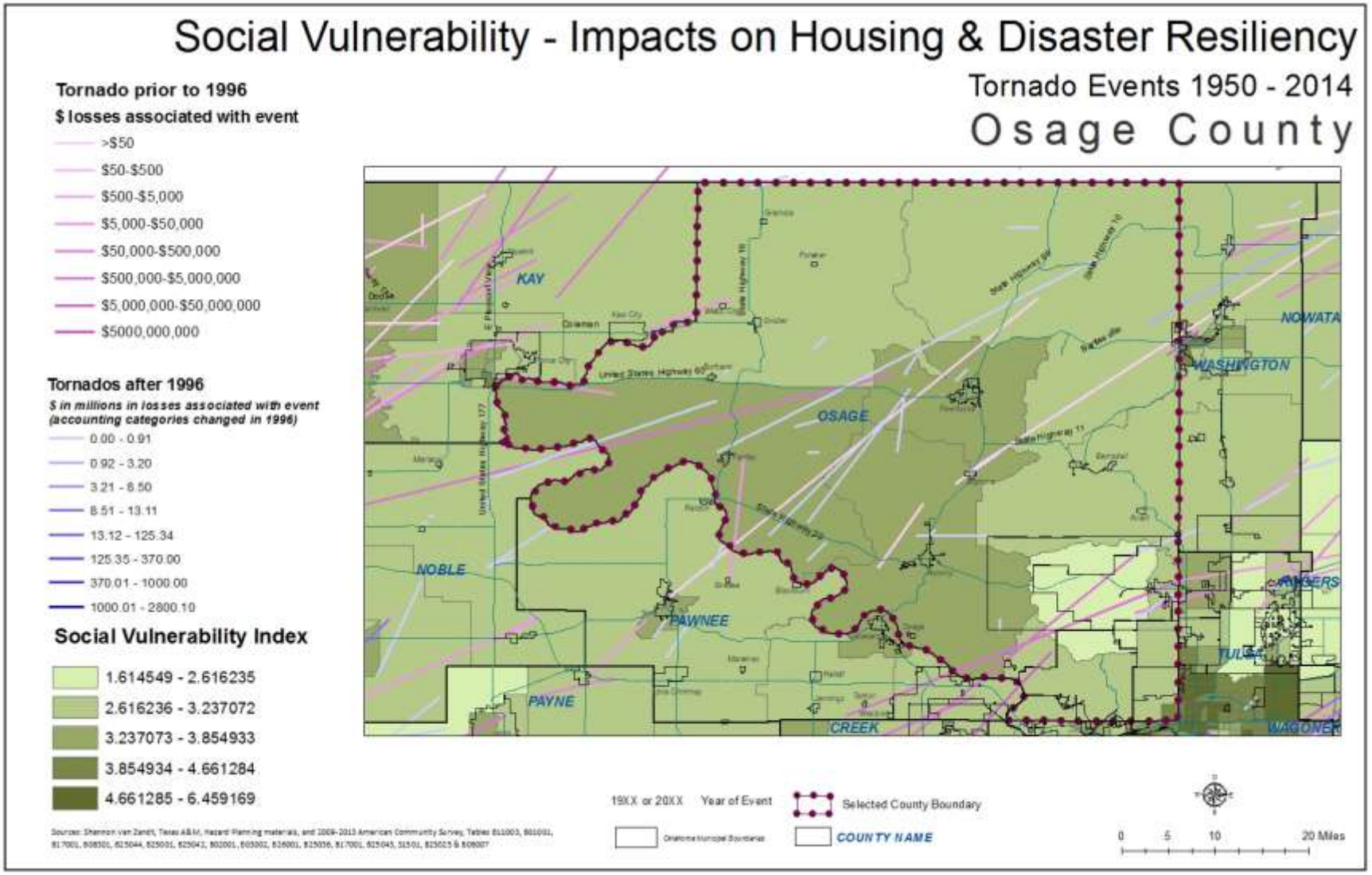
PAYNE
CREEK
TULSA
WAGONER
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 5 10 20 Miles


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Osage County
Tornado prior to 1996
$ losses associated with event
>$50
$50-$500
$500-$5,000
$5,000-$50,000
$50,000-$500,000
$500,000-$5,000,000
$5,000,000-$50,000,000
$5000,000,000
Tornados after 1996
$ in millions in losses associated with event (accounting categories changed in 1996)
0.00 - 0.91
0.92 - 3.20
3.21 - 8.50
8.51 - 13.11
13.12 - 125.34
125.35 - 370.00
370.01 - 1000.00
1000.01 - 2800.10
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
KAY
OSAGE
NOWATA
WASHINGTON
NOBLE
PAWNEE
PAYNE
CREEK
TULSA
WAGONER
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 5 10 20 Miles

Wildfires

Historical Context**:** The City of Pawhuska, alone, responded to 53 grass fire events from 2008 to 2010. Between 2004 and 2008, the Bartlesville Fire Department made a total of **435 runs** related to grass and crop fires that caused **$15,351 in damage**. In 2008, Osage County fire agencies made 199 wildland fire runs with a reported 10,727 acres affected.

Mitigation Strategy / Recommendations from HMP:
Establish fire breaks in the wildfire urban interface.

Winter Storms

Historical Context**:** According to the NCDC, Osage County has experienced **35 Winter Storm** events from 1950 through 2010 resulting in $51,500,000 in property damage.

Mitigation Strategy / Recommendations from HMP:
Develop a contingency plan for responding to a massive power outage due to severe winter storms, ice and snow.

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

Most jurisdictions have elected to not have public shelters in order to discourage people from leaving safe places and ultimately be caught on the road trying to reach a public shelter. Mitigation measures included in the HMP include installing safe rooms/storm shelters in schools and other public facilities.

Osage County has a storm shelter registration program. Residents can e-mail the following address to register their shelters:

osagecountystormshelters@gmail.com

C.2.1.3 Public Policy and Governance to Build Disaster Resiliency

Osage County has adopted and uses the 2000 International Building Codes published by BOCA. The county has numerous fire departments with various ISO fire ratings. Fire Department ISO ratings are set within the Hazard Mitigation Plan.

Osage County Hazard Mitigation Planning Team includes representation by all cities, towns and school districts within the county.

C.2.1.4 Local Emergency Response Agency Structure

The Osage County Emergency Operation Plan was used as a reference in preparing the HMP.

Warning systems may be activated from any level of government by agencies having responsibility to notify the public of imminent danger. At the local level, these warnings are channeled through the Emergency Management Director in order to assign responsibility and ensure control of the warning process.

C.2.1.5 Threat & Hazard Warning Systems

Town of Avant – needs outdoor siren and was included as goal item within the HMP.

Town of Burbank – plans to upgrade their sirens per the HMP.

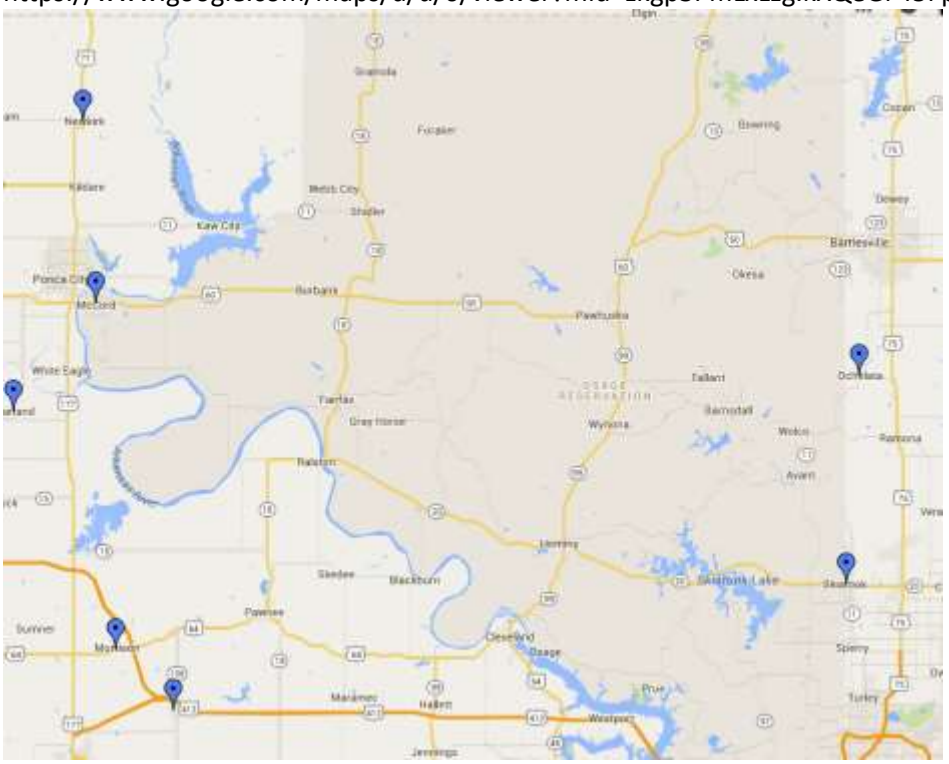
City of Hominy – plans to extend their outdoor sirens to cover the City Lake area better.

Pawhuska has determined a need for five additional sirens per the HMP.

Wynona – plans to upgrade their sirens per the HMP

Osage Hills Elementary School District – plans to upgrade their Outdoor Sirens and Intercom System.

