Integra Realty Resources
Tulsa/OKC

Housing Needs Assessment
Mayes 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:
July 30, 2015

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

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December 31, 2015

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

SUBJECT: Housing Needs Assessment
Mayes County
IRR - Tulsa/OKC File No. 140-2015-0059

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

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

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

Respectfully submitted,

Integra Realty Resources - Tulsa/OKC

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Market Analyst

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Introduction and Executive Summary

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

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

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

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

Housing Market Analysis Specific Findings:

1. The population of Mayes County is projected to grow by 0.22% per year over the next five years, underperforming the State of Oklahoma.
2. Mayes County is projected to need a total of 141 housing units for ownership and 47 housing units for rent over the next five years.
3. Median Household Income in Mayes County is estimated to be $43,614 in 2015, compared with $47,049 estimated for the State of Oklahoma. The poverty rate in Mayes County is estimated to be 18.63%, compared with 16.85% for Oklahoma.
4. Homeowner and rental vacancy rates in Mayes County are slightly higher than the state averages.
5. Home values and rental rates in Caddo County are lower than the state averages.
6. Median sale price for homes in Pryor Creek was $112,000 in 2015, with a median price per square foot of $67.73. The median sale price to list price ratio was 97.3%, with median days on market of 47 days.

7. Approximately 30.86% of renters and 17.73% of owners are housing cost overburdened.

Disaster Resiliency Specific Findings:

1. Tornadoes (1959-2014): Number: 60 Injuries: 145 Fatalities: 3 Damages (1996-2014): $1,390,000.00
2. Social Vulnerability: Similar to overall state level at county level; at the census tract level, the Pryor area and a corridor running from southwest to northeast portion of the county have elevated scores
3. Floodplain: Mayes County experienced 29 flood events between 1995 and 2010 that resulted in 1 death, 2 injuries, and $1,018,000 in property damage.

Homelessness Specific Findings

1. Mayes County is located in the Northeast Oklahoma Continuum of Care.
2. There are an estimated 383 homeless individuals in this area, 300 of which are identified as sheltered.
3. There is a disproportionately high number of homeless households comprised of children in this CoC (24 out of 300).
4. This area also has a high incidence of homeless victims of domestic violence (168).
5. The majority of homeless veterans are unsheltered.

Fair Housing Specific Findings

1. Units at risk for poverty: 382
2. Units in mostly non-white enclaves: 218
3. Units nearer elevated number of disabled persons: 382

Lead-Based Paint Specific Findings

1. We estimate there are 2,344 occupied housing units in Mayes County with lead-based paint hazards.
2. 1,040 of those housing units are estimated to be occupied by low-to-moderate income households.
3. We estimate that 367 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 Mayes 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 Mayes 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 Mayes 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 Mayes County, Oklahoma. The analysis will consider existing supply and projected demand and overall market trends in the Mayes County area.

Effective Date of Consultation

The Mayes County area was inspected and research was performed during July, 2015. The effective date of this analysis is July 30, 2015. The date of this report is December 31, 2015. The market study is valid only as of the stated effective date or dates.

Scope of the Assignment

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

Data Sources

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

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

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

Mayes County Analysis

Area Information

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

Mayes County is located in northeastern Oklahoma. The county is bordered on the north by Craig County, on the west by Rogers County, on the south by Wagoner and Cherokee counties, and on the east by Delaware County. The Mayes County Seat is Pryor Creek (more commonly known as Pryor), which is located in the central part of the county. This location is approximately 44.4 miles northeast of Tulsa and 149 miles northeast of Oklahoma City.

Mayes County has a total area of 684 square miles (655 square miles of land, and 28 square miles of water), ranking 57th out of Oklahoma's 77 counties in terms of total area. The total population of Mayes County as of the 2010 Census was 41,259 persons, for a population density of 63 persons per square mile of land.

Access and Linkages

The county has average accessibility to state and national highway systems. Multiple major national highway and state highway systems intersect through Mayes County. These are I-412 (the Cherokee Turnpike east of the Neosho River), US-69, OK-28, OK-20, and OK-82. The nearest interstate highway is I-412, which runs through the northern corner of Mayes County. The county also has an intricate network of county roadways.

Public transportation is provided by Pelivan Transit, which is owned and operated by Grand Gateway Economic Development Association. Pelivan provides curb-to-curb demand response service, deviated fixed employment routes, and a trolley loop in Miami. Pelivan services the counties of Craig, Delaware, Mayes, northern Tulsa, Ottawa and Rogers, along with tribal transit services. The local market perceives public transportation as average compared to other communities in the region of similar size. However, the primary mode of transportation in this area is private automobiles by far.

