Integra Realty Resources
Tulsa/OKC

Housing Needs Assessment
Tulsa 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:
October 1, 2015

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



Integra Realty Resources
Tulsa/OKC

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

T 918.492.4844
F 918.493.7155
www.irr.com

January 31, 2016

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

SUBJECT: Housing Needs Assessment
Tulsa County
IRR - Tulsa/OKC File No. 140-2015-0085

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

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

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

Respectfully submitted,

Integra Realty Resources - Tulsa/OKC

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

Table of Contents

Introduction and Executive Summary **1**

General Information **4**
- Purpose and Function of the Market Study 4
- Effective Date of Consultation 4
- Scope of the Assignment 4
- Data Sources 4

Tulsa County Analysis **6**

Area Information 6
- Access and Linkages 6
- Educational Facilities 6
- Medical Facilities 7

Demographic Analysis 10
- Population and Households 10
- Population by Race and Ethnicity 13
- Population by Age 15
- Families by Presence of Children 23
- Population by Presence of Disabilities 24
- Group Quarters Population 27

Household Income Levels 29
- Household Income Trend 33
- Poverty Rates 34

Economic Conditions **36**

Employment and Unemployment 36
- Employment Level Trends 36
- Unemployment Rate Trends 37

Employment and Wages by Industrial Supersector 38

Working Families 41

Major Employers 44

Commuting Patterns 46

Housing Stock Analysis **48**

Existing Housing Units 48
- Housing by Units in Structure 48
- Housing Units Number of Bedrooms and Tenure 50
- Housing Units Tenure and Household Income 52
- Housing Units by Year of Construction and Tenure 57
- Substandard Housing 59

Vacancy Rates 60

Building Permits 62
- New Construction Activity 67

Homeownership Market 69
- Housing Units by Home Value 69
- Tulsa County Median Home Values by Census Tract 72
- Median Home Values by Census Tract – Central Tulsa Detail 73
- Home Values by Year of Construction 74
- Tulsa Single Family Sales Activity 75
- Broken Arrow Single Family Sales Activity 76
- Owasso Single Family Sales Activity 77
- Bixby Single Family Sales Activity 78
- Sand Springs Single Family Sales Activity 80
- Jenks Single Family Sales Activity 81
- Glenpool Single Family Sales Activity 82
- Collinsville Single Family Sales Activity 84
- Foreclosure Rates 85

Rental Market 87
- Gross Rent Levels 87

Tulsa Area Rental Survey Data 91
- Rental Survey Data – Urban Core 92
- Rental Survey Data – Affordable Properties 92
- Rental Survey Summary 93

Summary of HUD Subsidized Properties 94

Projected Housing Need **99**

Consolidated Housing Affordability Strategy (CHAS) 99
- Cost Burden by Income Threshold 99

Table of Contents

Substandard Conditions / Overcrowding by Income Threshold 101
Cost Burden by Household Type 104
Housing Problems by Household Type 106
Housing Problems by Race / Ethnicity 108
CHAS Conclusions 110
Overall Anticipated Housing Demand 112
Tulsa Anticipated Demand 112
Broken Arrow Anticipated Demand 112
Owasso Anticipated Demand 113
Bixby Anticipated Demand 113
Sand Springs Anticipated Demand 114
Jenks Anticipated Demand 115
Glenpool Anticipated Demand 115
Collinsville Anticipated Demand 116
Tulsa County Anticipated Demand 116
Housing Demand – Population Subsets 118
Housing Needs by Income Thresholds 118
Elderly Housing Needs 118
Housing Needs for Persons with Disabilities / Special Needs 118
Housing Needs for Veterans 119
Housing Needs for Working Families 119
Population Subset Conclusions 119

Special Topics 121

Tulsa County Disaster Resiliency Assessment 122
C.0 Comprehensive Plans & Hazard Mitigation Plans 122
C.2.1.1. Historical Data on Natural Disasters and Other Hazards 123
C.2.1.2; C.2.1.6; C.2.1.7; C.2.1.8 Shelters from Disaster Event 149
C.2.1.3 Public Policy and Governance to Build Disaster Resiliency 149
C.2.1.4 Local Emergency Response Agency Structure 149
C.2.1.5 Threat & Hazard Warning Systems 149
Social Vulnerability 151
Homelessness 157
By Continuum of Care 157
A Snap Shot of Homelessness in the State 160
Rural Areas 164
At Risk For Homelessness 166
Findings and Recommendations 168
Fair Housing 171
Summary 171
Key Findings: 171
Recommendations: 171
Appendix 1: County affordable housing Summaries 186
Lead-Based Paint Hazards 190
Tulsa County Findings 192

Conclusions 203

Addenda

A. Acknowledgments
B. Qualifications

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 Tulsa County is projected to grow by 0.98% per year over the next five years, outperforming the State of Oklahoma.
2. Tulsa County is projected to need a total of 7,642 housing units for ownership and 4,898 housing units for rent over the next five years.
3. Median Household Income in Tulsa County is estimated to be $48,553 in 2015, compared with $47,049 estimated for the State of Oklahoma. The poverty rate in Tulsa County is estimated to be 15.90%, compared with 16.85% for Oklahoma.
4. Homeowner and rental vacancy rates in Tulsa County are slightly higher than the state averages.
5. Home values and rental rates in Tulsa County are higher than the state averages.
6. Median sale price for homes in Tulsa was $135,000 in 2015, with a median price per square foot of $77.50. The median sale price to list price ratio was 96.9%, with median days on market of 29 days.

7. Median sale price for homes in Broken Arrow was $159,900 in 2015, with a median price per square foot of $82.81. The median sale price to list price ratio was 99.0%, with median days on market of 28 days.
8. Median sale price for homes in Owasso was $188,750 in 2015, with a median price per square foot of $93.49. The median sale price to list price ratio was 99.4%, with median days on market of 28 days.
9. Median sale price for homes in Bixby was $215,000 in 2015, with a median price per square foot of $98.17. The median sale price to list price ratio was 97.8%, with median days on market of 34 days.
10. Median sale price for homes in Sand Springs was $132,000 in 2015, with a median price per square foot of $80.78. The median sale price to list price ratio was 97.8%, with median days on market of 37 days.
11. Median sale price for homes in Jenks was $200,439 in 2015, with a median price per square foot of $98.69. The median sale price to list price ratio was 97.8%, with median days on market of 27 days.
12. Median sale price for homes in Glenpool was $149,275 in 2015, with a median price per square foot of $96.68. The median sale price to list price ratio was 99.5%, with median days on market of 28 days.
13. Median sale price for homes in Collinsville was $156,500 in 2015, with a median price per square foot of $88.92. The median sale price to list price ratio was 98.5%, with median days on market of 28 days.
14. Approximately 42.74% of renters and 20.77% of owners are housing cost overburdened.

Disaster Resiliency Specific Findings:

1. Increase sirens coverage as recommended by HMP and emergency manager
2. Tornadoes (1959-2014): Number:67 Injuries: 383 Fatalities: 15 Damages (1996-2014): $13,270,000.00
3. Social Vulnerability: Similar to overall state level at county level; at the census tract level, Tulsa – particularly North Tulsa – has increased social vulnerability
4. Floodplain: Estimated 1425 residential buildings in the floodplain; 29 repetitive loss structures in unincorporated Tulsa County that are insured through the National Flood Insurance Program

Homelessness Specific Findings

1. Tulsa County is served by the Tulsa City/County Continuum of Care.
2. There are an estimated 1,010 homeless individuals in this area, 908 of which are identified as sheltered.
3. The majority of the homeless population is over 24 years of age.
4. The largest homeless subpopulations include the mentally ill, chronic substance abusers, veterans and victims of domestic violence.
5. Of these subpopulations, the mentally ill and chronic substance abusers are the least sheltered.

6. Permanent housing options are significantly limited. More funds should be diverted to meet the long term housing needs of the mentally ill and substance abusers.

Fair Housing Specific Findings

1. Units at risk for poverty: 4,750
2. Units in mostly non-white enclaves: 1,807
3. Units in a community of immigrants: 2,281
4. Units in limited English neighborhoods: 2,109
5. Units nearer elevated number of persons with disabilities: 1,419
6. Units located in a food desert: 1,441
7. Units that lack readily available transit: 2,220

Lead-Based Paint Specific Findings

1. We estimate there are 40,136 occupied housing units in Tulsa County with lead-based paint hazards.
2. 17,864 of those housing units are estimated to be occupied by low-to-moderate income households.
3. We estimate that 6,139 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 Tulsa 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 Tulsa 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 Tulsa 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 Tulsa County, Oklahoma. The analysis will consider existing supply and projected demand and overall market trends in the Tulsa County area.

Effective Date of Consultation

The Tulsa County area was inspected and research was performed during October, 2015. The effective date of this analysis is October 1, 2015. The date of this report is January 31, 2016. The market study is valid only as of the stated effective date or dates.

Scope of the Assignment

1. The Tulsa County area was inspected during October, 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

Tulsa County Analysis

Area Information

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

Tulsa County is located in northeast Oklahoma. It is bordered on the north by Washington County, on the east by Rogers and Wagoner counties, on the south by Okmulgee County, and on the west by Osage and Creek counties. The county seat, Tulsa, is approximately 100 miles northeast of Oklahoma City, and approximately 100 miles southwest of Joplin, Missouri.

Tulsa County has a total area of 587 square miles (570 square miles of land, and 17 square miles of water), ranking 66th out of Oklahoma's 77 counties in terms of total area. The total population of Tulsa County as of the 2010 Census was 603,403 persons, for a population density of 1,058 persons per square mile of land.

Access and Linkages

The county is well located in relationship to state and national highway systems. I-44 crosses through the county, providing access to Oklahoma City to the southwest and Joplin to the northeast. U.S. 75 intersects I-44 in the county, providing access to Bartlesville to the north and the Dallas/Fort Worth area to the south. Additionally, the county has a well maintained interior road system.

In most of the county, public transportation is provided by the Metropolitan Tulsa Transit Authority. In northern portions of the county, additional transit services are provided by Pelivan Transit. However, the primary mode of transportation in this area is private automobiles by far.

Tulsa International Airport is located in the central area of the county. It is the primary commercial airport in the region and is served by most major carriers.

Educational Facilities

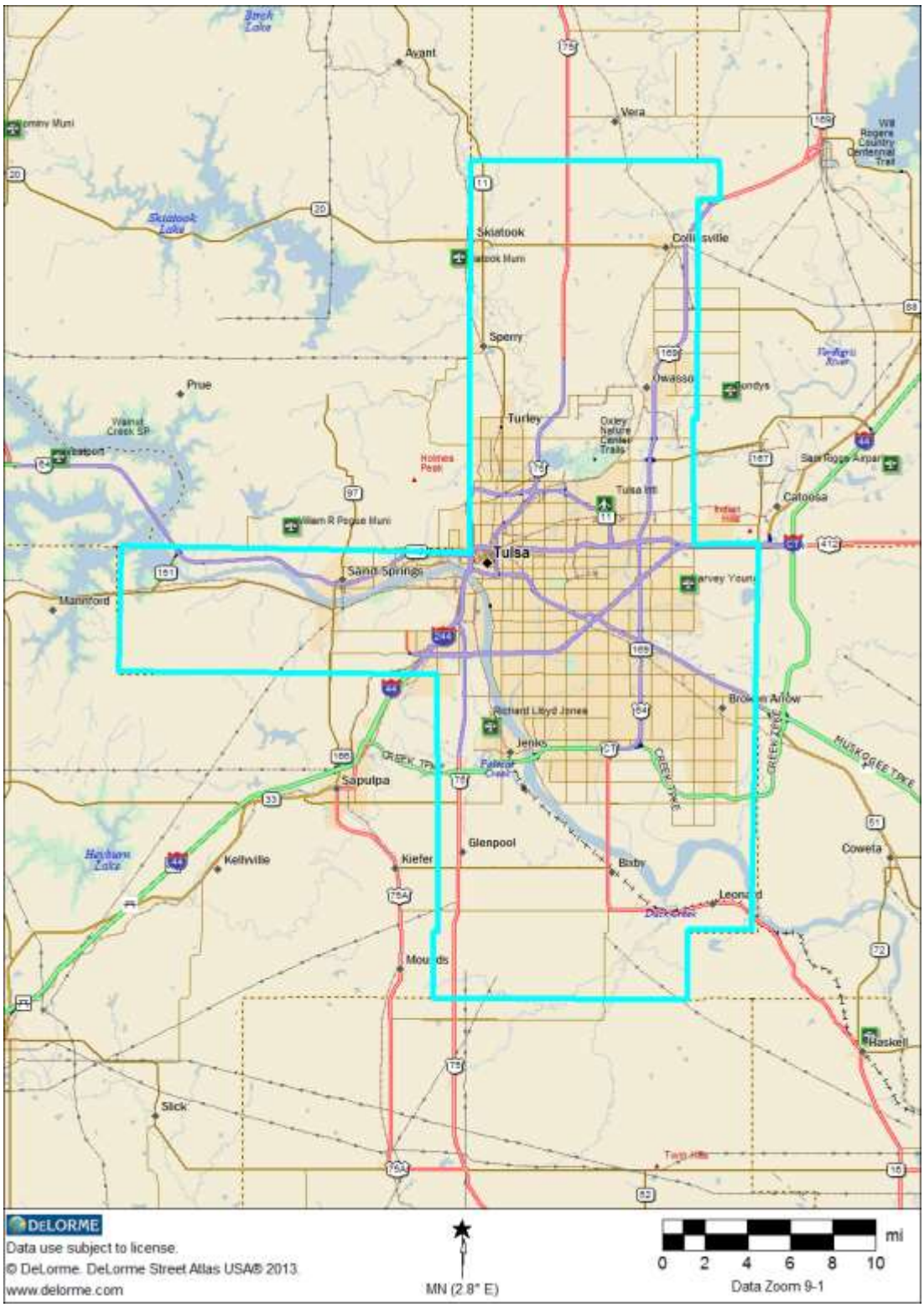
All of the county communities have public school facilities. Higher education is available throughout the county as well, including institutions such as the University of Tulsa, Oral Roberts University, and

branch campuses of the University of Oklahoma, Oklahoma State University, and Northeastern State University.

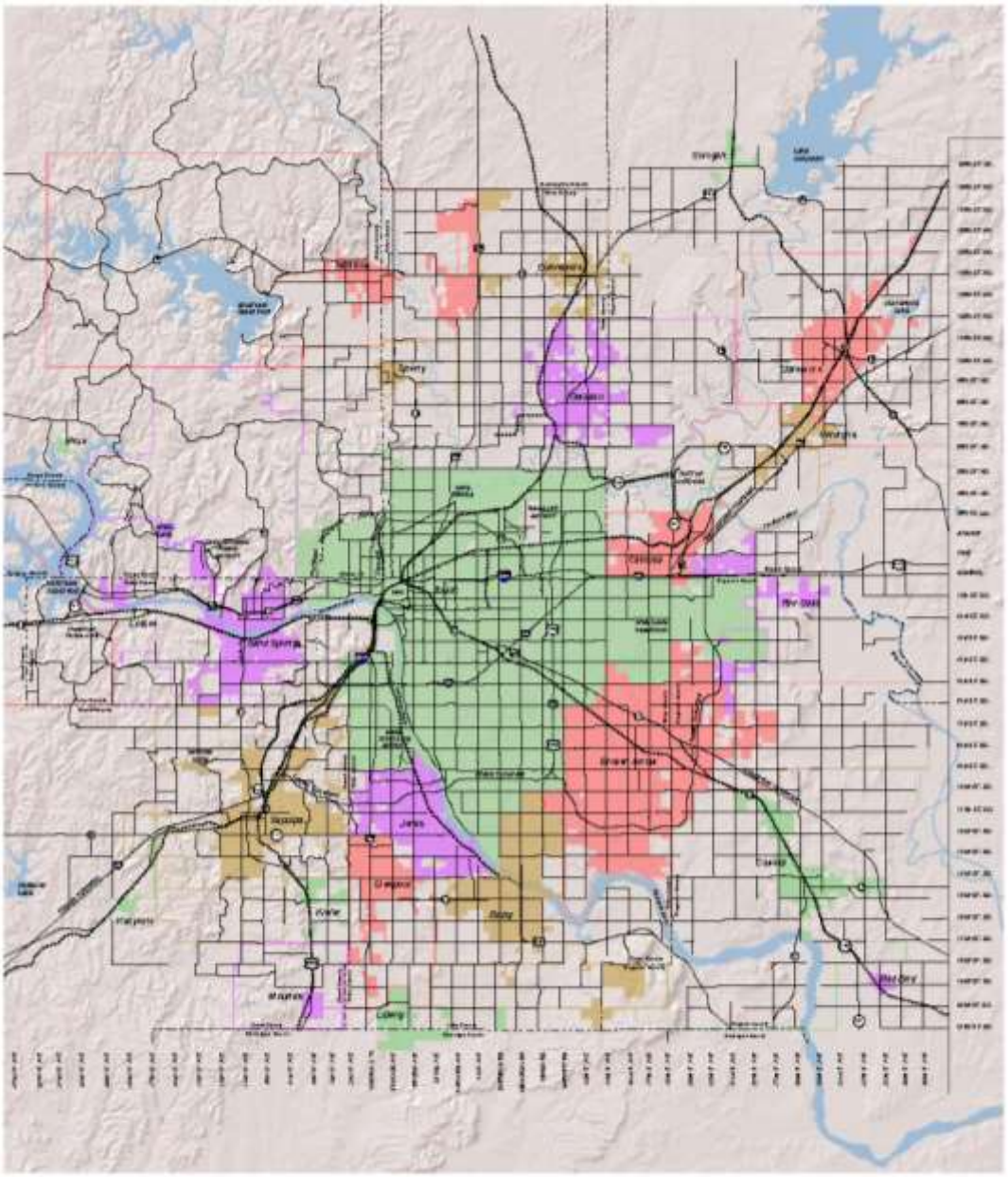
Medical Facilities

The area has a large number of health care facilities and specialty hospitals, including St. John Health System, Hillcrest Health System, and Saint Francis Health System. The smaller county communities typically have either small outpatient medical services or doctors officing in the community.

Tulsa County Area Map



Tulsa Area Map / Corporate Limits



METROPOLITAN
TULSA AREA CORPORATE LIMITS

TERRITORIAL AND JURISDICTIONAL LIMITS
2012

NOTE:

PREPARED BY INCOG
March 2012

Demographic Analysis

Population and Households

The following table presents population levels and annualized changes in Tulsa 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
Tulsa	393,049	391,906	-0.03%	401,838	0.50%	415,164	0.65%
Broken Arrow	74,859	98,850	2.82%	107,506	1.69%	114,987	1.35%
Owasso	18,502	28,915	4.57%	33,539	3.01%	36,710	1.82%
Bixby	13,336	20,884	4.59%	23,880	2.72%	26,592	2.17%
Sand Springs	17,451	18,906	0.80%	20,317	1.45%	21,327	0.98%
Jenks	9,557	16,924	5.88%	19,554	2.93%	21,831	2.23%
Glenpool	8,123	10,808	2.90%	11,790	1.75%	12,762	1.60%
Collinsville	4,077	5,606	3.24%	6,489	2.97%	6,961	1.41%
Tulsa County	563,299	603,403	0.69%	632,738	0.95%	664,457	0.98%
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 Tulsa County was 603,403 persons as of the 2010 Census, a 0.69% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Tulsa County to be 632,738 persons, and projects that the population will show 0.98% annualized growth over the next five years.

The population of Tulsa was 391,906 persons as of the 2010 Census, a -0.03% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Tulsa to be 401,838 persons, and projects that the population will show 0.65% annualized growth over the next five years.

The population of Broken Arrow was 98,850 persons as of the 2010 Census, a 2.82% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Broken Arrow to be 107,506 persons, and projects that the population will show 1.35% annualized growth over the next five years.

The population of Owasso was 28,915 persons as of the 2010 Census, a 4.57% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Owasso to be 33,539 persons, and projects that the population will show 1.82% annualized growth over the next five years.

The population of Bixby was 20,884 persons as of the 2010 Census, a 4.59% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Bixby to be 23,880 persons, and projects that the population will show 2.17% annualized growth over the next five years.

The population of Sand Springs was 18,906 persons as of the 2010 Census, a 0.80% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Sand Springs to be 20,317 persons, and projects that the population will show 0.98% annualized growth over the next five years.

The population of Jenks was 16,924 persons as of the 2010 Census, a 5.88% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Jenks to be 19,554 persons, and projects that the population will show 2.23% annualized growth over the next five years.

The population of Glenpool was 10,808 persons as of the 2010 Census, a 2.90% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Glenpool to be 11,790 persons, and projects that the population will show 1.60% annualized growth over the next five years.

The population of Collinsville was 5,606 persons as of the 2010 Census, a 3.24% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Collinsville to be 6,489 persons, and projects that the population will show 1.41% annualized growth over the next five years.

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

Households Levels and Annual Changes							
Total Households	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Tulsa	165,743	163,975	-0.11%	168,644	0.56%	174,744	0.71%
Broken Arrow	26,159	36,141	3.29%	39,195	1.64%	41,897	1.34%
Owasso	6,595	10,689	4.95%	12,123	2.55%	13,183	1.69%
Bixby	4,903	7,658	4.56%	8,674	2.52%	9,613	2.08%
Sand Springs	6,564	7,335	1.12%	7,916	1.54%	8,326	1.02%
Jenks	3,451	5,954	5.61%	6,739	2.51%	7,462	2.06%
Glenpool	2,761	3,723	3.03%	4,066	1.78%	4,386	1.53%
Collinsville	1,550	2,111	3.14%	2,409	2.68%	2,571	1.31%
Tulsa County	226,892	241,737	0.64%	252,860	0.90%	265,400	0.97%
State of Oklahoma	1,342,293	1,460,450	0.85%	1,520,327	0.81%	1,585,130	0.84%
Family Households	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Tulsa	99,094	95,246	-0.40%	98,186	0.61%	101,810	0.73%
Broken Arrow	21,167	27,614	2.69%	29,913	1.61%	31,989	1.35%
Owasso	5,120	7,807	4.31%	9,035	2.96%	9,843	1.73%
Bixby	3,819	5,925	4.49%	6,682	2.43%	7,409	2.09%
Sand Springs	4,869	5,187	0.63%	5,651	1.73%	5,953	1.05%
Jenks	2,756	4,753	5.60%	5,407	2.61%	6,013	2.15%
Glenpool	2,251	2,927	2.66%	3,199	1.79%	3,453	1.54%
Collinsville	1,113	1,529	3.23%	1,753	2.77%	1,874	1.34%
Tulsa County	147,316	154,084	0.45%	161,916	1.00%	170,507	1.04%
State of Oklahoma	921,750	975,267	0.57%	1,016,508	0.83%	1,060,736	0.86%

Sources: 2000 and 2010 Decennial Censuses, Nielsen SiteReports

As of 2010, Tulsa County had a total of 241,737 households, representing a 0.64% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Tulsa County to have 252,860 households. This number is expected to experience a 0.97% annualized rate of growth over the next five years.

As of 2010, Tulsa had a total of 163,975 households, representing a -0.11% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Tulsa to have 168,644 households. This number is expected to experience a 0.71% annualized rate of growth over the next five years.

As of 2010, Broken Arrow had a total of 36,141 households, representing a 3.29% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Broken Arrow to have 39,195 households. This number is expected to experience a 1.34% annualized rate of growth over the next five years.

As of 2010, Owasso had a total of 10,689 households, representing a 4.95% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Owasso to have 12,123 households. This number is expected to experience a 1.69% annualized rate of growth over the next five years.

As of 2010, Bixby had a total of 7,658 households, representing a 4.56% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Bixby to have 8,674 households. This number is expected to experience a 2.08% annualized rate of growth over the next five years.

As of 2010, Sand Springs had a total of 7,335 households, representing a 1.12% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Sand Springs to have 7,916 households. This number is expected to experience a 1.02% annualized rate of growth over the next five years.

As of 2010, Jenks had a total of 5,954 households, representing a 5.61% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Jenks to have 6,739 households. This number is expected to experience a 2.06% annualized rate of growth over the next five years.

As of 2010, Glenpool had a total of 3,723 households, representing a 3.03% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Glenpool to have 4,066 households. This number is expected to experience a 1.53% annualized rate of growth over the next five years.

As of 2010, Collinsville had a total of 2,111 households, representing a 3.14% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Collinsville to have 2,409 households. This number is expected to experience a 1.31% annualized rate of growth over the next five years.

Population by Race and Ethnicity

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

2013 Population by Race and Ethnicity

Single-Classification Race	Tulsa		Broken Arrow		Owasso		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Population	393,709		100,464		30,558		609,610	
White Alone	262,403	66.65%	79,624	79.26%	23,939	78.34%	439,171	72.04%
Black or African American Alone	59,874	15.21%	4,574	4.55%	895	2.93%	62,729	10.29%
Amer. Indian or Alaska Native Alone	16,743	4.25%	3,846	3.83%	2,292	7.50%	28,619	4.69%
Asian Alone	9,549	2.43%	3,173	3.16%	767	2.51%	14,682	2.41%
Native Hawaiian and Other Pac. Isl. Alone	383	0.10%	47	0.05%	0	0.00%	440	0.07%
Some Other Race Alone	16,593	4.21%	1,584	1.58%	669	2.19%	19,204	3.15%
Two or More Races	28,164	7.15%	7,616	7.58%	1,996	6.53%	44,765	7.34%
Population by Hispanic or Latino Origin	**Tulsa**		**Broken Arrow**		**Owasso**		**Tulsa County**	
	No.	**Percent**	**No.**	**Percent**	**No.**	**Percent**	**No.**	**Percent**
Total Population	393,709		100,464		30,558		609,610	
Hispanic or Latino	56,643	14.39%	7,352	7.32%	2,086	6.83%	68,260	11.20%
Hispanic or Latino, White Alone	*36,119*	*63.77%*	*4,881*	*66.39%*	*1,195*	*57.29%*	*43,948*	*64.38%*
Hispanic or Latino, All Other Races	*20,524*	*36.23%*	*2,471*	*33.61%*	*891*	*42.71%*	*24,312*	*35.62%*
Not Hispanic or Latino	337,066	85.61%	93,112	92.68%	28,472	93.17%	541,350	88.80%
Not Hispanic or Latino, White Alone	*226,284*	*67.13%*	*74,743*	*80.27%*	*22,744*	*79.88%*	*395,223*	*73.01%*
Not Hispanic or Latino, All Other Races	*110,782*	*32.87%*	*18,369*	*19.73%*	*5,728*	*20.12%*	*146,127*	*26.99%*

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

2013 Population by Race and Ethnicity

Single-Classification Race	Bixby		Sand Springs		Jenks		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Population	21,719		19,243		17,560		609,610	
White Alone	18,672	85.97%	15,465	80.37%	14,815	84.37%	439,171	72.04%
Black or African American Alone	244	1.12%	430	2.23%	657	3.74%	62,729	10.29%
Amer. Indian or Alaska Native Alone	891	4.10%	1,243	6.46%	568	3.23%	28,619	4.69%
Asian Alone	535	2.46%	73	0.38%	520	2.96%	14,682	2.41%
Native Hawaiian and Other Pac. Isl. Alone	10	0.05%	0	0.00%	0	0.00%	440	0.07%
Some Other Race Alone	87	0.40%	88	0.46%	45	0.26%	19,204	3.15%
Two or More Races	1,280	5.89%	1,944	10.10%	955	5.44%	44,765	7.34%
Population by Hispanic or Latino Origin	**Bixby**		**Sand Springs**		**Jenks**		**Tulsa County**	
	No.	**Percent**	**No.**	**Percent**	**No.**	**Percent**	**No.**	**Percent**
Total Population	21,719		19,243		17,560		609,610	
Hispanic or Latino	712	3.28%	709	3.68%	826	4.70%	68,260	11.20%
Hispanic or Latino, White Alone	*591*	*83.01%*	*471*	*66.43%*	*755*	*91.40%*	*43,948*	*64.38%*
Hispanic or Latino, All Other Races	*121*	*16.99%*	*238*	*33.57%*	*71*	*8.60%*	*24,312*	*35.62%*
Not Hispanic or Latino	21,007	96.72%	18,534	96.32%	16,734	95.30%	541,350	88.80%
Not Hispanic or Latino, White Alone	*18,081*	*86.07%*	*14,994*	*80.90%*	*14,060*	*84.02%*	*395,223*	*73.01%*
Not Hispanic or Latino, All Other Races	*2,926*	*13.93%*	*3,540*	*19.10%*	*2,674*	*15.98%*	*146,127*	*26.99%*

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

2013 Population by Race and Ethnicity

Single-Classification Race	Glenpool		Collinsville		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	11,117		5,808		609,610	
White Alone	8,477	76.25%	4,604	79.27%	439,171	72.04%
Black or African American Alone	111	1.00%	154	2.65%	62,729	10.29%
Amer. Indian or Alaska Native Alone	1,184	10.65%	421	7.25%	28,619	4.69%
Asian Alone	75	0.67%	40	0.69%	14,682	2.41%
Native Hawaiian and Other Pac. Isl. Alone	0	0.00%	0	0.00%	440	0.07%
Some Other Race Alone	75	0.67%	14	0.24%	19,204	3.15%
Two or More Races	1,195	10.75%	575	9.90%	44,765	7.34%
Population by Hispanic or Latino Origin	**Glenpool**		**Collinsville**		**Tulsa County**	
	No.	**Percent**	**No.**	**Percent**	**No.**	**Percent**
Total Population	11,117		5,808		609,610	
Hispanic or Latino	464	4.17%	62	1.07%	68,260	11.20%
Hispanic or Latino, White Alone	*340*	*73.28%*	*48*	*77.42%*	*43,948*	*64.38%*
Hispanic or Latino, All Other Races	*124*	*26.72%*	*14*	*22.58%*	*24,312*	*35.62%*
Not Hispanic or Latino	10,653	95.83%	5,746	98.93%	541,350	88.80%
Not Hispanic or Latino, White Alone	*8,137*	*76.38%*	*4,556*	*79.29%*	*395,223*	*73.01%*
Not Hispanic or Latino, All Other Races	*2,516*	*23.62%*	*1,190*	*20.71%*	*146,127*	*26.99%*

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

In Tulsa County, racial and ethnic minorities comprise 35.17% of the total population. Within Tulsa, racial and ethnic minorities represent 42.53% of the population. Within Broken Arrow, the percentage is 25.60%, while in Owasso the percentage is 25.57%.

Within Bixby, racial and ethnic minorities represent 16.75% of the population. Within Sand Springs, the percentage is 22.08%, while in Jenks the percentage is 19.93%.

Within Glenpool, racial and ethnic minorities represent 26.81% of the population. Within Collinsville, the percentage is 21.56%.

Population by Age

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

Tulsa County Population By Age

	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	603,403		632,738		664,457			
Age 0 - 4	44,711	7.41%	46,175	7.30%	47,378	7.13%	0.65%	0.52%
Age 5 - 9	43,321	7.18%	45,236	7.15%	46,924	7.06%	0.87%	0.74%
Age 10 - 14	41,237	6.83%	43,846	6.93%	46,119	6.94%	1.23%	1.02%
Age 15 - 17	25,007	4.14%	25,711	4.06%	28,036	4.22%	0.56%	1.75%
Age 18 - 20	24,953	4.14%	25,311	4.00%	26,985	4.06%	0.29%	1.29%
Age 21 - 24	33,867	5.61%	33,515	5.30%	34,394	5.18%	-0.21%	0.52%
Age 25 - 34	87,168	14.45%	89,634	14.17%	86,423	13.01%	0.56%	-0.73%
Age 35 - 44	78,473	13.01%	81,751	12.92%	87,801	13.21%	0.82%	1.44%
Age 45 - 54	83,642	13.86%	80,465	12.72%	79,800	12.01%	-0.77%	-0.17%
Age 55 - 64	68,168	11.30%	76,665	12.12%	79,923	12.03%	2.38%	0.84%
Age 65 - 74	38,330	6.35%	48,417	7.65%	60,420	9.09%	4.78%	4.53%
Age 75 - 84	24,440	4.05%	24,743	3.91%	28,611	4.31%	0.25%	2.95%
Age 85 and over	10,086	1.67%	11,269	1.78%	11,643	1.75%	2.24%	0.66%
Age 55 and over	*141,024*	23.37%	*161,094*	25.46%	*180,597*	27.18%	2.70%	2.31%
Age 62 and over	*83,220*	13.79%	*96,160*	15.20%	*113,008*	17.01%	2.93%	3.28%
Median Age	35.2		35.8		36.8		0.34%	0.55%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Tulsa County is 35.8 years. This compares with the statewide figure of 36.6 years. Approximately 7.30% of the population is below the age of 5, while 15.20% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 3.28% per year.

Tulsa Population By Age	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	391,906		401,838		415,164			
Age 0 - 4	29,376	7.50%	28,864	7.18%	28,997	6.98%	-0.35%	0.09%
Age 5 - 9	26,747	6.82%	28,374	7.06%	28,854	6.95%	1.19%	0.34%
Age 10 - 14	24,579	6.27%	26,175	6.51%	28,209	6.79%	1.27%	1.51%
Age 15 - 17	15,064	3.84%	15,334	3.82%	16,591	4.00%	0.36%	1.59%
Age 18 - 20	17,319	4.42%	16,070	4.00%	16,651	4.01%	-1.49%	0.71%
Age 21 - 24	24,988	6.38%	21,569	5.37%	20,798	5.01%	-2.90%	-0.73%
Age 25 - 34	58,941	15.04%	61,832	15.39%	57,666	13.89%	0.96%	-1.39%
Age 35 - 44	48,281	12.32%	50,456	12.56%	55,957	13.48%	0.89%	2.09%
Age 45 - 54	52,806	13.47%	48,789	12.14%	47,228	11.38%	-1.57%	-0.65%
Age 55 - 64	44,864	11.45%	48,910	12.17%	49,268	11.87%	1.74%	0.15%
Age 65 - 74	24,850	6.34%	31,106	7.74%	38,613	9.30%	4.59%	4.42%
Age 75 - 84	16,783	4.28%	16,427	4.09%	18,322	4.41%	-0.43%	2.21%
Age 85 and over	7,308	1.86%	7,932	1.97%	8,010	1.93%	1.65%	0.20%
Age 55 and over	*93,805*	23.94%	*104,375*	25.97%	*114,213*	27.51%	2.16%	1.82%
Age 62 and over	*55,092*	14.06%	*62,206*	15.48%	*71,715*	17.27%	2.46%	2.89%
Median Age	34.8		35.5		36.8		0.40%	0.72%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Tulsa is 35.5 years. This compares with the statewide figure of 36.6 years. Approximately 7.18% of the population is below the age of 5, while 15.48% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 2.89% per year.

Broken Arrow Population By Age								
	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	98,850		107,506		114,987			
Age 0 - 4	7,146	7.23%	7,732	7.19%	8,128	7.07%	1.59%	1.00%
Age 5 - 9	7,619	7.71%	7,677	7.14%	8,008	6.96%	0.15%	0.85%
Age 10 - 14	7,634	7.72%	8,032	7.47%	8,022	6.98%	1.02%	-0.02%
Age 15 - 17	4,699	4.75%	4,753	4.42%	5,147	4.48%	0.23%	1.61%
Age 18 - 20	3,644	3.69%	4,252	3.96%	4,664	4.06%	3.13%	1.87%
Age 21 - 24	4,219	4.27%	5,626	5.23%	6,207	5.40%	5.92%	1.99%
Age 25 - 34	13,755	13.92%	13,521	12.58%	13,696	11.91%	-0.34%	0.26%
Age 35 - 44	13,920	14.08%	14,660	13.64%	15,166	13.19%	1.04%	0.68%
Age 45 - 54	14,418	14.59%	14,623	13.60%	14,789	12.86%	0.28%	0.23%
Age 55 - 64	11,501	11.63%	13,570	12.62%	14,435	12.55%	3.36%	1.24%
Age 65 - 74	6,000	6.07%	8,193	7.62%	10,772	9.37%	6.43%	5.63%
Age 75 - 84	3,187	3.22%	3,489	3.25%	4,439	3.86%	1.83%	4.93%
Age 85 and over	1,108	1.12%	1,378	1.28%	1,514	1.32%	4.46%	1.90%
Age 55 and over	*21,796*	22.05%	*26,630*	24.77%	*31,160*	27.10%	4.09%	3.19%
Age 62 and over	*12,637*	12.78%	*15,753*	14.65%	*19,542*	16.99%	4.51%	4.40%
Median Age	35.5		36.5		37.4		0.56%	0.49%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Broken Arrow is 36.5 years. This compares with the statewide figure of 36.6 years. Approximately 7.19% of the population is below the age of 5, while 14.65% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 4.40% per year.

Owasso Population By Age

	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	28,915		33,539		36,710			
Age 0 - 4	2,220	7.68%	2,542	7.58%	2,724	7.42%	2.75%	1.39%
Age 5 - 9	2,445	8.46%	2,500	7.45%	2,661	7.25%	0.45%	1.26%
Age 10 - 14	2,415	8.35%	2,787	8.31%	2,719	7.41%	2.91%	-0.49%
Age 15 - 17	1,391	4.81%	1,590	4.74%	1,791	4.88%	2.71%	2.41%
Age 18 - 20	1,097	3.79%	1,404	4.19%	1,615	4.40%	5.06%	2.84%
Age 21 - 24	1,407	4.87%	1,787	5.33%	2,107	5.74%	4.90%	3.35%
Age 25 - 34	4,055	14.02%	4,232	12.62%	4,408	12.01%	0.86%	0.82%
Age 35 - 44	4,253	14.71%	4,671	13.93%	4,777	13.01%	1.89%	0.45%
Age 45 - 54	4,095	14.16%	4,672	13.93%	4,921	13.41%	2.67%	1.04%
Age 55 - 64	2,628	9.09%	3,605	10.75%	4,336	11.81%	6.53%	3.76%
Age 65 - 74	1,571	5.43%	2,094	6.24%	2,667	7.27%	5.92%	4.96%
Age 75 - 84	965	3.34%	1,139	3.40%	1,413	3.85%	3.37%	4.41%
Age 85 and over	373	1.29%	516	1.54%	571	1.56%	6.71%	2.05%
Age 55 and over	*5,537*	19.15%	*7,354*	21.93%	*8,987*	24.48%	5.84%	4.09%
Age 62 and over	*3,324*	11.50%	*4,315*	12.86%	*5,381*	14.66%	5.35%	4.52%
Median Age	33.6		34.8		35.7		0.70%	0.51%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Owasso is 34.8 years. This compares with the statewide figure of 36.6 years. Approximately 7.58% of the population is below the age of 5, while 12.86% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 4.52% per year.

Bixby Population By Age

	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	20,884		23,880		26,592			
Age 0 - 4	1,541	7.38%	1,809	7.58%	1,980	7.45%	3.26%	1.82%
Age 5 - 9	1,803	8.63%	1,851	7.75%	1,955	7.35%	0.53%	1.10%
Age 10 - 14	1,666	7.98%	1,931	8.09%	2,024	7.61%	3.00%	0.95%
Age 15 - 17	875	4.19%	1,080	4.52%	1,291	4.85%	4.30%	3.63%
Age 18 - 20	645	3.09%	925	3.87%	1,150	4.32%	7.48%	4.45%
Age 21 - 24	828	3.96%	1,102	4.61%	1,465	5.51%	5.88%	5.86%
Age 25 - 34	2,591	12.41%	2,641	11.06%	2,804	10.54%	0.38%	1.20%
Age 35 - 44	3,171	15.18%	3,280	13.74%	3,169	11.92%	0.68%	-0.69%
Age 45 - 54	2,956	14.15%	3,350	14.03%	3,699	13.91%	2.53%	2.00%
Age 55 - 64	2,236	10.71%	2,725	11.41%	3,185	11.98%	4.03%	3.17%
Age 65 - 74	1,494	7.15%	1,930	8.08%	2,313	8.70%	5.25%	3.69%
Age 75 - 84	815	3.90%	933	3.91%	1,191	4.48%	2.74%	5.00%
Age 85 and over	263	1.26%	323	1.35%	366	1.38%	4.20%	2.53%
Age 55 and over	*4,808*	23.02%	*5,911*	24.75%	*7,055*	26.53%	4.22%	3.60%
Age 62 and over	*2,980*	14.27%	*3,681*	15.41%	*4,460*	16.77%	4.31%	3.91%
Median Age	36.6		36.8		37.0		0.11%	0.11%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Bixby is 36.8 years. This compares with the statewide figure of 36.6 years. Approximately 7.58% of the population is below the age of 5, while 15.41% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 3.91% per year.

Sand Springs Population By Age								
	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	18,906		20,317		21,327			
Age 0 - 4	1,277	6.75%	1,443	7.10%	1,514	7.10%	2.47%	0.97%
Age 5 - 9	1,385	7.33%	1,386	6.82%	1,485	6.96%	0.01%	1.39%
Age 10 - 14	1,430	7.56%	1,484	7.30%	1,458	6.84%	0.74%	-0.35%
Age 15 - 17	876	4.63%	892	4.39%	964	4.52%	0.36%	1.56%
Age 18 - 20	701	3.71%	807	3.97%	874	4.10%	2.86%	1.61%
Age 21 - 24	801	4.24%	1,024	5.04%	1,130	5.30%	5.03%	1.99%
Age 25 - 34	2,349	12.42%	2,478	12.20%	2,499	11.72%	1.07%	0.17%
Age 35 - 44	2,448	12.95%	2,504	12.32%	2,614	12.26%	0.45%	0.86%
Age 45 - 54	2,662	14.08%	2,657	13.08%	2,593	12.16%	-0.04%	-0.49%
Age 55 - 64	2,259	11.95%	2,485	12.23%	2,591	12.15%	1.93%	0.84%
Age 65 - 74	1,450	7.67%	1,776	8.74%	2,097	9.83%	4.14%	3.38%
Age 75 - 84	930	4.92%	966	4.75%	1,069	5.01%	0.76%	2.05%
Age 85 and over	338	1.79%	415	2.04%	439	2.06%	4.19%	1.13%
Age 55 and over	*4,977*	26.32%	*5,642*	27.77%	*6,196*	29.05%	2.54%	1.89%
Age 62 and over	*3,058*	16.17%	*3,488*	17.17%	*3,943*	18.49%	2.67%	2.49%
Median Age	37.6		37.6		37.8		0.00%	0.11%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Sand Springs is 37.6 years. This compares with the statewide figure of 36.6 years. Approximately 7.10% of the population is below the age of 5, while 17.17% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 2.49% per year.

Jenks Population By Age								
	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	16,924		19,554		21,831			
Age 0 - 4	1,391	8.22%	1,647	8.42%	1,791	8.20%	3.44%	1.69%
Age 5 - 9	1,490	8.80%	1,634	8.36%	1,762	8.07%	1.86%	1.52%
Age 10 - 14	1,379	8.15%	1,622	8.29%	1,767	8.09%	3.30%	1.73%
Age 15 - 17	736	4.35%	881	4.51%	1,075	4.92%	3.66%	4.06%
Age 18 - 20	500	2.95%	754	3.86%	943	4.32%	8.56%	4.58%
Age 21 - 24	492	2.91%	891	4.56%	1,182	5.41%	12.61%	5.82%
Age 25 - 34	2,437	14.40%	2,056	10.51%	1,972	9.03%	-3.34%	-0.83%
Age 35 - 44	2,639	15.59%	2,993	15.31%	2,993	13.71%	2.55%	0.00%
Age 45 - 54	2,373	14.02%	2,660	13.60%	3,014	13.81%	2.31%	2.53%
Age 55 - 64	1,712	10.12%	2,131	10.90%	2,500	11.45%	4.48%	3.25%
Age 65 - 74	994	5.87%	1,387	7.09%	1,733	7.94%	6.89%	4.55%
Age 75 - 84	570	3.37%	645	3.30%	801	3.67%	2.50%	4.43%
Age 85 and over	211	1.25%	253	1.29%	298	1.37%	3.70%	3.33%
Age 55 and over	*3,487*	20.60%	*4,416*	22.58%	*5,332*	24.42%	4.84%	3.84%
Age 62 and over	*2,078*	12.28%	*2,671*	13.66%	*3,284*	15.04%	5.16%	4.22%
Median Age	35.1		36.0		36.4		0.51%	0.22%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Jenks is 36.0 years. This compares with the statewide figure of 36.6 years. Approximately 8.42% of the population is below the age of 5, while 13.66% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 4.22% per year.

Glenpool Population By Age	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	10,808		11,790		12,762			
Age 0 - 4	915	8.47%	1,018	8.63%	1,062	8.32%	2.16%	0.85%
Age 5 - 9	920	8.51%	966	8.19%	1,047	8.20%	0.98%	1.62%
Age 10 - 14	912	8.44%	938	7.96%	998	7.82%	0.56%	1.25%
Age 15 - 17	512	4.74%	546	4.63%	593	4.65%	1.29%	1.67%
Age 18 - 20	443	4.10%	486	4.12%	535	4.19%	1.87%	1.94%
Age 21 - 24	482	4.46%	625	5.30%	705	5.52%	5.33%	2.44%
Age 25 - 34	1,779	16.46%	1,703	14.44%	1,554	12.18%	-0.87%	-1.81%
Age 35 - 44	1,540	14.25%	1,727	14.65%	1,922	15.06%	2.32%	2.16%
Age 45 - 54	1,495	13.83%	1,465	12.43%	1,566	12.27%	-0.40%	1.34%
Age 55 - 64	1,014	9.38%	1,276	10.82%	1,421	11.13%	4.70%	2.18%
Age 65 - 74	511	4.73%	679	5.76%	891	6.98%	5.85%	5.58%
Age 75 - 84	197	1.82%	272	2.31%	376	2.95%	6.66%	6.69%
Age 85 and over	88	0.81%	89	0.75%	92	0.72%	0.23%	0.67%
Age 55 and over	*1,810*	16.75%	*2,316*	19.64%	*2,780*	21.78%	5.05%	3.72%
Age 62 and over	*1,012*	9.37%	*1,334*	11.31%	*1,693*	13.27%	5.67%	4.89%
Median Age	31.9		32.7		34.3		0.50%	0.96%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Glenpool is 32.7 years. This compares with the statewide figure of 36.6 years. Approximately 8.63% of the population is below the age of 5, while 11.31% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 4.89% per year.

Collinsville Population By Age	2010 Census	Percent of Total	2015 Estimate	Percent of Total	2020 Forecast	Percent of Total	2000 - 2015 Ann. Chng.	2015 - 2020 Ann. Chng.
Population by Age	5,606		6,489		6,961			
Age 0 - 4	401	7.15%	488	7.52%	519	7.46%	4.01%	1.24%
Age 5 - 9	431	7.69%	464	7.15%	504	7.24%	1.49%	1.67%
Age 10 - 14	427	7.62%	493	7.60%	491	7.05%	2.92%	-0.08%
Age 15 - 17	261	4.66%	281	4.33%	318	4.57%	1.49%	2.50%
Age 18 - 20	192	3.42%	256	3.95%	286	4.11%	5.92%	2.24%
Age 21 - 24	242	4.32%	340	5.24%	374	5.37%	7.04%	1.92%
Age 25 - 34	738	13.16%	787	12.13%	805	11.56%	1.29%	0.45%
Age 35 - 44	791	14.11%	874	13.47%	900	12.93%	2.02%	0.59%
Age 45 - 54	736	13.13%	845	13.02%	907	13.03%	2.80%	1.43%
Age 55 - 64	589	10.51%	727	11.20%	785	11.28%	4.30%	1.55%
Age 65 - 74	405	7.22%	498	7.67%	596	8.56%	4.22%	3.66%
Age 75 - 84	266	4.74%	298	4.59%	340	4.88%	2.30%	2.67%
Age 85 and over	127	2.27%	138	2.13%	136	1.95%	1.68%	-0.29%
Age 55 and over	*1,387*	24.74%	*1,661*	25.60%	*1,857*	26.68%	3.67%	2.26%
Age 62 and over	*848*	15.12%	*1,014*	15.63%	*1,172*	16.83%	3.65%	2.93%
Median Age	36.4		36.6		37.0		0.11%	0.22%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Collinsville is 36.6 years. This compares with the statewide figure of 36.6 years. Approximately 7.52% of the population is below the age of 5, while 15.63% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 2.93% per year.

Families by Presence of Children

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

2013 Family Type by Presence of Children Under 18 Years	Tulsa		Broken Arrow		Owasso		Tulsa County	
	No.	**Percent**	**No.**	**Percent**	**No.**	**Percent**	**No.**	**Percent**
Total Families:	95,073		27,462		8,085		153,790	
Married-Couple Family:	62,187	65.41%	22,193	80.81%	6,419	79.39%	109,572	71.25%
With Children Under 18 Years	25,133	26.44%	10,337	37.64%	3,378	41.78%	47,083	30.62%
No Children Under 18 Years	37,054	38.97%	11,856	43.17%	3,041	37.61%	62,489	40.63%
Other Family:	32,886	34.59%	5,269	19.19%	1,666	20.61%	44,218	28.75%
Male Householder, No Wife Present	7,990	8.40%	1,393	5.07%	608	7.52%	11,268	7.33%
With Children Under 18 Years	4,201	4.42%	767	2.79%	473	5.85%	6,139	3.99%
No Children Under 18 Years	3,789	3.99%	626	2.28%	135	1.67%	5,129	3.34%
Female Householder, No Husband Present	24,896	26.19%	3,876	14.11%	1,058	13.09%	32,950	21.43%
With Children Under 18 Years	15,680	16.49%	2,475	9.01%	690	8.53%	20,602	13.40%
No Children Under 18 Years	9,216	9.69%	1,401	5.10%	368	4.55%	12,348	8.03%
Total Single Parent Families	19,881		3,242		1,163		26,741	
Male Householder	4,201	21.13%	767	23.66%	473	40.67%	6,139	22.96%
Female Householder	15,680	78.87%	2,475	76.34%	690	59.33%	20,602	77.04%

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

2013 Family Type by Presence of Children Under 18 Years

	Bixby		Sand Springs		Jenks		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Families:	5,955		5,106		4,842		153,790	
Married-Couple Family:	5,139	86.30%	4,003	78.40%	4,004	82.69%	109,572	71.25%
With Children Under 18 Years	2,424	40.71%	1,880	36.82%	2,064	42.63%	47,083	30.62%
No Children Under 18 Years	2,715	45.59%	2,123	41.58%	1,940	40.07%	62,489	40.63%
Other Family:	816	13.70%	1,103	21.60%	838	17.31%	44,218	28.75%
Male Householder, No Wife Present	221	3.71%	216	4.23%	153	3.16%	11,268	7.33%
With Children Under 18 Years	138	2.32%	122	2.39%	73	1.51%	6,139	3.99%
No Children Under 18 Years	83	1.39%	94	1.84%	80	1.65%	5,129	3.34%
Female Householder, No Husband Present	595	9.99%	887	17.37%	685	14.15%	32,950	21.43%
With Children Under 18 Years	397	6.67%	587	11.50%	418	8.63%	20,602	13.40%
No Children Under 18 Years	198	3.32%	300	5.88%	267	5.51%	12,348	8.03%
Total Single Parent Families	535		709		491		26,741	
Male Householder	138	25.79%	122	17.21%	73	14.87%	6,139	22.96%
Female Householder	397	74.21%	587	82.79%	418	85.13%	20,602	77.04%

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

2013 Family Type by Presence of Children Under 18 Years

	Glenpool		Collinsville		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent
Total Families:	2,965		1,523		153,790	
Married-Couple Family:	2,102	70.89%	1,258	82.60%	109,572	71.25%
With Children Under 18 Years	1,091	36.80%	701	46.03%	47,083	30.62%
No Children Under 18 Years	1,011	34.10%	557	36.57%	62,489	40.63%
Other Family:	863	29.11%	265	17.40%	44,218	28.75%
Male Householder, No Wife Present	169	5.70%	145	9.52%	11,268	7.33%
With Children Under 18 Years	125	4.22%	145	9.52%	6,139	3.99%
No Children Under 18 Years	44	1.48%	0	0.00%	5,129	3.34%
Female Householder, No Husband Present	694	23.41%	120	7.88%	32,950	21.43%
With Children Under 18 Years	333	11.23%	62	4.07%	20,602	13.40%
No Children Under 18 Years	361	12.18%	58	3.81%	12,348	8.03%
Total Single Parent Families	458		207		26,741	
Male Householder	125	27.29%	145	70.05%	6,139	22.96%
Female Householder	333	72.71%	62	29.95%	20,602	77.04%

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

As shown, within Tulsa County, among all families 17.39% are single-parent families, while in Tulsa, the percentage is 20.91%. In Broken Arrow the percentage of single-parent families is 11.81%, while in Owasso the percentage is 14.38%.