Google Mapped sirens in Oklahoma:
https://www.google.com/maps/d/u/0/viewer?mid=zkgp3PmLxLzg.kXQeGF45FpQg&hl=en



Social Vulnerability Index

By County

Levels of Social Vulnerability Analysis

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

Source: Shannon VanZandt, Texas A&M, Hazard Planning materials; 2009-2013 American Community Survey, Tables B11003, B01001, B17001,

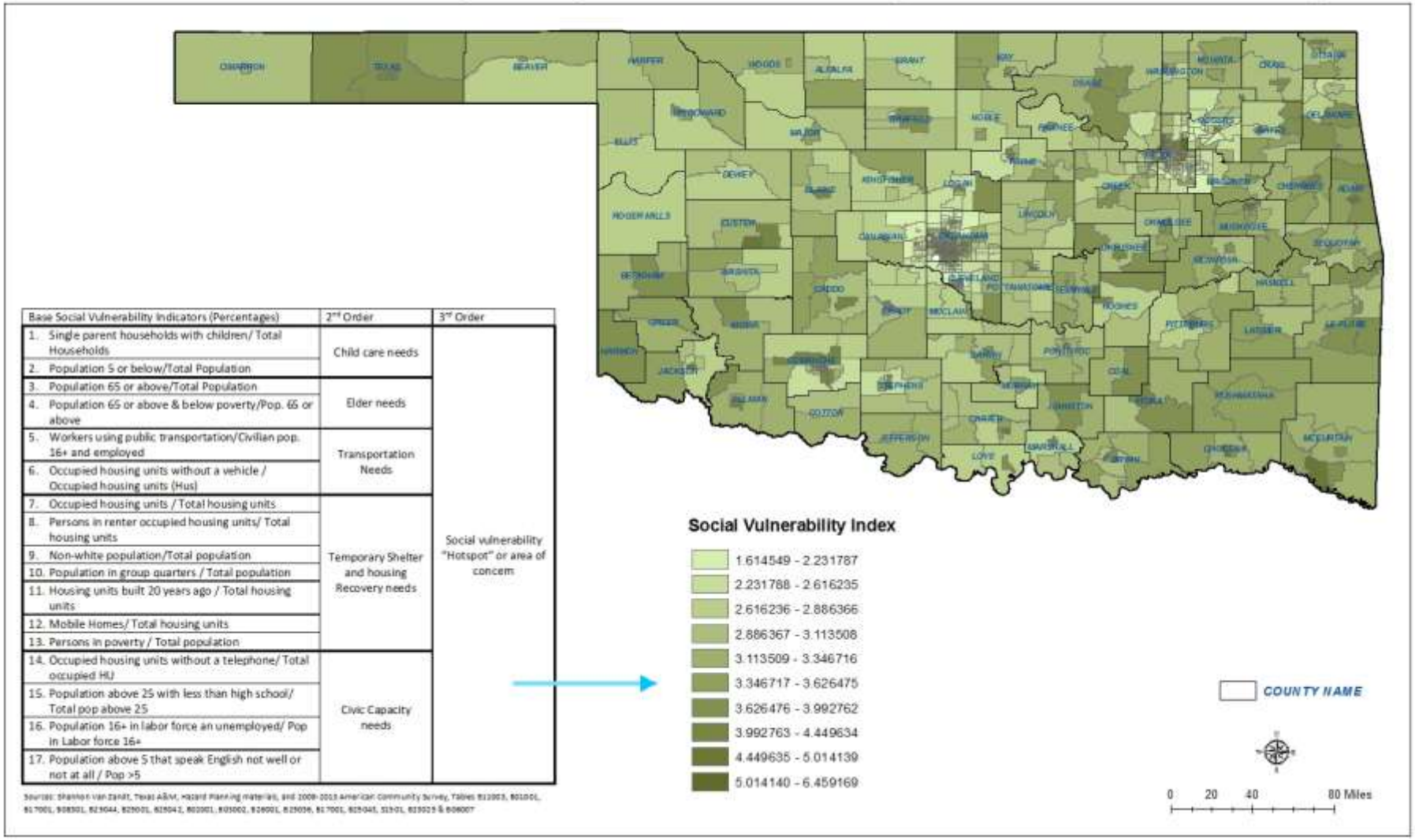
Legend

Social Vulnerabiity "Hot Spots"

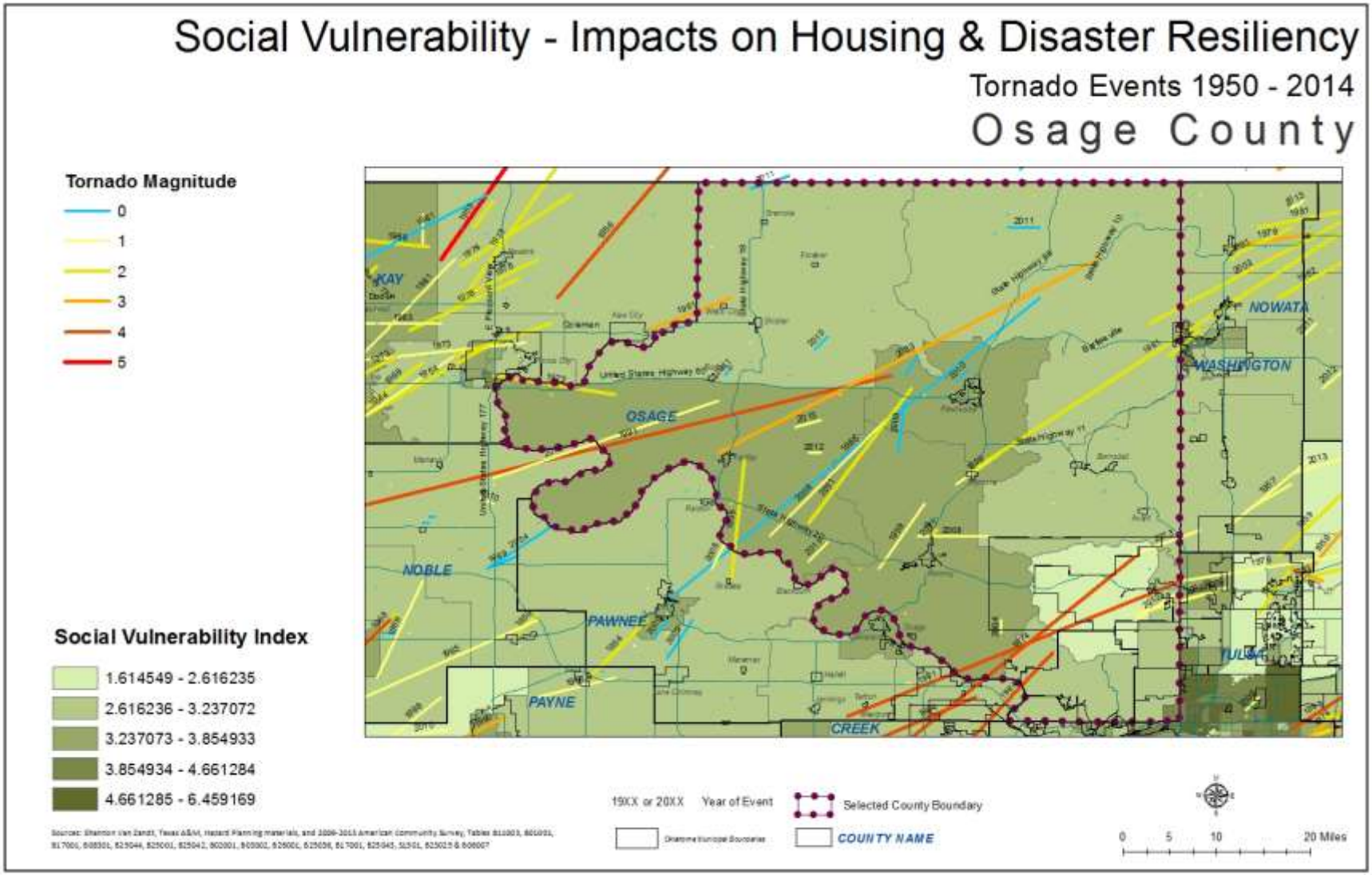
- 2.6340 - 2.9760
- 2.9761 - 3.2170
- 3.2171 - 3.4180
- 3.4181 - 3.6370
- 3.6371 - 3.9500

0 25 50 100 Miles

Social Vulnerability - Impacts on Housing & Disaster Resiliency



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


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Osage County
Tornado Magnitude
0
1
2
3
4
5
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
0 5 10 20 Miles
KAY
OSAGE
NOBLE
PAWNEE
PAYNE
CREEK
WASHINGTON
NOWATA
TULSA

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 great 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. Looking at the census tract level, the western portion of the county, including Pawhuska, has elevated social vulnerability and thus additional efforts to provide assistance for preparation prior to an event, during an event and for recovery may be needed.

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.

