

Housing Needs Assessment
Kay 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 18, 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.





January 20, 2016

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

SUBJECT: Housing Needs Assessment
 Kay County
 IRR - Tulsa/OKC File No. 140-2015-0049

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 Kay County Residential Housing Market Analysis. Analyst Tyler Bowers personally inspected the Kay County area during the month of December 2015 to collect the data used in the preparation of the Kay County Market Analysis. The University of Oklahoma College of Architecture Division of Regional and City Planning provided consultation, assemblage and analysis of the data for IRR-Tulsa/OKC.

Mr. Dennis Shockley
Oklahoma Housing Finance Agency
January 20, 2016
Page 2

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

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

Respectfully submitted,

Integra Realty Resources - Tulsa/OKC

Owen S. Ard, MAI
Certified General Real Estate Appraiser
Oklahoma Certificate #11245CGA
Telephone: 918-492-4844, x103
Email: oard@irr.com

David A. Puckett
Certified General Real Estate Appraiser
Oklahoma Certificate #12795CGA
Telephone: 918-492-4844, x104
Email: dpuckett@irr.com

Tyler Bowers
Market Analyst



Table of Contents

Introduction and Executive Summary	1	Housing Units Number of Bedrooms and Tenure	31
General Information	4	Housing Units Tenure and Household Income	31
Purpose and Function of the Market Study	4	Housing Units by Year of Construction and Tenure	33
Effective Date of Consultation	4	Substandard Housing	34
Scope of the Assignment	4	Vacancy Rates	35
Data Sources	4	Building Permits	36
Kay County Analysis	6	New Construction Activity	37
Area Information	6	Homeownership Market	38
Access and Linkages	6	Housing Units by Home Value	38
Educational Facilities	7	Kay County Median Home Values by Census Tract	39
Medical Facilities	7	Median Home Values by Census Tract – Ponca City Detail	40
Demographic Analysis	11	Home Values by Year of Construction	41
Population and Households	11	Blackwell Single Family Sales Activity	41
Population by Race and Ethnicity	12	Ponca City Single Family Sales Activity	42
Population by Age	12	Foreclosure Rates	44
Families by Presence of Children	15	Rental Market	45
Population by Presence of Disabilities	16	Gross Rent Levels	45
Group Quarters Population	17	Blackwell Rental Survey Data	46
Household Income Levels	18	Rental Market Vacancy – Blackwell	47
Household Income Trend	19	Ponca City Rental Survey Data	49
Poverty Rates	20	Rental Market Vacancy – Ponca City	49
Economic Conditions	21	Summary of HUD Subsidized Properties	51
Employment and Unemployment	21	Projected Housing Need	56
Employment Level Trends	21	Consolidated Housing Affordability Strategy (CHAS)	56
Unemployment Rate Trends	22	Cost Burden by Income Threshold	56
Employment and Wages by Industrial Supersector	23	Substandard Conditions / Overcrowding by Income Threshold	58
Working Families	26	Cost Burden by Household Type	61
Major Employers	27	Housing Problems by Household Type	63
Commuting Patterns	28		
Housing Stock Analysis	30		
Existing Housing Units	30		
Housing by Units in Structure	30		

Table of Contents

Housing Problems by Race / Ethnicity	65	Conclusions	135
CHAS Conclusions	67		
Overall Anticipated Housing Demand	69	Addenda	
Blackwell Anticipated Demand	69	A. Acknowledgments	
Ponca City Anticipated Demand	69	B. Qualifications	
Kay County Anticipated Demand	70		
Special Topics	72		
Kay County Disaster Resiliency Assessment	73		
C.0 Comprehensive Plans & Hazard Mitigation Plans	73		
C.2.1.1. Historical Data on Natural Disasters and Other Hazards	73		
C.2.1.2; C.2.1.6; C.2.1.7;C.2.1.8 Shelters from Disaster Event	83		
C.2.1.3 Public Policy and Governance to Build Disaster Resiliency	83		
C.2.1.4 Local Emergency Response Agency Structure	83		
C.2.1.5 Threat & Hazard Warning Systems	83		
Social Vulnerability	84		
Homelessness	89		
By Continuum of Care	89		
A Snap Shot of Homelessness in the State	92		
Rural Areas	96		
At Risk For Homelessness	98		
Findings and Recommendations	100		
Fair Housing	103		
Summary	103		
Key Findings:	103		
Recommendations:	103		
Appendix 1: County affordable housing Summaries	118		
Lead-Based Paint Hazards	122		
Kay County Findings	124		

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 Kay County is projected to decline by -0.12% per year over the next five years.
2. Median Household Income in Kay County is estimated to be \$43,100 in 2015, compared with \$47,049 estimated for the State of Oklahoma. The poverty rate in Kay County is estimated to be 18.17%, compared with 16.85% for Oklahoma.
3. Homeowner and rental vacancy rates in Kay County are higher than the state averages.
4. Home values and rental rates in Kay County are also lower than the state averages.
5. Average sale price for homes in Blackwell was \$60,931 in 2015, with an average price per square foot of \$39.46.
6. Average sale price for homes in Ponca City was \$106,656 in 2015, with an average price per square foot of \$62.78.
7. Approximately 35.83% of renters and 16.25% of owners are housing cost overburdened in Kay County.

Disaster Resiliency Specific Findings:

1. Maintain the county HMP
2. Tornadoes (1959-2014): Number: 92 Injuries: 604 Fatalities: 102 Damages (1996-2014): \$5,120,000.00
3. Social Vulnerability: Similar to overall state level at county level; western census tract of the county (Braman, Blackwell, and Tonkawa) has increased scores.
4. Floodplain: The Ponca City Stormwater Master Plan has mapped all the impacted structures subject to flooding and have identified structural improvements to reduce impacts (Ponca City HMP, p. 82).

Homelessness Specific Findings

1. Kay 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: 196
2. Units in mostly non-white enclaves: 168
3. Units nearer elevated number of persons with disabilities: 344

Lead-Based Paint Specific Findings

1. We estimate there are 4,960 occupied housing units in Kay County with lead-based paint hazards.
2. 2,314 of those housing units are estimated to be occupied by low-to-moderate income households.
3. We estimate that 688 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 Kay 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 Kay 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 Kay 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 Kay County, Oklahoma. The analysis will consider existing supply and projected demand and overall market trends in the Kay County area.

Effective Date of Consultation

The Kay County area was inspected and research was performed during December, 2015. The effective date of this analysis is December 18, 2015. The date of this report is January 20, 2016. The market study is valid only as of the stated effective date or dates.

Scope of the Assignment

1. The Kay 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

Kay County Analysis

Area Information

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

Kay County is located in northern Oklahoma. The county is bordered on the north by Kansas, on the west by Grant County, on the south by Osage and Noble counties, and on the east by Osage County. The Kay County Seat is Newkirk, which is located in the southern part of the county. This location is approximately 78.6 miles west of Tulsa and 64.5 miles north of Oklahoma City.

Kay County has a total area of 945 square miles (920 square miles of land, and 25 square miles of water), ranking 27th out of Oklahoma's 77 counties in terms of total area. The total population of Kay County as of the 2010 Census was 46,562 persons, for a population density of 51 persons per square mile of land.

Access and Linkages

The county has above average accessibility to state and national highway systems. There are major highways that intersect within Kay County. These are I-35, US-177, US-77, US-60, OK-11, and OK-156. The nearest interstate highway is I-35, which dissects the county on the west. The county also has an intricate network of county roadways.

Public transportation is provided Cimarron Public Transit System, which operates a demand-response service in both Blackwell and Ponca City. The local market perceives public transportation as average compared to other communities in the region of similar size. However, the primary mode of transportation in this area is private automobiles by far.

Ponca City Regional Airport is located west of Ponca City. Its primary concrete runway is 7,201 feet in length. The airports operations average 168 flights per day. The nearest full-service commercial airport is both the Will Rogers World Airport and the Tulsa International Airport. The city of Blackwell is also served by these airports, as there is no airport within the city and the distance from Oklahoma City and Tulsa are similar in distance.

Educational Facilities

All of the county communities have public school facilities. Ponca City is served by Ponca City Public Schools which is comprised of seven elementary schools, two middle schools, one high school, and one alternative school. Higher education opportunities in Ponca City include Northern Oklahoma College University Center and the Pioneer Area Vocational College.

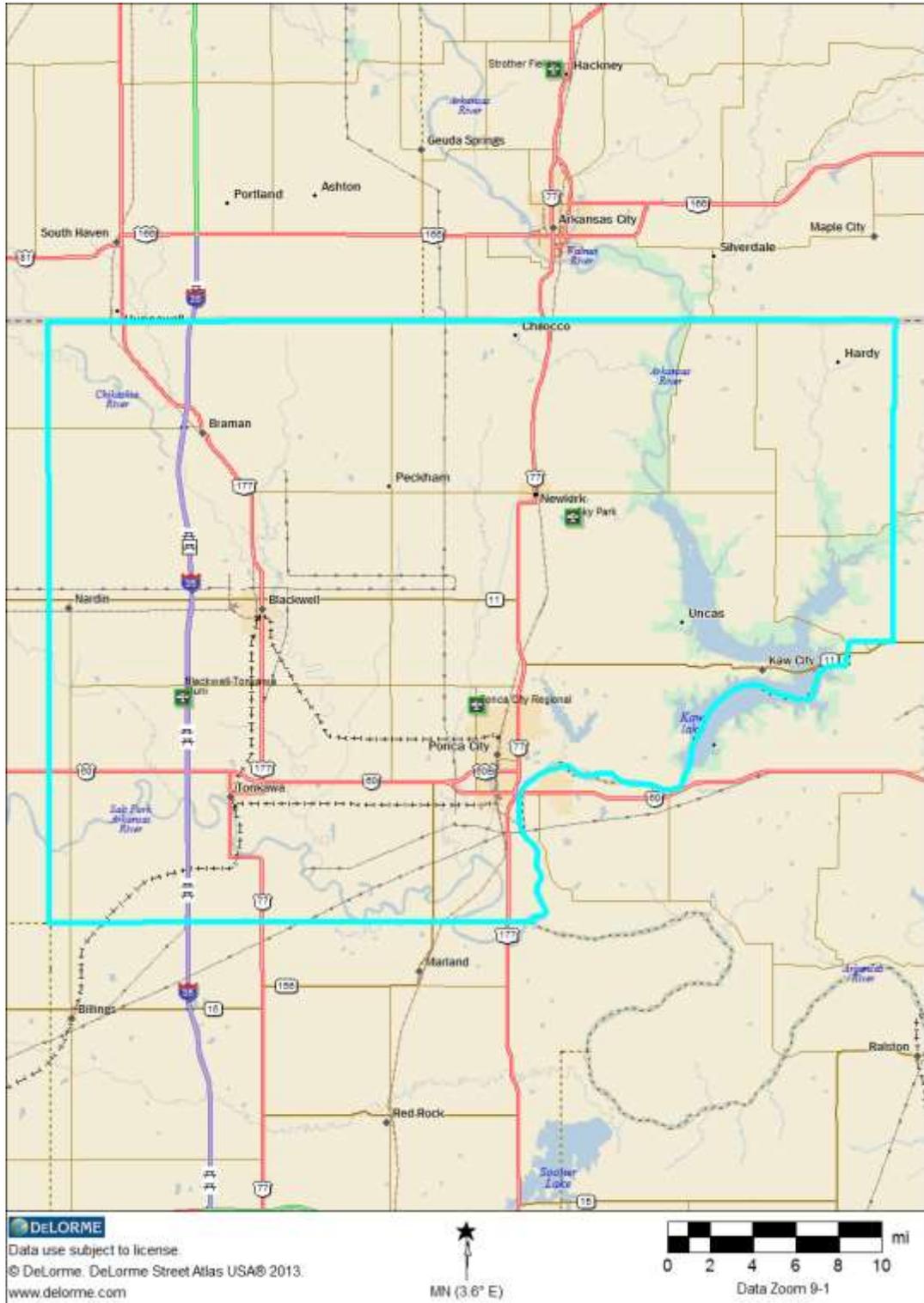
Blackwell is served by the Blackwell Public Schools which is comprised of one elementary school, one middle school, and one high school. There are no higher education opportunities available in Blackwell. The Northern Oklahoma College is located 9.6 miles south in Tonkawa and is the closest higher education institution to Blackwell.

Medical Facilities

Ponca City medical services are provided by the Ponca City Medical Center, part of Alliance Health, an acute-care, full-service hospital offering emergency care and many additional medical procedures. The smaller county communities typically have either small outpatient medical services or doctor's officing in the community.

Blackwell medical services are provided by Integris Blackwell Regional Hospital, an acute care hospital, offering emergency care, in and outpatient services, and additional medical procedures. The smaller county communities typically have either small outpatient medical services or doctor's officing in the community.

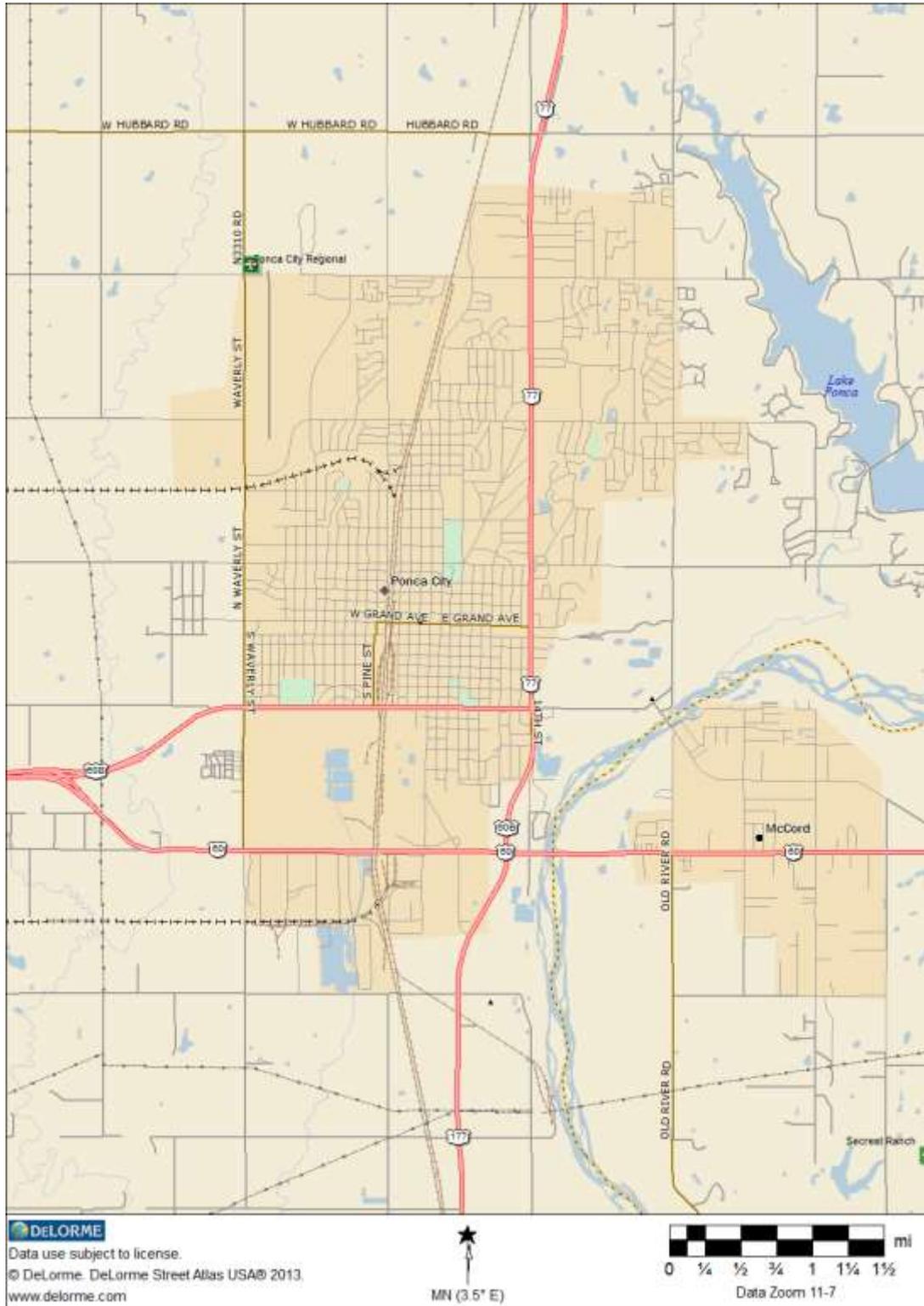
Kay County Area Map



Blackwell Area Map



Ponca City Area Map



Demographic Analysis

Population and Households

The following table presents population levels and annualized changes in Kay 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
Blackwell	7,668	7,092	-0.78%	6,802	-0.83%	6,678	-0.37%
Ponca City	25,919	25,387	-0.21%	24,898	-0.39%	24,840	-0.05%
Kay County	48,080	46,562	-0.32%	45,327	-0.54%	45,052	-0.12%
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 Kay County was 46,562 persons as of the 2010 Census, a -0.32% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Kay County to be 45,327 persons, and projects that the population will show -0.12% annualized decline over the next five years.

The population of Blackwell was 7,092 persons as of the 2010 Census, a -0.78% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Blackwell to be 6,802 persons, and projects that the population will show -0.37% annualized decline over the next five years.

The next table presents data regarding household levels in Kay 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.

Population Levels and Annual Changes							
	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Blackwell	7,668	7,092	-0.78%	6,802	-0.83%	6,678	-0.37%
Ponca City	25,919	25,387	-0.21%	24,898	-0.39%	24,840	-0.05%
Kay County	48,080	46,562	-0.32%	45,327	-0.54%	45,052	-0.12%
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

As of 2010, Kay County had a total of 18,577 households, representing a -0.31% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Kay County to have 18,102 households. This number is expected to experience a -0.10% annualized rate of decline over the next five years.

As of 2010, Blackwell had a total of 2,840 households, representing a -0.76% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Blackwell to have 2,713 households. This number is expected to experience a -0.39% annualized rate of decline over the next five years.

As of 2010, Ponca City had a total of 10,395 households, representing a -0.23% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Ponca City to have 10,218 households. This number is expected to experience a 0.01% annualized rate of decline over the next five years.

Population by Race and Ethnicity

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

2013 Population by Race and Ethnicity

Single-Classification Race	Blackwell		Ponca City		Kay County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	7,032		25,152		46,122	
White Alone	5,874	83.53%	19,900	79.12%	36,932	80.07%
Black or African American Alone	11	0.16%	752	2.99%	799	1.73%
Amer. Indian or Alaska Native Alone	272	3.87%	2,071	8.23%	3,785	8.21%
Asian Alone	0	0.00%	249	0.99%	297	0.64%
Native Hawaiian and Other Pac. Isl. Alone	0	0.00%	27	0.11%	31	0.07%
Some Other Race Alone	380	5.40%	478	1.90%	1,045	2.27%
Two or More Races	495	7.04%	1,675	6.66%	3,233	7.01%
Population by Hispanic or Latino Origin	Blackwell		Ponca City		Kay County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	7,032		25,152		46,122	
Hispanic or Latino	933	13.27%	1,655	6.58%	3,113	6.75%
<i>Hispanic or Latino, White Alone</i>	411	44.05%	829	50.09%	1,444	46.39%
<i>Hispanic or Latino, All Other Races</i>	522	55.95%	826	49.91%	1,669	53.61%
Not Hispanic or Latino	6,099	86.73%	23,497	93.42%	43,009	93.25%
<i>Not Hispanic or Latino, White Alone</i>	5,463	89.57%	19,071	81.16%	35,488	82.51%
<i>Not Hispanic or Latino, All Other Races</i>	636	10.43%	4,426	18.84%	7,521	17.49%

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

In Kay County, racial and ethnic minorities comprise 23.06% of the total population. Within Blackwell, racial and ethnic minorities represent 22.31% of the population. Within Ponca City, the percentage is 24.18%.

Population by Age

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

Kay County Population By Age								
	2010	Percent	2015	Percent	2020	Percent	2000 - 2015	2015 - 2020
	Census	of Total	Estimate	of Total	Forecast	of Total	Ann. Chng.	Ann. Chng.
Population by Age	46,562		45,327		45,052			
Age 0 - 4	3,348	7.19%	3,266	7.21%	3,288	7.30%	-0.49%	0.13%
Age 5 - 9	3,121	6.70%	3,132	6.91%	3,159	7.01%	0.07%	0.17%
Age 10 - 14	3,298	7.08%	3,093	6.82%	3,053	6.78%	-1.28%	-0.26%
Age 15 - 17	2,014	4.33%	1,893	4.18%	1,886	4.19%	-1.23%	-0.07%
Age 18 - 20	1,965	4.22%	1,899	4.19%	1,918	4.26%	-0.68%	0.20%
Age 21 - 24	1,977	4.25%	2,293	5.06%	2,399	5.32%	3.01%	0.91%
Age 25 - 34	5,490	11.79%	5,183	11.43%	5,176	11.49%	-1.14%	-0.03%
Age 35 - 44	5,003	10.74%	4,911	10.83%	4,937	10.96%	-0.37%	0.11%
Age 45 - 54	6,503	13.97%	5,463	12.05%	4,684	10.40%	-3.43%	-3.03%
Age 55 - 64	5,911	12.69%	5,898	13.01%	5,563	12.35%	-0.04%	-1.16%
Age 65 - 74	4,073	8.75%	4,499	9.93%	5,148	11.43%	2.01%	2.73%
Age 75 - 84	2,747	5.90%	2,610	5.76%	2,604	5.78%	-1.02%	-0.05%
Age 85 and over	1,112	2.39%	1,187	2.62%	1,237	2.75%	1.31%	0.83%
<i>Age 55 and over</i>	<i>13,843</i>	<i>29.73%</i>	<i>14,194</i>	<i>31.31%</i>	<i>14,552</i>	<i>32.30%</i>	<i>0.50%</i>	<i>0.50%</i>
<i>Age 62 and over</i>	<i>8,593</i>	<i>18.46%</i>	<i>8,878</i>	<i>19.59%</i>	<i>9,421</i>	<i>20.91%</i>	<i>0.65%</i>	<i>1.19%</i>
Median Age	39.1		38.9		38.3		-0.10%	-0.31%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Kay County is 38.9 years. This compares with the statewide figure of 36.6 years. Approximately 7.21% of the population is below the age of 5, while 19.59% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 1.19% per year.

Blackwell Population By Age								
	2010	Percent	2015	Percent	2020	Percent	2000 - 2015	2015 - 2020
	Census	of Total	Estimate	of Total	Forecast	of Total	Ann. Chng.	Ann. Chng.
Population by Age	7,092		6,802		6,678			
Age 0 - 4	505	7.12%	505	7.42%	504	7.55%	0.00%	-0.04%
Age 5 - 9	488	6.88%	482	7.09%	487	7.29%	-0.25%	0.21%
Age 10 - 14	540	7.61%	473	6.95%	462	6.92%	-2.61%	-0.47%
Age 15 - 17	321	4.53%	308	4.53%	282	4.22%	-0.82%	-1.75%
Age 18 - 20	295	4.16%	275	4.04%	265	3.97%	-1.39%	-0.74%
Age 21 - 24	275	3.88%	358	5.26%	375	5.62%	5.42%	0.93%
Age 25 - 34	833	11.75%	758	11.14%	783	11.73%	-1.87%	0.65%
Age 35 - 44	754	10.63%	743	10.92%	740	11.08%	-0.29%	-0.08%
Age 45 - 54	988	13.93%	811	11.92%	692	10.36%	-3.87%	-3.12%
Age 55 - 64	839	11.83%	866	12.73%	802	12.01%	0.64%	-1.52%
Age 65 - 74	641	9.04%	643	9.45%	712	10.66%	0.06%	2.06%
Age 75 - 84	438	6.18%	402	5.91%	384	5.75%	-1.70%	-0.91%
Age 85 and over	175	2.47%	178	2.62%	190	2.85%	0.34%	1.31%
<i>Age 55 and over</i>	<i>2,093</i>	<i>29.51%</i>	<i>2,089</i>	<i>30.71%</i>	<i>2,088</i>	<i>31.27%</i>	<i>-0.04%</i>	<i>-0.01%</i>
<i>Age 62 and over</i>	<i>1,331</i>	<i>18.76%</i>	<i>1,305</i>	<i>19.18%</i>	<i>1,337</i>	<i>20.01%</i>	<i>-0.39%</i>	<i>0.48%</i>
Median Age	38.8		38.3		37.4		-0.26%	-0.47%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Blackwell is 38.3 years. This compares with the statewide figure of 36.6 years. Approximately 7.42% of the population is below the age of 5, while 19.18% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 0.48% per year.