In Bixby, the percentage is 8.98%. In Sand Springs the percentage of single-parent families is 13.89%, while in Jenks the percentage is 10.14%. In Glenpool, the percentage is 15.45%. In Collinsville the percentage of single-parent families is 13.59%

Population by Presence of Disabilities

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

2013 Age by Number of Disabilities

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	389,987		100,009		30,214		604,388		3,702,515	
Under 18 Years:	95,940		27,489		9,132		155,205		933,738	
With One Type of Disability	3,919	4.08%	720	2.62%	234	2.56%	5,594	3.60%	33,744	3.61%
With Two or More Disabilities	1,115	1.16%	290	1.05%	91	1.00%	1,687	1.09%	11,082	1.19%
No Disabilities	90,906	94.75%	26,479	96.33%	8,807	96.44%	147,924	95.31%	888,912	95.20%
18 to 64 Years:	245,628		62,111		18,470		376,490		2,265,702	
With One Type of Disability	17,127	6.97%	3,047	4.91%	1,023	5.54%	24,521	6.51%	169,697	7.49%
With Two or More Disabilities	15,599	6.35%	2,185	3.52%	796	4.31%	20,761	5.51%	149,960	6.62%
No Disabilities	212,902	86.68%	56,879	91.58%	16,651	90.15%	331,208	87.97%	1,946,045	85.89%
65 Years and Over:	48,419		10,409		2,612		72,693		503,075	
With One Type of Disability	8,142	16.82%	1,665	16.00%	451	17.27%	12,589	17.32%	95,633	19.01%
With Two or More Disabilities	10,336	21.35%	1,649	15.84%	730	27.95%	15,305	21.05%	117,044	23.27%
No Disabilities	29,941	61.84%	7,095	68.16%	1,431	54.79%	44,799	61.63%	290,398	57.72%
Total Number of Persons with Disabilities:	56,238	14.42%	9,556	9.56%	3,325	11.00%	80,457	13.31%	577,160	15.59%

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

2013 Age by Number of Disabilities

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	21,662		19,107		17,430		604,388		3,702,515	
Under 18 Years:	6,536		5,326		5,398		155,205		933,738	
With One Type of Disability	135	2.07%	116	2.18%	157	2.91%	5,594	3.60%	33,744	3.61%
With Two or More Disabilities	35	0.54%	42	0.79%	49	0.91%	1,687	1.09%	11,082	1.19%
No Disabilities	6,366	97.40%	5,168	97.03%	5,192	96.18%	147,924	95.31%	888,912	95.20%
18 to 64 Years:	12,714		11,351		10,483		376,490		2,265,702	
With One Type of Disability	619	4.87%	977	8.61%	291	2.78%	24,521	6.51%	169,697	7.49%
With Two or More Disabilities	298	2.34%	609	5.37%	208	1.98%	20,761	5.51%	149,960	6.62%
No Disabilities	11,797	92.79%	9,765	86.03%	9,984	95.24%	331,208	87.97%	1,946,045	85.89%
65 Years and Over:	2,412		2,430		1,549		72,693		503,075	
With One Type of Disability	490	20.32%	599	24.65%	334	21.56%	12,589	17.32%	95,633	19.01%
With Two or More Disabilities	476	19.73%	742	30.53%	188	12.14%	15,305	21.05%	117,044	23.27%
No Disabilities	1,446	59.95%	1,089	44.81%	1,027	66.30%	44,799	61.63%	290,398	57.72%
Total Number of Persons with Disabilities:	2,053	9.48%	3,085	16.15%	1,227	7.04%	80,457	13.31%	577,160	15.59%

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

2013 Age by Number of Disabilities

	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	11,036		5,734		604,388		3,702,515	
Under 18 Years:	3,175		1,744		155,205		933,738	
With One Type of Disability	131	4.13%	30	1.72%	5,594	3.60%	33,744	3.61%
With Two or More Disabilities	30	0.94%	33	1.89%	1,687	1.09%	11,082	1.19%
No Disabilities	3,014	94.93%	1,681	96.39%	147,924	95.31%	888,912	95.20%
18 to 64 Years:	6,978		3,308		376,490		2,265,702	
With One Type of Disability	539	7.72%	273	8.25%	24,521	6.51%	169,697	7.49%
With Two or More Disabilities	351	5.03%	115	3.48%	20,761	5.51%	149,960	6.62%
No Disabilities	6,088	87.25%	2,920	88.27%	331,208	87.97%	1,946,045	85.89%
65 Years and Over:	883		682		72,693		503,075	
With One Type of Disability	125	14.16%	101	14.81%	12,589	17.32%	95,633	19.01%
With Two or More Disabilities	165	18.69%	198	29.03%	15,305	21.05%	117,044	23.27%
No Disabilities	593	67.16%	383	56.16%	44,799	61.63%	290,398	57.72%
Total Number of Persons with Disabilities:	1,341	12.15%	750	13.08%	80,457	13.31%	577,160	15.59%

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

Within Tulsa County, 13.31% of the civilian non-institutionalized population has one or more disabilities, compared with 15.59% of Oklahomans as a whole. In Tulsa the percentage is 14.42%. In

Broken Arrow the percentage is 9.56%, while in Owasso the percentage is 11.00%. In Bixby the percentage is 9.48%. In Sand Springs the percentage is 16.15%, while in Jenks the percentage is 7.04%. In Glenpool the percentage is 12.15%. In Collinsville the percentage is 13.08%.

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

2013 Population by Veteran and Disability Status

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	291,001		72,520		21,082		446,131		2,738,788	
Veteran:	27,037	9.29%	7,477	10.31%	2,340	11.10%	43,029	9.64%	305,899	11.17%
With a Disability	*8,314*	*30.75%*	*1,623*	*21.71%*	*626*	*26.75%*	*12,769*	*29.68%*	*100,518*	*32.86%*
No Disability	*18,723*	*69.25%*	*5,854*	*78.29%*	*1,714*	*73.25%*	*30,260*	*70.32%*	*205,381*	*67.14%*
Non-veteran:	263,964	90.71%	65,043	89.69%	18,742	88.90%	403,102	90.36%	2,432,889	88.83%
With a Disability	*42,814*	*16.22%*	*6,923*	*10.64%*	*2,374*	*12.67%*	*60,331*	*14.97%*	*430,610*	*17.70%*
No Disability	*221,150*	*83.78%*	*58,120*	*89.36%*	*16,368*	*87.33%*	*342,771*	*85.03%*	*2,002,279*	*82.30%*

Source: 2009-2013 American Community Survey, Table C21007

2013 Population by Veteran and Disability Status

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	15,126		13,781		12,032		446,131		2,738,788	
Veteran:	1,293	8.55%	1,268	9.20%	995	8.27%	43,029	9.64%	305,899	11.17%
With a Disability	*302*	*23.36%*	*543*	*42.82%*	*211*	*21.21%*	*12,769*	*29.68%*	*100,518*	*32.86%*
No Disability	*991*	*76.64%*	*725*	*57.18%*	*784*	*78.79%*	*30,260*	*70.32%*	*205,381*	*67.14%*
Non-veteran:	13,833	91.45%	12,513	90.80%	11,037	91.73%	403,102	90.36%	2,432,889	88.83%
With a Disability	*1,581*	*11.43%*	*2,384*	*19.05%*	*810*	*7.34%*	*60,331*	*14.97%*	*430,610*	*17.70%*
No Disability	*12,252*	*88.57%*	*10,129*	*80.95%*	*10,227*	*92.66%*	*342,771*	*85.03%*	*2,002,279*	*82.30%*

Source: 2009-2013 American Community Survey, Table C21007

2013 Population by Veteran and Disability Status

	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	7,861		3,990		446,131		2,738,788	
Veteran:	764	9.72%	424	10.63%	43,029	9.64%	305,899	11.17%
With a Disability	*187*	*24.48%*	*159*	*37.50%*	*12,769*	*29.68%*	*100,518*	*32.86%*
No Disability	*577*	*75.52%*	*265*	*62.50%*	*30,260*	*70.32%*	*205,381*	*67.14%*
Non-veteran:	7,097	90.28%	3,566	89.37%	403,102	90.36%	2,432,889	88.83%
With a Disability	*993*	*13.99%*	*528*	*14.81%*	*60,331*	*14.97%*	*430,610*	*17.70%*
No Disability	*6,104*	*86.01%*	*3,038*	*85.19%*	*342,771*	*85.03%*	*2,002,279*	*82.30%*

Source: 2009-2013 American Community Survey, Table C21007

Within Tulsa County, the Census Bureau estimates there are 43,029 veterans, 29.68% of which have one or more disabilities (compared with 32.86% at a statewide level). In Tulsa, there are an estimated 27,037 veterans, 30.75% of which are estimated to have a disability. Within Broken Arrow the number of veterans is estimated to be 7,477 (21.71% with a disability), and within Owasso there are an estimated 2,340 veterans, 26.75% with one or more disabilities.

In Bixby, there are an estimated 1,293 veterans, 23.36% of which are estimated to have a disability. Within Sand Springs the number of veterans is estimated to be 1,268 (42.82% with a disability), and within Jenks there are an estimated 995 veterans, 21.21% with one or more disabilities.

In Glenpool, there are an estimated 764 veterans, 24.48% of which are estimated to have a disability. Within Collinsville the number of veterans is estimated to be 424 (37.50% with a disability).

Group Quarters Population

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

2010 Group Quarters Population

	Tulsa		Broken Arrow		Owasso		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Population	391,906		98,850		28,915		603,403	
Group Quarters Population	8,386	2.14%	468	0.47%	242	0.84%	9,817	1.63%
Institutionalized Population	4,284	1.09%	466	0.47%	214	0.74%	5,670	0.94%
Correctional facilities for adults	2,049	0.52%	0	0.00%	0	0.00%	2,188	0.36%
Juvenile facilities	83	0.02%	0	0.00%	41	0.14%	251	0.04%
Nursing facilities/Skilled-nursing facilities	2,033	0.52%	466	0.47%	173	0.60%	3,112	0.52%
Other institutional facilities	119	0.03%	0	0.00%	0	0.00%	119	0.02%
Noninstitutionalized population	4,102	1.05%	2	0.00%	28	0.10%	4,147	0.69%
College/University student housing	2721	0.69%	0	0.00%	0	0.00%	2721	0.45%
Military quarters	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Other noninstitutional facilities	1381	0.35%	2	0.00%	28	0.10%	1426	0.24%

Source: 2010 Decennial Census, Table P42

2010 Group Quarters Population

	Bixby		Sand Springs		Jenks		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Population	20,884		18,906		16,924		603,403	
Group Quarters Population	47	0.23%	213	1.13%	165	0.97%	9,817	1.63%
Institutionalized Population	47	0.23%	169	0.89%	165	0.97%	5,670	0.94%
Correctional facilities for adults	0	0.00%	0	0.00%	0	0.00%	2,188	0.36%
Juvenile facilities	0	0.00%	85	0.45%	0	0.00%	251	0.04%
Nursing facilities/Skilled-nursing facilities	47	0.23%	84	0.44%	165	0.97%	3,112	0.52%
Other institutional facilities	0	0.00%	0	0.00%	0	0.00%	119	0.02%
Noninstitutionalized population	0	0.00%	44	0.23%	0	0.00%	4,147	0.69%
College/University student housing	0	0.00%	0	0.00%	0	0.00%	2721	0.45%
Military quarters	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Other noninstitutional facilities	0	0.00%	44	0.23%	0	0.00%	1426	0.24%

Source: 2010 Decennial Census, Table P42

2010 Group Quarters Population

	Glenpool		Collinsville		Tulsa County	
	No.	Percent	No.	Percent	No.	Percent
Total Population	10,808		5,606		603,403	
Group Quarters Population	64	0.59%	80	1.43%	9,817	1.63%
Institutionalized Population	64	0.59%	80	1.43%	5,670	0.94%
Correctional facilities for adults	0	0.00%	0	0.00%	2,188	0.36%
Juvenile facilities	0	0.00%	0	0.00%	251	0.04%
Nursing facilities/Skilled-nursing facilities	64	0.59%	80	1.43%	3,112	0.52%
Other institutional facilities	0	0.00%	0	0.00%	119	0.02%
Noninstitutionalized population	0	0.00%	0	0.00%	4,147	0.69%
College/University student housing	0	0.00%	0	0.00%	2721	0.45%
Military quarters	0	0.00%	0	0.00%	0	0.00%
Other noninstitutional facilities	0	0.00%	0	0.00%	1426	0.24%

Source: 2010 Decennial Census, Table P42

The percentage of the Tulsa 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 Tulsa 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

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Households by HH Income	168,644		39,195		12,123		252,860		1,520,327	
< $15,000	27,572	16.35%	2,463	6.28%	620	5.11%	33,381	13.20%	213,623	14.05%
$15,000 - $24,999	23,056	13.67%	2,995	7.64%	937	7.73%	30,033	11.88%	184,613	12.14%
$25,000 - $34,999	21,806	12.93%	3,418	8.72%	1,019	8.41%	28,846	11.41%	177,481	11.67%
$35,000 - $49,999	26,625	15.79%	5,547	14.15%	1,532	12.64%	37,819	14.96%	229,628	15.10%
$50,000 - $74,999	28,443	16.87%	9,071	23.14%	2,660	21.94%	47,012	18.59%	280,845	18.47%
$75,000 - $99,999	14,727	8.73%	6,255	15.96%	1,852	15.28%	27,456	10.86%	173,963	11.44%
$100,000 - $124,999	9,195	5.45%	3,981	10.16%	1,342	11.07%	17,803	7.04%	106,912	7.03%
$125,000 - $149,999	4,843	2.87%	2,139	5.46%	865	7.14%	9,691	3.83%	57,804	3.80%
$150,000 - $199,999	5,296	3.14%	1,911	4.88%	803	6.62%	10,021	3.96%	48,856	3.21%
$200,000 - $249,999	2,217	1.31%	650	1.66%	271	2.24%	3,864	1.53%	18,661	1.23%
$250,000 - $499,999	3,320	1.97%	643	1.64%	184	1.52%	4,980	1.97%	20,487	1.35%
$500,000+	1,544	0.92%	122	0.31%	38	0.31%	1,954	0.77%	7,454	0.49%
Median Household Income	$41,697		$64,261		$68,360		$48,553		$47,049	
Average Household Income	$62,359		$77,128		$82,426		$68,197		$63,390	

Source: Nielsen SiteReports

2015 Household Income Distribution

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Households by HH Income	8,674		7,916		6,739		252,860		1,520,327	
< $15,000	669	7.71%	850	10.74%	230	3.41%	33,381	13.20%	213,623	14.05%
$15,000 - $24,999	599	6.91%	850	10.74%	399	5.92%	30,033	11.88%	184,613	12.14%
$25,000 - $34,999	481	5.55%	953	12.04%	352	5.22%	28,846	11.41%	177,481	11.67%
$35,000 - $49,999	1,070	12.34%	1,130	14.27%	749	11.11%	37,819	14.96%	229,628	15.10%
$50,000 - $74,999	1,816	20.94%	1,655	20.91%	1,281	19.01%	47,012	18.59%	280,845	18.47%
$75,000 - $99,999	1,215	14.01%	1,015	12.82%	1,266	18.79%	27,456	10.86%	173,963	11.44%
$100,000 - $124,999	850	9.80%	585	7.39%	1,065	15.80%	17,803	7.04%	106,912	7.03%
$125,000 - $149,999	540	6.23%	343	4.33%	488	7.24%	9,691	3.83%	57,804	3.80%
$150,000 - $199,999	605	6.97%	322	4.07%	496	7.36%	10,021	3.96%	48,856	3.21%
$200,000 - $249,999	268	3.09%	92	1.16%	170	2.52%	3,864	1.53%	18,661	1.23%
$250,000 - $499,999	410	4.73%	97	1.23%	199	2.95%	4,980	1.97%	20,487	1.35%
$500,000+	151	1.74%	24	0.30%	44	0.65%	1,954	0.77%	7,454	0.49%
Median Household Income	$70,898		$52,644		$82,079		$48,553		$47,049	
Average Household Income	$97,465		$66,490		$95,332		$68,197		$63,390	

Source: Nielsen SiteReports

2015 Household Income Distribution								
	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Households by HH Income	4,066		2,409		252,860		1,520,327	
< $15,000	256	6.30%	238	9.88%	33,381	13.20%	213,623	14.05%
$15,000 - $24,999	385	9.47%	263	10.92%	30,033	11.88%	184,613	12.14%
$25,000 - $34,999	326	8.02%	226	9.38%	28,846	11.41%	177,481	11.67%
$35,000 - $49,999	447	10.99%	322	13.37%	37,819	14.96%	229,628	15.10%
$50,000 - $74,999	1,067	26.24%	495	20.55%	47,012	18.59%	280,845	18.47%
$75,000 - $99,999	788	19.38%	360	14.94%	27,456	10.86%	173,963	11.44%
$100,000 - $124,999	357	8.78%	226	9.38%	17,803	7.04%	106,912	7.03%
$125,000 - $149,999	166	4.08%	115	4.77%	9,691	3.83%	57,804	3.80%
$150,000 - $199,999	157	3.86%	92	3.82%	10,021	3.96%	48,856	3.21%
$200,000 - $249,999	51	1.25%	32	1.33%	3,864	1.53%	18,661	1.23%
$250,000 - $499,999	57	1.40%	30	1.25%	4,980	1.97%	20,487	1.35%
$500,000+	9	0.22%	10	0.42%	1,954	0.77%	7,454	0.49%
Median Household Income	$64,503		$57,854		$48,553		$47,049	
Average Household Income	$73,593		$70,348		$68,197		$63,390	

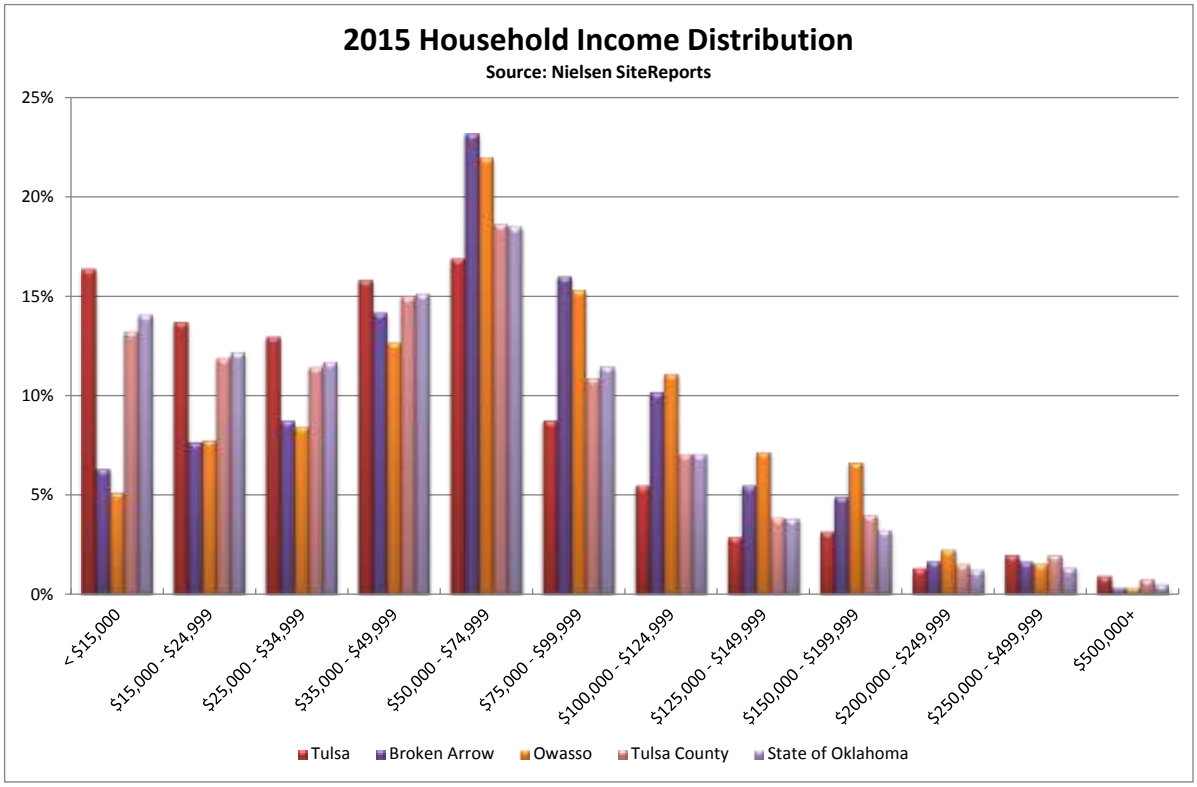
Source: Nielsen SiteReports

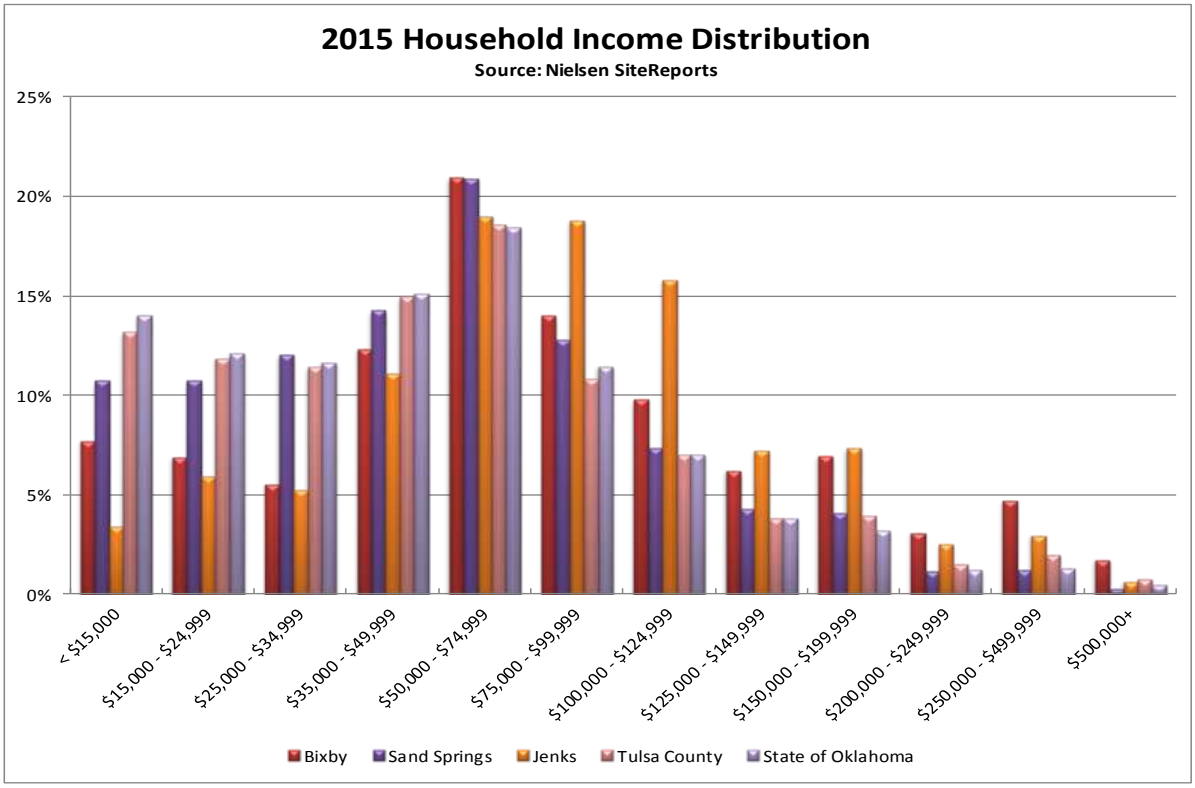
As shown, median household income for Tulsa County is estimated to be $48,553 in 2015. By way of comparison, the median household income of Oklahoma is estimated to be $47,049. For Tulsa, median household income is estimated to be $41,697. In Broken Arrow the estimate is $64,261, while in Owasso the estimate is $68,360.

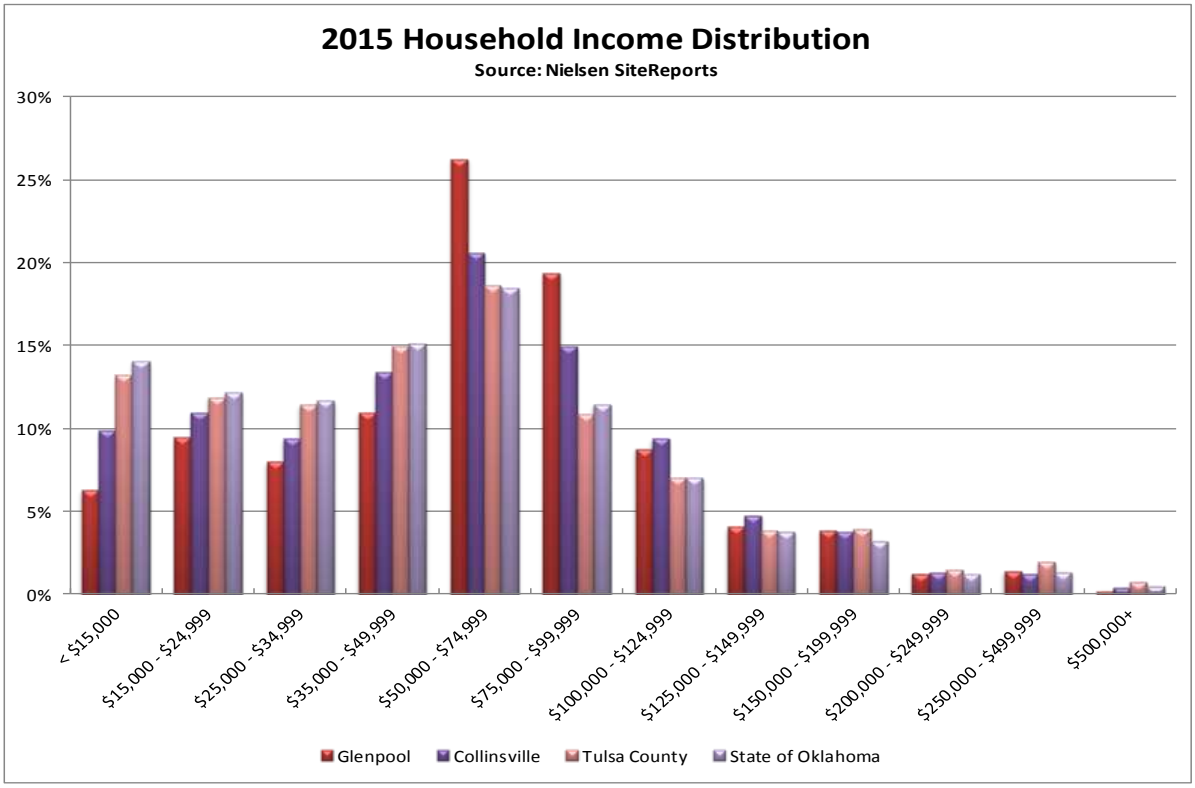
For Bixby, median household income is estimated to be $70,898. In Sand Springs the estimate is $52,644, while in Jenks the estimate is $82,079.

For Glenpool, median household income is estimated to be $64,503. In Collinsville the estimate is $57,854.

The income distribution can be better visualized by the following charts.


2015 Household Income Distribution
Source: Nielsen SiteReports
25%
20%
15%
10%
5%
0%
< $15,000
$15,000 - $24,999
$25,000 - $34,999
$35,000 - $49,999
$50,000 - $74,999
$75,000 - $99,999
$100,000 - $124,999
$125,000 - $149,999
$150,000 - $199,999
$200,000 - $249,999
$250,000 - $499,999
$500,000+
Tulsa
Broken Arrow
Owasso
Tulsa County
State of Oklahoma


2015 Household Income Distribution
Source: Nielsen SiteReports
25%
20%
15%
10%
5%
0%
< $15,000
$15,000 - $24,999
$25,000 - $34,999
$35,000 - $49,999
$50,000 - $74,999
$75,000 - $99,999
$100,000 - $124,999
$125,000 - $149,999
$150,000 - $199,999
$200,000 - $249,999
$250,000 - $499,999
$500,000+
Bixby
Sand Springs
Jenks
Tulsa County
State of Oklahoma



Household Income Trend

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

Household Income Trend

	1999 Median HH Income	2015 Median HH Income	Nominal Growth	Inflation Rate	Real Growth
Tulsa	$35,316	$41,697	1.04%	2.40%	-1.36%
Broken Arrow	$53,507	$64,261	1.15%	2.40%	-1.25%
Owasso	$49,798	$68,360	2.00%	2.40%	-0.40%
Bixby	$50,854	$70,898	2.10%	2.40%	-0.30%
Sand Springs	$40,380	$52,644	1.67%	2.40%	-0.73%
Jenks	$54,637	$82,079	2.58%	2.40%	0.18%
Glenpool	$43,209	$64,503	2.54%	2.40%	0.14%
Collinsville	$36,209	$57,854	2.97%	2.40%	0.57%
Tulsa County	$38,213	$48,553	1.51%	2.40%	-0.89%
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 Tulsa 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 Tulsa 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 Tulsa 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
Tulsa	14.12%	20.10%	598	24.14%	50.22%
Broken Arrow	4.50%	7.70%	320	10.82%	31.84%
Owasso	4.75%	8.74%	399	5.29%	36.09%
Bixby	5.40%	7.02%	162	5.80%	35.77%
Sand Springs	9.10%	9.89%	79	31.15%	39.86%
Jenks	4.55%	5.67%	112	13.70%	26.79%
Glenpool	6.43%	8.89%	246	0.00%	25.53%
Collinsville	11.36%	7.65%	-371	8.28%	40.32%
Tulsa County	11.61%	15.90%	429	20.38%	46.58%
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 Tulsa County is estimated to be 15.90% by the American Community Survey. This is an increase of 429 basis points since the 2000 Census. Within Tulsa, the poverty rate is estimated to be 20.10%. Within Broken Arrow, the rate is estimated to be 7.70%, while the poverty rate in Owasso is estimated to be 8.74%. Within Bixby, the poverty rate is estimated to be 7.02%. Within Sand

Springs, the rate is estimated to be 9.89%, while the poverty rate in Jenks is estimated to be 5.67%. Within Glenpool, the poverty rate is estimated to be 8.89%. Within Collinsville, the rate is estimated to be 7.65%. It is notable that Collinsville is the only community in Tulsa County to have shown a decrease in poverty between 2000 and 2013.

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 Tulsa 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)
Tulsa County	285,562	303,678	1.24%	7.1%	4.1%	-300
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

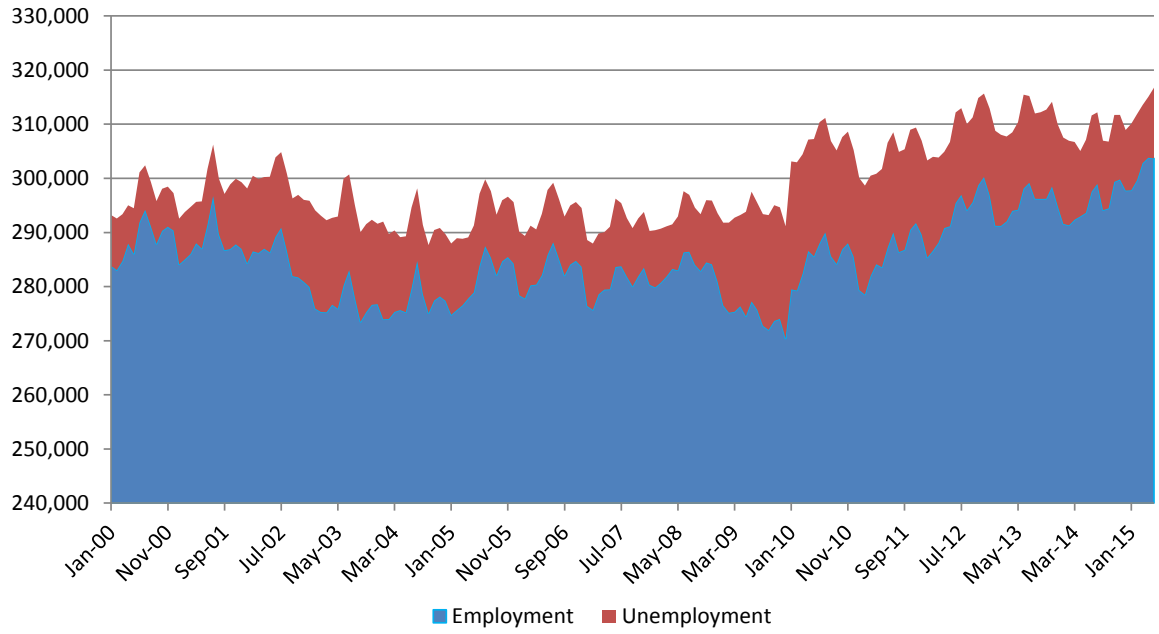
Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Population Survey

As of May 2015, total employment in Tulsa County was 303,678 persons. Compared with figures from May 2010, this represents annualized employment growth of 1.24% per year. The unemployment rate in May was 4.1%, a decrease of -300 basis points from May 2010, which was 7.1%. Over the last five years, both the statewide and national trends have been improving employment levels and declining unemployment rates, and Tulsa County has generally mirrored these trends, though annualized employment growth was slightly slower than both the state and the nation during this period of time.

Employment Level Trends

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

Employment and Unemployment in Tulsa County
January 2000 through May 2015



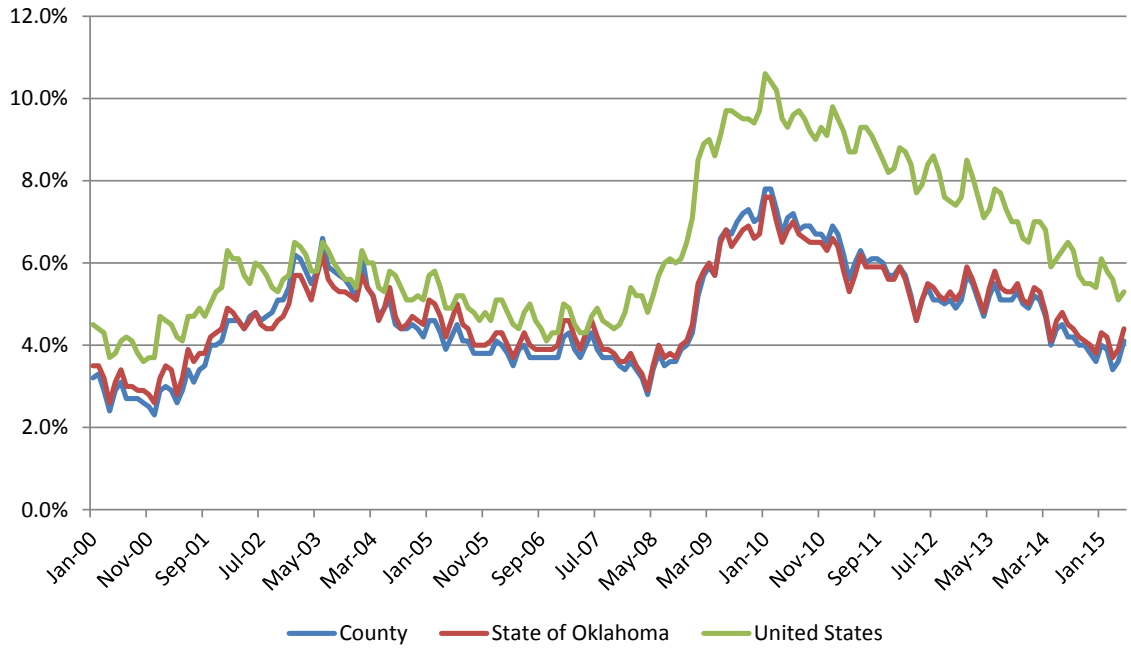
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

As shown, total employment levels fluctuated somewhat 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 continued to grow to its current level of 303,678 persons. The number of unemployed persons in May 2015 was 13,079, out of a total labor force of 316,757 persons. We note that there have been two notable layoff announcements since that time: BizJet (150 affected employees) and Apache Corp (166 affected employees). In addition, the oil and gas industry is a major economic driver in the region, and persistent low energy prices will have a negative impact on the area in the area in the near term.

Unemployment Rate Trends

The next chart shows historic unemployment rates for Tulsa 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 Tulsa 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 Tulsa 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 4.1%. On the whole, unemployment rates in Tulsa County track very well with statewide figures. Compared with the United States, unemployment rates in Tulsa County and Oklahoma are and have historically been well below the national average.

Employment and Wages by Industrial Supersector

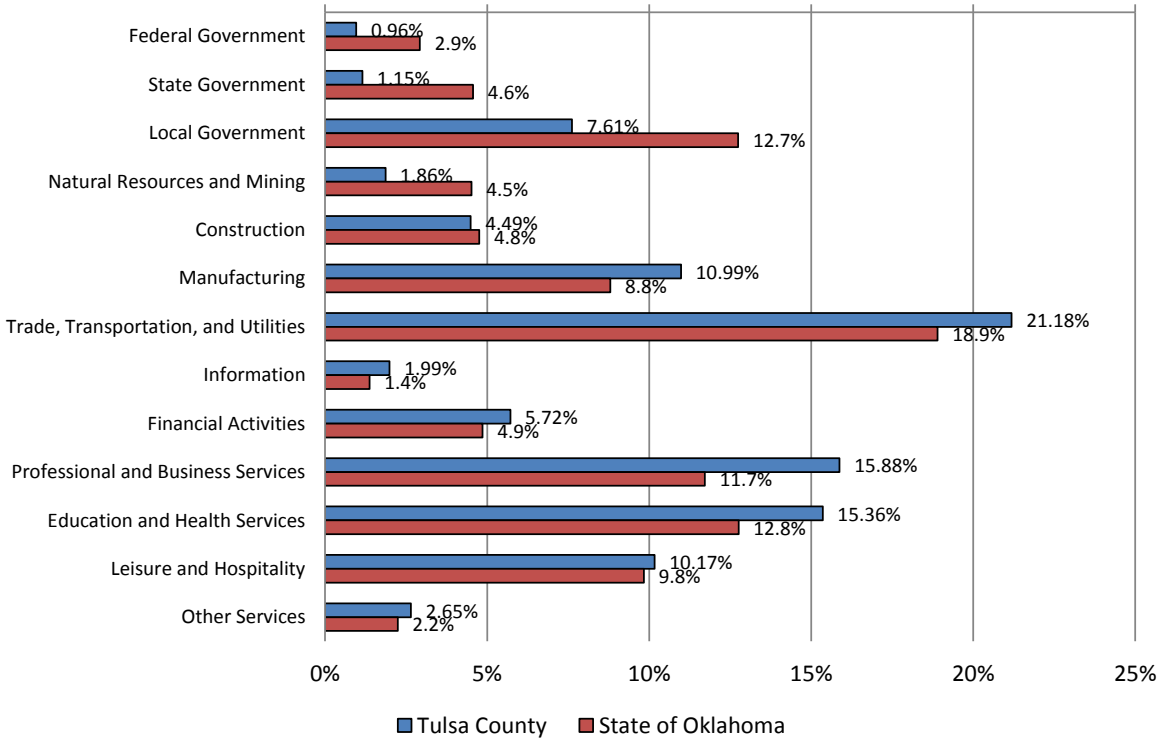
The next table presents data regarding employment in Tulsa County by industry, including total number of establishments, average number of employees in 2014, average annual pay, and location quotients for each industry compared with the United States. This data is furnished by the Bureau of Labor Statistics, 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	60	3,290	0.96%	$71,199	0.48
State Government	28	3,956	1.15%	$34,419	0.35
Local Government	168	26,113	7.61%	$38,397	0.76
Natural Resources and Mining	425	6,389	1.86%	$115,636	1.23
Construction	1,682	15,402	4.49%	$49,269	1.00
Manufacturing	1,092	37,679	10.99%	$58,586	1.23
Trade, Transportation, and Utilities	4,533	72,632	21.18%	$48,893	1.11
Information	349	6,826	1.99%	$64,571	0.99
Financial Activities	2,351	19,614	5.72%	$62,389	1.02
Professional and Business Services	4,508	54,446	15.88%	$51,540	1.14
Education and Health Services	2,913	52,665	15.36%	$48,193	1.02
Leisure and Hospitality	1,740	34,874	10.17%	$16,951	0.95
Other Services	1,504	9,080	2.65%	$32,750	0.85
Total	**21,352**	**342,965**		**$48,187**	**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 (21.18%) are employed in Trade, Transportation, and Utilities. The average annual pay in this sector is $48,893 per year. The industry

with the highest annual pay is Natural Resources and Mining, with average annual pay of $115,636 per year.

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

10% (county manufacturing %) / 5% (U.S. manufacturing %) = 2.0

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

Within Tulsa County, among all industries the largest location quotient is in Natural Resources and Mining, with a quotient of 1.23. This sector includes agricultural employment as well as employment in the oil and gas industry.

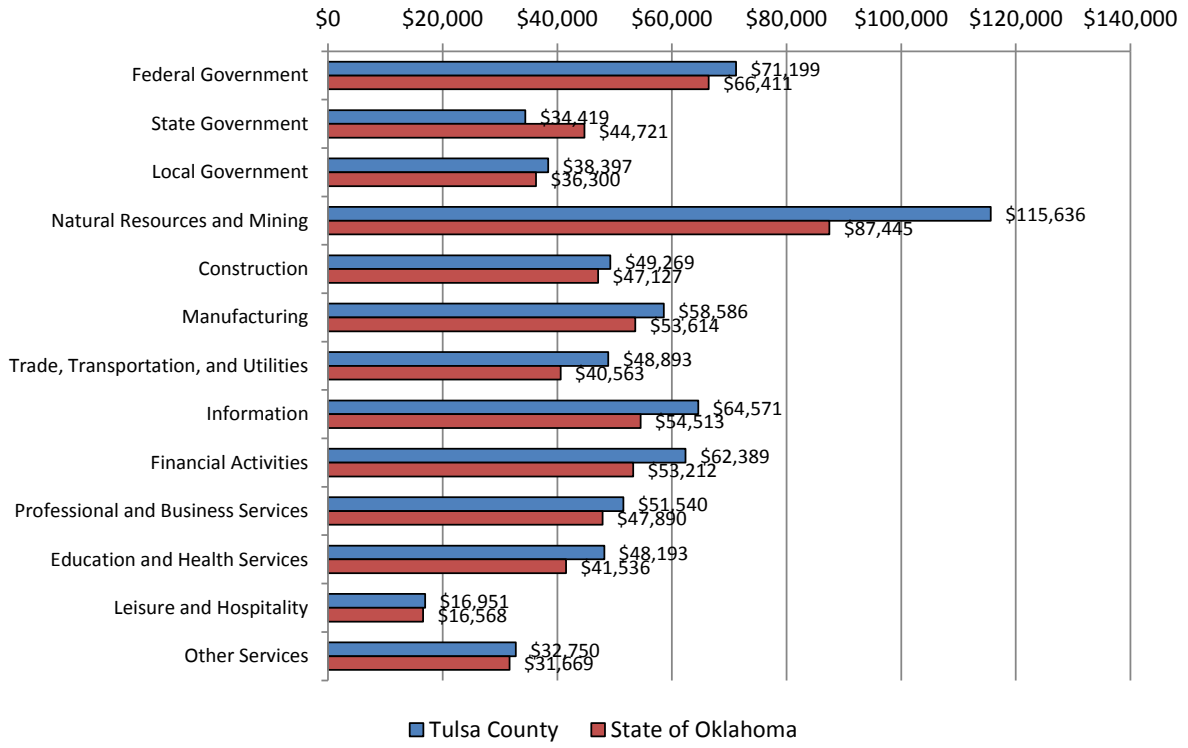
The next table presents average annual pay in Tulsa County by industry, in comparison with Oklahoma as a whole and the United States.

Comparison of 2014 Average Annual Pay by Supersector

Supersector	Tulsa County	State of Oklahoma	United States	Percent of State	Percent of Nation
Federal Government	$71,199	$66,411	$75,784	107.2%	93.9%
State Government	$34,419	$44,721	$54,184	77.0%	63.5%
Local Government	$38,397	$36,300	$46,146	105.8%	83.2%
Natural Resources and Mining	$115,636	$87,445	$59,666	132.2%	193.8%
Construction	$49,269	$47,127	$55,041	104.5%	89.5%
Manufacturing	$58,586	$53,614	$62,977	109.3%	93.0%
Trade, Transportation, and Utilities	$48,893	$40,563	$42,988	120.5%	113.7%
Information	$64,571	$54,513	$90,804	118.5%	71.1%
Financial Activities	$62,389	$53,212	$85,261	117.2%	73.2%
Professional and Business Services	$51,540	$47,890	$66,657	107.6%	77.3%
Education and Health Services	$48,193	$41,536	$45,951	116.0%	104.9%
Leisure and Hospitality	$16,951	$16,568	$20,993	102.3%	80.7%
Other Services	$32,750	$31,669	$33,935	103.4%	96.5%
Total	**$48,187**	**$43,774**	**$51,361**	**110.1%**	**93.8%**

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, Tulsa County has higher average wages in every employment supersector, except state government.

Working Families

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

Families by Employment Status and Presence of Children

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Families	**95,073**		**27,462**		**8,085**		**153,790**		**961,468**	
With Children <18 Years:	45,014	47.35%	13,579	49.45%	4,541	56.17%	73,824	48.00%	425,517	44.26%
Married Couple:	25,133	55.83%	10,337	76.12%	3,378	74.39%	47,083	63.78%	281,418	66.14%
Both Parents Employed	13,440	53.48%	6,742	65.22%	2,223	65.81%	27,795	59.03%	166,700	59.24%
One Parent Employed	10,864	43.23%	3,467	33.54%	1,133	33.54%	18,125	38.50%	104,817	37.25%
Neither Parent Employed	829	3.30%	128	1.24%	22	0.65%	1,163	2.47%	9,901	3.52%
Other Family:	19,881	44.17%	3,242	23.88%	1,163	25.61%	26,741	36.22%	144,099	33.86%
Male Householder:	4,201	21.13%	767	23.66%	473	40.67%	6,139	22.96%	36,996	25.67%
Employed	3,394	80.79%	704	91.79%	428	90.49%	5,147	83.84%	31,044	83.91%
Not Employed	807	19.21%	63	8.21%	45	9.51%	992	16.16%	5,952	16.09%
Female Householder:	15,680	78.87%	2,475	76.34%	690	59.33%	20,602	77.04%	107,103	74.33%
Employed	10,603	67.62%	1,865	75.35%	533	77.25%	14,440	70.09%	75,631	70.62%
Not Employed	5,077	32.38%	610	24.65%	157	22.75%	6,162	29.91%	31,472	29.38%
Without Children <18 Years:	50,059	52.65%	13,883	50.55%	3,544	43.83%	79,966	52.00%	535,951	55.74%
Married Couple:	37,054	74.02%	11,856	85.40%	3,041	85.81%	62,489	78.14%	431,868	80.58%
Both Spouses Employed	14,881	40.16%	5,658	47.72%	1,480	48.67%	26,552	42.49%	167,589	38.81%
One Spouse Employed	12,403	33.47%	3,992	33.67%	956	31.44%	20,699	33.12%	138,214	32.00%
Neither Spouse Employed	9,770	26.37%	2,206	18.61%	605	19.89%	15,238	24.39%	126,065	29.19%
Other Family:	13,005	25.98%	2,027	14.60%	503	14.19%	17,477	21.86%	104,083	19.42%
Male Householder:	3,789	38.78%	626	28.38%	135	22.31%	5,129	33.66%	32,243	25.58%
Employed	2,516	66.40%	461	73.64%	109	80.74%	3,360	65.51%	19,437	60.28%
Not Employed	1,273	33.60%	165	26.36%	26	19.26%	1,769	34.49%	12,806	39.72%
Female Householder:	9,216	70.87%	1,401	69.12%	368	73.16%	12,348	70.65%	71,840	69.02%
Employed	5,344	57.99%	869	62.03%	213	57.88%	7,009	56.76%	36,601	50.95%
Not Employed	3,872	42.01%	532	37.97%	155	42.12%	5,339	43.24%	35,239	49.05%
Total Working Families:	*73,445*	*77.25%*	*23,758*	*86.51%*	*7,075*	*87.51%*	*123,127*	*80.06%*	*740,033*	*76.97%*
With Children <18 Years:	*38,301*	*52.15%*	*12,778*	*53.78%*	*4,317*	*61.02%*	*65,507*	*53.20%*	*378,192*	*51.10%*
Without Children <18 Years:	*35,144*	*47.85%*	*10,980*	*46.22%*	*2,758*	*38.98%*	*57,620*	*46.80%*	*361,841*	*48.90%*

Source: 2009-2013 American Community Survey, Table B23007

Families by Employment Status and Presence of Children

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Families	**5,955**		**5,106**		**4,842**		**153,790**		**961,468**	
With Children <18 Years:	2,959	49.69%	2,589	50.71%	2,555	52.77%	73,824	48.00%	425,517	44.26%
Married Couple:	2,424	81.92%	1,880	72.61%	2,064	80.78%	47,083	63.78%	281,418	66.14%
Both Parents Employed	1,447	59.69%	1,385	73.67%	1,224	59.30%	27,795	59.03%	166,700	59.24%
One Parent Employed	932	38.45%	455	24.20%	816	39.53%	18,125	38.50%	104,817	37.25%
Neither Parent Employed	45	1.86%	40	2.13%	24	1.16%	1,163	2.47%	9,901	3.52%
Other Family:	535	18.08%	709	27.39%	491	19.22%	26,741	36.22%	144,099	33.86%
Male Householder:	138	25.79%	122	17.21%	73	14.87%	6,139	22.96%	36,996	25.67%
Employed	111	80.43%	98	80.33%	63	86.30%	5,147	83.84%	31,044	83.91%
Not Employed	27	19.57%	24	19.67%	10	13.70%	992	16.16%	5,952	16.09%
Female Householder:	397	74.21%	587	82.79%	418	85.13%	20,602	77.04%	107,103	74.33%
Employed	345	86.90%	446	75.98%	368	88.04%	14,440	70.09%	75,631	70.62%
Not Employed	52	13.10%	141	24.02%	50	11.96%	6,162	29.91%	31,472	29.38%
Without Children <18 Years:	2,996	50.31%	2,517	49.29%	2,287	47.23%	79,966	52.00%	535,951	55.74%
Married Couple:	2,715	90.62%	2,123	84.35%	1,940	84.83%	62,489	78.14%	431,868	80.58%
Both Spouses Employed	1,165	42.91%	951	44.80%	1,033	53.25%	26,552	42.49%	167,589	38.81%
One Spouse Employed	999	36.80%	644	30.33%	571	29.43%	20,699	33.12%	138,214	32.00%
Neither Spouse Employed	551	20.29%	528	24.87%	336	17.32%	15,238	24.39%	126,065	29.19%
Other Family:	281	9.38%	394	15.65%	347	15.17%	17,477	21.86%	104,083	19.42%
Male Householder:	83	15.06%	94	17.80%	80	23.81%	5,129	33.66%	32,243	25.58%
Employed	50	60.24%	64	68.09%	42	52.50%	3,360	65.51%	19,437	60.28%
Not Employed	33	39.76%	30	31.91%	38	47.50%	1,769	34.49%	12,806	39.72%
Female Householder:	198	70.46%	300	76.14%	267	76.95%	12,348	70.65%	71,840	69.02%
Employed	96	48.48%	146	48.67%	164	61.42%	7,009	56.76%	36,601	50.95%
Not Employed	102	51.52%	154	51.33%	103	38.58%	5,339	43.24%	35,239	49.05%
Total Working Families:	*5,145*	*86.40%*	*4,189*	*82.04%*	*4,281*	*88.41%*	*123,127*	*80.06%*	*740,033*	*76.97%*
With Children <18 Years:	*2,835*	*55.10%*	*2,384*	*56.91%*	*2,471*	*57.72%*	*65,507*	*53.20%*	*378,192*	*51.10%*
Without Children <18 Years:	*2,310*	*44.90%*	*1,805*	*43.09%*	*1,810*	*42.28%*	*57,620*	*46.80%*	*361,841*	*48.90%*

Source: 2009-2013 American Community Survey, Table B23007

Families by Employment Status and Presence of Children	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Families	**2,965**		**1,523**		**153,790**		**961,468**	
With Children <18 Years:	1,549	52.24%	908	59.62%	73,824	48.00%	425,517	44.26%
Married Couple:	1,091	70.43%	701	77.20%	47,083	63.78%	281,418	66.14%
Both Parents Employed	666	61.04%	514	73.32%	27,795	59.03%	166,700	59.24%
One Parent Employed	425	38.96%	187	26.68%	18,125	38.50%	104,817	37.25%
Neither Parent Employed	0	0.00%	0	0.00%	1,163	2.47%	9,901	3.52%
Other Family:	458	29.57%	207	22.80%	26,741	36.22%	144,099	33.86%
Male Householder:	125	27.29%	145	70.05%	6,139	22.96%	36,996	25.67%
Employed	113	90.40%	145	100.00%	5,147	83.84%	31,044	83.91%
Not Employed	12	9.60%	0	0.00%	992	16.16%	5,952	16.09%
Female Householder:	333	72.71%	62	29.95%	20,602	77.04%	107,103	74.33%
Employed	286	85.89%	47	75.81%	14,440	70.09%	75,631	70.62%
Not Employed	47	14.11%	15	24.19%	6,162	29.91%	31,472	29.38%
Without Children <18 Years:	1,416	47.76%	615	40.38%	79,966	52.00%	535,951	55.74%
Married Couple:	1,011	71.40%	557	90.57%	62,489	78.14%	431,868	80.58%
Both Spouses Employed	451	44.61%	255	45.78%	26,552	42.49%	167,589	38.81%
One Spouse Employed	387	38.28%	175	31.42%	20,699	33.12%	138,214	32.00%
Neither Spouse Employed	173	17.11%	127	22.80%	15,238	24.39%	126,065	29.19%
Other Family:	405	28.60%	58	9.43%	17,477	21.86%	104,083	19.42%
Male Householder:	44	25.43%	0	0.00%	5,129	33.66%	32,243	25.58%
Employed	33	75.00%	0	#DIV/0!	3,360	65.51%	19,437	60.28%
Not Employed	11	25.00%	0	#DIV/0!	1,769	34.49%	12,806	39.72%
Female Householder:	361	89.14%	58	100.00%	12,348	70.65%	71,840	69.02%
Employed	209	57.89%	22	37.93%	7,009	56.76%	36,601	50.95%
Not Employed	152	42.11%	36	62.07%	5,339	43.24%	35,239	49.05%
Total Working Families:	*2,570*	*86.68%*	*1,345*	*88.31%*	*123,127*	*80.06%*	*740,033*	*76.97%*
With Children <18 Years:	*1,490*	*57.98%*	*893*	*66.39%*	*65,507*	*53.20%*	*378,192*	*51.10%*
Without Children <18 Years:	*1,080*	*42.02%*	*452*	*33.61%*	*57,620*	*46.80%*	*361,841*	*48.90%*

Source: 2009-2013 American Community Survey, Table B23007

Within Tulsa County, there are 123,127 working families, 53.20% 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 Tulsa County area are presented in the following table, as reported by the Tulsa Area Partnership.