Mid-America Industrial Park Airport is located just south of Pryor. It has a single asphalt runway approximately 5,000 feet in length, and averages approximately 98 aircraft operations per week. The nearest full-service commercial airport is Tulsa International Airport, located approximately 35 miles west of Pryor.

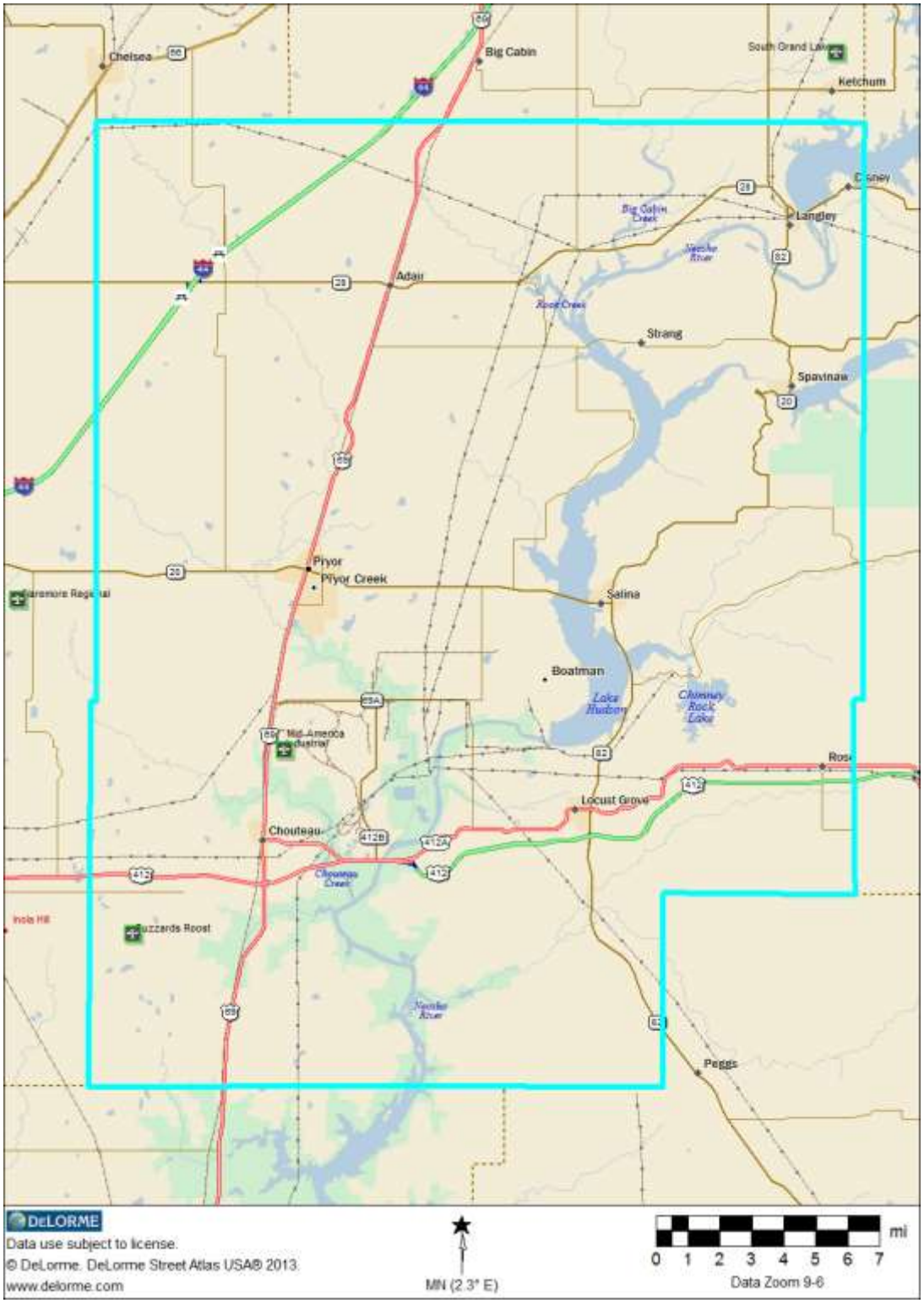
Educational Facilities

All of the county communities have public school facilities. Pryor Creek is served by Pryor Public Schools. Pryor Public Schools is comprised of three elementary schools, one middle school and high school, and an early childhood learning center. Higher education offerings in Pryor Creek include the Rogers State University Pryor campus, the Oklahoma State University Institute of Technology at the MidAmerica Industrial Park, and Northeast Technology Center – Pryor Campus.