Ponca City Population By Age								
	2010	Percent	2015	Percent	2020	Percent	2000 - 2015	2015 - 2020
	Census	of Total	Estimate	of Total	Forecast	of Total	Ann. Chng.	Ann. Chng.
Population by Age	25,387		24,898		24,840			
Age 0 - 4	1,950	7.68%	1,874	7.53%	1,877	7.56%	-0.79%	0.03%
Age 5 - 9	1,732	6.82%	1,796	7.21%	1,806	7.27%	0.73%	0.11%
Age 10 - 14	1,732	6.82%	1,729	6.94%	1,756	7.07%	-0.03%	0.31%
Age 15 - 17	1,039	4.09%	978	3.93%	1,042	4.19%	-1.20%	1.28%
Age 18 - 20	919	3.62%	888	3.57%	931	3.75%	-0.68%	0.95%
Age 21 - 24	1,181	4.65%	1,165	4.68%	1,194	4.81%	-0.27%	0.49%
Age 25 - 34	3,307	13.03%	3,137	12.60%	2,931	11.80%	-1.05%	-1.35%
Age 35 - 44	2,674	10.53%	2,841	11.41%	2,953	11.89%	1.22%	0.78%
Age 45 - 54	3,387	13.34%	2,813	11.30%	2,503	10.08%	-3.65%	-2.31%
Age 55 - 64	3,191	12.57%	3,116	12.52%	2,876	11.58%	-0.47%	-1.59%
Age 65 - 74	2,027	7.98%	2,369	9.51%	2,782	11.20%	3.17%	3.27%
Age 75 - 84	1,548	6.10%	1,451	5.83%	1,427	5.74%	-1.29%	-0.33%
Age 85 and over	700	2.76%	741	2.98%	762	3.07%	1.14%	0.56%
<i>Age 55 and over</i>	<i>7,466</i>	<i>29.41%</i>	<i>7,677</i>	<i>30.83%</i>	<i>7,847</i>	<i>31.59%</i>	<i>0.56%</i>	<i>0.44%</i>
<i>Age 62 and over</i>	<i>4,532</i>	<i>17.85%</i>	<i>4,755</i>	<i>19.10%</i>	<i>5,072</i>	<i>20.42%</i>	<i>0.96%</i>	<i>1.30%</i>
Median Age	38.1		38.1		38.0		0.00%	-0.05%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Ponca City is 38.1 years. This compares with the statewide figure of 36.6 years. Approximately 7.53% of the population is below the age of 5, while 19.10% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 1.30% per year.

Families by Presence of Children

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

2013 Family Type by Presence of Children Under 18 Years						
	Blackwell		Ponca City		Kay County	
	No.	Percent	No.	Percent	No.	Percent
Total Families:	1,825		6,449		11,955	
Married-Couple Family:	1,198	65.64%	4,781	74.14%	8,891	74.37%
With Children Under 18 Years	334	18.30%	1,769	27.43%	3,137	26.24%
No Children Under 18 Years	864	47.34%	3,012	46.70%	5,754	48.13%
Other Family:	627	34.36%	1,668	25.86%	3,064	25.63%
Male Householder, No Wife Present	298	16.33%	460	7.13%	995	8.32%
With Children Under 18 Years	188	10.30%	298	4.62%	617	5.16%
No Children Under 18 Years	110	6.03%	162	2.51%	378	3.16%
Female Householder, No Husband Present	329	18.03%	1,208	18.73%	2,069	17.31%
With Children Under 18 Years	198	10.85%	812	12.59%	1,294	10.82%
No Children Under 18 Years	131	7.18%	396	6.14%	775	6.48%
Total Single Parent Families	386		1,110		1,911	
Male Householder	188	48.70%	298	26.85%	617	32.29%
Female Householder	198	51.30%	812	73.15%	1,294	67.71%

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

As shown, within Kay County, among all families 15.98% are single-parent families, while in Blackwell, the percentage is 21.15%. In Ponca City the percentage of single-parent families is 17.21%.

Population by Presence of Disabilities

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

2013 Age by Number of Disabilities								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	6,960		24,774		45,508		3,702,515	
Under 18 Years:	1,660		6,327		11,558		933,738	
With One Type of Disability	15	0.90%	288	4.55%	439	3.80%	33,744	3.61%
With Two or More Disabilities	0	0.00%	79	1.25%	109	0.94%	11,082	1.19%
No Disabilities	1,645	99.10%	5,960	94.20%	11,010	95.26%	888,912	95.20%
18 to 64 Years:	4,047		14,396		26,314		2,265,702	
With One Type of Disability	283	6.99%	1,358	9.43%	2,196	8.35%	169,697	7.49%
With Two or More Disabilities	246	6.08%	1,151	8.00%	1,971	7.49%	149,960	6.62%
No Disabilities	3,518	86.93%	11,887	82.57%	22,147	84.16%	1,946,045	85.89%
65 Years and Over:	1,253		4,051		7,636		503,075	
With One Type of Disability	199	15.88%	731	18.04%	1,360	17.81%	95,633	19.01%
With Two or More Disabilities	363	28.97%	947	23.38%	1,727	22.62%	117,044	23.27%
No Disabilities	691	55.15%	2,373	58.58%	4,549	59.57%	290,398	57.72%
Total Number of Persons with Disabilities:	1,106	15.89%	4,554	18.38%	7,802	17.14%	577,160	15.59%

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

Within Kay County, 17.14% of the civilian non-institutionalized population has one or more disabilities, compared with 15.59% of Oklahomans as a whole. In Blackwell the percentage is 15.89%. In Ponca City the percentage is 18.38%.

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

2013 Population by Veteran and Disability Status								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	5,300		18,447		33,773		2,738,788	
Veteran:	562	10.60%	1,970	10.68%	3,744	11.09%	305,899	11.17%
With a Disability	233	41.46%	708	35.94%	1,339	35.76%	100,518	32.86%
No Disability	329	58.54%	1,262	64.06%	2,405	64.24%	205,381	67.14%
Non-veteran:	4,738	89.40%	16,477	89.32%	30,029	88.91%	2,432,889	88.83%
With a Disability	858	18.11%	3,479	21.11%	5,904	19.66%	430,610	17.70%
No Disability	3,880	81.89%	12,998	78.89%	24,125	80.34%	2,002,279	82.30%

Source: 2009-2013 American Community Survey, Table C21007

Within Kay County, the Census Bureau estimates there are 3,744 veterans, 35.76% of which have one or more disabilities (compared with 32.86% at a statewide level). In Blackwell, there are an estimated 562 veterans, 41.46% of which are estimated to have a disability. Within Ponca City the number of veterans is estimated to be 1,970 (35.94% with a disability).

Group Quarters Population

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

	Blackwell		Ponca City		Kay County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	7,092		25,387		46,562	
Group Quarters Population	84	1.18%	700	2.76%	1,273	2.73%
Institutionalized Population	79	1.11%	433	1.71%	693	1.49%
Correctional facilities for adults	0	0.00%	123	0.48%	251	0.54%
Juvenile facilities	0	0.00%	65	0.26%	65	0.14%
Nursing facilities/Skilled-nursing facilities	79	1.11%	245	0.97%	377	0.81%
Other institutional facilities	0	0.00%	0	0.00%	0	0.00%
Noninstitutionalized population	5	0.07%	267	1.05%	580	1.25%
College/University student housing	0	0.00%	0	0.00%	308	0.66%
Military quarters	0	0.00%	0	0.00%	0	0.00%
Other noninstitutional facilities	5	0.07%	267	1.05%	272	0.58%

Source: 2010 Decennial Census, Table P42

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

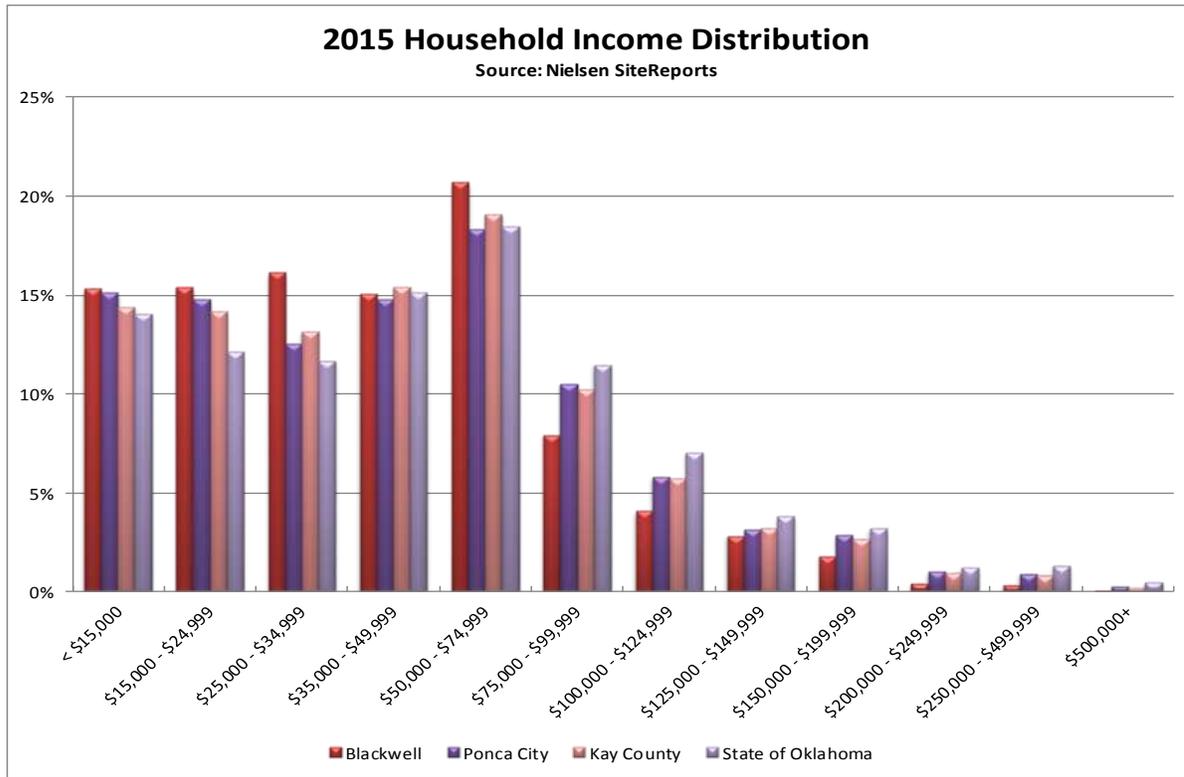
Household Income Levels

Data in the following chart shows the distribution of household income in Kay 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								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Households by HH Income	2,713		10,218		18,102		1,520,327	
< \$15,000	415	15.30%	1,542	15.09%	2,602	14.37%	213,623	14.05%
\$15,000 - \$24,999	417	15.37%	1,506	14.74%	2,560	14.14%	184,613	12.14%
\$25,000 - \$34,999	437	16.11%	1,278	12.51%	2,383	13.16%	177,481	11.67%
\$35,000 - \$49,999	409	15.08%	1,507	14.75%	2,789	15.41%	229,628	15.10%
\$50,000 - \$74,999	561	20.68%	1,873	18.33%	3,452	19.07%	280,845	18.47%
\$75,000 - \$99,999	215	7.92%	1,074	10.51%	1,855	10.25%	173,963	11.44%
\$100,000 - \$124,999	111	4.09%	596	5.83%	1,034	5.71%	106,912	7.03%
\$125,000 - \$149,999	77	2.84%	321	3.14%	583	3.22%	57,804	3.80%
\$150,000 - \$199,999	49	1.81%	293	2.87%	478	2.64%	48,856	3.21%
\$200,000 - \$249,999	12	0.44%	105	1.03%	172	0.95%	18,661	1.23%
\$250,000 - \$499,999	9	0.33%	94	0.92%	154	0.85%	20,487	1.35%
\$500,000+	1	0.04%	29	0.28%	40	0.22%	7,454	0.49%
Median Household Income	\$38,209		\$42,794		\$43,100		\$47,049	
Average Household Income	\$49,014		\$57,441		\$56,774		\$63,390	

Source: Nielsen SiteReports

As shown, median household income for Kay County is estimated to be \$43,100 in 2015. By way of comparison, the median household income of Oklahoma is estimated to be \$47,049. For Blackwell, median household income is estimated to be \$38,209. In Ponca City the estimate is \$42,794. The income distribution can be better visualized by the following chart.



Household Income Trend

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

	1999 Median HH Income	2015 Median HH Income	Nominal Growth	Inflation Rate	Real Growth
Blackwell	\$25,835	\$38,209	2.48%	2.40%	0.08%
Ponca City	\$31,406	\$42,794	1.95%	2.40%	-0.45%
Kay County	\$30,762	\$43,100	2.13%	2.40%	-0.27%
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 Kay 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 Kay 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 Kay 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
Blackwell	17.07%	23.56%	649	32.98%	45.45%
Ponca City	16.02%	18.43%	241	17.79%	46.31%
Kay County	16.00%	18.17%	217	21.56%	45.21%
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 Kay County is estimated to be 18.17% by the American Community Survey. This is an increase of 217 basis points since the 2000 Census. Within Blackwell, the poverty rate is estimated to be 23.56%. Within Ponca City, the rate is estimated to be 18.43%. 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 Kay County, with figures for Oklahoma and the United States for comparison. This data is as of May 2015.

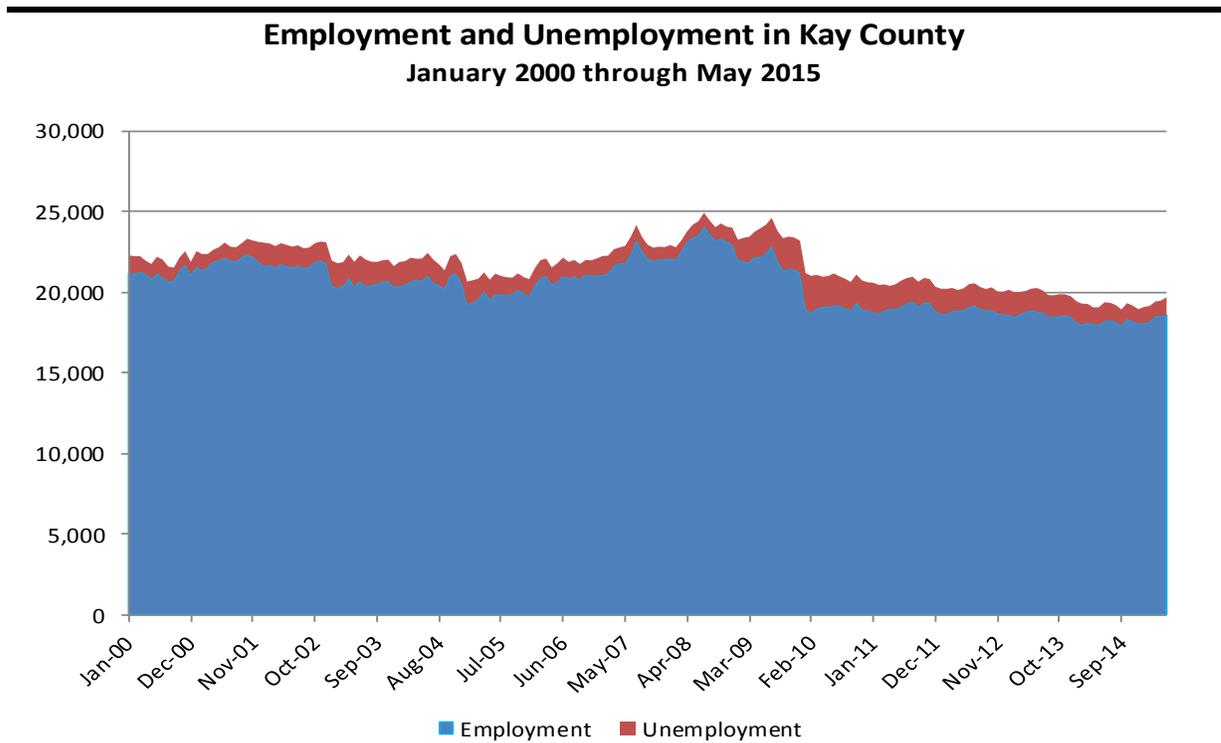
Employment and Unemployment						
	May-2010 Employment	May-2015 Employment	Annual Growth	May-2010 Unemp. Rate	May-2015 Unemp. Rate	Change (bp)
Kay County	19,068	18,577	-0.52%	9.2%	5.6%	-360
State of Oklahoma	1,650,748	1,776,187	1.48%	6.8%	4.4%	-240
United States (thsds)	139,497	149,349	1.37%	9.3%	5.3%	-400

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

As of May 2015, total employment in Kay County was 18,577 persons. Compared with figures from May 2010, this represents annualized employment decline of -0.52% per year. The unemployment rate in May was 5.6%, a decrease of -360 basis points from May 2010, which was 9.2%. Over the last five years, both the statewide and national trends have been improving employment levels and declining unemployment rates, and Kay County has underperformed both the state and nation in these statistics.

Employment Level Trends

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



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

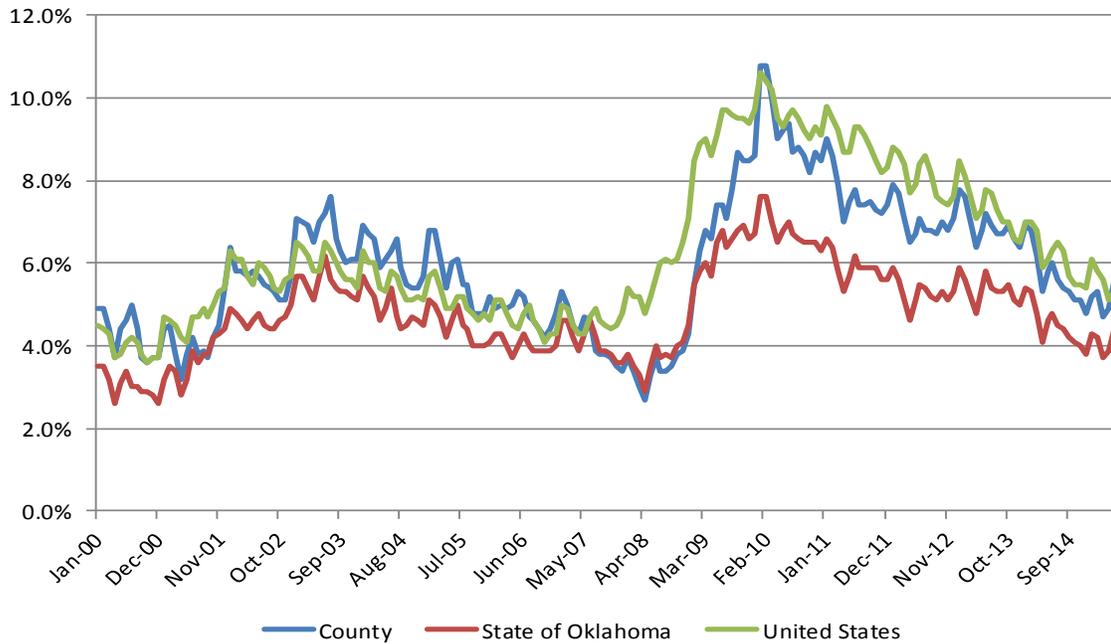
As shown, total employment levels have generally trended upward from 2000 through the 3rd quarter of 2008, when employment levels began to decline due to the national economic recession. Employment growth resumed in early 2010, and has gradually declined to its current level of 18,577 persons. The number of unemployed persons in May 2015 was 1,101, out of a total labor force of 19,678 persons.

Unemployment Rate Trends

The next chart shows historic unemployment rates for Kay 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 Kay 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 Kay 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 5.6%. On the whole, unemployment rates in Kay County track very well with statewide figures but are typically above the state. Compared with the United States, unemployment rates in Kay County and Oklahoma are and have historically been well below the national average but have seen a rise in the last months of 2015.

Employment and Wages by Industrial Supersector

The next table presents data regarding employment in Kay 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.

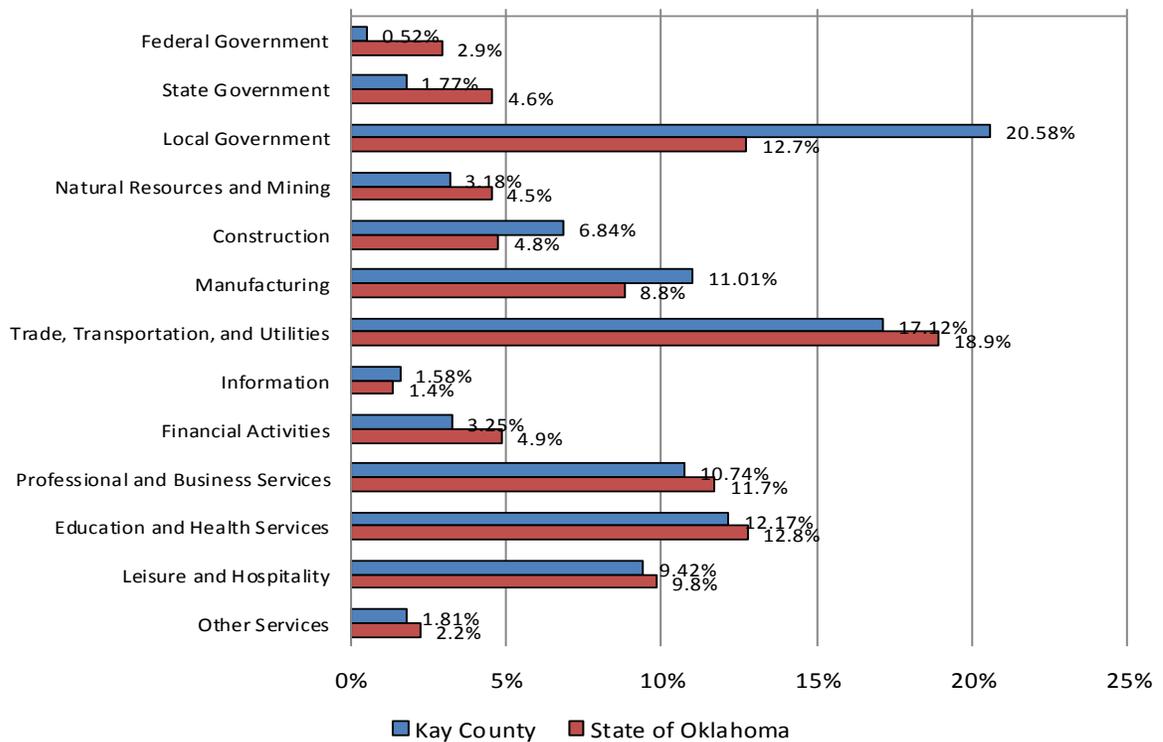


Employees and Wages by Supersector - 2014

Supersector	Establishments	Avg. No. of Employees	Percent of Total	Avg. Annual Pay	Location Quotient
Federal Government	12	97	0.52%	\$58,874	0.26
State Government	13	328	1.77%	\$31,788	0.53
Local Government	91	3,806	20.58%	\$31,445	2.04
Natural Resources and Mining	49	588	3.18%	\$64,468	2.10
Construction	120	1,266	6.84%	\$52,513	1.53
Manufacturing	64	2,036	11.01%	\$47,560	1.24
Trade, Transportation, and Utilities	276	3,167	17.12%	\$36,769	0.90
Information	21	292	1.58%	\$39,246	0.79
Financial Activities	122	601	3.25%	\$39,409	0.58
Professional and Business Services	157	1,987	10.74%	\$68,058	0.77
Education and Health Services	145	2,252	12.17%	\$31,429	0.81
Leisure and Hospitality	109	1,743	9.42%	\$12,393	0.88
Other Services	75	335	1.81%	\$34,411	0.58
Total	1,251	18,498		\$39,342	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 (17.12%) are employed in Trade, Transportation, and Utilities. The average annual pay in this sector is \$36,769 per year. The industry



with the highest annual pay is Professional and Business Services, with average annual pay of \$68,058 per year.

The rightmost column of the previous table provides location quotients for each industry for Kay 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 (Kay County in this instance), by the percentage of employment in the same industry in the United States. For example, if manufacturing in a certain county comprised 10% of total employment, while in the United States manufacturing comprised 5% of total employment, the location quotient would be 2.0:

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

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

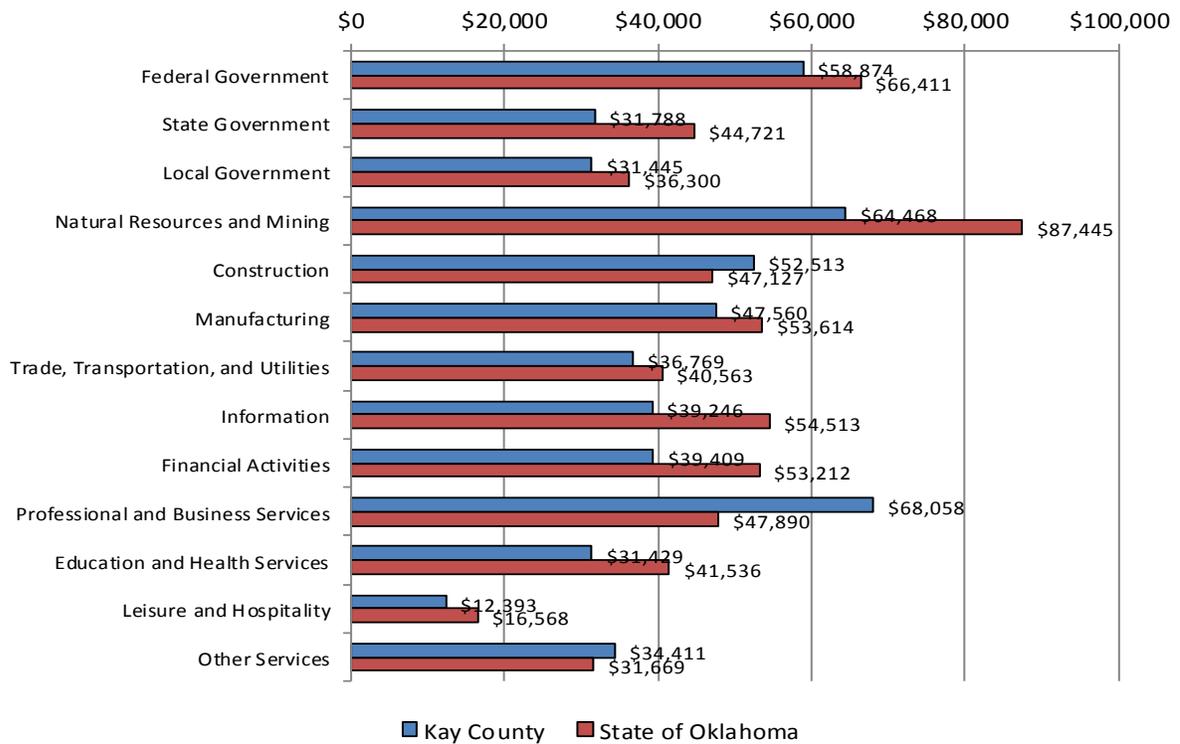
Within Kay County, among all industries the largest location quotient is in Natural Resources and Mining, with a quotient of 2.10. Among private employers, the largest is Natural Resources and Mining, with a quotient of 2.10.