Major Employers (Over 1,000 Employees) - Tulsa MSA

Company	Industry / Description
Williams Companies Inc	Oil & Gas
Saint Francis Health System	Health Care
American Airlines	Aircraft Maintenance
Bank Of Oklahoma	Financial Services
Blue Cross & Blue Shield	Insurance
Broken Arrow Public Schools	Education
Okla. State Univ. Medical Ctr	Health Care
Oral Roberts University	Higher Education
Quiktrip Corp	Convenience Stores Hq
Spirit Aerosystems Inc.	Aerospace
St John Medical Center	Health Care
Avis Budget Group	Reservation Ctr
Dollar Thrifty Automotive	Automobile Rental
EDS	Data Services
Hillcrest Healthcare System	Health Care
ONEOK Inc	Natural Gas
IBM	Accounting
Nordam Group	Aerospace
Owasso Public Schools	Education
Reasor's Foods	Grocers
State Farm Insurance	Insurance
Tulsa Public Schools	Education
Tulsa, City Of	City Government
Tulsa, County Of	County Government
Union Public Schools	Education
University Of Tulsa	Higher Education
US Postal Service	Mail Service
Verizon	Communication Services
Wal-Mart	Retail
Whirlpool	Electric & Gas Ranges
Jenks Public Schools	Education
Aaon	Heat Exchangers
Alorica Inc	Tech Service
AT&T	Communication Services
Cherokee Casino Resort	Attractions
DirecTV	Customer Service

Source: Tulsa Area Partnership

The Tulsa area has a wide variety of employers, though the oil and gas industry is a major component of the area's economic base. The current environment of depressed energy prices will likely continue to have a negative impact on the area in the near term.

Commuting Patterns

Travel Time to Work

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

Workers 16 Years and Over by Commuting Time to Work

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Commuting Workers:	**175,338**		**48,268**		**14,682**		**276,312**		**1,613,364**	
Less than 15 minutes	62,994	35.93%	12,810	26.54%	4,803	32.71%	89,404	32.36%	581,194	36.02%
15 to 30 minutes	85,915	49.00%	25,578	52.99%	6,238	42.49%	135,046	48.87%	625,885	38.79%
30 to 45 minutes	18,673	10.65%	7,810	16.18%	3,041	20.71%	39,005	14.12%	260,192	16.13%
45 to 60 minutes	3,459	1.97%	1,211	2.51%	311	2.12%	6,304	2.28%	74,625	4.63%
60 or more minutes	4,297	2.45%	859	1.78%	289	1.97%	6,553	2.37%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Workers 16 Years and Over by Commuting Time to Work

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Commuting Workers:	**9,557**		**8,867**		**8,395**		**276,312**		**1,613,364**	
Less than 15 minutes	1,907	19.95%	2,447	27.60%	1,860	22.16%	89,404	32.36%	581,194	36.02%
15 to 30 minutes	4,608	48.22%	4,109	46.34%	4,984	59.37%	135,046	48.87%	625,885	38.79%
30 to 45 minutes	2,464	25.78%	1,671	18.85%	1,352	16.10%	39,005	14.12%	260,192	16.13%
45 to 60 minutes	300	3.14%	270	3.04%	108	1.29%	6,304	2.28%	74,625	4.63%
60 or more minutes	278	2.91%	370	4.17%	91	1.08%	6,553	2.37%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Workers 16 Years and Over by Commuting Time to Work

	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Commuting Workers:	**5,045**		**2,691**		**276,312**		**1,613,364**	
Less than 15 minutes	1,163	23.05%	595	22.11%	89,404	32.36%	581,194	36.02%
15 to 30 minutes	2,464	48.84%	1,171	43.52%	135,046	48.87%	625,885	38.79%
30 to 45 minutes	1,080	21.41%	782	29.06%	39,005	14.12%	260,192	16.13%
45 to 60 minutes	239	4.74%	94	3.49%	6,304	2.28%	74,625	4.63%
60 or more minutes	99	1.96%	49	1.82%	6,553	2.37%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Within Tulsa County, the largest percentage of workers (48.87%) travel 15 to 30 minutes to work. Tulsa is the economic hub of northeastern Oklahoma, and is consequently a net importer of labor from other satellite communities in the region.

Means of Transportation

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

Workers 16 Years and Over by Means of Transportation to Work

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Workers Age 16+	**181,829**		**50,336**		**15,403**		**287,106**		**1,673,026**	
Car, Truck or Van:	167,473	92.10%	47,219	93.81%	14,373	93.31%	266,389	92.78%	1,551,461	92.73%
Drove Alone	*147,398*	*88.01%*	*42,527*	*90.06%*	*13,130*	*91.35%*	*236,835*	*88.91%*	*1,373,407*	*88.52%*
Carpooled	*20,075*	*11.99%*	*4,692*	*9.94%*	*1,243*	*8.65%*	*29,554*	*11.09%*	*178,054*	*11.48%*
Public Transportation	1,967	1.08%	164	0.33%	41	0.27%	2,199	0.77%	8,092	0.48%
Taxicab	244	0.13%	0	0.00%	7	0.05%	259	0.09%	984	0.06%
Motorcycle	319	0.18%	127	0.25%	26	0.17%	543	0.19%	3,757	0.22%
Bicycle	590	0.32%	30	0.06%	48	0.31%	784	0.27%	4,227	0.25%
Walked	3,362	1.85%	216	0.43%	139	0.90%	3,936	1.37%	30,401	1.82%
Other Means	1,383	0.76%	512	1.02%	48	0.31%	2,202	0.77%	14,442	0.86%
Worked at Home	6,491	3.57%	2,068	4.11%	721	4.68%	10,794	3.76%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

Workers 16 Years and Over by Means of Transportation to Work

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Workers Age 16+	**9,967**		**9,083**		**8,870**		**287,106**		**1,673,026**	
Car, Truck or Van:	9,349	93.80%	8,656	95.30%	8,336	93.98%	266,389	92.78%	1,551,461	92.73%
Drove Alone	*8,757*	*93.67%*	*7,758*	*89.63%*	*7,830*	*93.93%*	*236,835*	*88.91%*	*1,373,407*	*88.52%*
Carpooled	*592*	*6.33%*	*898*	*10.37%*	*506*	*6.07%*	*29,554*	*11.09%*	*178,054*	*11.48%*
Public Transportation	43	0.43%	57	0.63%	0	0.00%	2,199	0.77%	8,092	0.48%
Taxicab	8	0.08%	0	0.00%	0	0.00%	259	0.09%	984	0.06%
Motorcycle	26	0.26%	20	0.22%	0	0.00%	543	0.19%	3,757	0.22%
Bicycle	25	0.25%	0	0.00%	41	0.46%	784	0.27%	4,227	0.25%
Walked	4	0.04%	95	1.05%	0	0.00%	3,936	1.37%	30,401	1.82%
Other Means	102	1.02%	39	0.43%	18	0.20%	2,202	0.77%	14,442	0.86%
Worked at Home	410	4.11%	216	2.38%	475	5.36%	10,794	3.76%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

Workers 16 Years and Over by Means of Transportation to Work

	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Workers Age 16+	**5,241**		**2,815**		**287,106**		**1,673,026**	
Car, Truck or Van:	4,836	92.27%	2,639	93.75%	266,389	92.78%	1,551,461	92.73%
Drove Alone	*4,263*	*88.15%*	*2,489*	*94.32%*	*236,835*	*88.91%*	*1,373,407*	*88.52%*
Carpooled	*573*	*11.85%*	*150*	*5.68%*	*29,554*	*11.09%*	*178,054*	*11.48%*
Public Transportation	0	0.00%	0	0.00%	2,199	0.77%	8,092	0.48%
Taxicab	0	0.00%	0	0.00%	259	0.09%	984	0.06%
Motorcycle	44	0.84%	0	0.00%	543	0.19%	3,757	0.22%
Bicycle	70	1.34%	0	0.00%	784	0.27%	4,227	0.25%
Walked	27	0.52%	0	0.00%	3,936	1.37%	30,401	1.82%
Other Means	68	1.30%	52	1.85%	2,202	0.77%	14,442	0.86%
Worked at Home	196	3.74%	124	4.40%	10,794	3.76%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

As shown, the vast majority of persons in Tulsa 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 Tulsa 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
Tulsa	179,405	185,127	0.31%	190,443	0.57%
Broken Arrow	27,085	38,013	3.45%	41,106	1.58%
Owasso	7,004	11,346	4.94%	12,759	2.38%
Bixby	5,287	8,187	4.47%	9,206	2.37%
Sand Springs	6,979	7,995	1.37%	8,619	1.51%
Jenks	3,592	6,395	5.94%	7,203	2.41%
Glenpool	2,849	3,947	3.31%	4,294	1.70%
Collinsville	1,688	2,324	3.25%	2,633	2.53%
Tulsa County	243,953	268,426	0.96%	280,340	0.87%
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 Tulsa County grew by 0.87% per year, to a total of 280,340 housing units in 2015. In terms of new housing unit construction, Tulsa County slightly outpaced Oklahoma as a whole between 2010 and 2015. The fastest rates of new home construction over this period were in Collinsville (2.53% annual growth), Jenks (2.41%), Owasso (2.38%) and Bixby (2.37%).

Housing by Units in Structure

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

2013 Housing Units by Units in Structure

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	**186,311**		**38,224**		**11,653**		**270,608**		**1,669,828**	
1 Unit, Detached	117,312	62.97%	32,495	85.01%	9,019	77.40%	187,422	69.26%	1,219,987	73.06%
1 Unit, Attached	5,954	3.20%	717	1.88%	228	1.96%	7,226	2.67%	34,434	2.06%
Duplex Units	3,860	2.07%	371	0.97%	18	0.15%	4,600	1.70%	34,207	2.05%
3-4 Units	8,560	4.59%	506	1.32%	176	1.51%	9,704	3.59%	42,069	2.52%
5-9 Units	14,049	7.54%	997	2.61%	295	2.53%	15,738	5.82%	59,977	3.59%
10-19 Units	16,147	8.67%	1,308	3.42%	1,030	8.84%	19,041	7.04%	57,594	3.45%
20-49 Units	8,319	4.47%	374	0.98%	440	3.78%	9,401	3.47%	29,602	1.77%
50 or More Units	9,086	4.88%	473	1.24%	274	2.35%	9,959	3.68%	30,240	1.81%
Mobile Homes	2,876	1.54%	983	2.57%	173	1.48%	7,340	2.71%	159,559	9.56%
Boat, RV, Van, etc.	148	0.08%	0	0.00%	0	0.00%	177	0.07%	2,159	0.13%
Total Multifamily Units	**60,021**	**32.22%**	**4,029**	**10.54%**	**2,233**	**19.16%**	**68,443**	**25.29%**	**253,689**	**15.19%**

Source: 2009-2013 American Community Survey, Table B25024

2013 Housing Units by Tenure and Number of Bedrooms

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**7,758**		**7,258**		**6,000**		**241,915**		**1,444,081**	
Owner Occupied:	**6,239**	**80.42%**	**5,117**	**70.50%**	**4,887**	**81.45%**	**147,424**	**60.94%**	**968,736**	**67.08%**
No Bedroom	19	0.30%	0	0.00%	0	0.00%	340	0.23%	2,580	0.27%
1 Bedroom	13	0.21%	12	0.23%	0	0.00%	1,701	1.15%	16,837	1.74%
2 Bedrooms	401	6.43%	639	12.49%	209	4.28%	20,589	13.97%	166,446	17.18%
3 Bedrooms	3,238	51.90%	3,622	70.78%	2,727	55.80%	84,595	57.38%	579,135	59.78%
4 Bedrooms	2,019	32.36%	745	14.56%	1,694	34.66%	34,159	23.17%	177,151	18.29%
5 or More Bedrooms	549	8.80%	99	1.93%	257	5.26%	6,040	4.10%	26,587	2.74%
Renter Occupied:	**1,519**	**19.58%**	**2,141**	**29.50%**	**1,113**	**18.55%**	**94,491**	**39.06%**	**475,345**	**32.92%**
No Bedroom	30	1.97%	76	3.55%	11	0.99%	2,719	2.88%	13,948	2.93%
1 Bedroom	316	20.80%	652	30.45%	75	6.74%	29,232	30.94%	101,850	21.43%
2 Bedrooms	624	41.08%	715	33.40%	233	20.93%	32,311	34.19%	179,121	37.68%
3 Bedrooms	436	28.70%	568	26.53%	586	52.65%	25,560	27.05%	152,358	32.05%
4 Bedrooms	113	7.44%	108	5.04%	182	16.35%	4,206	4.45%	24,968	5.25%
5 or More Bedrooms	0	0.00%	22	1.03%	26	2.34%	463	0.49%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

2013 Housing Units by Units in Structure

	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	**3,987**		**2,277**		**270,608**		**1,669,828**	
1 Unit, Detached	3,390	85.03%	2,012	88.36%	187,422	69.26%	1,219,987	73.06%
1 Unit, Attached	83	2.08%	15	0.66%	7,226	2.67%	34,434	2.06%
Duplex Units	16	0.40%	15	0.66%	4,600	1.70%	34,207	2.05%
3-4 Units	13	0.33%	0	0.00%	9,704	3.59%	42,069	2.52%
5-9 Units	95	2.38%	0	0.00%	15,738	5.82%	59,977	3.59%
10-19 Units	101	2.53%	26	1.14%	19,041	7.04%	57,594	3.45%
20-49 Units	33	0.83%	103	4.52%	9,401	3.47%	29,602	1.77%
50 or More Units	23	0.58%	5	0.22%	9,959	3.68%	30,240	1.81%
Mobile Homes	233	5.84%	101	4.44%	7,340	2.71%	159,559	9.56%
Boat, RV, Van, etc.	0	0.00%	0	0.00%	177	0.07%	2,159	0.13%
Total Multifamily Units	**281**	**7.05%**	**149**	**6.54%**	**68,443**	**25.29%**	**253,689**	**15.19%**

Source: 2009-2013 American Community Survey, Table B25024

Within Tulsa County, 69.26% of housing units are single-family, detached. 25.29% of housing units are multifamily in structure (two or more units per building), while 2.78% of housing units comprise mobile homes, RVs, etc.

Within Tulsa, 62.97% of housing units are single-family, detached. 32.22% of housing units are multifamily in structure, while 1.62% of housing units comprise mobile homes, RVs, etc.

Within Broken Arrow, 85.01% of housing units are single-family, detached. 10.54% of housing units are multifamily in structure, while 2.57% of housing units comprise mobile homes, RVs, etc.

Within Owasso, 77.40% of housing units are single-family, detached. 19.16% of housing units are multifamily in structure, while 1.48% of housing units comprise mobile homes, RVs, etc.

Within Bixby, 80.64% of housing units are single-family, detached. 11.19% of housing units are multifamily in structure, while 6.82% of housing units comprise mobile homes, RVs, etc.

Within Sand Springs, 79.60% of housing units are single-family, detached. 14.88% of housing units are multifamily in structure, while 3.97% of housing units comprise mobile homes, RVs, etc.

Within Jenks, 93.42% of housing units are single-family, detached. 4.37% of housing units are multifamily in structure, while 1.40% of housing units comprise mobile homes, RVs, etc.

Within Glenpool, 85.03% of housing units are single-family, detached. 7.05% of housing units are multifamily in structure, while 5.84% of housing units comprise mobile homes, RVs, etc.

Within Collinsville, 88.36% of housing units are single-family, detached. 6.54% of housing units are multifamily in structure, while 4.44% of housing units comprise mobile homes, RVs, etc.

Housing Units Number of Bedrooms and Tenure

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

2013 Housing Units by Tenure and Number of Bedrooms

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**163,507**		**35,978**		**11,044**		**241,915**		**1,444,081**	
Owner Occupied:	**87,194**	**53.33%**	**28,343**	**78.78%**	**7,442**	**67.39%**	**147,424**	**60.94%**	**968,736**	**67.08%**
No Bedroom	179	0.21%	74	0.26%	13	0.17%	340	0.23%	2,580	0.27%
1 Bedroom	1,257	1.44%	143	0.50%	72	0.97%	1,701	1.15%	16,837	1.74%
2 Bedrooms	15,362	17.62%	1,226	4.33%	399	5.36%	20,589	13.97%	166,446	17.18%
3 Bedrooms	48,864	56.04%	16,736	59.05%	4,866	65.39%	84,595	57.38%	579,135	59.78%
4 Bedrooms	18,234	20.91%	8,862	31.27%	1,884	25.32%	34,159	23.17%	177,151	18.29%
5 or More Bedrooms	3,298	3.78%	1,302	4.59%	208	2.79%	6,040	4.10%	26,587	2.74%
Renter Occupied:	**76,313**	**46.67%**	**7,635**	**21.22%**	**3,602**	**32.61%**	**94,491**	**39.06%**	**475,345**	**32.92%**
No Bedroom	2,348	3.08%	150	1.96%	60	1.67%	2,719	2.88%	13,948	2.93%
1 Bedroom	25,867	33.90%	1,252	16.40%	962	26.71%	29,232	30.94%	101,850	21.43%
2 Bedrooms	26,634	34.90%	2,340	30.65%	1,145	31.79%	32,311	34.19%	179,121	37.68%
3 Bedrooms	18,365	24.07%	3,133	41.03%	1,229	34.12%	25,560	27.05%	152,358	32.05%
4 Bedrooms	2,793	3.66%	669	8.76%	200	5.55%	4,206	4.45%	24,968	5.25%
5 or More Bedrooms	306	0.40%	91	1.19%	6	0.17%	463	0.49%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

2013 Housing Units by Tenure and Number of Bedrooms

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**7,758**		**7,258**		**6,000**		**241,915**		**1,444,081**	
Owner Occupied:	**6,239**	**80.42%**	**5,117**	**70.50%**	**4,887**	**81.45%**	**147,424**	**60.94%**	**968,736**	**67.08%**
No Bedroom	19	0.30%	0	0.00%	0	0.00%	340	0.23%	2,580	0.27%
1 Bedroom	13	0.21%	12	0.23%	0	0.00%	1,701	1.15%	16,837	1.74%
2 Bedrooms	401	6.43%	639	12.49%	209	4.28%	20,589	13.97%	166,446	17.18%
3 Bedrooms	3,238	51.90%	3,622	70.78%	2,727	55.80%	84,595	57.38%	579,135	59.78%
4 Bedrooms	2,019	32.36%	745	14.56%	1,694	34.66%	34,159	23.17%	177,151	18.29%
5 or More Bedrooms	549	8.80%	99	1.93%	257	5.26%	6,040	4.10%	26,587	2.74%
Renter Occupied:	**1,519**	**19.58%**	**2,141**	**29.50%**	**1,113**	**18.55%**	**94,491**	**39.06%**	**475,345**	**32.92%**
No Bedroom	30	1.97%	76	3.55%	11	0.99%	2,719	2.88%	13,948	2.93%
1 Bedroom	316	20.80%	652	30.45%	75	6.74%	29,232	30.94%	101,850	21.43%
2 Bedrooms	624	41.08%	715	33.40%	233	20.93%	32,311	34.19%	179,121	37.68%
3 Bedrooms	436	28.70%	568	26.53%	586	52.65%	25,560	27.05%	152,358	32.05%
4 Bedrooms	113	7.44%	108	5.04%	182	16.35%	4,206	4.45%	24,968	5.25%
5 or More Bedrooms	0	0.00%	22	1.03%	26	2.34%	463	0.49%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

2013 Housing Units by Tenure and Number of Bedrooms								
	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**3,726**		**2,162**		**241,915**		**1,444,081**	
Owner Occupied:	**2,748**	**73.75%**	**1,457**	**67.39%**	**147,424**	**60.94%**	**968,736**	**67.08%**
No Bedroom	0	0.00%	0	0.00%	340	0.23%	2,580	0.27%
1 Bedroom	0	0.00%	28	1.92%	1,701	1.15%	16,837	1.74%
2 Bedrooms	203	7.39%	221	15.17%	20,589	13.97%	166,446	17.18%
3 Bedrooms	2,047	74.49%	897	61.56%	84,595	57.38%	579,135	59.78%
4 Bedrooms	437	15.90%	297	20.38%	34,159	23.17%	177,151	18.29%
5 or More Bedrooms	61	2.22%	14	0.96%	6,040	4.10%	26,587	2.74%
Renter Occupied:	**978**	**26.25%**	**705**	**32.61%**	**94,491**	**39.06%**	**475,345**	**32.92%**
No Bedroom	13	1.33%	41	5.82%	2,719	2.88%	13,948	2.93%
1 Bedroom	131	13.39%	154	21.84%	29,232	30.94%	101,850	21.43%
2 Bedrooms	166	16.97%	185	26.24%	32,311	34.19%	179,121	37.68%
3 Bedrooms	607	62.07%	270	38.30%	25,560	27.05%	152,358	32.05%
4 Bedrooms	61	6.24%	55	7.80%	4,206	4.45%	24,968	5.25%
5 or More Bedrooms	0	0.00%	0	0.00%	463	0.49%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

The overall homeownership rate in Tulsa County is 60.94%, while 39.06% of housing units are renter occupied. In Tulsa, the homeownership rate is 53.33%, while 46.67% of households are renters. In Broken Arrow 78.78% of households are homeowners while 21.22% are renters, and in Owasso the homeownership rate is 67.39% while 32.61% are renters.

In Bixby, the homeownership rate is 80.42%, while 19.58% of households are renters. In Sand Springs 70.50% of households are homeowners while 29.50% are renters, and in Jenks the homeownership rate is 81.45% while 18.55% are renters.

In Glenpool, the homeownership rate is 73.75%, while 26.25% of households are renters. In Collinsville 67.39% of households are homeowners while 32.61% are renters.

Housing Units Tenure and Household Income

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

Tulsa County Owner/Renter Percentages by Income Band in 2013					
Household Income	**Total Households**	**Total Owners**	**Total Renters**	**% Owners**	**% Renters**
Total	**241,915**	**147,424**	**94,491**	**60.94%**	**39.06%**
Less than $5,000	9,204	2,142	7,062	23.27%	76.73%
$5,000 - $9,999	9,652	3,010	6,642	31.19%	68.81%
$10,000-$14,999	13,480	4,279	9,201	31.74%	68.26%
$15,000-$19,999	14,075	5,545	8,530	39.40%	60.60%
$20,000-$24,999	14,362	5,977	8,385	41.62%	58.38%
$25,000-$34,999	27,916	13,254	14,662	47.48%	52.52%
$35,000-$49,999	36,108	19,957	16,151	55.27%	44.73%
$50,000-$74,999	44,980	30,890	14,090	68.67%	31.33%
$75,000-$99,999	26,850	21,531	5,319	80.19%	19.81%
$100,000-$149,999	26,712	23,682	3,030	88.66%	11.34%
$150,000 or more	18,576	17,157	1,419	92.36%	7.64%
Income Less Than $25,000	**60,773**	**20,953**	**39,820**	**34.48%**	**65.52%**

Source: 2009-2013 American Community Survey, Table B25118

Within Tulsa County as a whole, 65.52% of households with incomes less than $25,000 are estimated to be renters, while 34.48% are estimated to be homeowners.

Tulsa Owner/Renter Percentages by Income Band in 2013					
Household Income	**Total Households**	**Total Owners**	**Total Renters**	**% Owners**	**% Renters**
Total	**163,507**	**87,194**	**76,313**	**53.33%**	**46.67%**
Less than $5,000	7,782	1,367	6,415	17.57%	82.43%
$5,000 - $9,999	8,098	2,101	5,997	25.94%	74.06%
$10,000-$14,999	10,852	3,239	7,613	29.85%	70.15%
$15,000-$19,999	10,799	3,732	7,067	34.56%	65.44%
$20,000-$24,999	11,208	4,294	6,914	38.31%	61.69%
$25,000-$34,999	21,169	9,089	12,080	42.94%	57.06%
$35,000-$49,999	25,537	12,740	12,797	49.89%	50.11%
$50,000-$74,999	27,730	17,192	10,538	62.00%	38.00%
$75,000-$99,999	14,640	10,995	3,645	75.10%	24.90%
$100,000-$149,999	13,807	11,694	2,113	84.70%	15.30%
$150,000 or more	11,885	10,751	1,134	90.46%	9.54%
Income Less Than $25,000	**48,739**	**14,733**	**34,006**	**30.23%**	**69.77%**

Source: 2009-2013 American Community Survey, Table B25118

Within Tulsa, 69.77% of households with incomes less than $25,000 are estimated to be renters, while 30.23% are estimated to be homeowners.

Broken Arrow Owner/Renter Percentages by Income Band in 2013					
Household Income	**Total Households**	**Total Owners**	**Total Renters**	**% Owners**	**% Renters**
Total	**35,978**	**28,343**	**7,635**	**78.78%**	**21.22%**
Less than $5,000	573	307	266	53.58%	46.42%
$5,000 - $9,999	577	293	284	50.78%	49.22%
$10,000-$14,999	998	424	574	42.48%	57.52%
$15,000-$19,999	1,162	609	553	52.41%	47.59%
$20,000-$24,999	1,428	912	516	63.87%	36.13%
$25,000-$34,999	3,038	1,990	1,048	65.50%	34.50%
$35,000-$49,999	4,987	3,436	1,551	68.90%	31.10%
$50,000-$74,999	7,965	6,365	1,600	79.91%	20.09%
$75,000-$99,999	5,812	5,168	644	88.92%	11.08%
$100,000-$149,999	6,233	5,786	447	92.83%	7.17%
$150,000 or more	3,205	3,053	152	95.26%	4.74%
Income Less Than $25,000	**4,738**	**2,545**	**2,193**	**53.71%**	**46.29%**

Source: 2009-2013 American Community Survey, Table B25118

Within Broken Arrow, 46.29% of households with incomes less than $25,000 are estimated to be renters, while 53.71% are estimated to be homeowners.

Owasso Owner/Renter Percentages by Income Band in 2013					
Household Income	**Total Households**	**Total Owners**	**Total Renters**	**% Owners**	**% Renters**
Total	**11,044**	**7,442**	**3,602**	**67.39%**	**32.61%**
Less than $5,000	256	75	181	29.30%	70.70%
$5,000 - $9,999	125	63	62	50.40%	49.60%
$10,000-$14,999	271	45	226	16.61%	83.39%
$15,000-$19,999	392	143	249	36.48%	63.52%
$20,000-$24,999	453	102	351	22.52%	77.48%
$25,000-$34,999	983	355	628	36.11%	63.89%
$35,000-$49,999	1,536	860	676	55.99%	44.01%
$50,000-$74,999	2,679	2,068	611	77.19%	22.81%
$75,000-$99,999	1,732	1,348	384	77.83%	22.17%
$100,000-$149,999	1,881	1,677	204	89.15%	10.85%
$150,000 or more	736	706	30	95.92%	4.08%
Income Less Than $25,000	**1,497**	**428**	**1,069**	**28.59%**	**71.41%**

Source: 2009-2013 American Community Survey, Table B25118

Within Owasso, 71.41% of households with incomes less than $25,000 are estimated to be renters, while 28.59% are estimated to be homeowners.

Bixby Owner/Renter Percentages by Income Band in 2013					
Household Income	**Total Households**	**Total Owners**	**Total Renters**	**% Owners**	**% Renters**
Total	**7,758**	**6,239**	**1,519**	**80.42%**	**19.58%**
Less than $5,000	124	67	57	54.03%	45.97%
$5,000 - $9,999	134	48	86	35.82%	64.18%
$10,000-$14,999	306	121	185	39.54%	60.46%
$15,000-$19,999	356	199	157	55.90%	44.10%
$20,000-$24,999	237	145	92	61.18%	38.82%
$25,000-$34,999	344	194	150	56.40%	43.60%
$35,000-$49,999	959	683	276	71.22%	28.78%
$50,000-$74,999	1,685	1,406	279	83.44%	16.56%
$75,000-$99,999	936	847	89	90.49%	9.51%
$100,000-$149,999	1,403	1,296	107	92.37%	7.63%
$150,000 or more	1,274	1,233	41	96.78%	3.22%
Income Less Than $25,000	**1,157**	**580**	**577**	**50.13%**	**49.87%**

Source: 2009-2013 American Community Survey, Table B25118

Within Bixby, 49.87% of households with incomes less than $25,000 are estimated to be renters, while 50.13% are estimated to be homeowners.

Sand Springs Owner/Renter Percentages by Income Band in 2013					
Household Income	**Total Households**	**Total Owners**	**Total Renters**	**% Owners**	**% Renters**
Total	**7,258**	**5,117**	**2,141**	**70.50%**	**29.50%**
Less than $5,000	152	41	111	26.97%	73.03%
$5,000 - $9,999	176	49	127	27.84%	72.16%
$10,000-$14,999	375	138	237	36.80%	63.20%
$15,000-$19,999	453	201	252	44.37%	55.63%
$20,000-$24,999	355	119	236	33.52%	66.48%
$25,000-$34,999	812	503	309	61.95%	38.05%
$35,000-$49,999	1,080	715	365	66.20%	33.80%
$50,000-$74,999	1,602	1,321	281	82.46%	17.54%
$75,000-$99,999	930	773	157	83.12%	16.88%
$100,000-$149,999	983	939	44	95.52%	4.48%
$150,000 or more	340	318	22	93.53%	6.47%
Income Less Than $25,000	**1,511**	**548**	**963**	**36.27%**	**63.73%**

Source: 2009-2013 American Community Survey, Table B25118

Within Sand Springs, 63.73% of households with incomes less than $25,000 are estimated to be renters, while 36.27% are estimated to be homeowners.

Jenks Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	**6,000**	**4,887**	**1,113**	**81.45%**	**18.55%**
Less than $5,000	48	39	9	81.25%	18.75%
$5,000 - $9,999	78	25	53	32.05%	67.95%
$10,000-$14,999	95	27	68	28.42%	71.58%
$15,000-$19,999	157	99	58	63.06%	36.94%
$20,000-$24,999	123	83	40	67.48%	32.52%
$25,000-$34,999	351	252	99	71.79%	28.21%
$35,000-$49,999	789	565	224	71.61%	28.39%
$50,000-$74,999	963	734	229	76.22%	23.78%
$75,000-$99,999	1,071	896	175	83.66%	16.34%
$100,000-$149,999	1,522	1,385	137	91.00%	9.00%
$150,000 or more	803	782	21	97.38%	2.62%
Income Less Than $25,000	**501**	**273**	**228**	**54.49%**	**45.51%**

Source: 2009-2013 American Community Survey, Table B25118

Within Jenks, 45.51% of households with incomes less than $25,000 are estimated to be renters, while 54.49% are estimated to be homeowners.

Glenpool Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	**3,726**	**2,748**	**978**	**73.75%**	**26.25%**
Less than $5,000	75	51	24	68.00%	32.00%
$5,000 - $9,999	78	39	39	50.00%	50.00%
$10,000-$14,999	108	65	43	60.19%	39.81%
$15,000-$19,999	173	55	118	31.79%	68.21%
$20,000-$24,999	151	109	42	72.19%	27.81%
$25,000-$34,999	383	193	190	50.39%	49.61%
$35,000-$49,999	456	308	148	67.54%	32.46%
$50,000-$74,999	1,089	811	278	74.47%	25.53%
$75,000-$99,999	715	641	74	89.65%	10.35%
$100,000-$149,999	343	332	11	96.79%	3.21%
$150,000 or more	155	144	11	92.90%	7.10%
Income Less Than $25,000	**585**	**319**	**266**	**54.53%**	**45.47%**

Source: 2009-2013 American Community Survey, Table B25118

Within Glenpool, 45.47% of households with incomes less than $25,000 are estimated to be renters, while 54.53% are estimated to be homeowners.

Collinsville Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	**2,162**	**1,457**	**705**	**67.39%**	**32.61%**
Less than $5,000	12	12	0	100.00%	0.00%
$5,000 - $9,999	38	12	26	31.58%	68.42%
$10,000-$14,999	161	50	111	31.06%	68.94%
$15,000-$19,999	90	54	36	60.00%	40.00%
$20,000-$24,999	148	22	126	14.86%	85.14%
$25,000-$34,999	167	111	56	66.47%	33.53%
$35,000-$49,999	290	248	42	85.52%	14.48%
$50,000-$74,999	500	333	167	66.60%	33.40%
$75,000-$99,999	478	388	90	81.17%	18.83%
$100,000-$149,999	193	169	24	87.56%	12.44%
$150,000 or more	85	58	27	68.24%	31.76%
Income Less Than $25,000	**449**	**150**	**299**	**33.41%**	**66.59%**

Source: 2009-2013 American Community Survey, Table B25118

Within Collinsville, 66.59% of households with incomes less than $25,000 are estimated to be renters, while 33.41% 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										
	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**163,507**		**35,978**		**11,044**		**241,915**		**1,444,081**	
Owner Occupied:	**87,194**	**53.33%**	**28,343**	**78.78%**	**7,442**	**67.39%**	**147,424**	**60.94%**	**968,736**	**67.08%**
Built 2010 or Later	374	0.43%	289	1.02%	248	3.33%	1,293	0.88%	10,443	1.08%
Built 2000 to 2009	5,573	6.39%	7,125	25.14%	3,391	45.57%	22,820	15.48%	153,492	15.84%
Built 1990 to 1999	7,202	8.26%	5,859	20.67%	1,499	20.14%	18,337	12.44%	125,431	12.95%
Built 1980 to 1989	10,203	11.70%	5,823	20.54%	1,052	14.14%	20,584	13.96%	148,643	15.34%
Built 1970 to 1979	15,665	17.97%	6,551	23.11%	754	10.13%	26,501	17.98%	184,378	19.03%
Built 1960 to 1969	13,185	15.12%	1,479	5.22%	198	2.66%	16,988	11.52%	114,425	11.81%
Built 1950 to 1959	18,631	21.37%	617	2.18%	246	3.31%	21,682	14.71%	106,544	11.00%
Built 1940 to 1949	7,087	8.13%	221	0.78%	9	0.12%	8,247	5.59%	50,143	5.18%
Built 1939 or Earlier	9,274	10.64%	379	1.34%	45	0.60%	10,972	7.44%	75,237	7.77%
Median Year Built:	1967		1988		1999		1976		1977	
Renter Occupied:	**76,313**	**46.67%**	**7,635**	**21.22%**	**3,602**	**32.61%**	**94,491**	**39.06%**	**475,345**	**32.92%**
Built 2010 or Later	440	0.58%	178	2.33%	164	4.55%	816	0.86%	5,019	1.06%
Built 2000 to 2009	4,927	6.46%	1,460	19.12%	1,139	31.62%	8,205	8.68%	50,883	10.70%
Built 1990 to 1999	7,516	9.85%	1,229	16.10%	674	18.71%	10,808	11.44%	47,860	10.07%
Built 1980 to 1989	13,540	17.74%	1,600	20.96%	613	17.02%	16,838	17.82%	77,521	16.31%
Built 1970 to 1979	19,480	25.53%	2,130	27.90%	602	16.71%	23,607	24.98%	104,609	22.01%
Built 1960 to 1969	10,785	14.13%	581	7.61%	179	4.97%	12,250	12.96%	64,546	13.58%
Built 1950 to 1959	8,995	11.79%	203	2.66%	118	3.28%	10,069	10.66%	54,601	11.49%
Built 1940 to 1949	4,977	6.52%	119	1.56%	15	0.42%	5,473	5.79%	31,217	6.57%
Built 1939 or Earlier	5,653	7.41%	135	1.77%	98	2.72%	6,425	6.80%	39,089	8.22%
Median Year Built:	1974		1984		1993		1976		1975	
Overall Median Year Built:	**1967**		**1988**		**1997**		**1976**		**1976**	

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

2013 Housing Units by Tenure and Year of Construction

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**7,758**		**7,258**		**6,000**		**241,915**		**1,444,081**	
Owner Occupied:	**6,239**	**80.42%**	**5,117**	**70.50%**	**4,887**	**81.45%**	**147,424**	**60.94%**	**968,736**	**67.08%**
Built 2010 or Later	128	2.05%	39	0.76%	133	2.72%	1,293	0.88%	10,443	1.08%
Built 2000 to 2009	2,846	45.62%	862	16.85%	2,347	48.03%	22,820	15.48%	153,492	15.84%
Built 1990 to 1999	1,112	17.82%	819	16.01%	789	16.14%	18,337	12.44%	125,431	12.95%
Built 1980 to 1989	759	12.17%	765	14.95%	548	11.21%	20,584	13.96%	148,643	15.34%
Built 1970 to 1979	677	10.85%	1,049	20.50%	657	13.44%	26,501	17.98%	184,378	19.03%
Built 1960 to 1969	431	6.91%	482	9.42%	247	5.05%	16,988	11.52%	114,425	11.81%
Built 1950 to 1959	242	3.88%	586	11.45%	113	2.31%	21,682	14.71%	106,544	11.00%
Built 1940 to 1949	29	0.46%	233	4.55%	44	0.90%	8,247	5.59%	50,143	5.18%
Built 1939 or Earlier	15	0.24%	282	5.51%	9	0.18%	10,972	7.44%	75,237	7.77%
Median Year Built:		1999		1979		2000		1976		1977
Renter Occupied:	**1,519**	**19.58%**	**2,141**	**29.50%**	**1,113**	**18.55%**	**94,491**	**39.06%**	**475,345**	**32.92%**
Built 2010 or Later	0	0.00%	11	0.51%	14	1.26%	816	0.86%	5,019	1.06%
Built 2000 to 2009	279	18.37%	306	14.29%	366	32.88%	8,205	8.68%	50,883	10.70%
Built 1990 to 1999	486	31.99%	343	16.02%	52	4.67%	10,808	11.44%	47,860	10.07%
Built 1980 to 1989	265	17.45%	325	15.18%	217	19.50%	16,838	17.82%	77,521	16.31%
Built 1970 to 1979	291	19.16%	389	18.17%	275	24.71%	23,607	24.98%	104,609	22.01%
Built 1960 to 1969	82	5.40%	270	12.61%	63	5.66%	12,250	12.96%	64,546	13.58%
Built 1950 to 1959	82	5.40%	123	5.74%	73	6.56%	10,069	10.66%	54,601	11.49%
Built 1940 to 1949	23	1.51%	171	7.99%	19	1.71%	5,473	5.79%	31,217	6.57%
Built 1939 or Earlier	11	0.72%	203	9.48%	34	3.05%	6,425	6.80%	39,089	8.22%
Median Year Built:		1990		1978		1984		1976		1975
Overall Median Year Built:		**1999**		**1979**		**1998**		**1976**		**1976**

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

2013 Housing Units by Tenure and Year of Construction	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**3,726**		**2,162**		**241,915**		**1,444,081**	
Owner Occupied:	**2,748**	**73.75%**	**1,457**	**67.39%**	**147,424**	**60.94%**	**968,736**	**67.08%**
Built 2010 or Later	65	2.37%	62	4.26%	1,293	0.88%	10,443	1.08%
Built 2000 to 2009	706	25.69%	388	26.63%	22,820	15.48%	153,492	15.84%
Built 1990 to 1999	521	18.96%	303	20.80%	18,337	12.44%	125,431	12.95%
Built 1980 to 1989	850	30.93%	186	12.77%	20,584	13.96%	148,643	15.34%
Built 1970 to 1979	485	17.65%	72	4.94%	26,501	17.98%	184,378	19.03%
Built 1960 to 1969	48	1.75%	67	4.60%	16,988	11.52%	114,425	11.81%
Built 1950 to 1959	43	1.56%	186	12.77%	21,682	14.71%	106,544	11.00%
Built 1940 to 1949	30	1.09%	53	3.64%	8,247	5.59%	50,143	5.18%
Built 1939 or Earlier	0	0.00%	140	9.61%	10,972	7.44%	75,237	7.77%
Median Year Built:		1989		1991		1976		1977
Renter Occupied:	**978**	**26.25%**	**705**	**32.61%**	**94,491**	**39.06%**	**475,345**	**32.92%**
Built 2010 or Later	13	1.33%	5	0.71%	816	0.86%	5,019	1.06%
Built 2000 to 2009	129	13.19%	124	17.59%	8,205	8.68%	50,883	10.70%
Built 1990 to 1999	212	21.68%	69	9.79%	10,808	11.44%	47,860	10.07%
Built 1980 to 1989	240	24.54%	49	6.95%	16,838	17.82%	77,521	16.31%
Built 1970 to 1979	290	29.65%	42	5.96%	23,607	24.98%	104,609	22.01%
Built 1960 to 1969	60	6.13%	93	13.19%	12,250	12.96%	64,546	13.58%
Built 1950 to 1959	34	3.48%	182	25.82%	10,069	10.66%	54,601	11.49%
Built 1940 to 1949	0	0.00%	58	8.23%	5,473	5.79%	31,217	6.57%
Built 1939 or Earlier	0	0.00%	83	11.77%	6,425	6.80%	39,089	8.22%
Median Year Built:		1984		1963		1976		1975
Overall Median Year Built:		**1989**		**1984**		**1976**		**1976**

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

Within Tulsa County, 13.70% of housing units were built after the year 2000. This compares with 15.22% statewide. Within Tulsa the percentage is 6.92%. Within Broken Arrow the percentage is 25.16%, while in Owasso the percentage is 44.75%. Within Bixby the percentage is 41.93%. Within Sand Springs the percentage is 16.78%, while in Jenks the percentage is 47.67%. Within Glenpool the percentage is 24.50%. Within Collinsville the percentage is 26.78%.

74.26% of housing units in Tulsa County were built prior to 1990, while in Tulsa the percentage is 84.08%. These figures compare with the statewide figure of 72.78%. In Broken Arrow the percentage is 55.14%, and in Owasso 35.58% were constructed prior to 1990. In Bixby the percentage is 37.47%. In Sand Springs the percentage is 67.21%, and in Jenks 38.32% were constructed prior to 1990. In Glenpool the percentage is 55.82%, while In Collinsville the percentage is 56.01%.

Substandard Housing

The next table presents data regarding substandard housing in Tulsa 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
Tulsa	163,507	724	0.44%	1,387	0.85%	294	0.18%
Broken Arrow	35,978	47	0.13%	240	0.67%	136	0.38%
Owasso	11,044	8	0.07%	107	0.97%	95	0.86%
Bixby	7,758	7	0.09%	31	0.40%	46	0.59%
Sand Springs	7,258	7	0.10%	47	0.65%	28	0.39%
Jenks	6,000	23	0.38%	25	0.42%	0	0.00%
Glenpool	3,726	0	0.00%	33	0.89%	30	0.81%
Collinsville	2,162	7	0.32%	41	1.90%	0	0.00%
Tulsa County	241,915	892	0.37%	2,001	0.83%	917	0.38%
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 Tulsa County, 0.37% of occupied housing units have inadequate plumbing (compared with 0.49% at a statewide level), while 0.83% 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 Tulsa County by vacancy and type. This data is provided by the American Community Survey.

2013 Housing Units by Vacancy

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	186,311		38,224		11,653		270,608		1,669,828	
Total Vacant Units	22,804	12.24%	2,246	5.88%	609	5.23%	28,693	10.60%	225,747	13.52%
For rent	8,313	36.45%	547	24.35%	128	21.02%	9,333	32.53%	43,477	19.26%
Rented, not occupied	1,047	4.59%	103	4.59%	51	8.37%	1,303	4.54%	9,127	4.04%
For sale only	2,551	11.19%	621	27.65%	58	9.52%	3,774	13.15%	23,149	10.25%
Sold, not occupied	862	3.78%	123	5.48%	24	3.94%	1,101	3.84%	8,618	3.82%
For seasonal, recreational, or occasional use	2,418	10.60%	117	5.21%	18	2.96%	3,081	10.74%	39,475	17.49%
For migrant workers	50	0.22%	5	0.22%	0	0.00%	50	0.17%	746	0.33%
Other vacant	7,563	33.17%	730	32.50%	330	54.19%	10,051	35.03%	101,155	44.81%
Homeowner Vacancy Rate	2.82%		2.13%		0.77%		2.48%		2.31%	
Rental Vacancy Rate	9.70%		6.60%		3.39%		8.88%		8.24%	

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

2013 Housing Units by Vacancy

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	8,447		7,901		6,227		270,608		1,669,828	
Total Vacant Units	689	8.16%	643	8.14%	227	3.65%	28,693	10.60%	225,747	13.52%
For rent	51	7.40%	143	22.24%	0	0.00%	9,333	32.53%	43,477	19.26%
Rented, not occupied	30	4.35%	9	1.40%	0	0.00%	1,303	4.54%	9,127	4.04%
For sale only	208	30.19%	113	17.57%	44	19.38%	3,774	13.15%	23,149	10.25%
Sold, not occupied	31	4.50%	21	3.27%	14	6.17%	1,101	3.84%	8,618	3.82%
For seasonal, recreational, or occasional use	18	2.61%	33	5.13%	34	14.98%	3,081	10.74%	39,475	17.49%
For migrant workers	0	0.00%	0	0.00%	0	0.00%	50	0.17%	746	0.33%
Other vacant	351	50.94%	324	50.39%	135	59.47%	10,051	35.03%	101,155	44.81%
Homeowner Vacancy Rate	3.21%		2.15%		0.89%		2.48%		2.31%	
Rental Vacancy Rate	3.19%		6.24%		0.00%		8.88%		8.24%	

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

2013 Housing Units by Vacancy

	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	3,987		2,277		270,608		1,669,828	
Total Vacant Units	261	6.55%	115	5.05%	28,693	10.60%	225,747	13.52%
For rent	51	19.54%	14	12.17%	9,333	32.53%	43,477	19.26%
Rented, not occupied	14	5.36%	0	0.00%	1,303	4.54%	9,127	4.04%
For sale only	83	31.80%	0	0.00%	3,774	13.15%	23,149	10.25%
Sold, not occupied	8	3.07%	0	0.00%	1,101	3.84%	8,618	3.82%
For seasonal, recreational, or occasional use	20	7.66%	44	38.26%	3,081	10.74%	39,475	17.49%
For migrant workers	0	0.00%	0	0.00%	50	0.17%	746	0.33%
Other vacant	85	32.57%	57	49.57%	10,051	35.03%	101,155	44.81%
Homeowner Vacancy Rate	2.92%		0.00%		2.48%		2.31%	
Rental Vacancy Rate	4.89%		1.95%		8.88%		8.24%	

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

Within Tulsa County, the overall housing vacancy rate is estimated to be 10.60%. The homeowner vacancy rate is estimated to be 2.48%, while the rental vacancy rate is estimated to be 8.88%.

In Tulsa, the overall housing vacancy rate is estimated to be 12.24%. The homeowner vacancy rate is estimated to be 2.82%, while the rental vacancy rate is estimated to be 9.70%.

In Broken Arrow, the overall housing vacancy rate is estimated to be 5.88%. The homeowner vacancy rate is estimated to be 2.13%, while the rental vacancy rate is estimated to be 6.60%.

In Owasso, the overall housing vacancy rate is estimated to be 5.23%. The homeowner vacancy rate is estimated to be 0.77%, while the rental vacancy rate is estimated to be 3.39%.

In Bixby, the overall housing vacancy rate is estimated to be 8.16%. The homeowner vacancy rate is estimated to be 3.21%, while the rental vacancy rate is estimated to be 3.19%.

In Sand Springs, the overall housing vacancy rate is estimated to be 8.14%. The homeowner vacancy rate is estimated to be 2.15%, while the rental vacancy rate is estimated to be 6.24%.

In Jenks, the overall housing vacancy rate is estimated to be 3.65%. The homeowner vacancy rate is estimated to be 0.89%, while the rental vacancy rate is estimated to be 0.00%.

In Glenpool, the overall housing vacancy rate is estimated to be 6.55%. The homeowner vacancy rate is estimated to be 2.92%, while the rental vacancy rate is estimated to be 4.89%.

In Collinsville, the overall housing vacancy rate is estimated to be 5.05%. The homeowner vacancy rate is estimated to be 0.00%, while the rental vacancy rate is estimated to be 1.95%.

Building Permits

The next series of tables present data regarding new residential building permits issued in Tulsa, Broken Arrow, Owasso, Bixby, Sand Springs, Jenks, Glenpool, Collinsville, and unincorporated areas of Tulsa 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.

Tulsa

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	519	$176,690	0	N/A
2005	717	$191,631	394	$62,634
2006	699	$241,565	2	$227,000
2007	667	$230,619	406	$18,085
2008	436	$245,265	394	$95,587
2009	372	$209,114	350	$83,024
2010	335	$227,614	111	$115,950
2011	319	$226,999	788	$80,560
2012	577	$198,431	594	$92,278
2013	436	$241,266	164	$92,573
2014	402	$261,170	963	$81,118

Source: United States Census Bureau Building Permits Survey

In Tulsa, building permits for 9,645 housing units were issued between 2004 and 2014, for an average of 877 units per year. 56.81% of these housing units were single family homes, and 43.19% consisted of multifamily units.

Broken Arrow

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	726	$134,863	2	$72,402
2005	906	$144,635	24	$81,841
2006	921	$154,521	149	$83,718
2007	861	$164,998	53	$81,910
2008	470	$173,915	112	$83,439
2009	497	$179,390	44	$49,656
2010	366	$176,131	0	N/A
2011	386	$182,174	378	$34,722
2012	404	$192,000	0	N/A
2013	547	$201,334	0	N/A
2014	486	$198,899	136	$146,712

Source: United States Census Bureau Building Permits Survey

In Broken Arrow, building permits for 7,468 housing units were issued between 2004 and 2014, for an average of 679 units per year. 87.98% of these housing units were single family homes, and 12.02% consisted of multifamily units.

Owasso

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	528	$100,372	8	$54,402
2005	518	$102,147	0	N/A
2006	336	$107,500	164	$37,992
2007	305	$107,923	300	$51,610
2008	267	$102,596	228	$37,127
2009	302	$104,640	0	N/A
2010	224	$106,164	228	$49,730
2011	179	$123,749	0	N/A
2012	224	$126,376	132	$33,826
2013	238	$154,659	274	$67,108
2014	266	$211,350	4	$122,446

Source: United States Census Bureau Building Permits Survey

In Owasso, building permits for 4,725 housing units were issued between 2004 and 2014, for an average of 430 units per year. 71.68% of these housing units were single family homes, and 28.32% consisted of multifamily units.

Bixby

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	406	$242,997	2	$70,200
2005	323	$218,724	0	N/A
2006	337	$210,191	0	N/A
2007	269	$233,864	0	N/A
2008	156	$231,046	108	$18,569
2009	181	$224,135	4	$90,740
2010	209	$234,067	0	N/A
2011	185	$286,387	248	$44,197
2012	227	$217,998	0	N/A
2013	288	$226,918	0	N/A
2014	227	$206,243	0	N/A

Source: United States Census Bureau Building Permits Survey

In Bixby, building permits for 3,170 housing units were issued between 2004 and 2014, for an average of 288 units per year. 88.58% of these housing units were single family homes, and 11.42% consisted of multifamily units.

Sand Springs
New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	60	$186,434	0	N/A
2005	86	$194,006	200	$64,870
2006	65	$197,776	0	N/A
2007	80	$214,427	0	N/A
2008	48	$226,966	0	N/A
2009	66	$167,584	0	N/A
2010	47	$193,697	0	N/A
2011	47	$184,028	42	$100,487
2012	67	$195,115	2	$140,000
2013	75	$184,080	4	$75,000
2014	64	$198,955	0	N/A

Source: United States Census Bureau Building Permits Survey

In Sand Springs, building permits for 953 housing units were issued between 2004 and 2014, for an average of 87 units per year. 73.98% of these housing units were single family homes, and 26.02% consisted of multifamily units.

Jenks
New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	381	$137,821	0	N/A
2005	438	$158,630	0	N/A
2006	307	$202,435	0	N/A
2007	299	$193,578	0	N/A
2008	200	$231,568	0	N/A
2009	172	$213,993	234	$70,833
2010	183	$222,809	0	N/A
2011	172	$238,740	0	N/A
2012	206	$248,742	0	N/A
2013	220	$270,420	260	$52,959
2014	278	$259,467	0	N/A

Source: United States Census Bureau Building Permits Survey

In Jenks, building permits for 3,350 housing units were issued between 2004 and 2014, for an average of 305 units per year. 85.25% of these housing units were single family homes, and 14.75% consisted of multifamily units.