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 - Osage County

Base Social Vulnerability Indicators (%)		2nd Order	3rd Order
1.) Single Parent Households	12.58%	0.184 (Child Care Needs)	**3.252 Social Vulnerability 'Hotspot' or Area of Concern**
2.) Population Under 5	5.79%		
3.) Population 65 or Above	16.47%	0.276 (Elder Needs)	
4.) Population 65 or Above & Below Poverty Rate	11.11%		
5.) Workers Using Public Transportation	0.41%	0.056 (Transportation Needs)	
6.) Occupied Housing Units w/o Vehicle	5.19%		
7.) Housing Unit Occupancy Rate	87.53%	2.514 (Temporary Shelter and Housing Recovery Needs)	
8.) Rental Occupancy Rate	21.04%		
9.) Non-White Population	35.52%		
10.) Population in Group Quarters	3.22%		
11.) Housing Units Built Prior to 1990	73.21%		
12.) Mobile Homes, RVs, Vans, etc.	16.36%		
13.) Poverty Rate	14.49%		
14.) Housing Units Lacking Telephones	2.11%	0.223 (Civic Capacity Needs)	
15.) Age 25+ With Less Than High School Diploma	12.40%		
16.) Unemployment Rate	6.81%		
17.) Age 5+ Which Cannot Speak English Well or Not At All	0.94%		

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

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 Osage 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 500 North Central Oklahoma

OK 500 represents the north central region of Oklahoma, including Noble, Osage, Pawnee, Creek, Kay, Payne, Grant, Garfield counties and the City of Enid. There are approximately 136 homeless individuals in this area (100 of which are identified as sheltered). The majority of this population is over the age of 24. Most families with children are sheltered. There is no record of homeless youth and young adults in this region. The largest subpopulations of homeless in OK 500 include: the chronically homeless (29), chronic substance abusers (23), and domestic violence victims (24). The population of domestic violence victims in this area is disproportionately high, possibly because of the limited resources available in the region that address domestic violence.

There are a variety of shelter types available to the homeless in the North Central Oklahoma CoC. Eighty one of the beds are available for the sole purpose of emergency shelter to mixed populations. This CoC appears to have an ample supply of emergency shelter and transitional housing for homeless individuals and families. However, permanent housing options are significantly limited. More funds should be diverted to meet the long term housing needs of the mentally ill, substance abusers, and victims of domestic violence.

OK 500 North Central OK

OK 500 North Central OK	**Emergency Shelter(sheltered)**	**Transitional Housing(sheltered)**	**Unsheltered**	**Total**
Households without children	38	29	29	96
Households with at least 1 adult & 1 child	14	19	7	40
Households with only children	0	0	0	0
total homeless households	52	48	36	136
Persons in households without children	38	29	29	96
persons age 18-24	6	8	8	22
persons over age 24	32	21	21	74
Persons in households with at least 1 adult & 1 child	37	50	18	105
children under age 18	22	28	6	56
persons age 18-24	0	10	2	12
persons over 24	15	12	10	37
persons in households with only 1 children	0	0	0	0
Total homeless persons	75	79	47	201
Subpopulations	**Sheltered**		**Unsheltered**	**Total**
Chronically Homeless	24		5	29
Chronically Homeless Individuals	12		5	17
Chronically Homeless Persons in Families	12		0	12
Severely Mentally Ill	5		7	12
Chronic Substance Abuse	17		6	23
Veterans	7		4	11
HIV/AIDS	0		0	0
Victims of Domestic Violence	24		0	24

CoC Number: OK-500

CoC Name: North Central Oklahoma CoC

Summary of all beds reported by Continuum of Care:

							Subset of Total Bed Inventory		
	Family Units[1]	Family Beds[1]	Adult-Only Beds	Child-Only Beds	Total Yr-Round Beds	Seasonal	Overflow / Voucher	Chronic Beds[2]	Veteran Beds[3]	Youth Beds[3]
Emergency, Safe Haven and Transitional Housing	**50**	**138**	**97**	**0**	**235**	**0**	**26**	**n/a**	**0**	**7**
Emergency Shelter	29	75	52	0	127	0	26	n/a	0	0
Transitional Housing	21	63	45	0	108	n/a	n/a	n/a	0	7
Permanent Housing	**4**	**8**	**9**	**0**	**17**	**n/a**	**n/a**	**5**	**9**	**0**
Permanent Supportive Housing*	1	3	7	0	10	n/a	n/a	5	6	0
Rapid Re-Housing	3	5	2	0	7	n/a	n/a	n/a	3	0
Grand Total	**54**	**146**	**106**	**0**	**252**	**0**	**26**	**5**	**9**	**7**

CoC beds reported by Program Type:

Emergency Shelter for Mixed Populations

								Subset of Total Bed Inventory		
Provider Name	Facility Name	Family Units[1]	Family Beds[1]	Adult-Only Beds	Child-Only Beds	Seasonal	Overflow / Voucher	Total Beds	Chronic Beds[2]	Veteran Beds[3]	Youth Beds[3]
DVPNCO	Emergency Shelter	4	16	4	0	0	0	20	n/a	0	0
Peachtree Landing	Emergency Shelter	2	4	5	0	0	0	9	n/a	0	0
Stillwater DV Program	Emergency Shelter	8	16	2	0	0	0	18	n/a	0	0
YWCA of Enid	Emergency Shelter	8	24	10	0	0	0	34	n/a	0	0
Total		**22**	**60**	**21**	**0**	**0**	**0**	**81**	**n/a**	**0**	**0**

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/AIS and/or persons with alcohol or drug addictions. The Point in Time data estimates that there are nearly 1300 homeless persons with special needs in OKC alone.

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

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

State Name: Oklahoma

Point-in Time Date: 1/29/2015

Summary by household type reported:

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

Summary of persons in each household type:

Persons in households without children[1]	**1,676**	**397**	**623**	**2,696**
Persons Age 18 to 24	214	61	110	385
Persons Over Age 24	1,462	336	513	2,311
Persons in households with at least one adult and one child[2]	**595**	**293**	**108**	**996**
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
Persons in households with only children[3]	**38**	**0**	**47**	**85**
Total Homeless Persons	**2,309**	**690**	**778**	**3,777**

Demographic summary by ethnicity:

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

Demographic summary by gender:

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

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.

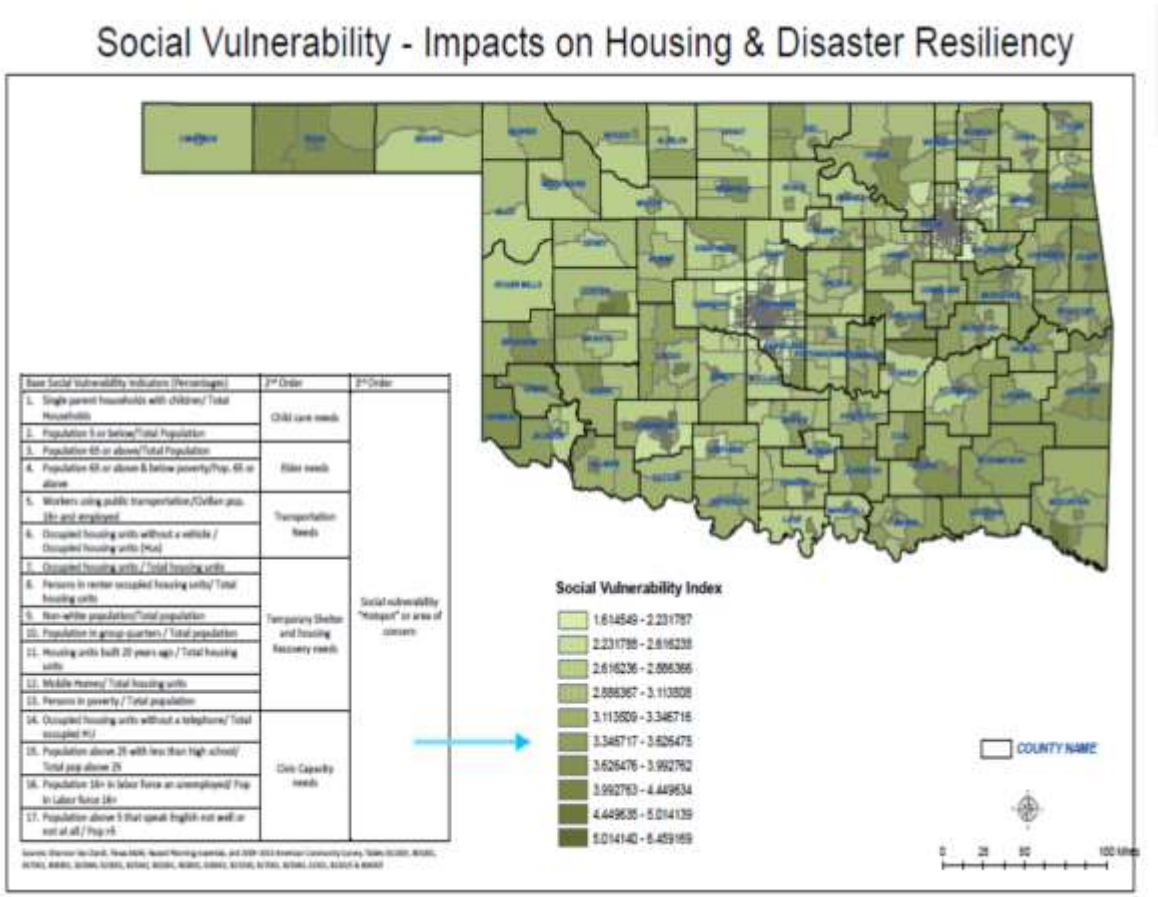
It is not surprising that rural areas typically lack both emergency shelters and temporary housing options. Services that provide temporary housing and provide relief and support services for those who cannot find food are virtually nonexistent in rural communities across the United States (Moore, 2001). 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.



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). 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).