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

Comparison of 2014 Average Annual Pay by Supersector					
Supersector	Kay County	State of Oklahoma	United States	Percent of State	Percent of Nation
Federal Government	\$58,874	\$66,411	\$75,784	88.7%	77.7%
State Government	\$31,788	\$44,721	\$54,184	71.1%	58.7%
Local Government	\$31,445	\$36,300	\$46,146	86.6%	68.1%
Natural Resources and Mining	\$64,468	\$87,445	\$59,666	73.7%	108.0%
Construction	\$52,513	\$47,127	\$55,041	111.4%	95.4%
Manufacturing	\$47,560	\$53,614	\$62,977	88.7%	75.5%
Trade, Transportation, and Utilities	\$36,769	\$40,563	\$42,988	90.6%	85.5%
Information	\$39,246	\$54,513	\$90,804	72.0%	43.2%
Financial Activities	\$39,409	\$53,212	\$85,261	74.1%	46.2%
Professional and Business Services	\$68,058	\$47,890	\$66,657	142.1%	102.1%
Education and Health Services	\$31,429	\$41,536	\$45,951	75.7%	68.4%
Leisure and Hospitality	\$12,393	\$16,568	\$20,993	74.8%	59.0%
Other Services	\$34,411	\$31,669	\$33,935	108.7%	101.4%
Total	\$39,342	\$43,774	\$51,361	89.9%	76.6%

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, Kay County has higher average wages in construction and professional and business services, and lower average wages in natural resources and mining, information, financial activities, and education and health services.

Working Families

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



Families by Employment Status and Presence of Children								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Families	1,825		6,449		11,955		961,468	
With Children <18 Years:	720	39.45%	2,879	44.64%	5,048	42.23%	425,517	44.26%
Married Couple:	334	46.39%	1,769	61.44%	3,137	62.14%	281,418	66.14%
Both Parents Employed	161	48.20%	1,126	63.65%	1,976	62.99%	166,700	59.24%
One Parent Employed	153	45.81%	594	33.58%	1,060	33.79%	104,817	37.25%
Neither Parent Employed	20	5.99%	49	2.77%	101	3.22%	9,901	3.52%
Other Family:	386	53.61%	1,110	38.56%	1,911	37.86%	144,099	33.86%
Male Householder:	188	48.70%	298	26.85%	617	32.29%	36,996	25.67%
Employed	188	100.00%	242	81.21%	550	89.14%	31,044	83.91%
Not Employed	0	0.00%	56	18.79%	67	10.86%	5,952	16.09%
Female Householder:	198	51.30%	812	73.15%	1,294	67.71%	107,103	74.33%
Employed	170	85.86%	583	71.80%	963	74.42%	75,631	70.62%
Not Employed	28	14.14%	229	28.20%	331	25.58%	31,472	29.38%
Without Children <18 Years:	1,105	60.55%	3,570	55.36%	6,907	57.77%	535,951	55.74%
Married Couple:	864	78.19%	3,012	84.37%	5,754	83.31%	431,868	80.58%
Both Spouses Employed	327	37.85%	981	32.57%	1,928	33.51%	167,589	38.81%
One Spouse Employed	237	27.43%	901	29.91%	1,719	29.87%	138,214	32.00%
Neither Spouse Employed	300	34.72%	1,130	37.52%	2,107	36.62%	126,065	29.19%
Other Family:	241	21.81%	558	15.63%	1,153	16.69%	104,083	19.42%
Male Householder:	110	36.67%	162	14.34%	378	17.94%	32,243	25.58%
Employed	96	87.27%	128	79.01%	293	77.51%	19,437	60.28%
Not Employed	14	12.73%	34	20.99%	85	22.49%	12,806	39.72%
Female Householder:	131	54.36%	396	70.97%	775	67.22%	71,840	69.02%
Employed	40	30.53%	174	43.94%	337	43.48%	36,601	50.95%
Not Employed	91	69.47%	222	56.06%	438	56.52%	35,239	49.05%
<i>Total Working Families:</i>	<i>1,372</i>	<i>75.18%</i>	<i>4,729</i>	<i>73.33%</i>	<i>8,826</i>	<i>73.83%</i>	<i>740,033</i>	<i>76.97%</i>
<i> With Children <18 Years:</i>	<i>672</i>	<i>48.98%</i>	<i>2,545</i>	<i>53.82%</i>	<i>4,549</i>	<i>51.54%</i>	<i>378,192</i>	<i>51.10%</i>
<i> Without Children <18 Years:</i>	<i>700</i>	<i>51.02%</i>	<i>2,184</i>	<i>46.18%</i>	<i>4,277</i>	<i>48.46%</i>	<i>361,841</i>	<i>48.90%</i>

Source: 2009-2013 American Community Survey, Table B23007

Within Kay County, there are 8,826 working families, 51.54% 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 Kay County area are presented in the following table, as reported by the Ponca City Development Authority.

Major Employers in Kay County

Company	Industry / Description	No. Employees
Phillips 66 Refinery	Oil Production	700
Ponca City Public School	Education	924
Alliance Health Ponca City	Health Care	415
City of Ponca City	Government	415
Supported Community Lifestyles	Housing	394
Smith Bits, a Schlumberger Company	Oil Industry	240
Dorada Foods	Distribution	432
Mertz Manufacturing	Manufacturing	217
Albertsons	Grocery Store	304
Evans & Associates	Construction	300

Source: Ponca City Development Authority

Commuting Patterns

Travel Time to Work

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

Workers 16 Years and Over by Commuting Time to Work

	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Commuting Workers:	3,087		10,502		19,225		1,613,364	
Less than 15 minutes	1,406	45.55%	7,069	67.31%	10,939	56.90%	581,194	36.02%
15 to 30 minutes	1,127	36.51%	2,271	21.62%	5,556	28.90%	625,885	38.79%
30 to 45 minutes	423	13.70%	482	4.59%	1,540	8.01%	260,192	16.13%
45 to 60 minutes	5	0.16%	280	2.67%	441	2.29%	74,625	4.63%
60 or more minutes	126	4.08%	400	3.81%	749	3.90%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Within Kay County, the largest percentage of workers (56.90%) travel Less than 15 minutes to work. Although Kay County has an active work market, there is a small percentage of workers that travel a greater distance for work, accounting for 28.90% that travel 15 to 30 minutes.

Means of Transportation

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

Workers 16 Years and Over by Means of Transportation to Work								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Workers Age 16+	3,095		10,720		19,614		1,673,026	
Car, Truck or Van:	2,941	95.02%	10,068	93.92%	18,388	93.75%	1,551,461	92.73%
<i>Drove Alone</i>	<i>2,532</i>	<i>86.09%</i>	<i>8,865</i>	<i>88.05%</i>	<i>16,197</i>	<i>88.08%</i>	<i>1,373,407</i>	<i>88.52%</i>
<i>Carpooled</i>	<i>409</i>	<i>13.91%</i>	<i>1,203</i>	<i>11.95%</i>	<i>2,191</i>	<i>11.92%</i>	<i>178,054</i>	<i>11.48%</i>
Public Transportation	44	1.42%	22	0.21%	71	0.36%	8,092	0.48%
Taxicab	0	0.00%	34	0.32%	34	0.17%	984	0.06%
Motorcycle	0	0.00%	33	0.31%	45	0.23%	3,757	0.22%
Bicycle	43	1.39%	20	0.19%	72	0.37%	4,227	0.25%
Walked	41	1.32%	288	2.69%	539	2.75%	30,401	1.82%
Other Means	18	0.58%	37	0.35%	76	0.39%	14,442	0.86%
Worked at Home	8	0.26%	218	2.03%	389	1.98%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

As shown, the vast majority of persons in Kay 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 Kay 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
Blackwell	3,527	3,398	-0.37%	3,361	-0.22%
Ponca City	11,871	11,950	0.07%	11,917	-0.06%
Kay County	21,804	21,708	-0.04%	21,536	-0.16%
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 Kay County declined by -0.16% per year, to a total of 21,536 housing units in 2015. In terms of new housing unit construction, Kay County underperformed Oklahoma as a whole between 2010 and 2015.

Housing by Units in Structure

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

2013 Housing Units by Units in Structure								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	3,586		11,783		21,615		1,669,828	
1 Unit, Detached	3,087	86.08%	9,740	82.66%	17,871	82.68%	1,219,987	73.06%
1 Unit, Attached	19	0.53%	183	1.55%	239	1.11%	34,434	2.06%
Duplex Units	0	0.00%	275	2.33%	378	1.75%	34,207	2.05%
3-4 Units	122	3.40%	327	2.78%	497	2.30%	42,069	2.52%
5-9 Units	78	2.18%	344	2.92%	449	2.08%	59,977	3.59%
10-19 Units	35	0.98%	174	1.48%	231	1.07%	57,594	3.45%
20-49 Units	112	3.12%	186	1.58%	344	1.59%	29,602	1.77%
50 or More Units	43	1.20%	242	2.05%	299	1.38%	30,240	1.81%
Mobile Homes	90	2.51%	312	2.65%	1,290	5.97%	159,559	9.56%
Boat, RV, Van, etc.	0	0.00%	0	0.00%	17	0.08%	2,159	0.13%
Total Multifamily Units	390	10.88%	1,548	13.14%	2,198	10.17%	253,689	15.19%

Source: 2009-2013 American Community Survey, Table B25024

Within Kay County, 82.68% of housing units are single-family, detached. 10.17% of housing units are multifamily in structure (two or more units per building), while 6.05% of housing units comprise mobile homes, RVs, etc.

Within Blackwell, 86.08% of housing units are single-family, detached. 10.88% of housing units are multifamily in structure, while 2.51% of housing units comprise mobile homes, RVs, etc.

Within Ponca City, 82.66% of housing units are single-family, detached. 13.14% of housing units are multifamily in structure, while 2.65% of housing units comprise mobile homes, RVs, etc.

Housing Units Number of Bedrooms and Tenure

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

2013 Housing Units by Tenure and Number of Bedrooms								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	3,011		10,148		18,357		1,444,081	
Owner Occupied:	1,993	66.19%	6,765	66.66%	12,837	69.93%	968,736	67.08%
No Bedroom	0	0.00%	26	0.38%	38	0.30%	2,580	0.27%
1 Bedroom	39	1.96%	93	1.37%	226	1.76%	16,837	1.74%
2 Bedrooms	743	37.28%	1,423	21.03%	3,073	23.94%	166,446	17.18%
3 Bedrooms	947	47.52%	3,801	56.19%	7,012	54.62%	579,135	59.78%
4 Bedrooms	223	11.19%	1,156	17.09%	2,042	15.91%	177,151	18.29%
5 or More Bedrooms	41	2.06%	266	3.93%	446	3.47%	26,587	2.74%
Renter Occupied:	1,018	33.81%	3,383	33.34%	5,520	30.07%	475,345	32.92%
No Bedroom	117	11.49%	124	3.67%	252	4.57%	13,948	2.93%
1 Bedroom	137	13.46%	582	17.20%	873	15.82%	101,850	21.43%
2 Bedrooms	467	45.87%	1,518	44.87%	2,432	44.06%	179,121	37.68%
3 Bedrooms	249	24.46%	1,037	30.65%	1,699	30.78%	152,358	32.05%
4 Bedrooms	48	4.72%	100	2.96%	235	4.26%	24,968	5.25%
5 or More Bedrooms	0	0.00%	22	0.65%	29	0.53%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

The overall homeownership rate in Kay County is 69.93%, while 30.07% of housing units are renter occupied. In Blackwell, the homeownership rate is 66.19%, while 33.81% of households are renters. In Ponca City 66.66% of households are homeowners while 33.34% are renters.

Housing Units Tenure and Household Income

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

Kay County Owner/Renter Percentages by Income Band in 2013

Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	18,357	12,837	5,520	69.93%	30.07%
Less than \$5,000	468	214	254	45.73%	54.27%
\$5,000 - \$9,999	928	338	590	36.42%	63.58%
\$10,000-\$14,999	1,290	716	574	55.50%	44.50%
\$15,000-\$19,999	1,467	809	658	55.15%	44.85%
\$20,000-\$24,999	1,263	756	507	59.86%	40.14%
\$25,000-\$34,999	2,463	1,531	932	62.16%	37.84%
\$35,000-\$49,999	3,020	2,212	808	73.25%	26.75%
\$50,000-\$74,999	3,404	2,553	851	75.00%	25.00%
\$75,000-\$99,999	1,831	1,646	185	89.90%	10.10%
\$100,000-\$149,999	1,455	1,318	137	90.58%	9.42%
\$150,000 or more	768	744	24	96.88%	3.13%
Income Less Than \$25,000	5,416	2,833	2,583	52.31%	47.69%

Source: 2009-2013 American Community Survey, Table B25118

Within Kay County as a whole, 47.69% of households with incomes less than \$25,000 are estimated to be renters, while 52.31% are estimated to be homeowners.

Blackwell Owner/Renter Percentages by Income Band in 2013

Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	3,011	1,993	1,018	66.19%	33.81%
Less than \$5,000	92	0	92	0.00%	100.00%
\$5,000 - \$9,999	181	54	127	29.83%	70.17%
\$10,000-\$14,999	181	115	66	63.54%	36.46%
\$15,000-\$19,999	298	217	81	72.82%	27.18%
\$20,000-\$24,999	252	175	77	69.44%	30.56%
\$25,000-\$34,999	468	280	188	59.83%	40.17%
\$35,000-\$49,999	644	456	188	70.81%	29.19%
\$50,000-\$74,999	409	292	117	71.39%	28.61%
\$75,000-\$99,999	199	184	15	92.46%	7.54%
\$100,000-\$149,999	200	133	67	66.50%	33.50%
\$150,000 or more	87	87	0	100.00%	0.00%
Income Less Than \$25,000	1,004	561	443	55.88%	44.12%

Source: 2009-2013 American Community Survey, Table B25118

Within Blackwell, 44.12% of households with incomes less than \$25,000 are estimated to be renters, while 55.88% are estimated to be homeowners.

Ponca City Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	10,148	6,765	3,383	66.66%	33.34%
Less than \$5,000	248	121	127	48.79%	51.21%
\$5,000 - \$9,999	519	190	329	36.61%	63.39%
\$10,000-\$14,999	789	401	388	50.82%	49.18%
\$15,000-\$19,999	905	432	473	47.73%	52.27%
\$20,000-\$24,999	658	310	348	47.11%	52.89%
\$25,000-\$34,999	1,350	771	579	57.11%	42.89%
\$35,000-\$49,999	1,496	1,064	432	71.12%	28.88%
\$50,000-\$74,999	1,922	1,360	562	70.76%	29.24%
\$75,000-\$99,999	1,043	948	95	90.89%	9.11%
\$100,000-\$149,999	798	748	50	93.73%	6.27%
\$150,000 or more	420	420	0	100.00%	0.00%
Income Less Than \$25,000	3,119	1,454	1,665	46.62%	53.38%

Source: 2009-2013 American Community Survey, Table B25118

Within Ponca City, 53.38% of households with incomes less than \$25,000 are estimated to be renters, while 46.62% 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								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	3,011		10,148		18,357		1,444,081	
Owner Occupied:	1,993	66.19%	6,765	66.66%	12,837	69.93%	968,736	67.08%
Built 2010 or Later	0	0.00%	0	0.00%	18	0.14%	10,443	1.08%
Built 2000 to 2009	37	1.86%	137	2.03%	528	4.11%	153,492	15.84%
Built 1990 to 1999	96	4.82%	325	4.80%	843	6.57%	125,431	12.95%
Built 1980 to 1989	114	5.72%	751	11.10%	1,323	10.31%	148,643	15.34%
Built 1970 to 1979	219	10.99%	1,172	17.32%	2,221	17.30%	184,378	19.03%
Built 1960 to 1969	221	11.09%	1,217	17.99%	1,805	14.06%	114,425	11.81%
Built 1950 to 1959	440	22.08%	1,598	23.62%	2,412	18.79%	106,544	11.00%
Built 1940 to 1949	290	14.55%	792	11.71%	1,387	10.80%	50,143	5.18%
Built 1939 or Earlier	576	28.90%	773	11.43%	2,300	17.92%	75,237	7.77%
Median Year Built:		1953		1962		1962		1977
Renter Occupied:	1,018	33.81%	3,383	33.34%	5,520	30.07%	475,345	32.92%
Built 2010 or Later	0	0.00%	0	0.00%	0	0.00%	5,019	1.06%
Built 2000 to 2009	0	0.00%	178	5.26%	202	3.66%	50,883	10.70%
Built 1990 to 1999	93	9.14%	209	6.18%	356	6.45%	47,860	10.07%
Built 1980 to 1989	75	7.37%	439	12.98%	687	12.45%	77,521	16.31%
Built 1970 to 1979	156	15.32%	528	15.61%	882	15.98%	104,609	22.01%
Built 1960 to 1969	37	3.63%	407	12.03%	561	10.16%	64,546	13.58%
Built 1950 to 1959	381	37.43%	754	22.29%	1,282	23.22%	54,601	11.49%
Built 1940 to 1949	65	6.39%	478	14.13%	649	11.76%	31,217	6.57%
Built 1939 or Earlier	211	20.73%	390	11.53%	901	16.32%	39,089	8.22%
Median Year Built:		1956		1962		1959		1975
Overall Median Year Built:		1953		1962		1961		1976

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

Within Kay County, 4.07% of housing units were built after the year 2000. This compares with 15.22% statewide. Within Blackwell the percentage is 1.23%. Within Ponca City the percentage is 3.10%.

89.39% of housing units in Kay County were built prior to 1990, while in Blackwell the percentage is 92.49%. These figures compare with the statewide figure of 72.78%. In Ponca City the percentage is 91.63%.

Substandard Housing

The next table presents data regarding substandard housing in Kay 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
Blackwell	3,011	71	2.36%	98	3.25%	43	1.43%
Ponca City	10,148	28	0.28%	61	0.60%	69	0.68%
Kay County	18,357	106	0.58%	209	1.14%	304	1.66%
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 Kay County, 0.58% of occupied housing units have inadequate plumbing (compared with 0.49% at a statewide level), while 1.14% 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 Kay County by vacancy and type. This data is provided by the American Community Survey.

2013 Housing Units by Vacancy

	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	3,586		11,783		21,615		1,669,828	
Total Vacant Units	575	16.03%	1,635	13.88%	3,258	15.07%	225,747	13.52%
For rent	111	19.30%	363	22.20%	566	17.37%	43,477	19.26%
Rented, not occupied	0	0.00%	99	6.06%	111	3.41%	9,127	4.04%
For sale only	77	13.39%	247	15.11%	407	12.49%	23,149	10.25%
Sold, not occupied	0	0.00%	60	3.67%	118	3.62%	8,618	3.82%
For seasonal, recreational, or occasional use	26	4.52%	73	4.46%	365	11.20%	39,475	17.49%
For migrant workers	0	0.00%	0	0.00%	0	0.00%	746	0.33%
Other vacant	361	62.78%	793	48.50%	1,691	51.90%	101,155	44.81%
Homeowner Vacancy Rate	3.72%		3.49%		3.05%		2.31%	
Rental Vacancy Rate	9.83%		9.44%		9.13%		8.24%	

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

Within Kay County, the overall housing vacancy rate is estimated to be 15.07%. The homeowner vacancy rate is estimated to be 3.05%, while the rental vacancy rate is estimated to be 9.13%.

In Blackwell, the overall housing vacancy rate is estimated to be 16.03%. The homeowner vacancy rate is estimated to be 3.72%, while the rental vacancy rate is estimated to be 9.83%.

In Ponca City, the overall housing vacancy rate is estimated to be 13.88%. The homeowner vacancy rate is estimated to be 3.49%, while the rental vacancy rate is estimated to be 9.44%.

Building Permits

The next series of tables present data regarding new residential building permits issued in Blackwell, Ponca City and unincorporated areas of Kay 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.

Blackwell

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	9	\$176,667	0	N/A
2005	3	\$148,500	0	N/A
2006	0	N/A	0	N/A
2007	4	\$170,544	0	N/A
2008	3	\$106,667	0	N/A
2009	2	\$40,000	4	\$40,000
2010	0	N/A	0	N/A
2011	3	\$179,382	0	N/A
2012	1	\$181,575	0	N/A
2013	1	\$130,000	2	\$94,500
2014	1	\$400,000	0	N/A

Source: United States Census Bureau Building Permits Survey

In Blackwell, building permits for 33 housing units were issued between 2004 and 2014, for an average of 3 units per year. 81.82% of these housing units were single family homes, and 18.18% consisted of multifamily units.

Ponca City

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	14	\$226,143	0	N/A
2005	1	\$600,000	0	N/A
2006	26	\$287,023	25	\$63,280
2007	12	\$155,375	0	N/A
2008	14	\$368,211	0	N/A
2009	2	\$55,000	0	N/A
2010	3	\$100,000	0	N/A
2011	0	N/A	0	N/A
2012	0	N/A	0	N/A
2013	0	N/A	0	N/A
2014	21	\$162,995	48	\$75,000

Source: United States Census Bureau Building Permits Survey

In Ponca City, building permits for 166 housing units were issued between 2004 and 2014, for an average of 15 units per year. 56.02% of these housing units were single family homes, and 43.98% consisted of multifamily units.

New Construction Activity

For Ownership:

New housing development has occurred in small sections of the county, including rural acreages as well as within Ponca City and Blackwell. New homes have been built recently in a number of different subdivisions in Ponca City and Blackwell, including the Fox Run Estates and Hampton Estates. Growth is primarily occurring within outlying rural areas of the county, though some infill development has taken place within city limits.

Many homes have been of larger and more expensive, though some are relatively more affordable. The average price of homes constructed in 2005 or more recently (homes sold since 2013) is \$200,556 or \$98.61 per square foot.

For Rent:

A small number of properties for rent have been constructed over the past ten years or are currently in the process of construction, including market-rate and affordable housing units. The most recently approved affordable housing project was Highland Park, a 34 unit housing project for families in Ponca City. This project has not yet broken ground, but has been approved for construction.