Glenpool

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	89	$125,636	0	N/A
2005	79	$131,563	0	N/A
2006	112	$135,982	36	$56,000
2007	147	$130,460	0	N/A
2008	142	$126,209	0	N/A
2009	122	$109,819	0	N/A
2010	103	$107,703	0	N/A
2011	48	$127,856	52	$62,988
2012	64	$134,154	0	N/A
2013	82	$132,866	0	N/A
2014	80	$148,262	348	$86,442

Source: United States Census Bureau Building Permits Survey

In Glenpool, building permits for 1,504 housing units were issued between 2004 and 2014, for an average of 137 units per year. 71.01% of these housing units were single family homes, and 28.99% consisted of multifamily units.

Collinsville

New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	0	N/A	0	N/A
2005	80	$105,900	2	$50,000
2006	99	$114,608	0	N/A
2007	148	$100,236	0	N/A
2008	63	$119,905	0	N/A
2009	49	$135,429	6	$56,667
2010	59	$129,051	2	$55,500
2011	44	$116,679	0	N/A
2012	88	$108,523	0	N/A
2013	83	$123,232	0	N/A
2014	68	$136,639	8	$62,250

Source: United States Census Bureau Building Permits Survey

In Collinsville, building permits for 799 housing units were issued between 2004 and 2014, for an average of 73 units per year. 97.75% of these housing units were single family homes, and 2.25% consisted of multifamily units.

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

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	149	$157,731	0	N/A
2005	157	$194,086	0	N/A
2006	168	$222,027	0	N/A
2007	191	$222,328	0	N/A
2008	104	$238,660	0	N/A
2009	97	$261,116	0	N/A
2010	94	$204,888	0	N/A
2011	73	$234,146	0	N/A
2012	94	$221,768	0	N/A
2013	112	$257,741	0	N/A
2014	126	$251,712	0	N/A

Source: United States Census Bureau Building Permits Survey

In Tulsa County's unincorporated area, building permits for 1,365 housing units were issued between 2004 and 2014, for an average of 124 units per year. 100.00% of these housing units were single family homes.

New Construction Activity

For Ownership:

New home construction for ownership has occurred throughout Tulsa County over the last several years, in the southeastern portion of the county (Broken Arrow and Bixby), the southern area of the county (Jenks, Glenpool, south Tulsa), and the northern area of the county in and around Owasso and Collinsville. There has also been some new construction of housing units for ownership in the downtown Tulsa area, typically comprising condominiums and townhouses.

New construction in the area has included a mixture of relatively affordable homes (priced under $150,000) and significantly more expensive homes. We have compiled sale statistics for homes of recent construction (in or after 2014) for most of Tulsa County's major population centers.

Tulsa: $410,912 average sale price, or $130.52 per square foot, median price $353,950.

Broken Arrow: $251,710 average sale price, or $107.04 per square foot, median price $237,000.

Owasso: $282,976 average sale price, or $114.91 per square foot, median price $236,500.

Bixby: $270,337 average sale price, or $112.97 per square foot, median price $262,897.

Sand Springs: $286,272 average sale price, or $118.26 per square foot, median price $319,378.

Jenks: $336,059 average sale price, or $116.62 per square foot, median price $292,000.

Glenpool: $181,562 average sale price, or $104.97 per square foot, median price $169,380.

Collinsville: $212,193 average sale price, or $110.44 per square foot, median price $199,995.

As can be seen, new homes for ownership are significantly more expensive in Tulsa and Jenks compared with other communities in Tulsa County, while new homes in Glenpool are relatively more affordable.

For Rent:

There has been significant new apartment development in Tulsa County over the last several years, both market rate and affordable in nature. Geographically, most of this development is occurring within Tulsa's urban core, and in suburban areas such as Broken Arrow, Owasso, South Tulsa, Jenks and Glenpool.

The following table presents data regarding new rental development either under construction or planned in Tulsa County. This list comprises most of the notable development of which we are aware.

New Multifamily Under Construction / Planned

Name	No. Units	Type	Location
YMCA Loft Redevelopment	82	Market Rate	Urban Core
The Edge at East Village	162	Market Rate	Urban Core
East End Village	83	Market Rate	Urban Core
The View	200	Market Rate	Urban Core
Santa Fe Square	291	Market Rate	Urban Core
The Cosmopolitan	262	Market Rate	Urban Core
Wind River	157	Market Rate	South Tulsa
The Icon at Broken Arrow	236	Market Rate	Broken Arrow
Creekside Apartments	248	Market Rate	Broken Arrow
Cottages of Tallgrass Point	270	Market Rate	Owasso
Total Market Rate	**1,991**		
Cherokee Meadows	48	Affordable - Elderly	North Tulsa
Ford / Fox Building Lofts	31	Affordable - Workforce	Urban Core
Northwind Estates II	56	Affordable - Elderly	North Tulsa
Total Affordable	**135**		
GRAND TOTAL	**2,126**		
Percent Market Rate	93.7%		
Percent Affordable	6.3%		

As can be seen, the vast majority of new rental development within the county comprises market rate housing. There has been new affordable housing added in Tulsa urban core area in the recent past (Riverbend Gardens, West Park), and 31 units are nearing completion in the historic Brady District in downtown Tulsa (the Ford / Fox Building Lofts): though those units are not subsidized or rent restricted, they will be comparatively affordable and intended as workforce housing.

Homeownership Market

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

Housing Units by Home Value

The following table presents housing units in Tulsa 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

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Owner-Occupied Units:	**87,194**		**28,343**		**7,442**		**147,424**		**968,736**	
Less than $10,000	1,027	1.18%	216	0.76%	93	1.25%	1,833	1.24%	20,980	2.17%
$10,000 to $14,999	579	0.66%	191	0.67%	60	0.81%	1,097	0.74%	15,427	1.59%
$15,000 to $19,999	731	0.84%	179	0.63%	21	0.28%	1,188	0.81%	13,813	1.43%
$20,000 to $24,999	782	0.90%	57	0.20%	12	0.16%	1,161	0.79%	16,705	1.72%
$25,000 to $29,999	894	1.03%	101	0.36%	0	0.00%	1,125	0.76%	16,060	1.66%
$30,000 to $34,999	1,027	1.18%	61	0.22%	6	0.08%	1,433	0.97%	19,146	1.98%
$35,000 to $39,999	959	1.10%	7	0.02%	11	0.15%	1,265	0.86%	14,899	1.54%
$40,000 to $49,999	2,570	2.95%	218	0.77%	53	0.71%	3,251	2.21%	39,618	4.09%
$50,000 to $59,999	3,681	4.22%	297	1.05%	23	0.31%	4,862	3.30%	45,292	4.68%
$60,000 to $69,999	4,219	4.84%	235	0.83%	32	0.43%	5,290	3.59%	52,304	5.40%
$70,000 to $79,999	4,928	5.65%	449	1.58%	91	1.22%	6,425	4.36%	55,612	5.74%
$80,000 to $89,999	6,179	7.09%	1,071	3.78%	159	2.14%	8,868	6.02%	61,981	6.40%
$90,000 to $99,999	5,420	6.22%	1,353	4.77%	345	4.64%	8,461	5.74%	51,518	5.32%
$100,000 to $124,999	11,936	13.69%	4,666	16.46%	1,320	17.74%	21,029	14.26%	119,416	12.33%
$125,000 to $149,999	8,983	10.30%	4,835	17.06%	1,585	21.30%	17,616	11.95%	96,769	9.99%
$150,000 to $174,999	7,742	8.88%	4,575	16.14%	1,253	16.84%	15,923	10.80%	91,779	9.47%
$175,000 to $199,999	4,716	5.41%	2,829	9.98%	697	9.37%	9,904	6.72%	53,304	5.50%
$200,000 to $249,999	6,247	7.16%	3,464	12.22%	892	11.99%	12,929	8.77%	69,754	7.20%
$250,000 to $299,999	4,316	4.95%	1,318	4.65%	463	6.22%	7,687	5.21%	41,779	4.31%
$300,000 to $399,999	4,629	5.31%	1,367	4.82%	266	3.57%	8,288	5.62%	37,680	3.89%
$400,000 to $499,999	1,993	2.29%	303	1.07%	41	0.55%	2,850	1.93%	13,334	1.38%
$500,000 to $749,999	2,131	2.44%	380	1.34%	11	0.15%	2,996	2.03%	12,784	1.32%
$750,000 to $999,999	727	0.83%	91	0.32%	0	0.00%	950	0.64%	3,764	0.39%
$1,000,000 or more	778	0.89%	80	0.28%	8	0.11%	993	0.67%	5,018	0.52%
Median Home Value:	**$122,200**		**$151,300**		**$148,600**		**$134,100**		**$112,800**	

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

2013 Housing Units by Home Value

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Owner-Occupied Units:	**6,239**		**5,117**		**4,887**		**147,424**		**968,736**	
Less than $10,000	63	1.01%	83	1.62%	30	0.61%	1,833	1.24%	20,980	2.17%
$10,000 to $14,999	72	1.15%	28	0.55%	41	0.84%	1,097	0.74%	15,427	1.59%
$15,000 to $19,999	60	0.96%	73	1.43%	18	0.37%	1,188	0.81%	13,813	1.43%
$20,000 to $24,999	19	0.30%	37	0.72%	12	0.25%	1,161	0.79%	16,705	1.72%
$25,000 to $29,999	14	0.22%	0	0.00%	0	0.00%	1,125	0.76%	16,060	1.66%
$30,000 to $34,999	15	0.24%	11	0.21%	0	0.00%	1,433	0.97%	19,146	1.98%
$35,000 to $39,999	0	0.00%	66	1.29%	0	0.00%	1,265	0.86%	14,899	1.54%
$40,000 to $49,999	0	0.00%	56	1.09%	33	0.68%	3,251	2.21%	39,618	4.09%
$50,000 to $59,999	11	0.18%	187	3.65%	58	1.19%	4,862	3.30%	45,292	4.68%
$60,000 to $69,999	76	1.22%	185	3.62%	10	0.20%	5,290	3.59%	52,304	5.40%
$70,000 to $79,999	30	0.48%	353	6.90%	23	0.47%	6,425	4.36%	55,612	5.74%
$80,000 to $89,999	173	2.77%	389	7.60%	56	1.15%	8,868	6.02%	61,981	6.40%
$90,000 to $99,999	158	2.53%	397	7.76%	83	1.70%	8,461	5.74%	51,518	5.32%
$100,000 to $124,999	573	9.18%	1,001	19.56%	555	11.36%	21,029	14.26%	119,416	12.33%
$125,000 to $149,999	757	12.13%	676	13.21%	683	13.98%	17,616	11.95%	96,769	9.99%
$150,000 to $174,999	817	13.10%	593	11.59%	755	15.45%	15,923	10.80%	91,779	9.47%
$175,000 to $199,999	671	10.75%	265	5.18%	475	9.72%	9,904	6.72%	53,304	5.50%
$200,000 to $249,999	561	8.99%	334	6.53%	951	19.46%	12,929	8.77%	69,754	7.20%
$250,000 to $299,999	584	9.36%	190	3.71%	384	7.86%	7,687	5.21%	41,779	4.31%
$300,000 to $399,999	955	15.31%	120	2.35%	500	10.23%	8,288	5.62%	37,680	3.89%
$400,000 to $499,999	282	4.52%	13	0.25%	64	1.31%	2,850	1.93%	13,334	1.38%
$500,000 to $749,999	264	4.23%	26	0.51%	106	2.17%	2,996	2.03%	12,784	1.32%
$750,000 to $999,999	70	1.12%	15	0.29%	15	0.31%	950	0.64%	3,764	0.39%
$1,000,000 or more	14	0.22%	19	0.37%	35	0.72%	993	0.67%	5,018	0.52%
Median Home Value:	**$185,500**		**$117,300**		**$179,600**		**$134,100**		**$112,800**	

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

2013 Housing Units by Home Value	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Owner-Occupied Units:	**2,748**		**1,457**		**147,424**		**968,736**	
Less than $10,000	19	0.69%	34	2.33%	1,833	1.24%	20,980	2.17%
$10,000 to $14,999	20	0.73%	6	0.41%	1,097	0.74%	15,427	1.59%
$15,000 to $19,999	8	0.29%	17	1.17%	1,188	0.81%	13,813	1.43%
$20,000 to $24,999	20	0.73%	16	1.10%	1,161	0.79%	16,705	1.72%
$25,000 to $29,999	19	0.69%	13	0.89%	1,125	0.76%	16,060	1.66%
$30,000 to $34,999	9	0.33%	0	0.00%	1,433	0.97%	19,146	1.98%
$35,000 to $39,999	0	0.00%	12	0.82%	1,265	0.86%	14,899	1.54%
$40,000 to $49,999	32	1.16%	56	3.84%	3,251	2.21%	39,618	4.09%
$50,000 to $59,999	16	0.58%	31	2.13%	4,862	3.30%	45,292	4.68%
$60,000 to $69,999	56	2.04%	24	1.65%	5,290	3.59%	52,304	5.40%
$70,000 to $79,999	138	5.02%	117	8.03%	6,425	4.36%	55,612	5.74%
$80,000 to $89,999	275	10.01%	83	5.70%	8,868	6.02%	61,981	6.40%
$90,000 to $99,999	340	12.37%	95	6.52%	8,461	5.74%	51,518	5.32%
$100,000 to $124,999	626	22.78%	176	12.08%	21,029	14.26%	119,416	12.33%
$125,000 to $149,999	458	16.67%	293	20.11%	17,616	11.95%	96,769	9.99%
$150,000 to $174,999	178	6.48%	181	12.42%	15,923	10.80%	91,779	9.47%
$175,000 to $199,999	159	5.79%	147	10.09%	9,904	6.72%	53,304	5.50%
$200,000 to $249,999	158	5.75%	126	8.65%	12,929	8.77%	69,754	7.20%
$250,000 to $299,999	75	2.73%	11	0.75%	7,687	5.21%	41,779	4.31%
$300,000 to $399,999	107	3.89%	0	0.00%	8,288	5.62%	37,680	3.89%
$400,000 to $499,999	0	0.00%	19	1.30%	2,850	1.93%	13,334	1.38%
$500,000 to $749,999	9	0.33%	0	0.00%	2,996	2.03%	12,784	1.32%
$750,000 to $999,999	11	0.40%	0	0.00%	950	0.64%	3,764	0.39%
$1,000,000 or more	15	0.55%	0	0.00%	993	0.67%	5,018	0.52%
Median Home Value:	**$116,900**		**$129,100**		**$134,100**		**$112,800**	

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

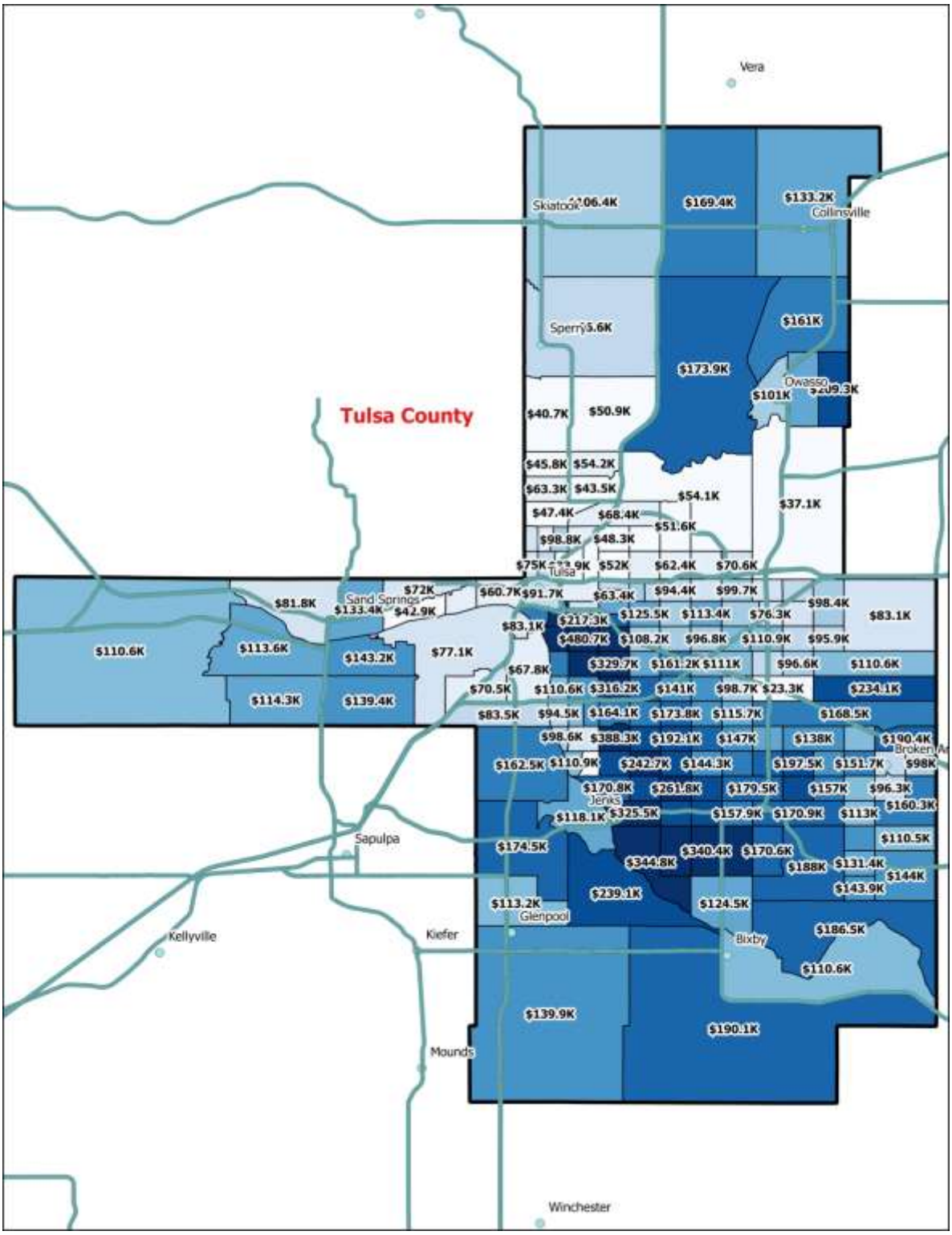
The median value of owner-occupied homes in Tulsa County is $134,100. This is 18.9% greater than the statewide median, which is $112,800. The median home value in Tulsa is estimated to be $122,200. The median home value in Broken Arrow is estimated to be $151,300, while in Owasso the estimate is $148,600.

The median home value in Bixby is estimated to be $185,500. The median home value in Sand Springs is estimated to be $117,300, while in Jenks the estimate is $179,600.

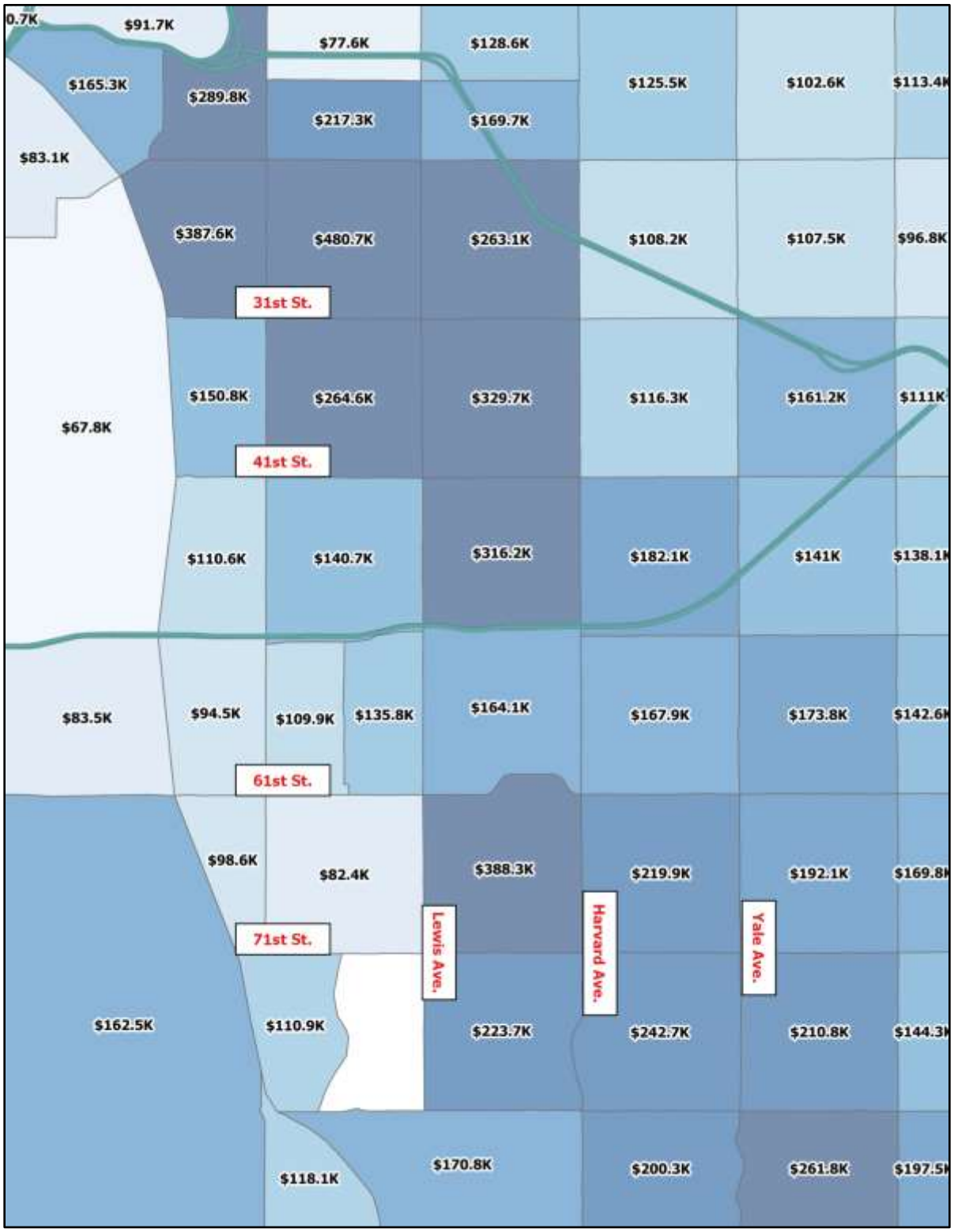
The median home value in Glenpool is estimated to be $116,900. The median home value in Collinsville is estimated to be $129,100.

The geographic distribution of home values in Tulsa County can be visualized by the following maps. As can be seen, the highest home values are in the central and southern areas of Tulsa, and the lowest are in the western and northern areas.

Tulsa County Median Home Values by Census Tract



Median Home Values by Census Tract – Central Tulsa Detail



Home Values by Year of Construction

The next table presents median home values in Tulsa 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

	Tulsa Median Value	Broken Arrow Median Value	Owasso Median Value	Tulsa County Median Value	State of Oklahoma Median Value
Total Owner-Occupied Units:					
Built 2010 or Later	$236,300	$265,200	$153,300	$230,100	$188,900
Built 2000 to 2009	$245,900	$210,800	$169,100	$216,100	$178,000
Built 1990 to 1999	$212,700	$167,700	$159,900	$174,300	$147,300
Built 1980 to 1989	$153,600	$136,300	$118,000	$137,800	$118,300
Built 1970 to 1979	$120,200	$122,100	$115,600	$119,500	$111,900
Built 1960 to 1969	$113,700	$103,700	$86,400	$112,100	$97,100
Built 1950 to 1959	$94,400	$88,800	$91,400	$93,200	$80,300
Built 1940 to 1949	$86,400	$79,000	-	$82,200	$67,900
Built 1939 or Earlier	$136,300	$87,800	$73,700	$119,100	$74,400

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

2013 Median Home Value by Year of Construction

	Bixby Median Value	Sand Springs Median Value	Jenks Median Value	Tulsa County Median Value	State of Oklahoma Median Value
Total Owner-Occupied Units:					
Built 2010 or Later	$322,400	$150,800	$235,000	$230,100	$188,900
Built 2000 to 2009	$259,200	$173,400	$218,800	$216,100	$178,000
Built 1990 to 1999	$186,100	$157,700	$193,000	$174,300	$147,300
Built 1980 to 1989	$141,200	$117,000	$151,300	$137,800	$118,300
Built 1970 to 1979	$139,900	$115,600	$132,500	$119,500	$111,900
Built 1960 to 1969	$130,400	$91,900	$117,300	$112,100	$97,100
Built 1950 to 1959	$102,400	$89,700	$97,200	$93,200	$80,300
Built 1940 to 1949	-	$62,600	$125,000	$82,200	$67,900
Built 1939 or Earlier	-	$84,900	-	$119,100	$74,400

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

2013 Median Home Value by Year of Construction

	Glenpool Median Value	Collinsville Median Value	Tulsa County Median Value	State of Oklahoma Median Value
Total Owner-Occupied Units:				
Built 2010 or Later	$221,000	$194,400	$230,100	$188,900
Built 2000 to 2009	$177,200	$165,100	$216,100	$178,000
Built 1990 to 1999	$130,200	$138,500	$174,300	$147,300
Built 1980 to 1989	$101,000	$114,100	$137,800	$118,300
Built 1970 to 1979	$92,700	$78,400	$119,500	$111,900
Built 1960 to 1969	$120,800	$101,400	$112,100	$97,100
Built 1950 to 1959	-	$93,200	$93,200	$80,300
Built 1940 to 1949	-	$52,700	$82,200	$67,900
Built 1939 or Earlier	-	$80,700	$119,100	$74,400

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

Tulsa Single Family Sales Activity

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

Tulsa Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	540	542	542	537	622
Median List Price	$61,780	$73,900	$78,000	$79,500	$88,900
Median Sale Price	$58,913	$68,000	$76,125	$73,800	$85,000
Sale/List Price Ratio	95.4%	92.0%	97.6%	92.8%	95.6%
Median Square Feet	1,112	1,138	1,133	1,147	1,136
Median Price/SF	$52.98	$59.75	$67.19	$64.34	$74.82
Med. Days on Market	45	38	28	35	26

Source: Tulsa MLS

Tulsa Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	2,193	2,493	2,539	2,735	2,709
Median List Price	$109,000	$110,000	$115,000	$116,500	$119,900
Median Sale Price	$103,000	$107,000	$111,000	$113,000	$116,000
Sale/List Price Ratio	94.5%	97.3%	96.5%	97.0%	96.7%
Median Square Feet	1,550	1,558	1,564	1,567	1,560
Median Price/SF	$66.45	$68.68	$70.97	$72.11	$74.36
Med. Days on Market	47	43	35	35	27

Source: Tulsa MLS

Tulsa Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	910	1,127	1,196	1,148	1,233
Median List Price	$219,900	$234,900	$238,950	$239,500	$242,500
Median Sale Price	$211,000	$228,000	$228,000	$230,000	$238,000
Sale/List Price Ratio	96.0%	97.1%	95.4%	96.0%	98.1%
Median Square Feet	2,835	2,873	2,848	2,849	2,835
Median Price/SF	$74.43	$79.36	$80.06	$80.73	$83.95
Med. Days on Market	56	48	41	40	39

Source: Tulsa MLS

Tulsa Single Family Sales Activity All Bedroom Types					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	3,828	4,368	4,516	4,669	4,796
Median List Price	$125,000	$129,000	$137,900	$135,000	$139,250
Median Sale Price	$120,000	$124,900	$132,900	$132,000	$135,000
Sale/List Price Ratio	96.0%	96.8%	96.4%	97.8%	96.9%
Median Square Feet	1,706	1,744	1,774	1,748	1,742
Median Price/SF	$70.34	$71.62	$74.92	$75.51	$77.50
Med. Days on Market	49	45	37	37	29

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 1.94% per year. The median sale price was $135,000 in 2015, for a median price per square foot of $77.50/SF. The median sale price to list price ratio was 96.9%, with median days on market of 29 days.

Broken Arrow Single Family Sales Activity

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

Broken Arrow Single Family Sales Activity Two Bedroom Units					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	42	32	41	34	38
Median List Price	$74,950	$70,000	$92,000	$71,200	$83,250
Median Sale Price	$74,950	$66,250	$90,000	$65,893	$79,750
Sale/List Price Ratio	100.0%	94.6%	97.8%	92.5%	95.8%
Median Square Feet	1,132	1,035	1,090	1,120	1,097
Median Price/SF	$66.21	$64.01	$82.57	$58.83	$72.70
Med. Days on Market	42	48	16	26	24

Source: Tulsa MLS

Broken Arrow Single Family Sales Activity Three Bedroom Units					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	925	1,098	1,261	1,312	1,364
Median List Price	$129,900	$130,000	$137,500	$139,500	$145,000
Median Sale Price	$125,000	$128,900	$135,000	$136,850	$142,725
Sale/List Price Ratio	96.2%	99.2%	98.2%	98.1%	98.4%
Median Square Feet	1,687	1,675	1,695	1,667	1,707
Median Price/SF	$74.10	$76.96	$79.65	$82.09	$83.61
Med. Days on Market	53	45	35	30	24

Source: Tulsa MLS

Broken Arrow Single Family Sales Activity Four Bedroom Units					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	465	578	682	704	723
Median List Price	$187,000	$182,950	$199,500	$198,000	$204,900
Median Sale Price	$182,500	$179,078	$196,250	$192,500	$198,500
Sale/List Price Ratio	97.6%	97.9%	98.4%	97.2%	96.9%
Median Square Feet	2,480	2,493	2,559	2,462	2,476
Median Price/SF	$73.59	$71.83	$76.69	$78.19	$80.17
Med. Days on Market	57	52	36	38	35

Source: Tulsa MLS

Broken Arrow Single Family Sales Activity All Bedroom Types					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	1,498	1,801	2,082	2,146	2,224
Median List Price	$144,900	$147,900	$154,999	$157,816	$161,500
Median Sale Price	$140,750	$144,525	$152,000	$154,900	$159,900
Sale/List Price Ratio	97.1%	97.7%	98.1%	98.2%	99.0%
Median Square Feet	1,909	1,921	1,933	1,914	1,931
Median Price/SF	$73.73	$75.23	$78.63	$80.93	$82.81
Med. Days on Market	55	49	35	34	28

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 2.16% per year. The median sale price was $159,900 in 2015, for a median price per square foot of $82.81/SF. The median sale price to list price ratio was 99.0%, with median days on market of 28 days.

Owasso Single Family Sales Activity

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

Owasso Single Family Sales Activity Two Bedroom Units					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	9	6	9	10	12
Median List Price	$82,900	$82,400	$89,900	$94,950	$115,260
Median Sale Price	$84,000	$78,750	$85,000	$91,450	$104,400
Sale/List Price Ratio	101.3%	95.6%	94.5%	96.3%	90.6%
Median Square Feet	1,035	859	1,110	1,201	1,175
Median Price/SF	$81.16	$91.68	$76.58	$76.14	$88.85
Med. Days on Market	39	39	43	25	21

Source: Tulsa MLS

Owasso Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	296	362	425	445	458
Median List Price	$138,995	$147,295	$149,900	$155,000	$153,383
Median Sale Price	$134,974	$145,420	$148,000	$154,000	$151,200
Sale/List Price Ratio	97.1%	98.7%	98.7%	99.4%	98.6%
Median Square Feet	1,598	1,694	1,670	1,668	1,589
Median Price/SF	$84.46	$85.84	$88.62	$92.33	$95.15
Med. Days on Market	53	49	41	28	23

Source: Tulsa MLS

Owasso Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	208	282	358	372	341
Median List Price	$223,700	$223,450	$229,000	$236,652	$239,900
Median Sale Price	$217,000	$219,050	$224,900	$235,000	$237,500
Sale/List Price Ratio	97.0%	98.0%	98.2%	99.3%	99.0%
Median Square Feet	2,635	2,623	2,491	2,538	2,568
Median Price/SF	$82.35	$83.51	$90.29	$92.59	$92.48
Med. Days on Market	48	48	37	39	37

Source: Tulsa MLS

Owasso Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	540	689	827	866	866
Median List Price	$169,700	$177,500	$185,000	$189,950	$189,900
Median Sale Price	$163,750	$175,000	$181,000	$189,000	$188,750
Sale/List Price Ratio	96.5%	98.6%	97.8%	99.5%	99.4%
Median Square Feet	1,960	2,080	2,049	2,055	2,019
Median Price/SF	$83.55	$84.13	$88.34	$91.97	$93.49
Med. Days on Market	52	49	41	32	28

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 2.86% per year. The median sale price was $188,750 in 2015, for a median price per square foot of $93.49/SF. The median sale price to list price ratio was 99.4%, with median days on market of 28 days.

Bixby Single Family Sales Activity

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

Bixby Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	8	8	7	4	4
Median List Price	$86,000	$57,950	$100,000	$214,994	$174,200
Median Sale Price	$83,300	$49,000	$85,000	$205,000	$179,000
Sale/List Price Ratio	96.9%	84.6%	85.0%	95.4%	102.8%
Median Square Feet	1,247	1,042	1,763	1,292	2,086
Median Price/SF	$66.80	$47.02	$48.21	$158.67	$85.81
Med. Days on Market	36	45	116	26	10

Source: Tulsa MLS

Bixby Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	175	188	245	260	305
Median List Price	$149,500	$145,000	$163,500	$169,900	$165,000
Median Sale Price	$143,900	$140,000	$159,500	$165,000	$164,000
Sale/List Price Ratio	96.3%	96.6%	97.6%	97.1%	99.4%
Median Square Feet	1,750	1,743	1,786	1,864	1,721
Median Price/SF	$82.23	$80.32	$89.31	$88.52	$95.29
Med. Days on Market	50	57	40	21	26

Source: Tulsa MLS

Bixby Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	127	171	179	207	220
Median List Price	$269,900	$296,600	$300,000	$295,000	$305,000
Median Sale Price	$265,000	$288,000	$295,000	$287,500	$299,900
Sale/List Price Ratio	98.2%	97.1%	98.3%	97.5%	98.3%
Median Square Feet	3,018	3,250	3,115	3,011	2,963
Median Price/SF	$87.81	$88.62	$94.70	$95.48	$101.21
Med. Days on Market	55	61	45	49	47

Source: Tulsa MLS

Bixby Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	350	406	475	517	584
Median List Price	$181,808	$209,700	$205,000	$224,500	$219,900
Median Sale Price	$175,185	$199,950	$203,000	$217,500	$215,000
Sale/List Price Ratio	96.4%	95.4%	99.0%	96.9%	97.8%
Median Square Feet	2,083	2,372	2,170	2,207	2,190
Median Price/SF	$84.10	$84.30	$93.55	$98.55	$98.17
Med. Days on Market	53	60	43	36	34

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 5.41% per year. The median sale price was $215,000 in 2015, for a median price per square foot of $98.17/SF. The median sale price to list price ratio was 97.8%, with median days on market of 34 days.

Sand Springs Single Family Sales Activity

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

Sand Springs Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	22	33	23	52	35
Median List Price	$63,500	$60,000	$69,999	$64,200	$69,800
Median Sale Price	$59,000	$61,800	$63,500	$64,250	$66,000
Sale/List Price Ratio	92.9%	103.0%	90.7%	100.1%	94.6%
Median Square Feet	1,117	1,112	1,048	1,140	1,128
Median Price/SF	$52.82	$55.58	$60.59	$56.36	$58.51
Med. Days on Market	52	38	62	53	46

Source: Tulsa MLS

Sand Springs Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	171	219	238	219	239
Median List Price	$109,000	$122,000	$114,950	$128,000	$129,900
Median Sale Price	$105,000	$119,000	$111,250	$125,000	$125,000
Sale/List Price Ratio	96.3%	97.5%	96.8%	97.7%	96.2%
Median Square Feet	1,459	1,569	1,520	1,574	1,540
Median Price/SF	$71.97	$75.84	$73.19	$79.42	$81.17
Med. Days on Market	63	42	39	39	34

Source: Tulsa MLS

Sand Springs Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	48	63	72	68	83
Median List Price	$186,250	$192,000	$193,450	$222,400	$220,000
Median Sale Price	$180,000	$192,000	$188,000	$211,000	$210,000
Sale/List Price Ratio	96.6%	100.0%	97.2%	94.9%	95.5%
Median Square Feet	2,349	2,482	2,496	2,420	2,480
Median Price/SF	$76.63	$77.36	$75.32	$87.19	$84.68
Med. Days on Market	37	74	47	36	36

Source: Tulsa MLS

Sand Springs Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	246	328	345	350	367
Median List Price	$110,450	$125,950	$126,900	$129,000	$135,000
Median Sale Price	$106,600	$122,875	$121,900	$126,700	$132,000
Sale/List Price Ratio	96.5%	97.6%	96.1%	98.2%	97.8%
Median Square Feet	1,531	1,665	1,648	1,654	1,634
Median Price/SF	$69.63	$73.80	$73.97	$76.60	$80.78
Med. Days on Market	55	45	41	42	37

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 3.96% per year. The median sale price was $132,000 in 2015, for a median price per square foot of $80.78/SF. The median sale price to list price ratio was 97.8%, with median days on market of 37 days.

Jenks Single Family Sales Activity

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

Jenks Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	1	3	0	6	5
Median List Price	$114,000	$48,900	N/A	$126,200	$87,900
Median Sale Price	$112,000	$44,900	N/A	$117,250	$82,100
Sale/List Price Ratio	98.2%	91.8%	N/A	92.9%	93.4%
Median Square Feet	1,190	1,114	N/A	1,324	1,188
Median Price/SF	$94.12	$40.31	N/A	$88.56	$69.11
Med. Days on Market	66	94	N/A	33	12

Source: Tulsa MLS

Jenks Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	161	175	220	255	229
Median List Price	$150,000	$155,000	$166,950	$169,900	$169,500
Median Sale Price	$148,000	$151,750	$161,700	$166,140	$167,500
Sale/List Price Ratio	98.7%	97.9%	96.9%	97.8%	98.8%
Median Square Feet	1,728	1,698	1,769	1,750	1,671
Median Price/SF	$85.65	$89.37	$91.41	$94.94	$100.24
Med. Days on Market	58	37	31	28	16

Source: Tulsa MLS

Jenks Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	100	140	185	190	173
Median List Price	$239,900	$247,000	$272,500	$260,950	$268,103
Median Sale Price	$229,700	$234,750	$267,500	$256,000	$265,000
Sale/List Price Ratio	95.7%	95.0%	98.2%	98.1%	98.8%
Median Square Feet	2,825	2,756	2,709	2,610	2,575
Median Price/SF	$81.31	$85.18	$98.74	$98.08	$102.91
Med. Days on Market	57	59	40	37	40

Source: Tulsa MLS

Jenks Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	286	339	430	478	441
Median List Price	$180,000	$189,000	$197,750	$199,900	$205,000
Median Sale Price	$175,450	$185,900	$195,000	$195,750	$200,439
Sale/List Price Ratio	97.5%	98.4%	98.6%	97.9%	97.8%
Median Square Feet	2,019	2,092	2,037	2,034	2,031
Median Price/SF	$86.90	$88.86	$95.73	$96.24	$98.69
Med. Days on Market	59	46	35	32	27

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 2.66% per year. The median sale price was $200,439 in 2015, for a median price per square foot of $98.69/SF. The median sale price to list price ratio was 97.8%, with median days on market of 27 days.

Glenpool Single Family Sales Activity

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

Glenpool Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	2	4	5	2	7
Median List Price	$65,750	$52,250	$49,900	$70,950	$69,000
Median Sale Price	$57,500	$57,613	$45,010	$68,000	$67,000
Sale/List Price Ratio	87.5%	110.3%	90.2%	95.8%	97.1%
Median Square Feet	884	1,114	1,024	1,104	1,081
Median Price/SF	$65.05	$51.72	$43.96	$61.59	$61.98
Med. Days on Market	32	47	24	32	14

Source: Tulsa MLS

Glenpool Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	122	135	160	140	176
Median List Price	$118,500	$126,900	$123,500	$130,000	$139,700
Median Sale Price	$119,000	$124,900	$120,000	$130,000	$139,700
Sale/List Price Ratio	100.4%	98.4%	97.2%	100.0%	100.0%
Median Square Feet	1,463	1,462	1,394	1,483	1,456
Median Price/SF	$81.34	$85.43	$86.08	$87.66	$95.95
Med. Days on Market	50	57	35	42	29

Source: Tulsa MLS

Glenpool Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	30	32	39	45	69
Median List Price	$180,260	$154,950	$150,000	$155,000	$192,900
Median Sale Price	$175,500	$148,250	$149,000	$162,000	$189,985
Sale/List Price Ratio	97.4%	95.7%	99.3%	104.5%	98.5%
Median Square Feet	1,987	1,907	1,876	1,828	2,004
Median Price/SF	$88.32	$77.74	$79.42	$88.62	$94.80
Med. Days on Market	89	50	42	46	33

Source: Tulsa MLS

Glenpool Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	156	177	207	190	255
Median List Price	$129,900	$132,999	$129,000	$139,700	$150,000
Median Sale Price	$128,950	$129,900	$126,644	$136,950	$149,275
Sale/List Price Ratio	99.3%	97.7%	98.2%	98.0%	99.5%
Median Square Feet	1,481	1,518	1,452	1,532	1,544
Median Price/SF	$87.07	$85.57	$87.22	$89.39	$96.68
Med. Days on Market	57	56	36	42	28

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 1.83% per year. The median sale price was $149,275 in 2015, for a median price per square foot of $96.68/SF. The median sale price to list price ratio was 99.5%, with median days on market of 28 days.

Collinsville Single Family Sales Activity

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

Collinsville Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	13	10	16	20	7
Median List Price	$49,500	$54,900	$72,950	$86,450	$109,900
Median Sale Price	$49,500	$60,300	$72,250	$84,500	$107,900
Sale/List Price Ratio	100.0%	109.8%	99.0%	97.7%	98.2%
Median Square Feet	958	1,400	1,127	998	1,253
Median Price/SF	$51.67	$43.07	$64.11	$84.67	$86.11
Med. Days on Market	35	58	23	46	14

Source: Tulsa MLS

Collinsville Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	202	191	231	213	182
Median List Price	$134,207	$133,900	$144,829	$144,900	$149,250
Median Sale Price	$131,950	$131,605	$144,000	$144,000	$146,545
Sale/List Price Ratio	98.3%	98.3%	99.4%	99.4%	98.2%
Median Square Feet	1,653	1,608	1,516	1,616	1,613
Median Price/SF	$79.82	$81.84	$94.99	$89.11	$90.85
Med. Days on Market	48	47	40	23	30

Source: Tulsa MLS

Collinsville Single Family Sales Activity Four Bedroom Units					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	76	76	91	112	104
Median List Price	$179,950	$165,000	$175,600	$191,000	$191,750
Median Sale Price	$176,288	$157,875	$175,000	$186,900	$194,250
Sale/List Price Ratio	98.0%	95.7%	99.7%	97.9%	101.3%
Median Square Feet	1,984	1,989	1,890	2,001	1,972
Median Price/SF	$88.85	$79.37	$92.59	$93.40	$98.50
Med. Days on Market	52	59	41	27	23

Source: Tulsa MLS

Collinsville Single Family Sales Activity All Bedroom Types					
Year	**2011**	**2012**	**2013**	**2014**	**YTD 2015**
# of Units Sold	295	282	344	355	301
Median List Price	$139,000	$140,250	$149,700	$154,900	$158,900
Median Sale Price	$137,500	$139,998	$147,750	$151,000	$156,500
Sale/List Price Ratio	98.9%	99.8%	98.7%	97.5%	98.5%
Median Square Feet	1,713	1,697	1,613	1,751	1,760
Median Price/SF	$80.27	$82.50	$91.60	$86.24	$88.92
Med. Days on Market	49	50	40	27	28

Source: Tulsa MLS

Between 2011 and year-end 2014, the median list price grew by 2.74% per year. The median sale price was $156,500 in 2015, for a median price per square foot of $88.92/SF. The median sale price to list price ratio was 98.5%, with median days on market of 28 days.

Foreclosure Rates

The next table presents foreclosure rate data for Tulsa 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**
Tulsa County	2.0%
State of Oklahoma	2.1%
United States	2.1%
Rank among Counties in Oklahoma*:	37

* 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 Tulsa County was 2.0% in May 2014. The county ranked 37 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%.

The foreclosure rate in Tulsa County is slightly lower than state and national averages. High rates of foreclosure can have a depressing effect on a neighborhood's home values, while lengthening marketing times and making it more difficult for potential buyers to secure financing. With a below average foreclosure rate, foreclosures have likely had less impact on the area's housing market compared with other areas of the state and the nation.

Rental Market

This section will discuss supply and demand factors for the rental market in Tulsa 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 Tulsa 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

	Tulsa		Broken Arrow		Owasso		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Rental Units:	**76,313**		**7,635**		**3,602**		**94,491**		**475,345**	
With cash rent:	72,959		7,301		3,354		89,694		432,109	
Less than $100	881	1.15%	0	0.00%	0	0.00%	906	0.96%	2,025	0.43%
$100 to $149	499	0.65%	27	0.35%	0	0.00%	578	0.61%	2,109	0.44%
$150 to $199	800	1.05%	8	0.10%	0	0.00%	797	0.84%	4,268	0.90%
$200 to $249	1,294	1.70%	56	0.73%	0	0.00%	1,345	1.42%	8,784	1.85%
$250 to $299	1,048	1.37%	88	1.15%	0	0.00%	1,116	1.18%	8,413	1.77%
$300 to $349	975	1.28%	58	0.76%	21	0.58%	1,159	1.23%	9,107	1.92%
$350 to $399	895	1.17%	131	1.72%	11	0.31%	1,151	1.22%	10,932	2.30%
$400 to $449	2,153	2.82%	82	1.07%	39	1.08%	2,414	2.55%	15,636	3.29%
$450 to $499	3,413	4.47%	126	1.65%	52	1.44%	3,803	4.02%	24,055	5.06%
$500 to $549	5,464	7.16%	139	1.82%	108	3.00%	6,019	6.37%	31,527	6.63%
$550 to $599	5,275	6.91%	389	5.09%	95	2.64%	6,040	6.39%	33,032	6.95%
$600 to $649	4,807	6.30%	372	4.87%	231	6.41%	5,991	6.34%	34,832	7.33%
$650 to $699	6,049	7.93%	302	3.96%	150	4.16%	6,940	7.34%	32,267	6.79%
$700 to $749	5,506	7.22%	330	4.32%	437	12.13%	6,719	7.11%	30,340	6.38%
$750 to $799	4,736	6.21%	558	7.31%	248	6.89%	5,997	6.35%	27,956	5.88%
$800 to $899	8,300	10.88%	810	10.61%	438	12.16%	10,273	10.87%	45,824	9.64%
$900 to $999	6,348	8.32%	692	9.06%	383	10.63%	7,978	8.44%	34,153	7.18%
$1,000 to $1,249	9,345	12.25%	1,678	21.98%	583	16.19%	12,511	13.24%	46,884	9.86%
$1,250 to $1,499	2,583	3.38%	717	9.39%	173	4.80%	3,926	4.15%	14,699	3.09%
$1,500 to $1,999	1,495	1.96%	597	7.82%	296	8.22%	2,638	2.79%	10,145	2.13%
$2,000 or more	1,093	1.43%	141	1.85%	89	2.47%	1,393	1.47%	5,121	1.08%
No cash rent	3,354	4.40%	334	4.37%	248	6.89%	4,797	5.08%	43,236	9.10%
Median Gross Rent	**$727**		**$925**		**$865**		**$749**		**$699**	

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

2013 Rental Units by Gross Rent

	Bixby		Sand Springs		Jenks		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Rental Units:	**1,519**		**2,141**		**1,113**		**94,491**		**475,345**	
With cash rent:	1,432		1,968		1,075		89,694		432,109	
Less than $100	0	0.00%	25	1.17%	0	0.00%	906	0.96%	2,025	0.43%
$100 to $149	0	0.00%	51	2.38%	9	0.81%	578	0.61%	2,109	0.44%
$150 to $199	0	0.00%	0	0.00%	0	0.00%	797	0.84%	4,268	0.90%
$200 to $249	8	0.53%	41	1.91%	0	0.00%	1,345	1.42%	8,784	1.85%
$250 to $299	9	0.59%	37	1.73%	0	0.00%	1,116	1.18%	8,413	1.77%
$300 to $349	0	0.00%	57	2.66%	0	0.00%	1,159	1.23%	9,107	1.92%
$350 to $399	31	2.04%	52	2.43%	0	0.00%	1,151	1.22%	10,932	2.30%
$400 to $449	34	2.24%	53	2.48%	10	0.90%	2,414	2.55%	15,636	3.29%
$450 to $499	17	1.12%	116	5.42%	7	0.63%	3,803	4.02%	24,055	5.06%
$500 to $549	24	1.58%	88	4.11%	50	4.49%	6,019	6.37%	31,527	6.63%
$550 to $599	25	1.65%	163	7.61%	9	0.81%	6,040	6.39%	33,032	6.95%
$600 to $649	119	7.83%	148	6.91%	49	4.40%	5,991	6.34%	34,832	7.33%
$650 to $699	110	7.24%	195	9.11%	39	3.50%	6,940	7.34%	32,267	6.79%
$700 to $749	46	3.03%	81	3.78%	105	9.43%	6,719	7.11%	30,340	6.38%
$750 to $799	190	12.51%	121	5.65%	39	3.50%	5,997	6.35%	27,956	5.88%
$800 to $899	304	20.01%	183	8.55%	81	7.28%	10,273	10.87%	45,824	9.64%
$900 to $999	103	6.78%	147	6.87%	99	8.89%	7,978	8.44%	34,153	7.18%
$1,000 to $1,249	134	8.82%	239	11.16%	253	22.73%	12,511	13.24%	46,884	9.86%
$1,250 to $1,499	156	10.27%	106	4.95%	145	13.03%	3,926	4.15%	14,699	3.09%
$1,500 to $1,999	82	5.40%	65	3.04%	150	13.48%	2,638	2.79%	10,145	2.13%
$2,000 or more	40	2.63%	0	0.00%	30	2.70%	1,393	1.47%	5,121	1.08%
No cash rent	87	5.73%	173	8.08%	38	3.41%	4,797	5.08%	43,236	9.10%
Median Gross Rent	**$834**		**$689**		**$1,040**		**$749**		**$699**	

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

2013 Rental Units by Gross Rent	Glenpool		Collinsville		Tulsa County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total Rental Units:	**978**		**705**		**94,491**		**475,345**	
With cash rent:	937		661		89,694		432,109	
Less than $100	0	0.00%	0	0.00%	906	0.96%	2,025	0.43%
$100 to $149	0	0.00%	0	0.00%	578	0.61%	2,109	0.44%
$150 to $199	0	0.00%	26	3.69%	797	0.84%	4,268	0.90%
$200 to $249	0	0.00%	5	0.71%	1,345	1.42%	8,784	1.85%
$250 to $299	0	0.00%	0	0.00%	1,116	1.18%	8,413	1.77%
$300 to $349	14	1.43%	14	1.99%	1,159	1.23%	9,107	1.92%
$350 to $399	45	4.60%	0	0.00%	1,151	1.22%	10,932	2.30%
$400 to $449	14	1.43%	21	2.98%	2,414	2.55%	15,636	3.29%
$450 to $499	61	6.24%	48	6.81%	3,803	4.02%	24,055	5.06%
$500 to $549	39	3.99%	0	0.00%	6,019	6.37%	31,527	6.63%
$550 to $599	40	4.09%	12	1.70%	6,040	6.39%	33,032	6.95%
$600 to $649	74	7.57%	23	3.26%	5,991	6.34%	34,832	7.33%
$650 to $699	30	3.07%	34	4.82%	6,940	7.34%	32,267	6.79%
$700 to $749	0	0.00%	90	12.77%	6,719	7.11%	30,340	6.38%
$750 to $799	7	0.72%	24	3.40%	5,997	6.35%	27,956	5.88%
$800 to $899	120	12.27%	41	5.82%	10,273	10.87%	45,824	9.64%
$900 to $999	133	13.60%	147	20.85%	7,978	8.44%	34,153	7.18%
$1,000 to $1,249	296	30.27%	51	7.23%	12,511	13.24%	46,884	9.86%
$1,250 to $1,499	53	5.42%	57	8.09%	3,926	4.15%	14,699	3.09%
$1,500 to $1,999	11	1.12%	68	9.65%	2,638	2.79%	10,145	2.13%
$2,000 or more	0	0.00%	0	0.00%	1,393	1.47%	5,121	1.08%
No cash rent	41	4.19%	44	6.24%	4,797	5.08%	43,236	9.10%
Median Gross Rent	**$918**		**$882**		**$749**		**$699**	

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

Median gross rent in Tulsa County is estimated to be $749, which is 7.2% greater than Oklahoma's median gross rent of $699/month. Median gross rent in Tulsa is estimated to be $727. Median rent in Broken Arrow is estimated to be $925, while in Owasso the estimate is $865.

Median gross rent in Bixby is estimated to be $834. Median rent in Sand Springs is estimated to be $689, while in Jenks the estimate is $1,040.

Median gross rent in Glenpool is estimated to be $918. Median rent in Collinsville is estimated to be $882.