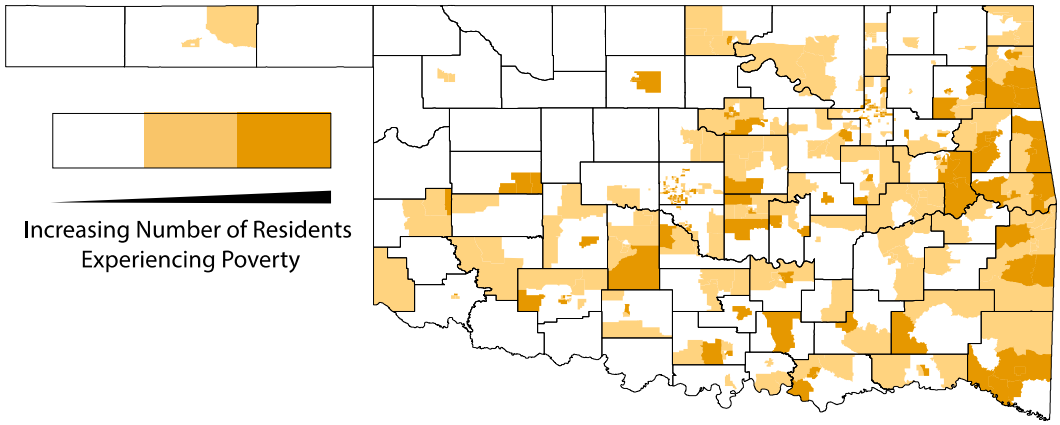
1. Urban/Rural

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

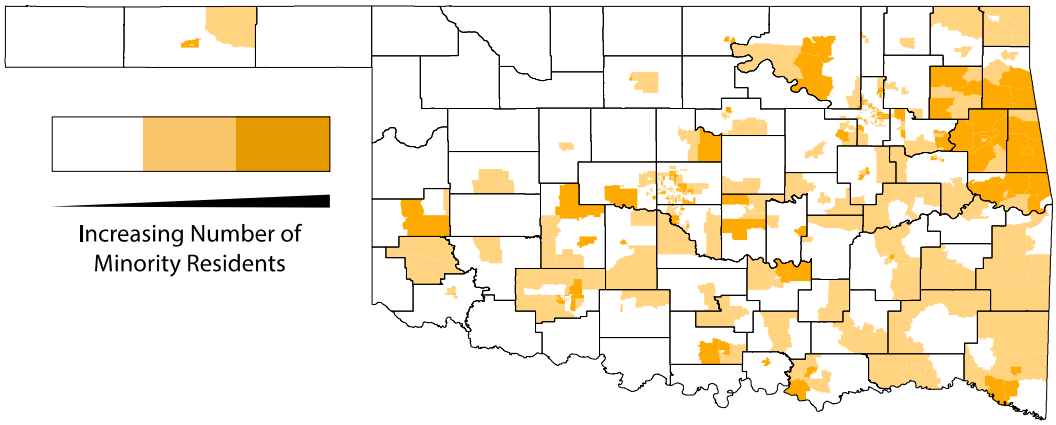
Approximately 70% of affordable housing units in Oklahoma are located in census tracts where the number of residents living in poverty is above the state average. About half of these units are located in areas of extreme poverty, where the number of individuals who are economically vulnerable exceeds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

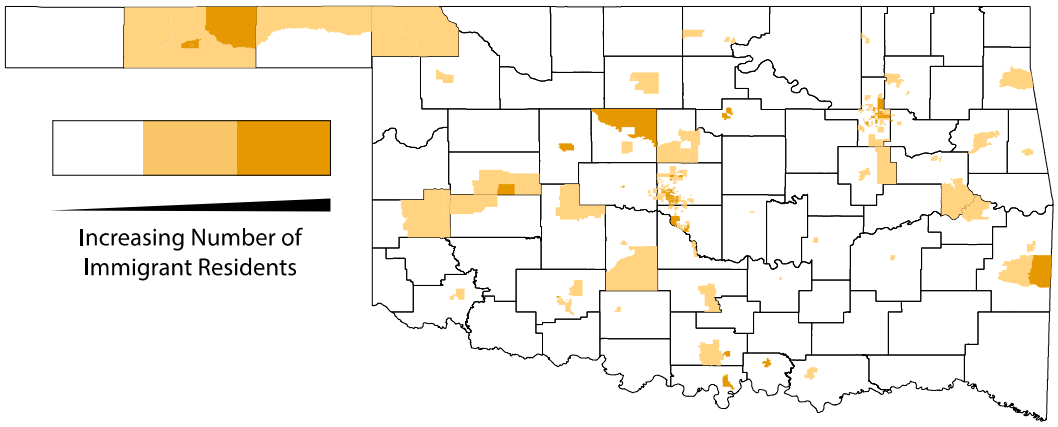
Just over 60% of affordable housing units in Oklahoma are located in census tracts where a majority of the residents are non-white. With just fewer than 24% of the total affordable housing units in census tracts heavily populated with residents who are not white – identified as census tracts where the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

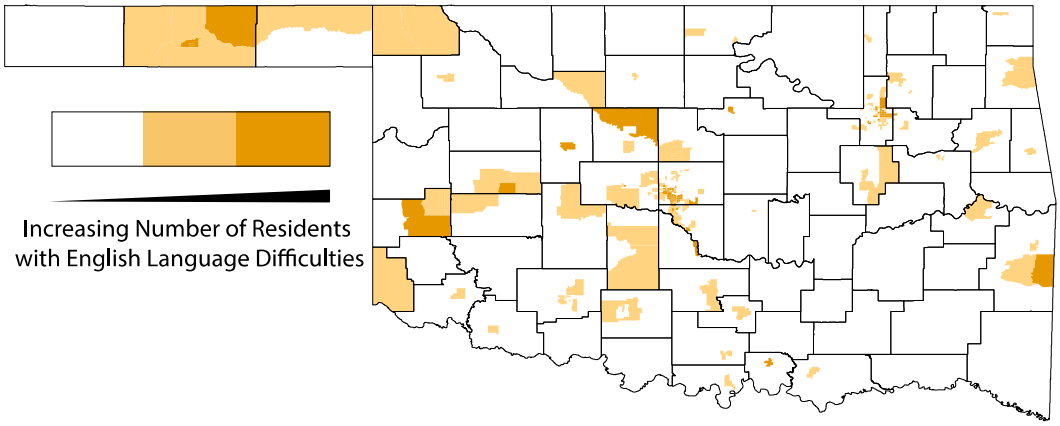
One-third of affordable housing units in Oklahoma are located in census tracts where more than the average number of residents are immigrants. About half of these units are located in areas dense with immigrants, where the number of individuals who are not citizen exceeds 349, more than one standard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

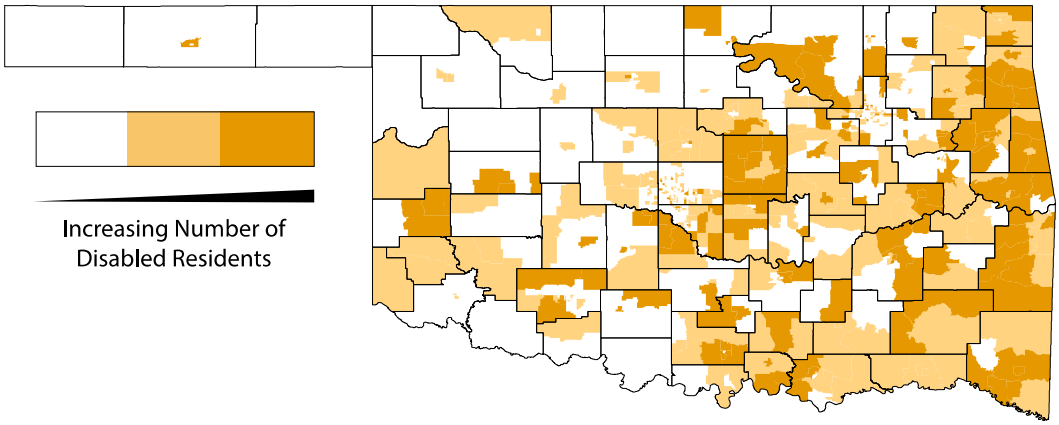
Almost 17,000 existing affordable housing units in Oklahoma are located in census tracts where more residents than average do not speak English very well. A little more than half of these units are located in areas dense with individuals with limited English proficiency, where the number of individuals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

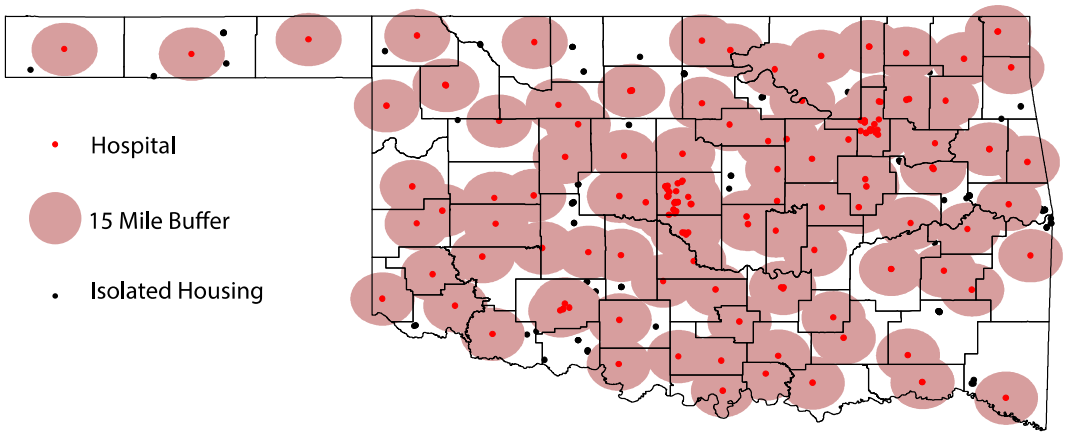
Almost 60% of existing affordable housing units in Oklahoma are located in census tracts where more residents than average have a disability. A little more than half of these units are located in areas dense with individuals with a disability, where the number of individuals who are disabled is greater 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