Homeownership Market

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

Housing Units by Home Value

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

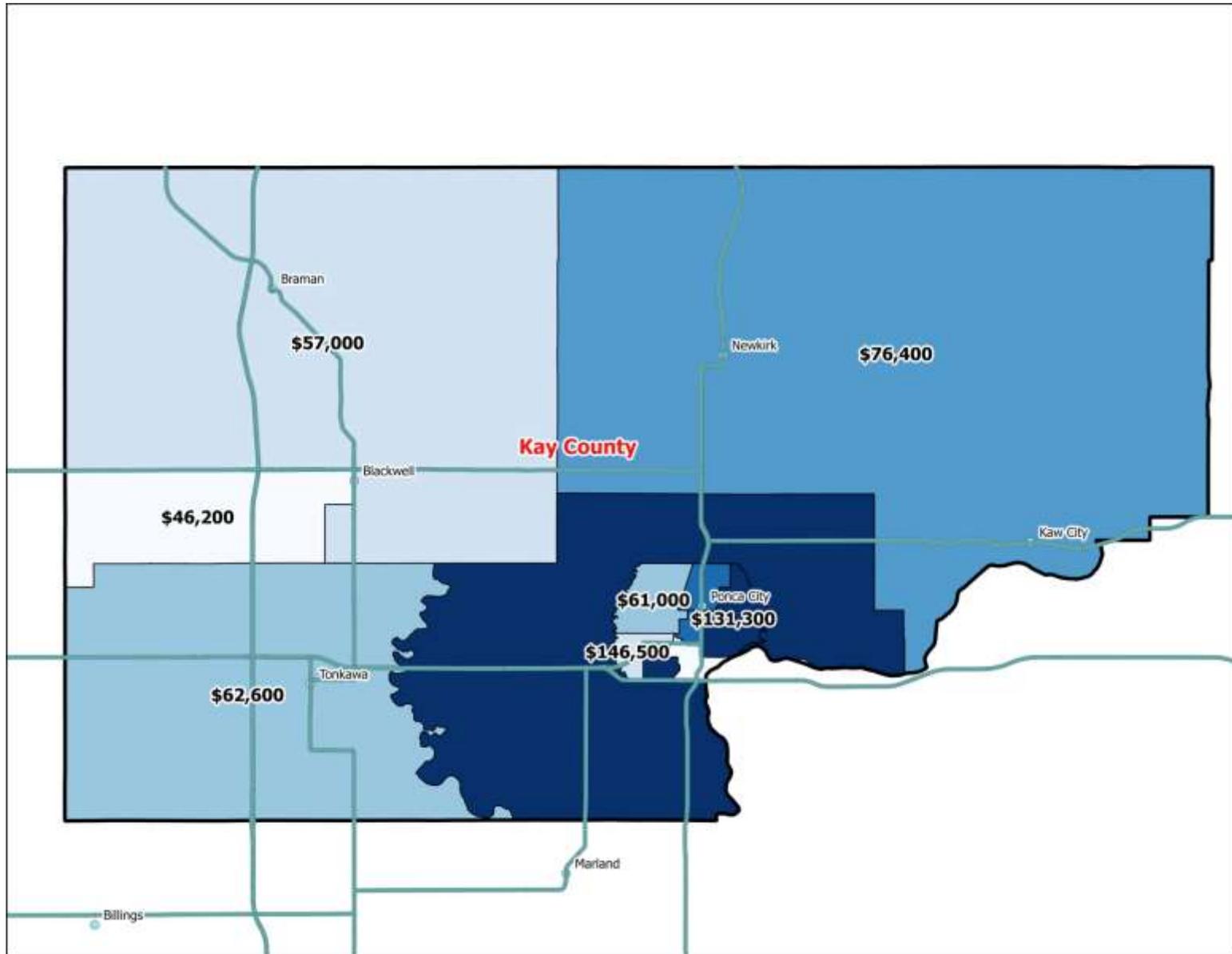
2013 Housing Units by Home Value								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Owner-Occupied Units:	1,993		6,765		12,837		968,736	
Less than \$10,000	30	1.51%	152	2.25%	266	2.07%	20,980	2.17%
\$10,000 to \$14,999	121	6.07%	64	0.95%	278	2.17%	15,427	1.59%
\$15,000 to \$19,999	195	9.78%	135	2.00%	434	3.38%	13,813	1.43%
\$20,000 to \$24,999	171	8.58%	158	2.34%	456	3.55%	16,705	1.72%
\$25,000 to \$29,999	83	4.16%	219	3.24%	466	3.63%	16,060	1.66%
\$30,000 to \$34,999	135	6.77%	309	4.57%	604	4.71%	19,146	1.98%
\$35,000 to \$39,999	144	7.23%	128	1.89%	406	3.16%	14,899	1.54%
\$40,000 to \$49,999	199	9.98%	331	4.89%	817	6.36%	39,618	4.09%
\$50,000 to \$59,999	192	9.63%	594	8.78%	1,093	8.51%	45,292	4.68%
\$60,000 to \$69,999	122	6.12%	626	9.25%	1,024	7.98%	52,304	5.40%
\$70,000 to \$79,999	107	5.37%	605	8.94%	1,026	7.99%	55,612	5.74%
\$80,000 to \$89,999	125	6.27%	528	7.80%	938	7.31%	61,981	6.40%
\$90,000 to \$99,999	92	4.62%	389	5.75%	682	5.31%	51,518	5.32%
\$100,000 to \$124,999	132	6.62%	821	12.14%	1,309	10.20%	119,416	12.33%
\$125,000 to \$149,999	39	1.96%	571	8.44%	798	6.22%	96,769	9.99%
\$150,000 to \$174,999	44	2.21%	351	5.19%	754	5.87%	91,779	9.47%
\$175,000 to \$199,999	6	0.30%	220	3.25%	361	2.81%	53,304	5.50%
\$200,000 to \$249,999	0	0.00%	251	3.71%	460	3.58%	69,754	7.20%
\$250,000 to \$299,999	20	1.00%	128	1.89%	269	2.10%	41,779	4.31%
\$300,000 to \$399,999	26	1.30%	118	1.74%	225	1.75%	37,680	3.89%
\$400,000 to \$499,999	0	0.00%	27	0.40%	70	0.55%	13,334	1.38%
\$500,000 to \$749,999	10	0.50%	30	0.44%	71	0.55%	12,784	1.32%
\$750,000 to \$999,999	0	0.00%	2	0.03%	9	0.07%	3,764	0.39%
\$1,000,000 or more	0	0.00%	8	0.12%	21	0.16%	5,018	0.52%
Median Home Value:	\$46,200		\$81,200		\$75,700		\$112,800	

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

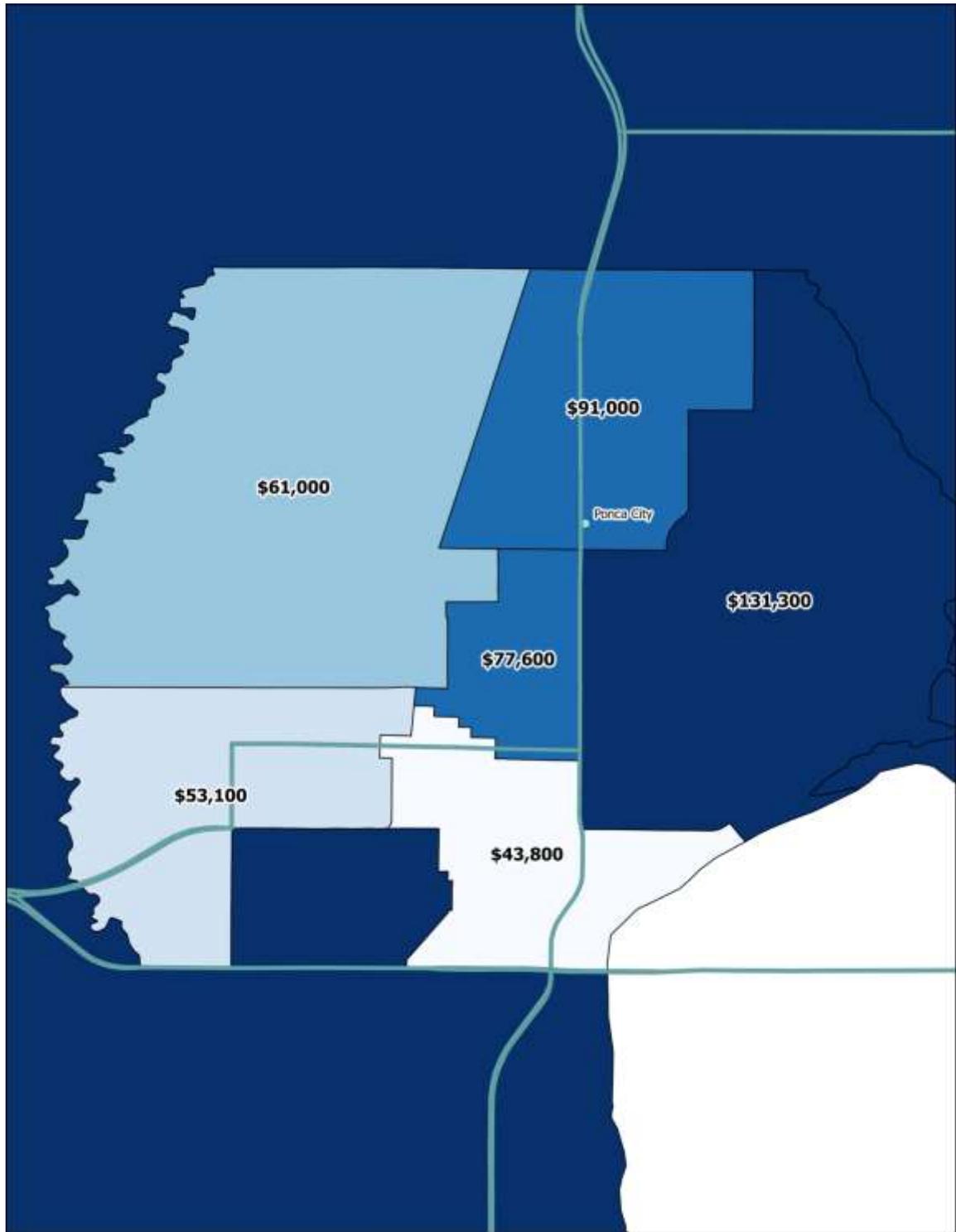
The median value of owner-occupied homes in Kay County is \$75,700. This is -32.9% lower than the statewide median, which is \$112,800. The median home value in Blackwell is estimated to be \$46,200. The median home value in Ponca City is estimated to be \$81,200.

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

Kay County Median Home Values by Census Tract



Median Home Values by Census Tract – Ponca City Detail



Home Values by Year of Construction

The next table presents median home values in Kay 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				
	Blackwell Median Value	Ponca City Median Value	Kay County Median Value	State of Oklahoma Median Value
Total Owner-Occupied Units:				
Built 2010 or Later	-	-	\$350,000	\$188,900
Built 2000 to 2009	-	\$149,500	\$159,000	\$178,000
Built 1990 to 1999	\$34,600	\$152,000	\$98,500	\$147,300
Built 1980 to 1989	\$29,200	\$109,000	\$98,100	\$118,300
Built 1970 to 1979	\$87,700	\$114,300	\$107,600	\$111,900
Built 1960 to 1969	\$45,700	\$84,600	\$80,500	\$97,100
Built 1950 to 1959	\$51,200	\$66,600	\$65,100	\$80,300
Built 1940 to 1949	\$36,300	\$60,000	\$55,400	\$67,900
Built 1939 or Earlier	\$36,900	\$49,000	\$49,100	\$74,400

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

Source: 2009-2013 American Community Survey, Table 25107

Blackwell Single Family Sales Activity

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

Blackwell Single Family Sales Activity					
Two Bedroom Units					
Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	36	54	41	48	34
Average Sale Price	\$23,779	\$105,526	\$24,771	\$36,398	\$30,016
Average Square Feet	1,052	1,122	1,007	1,111	1,043
Average Price/SF	\$22.60	\$94.05	\$24.60	\$32.76	\$28.78
Average Year Built	1937	1938	1936	1945	1939

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

Blackwell Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	40	46	44	46	62
Average Sale Price	\$47,340	\$101,197	\$55,277	\$61,882	\$61,862
Average Square Feet	1,549	1,541	1,430	1,547	1,519
Average Price/SF	\$30.56	\$65.67	\$38.66	\$40.00	\$40.73
Average Year Built	1944	1954	1954	1957	1954

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

Blackwell Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	7	6	7	9	13
Average Sale Price	\$68,571	\$114,998	\$97,429	\$83,562	\$90,917
Average Square Feet	1,893	2,403	2,404	2,165	2,071
Average Price/SF	\$36.22	\$47.86	\$40.53	\$38.60	\$43.90
Average Year Built	1941	1957	1933	1951	1944

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

Blackwell Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	83	106	92	103	109
Average Sale Price	\$46,563	\$107,240	\$59,159	\$60,614	\$60,931
Average Square Feet	1,498	1,200	1,613	1,607	1,544
Average Price/SF	\$31.08	\$89.37	\$36.68	\$37.72	\$39.46
Average Year Built	1940	1941	1941	1951	1945

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

Between 2011 and 2014, the average sale price grew by 6.82% per year, though this appears to be due to an unusually low average price in 2011. The average sale price in 2015 was \$60,931 for an average price per square foot of \$39.46. The average year of construction for homes sold in 2015 is estimated to be 1945.

Ponca City Single Family Sales Activity

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

Ponca City Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	114	131	148	133	139
Average Sale Price	\$45,263	\$41,557	\$43,361	\$41,257	\$40,183
Average Square Feet	1,108	1,074	1,143	1,116	1,092
Average Price/SF	\$40.85	\$38.69	\$37.94	\$36.97	\$36.80
Average Year Built	1945	1946	1946	1945	1944

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

Ponca City Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	228	272	279	278	266
Average Sale Price	\$79,009	\$92,705	\$95,517	\$96,481	\$99,057
Average Square Feet	1,617	1,600	1,573	1,564	1,629
Average Price/SF	\$48.86	\$57.94	\$60.72	\$61.69	\$60.81
Average Year Built	1959	1962	1963	1964	1961

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

Ponca City Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	56	76	66	75	63
Average Sale Price	\$149,426	\$152,170	\$172,666	\$174,108	\$180,726
Average Square Feet	2,375	2,392	2,450	2,378	2,377
Average Price/SF	\$62.92	\$63.62	\$70.48	\$73.22	\$76.03
Average Year Built	1969	1967	1964	1967	1967

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

Ponca City Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	398	479	493	486	468
Average Sale Price	\$91,232	\$95,477	\$103,848	\$103,948	\$106,656
Average Square Feet	1,700	1,688	1,722	1,686	1,699
Average Price/SF	\$53.67	\$56.56	\$60.31	\$61.65	\$62.78
Average Year Built	1957	1958	1957	1958	1957

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

Between 2011 and 2014, the average sale price grew by 3.32% per year. The average sale price in 2015 was \$106,656 for an average price per square foot of \$62.78. The average year of construction for homes sold in 2015 is estimated to be 1957.

Foreclosure Rates

The next table presents foreclosure rate data for Kay 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
Kay County	1.8%
State of Oklahoma	2.1%
United States	2.1%
Rank among Counties in Oklahoma*:	41
* 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 Kay County was 1.8% in May 2014. The county ranked 41 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%.

Discussions with local real estate professionals indicate that foreclosures in the area have had little, to no impact on the local market. Though there has been small percentage of foreclosures within the county, the market has not been significantly impacted in a negative way.

Rental Market

This section will discuss supply and demand factors for the rental market in Kay 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 Kay 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								
	Blackwell		Ponca City		Kay County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Rental Units:	1,018		3,383		5,520		475,345	
With cash rent:	977		3,132		5,038		432,109	
Less than \$100	9	0.88%	6	0.18%	15	0.27%	2,025	0.43%
\$100 to \$149	48	4.72%	16	0.47%	72	1.30%	2,109	0.44%
\$150 to \$199	21	2.06%	62	1.83%	92	1.67%	4,268	0.90%
\$200 to \$249	29	2.85%	70	2.07%	125	2.26%	8,784	1.85%
\$250 to \$299	28	2.75%	96	2.84%	152	2.75%	8,413	1.77%
\$300 to \$349	11	1.08%	63	1.86%	114	2.07%	9,107	1.92%
\$350 to \$399	62	6.09%	86	2.54%	191	3.46%	10,932	2.30%
\$400 to \$449	100	9.82%	99	2.93%	310	5.62%	15,636	3.29%
\$450 to \$499	96	9.43%	249	7.36%	456	8.26%	24,055	5.06%
\$500 to \$549	49	4.81%	275	8.13%	406	7.36%	31,527	6.63%
\$550 to \$599	136	13.36%	329	9.73%	585	10.60%	33,032	6.95%
\$600 to \$649	35	3.44%	285	8.42%	402	7.28%	34,832	7.33%
\$650 to \$699	0	0.00%	267	7.89%	328	5.94%	32,267	6.79%
\$700 to \$749	92	9.04%	206	6.09%	329	5.96%	30,340	6.38%
\$750 to \$799	51	5.01%	174	5.14%	277	5.02%	27,956	5.88%
\$800 to \$899	160	15.72%	292	8.63%	526	9.53%	45,824	9.64%
\$900 to \$999	34	3.34%	254	7.51%	311	5.63%	34,153	7.18%
\$1,000 to \$1,249	0	0.00%	197	5.82%	214	3.88%	46,884	9.86%
\$1,250 to \$1,499	0	0.00%	71	2.10%	82	1.49%	14,699	3.09%
\$1,500 to \$1,999	16	1.57%	12	0.35%	28	0.51%	10,145	2.13%
\$2,000 or more	0	0.00%	23	0.68%	23	0.42%	5,121	1.08%
No cash rent	41	4.03%	251	7.42%	482	8.73%	43,236	9.10%
Median Gross Rent	\$563		\$638		\$600		\$699	

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

Median gross rent in Kay County is estimated to be \$600, which is -14.2% less than Oklahoma's median gross rent of \$699/month. Median gross rent in Blackwell is estimated to be \$563. Median rent in Ponca City is estimated to be \$638.

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				
	Blackwell Median Rent	Ponca City Median Rent	Kay County Median Rent	State of Oklahoma Median Rent
Total Rental Units:				
Built 2010 or Later	-	-	-	\$933
Built 2000 to 2009	-	\$522	\$532	\$841
Built 1990 to 1999	\$284	\$617	\$559	\$715
Built 1980 to 1989	\$814	\$612	\$605	\$693
Built 1970 to 1979	\$395	\$537	\$511	\$662
Built 1960 to 1969	\$548	\$694	\$655	\$689
Built 1950 to 1959	\$705	\$705	\$694	\$714
Built 1940 to 1949	\$798	\$634	\$641	\$673
Built 1939 or Earlier	\$450	\$680	\$575	\$651

rent.

Source: 2009-2013 American Community Survey, Table 25111

The highest median gross rent in Kay County is among housing units constructed between 1980 and 1989 in Blackwell, which is \$814 per month. In order to be affordable, a household would need to earn at least \$32,560 per year to afford such a unit.

Blackwell Rental Survey Data

The next table shows the results of our rental survey of Blackwell.

Blackwell Rental Properties - Affordable								
Name	Type	Year Built	Bedrooms	Bathrooms	Size (SF)	Rate	Rate/SF	Vacancy
Andros Village	LIHTC	1978	N/A	N/A	684	\$485	\$0.709	6.00%
Andros Village	LIHTC	1978	N/A	N/A	820	\$655	\$0.799	6.00%
Jefferson Park Apartments	LIHTC	1970	N/A	N/A	550	\$518	\$0.942	0.00%
Jefferson Park Apartments	LIHTC	1970	N/A	N/A	722	\$576	\$0.798	0.00%
Jefferson Park Apartments	LIHTC	1970	N/A	N/A	868	\$685	\$0.789	0.00%
Jefferson Park Apartments	LIHTC	1970	N/A	N/A	1,010	\$762	\$0.754	0.00%
Jefferson Park Apartments	LIHTC	1970	N/A	N/A	420	\$420	\$1.000	0.00%

The previous rent surveys encompass rental units in two 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 slightly increased. Occupancy levels in the Blackwell area have continued to increase to its present level in the 94-100% 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.

Based on the number of units identified as rentals by the 2010 Census, it is reasonable to assume that a significant number of single family residences are rentals as well as smaller complexes (under 20 units) not surveyed by this analyst.

Rental Market Vacancy – Blackwell

The developments outlined previously report occupancy levels typically above 95%. These occupancy levels are typical of well-maintained and poorly maintained properties alike. The ability of older, physically deteriorating facilities to maintain high occupancy levels reflects the lack of superior alternatives in the Tahlequah market. The overall market vacancy of rental housing units was reported at 19.3% by the Census Bureau as of the most recent American Community Survey, but this figure appears high based on our own survey of housing in the area.

As noted above, the majority of complexes in Tahlequah report occupancy levels above 90%. Although this analyst's survey does not include all rental units in Tahlequah, it represents a reasonable market sample of available units, both affordable and market rate. Due to the inflow and outflow of energy workers in the Kay County area, the overall vacancy percentage could be affected either positive or negative depending on the current market performance of the industry.



Rent Survey 1
Jefferson Park Apartments



Rent Survey 2
Andros Village

Ponca City Rental Survey Data

The next two tables show the results of our rental survey of Ponca City. 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.)

Ponca City Rental Properties								
Name	Type	Year Built	Bedrooms	Bathrooms	Size (SF)	Rate	Rate/SF	Vacancy
Village Green Apartments	Conventional	1984	1	1	550	\$475	\$0.864	0.00%
Village Green Apartments	Conventional	1984	1	1	580	\$500	\$0.862	0.00%
Village Green Apartments	Conventional	1984	2	1	832	\$525	\$0.631	0.00%
Village Green Apartments	Conventional	1984	3	2	1,100	\$650	\$0.591	0.00%
Pecan Place Apartments	Conventional	1984	1	1	622	\$350	\$0.563	0.00%
Pecan Place Apartments	Conventional	1984	2	1	820	\$440	\$0.537	0.00%
Pecan Place Apartments	Conventional	1984	2	2	839	\$450	\$0.536	0.00%
Windsor Park Apartments	Conventional	1984	2	1	832	\$490	\$0.589	N/A
Windsor Park Apartments	Conventional	1984	1	2	700	\$900	\$1.286	N/A
Willow Creek I & II	LHHC	2002	1	1	700	\$395	\$0.564	2.00%
Willow Creek I & II	LHHC	2002	1	1	711	\$480	\$0.675	2.00%
Willow Creek I & II	LHHC	2002	2	2	900	\$455	\$0.506	2.00%
Willow Creek I & II	LHHC	2002	2	2	953	\$550	\$0.577	2.00%

The previous rent surveys encompass over 367 rental units in four 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 slightly increased. Occupancy levels in the Ponca City area have continued to increase to its present level in the 94-100% 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.

Based on the number of units identified as rentals by the 2010 Census, it is reasonable to assume that a significant number of single family residences are rentals as well as smaller complexes (under 20 units) not surveyed by this analyst.

Rental Market Vacancy – Ponca City

The developments outlined previously report occupancy levels typically above 95%. These occupancy levels are typical of well-maintained and poorly maintained properties alike. The ability of older, physically deteriorating facilities to maintain high occupancy levels reflects the lack of superior alternatives in the Ponca City market. The overall market vacancy of rental housing units was reported at 22.20% by the Census Bureau as of the most recent American Community Survey, but this figure appears high based on our own survey of housing in the area. Due to the inflow and outflow of energy workers in the Kay County area, the overall vacancy percentage could be affected either positive or negative depending on the current market standing of the industry.

As noted above, the majority of complexes in Ponca City report occupancy levels above 90%. Although this analyst's survey does not include all rental units in Ponca City, it represents a reasonable market sample of available units, both affordable and market rate.



Rent Survey 1
Willow Creek I & II



Rent Survey 2
Windsor Park Apartments



Rent Survey 3
Pecan Place Apartments



Rent Survey 4
Village Green Apartments

Summary of HUD Subsidized Properties

The following tables present data for housing units and households subsidized by the United States Department of Housing and Urban Development, for Kay 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.

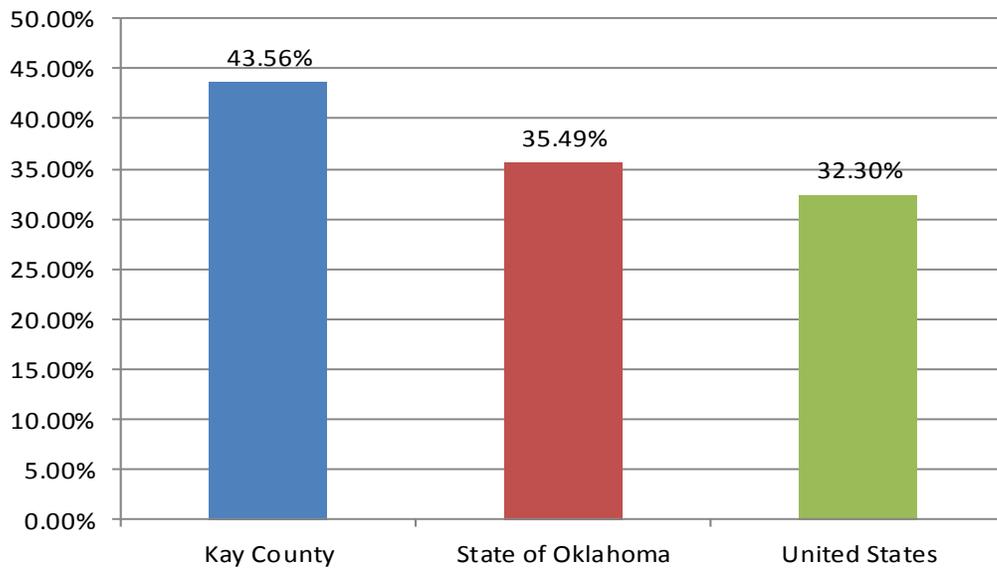
HUD Programs in Kay County

Kay County	# Units	Occupancy Rate	Avg. Household Income	Tenant Contribution	Federal Contribution	% of Total Rent
Public Housing	223	99%	\$15,155	\$268	\$263	50.42%
Housing Choice Vouchers	145	96%	\$13,475	\$373	\$266	58.40%
Mod Rehab	34	83%	\$5,452	\$130	\$351	27.01%
Section 8 NC/SR	60	93%	\$10,314	\$238	\$444	34.94%
Section 236	60	95%	\$3,491	\$87	\$557	13.49%
Multi-Family Other	22	95%	\$7,703	\$174	\$345	33.51%
Summary of All HUD Programs	544	96%	\$11,623	\$253	\$327	43.56%
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 544 housing units located within Kay County, with an overall occupancy rate of 96%. The average household income among households living in these units is \$11,623. Total monthly rent for these units averages \$580, with the federal contribution averaging \$327 (56.44%) and the tenant's contribution averaging \$253 (43.56%).

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.