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

	Tulsa Median Rent	Broken Arrow Median Rent	Owasso Median Rent	Tulsa County Median Rent	State of Oklahoma Median Rent
Total Rental Units:					
Built 2010 or Later	$1,006	$1,017	$789	$965	$933
Built 2000 to 2009	$904	$951	$892	$904	$841
Built 1990 to 1999	$771	$869	$839	$784	$715
Built 1980 to 1989	$707	$982	$810	$731	$693
Built 1970 to 1979	$679	$969	$896	$703	$662
Built 1960 to 1969	$675	$871	$899	$696	$689
Built 1950 to 1959	$803	$796	$917	$798	$714
Built 1940 to 1949	$766	$649	-	$760	$673
Built 1939 or Earlier	$731	$763	$921	$738	$651

Note: Dashes indicate the Census Bureau had insufficient data to estimate a median gross rent.
Source: 2009-2013 American Community Survey, Table 25111

2013 Median Gross Rent by Year of Construction

	Bixby Median Rent	Sand Springs Median Rent	Jenks Median Rent	Tulsa County Median Rent	State of Oklahoma Median Rent
Total Rental Units:					
Built 2010 or Later	-	-	-	$965	$933
Built 2000 to 2009	$901	$695	$1,437	$904	$841
Built 1990 to 1999	$831	$759	$589	$784	$715
Built 1980 to 1989	$903	$621	$987	$731	$693
Built 1970 to 1979	$799	$644	$901	$703	$662
Built 1960 to 1969	$796	$684	$749	$696	$689
Built 1950 to 1959	$773	$787	$793	$798	$714
Built 1940 to 1949	-	$677	-	$760	$673
Built 1939 or Earlier	-	$818	$686	$738	$651

Note: Dashes indicate the Census Bureau had insufficient data to estimate a median gross rent.
Source: 2009-2013 American Community Survey, Table 25111

2013 Median Gross Rent by Year of Construction

	Glenpool Median Rent	Collinsville Median Rent	Tulsa County Median Rent	State of Oklahoma Median Rent
Total Rental Units:				
Built 2010 or Later	-	-	$965	$933
Built 2000 to 2009	$420	$421	$904	$841
Built 1990 to 1999	$667	$1,358	$784	$715
Built 1980 to 1989	$1,096	-	$731	$693
Built 1970 to 1979	$958	$825	$703	$662
Built 1960 to 1969	-	$932	$696	$689
Built 1950 to 1959	-	$748	$798	$714
Built 1940 to 1949	-	$491	$760	$673
Built 1939 or Earlier	-	$1,567	$738	$651

rent.
Source: 2009-2013 American Community Survey, Table 25111

The highest median gross rent in Tulsa County is among housing units constructed in Jenks after 2000, which is $1,437 per month. In order to be affordable, a household would need to earn at least $57,480 per year to afford such a unit.

Tulsa Area Rental Survey Data

The next series of tables show the results of our rental survey of the Tulsa area. This data is summarized for each of the major communities in Tulsa County, and also separated by construction vintage (properties built prior to and after the year 2000), and also for affordable rental developments (in this case, developments under the Affordable Housing Tax Credit program). Due to the relatively small size of the Glenpool and Collinsville market rate apartment markets we were unable to report figures for those communities.

Tulsa Area Apartments - By City / Submarket

City	Average Rent	Average Size (SF)	Average Rent/SF	Average Vacancy
Tulsa - Urban	$1,416	1,025	$1.39	6.1%
Tulsa - Suburban	$796	902	$0.90	6.4%
Broken Arrow	$852	938	$0.92	6.0%
Owasso	$793	881	$0.90	5.6%
Bixby	$864	894	$0.97	4.0%
Sand Springs	$699	910	$0.78	N/A
Jenks	$832	896	$0.94	6.5%
Overall Averages	**$895**	**922**	**$0.98**	**6.3%**

By far, the highest rental rates in Tulsa County are found in its urban core area (downtown and surrounding neighborhoods, including the Brookside and Cherry Street districts). High demand for housing is driven by the proximity of major employers, as well as significant entertainment and cultural amenities. High demand has, until recently, been met with relatively little new supply. Consequently the downtown / midtown area of Tulsa has seen rapid escalation in rental rates with very little vacancy, though rental growth has slowed in the last quarter of 2015.

The next highest rental rates in area are found in Broken Arrow and Bixby, where the local school districts are a significant demand driver. Suburban areas of Tulsa have much lower rental rates than its urban core, and also include much of the city's older multifamily rental stock (much of which was constructed in the 1970s and early 1980s).

The next two tables shows rental rates in the Tulsa area, by one, two and three bedroom units, and separated by properties built prior to 2000 and after 2000 (this data is reported only for market rate properties, affordable developments will be discussed separately).

Tulsa Area Apartments - Post 2000 Vintage

Bedroom Type	Average Rent	Average Size (SF)	Average Rent/SF	Average Vacancy
One Bedroom	$949	800	$1.19	7.1%
Two Bedroom	$1,210	1,130	$1.06	6.5%
Three Bedroom	$1,297	1,315	$0.99	7.0%
All Bedroom Types	**$1,086**	**974**	**$1.12**	**6.6%**

Tulsa Area Apartments - Pre 2000 Vintage				
Bedroom Type	**Average Rent**	**Average Size (SF)**	**Average Rent/SF**	**Average Vacancy**
One Bedroom	$645	697	$0.93	7.3%
Two Bedroom	$846	1,028	$0.83	7.1%
Three Bedroom	$962	1,202	$0.81	6.6%
All Bedroom Types	**$760**	**886**	**$0.88**	**7.1%**

As can be seen, there is a significant difference in rental rates and occupancy rates between properties of recent construction versus older properties. Review of historical rental data indicates rental rates have increased in a predominant range of $10 to $20 per unit per month annually over the past 36 months, but appear to be relatively flat over the last three months of 2015.

Rental Survey Data – Urban Core

The next table summarizes data from our survey of market rate properties in Tulsa's urban core (downtown and immediately surrounding areas). Three bedroom units are relatively scarce in this market and there was insufficient data to provide statistics for that bedroom type.

Tulsa Apartments - Downtown / Midtown				
Bedroom Type	**Average Rent**	**Average Size (SF)**	**Average Rent/SF**	**Average Vacancy**
One Bedroom	$1,185	841	$1.41	5.8%
Two Bedroom	$1,733	1,272	$1.37	6.3%
Three Bedroom	N/A	N/A	N/A	N/A
All Bedroom Types	**$1,416**	**1,025**	**$1.39**	**6.1%**

As can be seen, rental rates in Tulsa's urban core are significantly higher than other areas of the metro area, with consistently low vacancy. Rental rates have increased significantly over the last 36 months, in some cases by as much as $50 to $100 per month, though rental rates appear to have been relatively flat over the last quarter of 2015. Overall vacancy of 6.1% is among the lowest of any of the Tulsa submarkets. This vacancy rate is somewhat high for Oklahoma City's urban core area: in the recent past, vacancy has averaged under 4%, with only a small handful of apartment units available for rent.

Rental Survey Data – Affordable Properties

The next table summarizes data from our survey of properties in Tulsa County that are under the Affordable Housing Tax Credit program.

Tulsa Area Apartments - Affordable Housing Tax Credit				
Bedroom Type	**Average Rent**	**Average Size (SF)**	**Average Rent/SF**	**Average Vacancy**
One Bedroom	$505	601	$0.84	1.0%
Two Bedroom	$638	951	$0.68	1.0%
Three Bedroom	$1,200	1,362	$0.88	2.0%
All Bedroom Types	**$591**	**795**	**$0.77**	**1.0%**

The rental rates shown above are restricted by the Affordable Housing Tax Credit program, and intended to be affordable to households earning less than 50% and 60% of Area Median Income. As can be seen, they are well below market rental rates in the Tulsa area. Increases in rent for these units are limited by the maximum rental rates allowable under the AHTC program, and in many cases these properties have shown $5 to $10 per month increases in rent over the last several years. Average vacancy reported in our survey is significantly lower than that reported for market rate properties, with an average of 1.0%, and many properties reporting full occupancy lengthy waiting lists.

Rental Survey Summary

Rental rates have increased notably throughout Tulsa County over the last several years, particularly in the downtown / midtown Tulsa area. This trend has lessened somewhat in the last 3 to 6 months of 2015, likely due in no small part to declining energy prices, but occupancy remains high in Tulsa's urban core.

Affordable rental housing is in very short supply throughout Tulsa County, with very low vacancy and waiting lists at many affordable properties. As population growth continues in the area over the next five years, demand for rental housing of all types should continue to grow, and with comparatively little new affordable housing development the need for affordable rental units will continue to grow as well.

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 Tulsa 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.

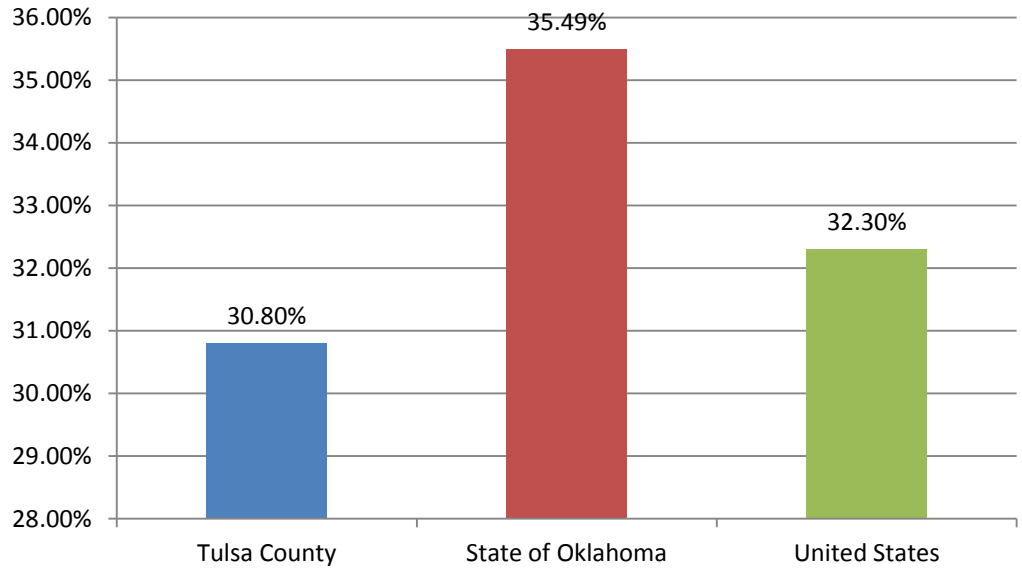
HUD Programs in Tulsa County

Tulsa County	# Units	Occupancy Rate	Avg. Household Income	Tenant Contribution	Federal Contribution	% of Total Rent
Public Housing	2,418	98%	$6,293	$153	$491	23.71%
Housing Choice Vouchers	6,287	95%	$10,282	$278	$497	35.87%
Mod Rehab	106	92%	$7,699	$142	$575	19.82%
Section 8 NC/SR	1,006	97%	$10,523	$239	$468	33.80%
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	2,100	92%	$6,676	$154	$537	22.35%
Summary of All HUD Programs	11,917	95%	$8,759	$222	$499	30.80%
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 11,917 housing units located within Tulsa County, with an overall occupancy rate of 95%. The average household income among households living in these units is $8,759. Total monthly rent for these units averages $721, with the federal contribution averaging $499 (69.20%) and the tenant's contribution averaging $222 (30.80%).

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.

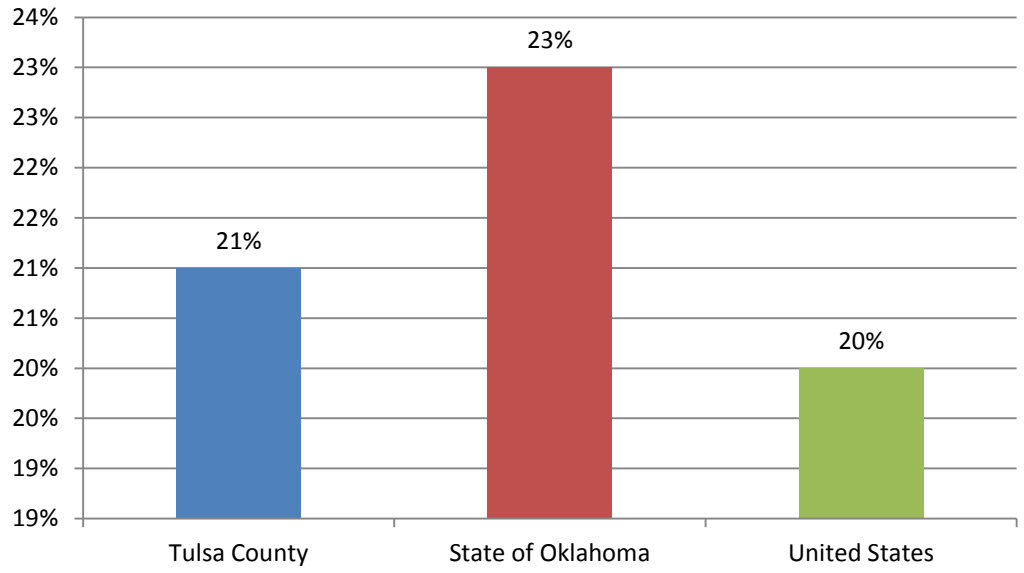
Demographics of Persons in HUD Programs in Tulsa County

Tulsa County	# Units	% Single Mothers	% w/ Disability	% Age 62+	% Age 62+ w/ Disability	% Minority
Public Housing	2,418	54%	14%	11%	70%	64%
Housing Choice Vouchers	6,287	47%	27%	17%	80%	68%
Mod Rehab	106	57%	16%	7%	100%	60%
Section 8 NC/SR	1,006	9%	41%	51%	25%	31%
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	2,100	47%	10%	16%	28%	58%
Summary of All HUD Programs	11,917	44%	21%	19%	52%	61%
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

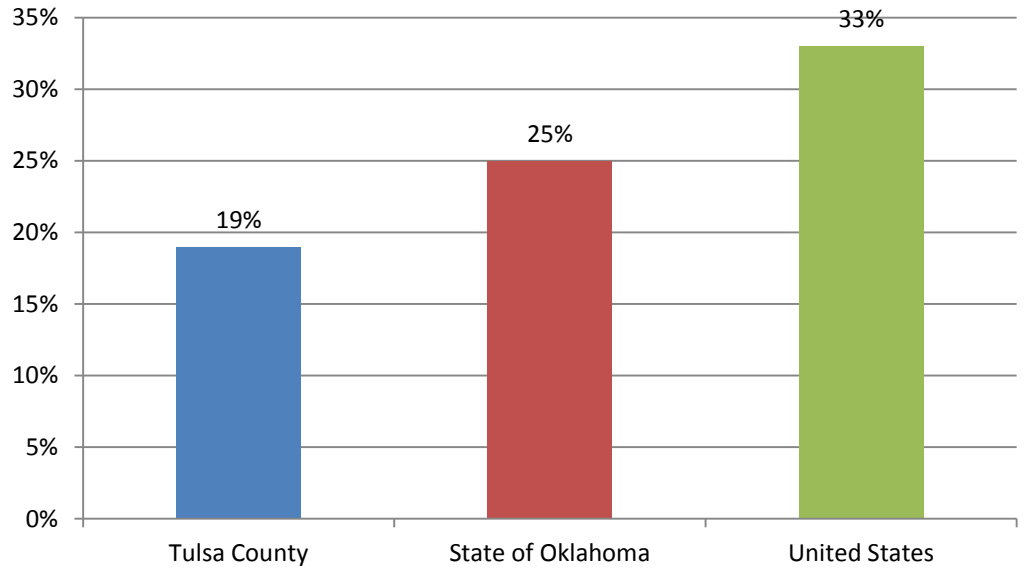
44% of housing units are occupied by single parents with female heads of household. 21% of households have at least one person with a disability. 19% of households have either a householder or spouse age 62 or above. Of the households age 62 or above, 52% have one or more disabilities. Finally, 61% of households are designated as racial or ethnic minorities.

Percentage of Households with Disabilities - HUD Subsidized Properties



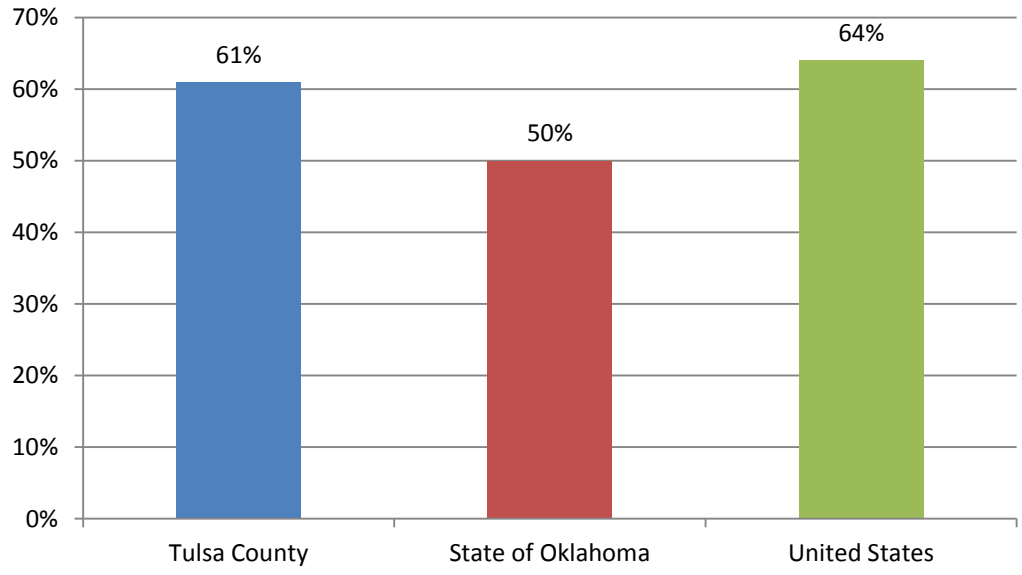
Source: 2013 HUD Picture of Subsidized Households

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 Tulsa 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 Tulsa 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.

Tulsa County : CHAS - Housing Cost Burden by HAMFI

	Owners		Renters	
Household Income / Cost Burden	Number	Percent	Number	Percent
Income < 30% HAMFI	**7,615**		**20,075**	
Cost Burden Less Than 30%	985	12.93%	2,885	14.37%
Cost Burden Between 30%-50%	1,410	18.52%	1,960	9.76%
Cost Burden Greater Than 50%	4,380	57.52%	12,645	62.99%
Not Computed (no/negative income)	845	11.10%	2,585	12.88%
Income 30%-50% HAMFI	**10,735**		**17,840**	
Cost Burden Less Than 30%	4,690	43.69%	3,810	21.36%
Cost Burden Between 30%-50%	2,680	24.97%	8,700	48.77%
Cost Burden Greater Than 50%	3,360	31.30%	5,325	29.85%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 50%-80% HAMFI	**20,100**		**21,710**	
Cost Burden Less Than 30%	11,465	57.04%	12,955	59.67%
Cost Burden Between 30%-50%	5,985	29.78%	7,635	35.17%
Cost Burden Greater Than 50%	2,650	13.18%	1,120	5.16%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 80%-100% HAMFI	**14,180**		**10,330**	
Cost Burden Less Than 30%	10,275	72.46%	8,840	85.58%
Cost Burden Between 30%-50%	3,335	23.52%	1,250	12.10%
Cost Burden Greater Than 50%	570	4.02%	240	2.32%
Not Computed (no/negative income)	0	0.00%	0	0.00%
All Incomes	**147,845**		**92,965**	
Cost Burden Less Than 30%	116,290	78.66%	50,645	54.48%
Cost Burden Between 30%-50%	19,055	12.89%	20,290	21.83%
Cost Burden Greater Than 50%	11,650	7.88%	19,440	20.91%
Not Computed (no/negative income)	845	0.57%	2,585	2.78%

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

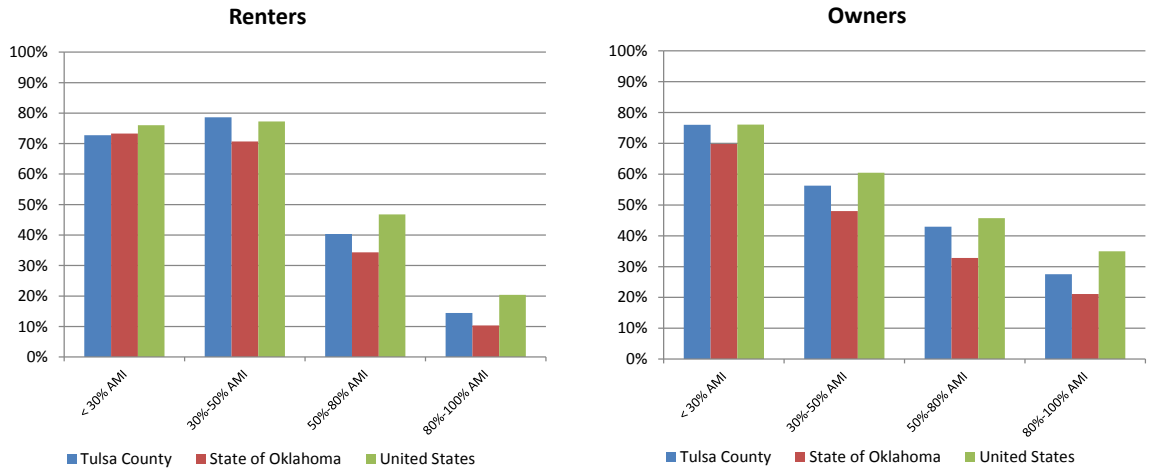
The next table summarizes the data from the previous table for households with cost burden greater than 30% of gross income, followed by a chart comparing these figures for Tulsa County with the State of Oklahoma as a whole, and the United States.

Tulsa County : Households by Income by Cost Burden

	Owners		Renters	
Household Income Threshold	Total	% w/ Cost > 30% Income	Total	% w/ Cost > 30% Income
Income < 30% HAMFI	7,615	76.03%	20,075	72.75%
Income 30%-50% HAMFI	10,735	56.26%	17,840	78.62%
Income 50%-80% HAMFI	20,100	42.96%	21,710	40.33%
Income 80%-100% HAMFI	14,180	27.54%	10,330	14.42%
All Incomes	147,845	20.77%	92,965	42.74%

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.

Tulsa County : CHAS - HAMFI by Substandard Conditions / Overcrowding

	Owners		Renters	
Household Income / Housing Problem	Number	Percent	Number	Percent
Income < 30% HAMFI	**7,615**		**20,075**	
Between 1.0 and 1.5 Persons per Room	210	2.76%	760	3.79%
More than 1.5 Persons per Room	10	0.13%	180	0.90%
Lacks Complete Kitchen or Plumbing	115	1.51%	535	2.67%
Income 30%-50% HAMFI	**10,735**		**17,840**	
Between 1.0 and 1.5 Persons per Room	275	2.56%	865	4.85%
More than 1.5 Persons per Room	4	0.04%	255	1.43%
Lacks Complete Kitchen or Plumbing	145	1.35%	395	2.21%
Income 50%-80% HAMFI	**20,100**		**21,710**	
Between 1.0 and 1.5 Persons per Room	310	1.54%	880	4.05%
More than 1.5 Persons per Room	90	0.45%	235	1.08%
Lacks Complete Kitchen or Plumbing	205	1.02%	450	2.07%
Income 80%-100% HAMFI	**14,180**		**10,330**	
Between 1.0 and 1.5 Persons per Room	260	1.83%	350	3.39%
More than 1.5 Persons per Room	60	0.42%	160	1.55%
Lacks Complete Kitchen or Plumbing	65	0.46%	160	1.55%
All Incomes	**147,845**		**92,965**	
Between 1.0 and 1.5 Persons per Room	1,670	1.13%	3,320	3.57%
More than 1.5 Persons per Room	279	0.19%	990	1.06%
Lacks Complete Kitchen or Plumbing	700	0.47%	1,905	2.05%

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

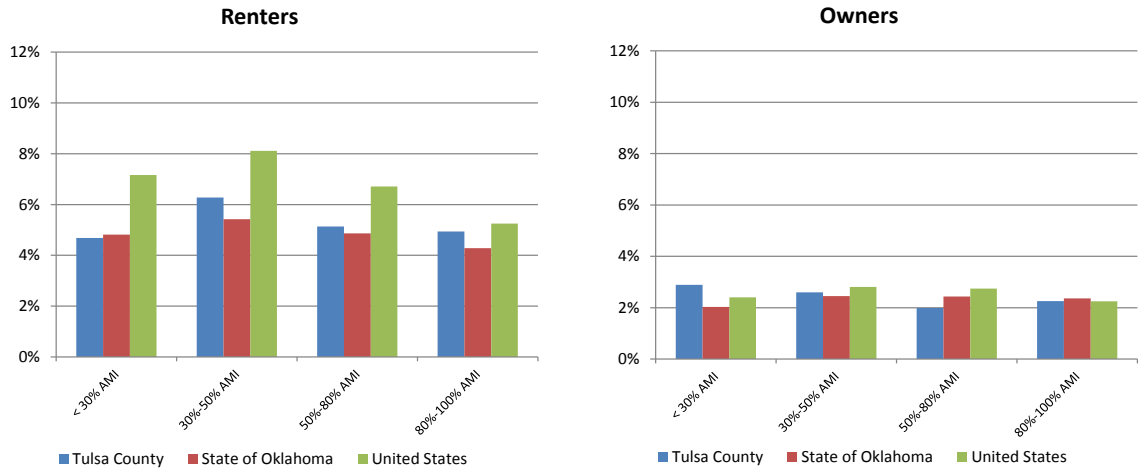
The next table summarizes this data for overcrowding (i.e. all households with greater than 1.0 persons per room), with a chart comparing this data between Tulsa County, Oklahoma and the nation.

Tulsa County : Households by Income by Overcrowding

	Owners		Renters	
Household Income Threshold	Total	% > 1.0 Persons per Room	Total	% > 1.0 Persons per Room
Income < 30% HAMFI	7,615	2.89%	20,075	4.68%
Income 30%-50% HAMFI	10,735	2.60%	17,840	6.28%
Income 50%-80% HAMFI	20,100	1.99%	21,710	5.14%
Income 80%-100% HAMFI	14,180	2.26%	10,330	4.94%
All Incomes	147,845	1.32%	92,965	4.64%

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

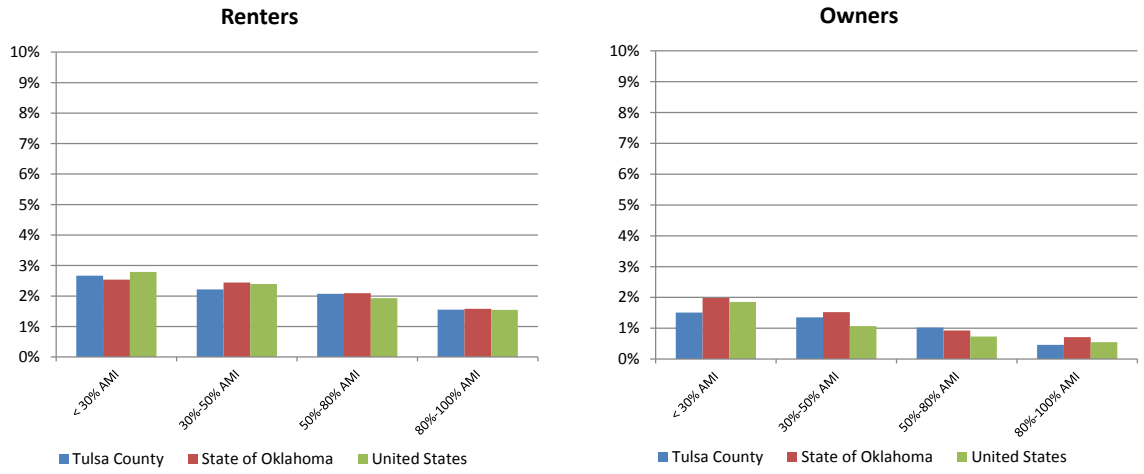
The table following summarizes this data for substandard housing conditions, with a comparison chart between Tulsa County, the state and the nation.

Tulsa County : Households by Income by Substandard Conditions

	Owners		Renters	
Household Size/Type	Total	% Lacking Kitchen or Plumbing	Total	% Lacking Kitchen or Plumbing
Income < 30% HAMFI	7,615	1.51%	20,075	2.67%
Income 30%-50% HAMFI	10,735	1.35%	17,840	2.21%
Income 50%-80% HAMFI	20,100	1.02%	21,710	2.07%
Income 80%-100% HAMFI	14,180	0.46%	10,330	1.55%
All Incomes	147,845	0.47%	92,965	2.05%

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.

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

	Owners			Renters		
Income, Household Size/Type	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
Income < 30% HAMFI	**7,615**	**5,775**	**75.84%**	**20,075**	**14,615**	**72.80%**
Elderly Family	640	440	68.75%	315	275	87.30%
Small Family (2-4 persons)	1,750	1,545	88.29%	7,125	5,155	72.35%
Large Family (5 or more persons)	485	425	87.63%	1,615	1,345	83.28%
Elderly Non-Family	2,600	1,835	70.58%	2,920	1,870	64.04%
Non-Family, Non-Elderly	2,145	1,530	71.33%	8,105	5,970	73.66%
Income 30%-50% HAMFI	**10,735**	**6,045**	**56.31%**	**17,840**	**14,015**	**78.56%**
Elderly Family	1,295	515	39.77%	420	320	76.19%
Small Family (2-4 persons)	2,730	1,975	72.34%	6,230	4,790	76.89%
Large Family (5 or more persons)	750	490	65.33%	1,510	1,225	81.13%
Elderly Non-Family	4,150	1,845	44.46%	2,905	2,085	71.77%
Non-Family, Non-Elderly	1,805	1,220	67.59%	6,770	5,595	82.64%
Income 50%-80% HAMFI	**20,100**	**8,635**	**42.96%**	**21,710**	**8,755**	**40.33%**
Elderly Family	4,225	1,030	24.38%	750	345	46.00%
Small Family (2-4 persons)	6,450	3,385	52.48%	8,315	3,200	38.48%
Large Family (5 or more persons)	1,890	940	49.74%	1,610	560	34.78%
Elderly Non-Family	4,150	1,230	29.64%	2,010	1,095	54.48%
Non-Family, Non-Elderly	3,390	2,050	60.47%	9,025	3,555	39.39%
Income 80%-100% HAMFI	**14,180**	**3,905**	**27.54%**	**10,330**	**1,485**	**14.38%**
Elderly Family	2,855	520	18.21%	255	15	5.88%
Small Family (2-4 persons)	5,425	1,670	30.78%	4,215	460	10.91%
Large Family (5 or more persons)	1,575	385	24.44%	920	45	4.89%
Elderly Non-Family	1,615	265	16.41%	775	315	40.65%
Non-Family, Non-Elderly	2,705	1,065	39.37%	4,160	650	15.63%
All Incomes	**147,845**	**30,700**	**20.76%**	**92,965**	**39,725**	**42.73%**
Elderly Family	25,045	3,280	13.10%	3,030	1,140	37.62%
Small Family (2-4 persons)	69,315	11,880	17.14%	35,825	13,750	38.38%
Large Family (5 or more persons)	12,480	2,800	22.44%	7,130	3,210	45.02%
Elderly Non-Family	18,225	5,595	30.70%	9,880	5,635	57.03%
Non-Family, Non-Elderly	22,780	7,145	31.37%	37,095	15,990	43.11%

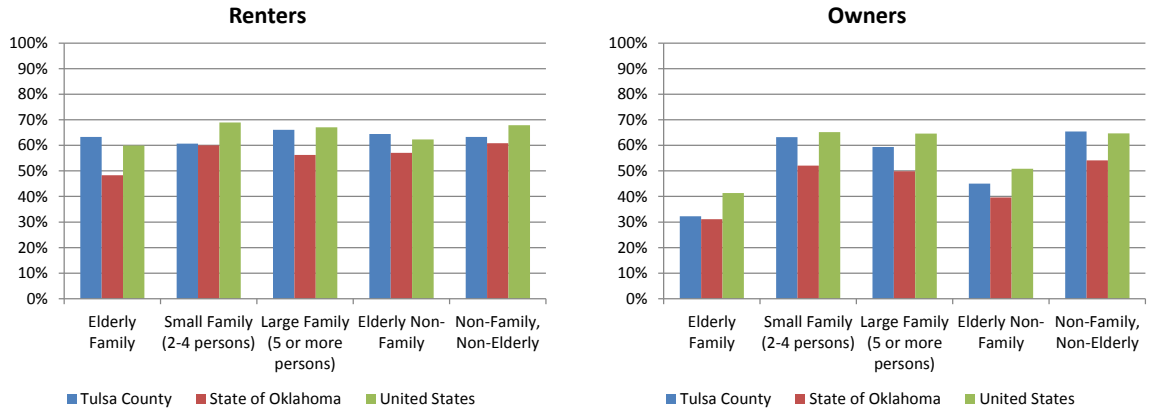
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

Tulsa County : Households under 80% AMI by Cost Burden

	Owners			Renters		
Household Size/Type	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income	Total	No. w/ Cost > 30% Income	Pct. w/ Cost > 30% Income
Income < 80% HAMFI	**38,450**	**20,455**	**53.20%**	**59,625**	**37,385**	**62.70%**
Elderly Family	6,160	1,985	32.22%	1,485	940	63.30%
Small Family (2-4 persons)	10,930	6,905	63.17%	21,670	13,145	60.66%
Large Family (5 or more persons)	3,125	1,855	59.36%	4,735	3,130	66.10%
Elderly Non-Family	10,900	4,910	45.05%	7,835	5,050	64.45%
Non-Family, Non-Elderly	7,340	4,800	65.40%	23,900	15,120	63.26%

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).

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

	Owners			Renters		
Income, Household Size/Type	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 30% HAMFI	**7,615**	**5,870**	**77.08%**	**20,075**	**14,755**	**73.50%**
Elderly Family	640	440	68.75%	315	275	87.30%
Small Family (2-4 persons)	1,750	1,565	89.43%	7,125	5,185	72.77%
Large Family (5 or more persons)	485	460	94.85%	1,615	1,370	84.83%
Elderly Non-Family	2,600	1,850	71.15%	2,920	1,880	64.38%
Non-Family, Non-Elderly	2,145	1,555	72.49%	8,105	6,045	74.58%
Income 30%-50% HAMFI	**10,735**	**6,250**	**58.22%**	**17,840**	**14,435**	**80.91%**
Elderly Family	1,295	525	40.54%	420	320	76.19%
Small Family (2-4 persons)	2,730	1,995	73.08%	6,230	5,005	80.34%
Large Family (5 or more persons)	750	600	80.00%	1,510	1,420	94.04%
Elderly Non-Family	4,150	1,880	45.30%	2,905	2,085	71.77%
Non-Family, Non-Elderly	1,805	1,250	69.25%	6,770	5,605	82.79%
Income 50%-80% HAMFI	**20,100**	**9,030**	**44.93%**	**21,710**	**9,860**	**45.42%**
Elderly Family	4,225	1,030	24.38%	750	370	49.33%
Small Family (2-4 persons)	6,450	3,490	54.11%	8,315	3,460	41.61%
Large Family (5 or more persons)	1,890	1,170	61.90%	1,610	1,135	70.50%
Elderly Non-Family	4,150	1,280	30.84%	2,010	1,150	57.21%
Non-Family, Non-Elderly	3,390	2,060	60.77%	9,025	3,745	41.50%
Income Greater than 80% of HAMFI	**109,390**	**11,585**	**10.59%**	**33,340**	**3,885**	**11.65%**
Elderly Family	18,885	1,305	6.91%	1,550	230	14.84%
Small Family (2-4 persons)	58,390	5,320	9.11%	14,155	1,120	7.91%
Large Family (5 or more persons)	9,355	1,800	19.24%	2,395	750	31.32%
Elderly Non-Family	7,325	720	9.83%	2,045	650	31.78%
Non-Family, Non-Elderly	15,440	2,440	15.80%	13,195	1,135	8.60%
All Incomes	**147,840**	**32,735**	**22.14%**	**92,965**	**42,935**	**46.18%**
Elderly Family	25,045	3,300	13.18%	3,035	1,195	39.37%
Small Family (2-4 persons)	69,320	12,370	17.84%	35,825	14,770	41.23%
Large Family (5 or more persons)	12,480	4,030	32.29%	7,130	4,675	65.57%
Elderly Non-Family	18,225	5,730	31.44%	9,880	5,765	58.35%
Non-Family, Non-Elderly	22,780	7,305	32.07%	37,095	16,530	44.56%

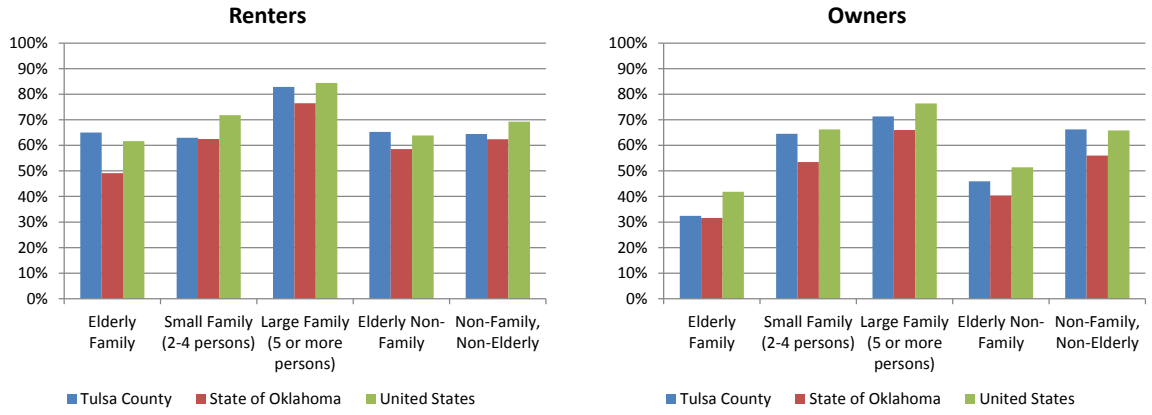
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 16

Tulsa County : Households under 80% AMI by Housing Problems

	Owners			Renters		
Household Size/Type	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 80% HAMFI	**38,450**	**21,150**	**55.01%**	**59,625**	**39,050**	**65.49%**
Elderly Family	6,160	1,995	32.39%	1,485	965	64.98%
Small Family (2-4 persons)	10,930	7,050	64.50%	21,670	13,650	62.99%
Large Family (5 or more persons)	3,125	2,230	71.36%	4,735	3,925	82.89%
Elderly Non-Family	10,900	5,010	45.96%	7,835	5,115	65.28%
Non-Family, Non-Elderly	7,340	4,865	66.28%	23,900	15,395	64.41%

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 Tulsa 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.”

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

	Owners			Renters		
Income, Race / Ethnicity	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 30% HAMFI	**7,615**	**5,875**	**77.2%**	**20,080**	**14,760**	**73.5%**
White alone, non-Hispanic	5,115	3,875	75.8%	9,840	7,120	72.4%
Black or African-American alone	1,215	865	71.2%	5,270	3,850	73.1%
Asian alone	105	90	85.7%	545	390	71.6%
American Indian alone	299	275	92.0%	950	680	71.6%
Pacific Islander alone	0	0	N/A	14	10	71.4%
Hispanic, any race	505	445	88.1%	1,940	1,605	82.7%
Other (including multiple races)	380	320	84.2%	1,525	1,105	72.5%
Income 30%-50% HAMFI	**10,735**	**6,250**	**58.2%**	**17,840**	**14,440**	**80.9%**
White alone, non-Hispanic	7,340	4,035	55.0%	10,055	8,165	81.2%
Black or African-American alone	1,180	790	66.9%	3,365	2,785	82.8%
Asian alone	130	120	92.3%	175	115	65.7%
American Indian alone	520	330	63.5%	855	680	79.5%
Pacific Islander alone	0	0	N/A	15	0	0.0%
Hispanic, any race	990	700	70.7%	2,415	1,990	82.4%
Other (including multiple races)	570	270	47.4%	960	705	73.4%
Income 50%-80% HAMFI	**20,100**	**9,030**	**44.9%**	**21,710**	**9,860**	**45.4%**
White alone, non-Hispanic	14,595	6,225	42.7%	12,590	6,060	48.1%
Black or African-American alone	1,720	725	42.2%	3,535	1,390	39.3%
Asian alone	320	270	84.4%	315	215	68.3%
American Indian alone	755	295	39.1%	1,185	425	35.9%
Pacific Islander alone	0	0	N/A	50	35	70.0%
Hispanic, any race	1,735	1,015	58.5%	2,620	1,095	41.8%
Other (including multiple races)	980	500	51.0%	1,420	645	45.4%
Income 80%-100% HAMFI	**14,180**	**4,205**	**29.7%**	**10,330**	**2,085**	**20.2%**
White alone, non-Hispanic	10,680	3,190	29.9%	6,615	1,295	19.6%
Black or African-American alone	1,065	275	25.8%	1,330	235	17.7%
Asian alone	290	155	53.4%	175	65	37.1%
American Indian alone	485	80	16.5%	475	100	21.1%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	1,030	390	37.9%	1,130	265	23.5%
Other (including multiple races)	625	115	18.4%	605	125	20.7%
All Incomes	**147,845**	**32,745**	**22.1%**	**92,970**	**42,945**	**46.2%**
White alone, non-Hispanic	116,620	23,075	19.8%	55,610	23,930	43.0%
Black or African-American alone	8,960	2,990	33.4%	15,560	8,405	54.0%
Asian alone	2,460	870	35.4%	1,925	825	42.9%
American Indian alone	5,569	1,205	21.6%	4,330	1,900	43.9%
Pacific Islander alone	15	0	0.0%	94	45	47.9%
Hispanic, any race	7,855	3,105	39.5%	9,770	5,190	53.1%
Other (including multiple races)	6,360	1,490	23.4%	5,690	2,655	46.7%

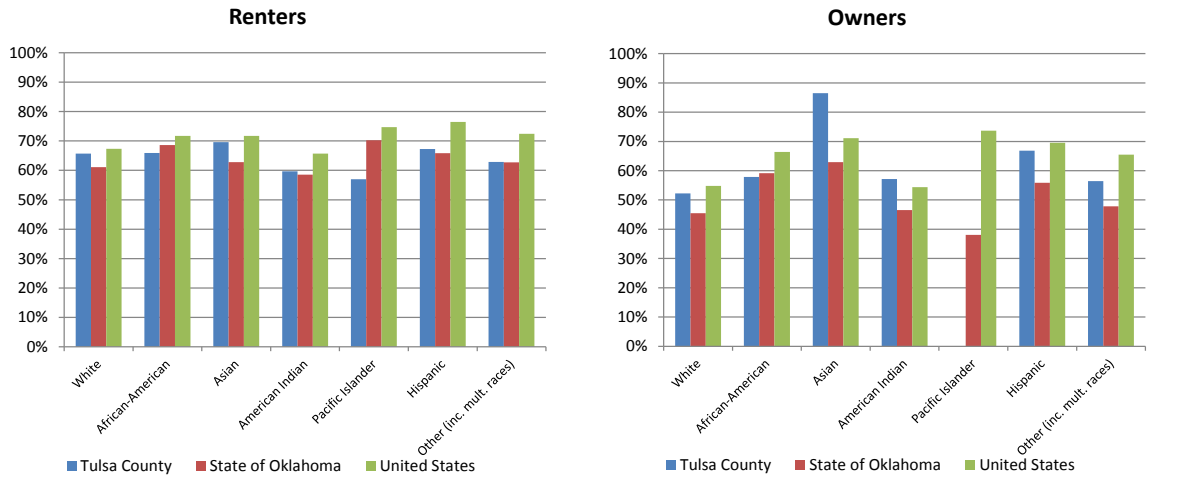
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 1

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

	Owners			Renters		
Household Size/Type	Total	No. w/ Housing Problems	Pct. w/ Housing Problems	Total	No. w/ Housing Problems	Pct. w/ Housing Problems
Income < 80% HAMFI	**38,450**	**21,155**	**55.02%**	**59,630**	**39,060**	**65.50%**
White alone, non-Hispanic	27,050	14,135	52.26%	32,485	21,345	65.71%
Black or African-American alone	4,115	2,380	57.84%	12,170	8,025	65.94%
Asian alone	555	480	86.49%	1,035	720	69.57%
American Indian alone	1,574	900	57.18%	2,990	1,785	59.70%
Pacific Islander alone	0	0	N/A	79	45	56.96%
Hispanic, any race	3,230	2,160	66.87%	6,975	4,690	67.24%
Other (including multiple races)	1,930	1,090	56.48%	3,905	2,455	62.87%

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 Tulsa County. The greatest needs are among households with incomes less than 50% of Area Median Income. Several other areas of note:

- Among households with incomes less than 50% of Area Median Income, there are 28,630 renter households that are cost overburdened, and 11,830 homeowners that are cost overburdened.
- Among **elderly** households with incomes less than 50% of Area Median Income, there are 4,550 renter households that are cost overburdened, and 4,635 homeowners that are cost overburdened.

- 86.49% of Asian homeowners with incomes less than 80% of Area Median Income have one or more housing problems.
- 66.87% of Hispanic homeowners with incomes less than 80% of Area Median Income have one or more housing problems.

Overall Anticipated Housing Demand

Future demand for housing units in Tulsa 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 Tulsa, Broken Arrow, Owasso, Bixby, Sand Springs, Jenks, Glenpool, and Collinsville, as well as Tulsa County as a whole. The calculations are shown in the following tables.

Tulsa Anticipated Demand

Households in Tulsa declined at an annually compounded rate of -0.11% from 2000 to 2010. Nielsen SiteReports estimates households have grown 0.56% per year since that time, and that households will grow 0.71% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 0.71% per year in forecasting future household growth for Tulsa.

The percentage of owner households was estimated at 53.33% with renter households estimated at 46.67%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Tulsa

Year		2015	2016	2017	2018	2019	2020
Household Estimates		168,644	169,847	171,058	172,278	173,507	174,744
Owner %:	53.33%	89,933	90,575	91,221	91,871	92,527	93,186
Renter %:	46.67%	78,711	79,272	79,837	80,407	80,980	81,558
				Total New Owner Households			**3,253**
				Total New Renter Households			**2,847**

Based on an estimated household growth rate of 0.71% per year, Tulsa would require 3,253 new housing units for ownership, and 2,847 units for rent, over the next five years. Annually this equates to 651 units for ownership per year, and 569 units for rent per year.

Broken Arrow Anticipated Demand

Households in Broken Arrow grew at an annually compounded rate of 3.29% from 2000 to 2010. Nielsen SiteReports estimates households have grown 1.64% per year since that time, and that households will grow 1.34% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 1.34% per year in forecasting future household growth for Broken Arrow.

The percentage of owner households was estimated at 78.78% with renter households estimated at 21.22%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth

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

Future Housing Demand Estimates for Broken Arrow							
Year		**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Household Estimates		39,195	39,721	40,254	40,795	41,342	41,897
Owner %:	78.78%	30,877	31,292	31,712	32,137	32,569	33,006
Renter %:	21.22%	8,318	8,429	8,542	8,657	8,773	8,891
					Total New Owner Households		**2,129**
					Total New Renter Households		**573**

Based on an estimated household growth rate of 1.34% per year, Broken Arrow would require 2,129 new housing units for ownership, and 573 units for rent, over the next five years. Annually this equates to 426 units for ownership per year, and 115 units for rent per year.

Owasso Anticipated Demand

Households in Owasso grew at an annually compounded rate of 4.95% from 2000 to 2010. Nielsen SiteReports estimates households have grown 2.55% per year since that time, and that households will grow 1.69% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 1.69% per year in forecasting future household growth for Owasso.

The percentage of owner households was estimated at 67.39% with renter households estimated at 32.61%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Owasso							
Year		**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Household Estimates		12,123	12,328	12,536	12,748	12,964	13,183
Owner %:	67.39%	8,169	8,307	8,448	8,590	8,736	8,883
Renter %:	32.61%	3,954	4,021	4,089	4,158	4,228	4,300
					Total New Owner Households		**714**
					Total New Renter Households		**346**

Based on an estimated household growth rate of 1.69% per year, Owasso would require 714 new housing units for ownership, and 346 units for rent, over the next five years. Annually this equates to 143 units for ownership per year, and 69 units for rent per year.

Bixby Anticipated Demand

Households in Bixby grew at an annually compounded rate of 4.56% from 2000 to 2010. Nielsen SiteReports estimates households have grown 2.52% per year since that time, and that households

will grow 2.08% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 2.08% per year in forecasting future household growth for Bixby.

The percentage of owner households was estimated at 80.42% with renter households estimated at 19.58%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Bixby

Year		2015	2016	2017	2018	2019	2020
Household Estimates		8,674	8,854	9,038	9,226	9,417	9,613
Owner %:	80.42%	6,976	7,121	7,268	7,419	7,573	7,731
Renter %:	19.58%	1,698	1,734	1,770	1,806	1,844	1,882
				Total New Owner Households			**755**
				Total New Renter Households			**184**

Based on an estimated household growth rate of 2.08% per year, Bixby would require 755 new housing units for ownership, and 184 units for rent, over the next five years. Annually this equates to 151 units for ownership per year, and 37 units for rent per year.

Sand Springs Anticipated Demand

Households in Sand Springs grew at an annually compounded rate of 1.12% from 2000 to 2010. Nielsen SiteReports estimates households have grown 1.54% per year since that time, and that households will grow 1.02% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 1.02% per year in forecasting future household growth for Sand Springs.

The percentage of owner households was estimated at 70.50% with renter households estimated at 29.50%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Sand Springs

Year		2015	2016	2017	2018	2019	2020
Household Estimates		7,916	7,996	8,078	8,160	8,242	8,326
Owner %:	70.50%	5,581	5,638	5,695	5,753	5,811	5,870
Renter %:	29.50%	2,335	2,359	2,383	2,407	2,431	2,456
				Total New Owner Households			**289**
				Total New Renter Households			**121**

Based on an estimated household growth rate of 1.02% per year, Sand Springs would require 289 new housing units for ownership, and 121 units for rent, over the next five years. Annually this equates to 58 units for ownership per year, and 24 units for rent per year.

Jenks Anticipated Demand

Households in Jenks grew at an annually compounded rate of 5.61% from 2000 to 2010. Nielsen SiteReports estimates households have grown 2.51% per year since that time, and that households will grow 2.06% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 2.06% per year in forecasting future household growth for Jenks.

The percentage of owner households was estimated at 81.45% with renter households estimated at 18.55%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Jenks

Year		2015	2016	2017	2018	2019	2020
Household Estimates		6,739	6,878	7,019	7,164	7,311	7,462
Owner %:	81.45%	5,489	5,602	5,717	5,835	5,955	6,078
Renter %:	18.55%	1,250	1,276	1,302	1,329	1,356	1,384
				Total New Owner Households			**589**
				Total New Renter Households			**134**

Based on an estimated household growth rate of 2.06% per year, Jenks would require 589 new housing units for ownership, and 134 units for rent, over the next five years. Annually this equates to 118 units for ownership per year, and 27 units for rent per year.

Glenpool Anticipated Demand

Households in Glenpool grew at an annually compounded rate of 3.03% from 2000 to 2010. Nielsen SiteReports estimates households have grown 1.78% per year since that time, and that households will grow 1.53% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 1.53% per year in forecasting future household growth for Glenpool.

The percentage of owner households was estimated at 73.75% with renter households estimated at 26.25%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Glenpool							
Year		**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Household Estimates		4,066	4,128	4,191	4,255	4,320	4,386
Owner %:	73.75%	2,999	3,045	3,091	3,138	3,186	3,235
Renter %:	26.25%	1,067	1,084	1,100	1,117	1,134	1,151
				Total New Owner Households			**236**
				Total New Renter Households			**84**

Based on an estimated household growth rate of 1.53% per year, Glenpool would require 236 new housing units for ownership, and 84 units for rent, over the next five years. Annually this equates to 47 units for ownership per year, and 17 units for rent per year.

Collinsville Anticipated Demand

Households in Collinsville grew at an annually compounded rate of 3.14% from 2000 to 2010. Nielsen SiteReports estimates households have grown 2.68% per year since that time, and that households will grow 1.31% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 1.31% per year in forecasting future household growth for Collinsville.

The percentage of owner households was estimated at 67.39% with renter households estimated at 32.61%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Collinsville							
Year		**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Household Estimates		2,409	2,441	2,473	2,505	2,538	2,571
Owner %:	67.39%	1,623	1,645	1,666	1,688	1,710	1,733
Renter %:	32.61%	786	796	806	817	828	838
				Total New Owner Households			**109**
				Total New Renter Households			**53**

Based on an estimated household growth rate of 1.31% per year, Collinsville would require 109 new housing units for ownership, and 53 units for rent, over the next five years. Annually this equates to 22 units for ownership per year, and 11 units for rent per year.

Tulsa County Anticipated Demand

Households in Tulsa County grew at an annually compounded rate of 0.64% from 2000 to 2010. Nielsen SiteReports estimates households have grown 0.90% per year since that time, and that households will grow 0.97% per year through 2020. For these reasons we will rely on the Nielsen SiteReports forecast of 0.97% per year in forecasting future household growth for Tulsa County.

The percentage of owner households was estimated at 60.94% with renter households estimated at 39.06%, based on data from the U.S. Census Bureau. The estimated number of additional units needed to service increasing demand can be estimated by applying this percentage to the anticipated growth in households. It should be noted that this is an estimate of rental and owner requirements and should be relied upon only as a guideline for possible new demand. The calculations are shown below.