Medical Facilities

Medical services are provided by Integris Mayes County Medical Center, a 52-bed acute-care hospital, offering an emergency unit, in and outpatient procedures, and many other medical practices. Additionally, the Claremore Regional Hospital is located a short distance from Pryor and offers a variety of medical services to residents of the area. The smaller county communities typically have either small outpatient medical services or doctor's officing in the community.

Mayes County Area Map



Pryor Creek Area Map

Demographic Analysis

Population and Households

The following table presents population levels and annualized changes in Mayes 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 (for Pryor), and by Esri Business Analyst (for Mayes County). Although Nielsen SiteReports and Esri Business Analyst have similar estimates and forecasts for Pryor, the estimates and forecasts by Esri appear more reasonable for Mayes County compared with Nielsen SiteReports in light of recent and ongoing economic development in Mayes County.

Population Levels and Annual Changes

	2000 Census	2010 Census	Annual Change	2015 Estimate	Annual Change	2020 Forecast	Annual Change
Pryor Creek	8,659	9,539	0.97%	9,394	-0.31%	9,363	-0.07%
Mayes County	38,369	41,259	0.73%	41,783	0.25%	42,241	0.22%
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, Esri Business Analyst (Mayes County)

The population of Mayes County was 41,259 persons as of the 2010 Census, a 0.73% annualized rate of change from the 2000 Census. As of 2015, Esri Business Analyst estimates the population of Mayes County to be 41,783 persons, and projects that the population will show 0.22% annualized growth over the next five years.

The population of Pryor Creek (commonly known as Pryor) was 9,539 persons as of the 2010 Census, a 0.97% annualized rate of change from the 2000 Census. As of 2015, Nielsen SiteReports estimates the population of Pryor Creek to be 9,394 persons, and projects that the population will show -0.07% annualized decline over the next five years.

The next table presents data regarding household levels in Mayes 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
Pryor Creek	3,567	3,822	0.69%	3,761	-0.32%	3,755	-0.03%
Mayes County	14,823	16,008	0.77%	16,237	0.28%	16,425	0.23%
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
Pryor Creek	2,342	2,458	0.48%	2,426	-0.26%	2,422	-0.03%
Mayes County	10,818	11,342	0.47%	11,418	0.13%	11,498	0.14%
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, Esri Business Analyst (Mayes County)

As of 2010, Mayes County had a total of 16,008 households, representing a 0.77% annualized rate of change since the 2000 Census. As of 2015, Esri Business Analyst estimates Mayes County to have 16,237 households. This number is expected to experience a 0.23% annualized rate of decline over the next five years.

As of 2010, Pryor Creek had a total of 3,822 households, representing a 0.69% annualized rate of change since the 2000 Census. As of 2015, Nielsen SiteReports estimates Pryor Creek to have 3,761 households. This number is expected to experience a -0.03% annualized rate of decline over the next five years.

Population by Race and Ethnicity

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

2013 Population by Race and Ethnicity

Single-Classification Race	Pryor Creek		Mayes County	
	No.	Percent	No.	Percent
Total Population	9,529		41,110	
White Alone	6,907	72.48%	28,065	68.27%
Black or African American Alone	65	0.68%	139	0.34%
Amer. Indian or Alaska Native Alone	757	7.94%	3,423	8.33%
Asian Alone	14	0.15%	171	0.42%
Native Hawaiian and Other Pac. Isl. Alone	11	0.12%	26	0.06%
Some Other Race Alone	0	0.00%	15	0.04%
Two or More Races	1,775	18.63%	9,271	22.55%
Population by Hispanic or Latino Origin	**Pryor Creek**		**Mayes County**	
	No.	**Percent**	**No.**	**Percent**
Total Population	9,529		41,110	
Hispanic or Latino	568	5.96%	1,195	2.91%
Hispanic or Latino, White Alone	*450*	*79.23%*	*735*	*61.51%*
Hispanic or Latino, All Other Races	*118*	*20.77%*	*460*	*38.49%*
Not Hispanic or Latino	8,961	94.04%	39,915	97.09%
Not Hispanic or Latino, White Alone	*6,457*	*72.06%*	*27,330*	*68.47%*
Not Hispanic or Latino, All Other Races	*2,504*	*27.94%*	*12,585*	*31.53%*

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

In Mayes County, racial and ethnic minorities comprise 33.52% of the total population. Within Pryor Creek, racial and ethnic minorities represent 32.24% of the population.