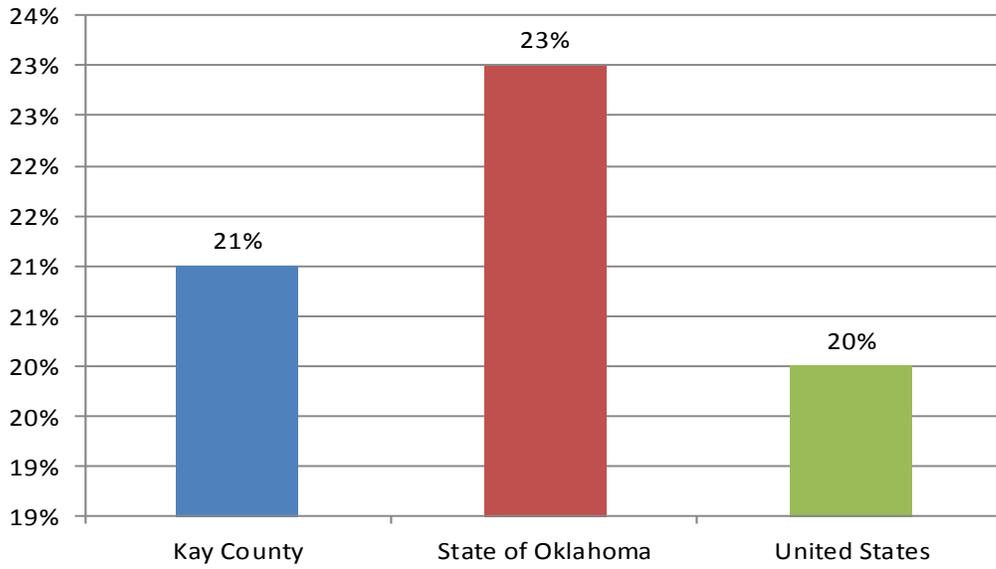
Demographics of Persons in HUD Programs in Kay County

Kay County	# Units	% Single Mothers	% w/ Disability	% Age 62+	% Age 62+ w/ Disability	% Minority
Public Housing	223	24%	27%	39%	34%	13%
Housing Choice Vouchers	145	21%	29%	50%	27%	13%
Mod Rehab	34	7%	27%	29%	50%	4%
Section 8 NC/SR	60	62%	7%	8%	20%	11%
Section 236	60	48%	4%	6%	33%	26%
Multi-Family Other	22	37%	21%	7%	67%	12%
Summary of All HUD Programs	544	31%	21%	30%	33%	14%
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

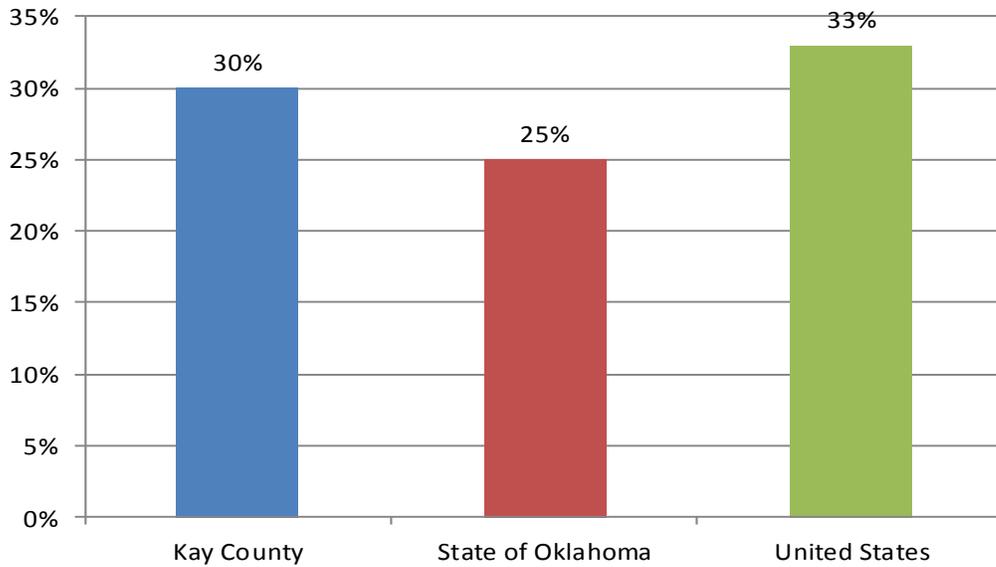
31% of housing units are occupied by single parents with female heads of household. 21% of households have at least one person with a disability. 30% of households have either a householder or spouse age 62 or above. Of the households age 62 or above, 33% have one or more disabilities. Finally, 14% of households are designated as racial or ethnic minorities.

Percentage of Households with Disabilities - HUD Subsidized Properties



Source: 2013 HUD Picture of Subsidized Households

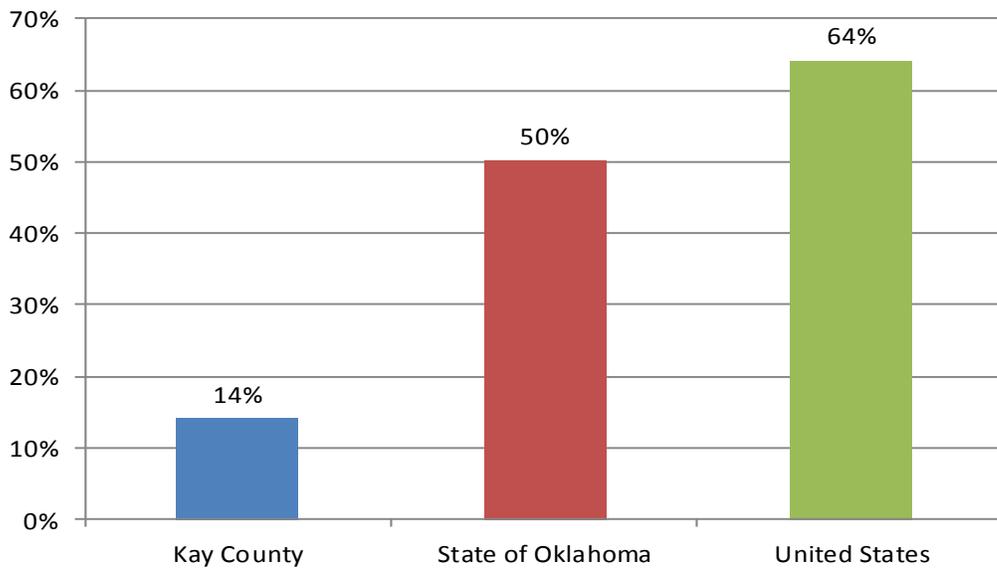
Percentage of Households Age 62+ - HUD Subsidized Properties



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 Kay 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 Kay 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.

Kay County : CHAS - Housing Cost Burden by HAMFI

Household Income / Cost Burden	Owners		Renters	
	Number	Percent	Number	Percent
Income < 30% HAMFI	750		1,240	
Cost Burden Less Than 30%	145	19.33%	265	21.37%
Cost Burden Between 30%-50%	130	17.33%	235	18.95%
Cost Burden Greater Than 50%	410	54.67%	660	53.23%
Not Computed (no/negative income)	65	8.67%	80	6.45%
Income 30%-50% HAMFI	1,260		1,085	
Cost Burden Less Than 30%	660	52.38%	380	35.02%
Cost Burden Between 30%-50%	335	26.59%	410	37.79%
Cost Burden Greater Than 50%	265	21.03%	295	27.19%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 50%-80% HAMFI	2,210		1,250	
Cost Burden Less Than 30%	1,615	73.08%	920	73.60%
Cost Burden Between 30%-50%	465	21.04%	305	24.40%
Cost Burden Greater Than 50%	130	5.88%	25	2.00%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 80%-100% HAMFI	1,280		620	
Cost Burden Less Than 30%	1,155	90.23%	525	84.68%
Cost Burden Between 30%-50%	100	7.81%	95	15.32%
Cost Burden Greater Than 50%	20	1.56%	0	0.00%
Not Computed (no/negative income)	0	0.00%	0	0.00%
All Incomes	12,740		5,690	
Cost Burden Less Than 30%	10,595	83.16%	3,570	62.74%
Cost Burden Between 30%-50%	1,220	9.58%	1,055	18.54%
Cost Burden Greater Than 50%	850	6.67%	984	17.29%
Not Computed (no/negative income)	65	0.51%	80	1.41%

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

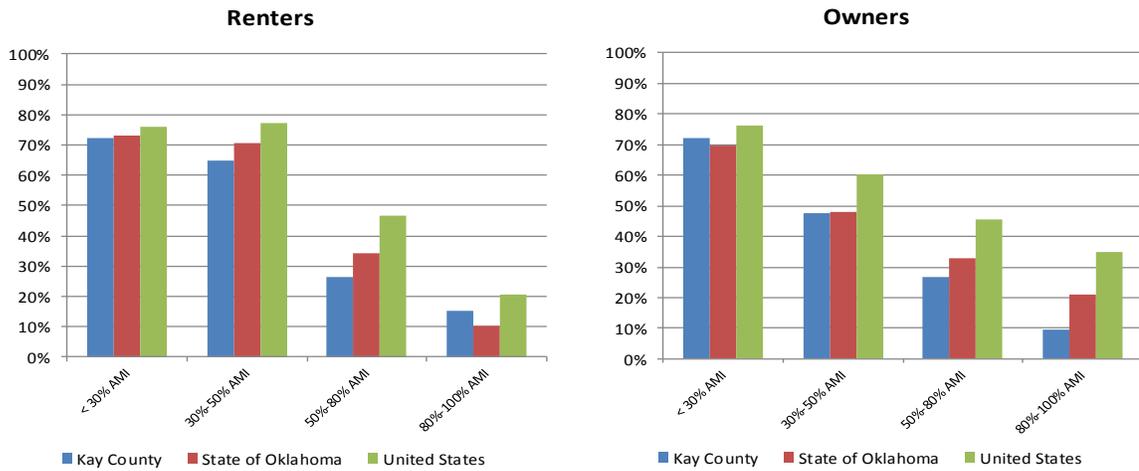
The next table summarizes the data from the previous table for households with cost burden greater than 30% of gross income, followed by a chart comparing these figures for Kay County with the State of Oklahoma as a whole, and the United States.

Kay County : Households by Income by Cost Burden

Household Income Threshold	Owners		Renters	
	Total	% w/ Cost > 30% Income	Total	% w/ Cost > 30% Income
Income < 30% HAMFI	750	72.00%	1,240	72.18%
Income 30%-50% HAMFI	1,260	47.62%	1,085	64.98%
Income 50%-80% HAMFI	2,210	26.92%	1,250	26.40%
Income 80%-100% HAMFI	1,280	9.38%	620	15.32%
All Incomes	12,740	16.25%	5,690	35.83%

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.



Kay County : CHAS - HAMFI by Substandard Conditions / Overcrowding

Household Income / Housing Problem	Owners		Renters	
	Number	Percent	Number	Percent
Income < 30% HAMFI	750		1,240	
Between 1.0 and 1.5 Persons per Room	35	4.67%	65	5.24%
More than 1.5 Persons per Room	0	0.00%	80	6.45%
Lacks Complete Kitchen or Plumbing	15	2.00%	35	2.82%
Income 30%-50% HAMFI	1,260		1,085	
Between 1.0 and 1.5 Persons per Room	25	1.98%	10	0.92%
More than 1.5 Persons per Room	4	0.32%	4	0.37%
Lacks Complete Kitchen or Plumbing	55	4.37%	25	2.30%
Income 50%-80% HAMFI	2,210		1,250	
Between 1.0 and 1.5 Persons per Room	15	0.68%	15	1.20%
More than 1.5 Persons per Room	0	0.00%	15	1.20%
Lacks Complete Kitchen or Plumbing	90	4.07%	40	3.20%
Income 80%-100% HAMFI	1,280		620	
Between 1.0 and 1.5 Persons per Room	10	0.78%	85	13.71%
More than 1.5 Persons per Room	0	0.00%	15	2.42%
Lacks Complete Kitchen or Plumbing	4	0.31%	4	0.65%
All Incomes	12,740		5,690	
Between 1.0 and 1.5 Persons per Room	120	0.94%	225	3.95%
More than 1.5 Persons per Room	14	0.11%	129	2.27%
Lacks Complete Kitchen or Plumbing	94	0.74%	164	2.88%

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

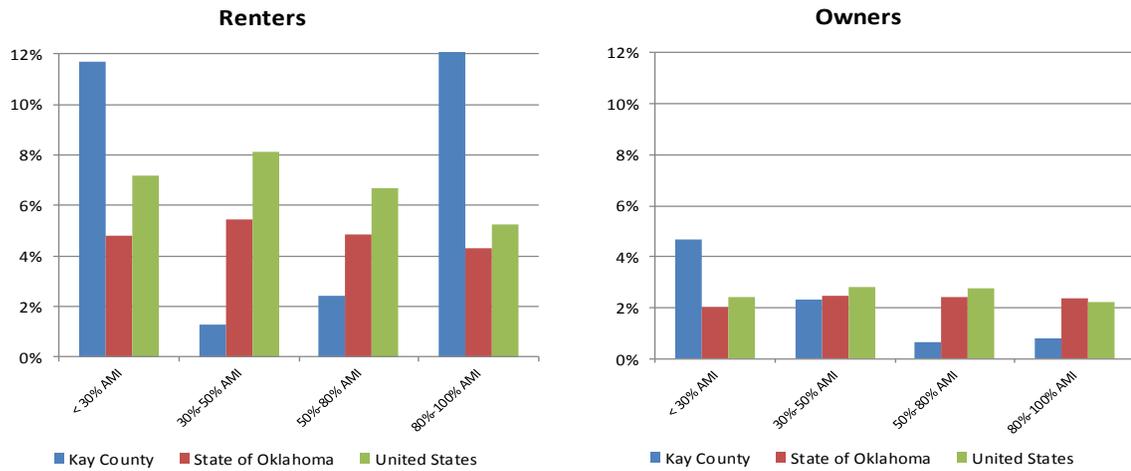
The next table summarizes this data for overcrowding (i.e. all households with greater than 1.0 persons per room), with a chart comparing this data between Kay County, Oklahoma and the nation.

Kay County : Households by Income by Overcrowding

Household Income Threshold	Total	Owners		Renters	
		% > 1.0 Persons per Room	Total	% > 1.0 Persons per Room	Total
Income < 30% HAMFI	750	4.67%	1,240	11.69%	1,240
Income 30%-50% HAMFI	1,260	2.30%	1,085	1.29%	1,085
Income 50%-80% HAMFI	2,210	0.68%	1,250	2.40%	1,250
Income 80%-100% HAMFI	1,280	0.78%	620	16.13%	620
All Incomes	12,740	1.05%	5,690	6.22%	5,690

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 Kay County, the state and the nation.

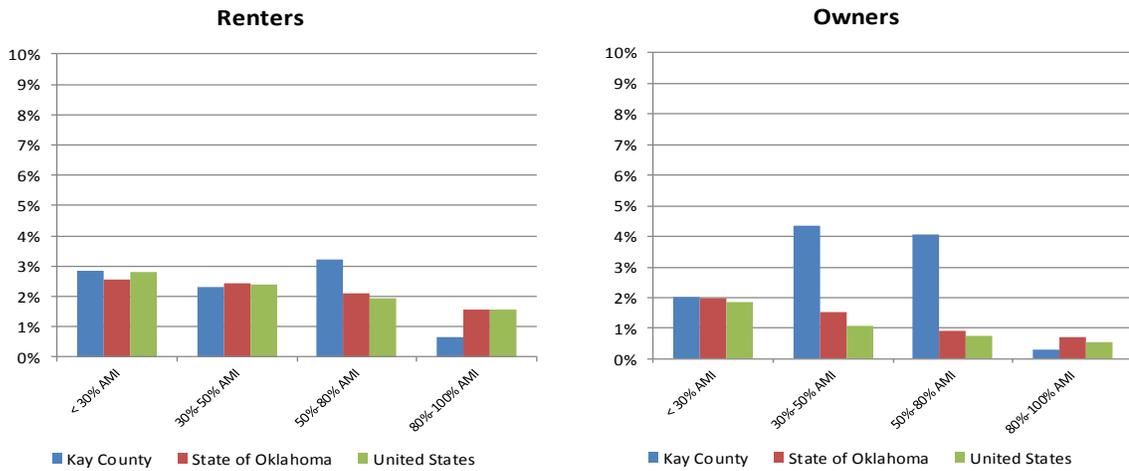
Kay County : Households by Income by Substandard Conditions

Household Size/Type	Total	Owners		Renters	
		% Lacking Kitchen or Plumbing	Total	% Lacking Kitchen or Plumbing	Total
Income < 30% HAMFI	750	2.00%	1,240	2.82%	
Income 30%-50% HAMFI	1,260	4.37%	1,085	2.30%	
Income 50%-80% HAMFI	2,210	4.07%	1,250	3.20%	
Income 80%-100% HAMFI	1,280	0.31%	620	0.65%	
All Incomes	12,740	0.74%	5,690	2.88%	

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.



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

Income, Household Size/Type	Total	Owners		Total	Renters	
		No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income		No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
Income < 30% HAMFI	750	534	71.20%	1,240	894	72.10%
Elderly Family	55	34	61.82%	30	15	50.00%
Small Family (2-4 persons)	170	140	82.35%	425	310	72.94%
Large Family (5 or more persons)	75	60	80.00%	105	89	84.76%
Elderly Non-Family	260	165	63.46%	170	85	50.00%
Non-Family, Non-Elderly	195	135	69.23%	510	395	77.45%
Income 30%-50% HAMFI	1,260	610	48.41%	1,085	709	65.35%
Elderly Family	160	65	40.63%	35	19	54.29%
Small Family (2-4 persons)	295	200	67.80%	355	280	78.87%
Large Family (5 or more persons)	70	25	35.71%	80	50	62.50%
Elderly Non-Family	530	260	49.06%	275	155	56.36%
Non-Family, Non-Elderly	210	60	28.57%	335	205	61.19%
Income 50%-80% HAMFI	2,210	600	27.15%	1,250	334	26.72%
Elderly Family	575	100	17.39%	95	20	21.05%
Small Family (2-4 persons)	635	285	44.88%	555	164	29.55%
Large Family (5 or more persons)	145	35	24.14%	120	15	12.50%
Elderly Non-Family	545	110	20.18%	140	55	39.29%
Non-Family, Non-Elderly	315	70	22.22%	340	80	23.53%
Income 80%-100% HAMFI	1,280	121	9.45%	620	100	16.13%
Elderly Family	435	45	10.34%	40	10	25.00%
Small Family (2-4 persons)	435	44	10.11%	265	45	16.98%
Large Family (5 or more persons)	130	4	3.08%	65	25	38.46%
Elderly Non-Family	165	4	2.42%	40	0	0.00%
Non-Family, Non-Elderly	110	24	21.82%	215	20	9.30%
All Incomes	12,740	2,092	16.42%	5,690	2,049	36.01%
Elderly Family	2,835	328	11.57%	270	64	23.70%
Small Family (2-4 persons)	5,250	754	14.36%	2,340	799	34.15%
Large Family (5 or more persons)	940	138	14.68%	460	179	38.91%
Elderly Non-Family	2,090	558	26.70%	745	303	40.67%
Non-Family, Non-Elderly	1,630	314	19.26%	1,870	704	37.65%

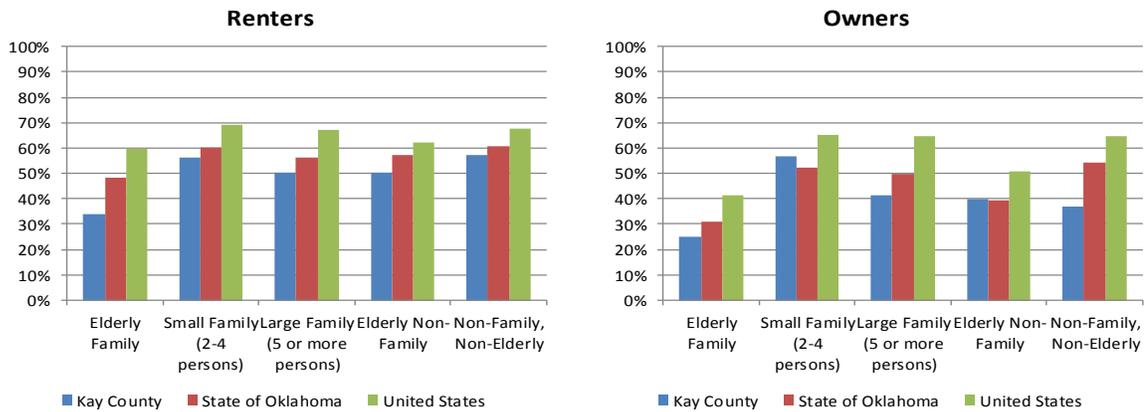
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

Kay County : Households under 80% AMI by Cost Burden

Household Size/Type	Total	Owners		Renters	
		No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
Income < 80% HAMFI	4,220	1,744	41.33%	3,575	54.18%
Elderly Family	790	199	25.19%	160	33.75%
Small Family (2-4 persons)	1,100	625	56.82%	1,335	56.48%
Large Family (5 or more persons)	290	120	41.38%	305	50.49%
Elderly Non-Family	1,335	535	40.07%	585	50.43%
Non-Family, Non-Elderly	720	265	36.81%	1,185	57.38%

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).



Kay County : CHAS - Housing Problems by Household Type and HAMFI						
Income, Household Size/Type	Total	Owners			Renters	
		No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 30% HAMFI	750	555	74.00%	1,240	905	72.98%
Elderly Family	55	35	63.64%	30	15	50.00%
Small Family (2-4 persons)	170	140	82.35%	425	310	72.94%
Large Family (5 or more persons)	75	65	86.67%	105	85	80.95%
Elderly Non-Family	260	165	63.46%	170	85	50.00%
Non-Family, Non-Elderly	195	150	76.92%	510	410	80.39%
Income 30%-50% HAMFI	1,260	670	53.17%	1,085	740	68.20%
Elderly Family	160	65	40.63%	35	25	71.43%
Small Family (2-4 persons)	295	195	66.10%	355	305	85.92%
Large Family (5 or more persons)	70	40	57.14%	80	55	68.75%
Elderly Non-Family	530	280	52.83%	275	150	54.55%
Non-Family, Non-Elderly	210	90	42.86%	335	205	61.19%
Income 50%-80% HAMFI	2,210	690	31.22%	1,250	395	31.60%
Elderly Family	575	100	17.39%	95	20	21.05%
Small Family (2-4 persons)	635	305	48.03%	555	185	33.33%
Large Family (5 or more persons)	145	45	31.03%	120	45	37.50%
Elderly Non-Family	545	110	20.18%	140	55	39.29%
Non-Family, Non-Elderly	315	130	41.27%	340	90	26.47%
Income Greater than 80% of HAMFI	8,515	415	4.87%	2,115	340	16.08%
Elderly Family	2,045	130	6.36%	110	10	9.09%
Small Family (2-4 persons)	4,150	150	3.61%	1,005	185	18.41%
Large Family (5 or more persons)	655	60	9.16%	155	90	58.06%
Elderly Non-Family	755	25	3.31%	160	10	6.25%
Non-Family, Non-Elderly	915	50	5.46%	685	45	6.57%
All Incomes	12,735	2,330	18.30%	5,690	2,380	41.83%
Elderly Family	2,835	330	11.64%	270	70	25.93%
Small Family (2-4 persons)	5,250	790	15.05%	2,340	985	42.09%
Large Family (5 or more persons)	945	210	22.22%	460	275	59.78%
Elderly Non-Family	2,090	580	27.75%	745	300	40.27%
Non-Family, Non-Elderly	1,635	420	25.69%	1,870	750	40.11%

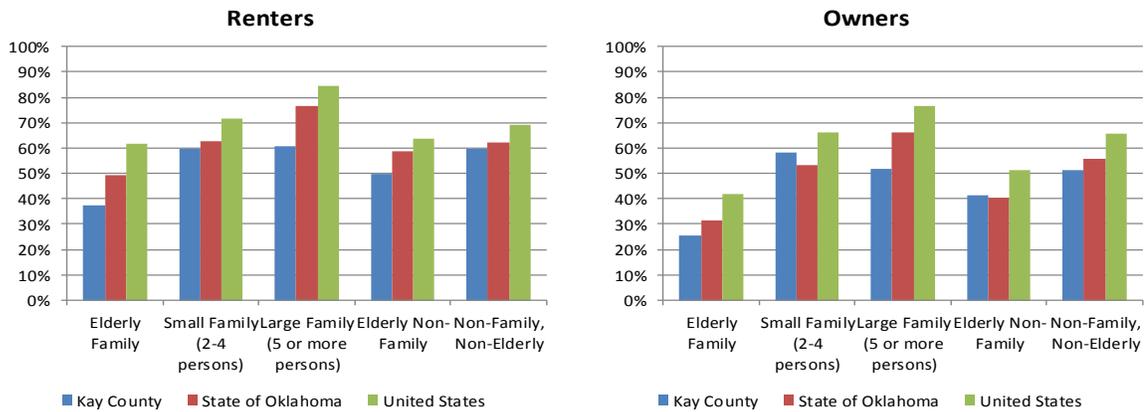
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 16

Kay County : Households under 80% AMI by Housing Problems

Household Size/Type	Total	Owners		Renters	
		No. w/ Housing Problems	Pct. w/ Housing Problems	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 80% HAMFI	4,220	1,915	45.38%	3,575	57.06%
Elderly Family	790	200	25.32%	160	37.50%
Small Family (2-4 persons)	1,100	640	58.18%	1,335	59.93%
Large Family (5 or more persons)	290	150	51.72%	305	60.66%
Elderly Non-Family	1,335	555	41.57%	585	49.57%
Non-Family, Non-Elderly	720	370	51.39%	1,185	59.49%

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

Households Under 80% of AMI: Percentage with Housing Problems



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

Housing Problems by Race / Ethnicity

Data presented in the following tables summarizes housing problems (as previously defined), by HAMFI threshold, and by race/ethnicity, for Kay 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.”