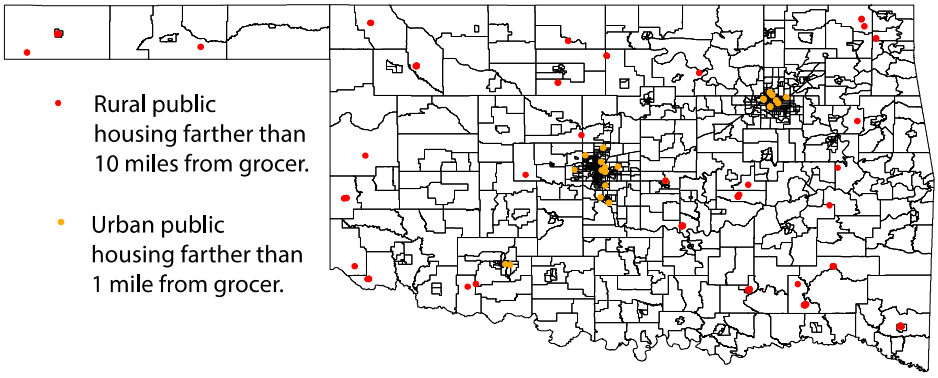
There are no affordable housing units more than 30 miles from a hospital. Approximately 2.6% of affordable housing units are farther than 15 miles from the nearest hospital. As indicated by the larger percentage of Rural Rental Housing Loan units, most of these are located in rural areas.



	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

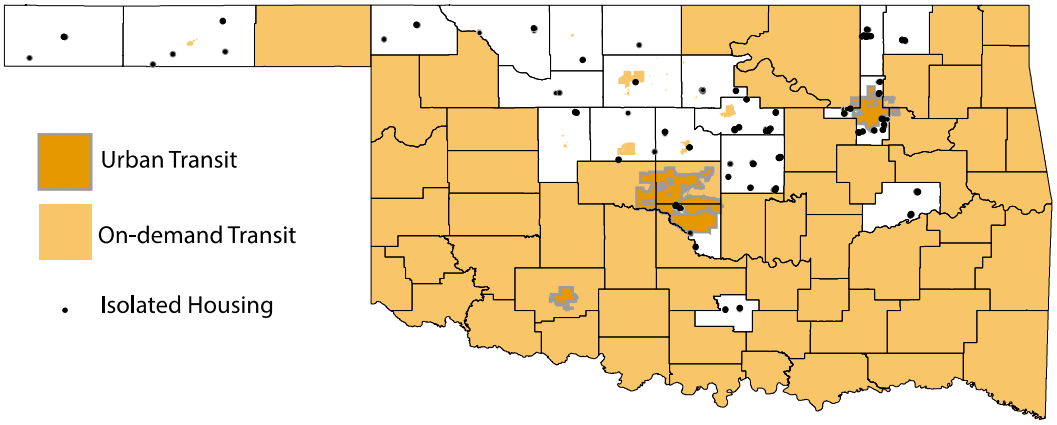
Approximately 7.8% of affordable housing units are in areas that are classified as food deserts. According to the United States Department of Agriculture, food deserts exist in urban environments further than 1 mile from a grocery store and in rural environments further than 10 miles from a grocery store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

Lead-Based Paint Hazards in Oklahoma

	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 & CHAS Tables 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 EBLL cases and proportion of minority population. Zip codes with higher EBLL prevalence and/or minority populations (Hispanic/African American/American Indian) were ranked higher and given the designation as HRTA zip codes.

Osage County Findings

The number of housing units in Osage 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 Osage County, by year of construction. The following table presents the percentage of housing units in the Census Bureau South Region based on the AHHS findings.

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

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

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 Osage 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 Osage County.

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

Total Owner-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	6,590	3.57%	235
1960-1977	4,046	11.18%	452
1940-1959	2,285	38.48%	879
1939 or Earlier	1,650	63.38%	1,046
Total	**14,570**	**17.93%**	**2,612**
Total Renter-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,579	3.57%	56
1960-1977	1,161	11.18%	130
1940-1959	805	38.48%	310
1939 or Earlier	295	63.38%	187
Total	**3,840**	**17.78%**	**683**
Total Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	8,169	3.57%	291
1960-1977	5,207	11.18%	582
1940-1959	3,090	38.48%	1,189
1939 or Earlier	1,945	63.38%	1,233
Total	**18,410**	**17.90%**	**3,295**

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 Osage County with lead-based paint hazards, occupied by households with low-to-moderate incomes, by tenure:

Housing Units in Osage 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	870	3.57%	31
1960-1977	851	11.18%	95
1940-1959	770	38.48%	296
1939 or Earlier	480	63.38%	304
Total	**2,970**	**24.46%**	**727**
Renter-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	888	3.57%	32
1960-1977	567	11.18%	63
1940-1959	260	38.48%	100
1939 or Earlier	165	63.38%	105
Total	**1,880**	**15.94%**	**300**
Total Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,758	3.57%	63
1960-1977	1,418	11.18%	159
1940-1959	1,030	38.48%	396
1939 or Earlier	645	63.38%	409
Total	**4,850**	**21.16%**	**1,026**

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

Housing Units in Osage 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	1,124	3.57%	40
1960-1977	756	11.18%	85
1940-1959	355	38.48%	137
1939 or Earlier	375	63.38%	238
Total	**2,610**	**19.11%**	**499**
Renter-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	427	3.57%	15
1960-1977	243	11.18%	27
1940-1959	180	38.48%	69
1939 or Earlier	60	63.38%	38
Total	**910**	**16.45%**	**150**
Total Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,551	3.57%	55
1960-1977	999	11.18%	112
1940-1959	535	38.48%	206
1939 or Earlier	435	63.38%	276
Total	**3,520**	**18.42%**	**649**

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

To conclude, we estimate that there are a total of 3,295 homes in Osage County containing lead-based paint hazards, 2,612 owner-occupied and 683 renter-occupied. Of the 3,295 homes in the county estimated to have lead-based paint hazards, 1,026 are estimated to be occupied by households with low-incomes (incomes less than 50% of Area Median Income), and 649 are estimated to be occupied by households with moderate incomes (between 50% and 80% of Area Median Income), for a total of 1,675 housing units in Osage 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 Osage County occupied by households with children under the age of six present. For this analysis we apply the lead-based paint hazards percentages from the American Healthy Homes Survey to the data in HUD CHAS Table 13, which details housing units by year of construction, household income, and presence of children under the age of six. The data is presented in the following table:

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

Housing Units < 50% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	362	3.57%	13
1940-1977	418	19.98%	84
1939 or Earlier	129	63.38%	82
Total	**909**	**19.60%**	**178**
Housing Units 50%-80% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	223	3.57%	8
1940-1977	247	19.98%	49
1939 or Earlier	90	63.38%	57
Total	**560**	**20.42%**	**114**
Total LMI Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	585	3.57%	21
1940-1977	665	19.98%	133
1939 or Earlier	219	63.38%	139
Total	**1,469**	**19.91%**	**293**
Total Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,416	3.57%	50
1940-1977	1,254	19.98%	251
1939 or Earlier	269	63.38%	170
Total	**2,939**	**16.04%**	**471**

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

As shown, we estimate there are 471 housing units in Osage County with lead-based paint hazards and children under the age of six present, and that 293 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

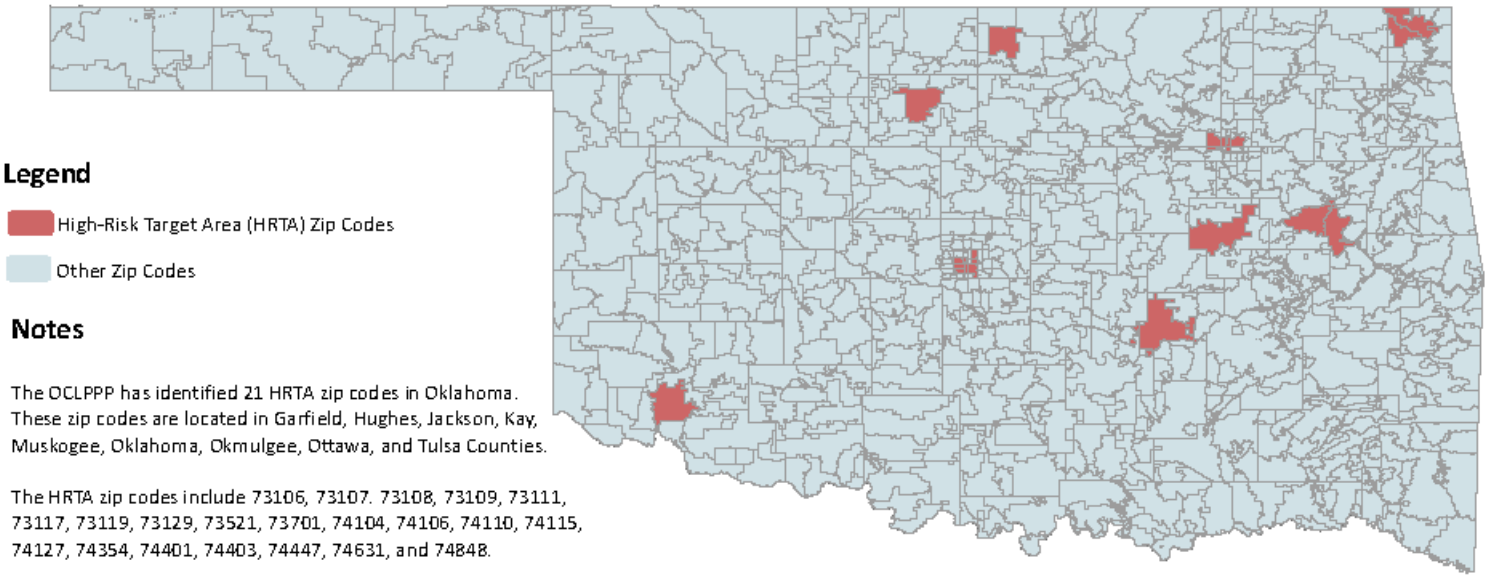
U.S. Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, “American Healthy Homes Survey, Lead and Arsenic Findings”, April 2011

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-RiskTarget 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) prevelence rate; and
4- Zip codes having the highest proportion of minority populations.