Population by Age

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

Mayes 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	41,259		40,466		40,243			
Age 0 - 4	2,877	6.97%	2,696	6.66%	2,698	6.70%	-1.29%	0.01%
Age 5 - 9	2,777	6.73%	2,702	6.68%	2,617	6.50%	-0.55%	-0.64%
Age 10 - 14	2,971	7.20%	2,840	7.02%	2,628	6.53%	-0.90%	-1.54%
Age 15 - 17	1,889	4.58%	1,811	4.48%	1,786	4.44%	-0.84%	-0.28%
Age 18 - 20	1,565	3.79%	1,616	3.99%	1,644	4.09%	0.64%	0.34%
Age 21 - 24	1,682	4.08%	2,021	4.99%	2,193	5.45%	3.74%	1.65%
Age 25 - 34	4,714	11.43%	4,568	11.29%	4,653	11.56%	-0.63%	0.37%
Age 35 - 44	4,962	12.03%	4,655	11.50%	4,463	11.09%	-1.27%	-0.84%
Age 45 - 54	6,032	14.62%	5,157	12.74%	4,576	11.37%	-3.09%	-2.36%
Age 55 - 64	5,319	12.89%	5,419	13.39%	5,203	12.93%	0.37%	-0.81%
Age 65 - 74	3,820	9.26%	4,235	10.47%	4,857	12.07%	2.08%	2.78%
Age 75 - 84	2,010	4.87%	2,051	5.07%	2,144	5.33%	0.40%	0.89%
Age 85 and over	641	1.55%	695	1.72%	781	1.94%	1.63%	2.36%
Age 55 and over	*11,790*	28.58%	*12,400*	30.64%	*12,985*	32.27%	1.01%	0.93%
Age 62 and over	*7,426*	18.00%	*7,912*	19.55%	*8,562*	21.28%	1.28%	1.59%
Median Age	39.3		39.3		39.3		0.00%	0.00%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Mayes County is 39.3 years. This compares with the statewide figure of 36.6 years. Approximately 6.66% of the population is below the age of 5, while 19.55% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 1.59% per year.

Pryor Creek 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	9,539		9,394		9,363			
Age 0 - 4	765	8.02%	696	7.41%	701	7.49%	-1.87%	0.14%
Age 5 - 9	651	6.82%	696	7.41%	670	7.16%	1.35%	-0.76%
Age 10 - 14	634	6.65%	665	7.08%	669	7.15%	0.96%	0.12%
Age 15 - 17	472	4.95%	445	4.74%	462	4.93%	-1.17%	0.75%
Age 18 - 20	402	4.21%	405	4.31%	419	4.48%	0.15%	0.68%
Age 21 - 24	490	5.14%	461	4.91%	496	5.30%	-1.21%	1.47%
Age 25 - 34	1,268	13.29%	1,281	13.64%	1,174	12.54%	0.20%	-1.73%
Age 35 - 44	1,130	11.85%	1,122	11.94%	1,171	12.51%	-0.14%	0.86%
Age 45 - 54	1,168	12.24%	1,042	11.09%	1,007	10.76%	-2.26%	-0.68%
Age 55 - 64	962	10.08%	990	10.54%	945	10.09%	0.58%	-0.93%
Age 65 - 74	798	8.37%	829	8.82%	885	9.45%	0.77%	1.32%
Age 75 - 84	547	5.73%	513	5.46%	509	5.44%	-1.28%	-0.16%
Age 85 and over	252	2.64%	249	2.65%	255	2.72%	-0.24%	0.48%
Age 55 and over	*2,559*	26.83%	*2,581*	27.47%	*2,594*	27.70%	0.17%	0.10%
Age 62 and over	*1,634*	17.13%	*1,639*	17.45%	*1,678*	17.92%	0.07%	0.47%
Median Age	35.8		35.4		35.8		-0.22%	0.22%

Source: Nielsen SiteReports

As of 2015, Nielsen estimates that the median age of Pryor Creek is 35.4 years. This compares with the statewide figure of 36.6 years. Approximately 7.41% of the population is below the age of 5, while 17.45% is over the age of 62. Over the next five years, the population age 62 and above is forecasted to grow by 0.47% per year.