Kay County : CHAS - Housing Problems by Race / Ethnicity and HAMFI						
Income, Race / Ethnicity	Total	Owners		Renters		
		No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 30% HAMFI	750	555	74.0%	1,240	910	73.4%
White alone, non-Hispanic	575	430	74.8%	975	700	71.8%
Black or African-American alone	4	0	0.0%	45	20	44.4%
Asian alone	14	10	71.4%	4	4	100.0%
American Indian alone	85	65	76.5%	80	60	75.0%
Pacific Islander alone	0	0	N/A	4	0	0.0%
Hispanic, any race	28	20	71.4%	59	55	93.2%
Other (including multiple races)	45	35	77.8%	74	70	94.6%
Income 30%-50% HAMFI	1,260	670	53.2%	1,085	740	68.2%
White alone, non-Hispanic	1,075	565	52.6%	765	520	68.0%
Black or African-American alone	40	25	62.5%	70	40	57.1%
Asian alone	0	0	N/A	0	0	N/A
American Indian alone	60	35	58.3%	100	75	75.0%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	50	20	40.0%	90	70	77.8%
Other (including multiple races)	40	25	62.5%	60	35	58.3%
Income 50%-80% HAMFI	2,210	690	31.2%	1,250	390	31.2%
White alone, non-Hispanic	1,940	590	30.4%	975	310	31.8%
Black or African-American alone	30	30	100.0%	65	10	15.4%
Asian alone	25	15	60.0%	15	0	0.0%
American Indian alone	100	35	35.0%	65	10	15.4%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	55	10	18.2%	90	55	61.1%
Other (including multiple races)	60	10	16.7%	44	4	9.1%
Income 80%-100% HAMFI	1,280	135	10.5%	620	195	31.5%
White alone, non-Hispanic	1,155	125	10.8%	535	175	32.7%
Black or African-American alone	10	0	0.0%	4	0	0.0%
Asian alone	0	0	N/A	0	0	N/A
American Indian alone	39	4	10.3%	25	10	40.0%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	49	4	8.2%	60	15	25.0%
Other (including multiple races)	20	0	0.0%	0	0	N/A
All Incomes	12,740	2,330	18.3%	5,690	2,380	41.8%
White alone, non-Hispanic	11,210	1,970	17.6%	4,460	1,795	40.2%
Black or African-American alone	144	55	38.2%	184	70	38.0%
Asian alone	69	35	50.7%	29	4	13.8%
American Indian alone	624	149	23.9%	405	205	50.6%
Pacific Islander alone	10	0	0.0%	14	0	0.0%
Hispanic, any race	317	54	17.0%	379	195	51.5%
Other (including multiple races)	360	70	19.4%	223	109	48.9%

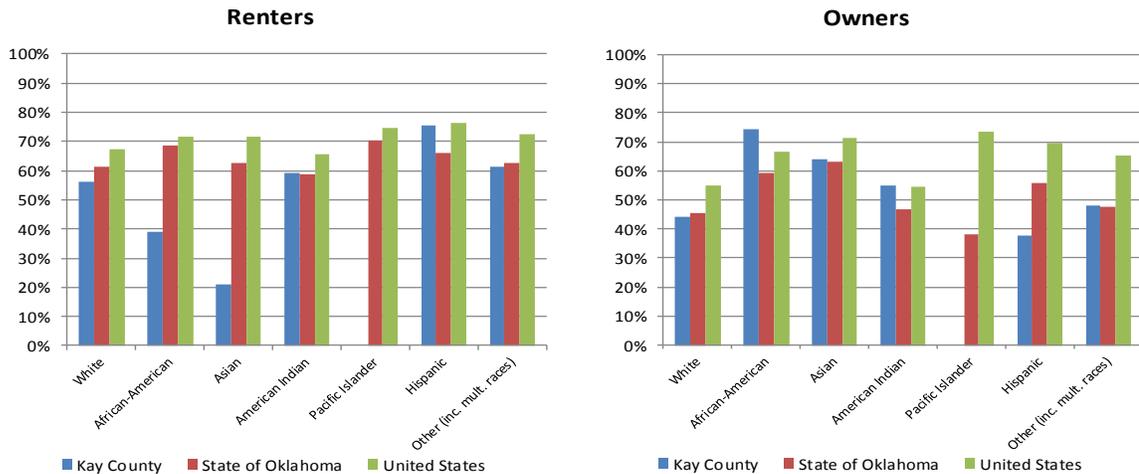
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 1

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

Household Size/Type	Total	Owners		Renters	
		No. w/ Housing Problems	Pct. w/ Housing Problems	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 80% HAMFI	4,220	1,915	45.38%	3,575	57.06%
White alone, non-Hispanic	3,590	1,585	44.15%	2,715	56.35%
Black or African-American alone	74	55	74.32%	180	38.89%
Asian alone	39	25	64.10%	19	21.05%
American Indian alone	245	135	55.10%	245	59.18%
Pacific Islander alone	0	0	N/A	4	0.00%
Hispanic, any race	133	50	37.59%	239	75.31%
Other (including multiple races)	145	70	48.28%	178	61.24%

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 Kay 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 1,645 renter households that are cost overburdened, and 1,225 homeowners that are cost overburdened.
- Among elderly households with incomes less than 50% of Area Median Income, there are 60 renter households that are cost overburdened, and 200 homeowners that are cost overburdened.



- 75.31% of Hispanic renters with incomes less than 80% of Area Median Income have one or more housing problems, and 74.3% of African American homeowners with incomes less than 80% of Area Median Income have one or more housing problems.

Overall Anticipated Housing Demand

Future demand for housing units in Kay 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 Blackwell, Ponca City, as well as Kay County as a whole. The calculations are shown in the following tables.

Blackwell Anticipated Demand

As indicated throughout the report, the population, households and number of housing units have decreased over the last fifteen years. The following table summarizes population, household, and housing unit changes.

Blackwell Historical Population and Housing Changes					
	2000 Census	2010 Census	% Change	2015 Estimate	% Change
Population	7,668	7,092	-0.78%	6,802	-0.83%
Households	3,064	2,840	-0.76%	2,713	-0.91%
Housing Units	3,527	3,398	-0.37%	3,361	-0.22%

Sources: 2000 and 2010 Decennial Censuses, Nielsen SiteReports

As shown, the number of housing units and the population declined at almost identical rates from 2000 to 2010. It is the opinion of this analyst that population decline will not be as rapid in the next several years but that the deterioration of the housing stock will continue at current rates. This will lead to reduced availability of housing units in the city of Blackwell.

According to local officials, there is very high demand for rental units that is not currently satisfied in the market. This is evident from very high occupancy rates for market rate rental units. High occupancy rates reduce options for potential residents of Blackwell and may lead people who are employed in Blackwell to live outside the city limits. There also appears to be high demand for affordable owner-occupied property. There has been limited single-family development in the past decade. There is an adequate supply of housing units that are valued below \$60,000. Sporadic development of custom-built housing units priced above \$150,000 has also occurred. Households that prefer housing units valued between \$60,000 and \$80,000 have a limited product available in the city of Blackwell. In general, there appears to be unsatisfied demand for median-income rental and owner-occupied property.

Ponca City Anticipated Demand

As indicated throughout the report, the population, households and number of housing units have decreased over the last fifteen years. The following table summarizes population, household, and housing unit changes.

Ponca City Historical Population and Housing Changes

	2000 Census	2010 Census	% Change	2015 Estimate	% Change
Population	25,919	25,387	-0.21%	24,898	-0.39%
Households	10,636	10,395	-0.23%	10,218	-0.34%
Housing Units	11,871	11,950	0.07%	11,917	-0.06%

Sources: 2000 and 2010 Decennial Censuses, Nielsen SiteReports

As shown, the number of housing units and the population declined at slightly higher rates from 2000 to 2010. It is the opinion of this analyst that population decline will remain in decline for the next several years and that the deterioration of the housing stock will continue at current rates. This will lead to reduced availability of housing units in the city of Ponca City.

According to local officials, there is very high demand for rental units that is not currently satisfied in the market. This is evident from very high occupancy rates for market rate rental units. High occupancy rates reduce options for potential residents of Ponca City and may lead people who are employed in Ponca City to live outside the city limits. There also appears to be high demand for affordable owner-occupied property. There has been limited single-family development in the past decade. There is an adequate supply of housing units that are valued below \$60,000. Sporadic development of custom-built housing units priced above \$150,000 has also occurred. Households that prefer housing units valued between \$60,000 and \$80,000 have a limited product available in the city of Ponca City. In general, there appears to be unsatisfied demand for median-income rental and owner-occupied property.

Kay County Anticipated Demand

As indicated throughout the report, the population, households and number of housing units have decreased over the last fifteen years. The following table summarizes population, household, and housing unit changes.

Kay County Historical Population and Housing Changes

	2000 Census	2010 Census	% Change	2015 Estimate	% Change
Population	48,080	46,562	-0.32%	45,327	-0.54%
Households	19,157	18,577	-0.31%	18,102	-0.52%
Housing Units	21,804	21,708	-0.04%	21,536	-0.16%

Sources: 2000 and 2010 Decennial Censuses, Nielsen SiteReports

As mentioned previously, the population is declining at a rate faster than the number of housing units declined. The loss of housing units may be attributed to demolitions outpacing new construction. The percentage loss of households was not as high as the percentage population loss due to declining average household size. It is unlikely that the average household size will significantly decrease in the future.

There were 3,131 more housing units than households in the county according to the 2010 Census. It is the opinion of this analyst that minimal demand exists for new housing units. This opinion is based

on the projection that the population of Kay County will continue to decline in the future. However, the housing stock of Kay County is rapidly aging and deteriorating. A small amount of affordable new housing would improve the county's housing infrastructure and give more housing options to current residents of Kay County.

Special Topics



Kay County Disaster Resiliency Assessment

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

C.0 Comprehensive Plans & Hazard Mitigation Plans

There are 8 key cities within the county (Ponca City, Newkirk, Blackwell, Tonkawa, Kaw City, Braman, Nardin, Oklahoma, Kildare).

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.

Ponca City has a comprehensive plan. The relevant sections of their plan were reviewed and goals of the plan consistent with this study included need for housing.

- Adequate Housing Needed for Growth – The plan identifies a lack of available housing for sale. (Ponca City Comprehensive Plan, 1.12)
- Notation on growth management to prevent: “Degradation of environmental resources such as floodplains, wetlands, habitat, vegetated areas, etc.” (3.19)
 - Policy 9: Preservation measures will be enacted to protect sensitive lands and conserve environmental resources. (3.21)

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

Kay County does have a Hazard Mitigation Plan, but it is under review. Ponca City also has a HMP in draft form which was available for review for this study.

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

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

Hazards identified in the Ponca City HMP are summarized in the table (Ponca City HMP, 34):

Hazards How and Why Identified

HAZARD	HOW IDENTIFIED	WHY IDENTIFIED
Dam Failure/Levees	<ul style="list-style-type: none"> ➢ National Inventory of Dams ➢ OWRB ➢ FIRMS ➢ ODEM 	<ul style="list-style-type: none"> ➢ Ponca City has three high hazard dams located within the boundaries. There are no levees listed for Ponca City.
Drought	<ul style="list-style-type: none"> ➢ USGS ➢ Water Department ➢ Lake and pond levels ➢ Dept. of Agriculture 	<ul style="list-style-type: none"> ➢ Low water levels at area ponds (including raw water supply reservoir) and lake ➢ Low crop yields
Earthquake	<ul style="list-style-type: none"> ➢ USGS ➢ NCDC ➢ State Hazard Mitigation Officer 	<ul style="list-style-type: none"> ➢ Low-level earthquakes measured by the Richter Scale have been recorded.
Extreme Heat	<ul style="list-style-type: none"> ➢ Local News Stations ➢ State Hazard Mitigation Officer ➢ Local EMS ➢ Local Fire Department 	<ul style="list-style-type: none"> ➢ Local EMS, Fire and Police Departments respond to numerous heat related calls each year during the elevated temperature period
Flooding	<ul style="list-style-type: none"> ➢ Review of FIRMS ➢ Risk Assessments ➢ Public Input ➢ OWRB 	<ul style="list-style-type: none"> ➢ History of flash floods
Hail	<ul style="list-style-type: none"> ➢ Emergency Management Storm Watchers ➢ NCDC 	<ul style="list-style-type: none"> ➢ Ponca City has records of past occurrences of frequent Thunderstorms including: Hail, Lightning, and High Wind
High Wind	<ul style="list-style-type: none"> ➢ Emergency Management Storm Watchers ➢ NCDC 	<ul style="list-style-type: none"> ➢ Ponca City has records of past occurrences of frequent Thunderstorms including: Hail, Lightning, and High Wind
Lightning	<ul style="list-style-type: none"> ➢ Emergency Management Storm Watchers ➢ NCDC 	<ul style="list-style-type: none"> ➢ Ponca City has records of past occurrences of frequent Thunderstorms including: Hail, Lightning, and High Wind
Thunderstorm	<ul style="list-style-type: none"> ➢ Emergency Management Storm Watchers ➢ NCDC 	<ul style="list-style-type: none"> ➢ Ponca City has records of past occurrences of frequent Thunderstorms including: Hail, Lightning, and High Wind
Tornados	<ul style="list-style-type: none"> ➢ Emergency Management Storm watchers ➢ NCDC ➢ Local Citizens 	<ul style="list-style-type: none"> ➢ Kay County has records of past occurrence.
Wildfires	<ul style="list-style-type: none"> ➢ Local Fire Department ➢ Local Emergency Manager ➢ NCDC 	<ul style="list-style-type: none"> ➢ Ponca City has reports of wildfires.
Winter Storms	<ul style="list-style-type: none"> ➢ Local Emergency Manager ➢ NCDC ➢ Ponca City Public Works Dept 	<ul style="list-style-type: none"> ➢ Ponca City has history of winter storms.

Figure 3: Hazards Identified (Table)

(Ponca City HMP, 34)

In the HMP, the identified risks were also assessed for their probability of causing harm to their area:

Hazard Probability Matrix

Hazard Event	Ponca City	School District #71	County data used
Dam Failure/ Levees	U	U	<input type="checkbox"/>
Drought	L	L	<input checked="" type="checkbox"/>
Earthquake	U	U	<input checked="" type="checkbox"/>
Extreme Heat	U	U	<input checked="" type="checkbox"/>
Flooding	H	U	<input type="checkbox"/>
Hail	H	H	<input type="checkbox"/>
High Wind	L	L	<input type="checkbox"/>
Lightning	U	U	<input type="checkbox"/>
Thunderstorms	H	H	<input type="checkbox"/>
Tornados	L	L	<input checked="" type="checkbox"/>
Wildfires	U	U	<input type="checkbox"/>
Winter storms	H	H	<input checked="" type="checkbox"/>

Figure 4: Hazard Probability Matrix (Table)

(Ponca City HMP, 37)

As noted in the above table, flooding, hail, thunderstorms and winter storms have the highest probability of occurrence in the area.

The number of events in the area was also summarized in the following table:

Hazard History

Ponca City, Oklahoma Recorded Hazard Events Since 1998 By the National Climatic Data Center	
Hazards	Events in Kay County
	2005 to 2015
Dam Failure	0
Drought (County only data)	4
Earthquake (since 2005) 3.0 or Greater	2
Extreme Heat	2
Flood/Flash Flood	15
Hail	98
High Wind	7
Lightning (2005-2009)	1
Thunderstorms	132
Tornado	9
Wildfire	0
Winter Storms	13

Note: Not all hazard events are reported to the NCDC.

* Information from USGS

** Information from Local Fire Department

Figure 5: Hazard History (Table)

(Ponca City HMP, 37)

Dam Failure

There has not been a dam failure in Ponca City but there are three “High Hazard” dams located within the city borders (Ponca Lake, Kaw Lake and Cremers Park Regional Detention Pond)(p 42).

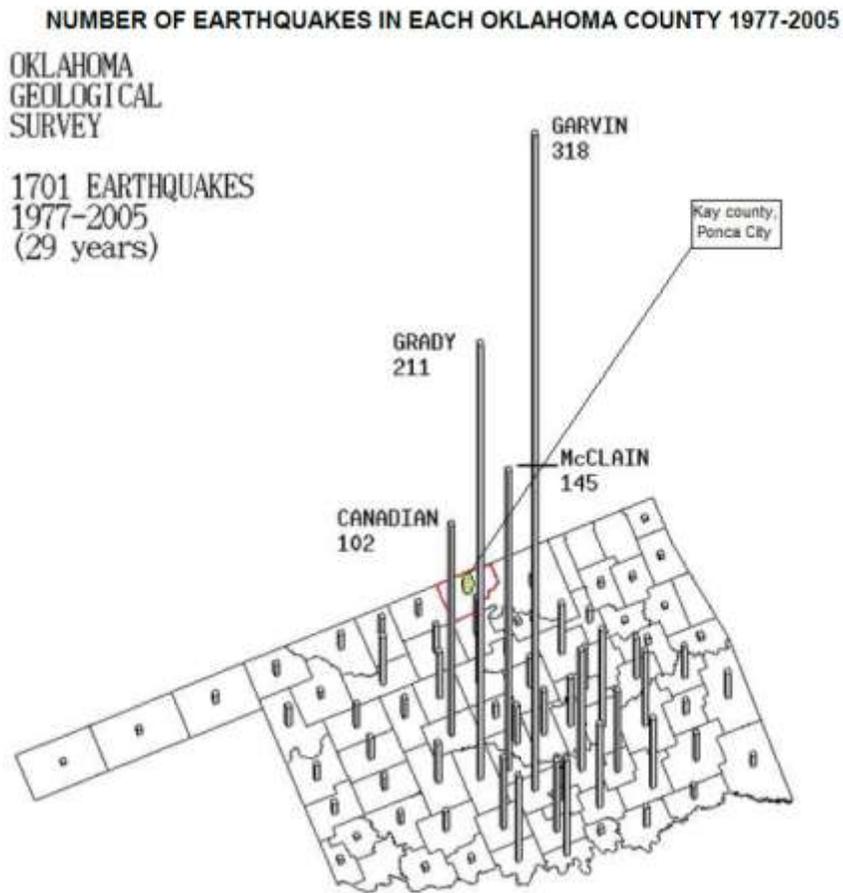


Figure 7: Ponca City Dam Failure Overview(Map)

Areas in Blue : Projected downstream path in the event of Dam Failure.

Earthquakes

While this is listed as unlikely for the area or as a lower probability, increased earthquakes in the state continue to be studied and of concern. The Ponca City HMP included this informative visual on historical earthquakes:



(Ponca City HMP, p. 54)

Flooding

There have been 15 flooding incidents in Ponca City. The HMP elaborates on locations and extent of damage:

“Ponca City has minor drainage backup around watersheds throughout the city. During heavy rain events, the city has several creeks, watersheds and tributaries that are located throughout the city, these areas fill the banks and overflow into nearby communities (Ponca City HMP, p.66)

Various Previous Occurrences For Flooding <small>Source: NCDC</small>	
April 29, 2012	Widespread street flooding occurred from near Tonkawa to Ponca City. Several inches of water forced the closure of several city streets and county roads, and also caused some automobiles to stall. I-35 also had about 6 to 8 inches of water running over it north-northwest of Tonkawa. Some of the water entered residences on the west side of Ponca City.
March 20, 2007	Heavy rainfall totals of 3 to 7 inches over northern Kay County during the morning hours of March 20 produced flash flooding in the area. At 1200 CST, the Kay County emergency manager reported that flash flooding from along Turkey Creek had covered and closed Oklahoma State Highway 11 four miles northeast of Ponca City and one miles east of the intersection with U.S. Highway 77. The powerful forces of the floodwaters damaged a temporary low water crossing on OK State Highway 11, tearing a 10-foot-wide section from the highway and damaging culverts under the highway. A cold front moved into the northwest third of Oklahoma during the afternoon of the 19th before stalling during the early evening hours. As an upper level storm system approached the southern plains, moist air from the Gulf of Mexico began spreading north into Oklahoma. Scattered showers and thunderstorms formed over north central Oklahoma late on the 19th. Several of these thunderstorms became severe, producing large hail and flooding rainfall. After midnight, the stationary front became a warm front and lifted to the north. Additional thunderstorms developed in western and northwest Oklahoma. Several of these thunderstorms also became severe with large hail and very heavy rainfall. Flooding was reported in several areas of northern Oklahoma.
April 26, 2006	Heavy rainfall amounts of 2.5 to 5 inches produced flash flooding during the late evening of April 28 in Kay County where Ponca City law enforcement reported numerous residential roads closed due to high water on the west side of Ponca City at 9:05 pm CST.
September 18, 2002	Numerous streets were covered with water. A large line of strong to severe thunderstorms developed over western Oklahoma during the late afternoon of the 18th and moved eastward as the evening progressed. Mangum, in Greer County, sustained structural damage inside the city limits, and there were two, brief, weak tornadoes verified over northern Oklahoma. One tornado formed near Nash in Grant County, while the other formed near Braman in Kay County. Both tornadoes were rated F0.

Several mitigation strategies to address channels and culverts that have potential for backup during heavy rains are planned as part of stormwater master plan. The Ponca City Stormwater Master Plan has mapped all the impacted structures subject to flooding and have identified structural improvements to reduce impacts.(Ponca City HMP, p. 82).

Tornados

Estimated Types and Numbers of Existing Structures Affected by an F-3 Tornado Ponca city					
Type of Structure	Number of Structures	Severe Damages	Moderate Damage	Population in Hazard Area	Total Damages
Residential	2,127	\$127,632,000	\$25,526,400	5,184	\$153,158,400
Commercial	293	\$1,770,517,000	\$345,070,850	3,016	\$2,115,587,850
School Dist.	4	\$45,365,379	\$9,073,076	1,183	\$54,438,455
Government (City)	11	\$66,268,892	\$13,252,650	273	\$79,521,542
TOTAL	2,435	\$2,009,783,272	\$401,956,654	9,392	\$2,411,739,926

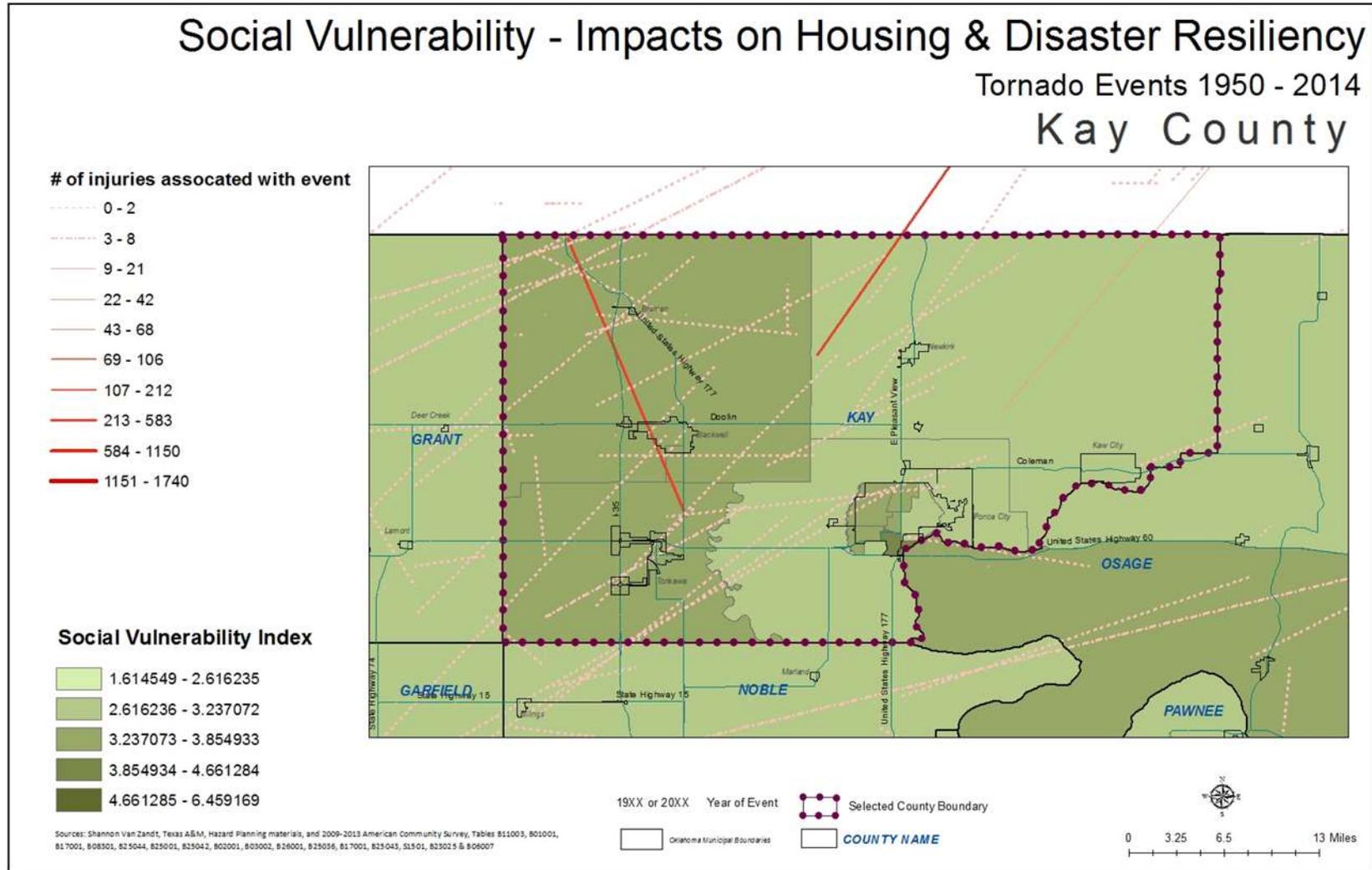
NOAA data shows the following historic data on disaster events for the county:

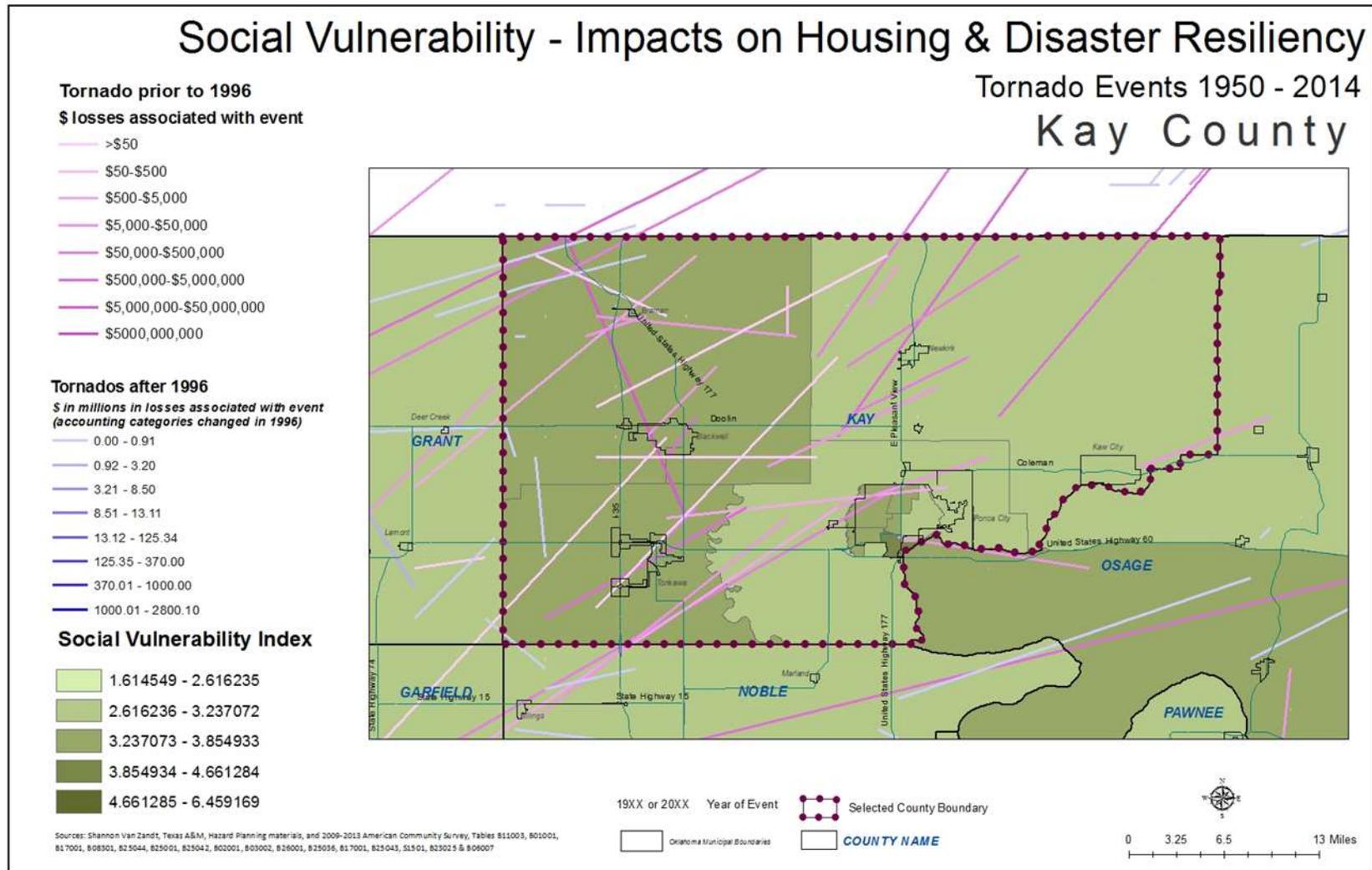
Kay County – Tornados

Historic data on tornados between 1950-2014 there are 92 tornados documented. There were 604 injuries that occurred connected to these tornados, with 553 of those injuries happening in the 1955 tornado. There were 102 fatalities connected to tornadoes during this time period, 100 of which occurred in the 1955 tornado. Property losses between 1950-1996 ranged from \$5,720,156.00 to



\$57,201,800.00. (The accounting methods used for losses changed in 1996.) The losses estimated between 1996-2014 was \$5,120,000.00





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

The Ponca City HMP notes as part of the development trends that many permits for storm shelters are being filed (p.121) and that the development is somewhat concentrated to the northeast side of the city.