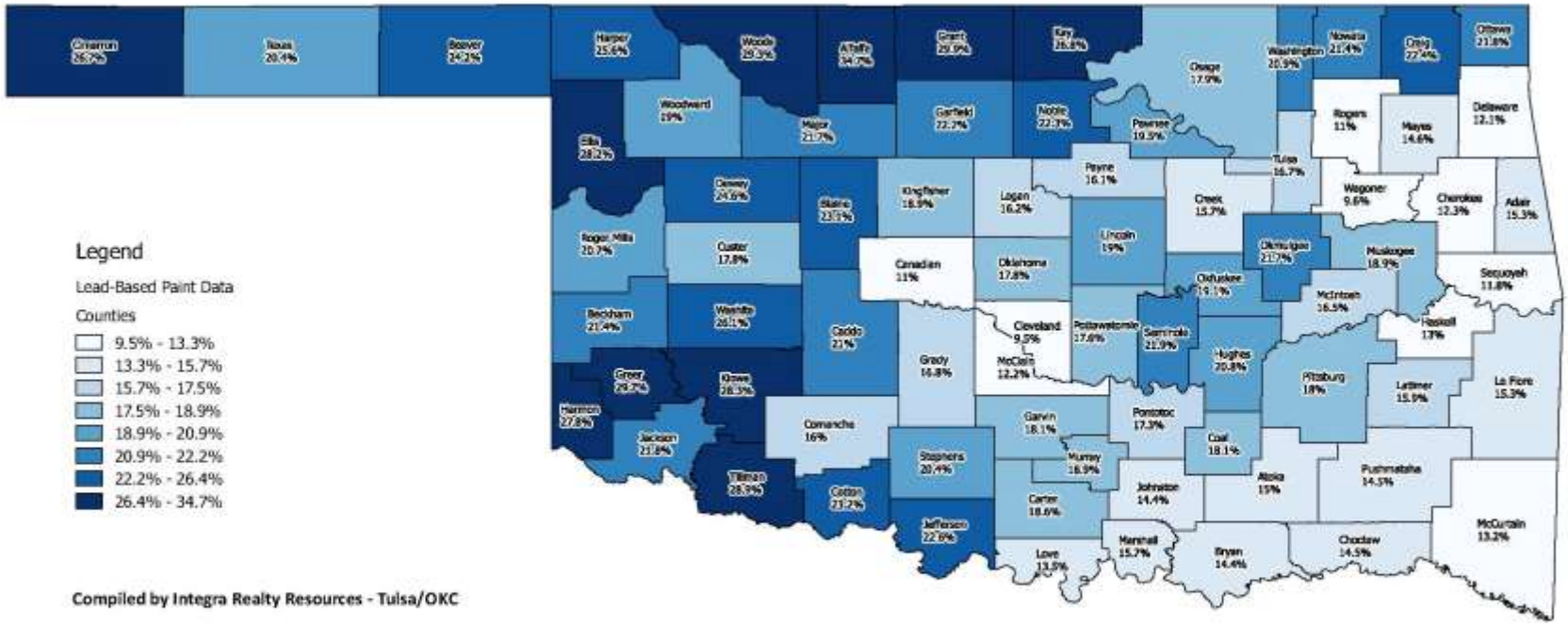
0 40 80 160 Miles

N W E S

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

Exhibit #2

Percentage of Housing Units Containing Lead-Based Paint Hazards

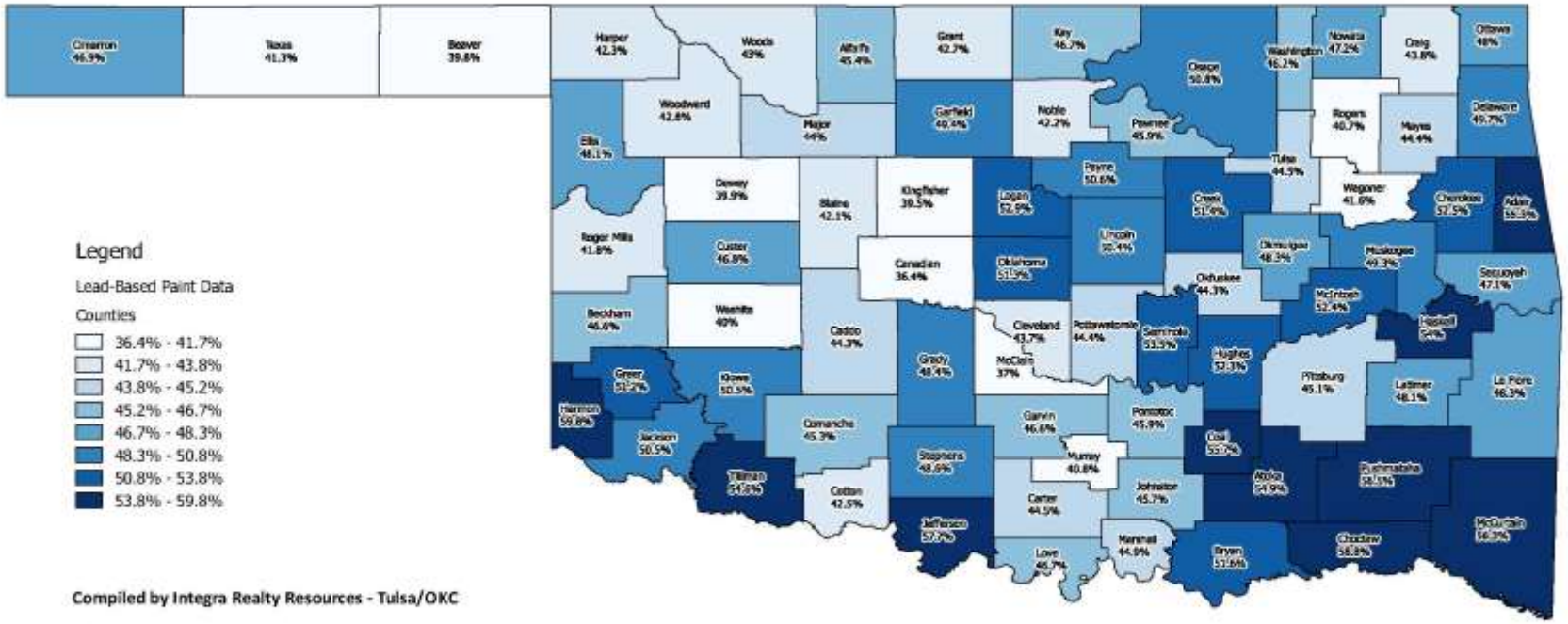


Compiled by Integra Realty Resources - Tulsa/OKC

Sources:
HUD Comprehensive Housing Affordability Strategy Data 2007-2011, Table 13
HUD American Healthy Homes Survey, Table 5-1

Exhibit #3

Percentage of Housing Units Containing Lead-Based Paint Hazards Occupied by Low to Moderate Income Households