Future Housing Demand Estimates for Tulsa County

Year		2015	2016	2017	2018	2019	2020
Household Estimates		252,860	255,320	257,803	260,311	262,843	265,400
Owner %:	60.94%	154,094	155,593	157,106	158,635	160,178	161,736
Renter %:	39.06%	98,766	99,727	100,697	101,676	102,665	103,664
				Total New Owner Households			**7,642**
				Total New Renter Households			**4,898**

Based on an estimated household growth rate of 0.97% per year, Tulsa County would require 7,642 new housing units for ownership, and 4,898 units for rent, over the next five years. Annually this equates to 1,528 units for ownership per year, and 980 units for rent per year.

Housing Demand – Population Subsets

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

Housing Needs by Income Thresholds

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

Tulsa County: 2015-2020 Housing Needs by Income Threshold

	Owner Subset %	Renter Subset %	Owners	Renters	**Total**
Total New Demand: 2015-2020	100.00%	100.00%	7,642	4,898	12,540
Less than 30% AMI	5.15%	21.59%	394	1,058	**1,451**
Less than 50% AMI	12.41%	40.78%	948	1,998	**2,946**
Less than 60% AMI	14.89%	48.94%	1,138	2,397	**3,535**
Less than 80% AMI	26.01%	64.14%	1,987	3,141	**5,129**

Elderly Housing Needs

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

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

	Owner Subset %	Renter Subset %	Elderly Owners	Elderly Renters	**Elderly Total**
Total New Elderly (62+) Demand: 2015-2020	29.27%	13.89%	2,237	680	**2,917**
Elderly less than 30% AMI	2.19%	3.48%	167	170	**338**
Elderly less than 50% AMI	5.87%	7.06%	449	346	**795**
Elderly less than 60% AMI	7.05%	8.47%	539	415	**953**
Elderly less than 80% AMI	11.54%	10.03%	882	491	**1,373**

Housing Needs for Persons with Disabilities / Special Needs

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

Tulsa County: 2015-2020 Housing Needs for Persons with Disabilities					
	Owner Subset %	Renter Subset %	Disabled Owners	Disabled Renters	**Disabled Total**
Total New Disabled Demand (2015-2020)	25.33%	28.35%	1,936	1,389	**3,325**
Disabled less than 30% AMI	2.31%	8.59%	177	421	**597**
Disabled less than 50% AMI	5.29%	15.22%	404	746	**1,150**
Disabled less than 60% AMI	6.35%	18.26%	485	895	**1,380**
Disabled less than 80% AMI	10.03%	21.17%	766	1,037	**1,803**

Housing Needs for Veterans

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

Tulsa County: 2015-2020 Housing Needs for Veterans					
	Owner Subset %	Renter Subset %	Veteran Owners	Veteran Renters	**Veteran Total**
Total New Demand (2015-2020)	100.00%	100.00%	7,642	4,898	12,540
Total Veteran Demand	9.64%	9.64%	737	472	**1,209**
Veterans with Disabilities	2.86%	2.86%	219	140	**359**
Veterans Below Poverty	0.79%	0.79%	60	39	**99**
Disabled Veterans Below Poverty	0.29%	0.29%	23	14	**37**

Housing Needs for Working Families

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

Tulsa County: 2015-2020 Housing Needs for Working Families					
	Owner Subset %	Renter Subset %	Owners	Renters	**Total**
Total New Demand (2015-2020)	100.00%	100.00%	7,642	4,898	12,540
Total Working Families	50.90%	50.90%	3,889	2,493	**6,382**
Working Families with Children Present	27.08%	27.08%	2,069	1,326	**3,396**

Population Subset Conclusions

Based on population and household growth over the next five years, a total of 12,540 housing units will be needed in Tulsa County over the next five years. Of those units:

- 3,535 will be needed by households earning less than 60% of Area Median Income

- 953 will be needed by households age 62 and up, earning less than 60% of Area Median Income
- 1,380 will be needed by households with disabilities / special needs, earning less than 60% of Area Median Income
- 99 will be needed by veterans living below the poverty line
- 3,396 will be needed by working families with children present

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

Special Topics

Tulsa 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 5 key cities within the county: Tulsa, Broken Arrow, Bixby, Jenks, and Owasso.

Comprehensive plans are the guiding documents for cities of various sizes to address key aspects of their community from land use, transportation, environment, housing, and economic development. Of the 5 key cities, all have comprehensive plans that have been adopted. Of these plans the following text highlights language in these plans that addresses land use decisions that reduce placing housing and businesses within historical areas of risk (e.g. flooding) and other supporting actions to increase disaster resiliency.

City of Tulsa Comprehensive Plan: The plan included language that focuses on transportation improvements within the city and how they have to potential to aid in reducing emergency response times. However, these improvements appeared to addressing daily emergency response issues rather than disaster-related emergencies.

The plan also contains language the supports green infrastructure to aid with stormwater runoff and mitigates flash flooding

City of Bixby Comprehensive Plan: Language in plan identifies the safest routes though the city for the transport of hazardous wastes or chemical. This is done to mitigate the risk of disaster events related to the transportation on these materials. The plans also discuss the necessity for the notification of these transports prior to the planned transport of these materials.

Bixby's drainage and storm water management system keeps new development out of flood-risk areas and reduces flood-risk in present flood prone areas. Bixby's sewer and water system connects to ail existing structures and all areas of potential development in the city. The city also restricts certain types of development in flood plains.

City of Broken Arrow: The Downtown Master Plan for Broken Arrow (adopted in 2005) was acquired. However there is very little language in plan that address disaster resiliency. There was little mentioning of development in floodplains and no mentioning of disaster mitigation or emergency management issues.

City of Jenks: The Comprehensive Plan language discourages structural development in floodways. The plan highlights the areas of the city most vulnerable to flood hazards.

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

resiliency. City policies allow no residential construction in floodplains, except as approved by Federal Emergency Management Agency guidelines. The city concluded a new flood study of the area to update floodway maps. According to the plan this was expected to be accepted by FEMA and released in 2008.

The City of Jenks has a Hazard Mitigation Plan that was adopted in 2004 (it isn't clear whether that has been updated). The city utilized the hazard mitigation plan in accordance with the comprehensive plan as a planning tool for the mitigation of hazardous material incidents and natural hazards within the community.

City of Owasso- The Comprehensive Plan has very little language in plan that address disaster resiliency. There was little mentioning of development in floodplains and no mentioning of disaster mitigation or emergency management issues.

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.

Tulsa County does have a Hazard Mitigation Plan (including the proposed 2015 updates). Numerous municipalities within Tulsa County also have their own HMPs. This includes: The City of Tulsa, the City of Bixby, the City of Broken Arrow, and the City of Owasso.

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.

Tulsa County

The proposed 2015 Tulsa County Hazard Mitigation Plan identifies the 13 hazards facing the Tulsa County. This includes:

1. Floods
2. Tornados
3. High Winds
4. Lighting
5. Hailstorms
6. Sever Winter Storms
7. Extreme Heat
8. Drought
9. Expansive Soils
10. Wildfires
11. Earthquakes
12. Hazardous Materials Events
13. Dam breaks

Table 1 (Also referred to as Appendix 6)

Natural Hazard Assessments

Each hazard is assigned a likelihood rating based on the criteria and methods described below.

Likelihood of Event "Rating" is based on the following definitions	
Highly likely (HL)	Event is probable within the calendar year.
Likely (L)	Event is probable within the next three years.
Occasional (O)	Event is probable within the next five years.
Unlikely (UL)	Event is possible within the next ten years.

Based on History, and using the information described above, Likelihood of Event is "Quantified" as follows:		
Highly Likely (HL)	Event has 1 in 1 year chance of occurring	1/1 = 100%
Likely (L)	Event has 1 in 3 years chance of occurring	1/3 = 33%
Occasional (O)	Event has 1 in 5 years chance of occurring	1/5 = 20%
Unlikely (UL)	Event has 1 in 10 years chance of occurring	1/10 = 10%

Which results in the following "Ranges" of Likelihood:
Event is "Highly Likely" to occur – History of events is greater than 33%.
Event is "Likely" to occur – History of events is greater than 20%, but less than or equal to 33%.
Event could "Occasionally" occur – History of events is greater than 10%, but less than or equal to 20%.
Event is "Unlikely," but is possible of occurring – History of events is less than 10%.

Example: NWS-NCDC records show that 38 tornados were reported in Example County between 01/01/1950 and 12/31/2003. 38 events divided by 53 years = 0.72(72%) which would make future occurrences "Highly Likely" to happen.

This table's format, categories, and the criteria for completing the table, was supplied by the Oklahoma Department of Emergency Management, 06/29/2004.

Table 2 (Also referred to as Appendix 6)

Hazard Summary
Tulsa County
Summary of Hazards for the Tulsa County Multi-Hazard Mitigation Plan
Source: NOAA national climatic data center, except wildfires and hazmat events which came from Tulsa Area Emergency Management Agency

Hazard Event	History	Estimated Total Dollar Loss ($$)	Average Cost Per Event ($$)	Likelihood Percentage	Likelihood Rating
Floods	Two County events, 2010 thru 2014	0	0	2/5=40%	HL
Tornado	Three County events, 2010 thru 2014	950000	316666	3/5=60%	HL
High Wind	Two County events, 2010 thru 2014	10000	5000	2/5=40%	HL
Lightning	Six County events, 2010 thru 2014	750000	125000	6/5>100%	HL
Hail	40 County events, 2010 thru 2014	460000	11500	40/5>100%	HL
Winter Storms	Eight County events, 2010 thru 2014	0	0	8/5>100%	HL
Extreme Heat	One County event, 2010 thru 2014	0	0	1/5=20%	O
Drought	16 County events, 2010 thru 2014	0	0	16/5>100%	HL
Expansive Soils (1)	Zero County events, 2010 thru 2014	0	0	0/5=0%	UL
Wildfire (2)	165 events, 2010 thru 2014	0	0	165/5>100%	HL
Earthquake	Zero County events, 2010 thru 2014	0	0	0/5=0%	UL
Hazmat Events (2)	80 events, 2010 thru 2014	0	0	80/5>100%	HL
Dam Break	Zero County events, 2010 thru 2014	0	0	0/5=0%	UL

Note: where zero events or zero dollar amounts are shown, this means there was no data reported for the hazard event.

Draft for Comment

The proposed 2015 Tulsa County Hazard Mitigation Plan outlines each hazard (see below) with its historical context in Tulsa County. The HMP also outlines the goals and objectives for each hazard.

The overall general goal of the HMP is to protect vulnerable populations and critical facilities from hazards.

Objectives:
1. Minimize the loss of life and damage to property and infrastructure from natural and man-made disasters.
2. Increase public awareness of risks from hazards and implement measures that can be taken to protect families and property from disasters.
3. Reduce the risk and effects of hazards and minimize disruption in the County.
4. Identify and protect vulnerable populations from natural and man-made hazards.
5. Identify and protect critical County and community facilities from hazards so that they can continue their missions in the event of a disaster

Flood

Historical Context: "Historically, Tulsa County, has recognized flooding as a hazard. The County joined the National Flood Insurance Program (NFIP) in 1981, adopting a Flood Damage Prevention Resolution, and requiring that all future development be built one foot above the 100-year base flood elevation. According to the National Climatic Data Center, from 2010 through 2014, the Tulsa County has had two flood events from 2010 through 2014."

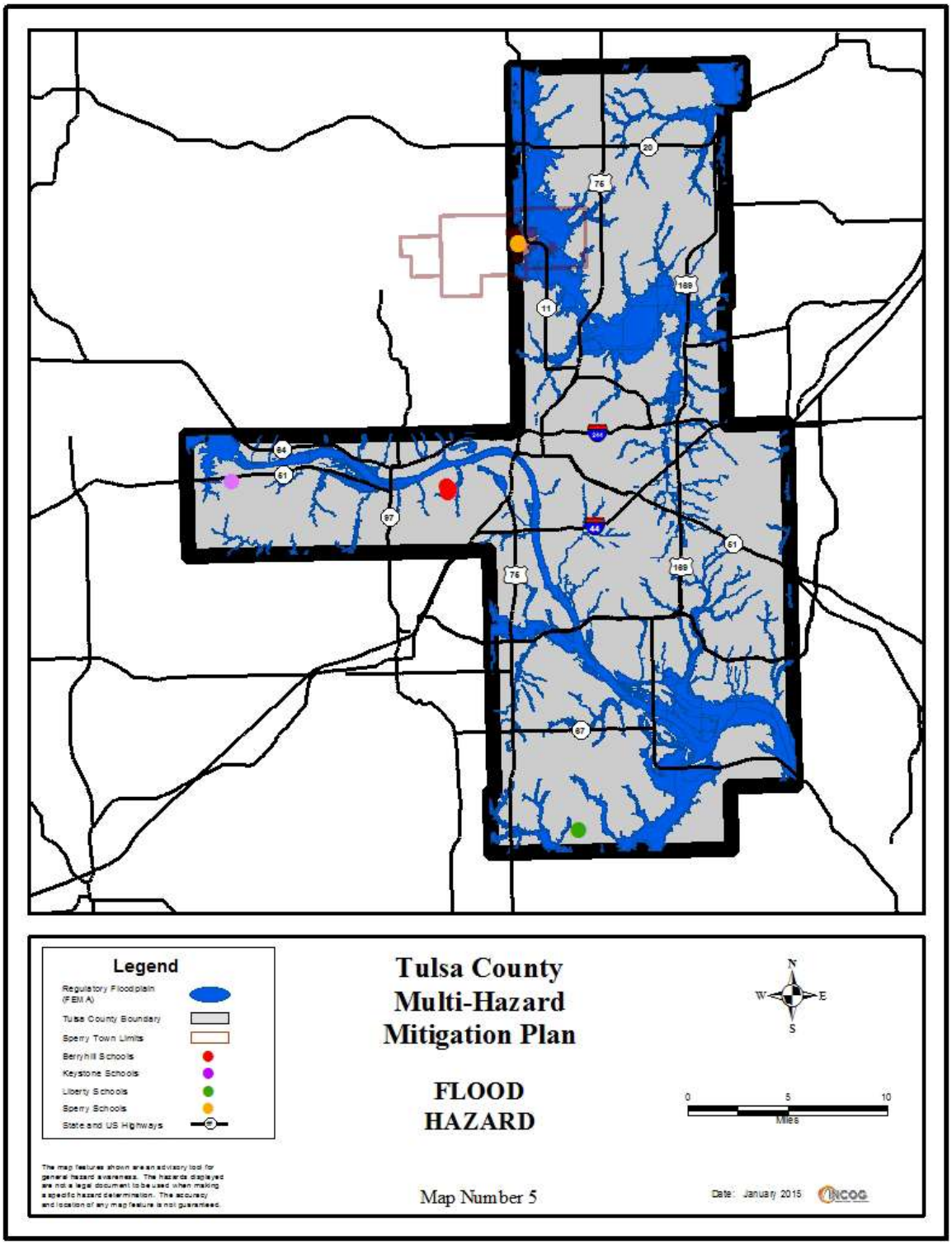
"The County floodplain administrator reports they are 29 repetitive loss structures in unincorporated Tulsa County that are insured through the National Flood Insurance Program; 27 are single family residential structures and two are commercial. Damaged structures are rebuilt in conformance with the County's flood damage prevention ordinance." (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Table 3 UNINCORPORATED TULSA COUNTY: TOTAL BUILDINGS IN FLOODPLAIN

	Number of Buildings	Building Value ($$)	Contents Value ($$)	Total Value ($$)
Residential	1425	121,000,390	566,805	1,700,415
Commercial	70	35,523,965	35,523,965	71,047,930
Agricultural	90	1,133,610	121,000,390	242,000,780
TOTAL	1585	157,657,965	157,091,160	314,749,125

"There are no critical facilities in the regulatory floodplain. Any future building in a flood hazard will be built in conformance with the County Flood Damage Prevention Ordinance as part of the County's membership in the NFIP; therefore, future buildings will not be considered by FEMA as at risk from the regulatory floodplain." (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Figure 1


Legend
Regulatory Floodplain (FEMA)
Tulsa County Boundary
Sperry Town Limits
Berryhill Schools
Keystone Schools
Liberty Schools
Sperry Schools
State and US Highways
Tulsa County
Multi-Hazard
Mitigation Plan
FLOOD
HAZARD
Map Number 5
N
W
E
S
0
5
10
Miles
Date: January 2015
INCOG

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal - Flood Hazard: To reduce the risk of flood hazard in the County
Objectives:
1. Identify buildings at risk from the 100-year regulatory flood.
2. Ensure that development does not increase flooding downstream or have off-site adverse impacts.
3. Identify and maximize the natural and beneficial uses of the floodplain.
4. Implement the best flood control measures to reduce vulnerability of flood-prone properties

Tornado

Historical Context: "From 2010 through 2014, there were three tornadoes in Tulsa County. Meteorological conditions have not changed, so future tornado events should occur at the same probability as previous events. No area of the County is any more or less at risk from the tornado hazard. According to the likelihood rating from Appendix 6 (the definition of the likelihood scale is shown in Appendix 6), the likelihood of a tornado hazard in the County is "highly likely". (Proposed 2015 Tulsa County Hazard Mitigation Plan)

"Historically the tornado will move in a southwest to northeast direction, but can move in any direction. Consequently, vulnerability of humans and property is difficult to evaluate since the tornados form at different strengths, in random locations, and create narrow paths of destruction."

Figure 2

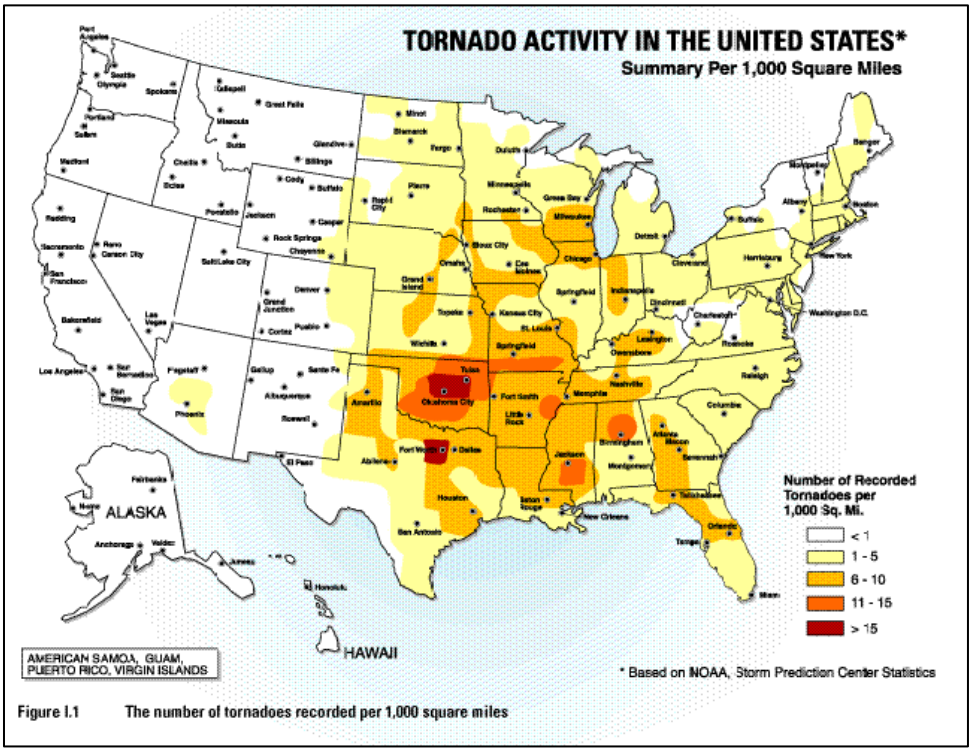


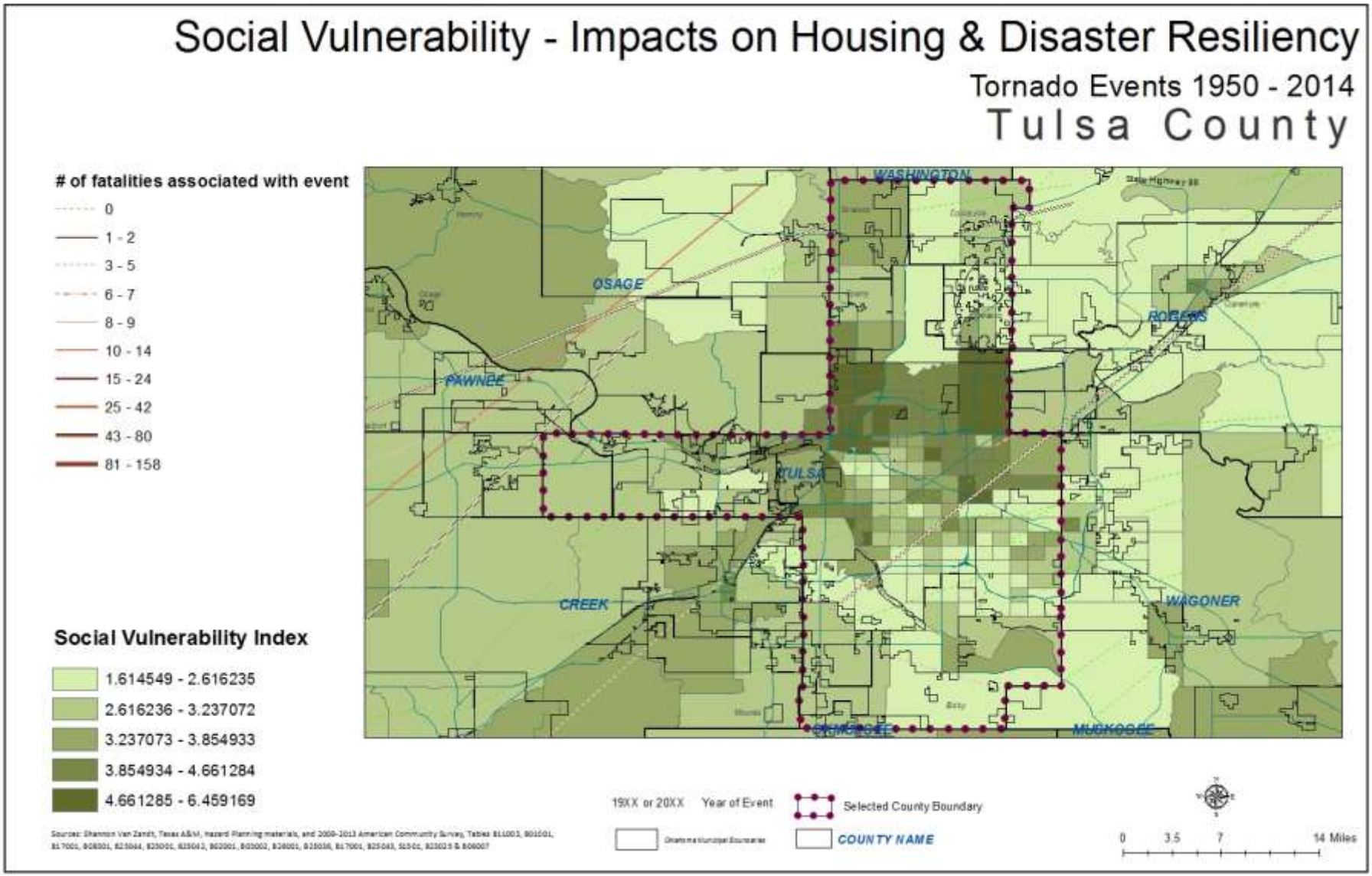
Figure I.1 The number of tornadoes recorded per 1,000 square miles

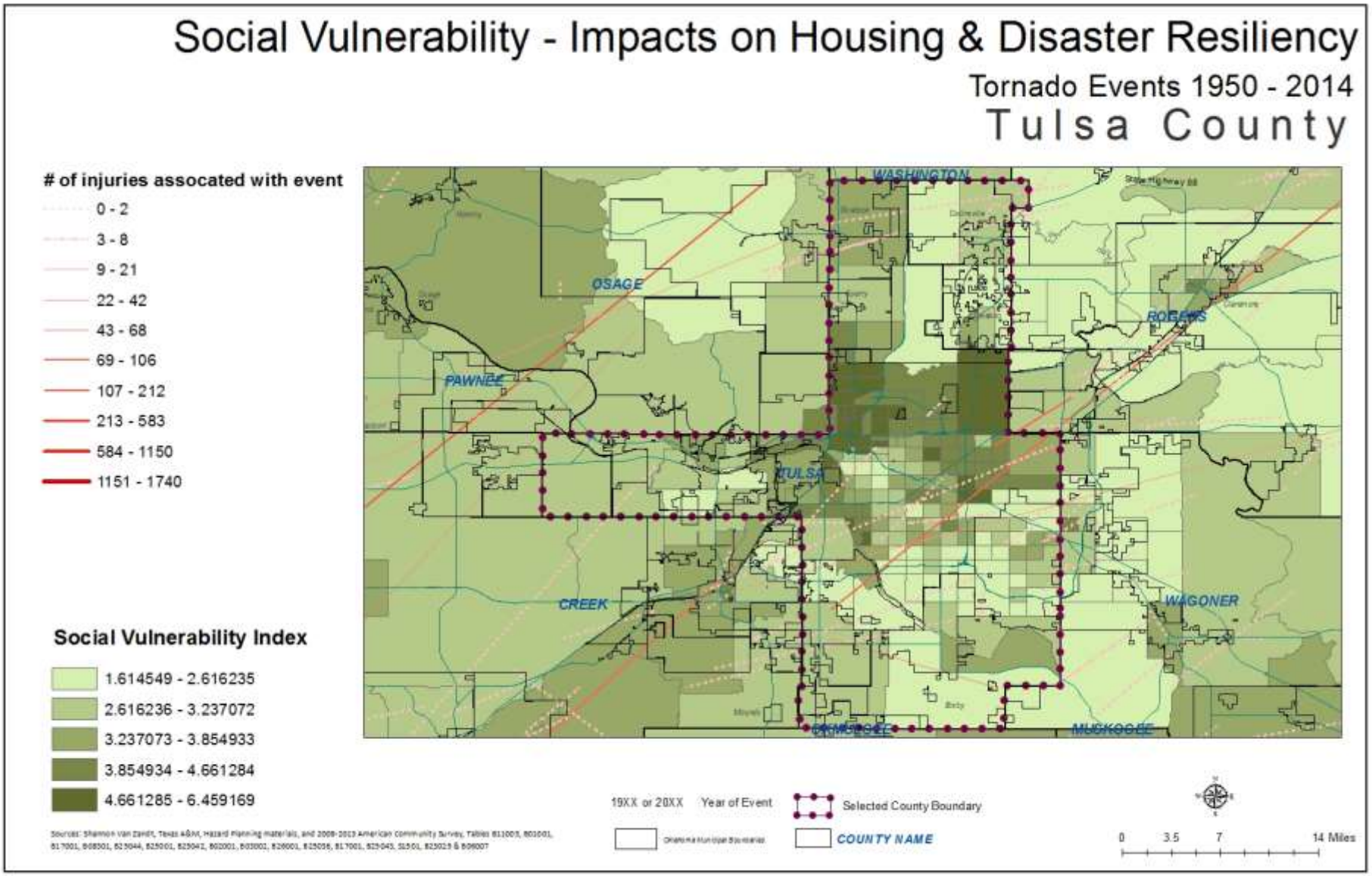
Utilizing warning systems, County residents can take appropriate precautions prior to and during these events. As a result, casualty rates are low. The popularity of mobile/manufactured housing has increased susceptibility of existing structures to tornados. The use of better building techniques, tie-down systems and the availability of storm shelters all help mitigate losses in the County.

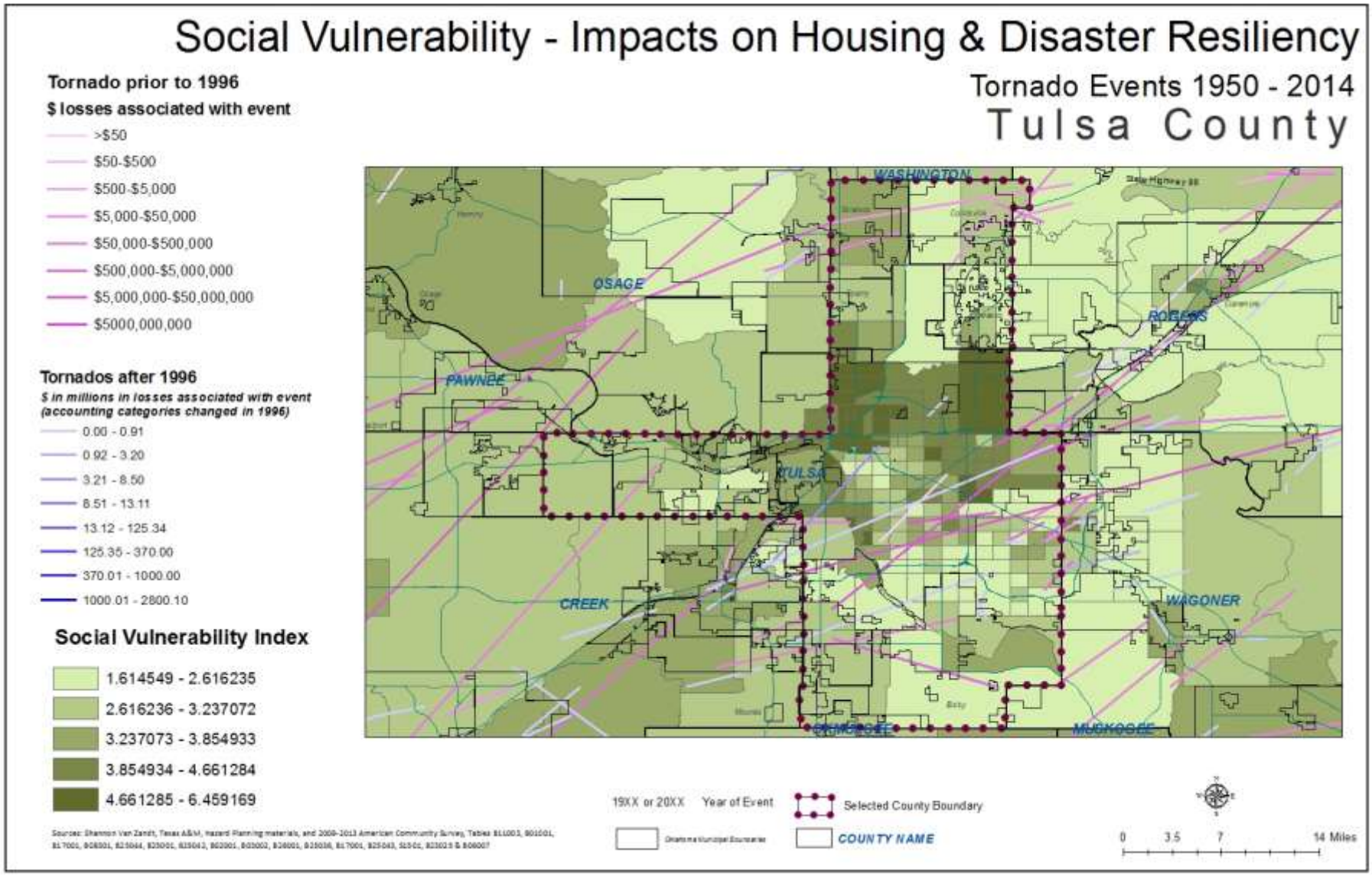
Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal - Tornado Hazard: To reduce the risk from tornados in the County.
Objectives:
1. Encourage building of individual safe rooms and storm shelters.

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

Historic data on tornados between 1950-2014 there are 67 tornados documented. There were 382 injuries that occurred connected to these tornados, with 7 of those injuries happening in the 2006 tornado and 130 occurring in the 1993 tornado. There were 15 fatalities connected to tornadoes during this time period, 7 of which occurred in 1993. Property losses between 1950-1996 ranged from $83,538,553.00 to $835,385,650.00. (The accounting methods used for losses changed in 1996.) The losses estimated between 1996-2014 was $13,270,000.00.


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Tulsa County
# of fatalities associated with event
0
1 - 2
3 - 5
6 - 7
8 - 9
10 - 14
15 - 24
25 - 42
43 - 80
81 - 158
WASHINGTON
OSAGE
ROGERS
PAWNEE
TULSA
CREEK
WAGONER
MUSKOGEE
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3.5 7 14 Miles

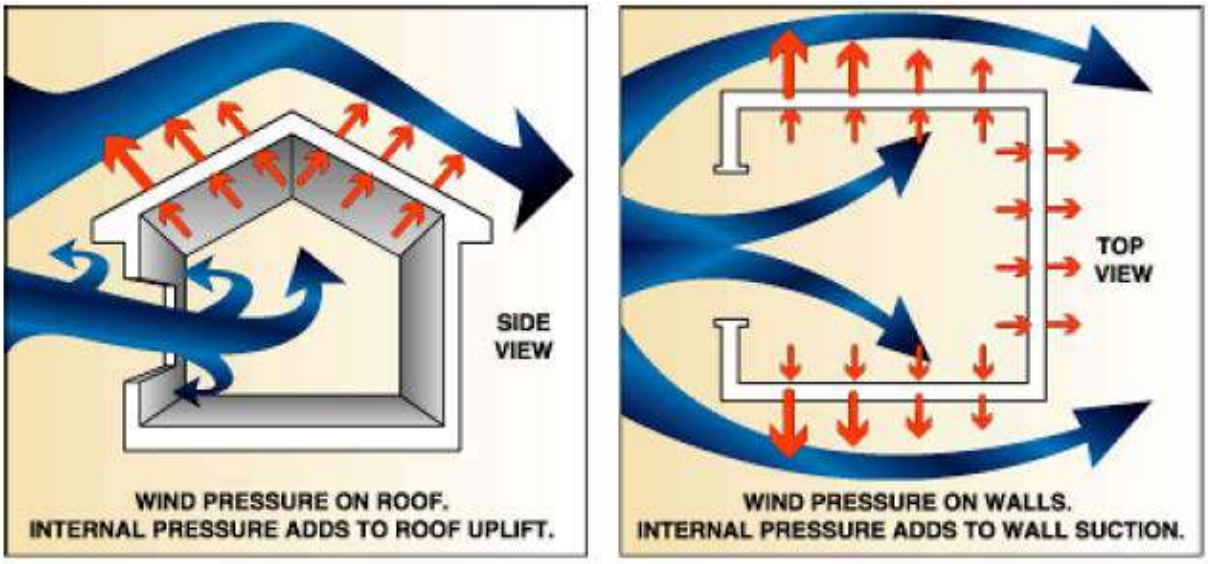

Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Tulsa County
# of injuries assocated with event
0 - 2
3 - 8
9 - 21
22 - 42
43 - 68
69 - 106
107 - 212
213 - 583
584 - 1150
1151 - 1740
WASHINGTON
OSAGE
ROGERS
PAWNEE
TULSA
CREEK
WAGONER
MUSKOGEE
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3.5 7 14 Miles


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Tulsa County
Tornado prior to 1996
$ losses associated with event
>$50
$50-$500
$500-$5,000
$5,000-$50,000
$50,000-$500,000
$500,000-$5,000,000
$5,000,000-$50,000,000
$5000,000,000
Tornados after 1996
$ in millions in losses associated with event (accounting categories changed in 1996)
0.00 - 0.91
0.92 - 3.20
3.21 - 8.50
8.51 - 13.11
13.12 - 125.34
125.35 - 370.00
370.01 - 1000.00
1000.01 - 2800.10
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
WASHINGTON
OSAGE
ROGERS
PAWNEE
TULSA
CREEK
WAGONER
MUSKOGEE
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3.5 7 14 Miles

High Winds

Historical Context: "According to the National Climatic Data Center, Tulsa County has had two recorded high winds events during the period of 2010 through 2014. Meteorological conditions have not changed, so future high wind events should occur at the same probability as previous events. No area of the County is any more or less at risk from the high wind hazard. According to the likelihood rating from Appendix 6 (the definition of the likelihood scale is shown in Appendix 6), the likelihood of a high wind hazard in the County is "highly likely". (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Figure 3 Diagram of Windstorm Effects



"Winds are always part of severe storms such as tornados and thunderstorms, but do not have to accompany a storm to be dangerous. Straight-line winds and microbursts can all cause injury and damage. Very little available data exists separate from thunderstorms or tornado data. Any efforts made to mitigate for tornados or thunderstorm winds should address the hazard of high winds." (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal - High Winds Hazard: To reduce the risk from high winds in the County
Objectives:

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

Lightning

Historical Context: "For Tulsa County, the National Climatic Data Center (NCDC) reports six lightning events during the five year period from 2010 through 2014. Meteorological conditions have not changed, so future lightning events should occur at the same probability as previous events. No area of the County is any more or less at risk from the lightning hazard. According to the likelihood rating from Appendix 6 (the definition of the likelihood scale is

shown in Appendix 6), the likelihood of a lightning hazard in the County is “highly likely”. (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal - Lightning Hazard: To reduce the risk from lightning in the County.
Objectives:
1. Reduce loss of life and property, and injury due to lightning by increased public awareness of measures to prevent and reduce damage, including warnings.

Hail Storms

Historical Context: “According to the National Climatic Data Center, Tulsa County has had 40 hail hazard events of hail diameter ¾ inch and greater during the period from 2010 through 2014.The location of this hazard is uniform over the entire County area. No areas of the County, including the Town of Sperry and the four participating Schools, are any more or less at risk from a hail storm hazard.” (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal - Hailstorm Hazard: To reduce the risk from hailstorms in the County.
Objectives:
1. Promote construction of hail resistant roofs.

Severe Winter Storms

Historical Context:” For Tulsa County, the National Climatic Data Center (NCDC) reports eight winter storm events during the five year period from 2010 through 2014. Meteorological conditions have not changed so future events should occur at the same probability as the previous events. According to the likelihood rating from Appendix 6 (the definition of the likelihood scale is shown in Appendix 6), the likelihood of a winter storm hazard in Tulsa County is “highly likely”. (Proposed 2015 Tulsa County Hazard Mitigation Plan)

“Tulsa County is affected periodically by heavy snow and ice that cause damage. Trees and power lines fall due to the weight of ice and snow causing power outages Icy roads cause accident rates to increase and impair the ability for emergency vehicles to respond which can result in more injuries and a higher loss of life. A major winter storm can be very dangerous. Preparing for cold weather conditions and responding to them effectively can reduce the dangers caused by winter storms.”

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal - Winter Storm Hazard: To reduce the hazards from winter storms in the County.
Objectives:
1. Reduce property loss and community disruption due to severe winter cold and ice storms.

Extreme Heat

Historical Context: ”According to the National Climatic Data Center, one extreme heat event was reported in Tulsa County from 2010 through 2014. Meteorological conditions have not

changed so future events should occur at the same probability as the previous events. The likelihood of a heat hazard in Tulsa County is “occasional”.

“Tulsa County considers a heat index between 95 and 105 degrees to be of minor severity. Tulsa County considers a heat event with a heat index above 105 degrees to be of major severity. Young children, elderly people, and those who are sick or overweight are more likely to become victims to extreme heat. Other conditions that can limit the ability to regulate temperature include fever, dehydration, heart disease, mental illness, poor circulation, sunburn, prescription drug use, and alcohol use. Another segment of the population at risk is those whose jobs consist of strenuous labor outside. When temperatures reach 90 degrees and above, people and animals are more likely to suffer sunstroke, heat cramps, and heat exhaustion.” (Proposed 2015 Tulsa County Hazard Mitigation Plan)

According to the proposed 2015 Tulsa County HMP, extreme heat can have a structural impact. Roads can buckle during times of extreme heat. Tar becomes soft and can allow concrete to settle, creating gaps and uneven surfaces. Extreme heat leads to rapid evaporation of ponds and lakes, depleting water sources used by both farmers and the community. Often times, residents use additional water during extreme heat to counter the drying of soils and prevent vegetation from dying. This additional strain on water systems can lead to low water pressure, and can cause water shortages when firefighters are trying to save property and brush land dried out by the extreme heat.

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal 7 Extreme Heat: To reduce the risk from extreme heat in the County.
Objectives:
1. Lessen injury and potential loss of life to citizens during periods of extreme heat through education.

Drought

Historical Context:” According to the National Climatic Data Center, 16 drought events were reported in Tulsa County from 2010 through 2014. Meteorological conditions have not changed so future events should occur at the same probability as the previous events. According to the likelihood rating from Appendix 6 (the definition of the likelihood scale is shown in Appendix 6), the likelihood of a heat hazard in Tulsa County is “highly likely”. (Proposed 2015 Tulsa County Hazard Mitigation Plan)

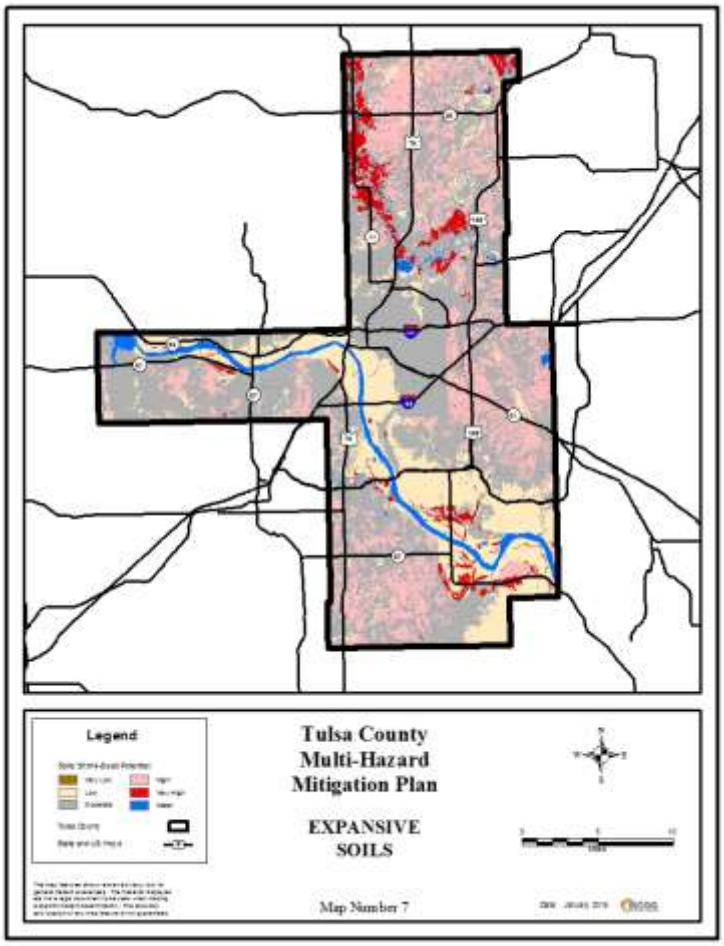
Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal 8 Drought Hazard: Reduce the economic impact of drought hazards to the County.
Objectives:
1. Reduce damage to property and building foundations due to drought by improving building codes.

Expansive Soils

Historical Context: “The Natural Resources Conservation Service (NRCS) has identified the soils in Tulsa County. The expansive tendency of a soil is a function of its shrink-swell

potential. The shrink swell potential of the soils in Tulsa County is shown on Map Number 7 in Appendix 1. The majority of the soils in Tulsa County are in the moderate and high shrink swell potential. The soils properties have not changed so future occurrences of soils expansion and contraction will continue. An estimate of future occurrences is rated as “unlikely” for Tulsa County, as shown in the Likelihood Rating field in the Hazard Summary Table in Appendix 6 (the definition of the likelihood scale is shown in Appendix 6), because no data is reported for this hazard.” (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Figure 4



Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal 9 Expansive Soil Hazard: Reduce structure's susceptibility to soil movement.
Objectives:
1. Reduce damage to property and building foundations due to expansive soils by improving building codes.

Wildfires

Historical Context: "The areas in the unincorporated Tulsa County in the communities' wildland-urban interface are at higher risk from a wildfire so are more vulnerable. The areas outside of the communities' wildland-urban interface can be at less risk, so less vulnerable to a wildfire.
Table 3-28 shows the numbers of structures in the unincorporated Tulsa County within the communities' wildland-urban interface." (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Table 3-28
UNINCORPORATED TULSA COUNTY STRUCTURES IN THE CITIES' WILDLAND-URBAN INTERFACE

Type	# of Structures	Structure Value ($)
Residential	6900	591,826,587
Commercial	343	290,039,378
Agricultural	126	2,624,616
TOTAL	7369	884,490,581

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal 10 Wildfire Hazard: To reduce the threat of wildfire hazards and their financial impact to the County
Objectives:
1. Develop a County-wide fire response and support group to facilitate the provisioning of water to fires during large fires.

Earthquakes

Background: According to the Proposed 2015 Tulsa County Hazard Mitigation Plan, all areas, and all buildings, in the County are at equal risk from this hazard.

There is no historical context provided in the HMP for earthquakes.

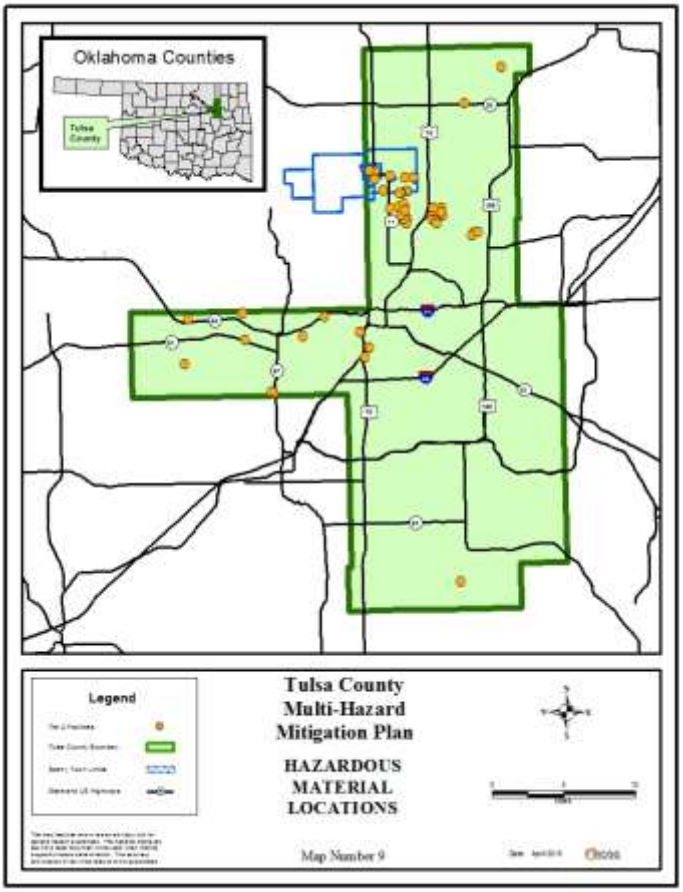
Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal 11 Earthquake Hazard: To reduce the risk from earthquakes in the County.
Objectives:
1. Educate and encourage the building trades industry about earthquake resistant construction.

Hazardous Materials Events

Background: The public is most at risk from hazardous materials when they are being transported. The County has defined the State and US Highways, and the railroads, as the major transportation routes through the County. (Proposed 2015 Tulsa County Hazard Mitigation Plan)

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal 12 Hazardous Materials Hazard: To reduce the risk from hazardous material storage facilities around the County.
Objectives:
1. Protect the public from exposure from hazardous materials events from sites within the community.

Figure 5



Dam Breaks

Historical Context: "The dam break hazard in Tulsa County is the high hazard dams. High hazard dams prepare an emergency action plan (EAP) which would make a determination on the number of structures and infrastructure in each dam's dam break inundation area. For the Keystone Lake dam, their EAP identifies structures or infrastructure in the inundation areas. Their addresses are on file with TAEMA. Therefore, the number of structures is not included in this plan and an estimated damage is not done." (Proposed 2015 Tulsa County Hazard Mitigation Plan)

According to the Proposed 2015 Tulsa County Hazard Mitigation Plan, "A related threat to Tulsa is posed by the Arkansas River levees, built in 1945 and protecting 2,271 residences, 149 commercial properties & 106 industrial parcels with improvement values ($147,453,020 in assessed improvements). Failure of the levees along the Arkansas River would have a devastating impact upon the City of Tulsa and Tulsa County. It is likely that a major Keystone Dam release could cause these levees to overtop and subsequently fail."

"The worst-case event, failure of Keystone Dam and the Arkansas River levees, could impact 14,285 parcels with improvements within the city limits of Tulsa, create a severe risk for an estimated 48,000 people, cause an estimated $1,843,401,375 in damage to an estimated 14,285 buildings including 67 critical facilities. In addition, it could produce widespread power outages, and release of hazardous chemicals."

Hazard Mitigation Plan Hazard-Specific Goal and Objectives:
Goal 13 Dam Break Hazard: To reduce the risk of a dam break hazard in the County.
Objectives:
1. Identify dams that could impact the County.
2. Identify areas at risk.

Hazard Mitigation Summaries of Cities within Tulsa County
Multiple municipalities within Tulsa County also have Hazard Mitigation Plans. This Includes the City of Tulsa, Bixby, Owasso, and Broken Arrow.

City of Tulsa *(information specific to the City of Tulsa and not mentioned in Tulsa County HMP)*
The City of Tulsa highlighted the same hazards within their HMP as the Tulsa County HMP. Major highlights for the City of Tulsa HMP are:

- Tornado – Goals:
    - Objective 2. Preventive Measures. Prevent or reduce tornado losses by strengthening buildings and by publicizing, training, and creating market options for fortified new construction, retrofits, code changes and code-plus innovations.
    - Objective 3. Structural Projects. Provide safe tornado shelters, SafeRooms, and fortified buildings for vulnerable populations, including children; offer training and incentives to encourage people of means to include shelters and SafeRooms in new and retrofit building projects.
    - City of Tulsa – Individual SafeRoom Rebate Program

City of Broken Arrow
Summary for the City of Broken Arrow HMP are:

- The Broken Arrow HMP received a 5-year update in 2010. Updates appear to have been adopted in 2011.
- The HMP highlights the six primary goals for the HMP:
    - Goal 1: Protect lives and property.
    - Goal 2: Enhance public understanding of risk from natural hazards.
    - Goal 3: Reduce prolonged business displacement.
    - Goal 4: Streamline government and public response to natural hazard disasters.
    - Goal 5: Reduce damage to city's lifelines and Continuity of Government.
    - Goal 6: Encourage and support improved forecasting of natural hazard events.
- The disasters identified in the Broken Arrow HMP reflected those highlighted in the Tulsa County HMP.
- Flood and Stormwater Management Plan with initiatives for 2011-2016.
- Environmental Action Plan.
- Summary of other applicable city documents relevant to hazard mitigation including Comprehensive Plan (amended in 2003) and city codes and ordinances. However the HMP

does not go into detail about Comprehensive Plan goals or how specific codes/ordinances apply to hazard mitigation.

- City of Broken Arrow Hazard Mitigation Planning Team

City of Bixby

Summary for the City of Bixby HMP are:

- The City of Bixby HMP is received an approval (on November 15, 2010) from FEMA for the next five years. This plan is currently out of compliance.
- The disasters identified in the Bixby HMP reflected those highlighted in the Tulsa County HMP.
- The City of Bixby has 15 Warning Sirens.
- Bixby is currently evaluating their emergency management program and policies in order to receive the StormReady Community accreditation in the future.
- Flood and Stormwater Management – Bixby voters chose to allocate funds (a total of $42M over two years) for numerous flood control projects in the city.
- The city has adopted the International Building Code (2003)
- No public storm shelters were identified in the City of Bixby HMP.
- The city utilizes a “reverse 9-1-1” telephone warning system to send out an emergency notification call to all numbers in 9-1-1 system in the event of emergencies.
- City has Community Emergency Response Team (CERT) to provide immediate, local aid after disasters.
- Mutual-aid agreements with surround municipalities.
- The city utilizes the Incident Command System is the model tool for the command, control and coordination of resources at the scene of an emergency. It is a management tool of procedures for organizing personnel, facilities, equipment and communications.