The City of Ponca City does not maintain public storm shelters. At this time there are no buildings that meet the construction specifications established by Texas Tech University's Wind Science and Engineering Department, and adopted by FEMA. (Ponca City website)

Ponca City maintains an online shelter registry: <http://www.myponcacity.com/shelter/index.php>

C.2.1.3 Public Policy and Governance to Build Disaster Resiliency**C.2.1.4 Local Emergency Response Agency Structure**

If no Hazard Mitigation Plan/Disaster Recovery Plan / Action Plan/Disaster Resilience Plan/Emergency Management Plan are prepared, updated, and monitored the recommendation for this county is to apply for funding and complete a Hazard Mitigation Plan with FEMA.

The structure for response and to address any perceived vulnerabilities in the county is included in the Hazard Mitigation Plan. [Cite section in the plan that are relevant]

C.2.1.5 Threat & Hazard Warning Systems

Ponca City maintains radio-controlled outdoor warning sirens, and has access to a cable override system for notifications. Ponca City installed 4 new sirens in 2007.

Social Vulnerability

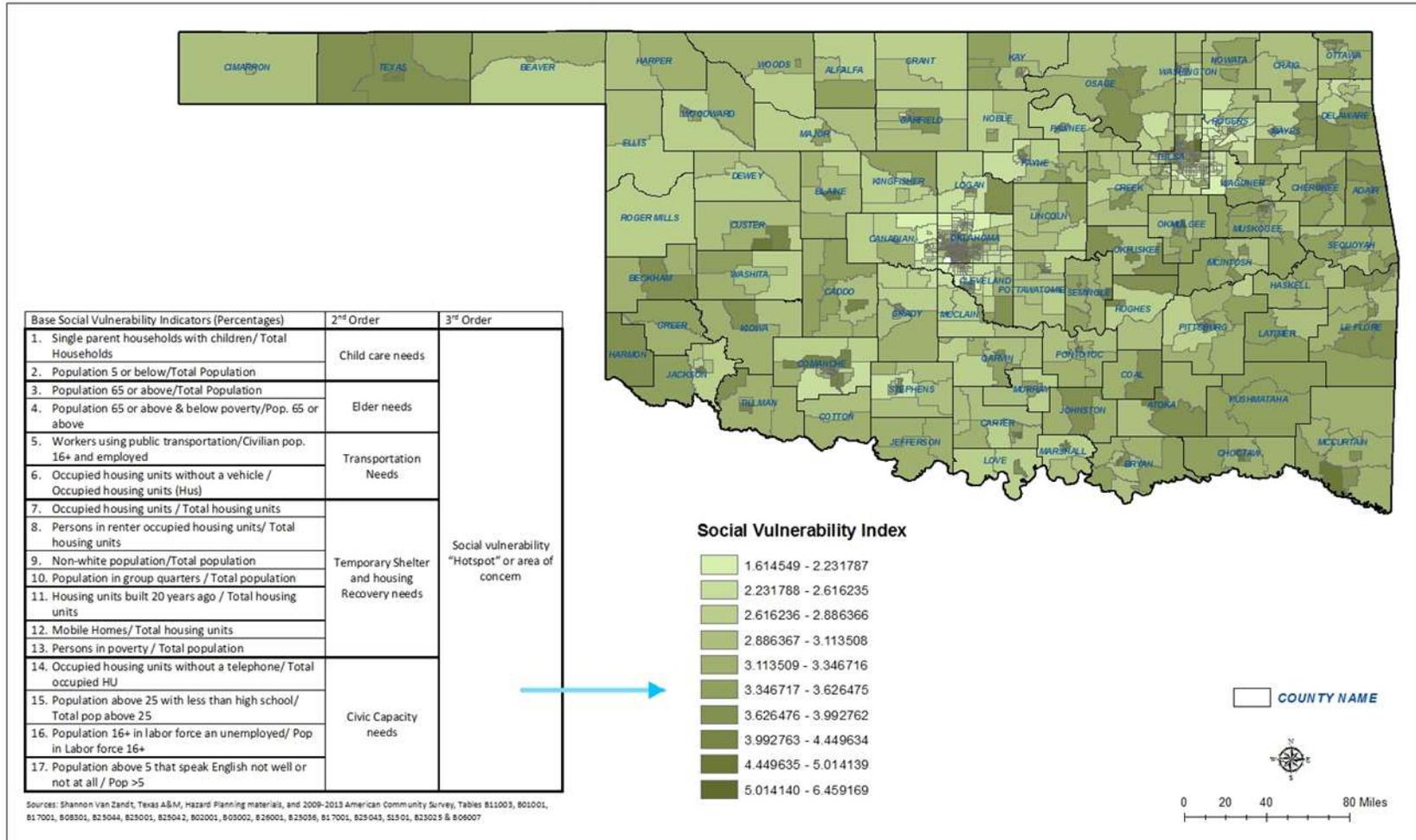
Based on the research work done by the Texas A&M University Hazard Reduction and Recovery Center, an added component is being included in this section. Social vulnerability can place households at a further disadvantage during and after a disaster. This analysis is assessing for the county the levels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

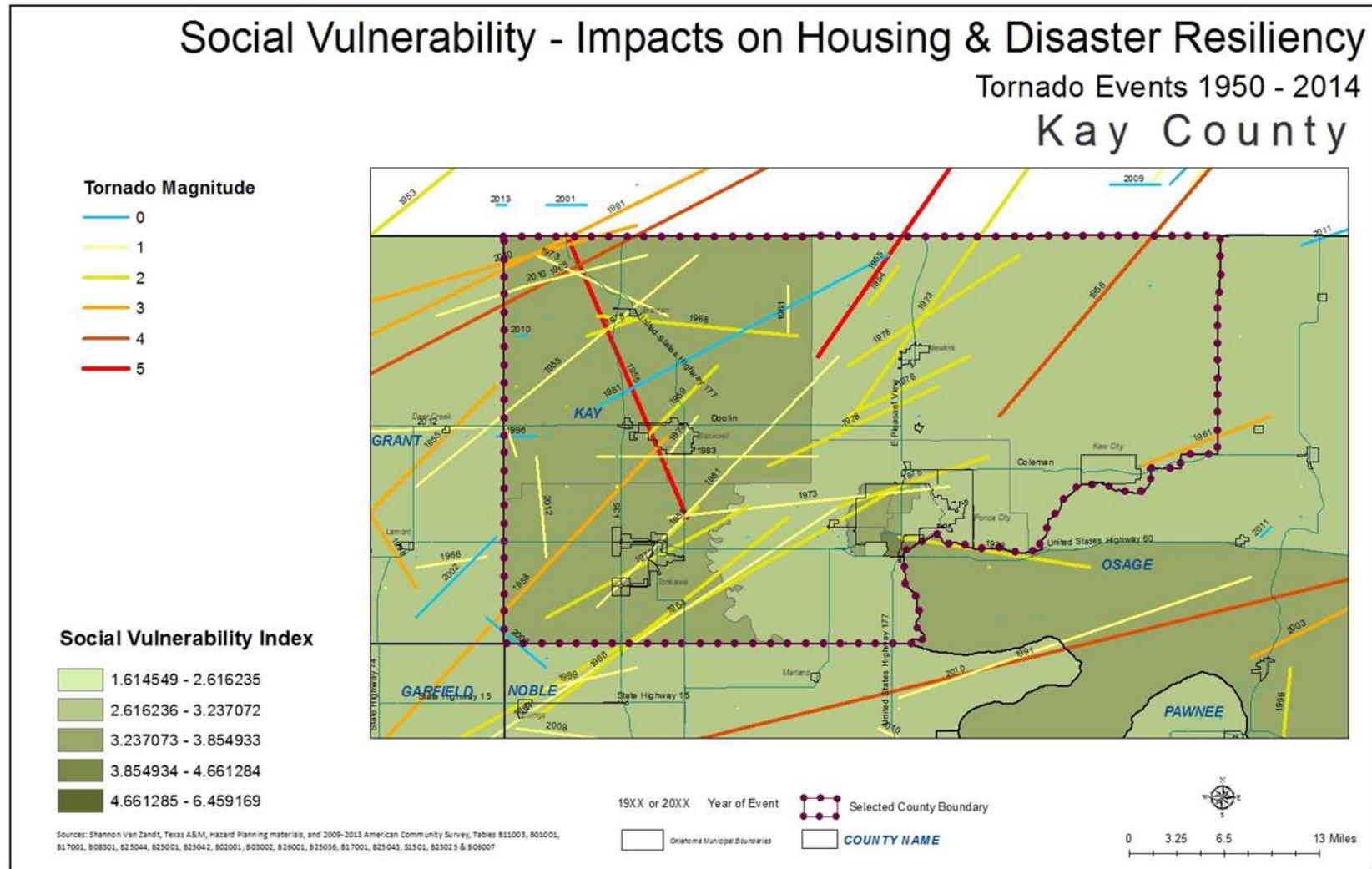
Social Vulnerability Analysis - Kay County			
Base Social Vulnerability Indicators (%)		2nd Order	3rd Order
1.) Single Parent Households	15.98%	0.231	3.351 Social Vulnerability 'Hotspot' or Area of Concern
2.) Population Under 5	7.10%	(Child Care Needs)	
3.) Population 65 or Above	17.22%	0.252	
4.) Population 65 or Above & Below Poverty Rate	7.99%	(Elder Needs)	
5.) Workers Using Public Transportation	0.36%	0.061	
6.) Occupied Housing Units w/o Vehicle	5.74%	(Transportation Needs)	
7.) Housing Unit Occupancy Rate	84.93%	2.538 (Temporary Shelter and Housing Recovery Needs)	
8.) Rental Occupancy Rate	30.07%		
9.) Non-White Population	23.06%		
10.) Population in Group Quarters	2.16%		
11.) Housing Units Built Prior to 1990	89.39%		
12.) Mobile Homes, RVs, Vans, etc.	6.05%		
13.) Poverty Rate	18.17%		
14.) Housing Units Lacking Telephones	2.96%	0.269 (Civic Capacity Needs)	
15.) Age 25+ With Less Than High School Diploma	13.70%		
16.) Unemployment Rate	7.94%		
17.) Age 5+ Which Cannot Speak English Well or Not At All	2.30%		

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



Social Vulnerability - Impacts on Housing & Disaster Resiliency





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

This county falls about average per this index for social vulnerability for the county per this index for social vulnerability when comparing as a county to other counties in the state. The western census tract of the county (Braman, Blackwell, and Tonkawa) has increased social vulnerability factors and as noted on the tornado maps a history of tornados in this area.

Recommendations for this county:

- Continue to update and maintain the county HMP and include attention to areas within the county that in addition to physical vulnerability may have compounding social vulnerability factors.
- Efforts to strengthen building codes related to tornadoes and natural disasters should be considered.
- Planning for shelters from disaster events for multifamily, HUD and LIHTC units, in addition to all housing in the community should be incorporated with any effort to increase housing.

Homelessness

By Continuum of Care

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

The data below describes the characteristics of those receiving or eligible for the CoC in which Kay 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:**

	Family Units ¹	Family Beds ¹	Adult-Only Beds	Child-Only Beds	Total Yr-Round Beds	Seasonal	Overflow / Voucher	Subset of Total Bed Inventory		
								Chronic Beds ²	Veteran Beds ²	Youth Beds ²
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**

Provider Name	Facility Name	Family Units ¹	Family Beds ²	Adult-Only Beds	Child-Only Beds	Seasonal	Overflow / Voucher	Total Beds	Subset of Total Bed Inventory		
									Chronic Beds ²	Veteran Beds ²	Youth Beds ²
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 as 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 individuals likely classify as "couch homeless" and are in a continued state of being vulnerable to becoming homeless.

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

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

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

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

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

	Sheltered		Unsheltered	Total
	Emergency Shelter	Transitional Housing*		
Households without children 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 children¹	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 child²	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 children³	38	0	47	85
Total Homeless Persons	2,309	690	778	3,777

Demographic summary by ethnicity:

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

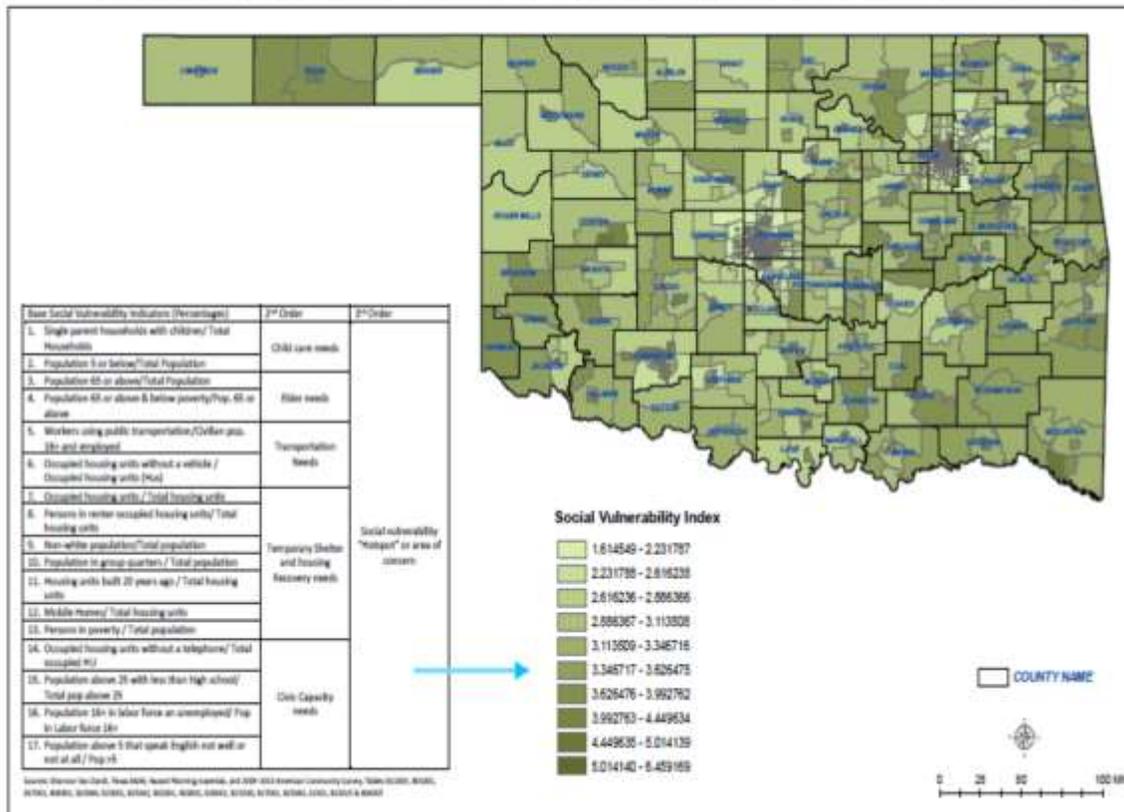
The absence of affordable housing in rural areas is a root cause of homelessness (Levinson, David, and Marcy Ross, 2007). In fact, it was noticed that many of the people were receiving monetary assistance or previously had some money saved up to spend on housing, but these measures were not enough to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

Social Vulnerability - Impacts on Housing & Disaster Resiliency



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

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

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

Findings and Recommendations

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

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

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

While not mentioned in the PIT data, estimates must be prepared to calculate the number and needs of homeless populations with felonies. In particular, there has been a rise nationally in the number of homeless sex offenders. Zoning regulations and discrimination from the private market has pushed many registered sex offenders to the periphery of many communities. This population must not be forgotten by policymakers.

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

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

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

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

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Fair Housing

Summary

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

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

Key Findings:

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

Recommendations:

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

What is Fair Housing?

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

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

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

Approach

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

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

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

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

Data

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

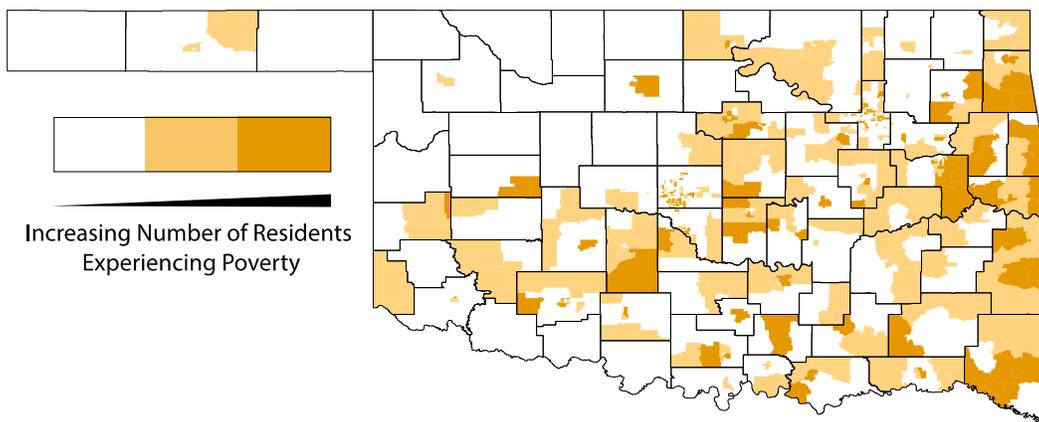
1. Urban/Rural

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

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

2. Poverty

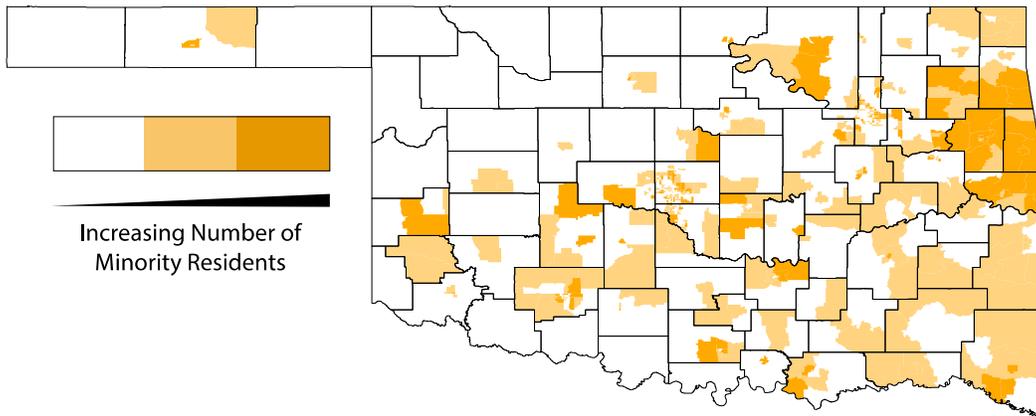
Approximately 70% of affordable housing units in Oklahoma are located in census tracts where the number of residents living in poverty is above the state average. About half of these units are located in areas of extreme poverty, where the number of individuals who are economically vulnerable exceeds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



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

3. Non-white Enclaves

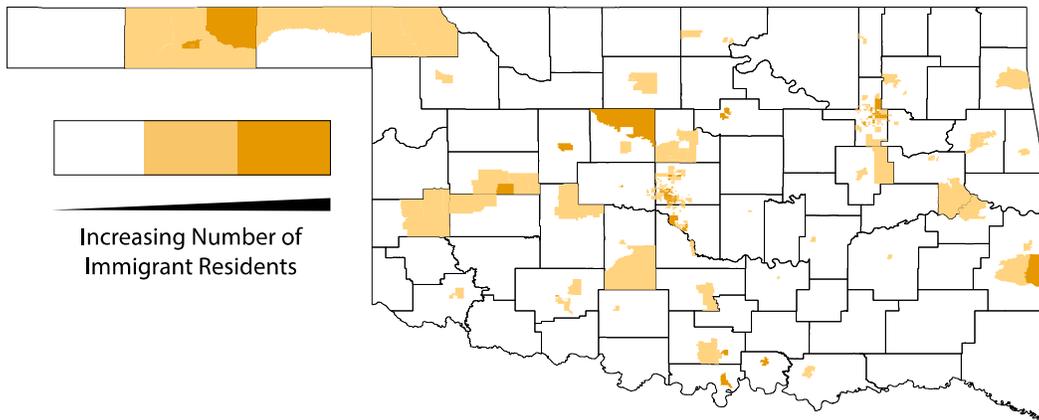
Just over 60% of affordable housing units in Oklahoma are located in census tracts where a majority of the residents are non-white. With just fewer than 24% of the total affordable housing units in census tracts heavily populated with residents who are not white – identified as census tracts where the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



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

4. Immigrant Enclaves

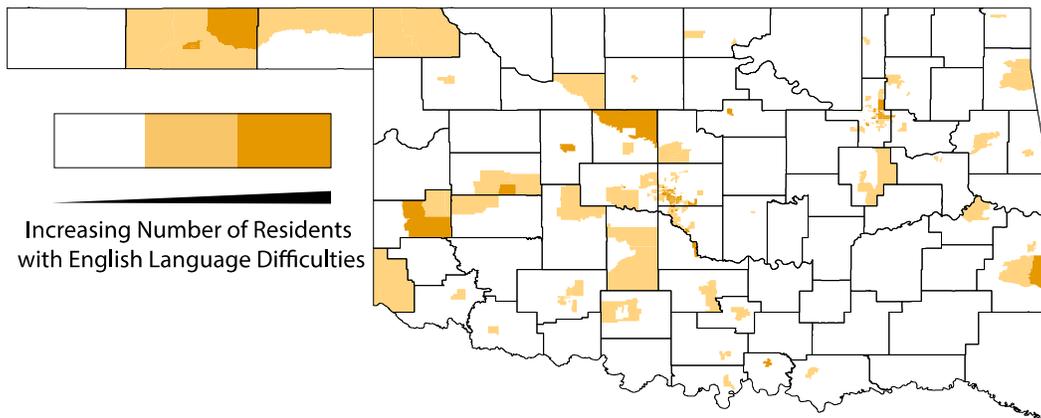
One-third of affordable housing units in Oklahoma are located in census tracts where more than the average number of residents are immigrants. About half of these units are located in areas dense with immigrants, where the number of individuals who are not citizen exceeds 349, more than one standard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