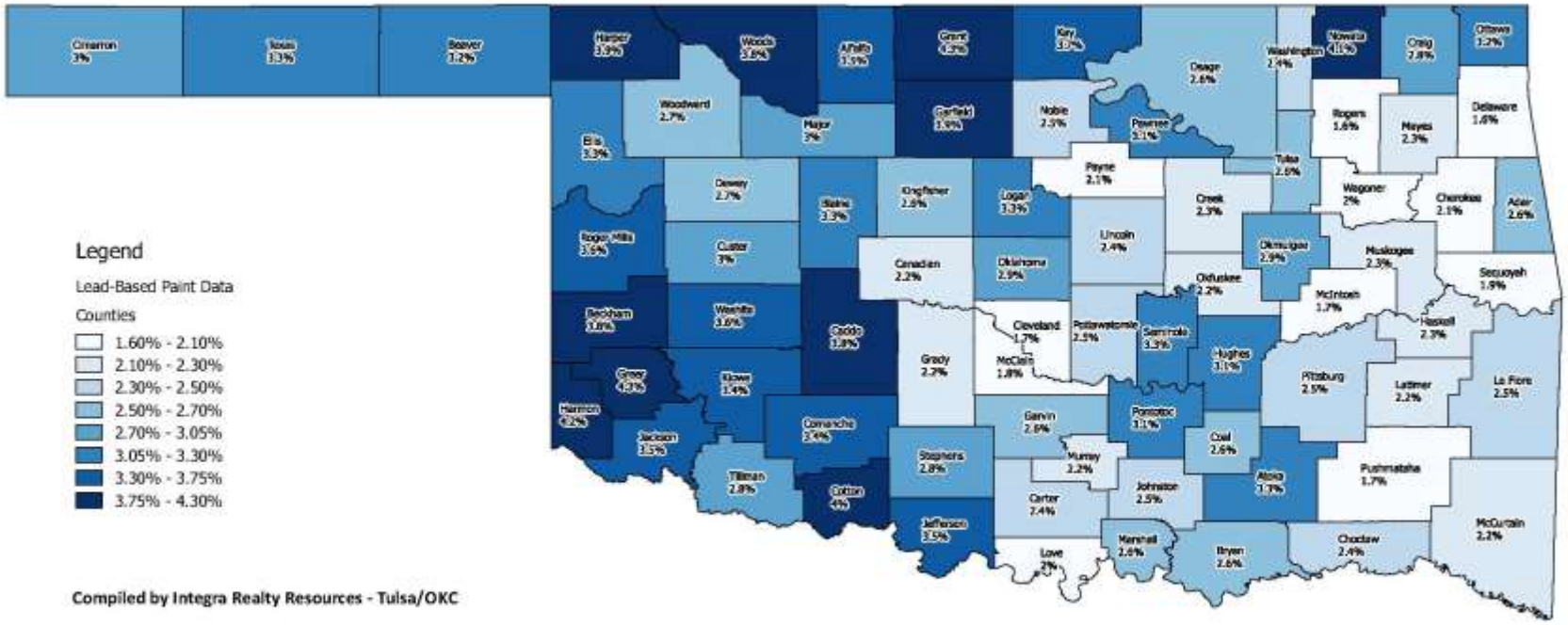


Compiled by Integra Realty Resources - Tulsa/OKC

Sources:
HUD Comprehensive Housing Affordability Strategy Data 2007-2011, Table 13
HUD American Healthy Homes Survey, Table 5-1

Exhibit #4

Percentage of Housing Units Containing Lead-Based Paint Hazards with Children Age 6 or Younger Present

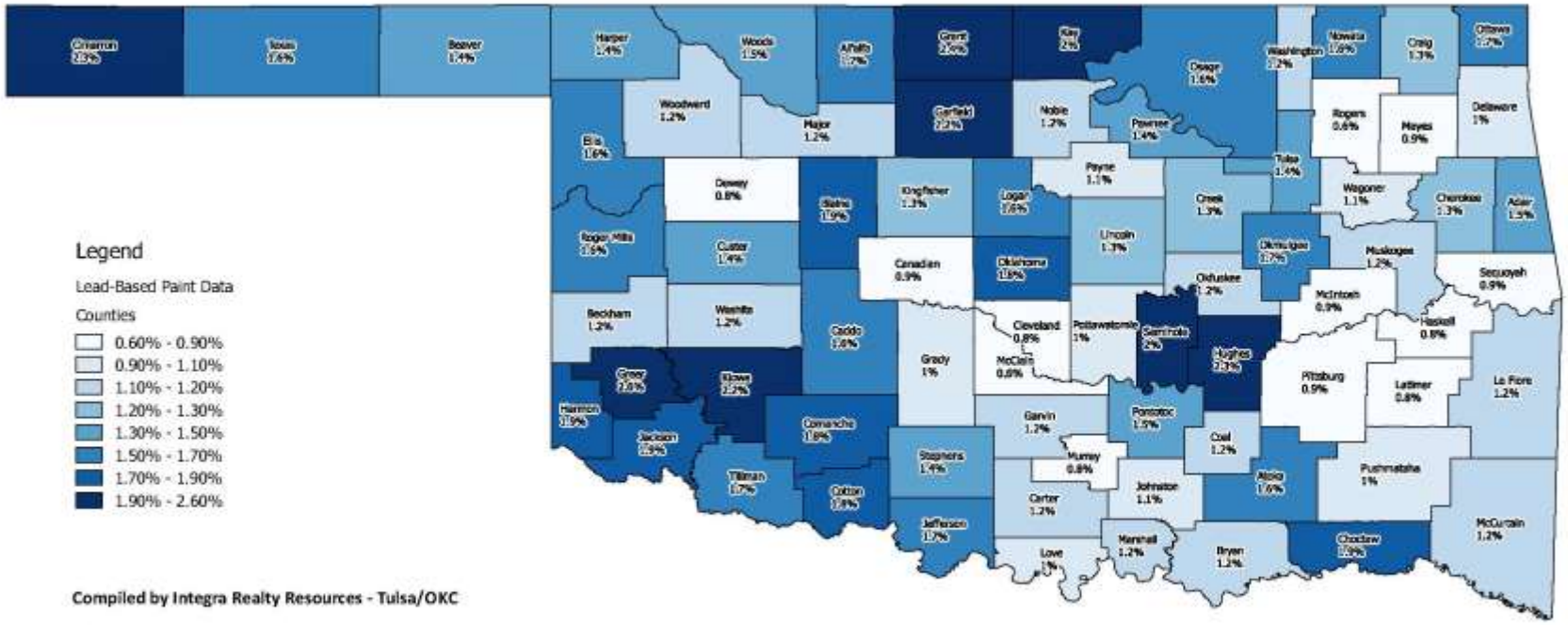


Compiled by Integra Realty Resources - Tulsa/OKC

Sources:
HUD Comprehensive Housing Affordability Strategy Data 2007-2011, Table 13
HUD American Healthy Homes Survey, Table 5-1

Exhibit #5

Percentage of Housing Units Occupied by Low to Moderate Income Households Containing Lead-Based Paint Hazards with Children Age 6 or Younger Present

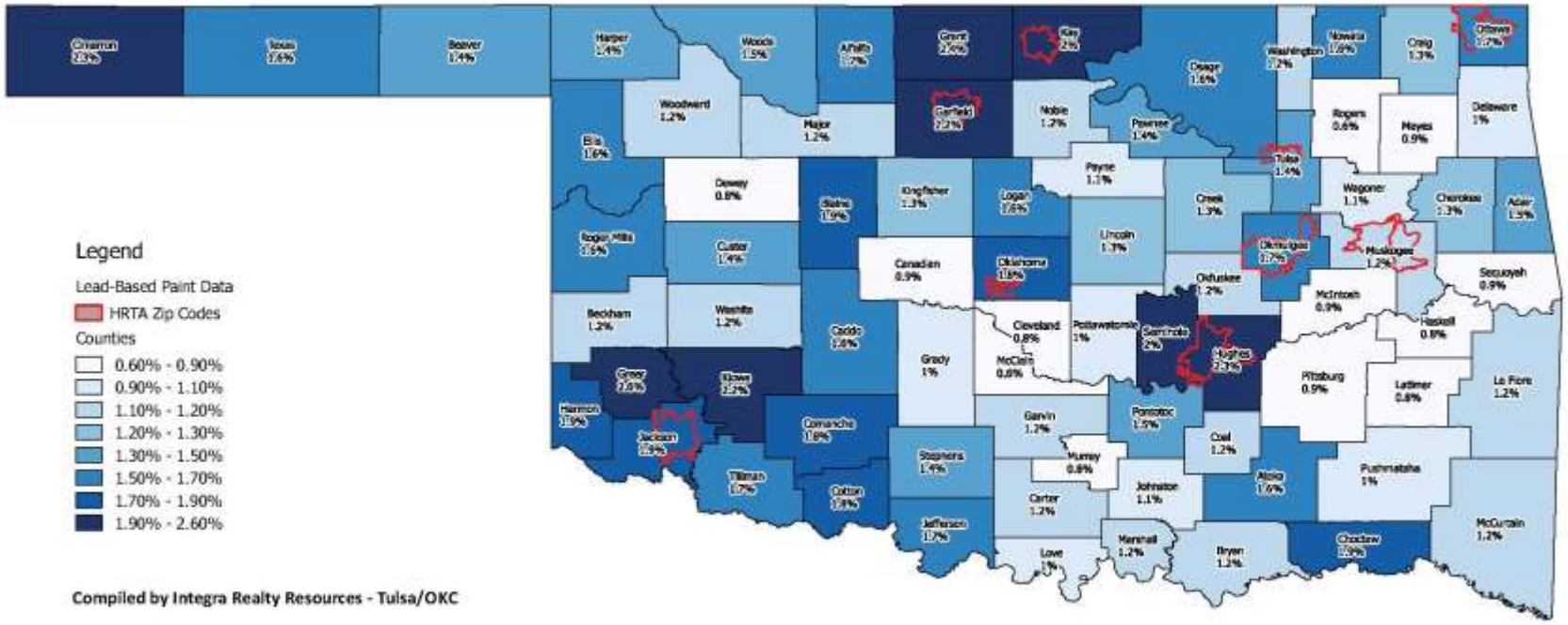


Compiled by Integra Realty Resources - Tulsa/OKC

Sources:
HUD Comprehensive Housing Affordability Strategy Data 2007-2011, Table 13
HUD American Healthy Homes Survey, Table 5-1

Exhibit #6

Percentage of Housing Units Occupied by Low to Moderate Income Households Containing Lead-Based Paint Hazards with Children Age 6 or Younger Present
High-Risk Target Area (HRTA) Zip Codes Highlighted in Red



Compiled by Integra Realty Resources - Tulsa/OKC

Sources:
HUD Comprehensive Housing Affordability Strategy Data 2007-2011, Table 13
HUD American Healthy Homes Survey, Table 5-1

Conclusions

The previous analysis has attempted to describe the state of the residential housing market in Osage 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.