Table 4 Bixby Summary of Damages (2004-2008)

Hazard	*Events*	*Events/ Year*	*Total Property Damage*	*Property Dmg/ Event*	*Property Dmg/ Year*	*Injuries*	*Injuries/ Event*	*Injuries/ Year*	*Deaths*	*Deaths/ Event*	*Deaths/ Year*
Floods	22	1.1	$3.74 Mil	$169,863	$186,850	0	0	0	2	0.1	0.1
Tornadoes	1	0.05	$2,000	$2,000	$20	0	0	0	0	0	0
High Winds	43	2.87	$142,000	$3,302	$9,467	0	0	0	0	0	0
Lightning	1	0.07	$25,000	$25,000	$1,667	0	0	0	0	0	0
Hail	38	2.53	$75,000	$1,974	$5,000	0	0	0	0	0	0
Winter Storms[1]	29	1.93	$50.15 Mil	$1.7 Mil	$3.34 Mil	0	0	0	0	0	0
Extreme Heat[1]	10	.67	$0	$0	$0	52	5.2	3.47	13	1.3	.87
Drought[1]	8	.53	$0	$0	$0	0	0	0	0	0	0
Expansive Soils	*Insufficient Data*										
Urban Fires[2]	70	14.0	$2.307Mil	$32,965	$461,510	1	0.01	0.2	4	0.06	0.8
Wildfires[2]	163	36.8	$7,610	$47	$1,520	*Insufficient Data*					
Earthquakes	0	0	$0	$0	$0	0	0	0	0	0	0
HazMat, Fixed	0	0	$0	$0	$0	0	0	0	0	0	0
Dam Failures	0	0	$0	$0	$0	0	0	0	0	0	0
Transportation	1	0.1	*Insufficient Data*			0	0	0	0	0	0

Figure 6

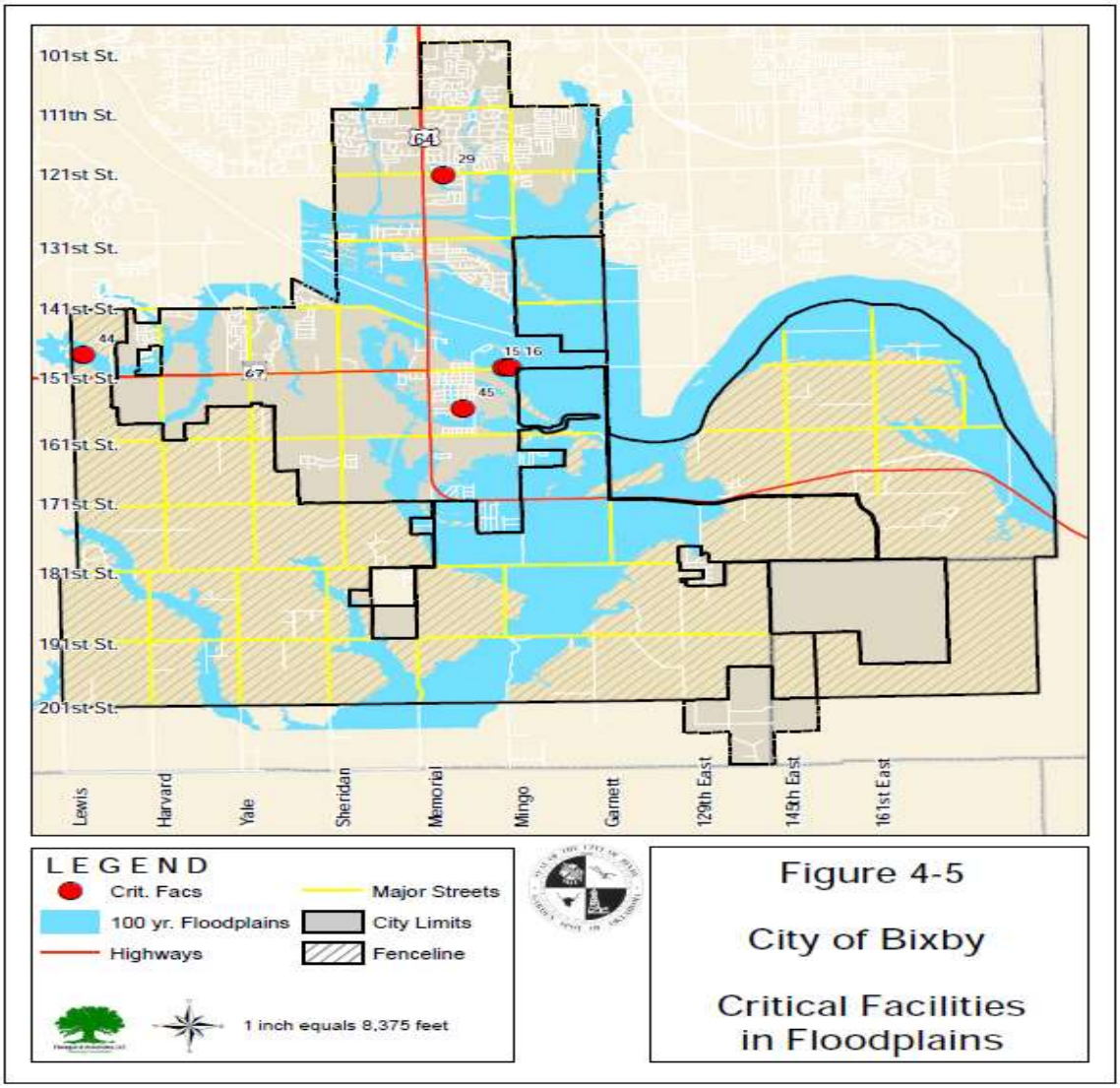

101st St.
111th St.
121st St.
131st St.
141st St.
151st St.
161st St.
171st St.
181st St.
191st St.
201st St.
64
29
44
67
15 16
45
Lewis
Harvard
Yale
Sheridan
Memorial
Mingo
Garnett
129th East
145th East
161st East
LEGEND
Crit. Facs
100 yr. Floodplains
Highways
Major Streets
City Limits
Fenceline
1 inch equals 8,375 feet
Figure 4-5
City of Bixby
Critical Facilities
in Floodplains

Figure 7

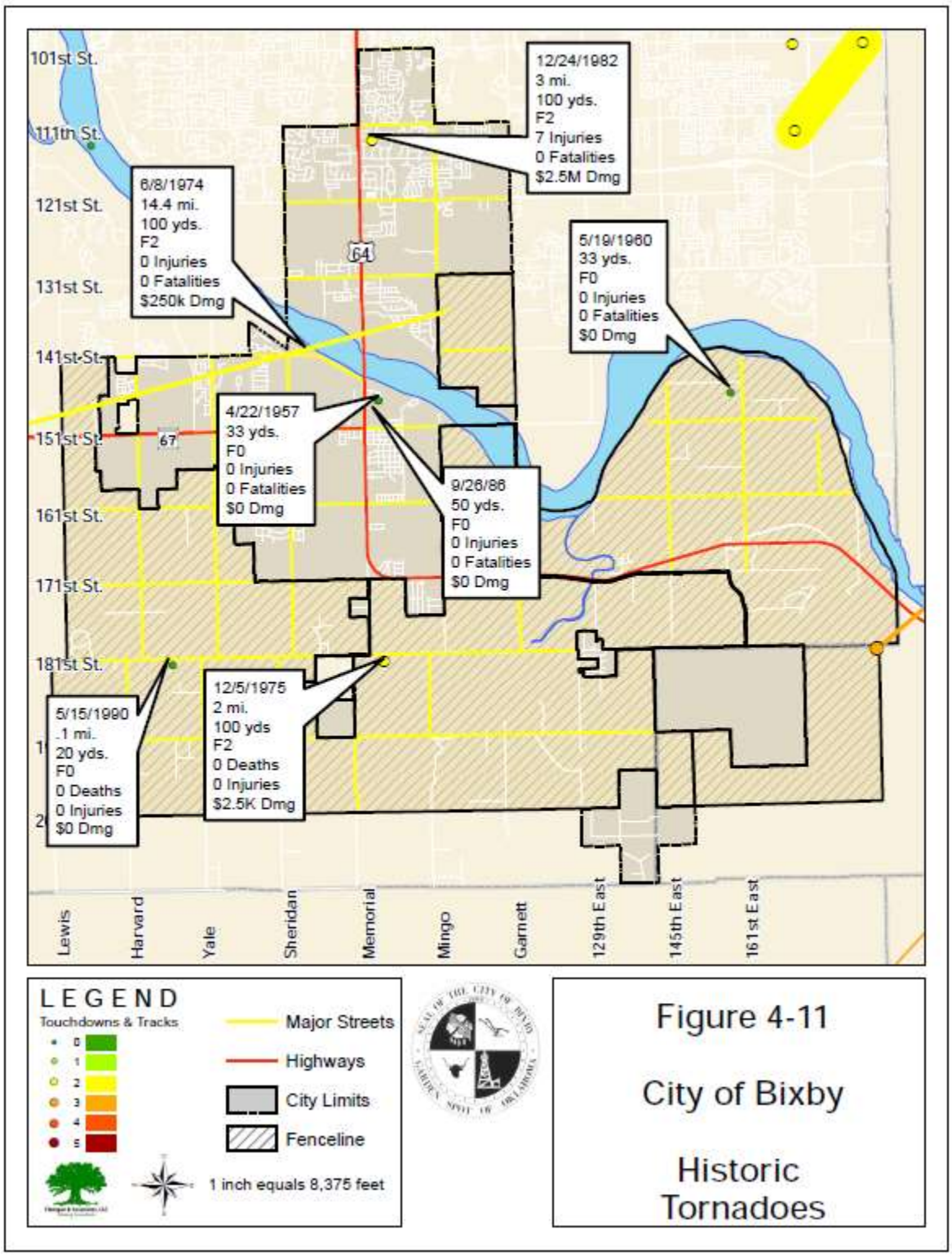
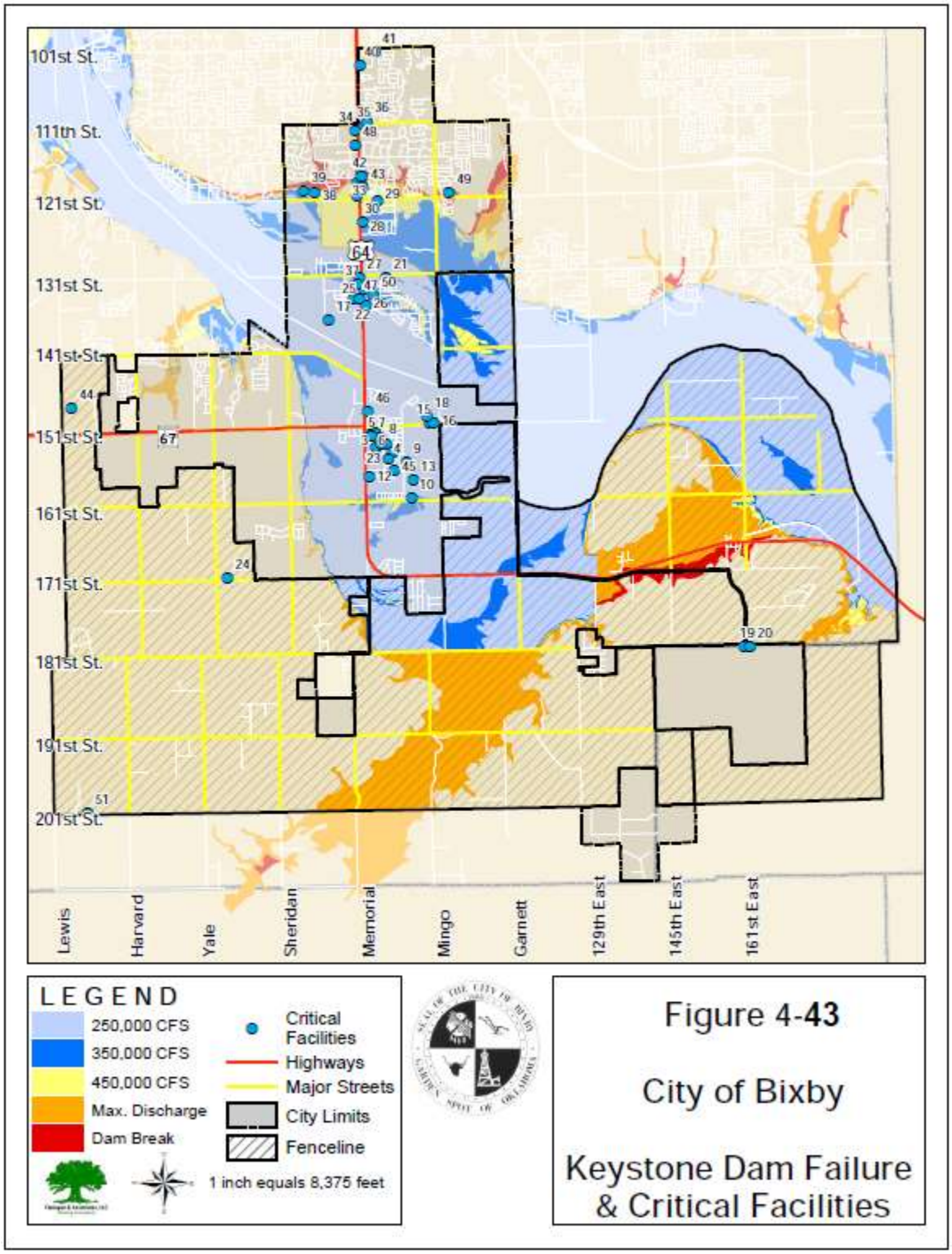

101st St.
111th St.
121st St.
131st St.
141st St.
151st St.
161st St.
171st St.
181st St.
64
67
12/24/1982
3 mi.
100 yds.
F2
7 Injuries
0 Fatalities
$2.5M Dmg
6/8/1974
14.4 mi.
100 yds.
F2
0 Injuries
0 Fatalities
$250k Dmg
5/19/1960
33 yds.
F0
0 Injuries
0 Fatalities
$0 Dmg
4/22/1957
33 yds.
F0
0 Injuries
0 Fatalities
$0 Dmg
9/26/86
50 yds.
F0
0 Injuries
0 Fatalities
$0 Dmg
5/15/1990
.1 mi.
20 yds.
F0
0 Deaths
0 Injuries
$0 Dmg
12/5/1975
2 mi.
100 yds
F2
0 Deaths
0 Injuries
$2.5K Dmg
Lewis
Harvard
Yale
Sheridan
Memorial
Mingo
Garnett
129th East
145th East
161st East
LEGEND
Touchdowns & Tracks
0
1
2
3
4
5
Major Streets
Highways
City Limits
Fenceline
1 inch equals 8,375 feet
Figure 4-11
City of Bixby
Historic Tornadoes

Figure 8


101st St.
111th St.
121st St.
131st St.
141st St.
151st St.
161st St.
171st St.
181st St.
191st St.
201st St.
Lewis
Harvard
Yale
Sheridan
Memorial
Mingo
Garnett
129th East
145th East
161st East
LEGEND
250,000 CFS
350,000 CFS
450,000 CFS
Max. Discharge
Dam Break
Critical Facilities
Highways
Major Streets
City Limits
Fenceline
1 inch equals 8,375 feet
Figure 4-43
City of Bixby
Keystone Dam Failure & Critical Facilities

City of Owasso

Summary for the City of Owasso HMP are:

- The City of Owasso updated the Hazard Mitigation Plan in 2013. No final dates were noted for dates of FEMA approval.
- To create a disaster-resistant community and improve the safety and well-being of the citizens of the City of Owasso by reducing deaths, injuries, property damage, environmental losses, and other losses from natural and technological hazards in a manner that advances community goals, quality of life, and results in a more livable, viable, and sustainable community.
- The disasters identified in the Owasso HMP reflected those highlighted in the Tulsa County HMP.
- No public storm shelters were identified in the City of Owasso HMP. However the HMP Goal #3 encourages building of individual safe rooms and storm shelters.
- Owasso participates in the National Flood Insurance Program (NFIP). The NFIP sets minimum requirements for subdivision regulations and building codes. Storm water management regulations require developers to mitigate any increase in runoff due to their development. Building codes require standards for new building construction.

Figure 9

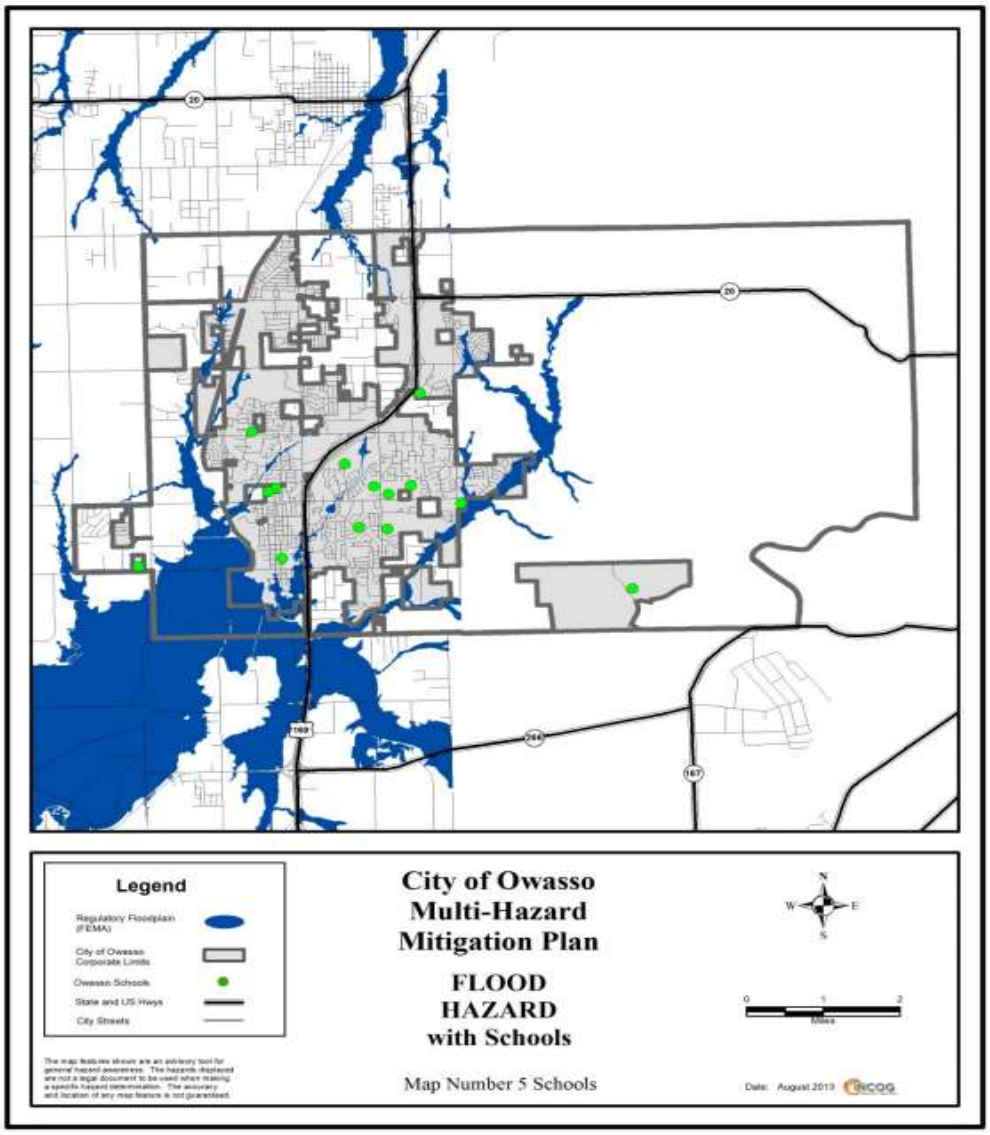

Legend
Regulatory Floodplain (FEMA)
City of Owasso Corporate Limits
Owasso Schools
State and US Hwys
City Streets
City of Owasso
Multi-Hazard
Mitigation Plan
FLOOD
HAZARD
with Schools
Map Number 5 Schools
N
W
E
S
0
1
2
Miles
Date: August 2013
INCOG

Figure 10

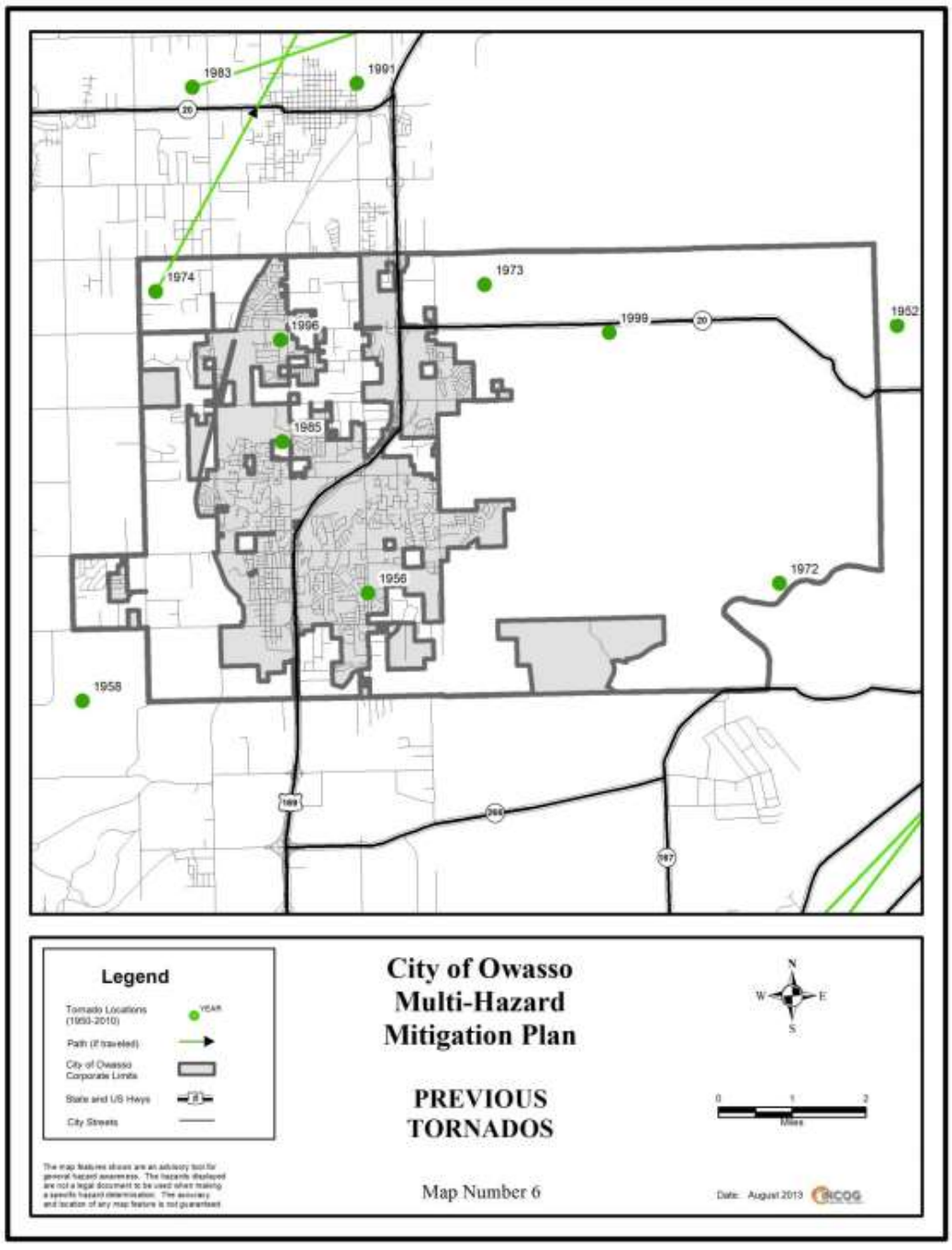
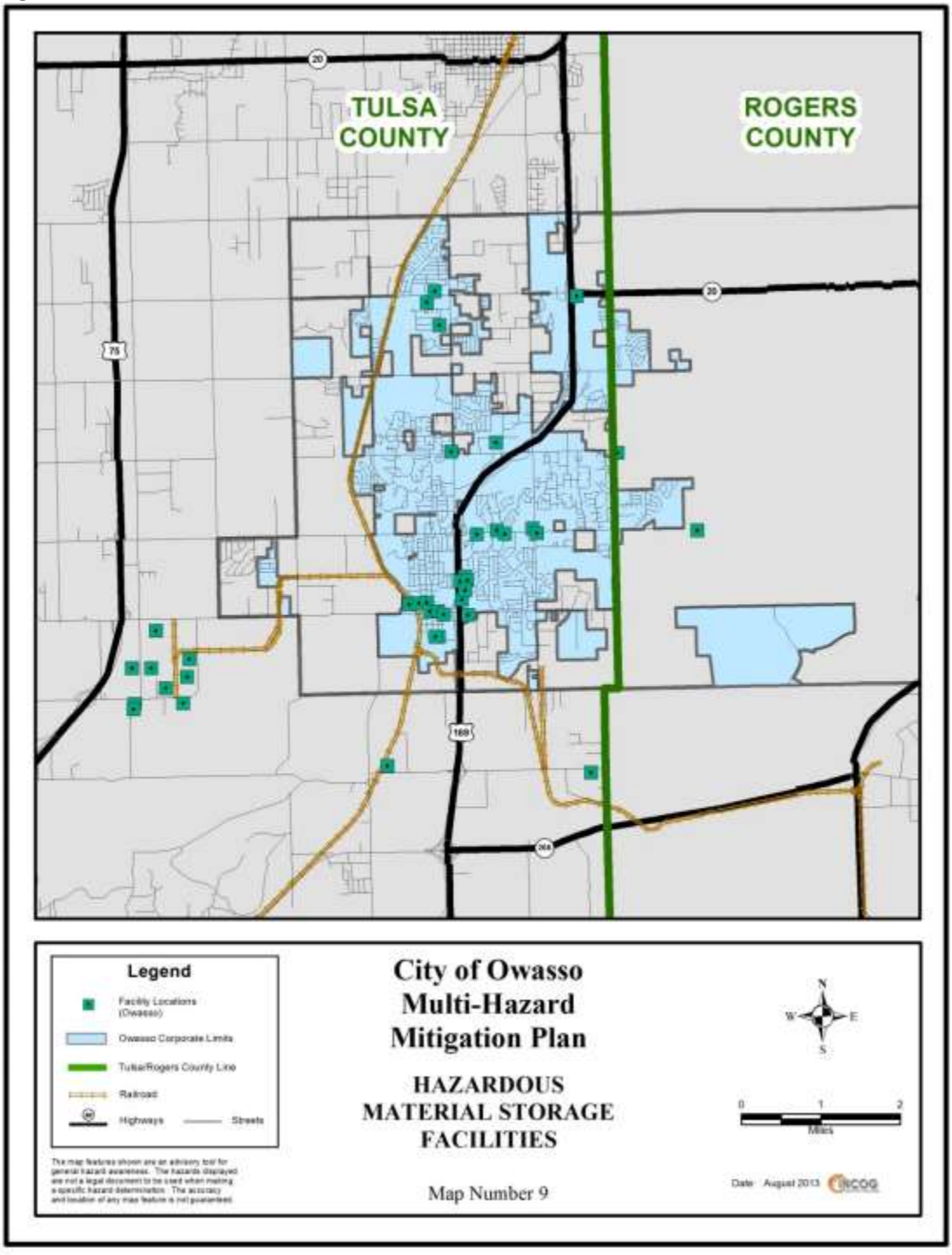

1983
1991
1974
1973
1999
1952
1996
1985
1956
1972
1958
Legend
Tornado Locations (1950-2010)
YEAR
Path (if traveled)
City of Owasso Corporate Limits
State and US Hwys
City Streets
City of Owasso Multi-Hazard Mitigation Plan
PREVIOUS TORNADOS
Map Number 6
N
W
E
S
0
1
2
Miles
Date: August 2013
INCOG

Figure 11


TULSA COUNTY
ROGERS COUNTY
Legend
Facility Locations (Owasso)
Owasso Corporate Limits
Tulsa/Rogers County Line
Railroad
Highways
Streets
City of Owasso
Multi-Hazard
Mitigation Plan
HAZARDOUS
MATERIAL STORAGE
FACILITIES
Map Number 9
N
W
E
S
0
1
2
Miles
Date: August 2013
INCOG

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

The cities of Tulsa, Broken Arrow, Owasso, Jenks, and Bixby all have an online storm shelter registries. However no estimates were found of total shelters registered.
Bixby Online registration:

http://www.bixby.com/pdf/storm_shelter_form.pdf

Broken Arrow Online registration:

http://www.brokenarrowok.gov/index.aspx?nid=398

Glenpool – call to register:

Community Development Department -- 918-322-5409

Tulsa & Unincorporated Tulsa County -- Tulsa Area Emergency Management Agency -- 918-596-9899

Sand Springs online registration:

https://ok-sandsprings.civicplus.com/MyAccount?from=Url&url=/FormCenter/Police-Department-3/Storm-Shelter-Registration-Form-58&anchor=&validationMessage=

City of Tulsa Online registration:

https://www.cityoftulsa.org/public-safety/storm-shelter-registration.aspx

City of Jenks Online registration:

http://www.jenks.com/city/storm-shelter-registry

C.2.1.3 Public Policy and Governance to Build Disaster Resiliency

Numerous municipalities within Tulsa County have adopted the International Building Code and regulate development within floodways. Many of these municipalities have adopted local policies to address flood-related issues within their communities.

C.2.1.4 Local Emergency Response Agency Structure

During an emergency, the EOC may effectively become the seat of City government for the duration of the crisis. Day-to-day functions that do not contribute directly to response actions may be suspended for the duration of the emergency.

The Tulsa County Hazard Mitigation Planning Committee is made up of 17 individuals; each representing city departments, schools, and external parties.

According to the proposed 2015 Tulsa County HMP, the primary point of contact is the Director of the Tulsa Area Emergency Management Agency. The Second contact is the Deputy Director.

C.2.1.5 Threat & Hazard Warning Systems

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

- ☐ Sirens - Agency operates 84 sirens in the outdoor warning system, some of which are in the City of Tulsa, others located in unincorporated areas of Tulsa County. The Coverage area for a single siren is 4,100ft. The City of Bixby operates 15 sirens with coverage throughout city jurisdiction.
- ☐ Phone notification (TulsaAlert: call, email, or text alerts.)
- ☐ Emergency Broadcast System (EAS- utilizes FM, AM, and TV broadcast stations.)
- ☐ Flood Alert System that monitors rainfall and stream levels.

Figure 12

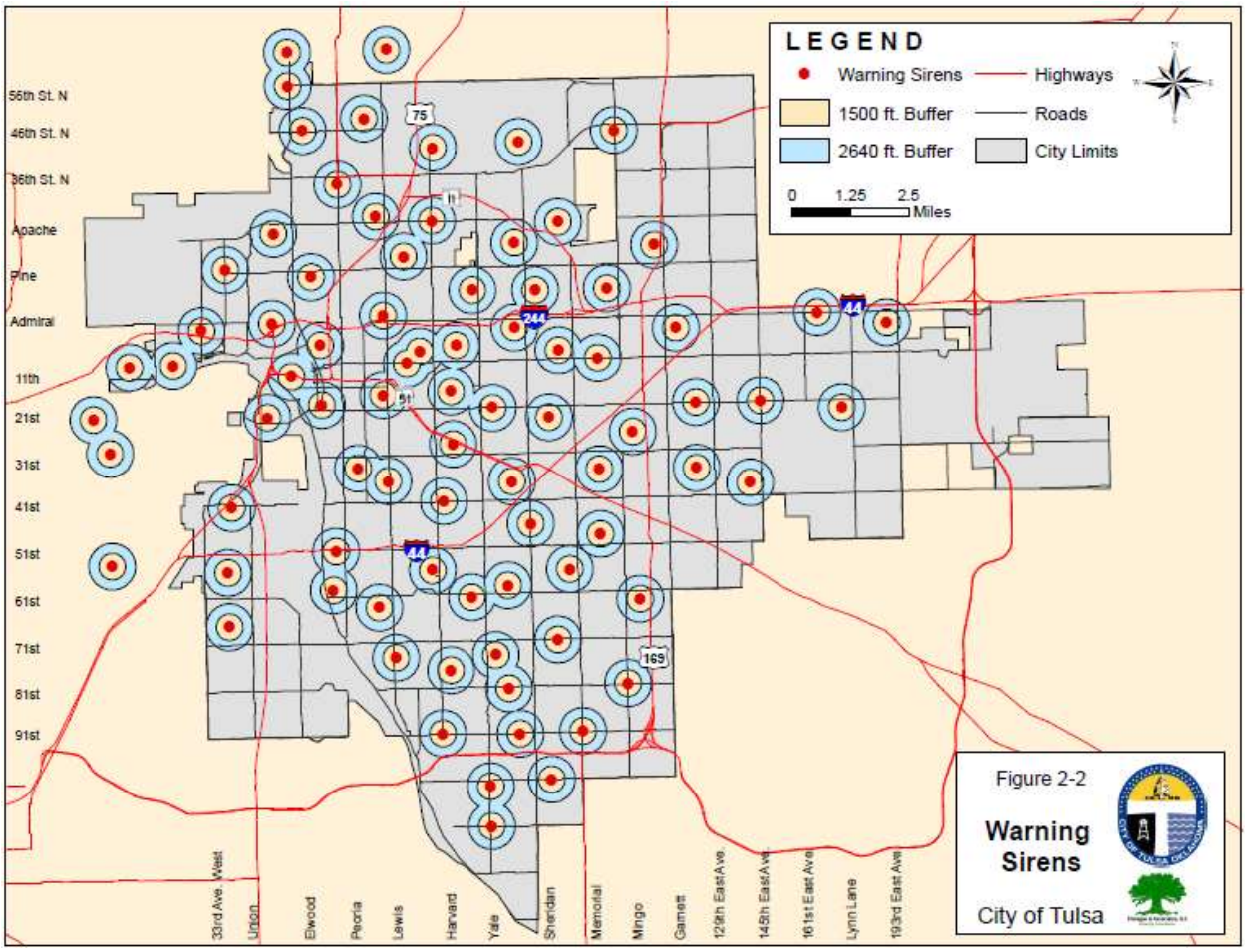
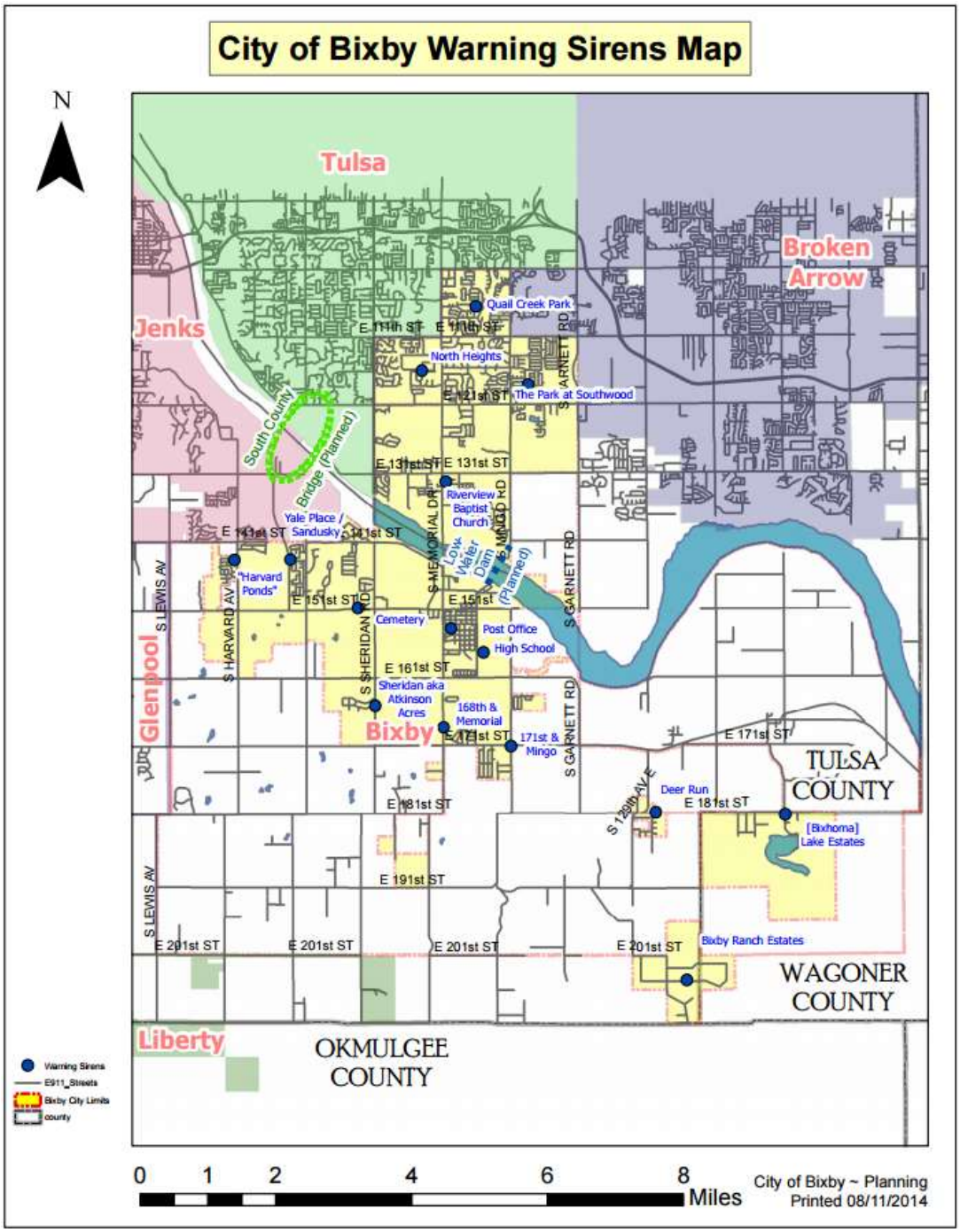


Figure 13



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.

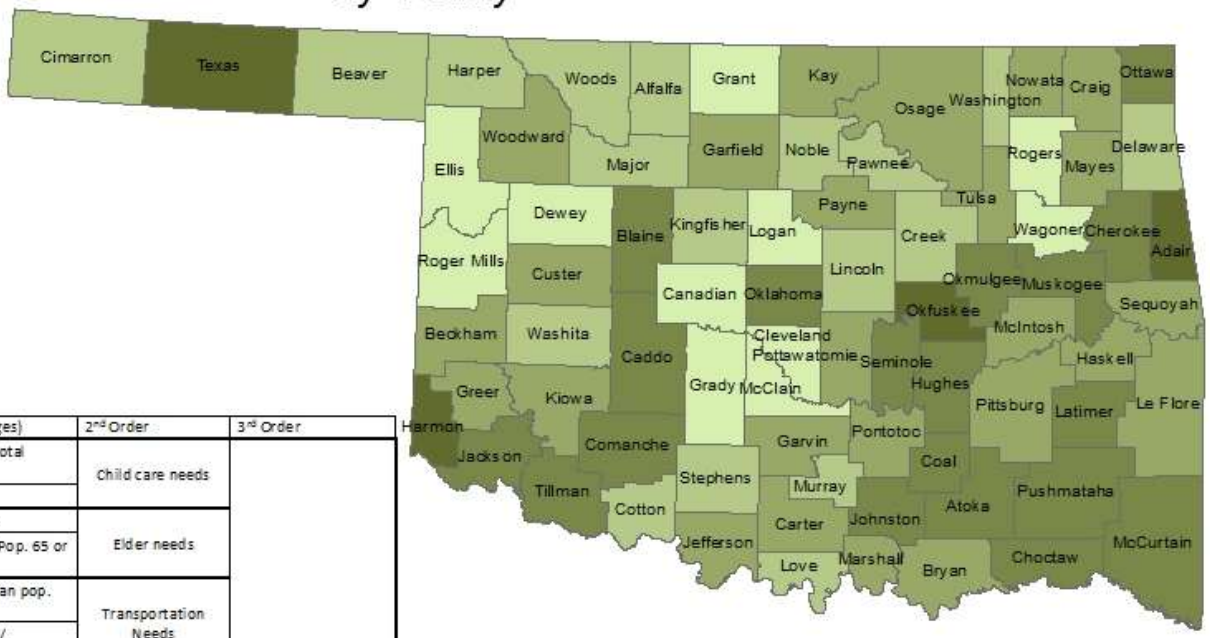
Social Vulnerability Analysis - Tulsa County

Base Social Vulnerability Indicators (%)		2nd Order	3rd Order
1.) Single Parent Households	17.39%	0.248 (Child Care Needs)	**3.369 Social Vulnerability 'Hotspot' or Area of Concern**
2.) Population Under 5	7.43%		
3.) Population 65 or Above	12.31%	0.206 (Elder Needs)	
4.) Population 65 or Above & Below Poverty Rate	8.27%		
5.) Workers Using Public Transportation	0.77%	0.075 (Transportation Needs)	
6.) Occupied Housing Units w/o Vehicle	6.69%		
7.) Housing Unit Occupancy Rate	89.40%	2.58 (Temporary Shelter and Housing Recovery Needs)	
8.) Rental Occupancy Rate	39.06%		
9.) Non-White Population	35.17%		
10.) Population in Group Quarters	1.47%		
11.) Housing Units Built Prior to 1990	74.26%		
12.) Mobile Homes, RVs, Vans, etc.	2.78%		
13.) Poverty Rate	15.90%		
14.) Housing Units Lacking Telephones	1.94%	0.261 (Civic Capacity Needs)	
15.) Age 25+ With Less Than High School Diploma	11.40%		
16.) Unemployment Rate	7.14%		
17.) Age 5+ Which Cannot Speak English Well or Not At All	5.57%		

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

Social Vulnerability Index

By County



Levels of Social Vulnerability Analysis

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

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

Legend

Social Vulnerabiity "Hot Spots"

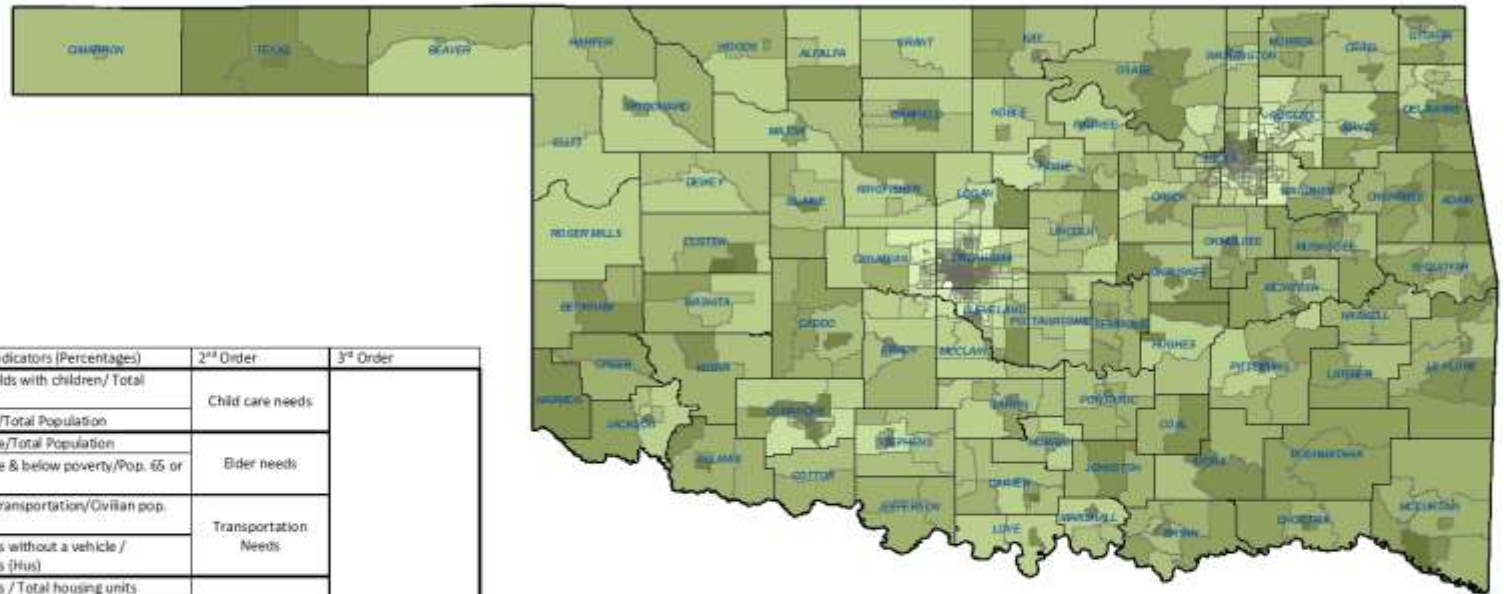
- 2.6340 - 2.9760
- 2.9761 - 3.2170
- 3.2171 - 3.4180
- 3.4181 - 3.6370
- 3.6371 - 3.9500

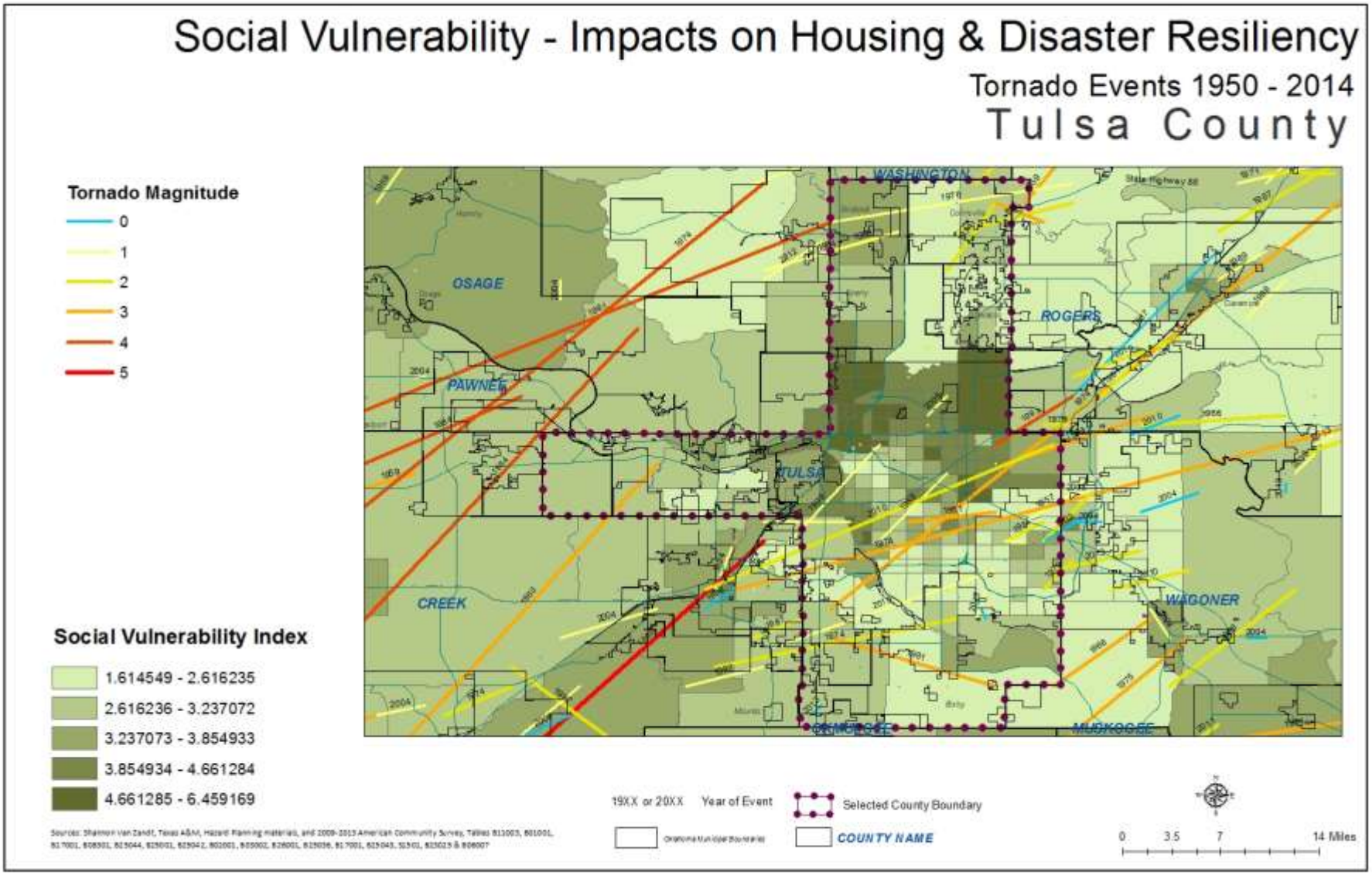
0 25 50 100 Miles

Social Vulnerability - Impacts on Housing & Disaster Resiliency

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

Sources: Shannon van Zandt, Texas A&M, Hazard Planning materials, and 2009-2013 American Community Survey, Tables B11003, B00000, B17001, B08301, B25044, B25031, B25043, B01001, B03002, B26001, B25058, B17001, B25043, S1501, B25025 & B06007




Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Tulsa County
Tornado Magnitude
0
1
2
3
4
5
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
WASHINGTON
OSAGE
ROGERS
PAWNEE
TULSA
CREEK
WAGONER
MUSKOGEE
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3.5 7 14 Miles

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

This county falls about average per this index for social vulnerability when comparing as a county to other counties in the state. Looking at the census tract level, Tulsa – particularly North Tulsa – has increased social vulnerability. Combine that with the tornados, as one physical hazard or event that occurs, people in these areas may have additional difficulties during an event due to transportation and family needs. Additionally recovery for socially vulnerable populations can be slow and may require additional outside assistance.

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.
- Pursue grants and funding for public storm shelters. 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 Tulsa 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 501 Tulsa City & County/Broken Arrow

The OK 501 CoC represents the city and county of Tulsa, as well as the city of Broken Arrow. Similar to all the other CoC data sets, most of the homeless include households without children. The majority of the homeless population is over 24 years of age. In this region, the largest homeless subpopulations includes the mentally ill, chronic substance abusers, veterans and victims of domestic violence. Of these subpopulations, the mentally ill and chronic substance abusers are the least sheltered.

There are a variety of shelter types available to the homeless in the Tulsa City & County/Broken Arrow. More than 350 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 and substance abusers.

OK 501 Tulsa City & County/Broken Arrow	**Emergency Shelter(sheltered)**	**Transitional Housing(sheltered)**	**Unsheltered**	**Total**
Households without children	451	174	97	722
Households with at least 1 adult & 1 child	40	44	2	86
Households with only children	3	0	1	4
total homeless households	494	218	100	812
Persons in households without children	459	174	97	730
persons age 18-24	31	27	34	92
persons over age 24	428	147	63	638
Persons in households with at least 1 adult & 1 child	135	137	4	276
children under age 18	91	80	2	173
persons age 18-24	6	5	0	11
persons over 24	38	52	2	92
persons in households with only 1 children	3	0	1	4
Total homeless persons	597	311	102	1010
Subpopulations	**Sheltered**		**Unsheltered**	**Total**
Chronically Homeless	60		39	99
Chronically Homeless Individuals	60		39	99
Chronically Homeless Persons in Families	0		0	0
Severely Mentally Ill	289		49	338
Chronic Substance Abuse	169		24	193
Veterans	101		13	114
HIV/AIDS	3		1	4
Victims of Domestic Violence	101		8	109

CoC Number: OK-501

CoC Name: Tulsa City & County/Broken Arrow CoC

Summary of all beds reported by Continuum of Care:

							Subset of Total Bed Inventory		
	Family Units[1]	Family Beds[1]	Adult-Only Beds	Child-Only Beds	Total Yr-Round Beds	Seasonal	Overflow / Voucher	Chronic Beds[2]	Veteran Beds[3]	Youth Beds[4]
Emergency, Safe Haven and Transitional Housing	**91**	**328**	**541**	**5**	**874**	**0**	**99**	**n/a**	**52**	**28**
Emergency Shelter	57	186	337	5	528	0	99	n/a	0	5
Safe Haven	n/a	n/a	50	n/a	50	n/a	n/a	n/a	13	0
Transitional Housing	34	142	154	0	296	n/a	n/a	n/a	39	23
Permanent Housing	**8**	**22**	**344**	**0**	**366**	**n/a**	**n/a**	**153**	**116**	**0**
Permanent Supportive Housing*	8	22	344	0	366	n/a	n/a	153	116	0
Grand Total	**99**	**350**	**885**	**5**	**1,240**	**0**	**99**	**153**	**168**	**28**

CoC beds reported by Program Type:

Emergency Shelter for Families[1]

									Subset of Total Bed Inventory		
Provider Name	Facility Name	Family Units[1]	Family Beds[1]	Adult-Only Beds	Child-Only Beds	Seasonal	Overflow / Voucher	Total Beds	Chronic Beds[2]	Veteran Beds[3]	Youth Beds[4]
Tulsa County Social Services	Emergency Shelter	26	65	0	0	0	0	65	n/a	0	0
Total		**26**	**65**	**0**	**0**	**0**	**0**	**65**	**n/a**	**0**	**0**

COC Conclusion

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

A Snap Shot of Homelessness in the State

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

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

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

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

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

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

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

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

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

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

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

State Name: Oklahoma
Point-in Time Date: 1/29/2015

Summary by household type reported:

	Sheltered		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 children[1]	**1,676**	**397**	**623**	**2,696**
Persons Age 18 to 24	214	61	110	385
Persons Over Age 24	1,462	336	513	2,311
Persons in households with at least one adult and one child[2]	**595**	**293**	**108**	**996**
Children Under Age 18	373	176	57	606
Persons Age 18 to 24	40	29	13	82
Persons Over Age 24	182	88	38	308
Persons in households with only children[3]	**38**	**0**	**47**	**85**
Total Homeless Persons	**2,309**	**690**	**778**	**3,777**

Demographic summary by ethnicity:

	Sheltered		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.