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

5. Limited English Proficiency

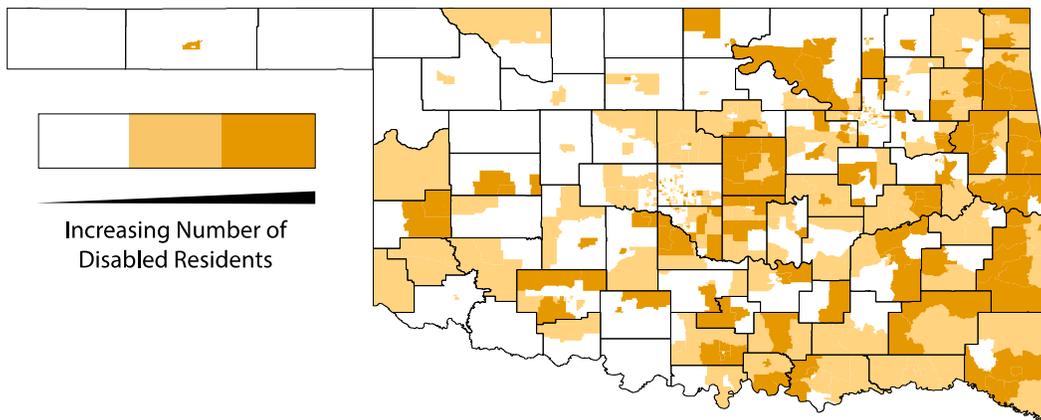
Almost 17,000 existing affordable housing units in Oklahoma are located in census tracts where more residents than average do not speak English very well. A little more than half of these units are located in areas dense with individuals with limited English proficiency, where the number of individuals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



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

6. Disability

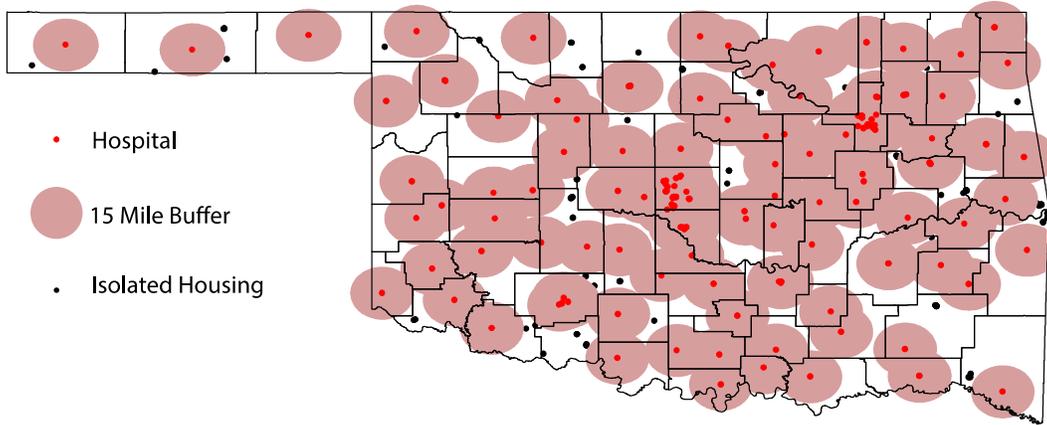
Almost 60% of existing affordable housing units in Oklahoma are located in census tracts where more residents than average have a disability. A little more than half of these units are located in areas dense with individuals with a disability, where the number of individuals who are disabled is greater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



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

7. Hospitals

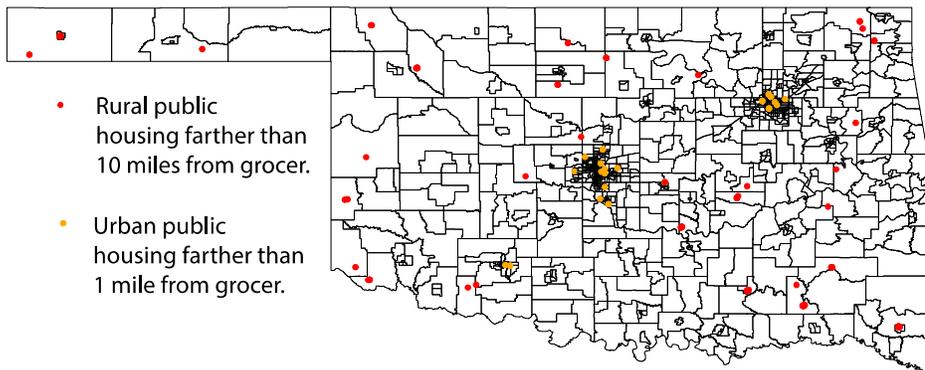
There are no affordable housing units more than 30 miles from a hospital. Approximately 2.6% of affordable housing units are farther than 15 miles from the nearest hospital. As indicated by the larger percentage of Rural Rental Housing Loan units, most of these are located in rural areas.



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

8. Grocery Stores

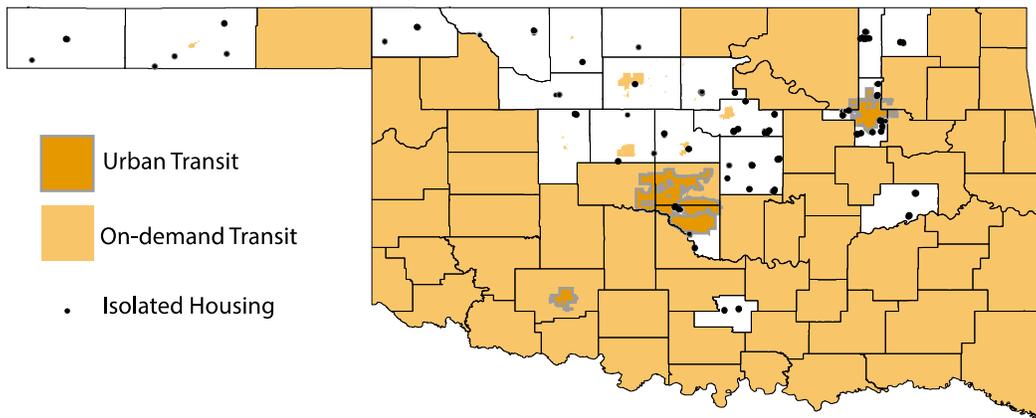
Approximately 7.8% of affordable housing units are in areas that are classified as food deserts. According to the United States Department of Agriculture, food deserts exist in urban environments further than 1 mile from a grocery store and in rural environments further than 10 miles from a grocery store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



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

9. Transit

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



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

What does this mean for Oklahoma?

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

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

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

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

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

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

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Data Sources

2014 American Community Survey Estimates

- Poverty: ACS_13_5YR_S1701 > HC02_EST_VC01 > Below poverty level; Estimate; Population for whom poverty status is determined
- Non-white enclaves: ACS_13_5YR_BO2001 > HD01_VD02 > [Total Population] - Estimate; Total: - White alone
- Immigrant enclaves: ACS_13_5YR_BO5001 > HD01_VD06 > Estimate; Total: - Not a U.S. citizen
- Limited English Proficiency: ACS_13_5YR_S1601 > HC03_EST_VC01 > Percent of specified language speakers - Speak English less than "very well"; Estimate; Population 5 years and over
- Disability: ACS_13_5YR_S1810 > HC02_EST_VC01 > with a disability; estimate; total civilian noninstitutionalized population

University of Oklahoma Center for Spatial Analysis: Data Warehouse

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

University of Oklahoma Division of Regional and City Planning

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

Appendix 1: County affordable housing Summaries

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

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

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

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

Lead-Based Paint Hazards

Findings / Health and Well-being

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

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

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

Statewide Findings

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

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 & CHASTables 12 & 13

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

Disaster Resiliency/ Economy and Society, Infrastructure and Environment

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

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

Leadership and Strategy

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

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

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

Survey of Previous Lead-based Paint Studies

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

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

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

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

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

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

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

Kay County Findings

The number of housing units in Kay 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 Kay 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 Kay 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 Kay County.

Total Housing Units in Kay 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	3,159	3.57%	113
1960-1977	3,816	11.18%	427
1940-1959	3,795	38.48%	1,460
1939 or Earlier	2,190	63.38%	1,388
Total	12,960	26.14%	3,387
Total Renter-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,126	3.57%	40
1960-1977	1,449	11.18%	162
1940-1959	2,070	38.48%	796
1939 or Earlier	905	63.38%	574
Total	5,550	28.33%	1,572
Total Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	4,285	3.57%	153
1960-1977	5,265	11.18%	589
1940-1959	5,865	38.48%	2,257
1939 or Earlier	3,095	63.38%	1,962
Total	18,510	26.79%	4,960

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

Housing Units in Kay 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	404	3.57%	14
1960-1977	486	11.18%	54
1940-1959	735	38.48%	283
1939 or Earlier	470	63.38%	298
Total	2,095	31.00%	649
Renter-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	545	3.57%	19
1960-1977	630	11.18%	70
1940-1959	840	38.48%	323
1939 or Earlier	360	63.38%	228
Total	2,375	27.00%	641
Total Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	949	3.57%	34
1960-1977	1,116	11.18%	125
1940-1959	1,575	38.48%	606
1939 or Earlier	830	63.38%	526
Total	4,470	28.87%	1,291

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

Housing Units in Kay 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	475	3.57%	17
1960-1977	581	11.18%	65
1940-1959	620	38.48%	239
1939 or Earlier	550	63.38%	349
Total	2,225	30.07%	669
Renter-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	153	3.57%	5
1960-1977	297	11.18%	33
1940-1959	475	38.48%	183
1939 or Earlier	210	63.38%	133
Total	1,135	31.24%	355
Total Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	628	3.57%	22
1960-1977	878	11.18%	98
1940-1959	1,095	38.48%	421
1939 or Earlier	760	63.38%	482
Total	3,360	30.46%	1,023

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

To conclude, we estimate that there are a total of 4,960 homes in Kay County containing lead-based paint hazards, 3,387 owner-occupied and 1,572 renter-occupied. Of the 4,960 homes in the county estimated to have lead-based paint hazards, 1,291 are estimated to be occupied by households with low-incomes (incomes less than 50% of Area Median Income), and 1,023 are estimated to be occupied by households with moderate incomes (between 50% and 80% of Area Median Income), for a total of 2,314 housing units in Kay 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 Kay 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 Kay 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	137	3.57%	5
1940-1977	618	19.98%	123
1939 or Earlier	145	63.38%	92
Total	899	24.49%	220
Housing Units 50%-80% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	75	3.57%	3
1940-1977	399	19.98%	80
1939 or Earlier	115	63.38%	73
Total	589	26.36%	155
Total LMI Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	212	3.57%	8
1940-1977	1,017	19.98%	203
1939 or Earlier	260	63.38%	165
Total	1,488	25.23%	375
Total Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	604	3.57%	22
1940-1977	1,829	19.98%	365
1939 or Earlier	475	63.38%	301
Total	2,908	23.66%	688

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

As shown, we estimate there are 688 housing units in Kay County with lead-based paint hazards and children under the age of six present, and that 375 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

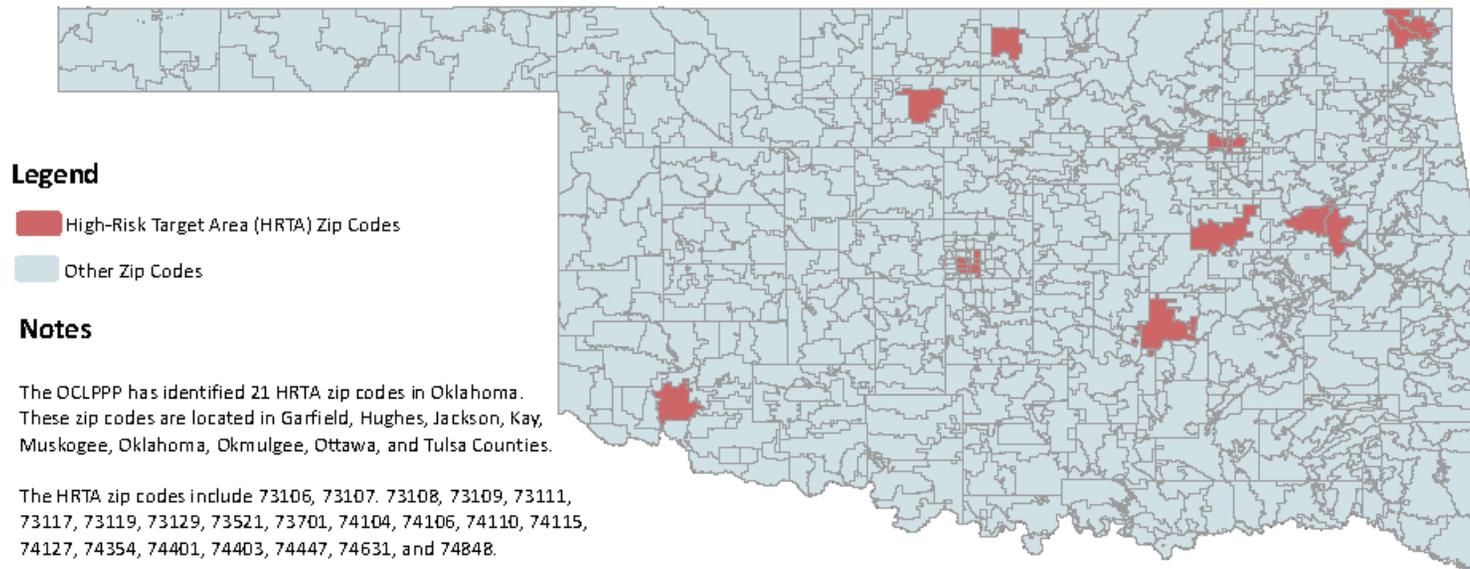
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Oklahoma State Department of Health, Oklahoma Childhood Lead Poisoning Prevention Program Focusing in High Risk Groups"

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

Exhibit #1

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



Legend

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

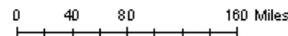
Notes

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

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

The HRTA zip codes are identified using the following criteria:

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



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

Conclusions

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

Kay County has undergone steady decline during the past several years in population and economy. Since 2010, the county population has decreased at an average annual rate of -0.12%. Decline has occurred throughout the county, including Ponca City and Blackwell. Moderate population decline is forecasted to continue over the next five years. There is talk within the wind energy sector of bringing jobs and wind infrastructure to areas of Kay County which could curb the trending population decline.

New housing development has occurred in recent years. Highland Park, a 34-unit family housing apartment project, is a notable housing development recently approved for construction in Ponca City. Small pockets of housing have continued to be constructed throughout the rural communities, as well as infill development within existing subdivisions.

Based on projected household decline, Kay County will not need new housing over the next five years, but could greatly benefit from rehabilitation of the existing housing stock. Rehabbed properties will need to be affordable to households earning less than 60% of Area Median Income, and based on the 17.14% of persons with disabilities in the county, housing of any type adequate for persons with disabilities should be available.

In Summary, it is apparent that no new housing is required in Kay County, though due to an aging housing supply, multifamily and single-family dwellings could be in need in future years. While the upper end of the market is being satisfied, the lower end of the population that requires rental moderate cost ownership property has a shrinking availability due to the aging housing product. As the population continues to decrease in Kay County as a whole, this demand will stagnate. It is the opinion of this analyst that there is no need for rental housing in all price ranges due to the decline in current population, rehabilitation of existing housing product and replacement of blighted properties is believed to be the greatest need for the area housing supply.

Addendum A
Acknowledgments

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

University of Oklahoma Intern Team

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

Federal Agencies

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

US Federal Emergency Management Agency, Harold Latham

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

Oklahoma State Agencies

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

Department of Human Services, Connie Schlittler

Department of Emergency Management Dara Hayes

Department of Commerce, Rebekah Zahn-Pittser

Local Organizations

Regional Council of Governments and Oklahoma Association of Regional Councils

Continuums of Care Network

Hazard Mitigation Plan personnel/administrators

Community economic development professionals

City Managers and Planners

Community Action Agencies

Chambers of Commerce

Affordable housing developers, owners and investors

Homeless Alliance, Dan Straughan, Sunshine Hernandez



Addenda

Pathways, Patrice Pratt

Women's Resource Center, Vanessa Morrison

AIDS Care Fund, Sunshine Schillings

Addendum B

Qualifications

Owen S. Ard, MAI

Experience

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

Professional Activities & Affiliations

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

Licenses

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

Education

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

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

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

Qualified Before Courts & Administrative Bodies

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

oard@irr.com - 918-492-4844

Integra Realty Resources
Tulsa/OKC

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

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

irr.com



Owen S. Ard, MAI

Qualified Before Courts & Administrative Bodies (Cont'd)

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

Integra Realty Resources

Tulsa/OKC

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

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

irr.com



David A. Puckett

Experience

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

Professional Activities & Affiliations

Appraisal Institute-Candidate for Designation

Licenses

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

Education

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

Successfully completed the following Appraisal Institute courses and seminars:

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

dpuckett@irr.com - 918-492-4844 x104

Integra Realty Resources

Tulsa/OKC

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

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

irr.com



Integra Realty Resources, Inc.

Corporate Profile

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

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

ATLANTA, GA - Sherry L. Watkins, MAI, FRICS
AUSTIN, TX - Randy A. Williams, MAI, SR/WA, FRICS
BALTIMORE, MD - G. Edward Kerr, MAI, MRICS
BIRMINGHAM, AL - Rusty Rich, MAI, MRICS
BOISE, ID - Bradford T. Knipe, MAI, ARA, CCIM, CRE, FRICS
BOSTON, MA - David L. Cary, Jr., MAI, MRICS
CHARLESTON, SC - Cleveland "Bud" Wright, Jr., MAI
CHARLOTTE, NC - Fitzhugh L. Stout, MAI, CRE, FRICS
CHICAGO, IL - Eric L. Enloe, MAI, FRICS
CINCINNATI, OH - Gary S. Wright, MAI, FRICS, SRA
CLEVELAND, OH - Douglas P. Sloan, MAI
COLUMBIA, SC - Michael B. Dodds, MAI, CCIM
COLUMBUS, OH - Bruce A. Daubner, MAI, FRICS
DALLAS, TX - Mark R. Lamb, MAI, CPA, FRICS
DAYTON, OH - Gary S. Wright, MAI, FRICS, SRA
DENVER, CO - Brad A. Weiman, MAI, FRICS
DETROIT, MI - Anthony Sanna, MAI, CRE, FRICS
FORT WORTH, TX - Gregory B. Cook, SR/WA
GREENSBORO, NC - Nancy Tritt, MAI, SRA, FRICS
GREENVILLE, SC - Michael B. Dodds, MAI, CCIM
HARTFORD, CT - Mark F. Bates, MAI, CRE, FRICS
HOUSTON, TX - David R. Dominy, MAI, CRE, FRICS
INDIANAPOLIS, IN - Michael C. Lady, MAI, SRA, CCIM, FRICS
JACKSON, MS - John R. Praytor, MAI
JACKSONVILLE, FL - Robert Crenshaw, MAI, FRICS
KANSAS CITY, MO/KS - Kenneth Jagers, MAI, FRICS
LAS VEGAS, NV - Charles E. Jack IV, MAI
LOS ANGELES, CA - John G. Ellis, MAI, CRE, FRICS
LOS ANGELES, CA - Matthew J. Swanson, MAI
LOUISVILLE, KY - Stacey Nicholas, MAI, MRICS
MEMPHIS, TN - J. Walter Allen, MAI, FRICS

MIAMI/PALM BEACH, FL - Anthony M. Graziano, MAI, CRE, FRICS
MINNEAPOLIS, MN - Michael F. Amundson, MAI, CCIM, FRICS
NAPLES, FL - Carlton J. Lloyd, MAI, FRICS
NASHVILLE, TN - R. Paul Perutelli, MAI, SRA, FRICS
NEW JERSEY COASTAL - Halvor J. Egeland, MAI
NEW JERSEY NORTHERN - Matthew S. Krauser, CRE, FRICS
NEW YORK, NY - Raymond T. Cirz, MAI, CRE, FRICS
ORANGE COUNTY, CA - Steve Calandra, MAI
ORLANDO, FL - Christopher Starkey, MAI, MRICS
PHILADELPHIA, PA - Joseph D. Pasquarella, MAI, CRE, FRICS
PHOENIX, AZ - Walter "Tres" Winus III, MAI, FRICS
PITTSBURGH, PA - Paul D. Griffith, MAI, CRE, FRICS
PORTLAND, OR - Brian A. Glanville, MAI, CRE, FRICS
PROVIDENCE, RI - Gerard H. McDonough, MAI, FRICS
RALEIGH, NC - Chris R. Morris, MAI, FRICS
RICHMOND, VA - Kenneth L. Brown, MAI, CCIM, FRICS
SACRAMENTO, CA - Scott Beebe, MAI, FRICS
ST. LOUIS, MO - P. Ryan McDonald, MAI, FRICS
SALT LAKE CITY, UT - Darrin W. Liddell, MAI, FRICS, CCIM
SAN DIEGO, CA - Jeff A. Greenwald, MAI, SRA, FRICS
SAN FRANCISCO, CA - Jan Kleczewski, MAI, FRICS
SARASOTA, FL - Carlton J. Lloyd, MAI, FRICS
SAVANNAH, GA - J. Carl Schultz, Jr., MAI, FRICS, CRE, SRA
SEATTLE, WA - Allen N. Safer, MAI, MRICS
SYRACUSE, NY - William J. Kimball, MAI, FRICS
TAMPA, FL - Bradford L. Johnson, MAI, MRICS
TULSA, OK - Owen S. Ard, MAI
WASHINGTON, DC - Patrick C. Kerr, MAI, FRICS, SRA
WILMINGTON, DE - Douglas L. Nickel, MAI, FRICS
CARIBBEAN/CAYMAN ISLANDS - James Andrews, MAI, FRICS

Corporate Office

Eleven Times Square, 640 Eighth Avenue, 15th Floor, Suite A, New York, New York 10036
Telephone: (212) 255-7858; Fax: (646) 424-1869; E-mail info@irr.com
Website: www.irr.com



DAWN EVE JOURDAN, ESQ., PH.D.

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

EDUCATION:

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

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

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

RESEARCH INTERESTS:

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

WORK EXPERIENCE:

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

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

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

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

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

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

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

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

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

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

AWARDS:

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

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

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

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

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

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

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

COURSES TAUGHT:

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

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

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

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

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

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

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

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

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

PUBLICATIONS:

Refereed Journal Articles

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

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

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

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

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

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

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

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

PUBLICATIONS:

Refereed Journal Articles

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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).

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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.

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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.

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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).

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

PREVIOUS RESEARCH POSITIONS & PRACTICE

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, WI; 2006.

INVITED LECTURES

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

Kansas State University – Big 12 Fellowship

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

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

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

GRANT FUNDING

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
<i>College of Architecture – Division of Regional and City Planning</i>	
<i>University of Oklahoma – Norman, OK</i>	

Education

Doctor of Philosophy – Policy, Planning, and Development	2014
<i>Sol Price School of Public Policy</i>	
<i>University of Southern California - Los Angeles, CA</i>	
<i>Dissertation: Social Construction of the Experience Economy: The spatial ecology of outdoor advertising in Los Angeles</i>	
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
<i>College of Environmental Design</i>	
<i>California State Polytechnic University - Pomona, CA</i>	
Master of Science – Environmental Policy and Behavior	2000
<i>School of Natural Resources and Environment</i>	
<i>University of Michigan - Ann Arbor, MI</i>	
Bachelor of Arts – Economics and Environmental Studies	1996
<i>Dornsife College of Letters, Arts, and Sciences</i>	
<i>University of Southern California - Los Angeles, CA</i>	

Publications

The Prospects and Problems of Integrating Sketch Maps with Geographic Information Systems (GIS) to Understand Environmental Perception: A case study of mapping youth fear in Los Angeles gang neighborhoods	2014
<i>Environment and Planning B: Planning and Design</i> 41(2): 251-271. Curtis, J.W., E. Shiao, B. Lowery, D. Sloane, K. Hennigan and A. Curtis	
The Prevalence of Harmful Content on Outdoor Advertising in Los Angeles: Land use, community characteristics, and the spatial inequality of a public health nuisance	2014
<i>American Journal of Public Health</i> 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**
University of Oklahoma – College of Architecture 2014-present
 Subdivision and Site Planning (graduate)
 Computer Mapping and GIS in Planning (graduate)
 Comprehensive Planning Studio (graduate)
- Lecturer**
University of California, Irvine – School of Social Ecology 2014
 Design and Planning Graphics (graduate)
- Teaching Assistant**
University of Southern California - Sol Price School of Public Policy 2008-2013
 Citizenship and Public Ethics (undergraduate)
 History of Planning and Development (undergraduate)
 Planning History and Urban Form (graduate)
 Smart Growth and Urban Sprawl (graduate)
 Urban Context for Policy and Planning (undergraduate)
 Urban Planning and Development (undergraduate)
 Urban Planning and Social Policy (graduate - online)
- Graduate Student Instructor**
University of Michigan - School of Natural Resources and Environment 1999-2000
 Introduction to Environmental Policy (undergraduate)
 Introduction to Natural Resource Management (undergraduate)

Other Experience

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

Byron DeBruler

DeBruler, Inc.

8200 NE 139th Street

Edmond, OK 73103

United States of America

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

BACKGROUND SUMMARY

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

EXPERIENCE

DeBruler, Inc.

Vice President, Oklahoma City, August 2001 to Present

Provide services including:

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

Oklahoma Housing Finance Agency

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

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

While employed by the agency:

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

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

Oklahoma Department of Commerce

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

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

City of Oklahoma City January 1984 to February 1988

Division Head, Code Inspections Division/Department of Environmental Services

Assistant Superintendent, Utility Services Division/Water Department

Administrative Assistant, Street Maintenance Division, Public Works Department

Management Intern, Personnel Department

EDUCATION

Masters of Public Administration, University of Oklahoma 1983

Bachelor of Arts Political Science, University of Oklahoma, 1979