Osage County has undergone slow but steady growth over the last fifteen years, in terms of population, households and employment levels. New population and employment growth has been met with new housing construction, primarily for ownership as no significant new rental development has occurred since the early 2000s. New single family home construction has occurred throughout the county, and particularly in Skiatook. Although some new homes are relatively affordable, many are not: the average sale price of a home constructed after 2010 in Osage County is estimated to be $194,273 or $106.94, which is well above what could be afforded by a household earning at or less than median household income for Osage County.

Osage County has a relatively moderate rate of renters with high rent costs (32.39%) as well as homeowners with high ownership costs (18.57%). The county's poverty rate is also below the state, at 14.49% compared with 16.85% statewide.

In terms of disaster resiliency we note that 96 tornadoes have impacted the county between 1959 and 2014, with 334 injuries and 16 fatalities combined, and that 71 flood events have impacted the county between 1950 and 2010, resulting in $992,000 in damage.

Osage County is located within the North Central Oklahoma Continuum of Care (CoC), which provides services to the area's homeless populations among other functions. Throughout the entire North Central Oklahoma CoC, there are an estimated 201 homeless persons, 154 of which are estimated to be sheltered. This Continuum of Care has large subpopulations of the chronically homeless, chronic substance abusers, and victims of domestic violence, with little in the way of permanent housing options.

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. 42 units are located further than 15 miles from a hospital.

Due to the age of the county's housing stock, lead-based paint hazards are an issue, with an estimated 3,295 occupied housing units with such hazards, and 471 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 Osage County. While the upper end of the market is being satisfied, the lower end of the population that requires rental and moderate cost ownership property has a more limited product available. As the population continues to grow in Osage County as a whole, this demand will continue to increase. We estimate the county will need 338 housing units for ownership and 90 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

Pathways, Patrice Pratt

Women's Resource Center, Vanessa Morrison

AIDS Care Fund, Sunshine Schillings

Addendum B

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

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Integra Realty Resources, Inc.
Corporate Profile

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

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

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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
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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
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HOUSTON, TX - David R. Dominy, MAI, CRE, FRICS
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JACKSONVILLE, FL - Robert Crenshaw, MAI, FRICS
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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' Winius 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

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DAWN EVE JOURDAN, ESQ., PH.D.

Director and Associate Professor
Regional and City Planning
College of Architecture
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Norman, OK 73019-4141
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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 Blounstein Institute (01/06-present)

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

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

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

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

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

AWARDS:

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

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

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

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

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

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

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

COURSES TAUGHT:

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

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

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

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

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

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

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

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

Land Development Law (graduate level, at Texas A&M University)

Historic Preservation Law (graduate level, at Texas A&M University)

Introduction to Urban Planning (undergraduate level, at Texas A&M University and Florida State University)

Attorney-Client Communications (undergraduate level, at Florida State University)

Legal Communications (undergraduate level, at Florida State University)

Environmental Law (continuing education, at Rutgers University)

Historic Preservation Law (continuing education, at Rutgers University)

Ordinance Drafting (continuing education, at Rutgers University)

PUBLICATIONS:

Refereed Journal Articles

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

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

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

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

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

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

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

Land Development Law (graduate level, at Texas A&M University)

Historic Preservation Law (graduate level, at Texas A&M University)

Introduction to Urban Planning (undergraduate level, at Texas A&M University and Florida State University)

Attorney-Client Communications (undergraduate level, at Florida State University)

Legal Communications (undergraduate level, at Florida State University)

Environmental Law (continuing education, at Rutgers University)

Historic Preservation Law (continuing education, at Rutgers University)

Ordinance Drafting (continuing education, at Rutgers University)

PUBLICATIONS:

Refereed Journal Articles

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

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

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

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

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

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

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

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

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

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

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

Books

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

Book Chapters and Entries

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

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

Non-Refereed Publications

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

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

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

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

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

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

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

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

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

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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).

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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 Shmaltsuyev, 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

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

Assistant Professor - University of Oklahoma **Fall 2009 – to present**

- RCPL 5813 Environmental Planning Methods
- RCPL 5513 Subdivision Planning
- RCPL 5493 Transportation and Land Use Planning
- RCPL 5013 History and Theory of Urban Planning
- RCPL 5823 Rural and Regional Planning
- RCPL 5990 Public Health & Built Environment

PREVIOUS RESEARCH POSITIONS & PRACTICE

Texas A&M University **August 2006**
Graduate Assistant **May 2009**

Texas Transportation Institute **August 2003 –**
Graduate Research Assistant **August 2006**

City of Austin - Transportation, Planning & Sustainability Department **August 1998 –**
Principal Planner / Senior Planner **August 2003**

Capital Metropolitan Transportation Authority **April 1994 –**
Land Use/Transportation Planner **August 1998**

PUBLICATIONS & REPORTS

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

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

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

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

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

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

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

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

CONFERENCE & INVITED PRESENTATIONS

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 82nd 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, WS; 2006.

INVITED LECTURES

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

Kansas State University – Big 12 Fellowship

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

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

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

GRANT FUNDING

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

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

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

Assistant Professor 2014 - present
College of Architecture – Division of Regional and City Planning
University of Oklahoma – Norman, OK

Education

Doctor of Philosophy – Policy, Planning, and Development 2014
Sol Price School of Public Policy
University of Southern California - Los Angeles, CA

Dissertation: *Social Construction of the Experience Economy:*
The spatial ecology of outdoor advertising in Los Angeles
Jack Dyckman Award - Best Dissertation in Planning & Development

Committee: David Sloane, PhD
Tridib Banerjee, PhD
Pierrette Hondagneu-Sotelo, PhD (Sociology)

Master of Landscape Architecture 2008
College of Environmental Design
California State Polytechnic University - Pomona, CA

Master of Science – Environmental Policy and Behavior 2000
School of Natural Resources and Environment
University of Michigan - Ann Arbor, MI

Bachelor of Arts – Economics and Environmental Studies 1996
Dornsife College of Letters, Arts, and Sciences
University of Southern California - Los Angeles, CA

Publications

The Prospects and Problems of Integrating Sketch Maps with Geographic Information Systems (GIS) to Understand Environmental Perception: 2014
A case study of mapping youth fear in Los Angeles gang neighborhoods
Environment and Planning B: Planning and Design 41(2): 251-271.
Curtis, J.W., E. Shiau, B. Lowery, D. Sloane, K. Hennigan and A. Curtis

The Prevalence of Harmful Content on Outdoor Advertising in Los Angeles: 2014
Land use, community characteristics, and the spatial inequality of a public health nuisance
American Journal of Public Health 104(4): 658–664.
Lowery, B.C. and D.C. Sloane

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

Assistant Professor 2014-present
University of Oklahoma – College of Architecture
Subdivision and Site Planning (graduate)
Computer Mapping and GIS in Planning (graduate)
Comprehensive Planning Studio (graduate)

Lecturer 2014
University of California, Irvine – School of Social Ecology
Design and Planning Graphics (graduate)

Teaching Assistant 2008-2013
University of Southern California - Sol Price School of Public Policy
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 1999-2000
University of Michigan - School of Natural Resources and Environment
Introduction to Environmental Policy (undergraduate)
Introduction to Natural Resource Management (undergraduate)

Other Experience

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

Curriculum Coordinator 2000
UCLA Labor, Occupational, Safety and Health Program

Research Coordinator 1996 - 1998
The Wild Thornberry's Television Series
Klasky-Csupo Incorporated/Nickelodeon Studios

Activities and Service

Committee Member
University of Oklahoma
Anna Siprikova – Master of City and Regional Planning Thesis 2014 - present

Reviewer
American Journal of Public Health
Council of Educators in Landscape Architecture

Member
American Planning Association
American Public Health Association
American Society of Landscape Architects
Association of American Geographers
Environmental Design Research Association

Member 2014 - present
Creating/Making Facilities Coordination Team
University of Oklahoma – College of Architecture

Member 2013
Billboard and Visual Landscape Visioning Group
City of Los Angeles

Area Chairperson 2010 - 2012
Hollywood Hills West Neighborhood Council – Area 2: Cahuenga Pass
City of Los Angeles

Vice-Chairperson 2010 - 2012
Appointee 2008 - 2012
Cahuenga/Ventura Corridor Specific Plan Review Board
City of Los Angeles - Council District 4

President 2011 - 2012
Member 2000 - 2012
Cahuenga Pass Property Owners' Association

Byron DeBruler
DeBruler, Inc.
8200 NE 139th Street
Edmond, OK 73103
United States of America
Phone: 405/396-2032 Cell Phone: 405/202-1610

BACKGROUND SUMMARY

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

EXPERIENCE

DeBruler, Inc.

Vice President, Oklahoma City, August 2001 to Present

Provide services including:

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

Oklahoma Housing Finance Agency

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

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

While employed by the agency:

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

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

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

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

City of Oklahoma City January 1984 to February 1988
Division Head, Code Inspections Division/Department of Environmental Services
Assistant Superintendent, Utility Services Division/Water Department
Administrative Assistant, Street Maintenance Division, Public Works Department
Management Intern, Personnel Department

EDUCATION
Masters of Public Administration, University of Oklahoma 1983
Bachelor of Arts Political Science, University of Oklahoma, 1979