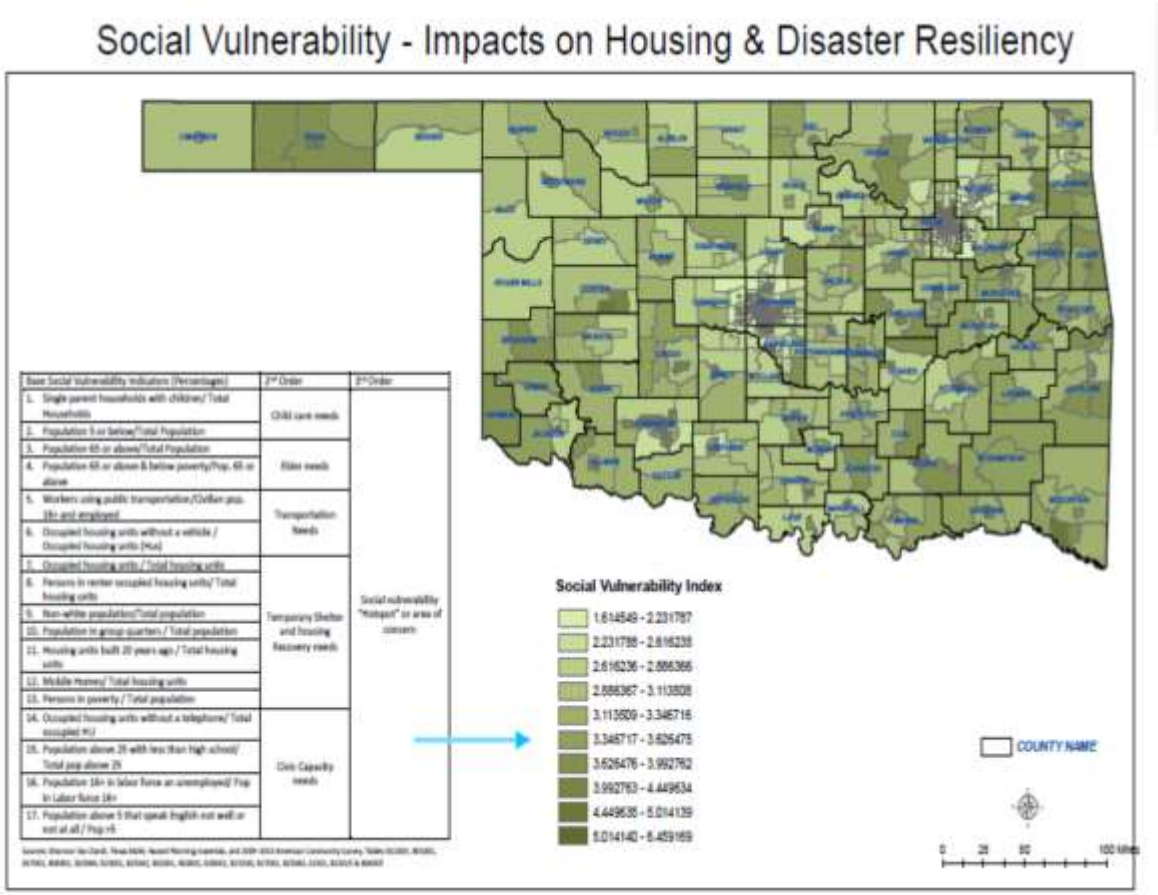
It is not surprising that rural areas typically lack both emergency shelters and temporary housing options. Services that provide temporary housing and provide relief and support services for those who cannot find food are virtually nonexistent in rural communities across the United States (Moore, 2001).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



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

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

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

Findings and Recommendations

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

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

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

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

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

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

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

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

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

Works Cited

Continuum of Care Network Pamphlet. 2015

Cummins, L. K., R. J. First, and B. G. Toomey. "Comparisons of Rural and Urban Homeless Women." *Affilia* 13.4 (1998): 435-53. Web. 24 Oct. 2015.

First, Richard J., John C. Rife, and Beverly G. Toomey. "Homelessness in Rural Areas: Causes, Patterns, and Trends." *Social Work* 39.1 (1994): 97-108. Web. 24 Oct. 2015.

Fitchen, Janet M. "Homelessness in Rural Places: Perspectives from Upstate New York." *Urban Anthropology and Studies of Cultural Systems and World Economic Development* 20.2 (1991): 177-210. Institute, Inc. Web. 23 Oct. 2015.

Levinson, David, and Marcy Ross. *Homelessness Handbook*. N.p.: Berkshire Group, 2007.

Milbourne, Paul, and Paul J. Cloke. *International Perspectives on Rural Homelessness*. London: Routledge, 2006.

Moore, Robert M. *The Hidden America: Social Problems in Rural America for the Twenty-first Century*. Selinsgrove: Susquehanna UP, 2001.

Rollinson, Paul A., and John T. Pardeck. *Homelessness in Rural America: Policy and Practice*. New York: Haworth, 2006.

Vissing, Yvonne Marie. *Out of Sight, out of Mind: Homeless Children and Families in Small-town America*. Lexington, KY: U of Kentucky, 1996.

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).

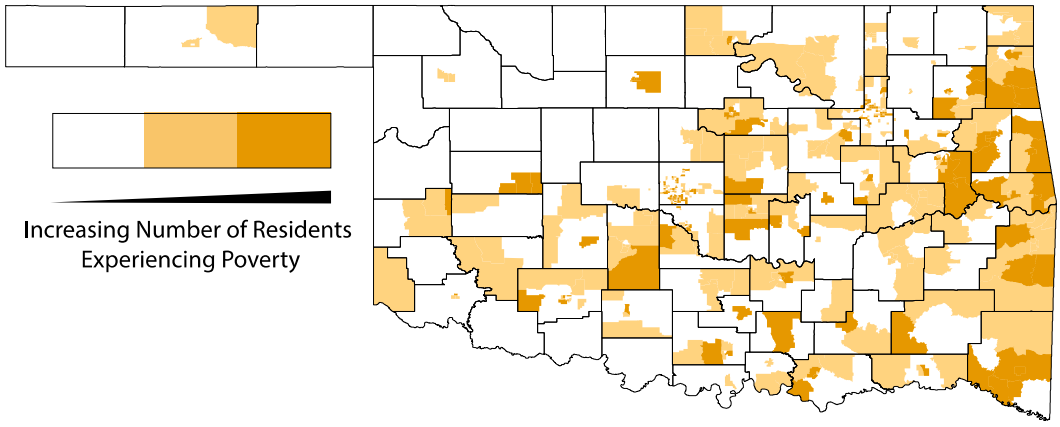
1. Urban/Rural

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

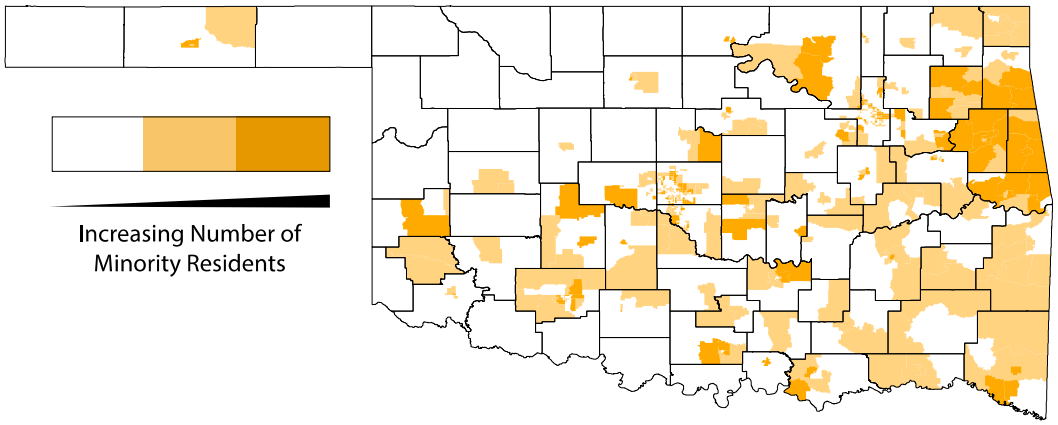
Approximately 70% of affordable housing units in Oklahoma are located in census tracts where the number of residents living in poverty is above the state average. About half of these units are located in areas of extreme poverty, where the number of individuals who are economically vulnerable exceeds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

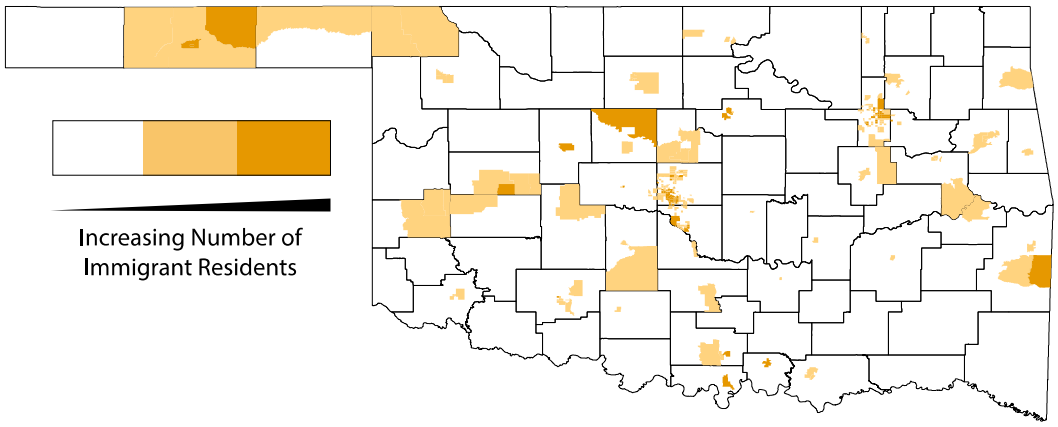
Just over 60% of affordable housing units in Oklahoma are located in census tracts where a majority of the residents are non-white. With just fewer than 24% of the total affordable housing units in census tracts heavily populated with residents who are not white – identified as census tracts where the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

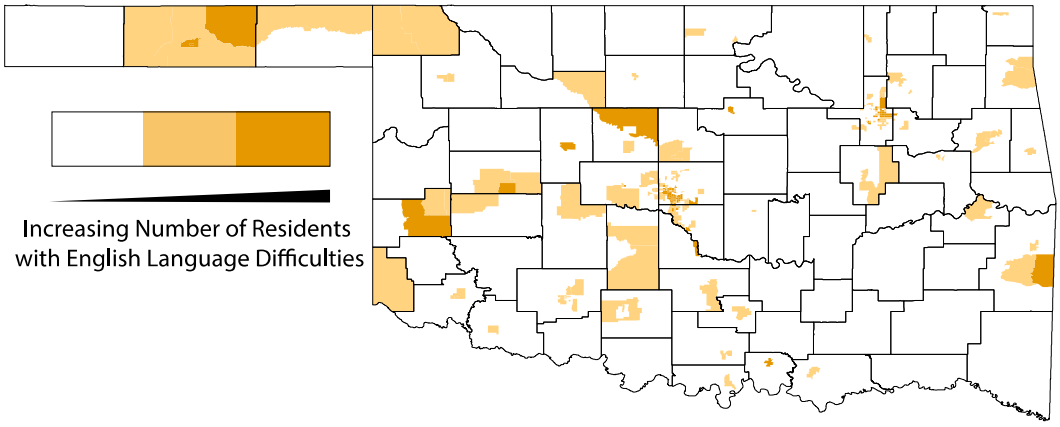
One-third of affordable housing units in Oklahoma are located in census tracts where more than the average number of residents are immigrants. About half of these units are located in areas dense with immigrants, where the number of individuals who are not citizen exceeds 349, more than one standard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

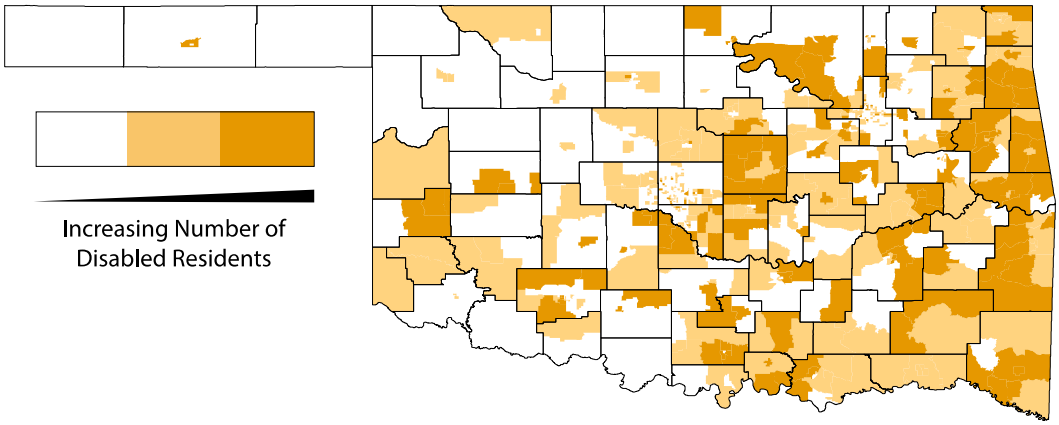
Almost 17,000 existing affordable housing units in Oklahoma are located in census tracts where more residents than average do not speak English very well. A little more than half of these units are located in areas dense with individuals with limited English proficiency, where the number of individuals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

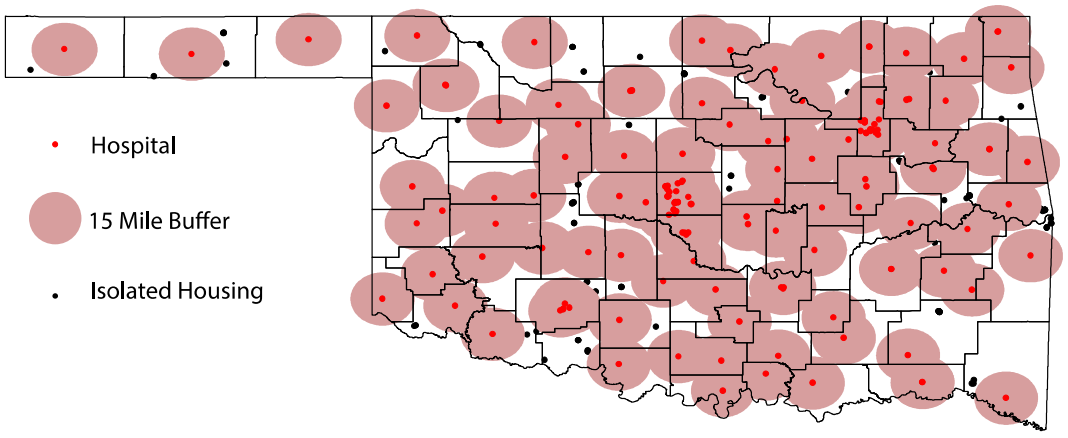
Almost 60% of existing affordable housing units in Oklahoma are located in census tracts where more residents than average have a disability. A little more than half of these units are located in areas dense with individuals with a disability, where the number of individuals who are disabled is greater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

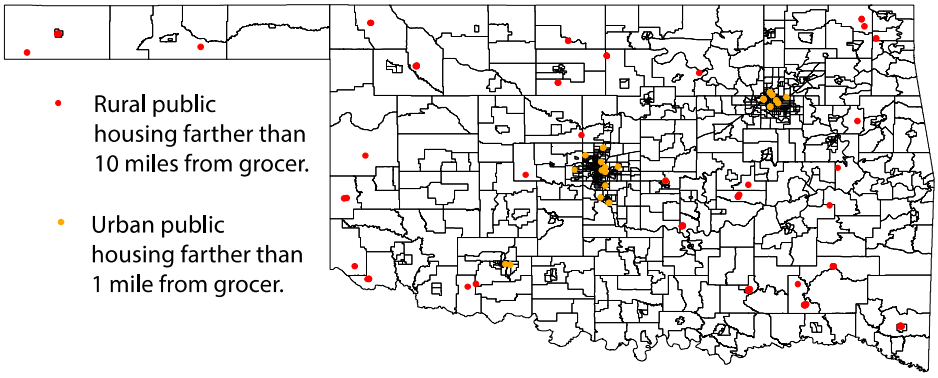
There are no affordable housing units more than 30 miles from a hospital. Approximately 2.6% of affordable housing units are farther than 15 miles from the nearest hospital. As indicated by the larger percentage of Rural Rental Housing Loan units, most of these are located in rural areas.



	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

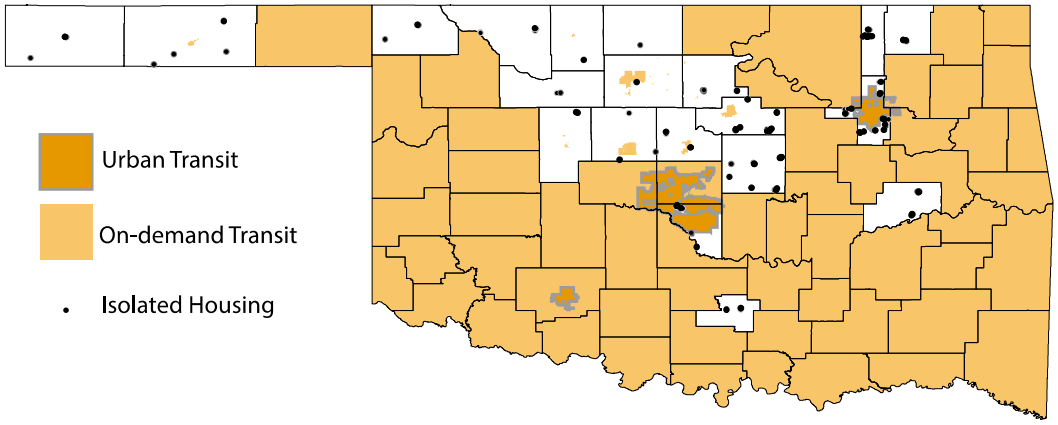
Approximately 7.8% of affordable housing units are in areas that are classified as food deserts. According to the United States Department of Agriculture, food deserts exist in urban environments further than 1 mile from a grocery store and in rural environments further than 10 miles from a grocery store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

Bibliography

Bostic, R. 2015. A clear SCOTUS statement on disparate impact and AFFH. Rooflines: the Shelterforce blog, 15 July. Retrieved from http://www.rooflines.org/4181/a_clear_scotus_statement_on_disparate_impact_and_affh/

Clarke P., Morenoff J., Debbink M., Golberstein E., Elliott M.R., Lantz P.M. 2014. Cumulative exposure to neighborhood context: consequences for health transitions over the adult life course. Research on Aging. 36(1):115-142.

Goetz, E.G. 2015. From Breaking Down barriers to Breaking Up Communities: the expanding spatial strategies of fair housing advocacy. Urban Affairs Review 51(6): 820-842.

Housing Authority of El Paso. 2015. Eastside Crossings. Retrieved from http://www.hacep.org/about-us/eastside-crossings

United States Department of Housing and Urban Development. 2015. Federal Register 80(136): 42272-42371. Retrieved from https://www.gpo.gov/fdsys/pkg/FR-2015-07-16/pdf/2015-17032.pdf

United States Department of Housing and Urban Development. 2014. Housing's and Neighborhoods' Role in Shaping Children's Future. Evidence Matters. Retrieved from https://www.huduser.gov/portal/periodicals/em/fall14/highlight1.html

Lens, M.C. 2015. Measuring the Geography of Opportunity. Progress in Human Geography. doi: 10:1177/0309132515618104

Theodos, B., S. Popkin, E. Guernsey, & L Getsinger. 2010. Inclusive Public Housing: Services for the Hard to House. Washington: Urban Institute. Retrieved from http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412035-Inclusive-Public-Housing-Services-for-the-Hard-to-House.PDF

Vellinga, M.L. 2015. This Week: Warehouse Artists Lofts gets Grand Opening Thursday. Sacramento Bee. April 5. Retrieved from http://www.sacbee.com/news/local/article17467076.html

Data Sources

2014 American Community Survey Estimates

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

University of Oklahoma Center for Spatial Analysis: Data Warehouse

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

University of Oklahoma Division of Regional and City Planning

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

Appendix 1: County affordable housing Summaries

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

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

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

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

Lead-Based Paint Hazards

Findings / Health and Well-being

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

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

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

Statewide Findings

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

Lead-Based Paint Hazards in Oklahoma

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

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

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

Disaster Resiliency/ Economy and Society, Infrastructure and Environment

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

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

Leadership and Strategy

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

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

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

Survey of Previous Lead-based Paint Studies

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

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

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

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

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

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

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

Tulsa County Findings

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

Total Housing Units in Tulsa 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	65,893	3.57%	2,349
1960-1977	39,897	11.18%	4,461
1940-1959	31,915	38.48%	12,279
1939 or Earlier	10,875	63.38%	6,892
Total	**148,580**	**17.49%**	**25,982**
Total Renter-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	38,689	3.57%	1,379
1960-1977	32,031	11.18%	3,582
1940-1959	14,940	38.48%	5,748
1939 or Earlier	5,435	63.38%	3,445
Total	**91,095**	**15.54%**	**14,154**
Total Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	104,582	3.57%	3,728
1960-1977	71,928	11.18%	8,043
1940-1959	46,855	38.48%	18,028
1939 or Earlier	16,310	63.38%	10,337
Total	**239,675**	**16.75%**	**40,136**

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

Housing Units in Tulsa 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	4,710	3.57%	168
1960-1977	5,085	11.18%	569
1940-1959	5,930	38.48%	2,282
1939 or Earlier	2,000	63.38%	1,268
Total	**17,725**	**24.18%**	**4,286**
Renter-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	14,205	3.57%	506
1960-1977	13,815	11.18%	1,545
1940-1959	6,415	38.48%	2,468
1939 or Earlier	2,215	63.38%	1,404
Total	**36,650**	**16.16%**	**5,923**
Total Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	18,915	3.57%	674
1960-1977	18,900	11.18%	2,113
1940-1959	12,345	38.48%	4,750
1939 or Earlier	4,215	63.38%	2,671
Total	**54,375**	**18.78%**	**10,209**

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

Housing Units in Tulsa 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	5,994	3.57%	214
1960-1977	6,246	11.18%	698
1940-1959	6,185	38.48%	2,380
1939 or Earlier	1,685	63.38%	1,068
Total	**20,110**	**21.68%**	**4,360**
Renter-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	8,671	3.57%	309
1960-1977	8,015	11.18%	896
1940-1959	3,455	38.48%	1,329
1939 or Earlier	1,200	63.38%	761
Total	**21,340**	**15.44%**	**3,295**
Total Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	14,665	3.57%	523
1960-1977	14,261	11.18%	1,595
1940-1959	9,640	38.48%	3,709
1939 or Earlier	2,885	63.38%	1,828
Total	**41,450**	**18.47%**	**7,655**

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

To conclude, we estimate that there are a total of 40,136 homes in Tulsa County containing lead-based paint hazards, 25,982 owner-occupied and 14,154 renter-occupied. Of the 40,136 homes in the county estimated to have lead-based paint hazards, 10,209 are estimated to be occupied by households with low-incomes (incomes less than 50% of Area Median Income), and 7,655 are estimated to be occupied by households with moderate incomes (between 50% and 80% of Area Median Income), for a total of 17,864 housing units in Tulsa 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 Tulsa 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 Tulsa 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	3,739	3.57%	133
1940-1977	7,097	19.98%	1,418
1939 or Earlier	625	63.38%	396
Total	**11,460**	**16.99%**	**1,947**
Housing Units 50%-80% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	2,872	3.57%	102
1940-1977	4,888	19.98%	976
1939 or Earlier	430	63.38%	273
Total	**8,190**	**16.50%**	**1,351**
Total LMI Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	6,611	3.57%	236
1940-1977	11,984	19.98%	2,394
1939 or Earlier	1,055	63.38%	669
Total	**19,650**	**16.79%**	**3,299**
Total Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	19,410	3.57%	692
1940-1977	20,145	19.98%	4,025
1939 or Earlier	2,245	63.38%	1,423
Total	**41,800**	**14.69%**	**6,139**

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

As shown, we estimate there are 6,139 housing units in Tulsa County with lead-based paint hazards and children under the age of six present, and that 3,299 of those housing units are occupied by families with low to moderate incomes.

Research Footnotes/Sources

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

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

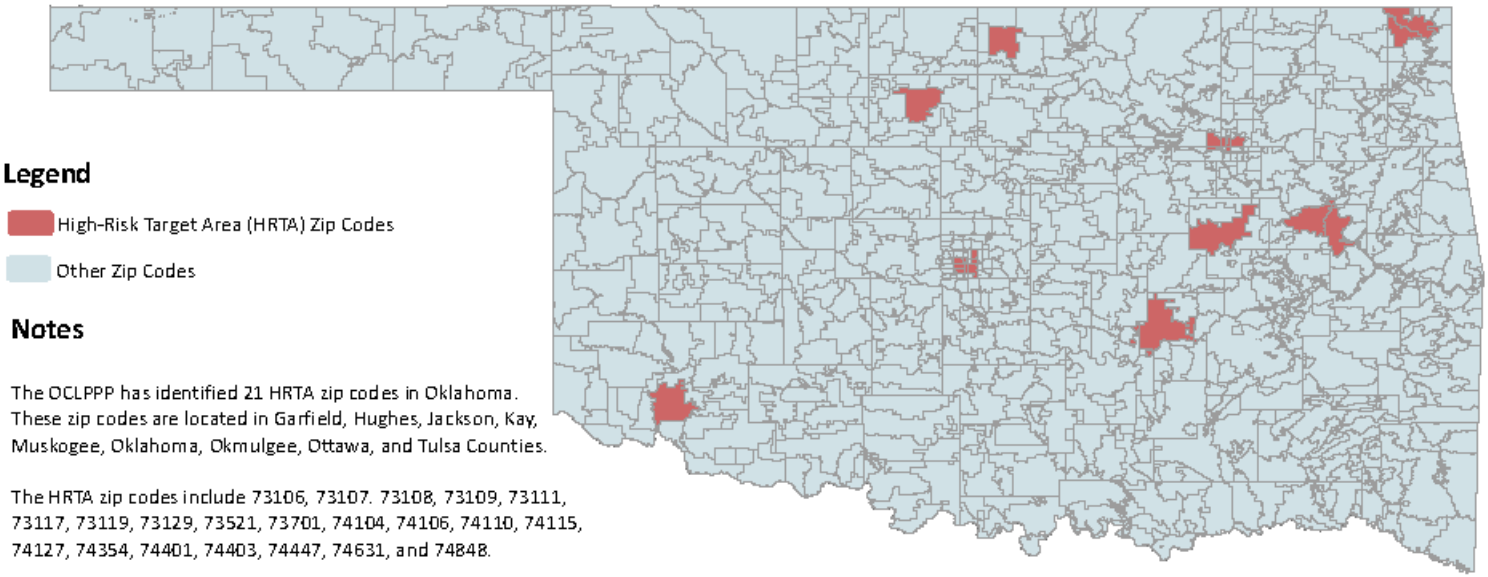
U.S. Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, “American Healthy Homes Survey, Lead and Arsenic Findings”, April 2011

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

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

Exhibit #1

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



Legend

High-Risk Target Area (HRTA) Zip Codes

Other Zip Codes

Notes

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

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

The HRTA zip codes are identified using the following criteria:

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

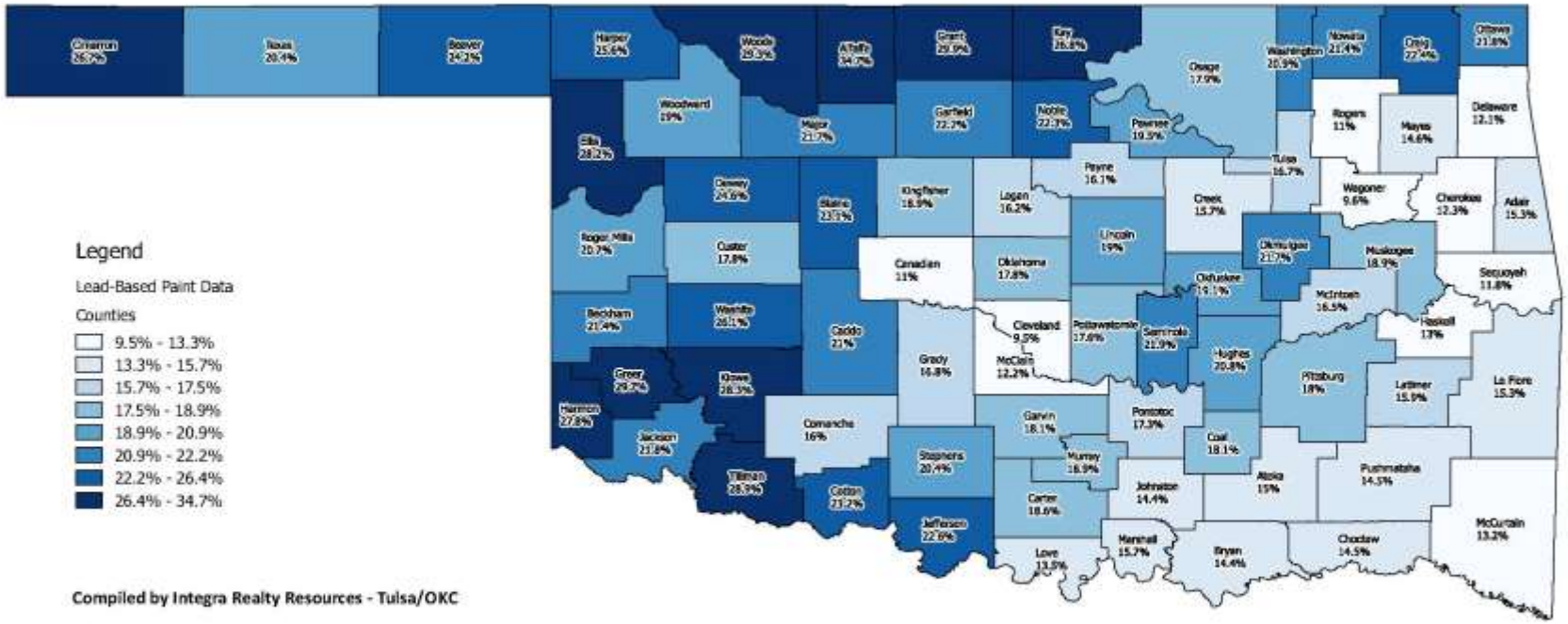
0 40 80 160 Miles

N W E S

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

Exhibit #2

Percentage of Housing Units Containing Lead-Based Paint Hazards

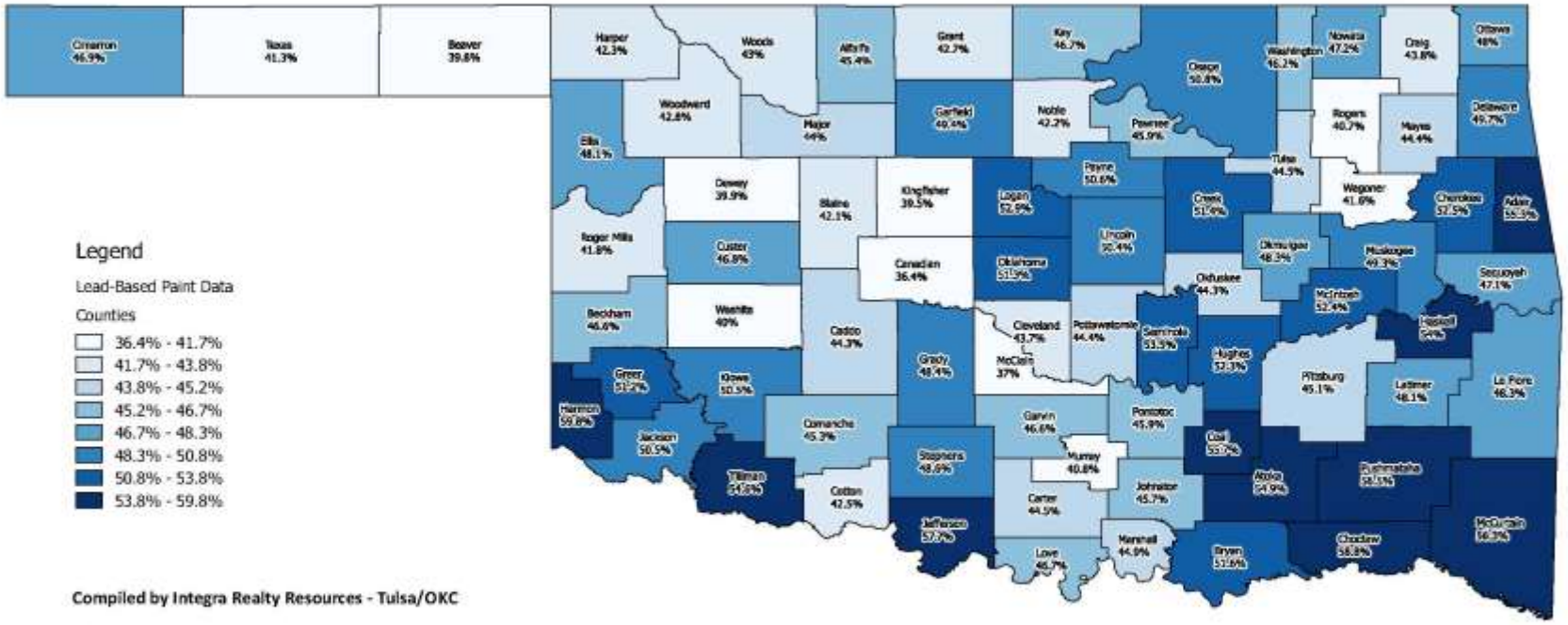


Compiled by Integra Realty Resources - Tulsa/OKC

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

Exhibit #3

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

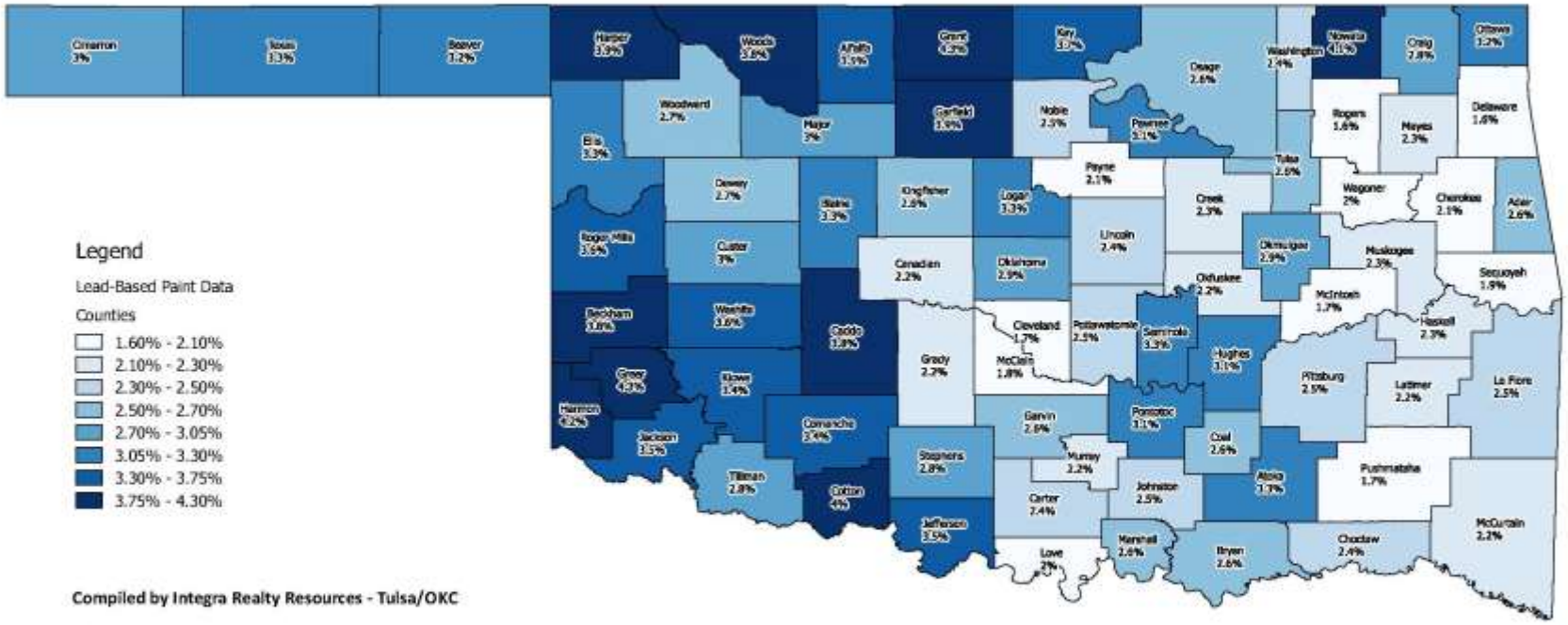


Compiled by Integra Realty Resources - Tulsa/OKC

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

Exhibit #4

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

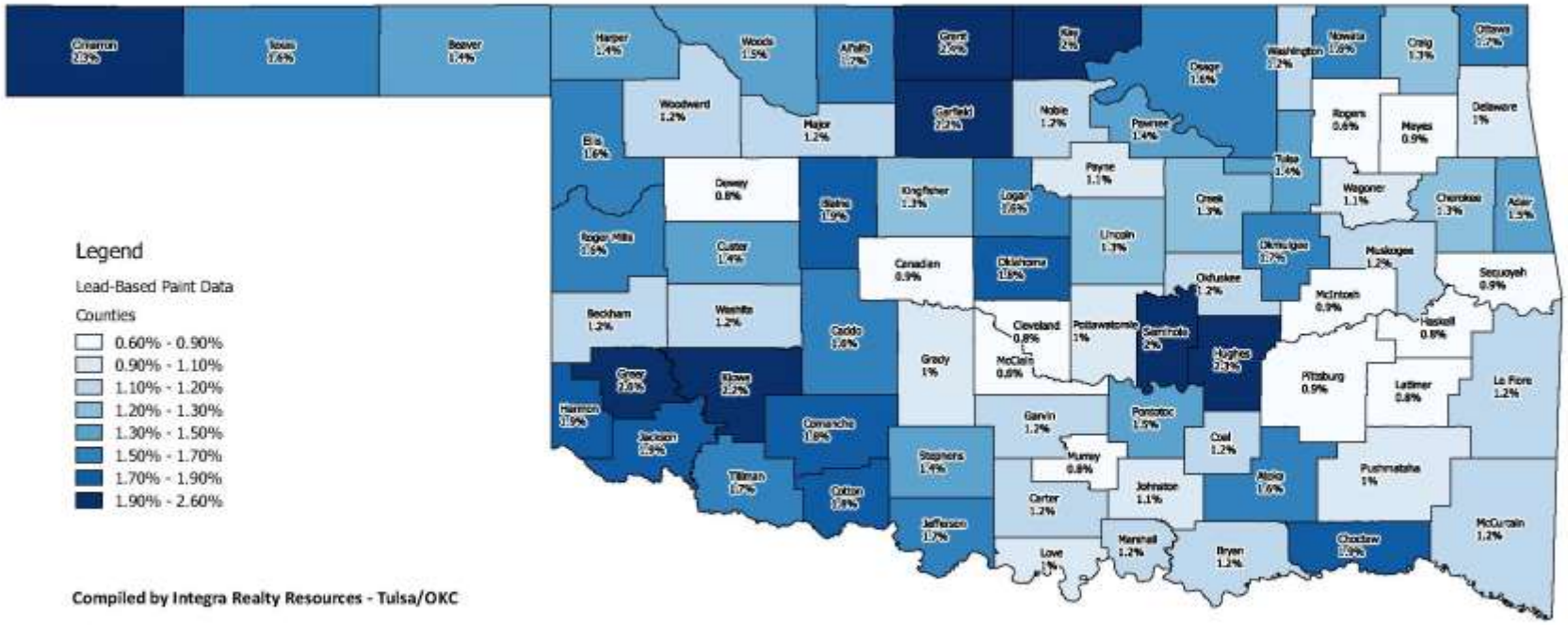


Compiled by Integra Realty Resources - Tulsa/OKC

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

Exhibit #5

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

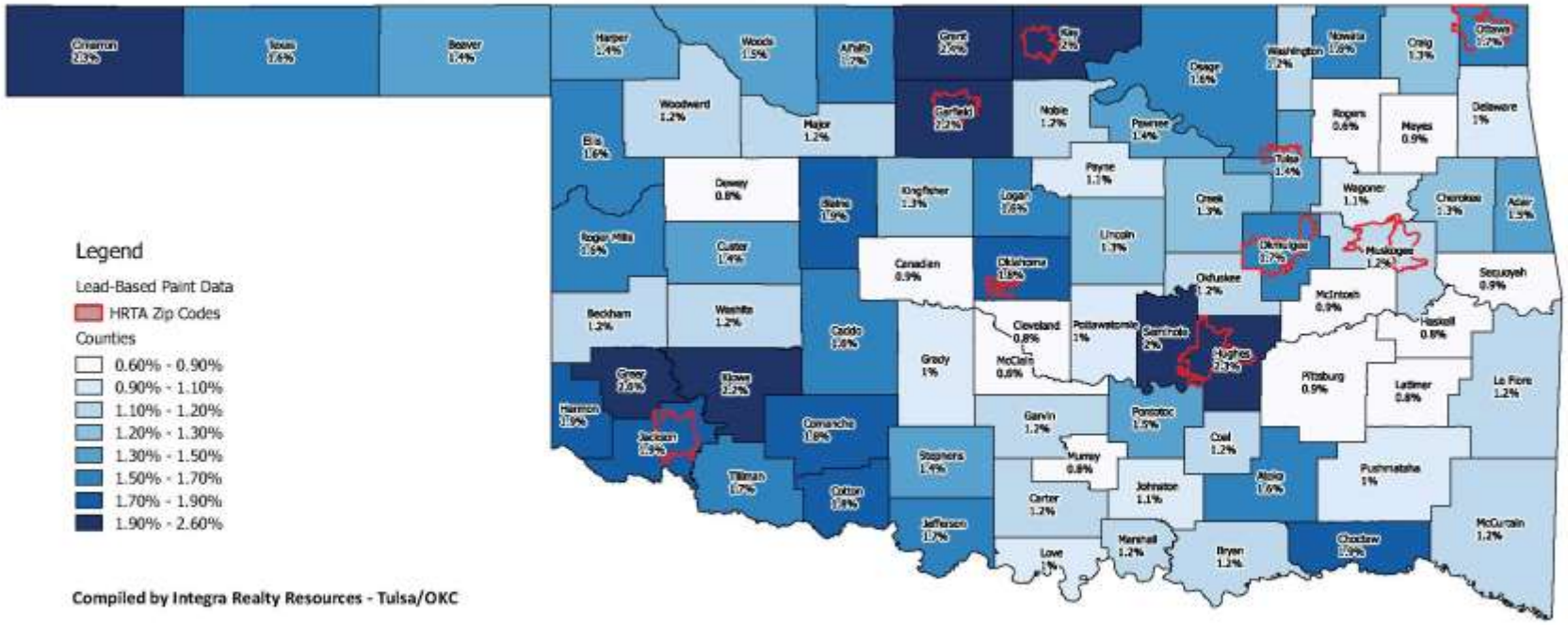


Compiled by Integra Realty Resources - Tulsa/OKC

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

Exhibit #6

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



Compiled by Integra Realty Resources - Tulsa/OKC

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

Conclusions

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

Tulsa County has undergone strong growth over the last fifteen years, in terms of population, households and employment levels. Until recently, the oil and gas industry was a major driver of new growth in the region. New population and employment growth has been met with new housing construction, both for rent and for ownership. Though some growth has occurred in nearly all parts of the county, growth has been strongest in suburban areas of the county (Broken Arrow, Owasso, Bixby, Jenks, Glenpool and south Tulsa), as well as Tulsa's urban core.

New housing development (both for ownership and rent) has comprised housing units that are affordable, as well as substantially more expensive. Among housing units for ownership, new construction is most expensive in the areas of greatest growth and demand, noting that the average sale price of homes in Jenks constructed in 2014/2015 is estimated to be $336,059. New construction for ownership in downtown Tulsa primarily consists of condominiums and townhomes, with most priced starting at $300,000. These prices are all well above what could be afforded by a household earning less than median household income for Tulsa County, estimated to be $48,553 in 2015.

There has been significant new rental development in most areas of Tulsa County, with the largest new developments primarily in downtown/midtown Tulsa, as well as suburban communities such as Broken Arrow, Owasso, Jenks, Glenpool, and south Tulsa. Some new rental housing construction is affordable in nature, but the majority is not: we estimate that among housing units either currently under construction or planned for construction in the near future, less than 10% are affordable. However, we forecast that over the next five years, 4,898 rental housing units will be needed in Tulsa County, and that 2,397 will need to be affordable to households earning at or less than 60% of median household income for the county, or 44.9%.

Tulsa County has a relatively high rate of renters with high rent costs (42.74%) as well as homeowners with high ownership costs (20.77%). These figures are both above state averages, and will likely not improve in the near future as new housing construction remains largely priced above what could be afforded by typical households.

In terms of disaster resiliency we note that 67 tornadoes have impacted the county between 1959 and 2014, with 383 injuries and 15 fatalities combined. Data provided by the local Hazard Mitigation Plan indicates approximately 1,425 residential structures are within a floodplain.

Tulsa County is largely served by the Tulsa City/County Continuum of Care (CoC), which provides services to the area's homeless populations among other functions. Throughout the Tulsa City/County CoC, there are an estimated 1,010 homeless persons, 908 of which are estimated to be sheltered. The majority of this population is over the age of 24, with significant subpopulations among the mentally ill, chronic substance abusers, military veterans, and victims of domestic violence. The mentally ill and chronic substance abusers are the least likely to be sheltered among those populations.

In terms of fair housing issues, many affordable housing units are located in areas at risk for poverty, in primarily non-white enclaves, and in areas where limited English is spoken. 1,441 affordable housing units are considered to be in a food desert; in urban environments this is considered to be further than 1 mile from a grocery store. 2,220 units lack readily available public transit.

Due to the age of the county's housing stock, lead-based paint hazards are an issue, with an estimated 40,136 occupied housing units with such hazards, and 6,139 of those units occupied by low-to-moderate income households with children under the age of 6 present.

In summary, it is apparent that new housing in several categories is required in Tulsa County. While the upper end of the market is being satisfied, the lower end of the population that requires rental and moderate cost ownership property has a more limited product available. As the population continues to grow in Tulsa County as a whole, this demand will continue to increase. We estimate the county will need 7,642 housing units for ownership and 4,898 housing units for rent over the next five years, in order to accommodate projected population and household growth. These units should include a mixture of both market rate rental units, affordable housing units, and housing for ownership affordable to a range of incomes.

Addendum A

Acknowledgments

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

University of Oklahoma Intern Team

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

Federal Agencies

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

US Federal Emergency Management Agency, Harold Latham

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

Oklahoma State Agencies

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

Department of Human Services, Connie Schlittler

Department of Emergency Management Dara Hayes

Department of Commerce, Rebekah Zahn-Pittser

Local Organizations

Regional Council of Governments and Oklahoma Association of Regional Councils

Continuums of Care Network

Hazard Mitigation Plan personnel/administrators

Community economic development professionals

City Managers and Planners

Community Action Agencies

Chambers of Commerce

Affordable housing developers, owners and investors

Homeless Alliance, Dan Straughan, Sunshine Hernandez

Pathways, Patrice Pratt

Women's Resource Center, Vanessa Morrison

AIDS Care Fund, Sunshine Schillings

Addendum B

Qualifications

Owen S. Ard, MAI

Integra Realty Resources
Tulsa/OKC

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

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

irr.com

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

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

Integra Realty Resources
Tulsa/OKC

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

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

irr.com

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, 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 Jaggers, 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' Winius III, MAI, FRICS
PITTSBURGH, PA - Paul D. Griffith, MAI, CRE, FRICS
PORTLAND, OR - Brian A. Glanville, MAI, CRE, FRICS
PROVIDENCE, RI - Gerard H. McDonough, MAI, FRICS
RALEIGH, NC - Chris R. Morris, MAI, FRICS
RICHMOND, VA - Kenneth L. Brown, MAI, CCIM, FRICS
SACRAMENTO, CA - Scott Beebe, MAI, FRICS
ST. LOUIS, MO - P. Ryan McDonald, MAI, FRICS
SALT LAKE CITY, UT - Darrin W. Liddell, MAI, FRICS, CCIM
SAN DIEGO, CA - Jeff A. Greenwald, MAI, SRA, FRICS
SAN FRANCISCO, CA - Jan Kleczewski, MAI, FRICS
SARASOTA, FL - Carlton J. Lloyd, MAI, FRICS
SAVANNAH, GA - J. Carl Schultz, Jr., MAI, FRICS, CRE, SRA
SEATTLE, WA - Allen N. Safer, MAI, MRICS
SYRACUSE, NY - William J. Kimball, MAI, FRICS
TAMPA, FL - Bradford L. Johnson, MAI, MRICS
TULSA, OK - Owen S. Ard, MAI
WASHINGTON, DC - Patrick C. Kerr, MAI, FRICS, SRA
WILMINGTON, DE - Douglas L. Nickel, MAI, FRICS
CARIBBEAN/CAYMAN ISLANDS - James Andrews, MAI, FRICS

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 Blounstein Institute (01/06-present)

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

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

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

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

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

AWARDS:

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

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

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

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

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

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

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

COURSES TAUGHT:

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

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

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

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

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

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

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

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

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

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

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

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

Legal Communications (undergraduate level, at Florida State University)

Environmental Law (continuing education, at Rutgers University)

Historic Preservation Law (continuing education, at Rutgers University)

Ordinance Drafting (continuing education, at Rutgers University)

PUBLICATIONS:

Refereed Journal Articles

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

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

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

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

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

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

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

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

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

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

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

Legal Communications (undergraduate level, at Florida State University)

Environmental Law (continuing education, at Rutgers University)

Historic Preservation Law (continuing education, at Rutgers University)

Ordinance Drafting (continuing education, at Rutgers University)

PUBLICATIONS:

Refereed Journal Articles

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

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

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

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

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

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

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

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

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

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

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

Books

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

Book Chapters and Entries

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

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

Non-Refereed Publications

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

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

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

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

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

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

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

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

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)

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

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

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

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

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

SPONSORED RESEARCH:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PROFESSIONAL SERVICE AND AFFILIATIONS:

Professional Services

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

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

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

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

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

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

Member of the ICCHP Committee (2009-2010)

Member of DCP Faculty Council (2009-2012)

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

UF Commencement Marshall (2008-2010)

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

Professional Affiliations

American Planning Association

Oklahoma Chapter of the APA

Association of Collegiate Schools of Planning

Member of the Illinois Bar

Served as a manuscript and grant proposal reviewer for the following:
Journal of the Community Development Society
Journal of Planning History
US-China Law Review
UF Journal of Law and Public Policy
Journal of Planning Education and Research
National Science Foundation

CONFERENCE PRESENTATIONS:

International Conferences-Refereed Presentations

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

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

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

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

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

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

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

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

National Conferences

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

National Conferences – Invited Discussant and/or Moderator

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

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

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

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

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

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

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

State Conferences –Presentations by Invitation

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

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

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

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

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

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

REFERENCES AVAILABLE UPON REQUEST

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

EDUCATION

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

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

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

TEACHING

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

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

PREVIOUS RESEARCH POSITIONS & PRACTICE

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

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

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

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

PUBLICATIONS & REPORTS

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

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

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

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

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

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

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

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

CONFERENCE & INVITED PRESENTATIONS

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

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

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

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

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

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

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

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

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

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

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

INVITED LECTURES

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

Kansas State University – Big 12 Fellowship

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

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

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

GRANT FUNDING

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

SERVICE

University-Level Service

- Advisory Committee Course Management Systems (ACCMS) Spring 2013

College-Level Service

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

SERVICE

State-level / City-Level Service

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

National-Level Service

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

Bryce C. Lowery, PhD

Contact

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

Academic Experience

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

Education

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

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

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

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

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

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

Publications

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

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

Presentations

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

Do Farmers' Markets Improve the Availability of Healthy Foods for All Communities?
A case study of 19 markets in Los Angeles.
Association of Collegiate Schools of Planning – Philadelphia, PA – October 30, 2014
with Denise Payan, LaVonna Blair Lewis and David Sloane

If You See Something, Say Something:
Community response (and non-response) to outdoor advertising regulation in Los Angeles
Council of Educators in Landscape Architecture – Austin, TX – March 29, 2013

The Spatial Ecology of Outdoor Advertising in Los Angeles:
The unjust impact of the commercial landscape
Association of Collegiate Schools of Planning – Cincinnati, OH – November 3, 2012
with David Sloane

Employing Social Network Analysis to Understand the Formation of Sustainable Social Capital
Council of Educators in Landscape Architecture - Tucson, AZ – January 15, 2009

Teaching Experience

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

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

Teaching Assistant 2008-2013
University of Southern California - Sol Price School of Public Policy
Citizenship and Public Ethics (undergraduate)
History of Planning and Development (undergraduate)
Planning History and Urban Form (graduate)
Smart Growth and Urban Sprawl (graduate)
Urban Context for Policy and Planning (undergraduate)
Urban Planning and Development (undergraduate)
Urban Planning and Social Policy (graduate - online)

Graduate Student Instructor 1999-2000
University of Michigan - School of Natural Resources and Environment
Introduction to Environmental Policy (undergraduate)
Introduction to Natural Resource Management (undergraduate)

Other Experience

Research Assistant 2009 - 2014
Sol Price School of Public Policy - University of Southern California

Editorial Assistant – Terry L. Cooper 2011 - 2012
The Responsible Administrator:
An Approach to Ethics for the Administrative Role, 6th Edition. 2012.

Research Associate 2005 - 2006
Lodestar Management/Research Inc. (now Harder+Company)

Project Coordinator 2004 - 2005
Perinatal Advisory Council of Los Angeles County

Community Researcher 2002 - 2004
Children's Planning Council - Los Angeles County Board of Supervisors

Assistant Director 2000 - 2002
Health DATA Program - UCLA Center for Health Policy Research

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

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

Activities and Service

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

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

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

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

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

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

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

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

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

BACKGROUND SUMMARY

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

EXPERIENCE

DeBruler, Inc.

Vice President, Oklahoma City, August 2001 to Present

Provide services including:

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

Oklahoma Housing Finance Agency

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

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

While employed by the agency:

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

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

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

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

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

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