Families by Presence of Children

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

2013 Family Type by Presence of Children Under 18 Years

	Pryor Creek		Mayes County	
	No.	Percent	No.	Percent
Total Families:	2,467		11,336	
Married-Couple Family:	1,863	75.52%	8,840	77.98%
With Children Under 18 Years	746	30.24%	3,244	28.62%
No Children Under 18 Years	1,117	45.28%	5,596	49.36%
Other Family:	604	24.48%	2,496	22.02%
Male Householder, No Wife Present	188	7.62%	771	6.80%
With Children Under 18 Years	80	3.24%	341	3.01%
No Children Under 18 Years	108	4.38%	430	3.79%
Female Householder, No Husband Present	416	16.86%	1,725	15.22%
With Children Under 18 Years	201	8.15%	979	8.64%
No Children Under 18 Years	215	8.72%	746	6.58%
Total Single Parent Families	281		1,320	
Male Householder	80	28.47%	341	25.83%
Female Householder	201	71.53%	979	74.17%

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

As shown, within Mayes County, among all families 11.64% are single-parent families, while in Pryor Creek, the percentage is 11.39%.

Population by Presence of Disabilities

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

2013 Age by Number of Disabilities

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Civilian Non-Institutionalized Population:	9,246		40,667		3,702,515	
Under 18 Years:	2,263		10,366		933,738	
With One Type of Disability	102	4.51%	514	4.96%	33,744	3.61%
With Two or More Disabilities	49	2.17%	161	1.55%	11,082	1.19%
No Disabilities	2,112	93.33%	9,691	93.49%	888,912	95.20%
18 to 64 Years:	5,397		23,930		2,265,702	
With One Type of Disability	446	8.26%	2,158	9.02%	169,697	7.49%
With Two or More Disabilities	449	8.32%	2,088	8.73%	149,960	6.62%
No Disabilities	4,502	83.42%	19,684	82.26%	1,946,045	85.89%
65 Years and Over:	1,586		6,371		503,075	
With One Type of Disability	351	22.13%	1,312	20.59%	95,633	19.01%
With Two or More Disabilities	360	22.70%	1,426	22.38%	117,044	23.27%
No Disabilities	875	55.17%	3,633	57.02%	290,398	57.72%
Total Number of Persons with Disabilities:	1,757	19.00%	7,659	18.83%	577,160	15.59%

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

Within Mayes County, 18.83% of the civilian non-institutionalized population has one or more disabilities, compared with 15.59% of Oklahomans as a whole. In Pryor Creek the percentage is 19.00%. Compared with the rest of the state, the populations of Pryor and Mayes County are more likely to have one or more disabilities.

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

2013 Population by Veteran and Disability Status

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Civilian Population Age 18+ For Whom Poverty Status is Determined	6,983		30,301		2,738,788	
Veteran:	853	12.22%	3,600	11.88%	305,899	11.17%
With a Disability	*255*	*29.89%*	*1,254*	*34.83%*	*100,518*	*32.86%*
No Disability	*598*	*70.11%*	*2,346*	*65.17%*	*205,381*	*67.14%*
Non-veteran:	6,130	87.78%	26,701	88.12%	2,432,889	88.83%
With a Disability	*1,351*	*22.04%*	*5,730*	*21.46%*	*430,610*	*17.70%*
No Disability	*4,779*	*77.96%*	*20,971*	*78.54%*	*2,002,279*	*82.30%*

Source: 2009-2013 American Community Survey, Table C21007

Within Mayes County, the Census Bureau estimates there are 3,600 veterans, 34.83% of which have one or more disabilities (compared with 32.86% at a statewide level). In Pryor Creek, there are an estimated 853 veterans, 29.89% of which are estimated to have a disability.

Group Quarters Population

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

2010 Group Quarters Population

	Pryor Creek		Mayes County	
	No.	Percent	No.	Percent
Total Population	9,539		41,259	
Group Quarters Population	337	3.53%	567	1.37%
Institutionalized Population	334	3.50%	429	1.04%
Correctional facilities for adults	128	1.34%	128	0.31%
Juvenile facilities	112	1.17%	112	0.27%
Nursing facilities/Skilled-nursing facilities	94	0.99%	189	0.46%
Other institutional facilities	0	0.00%	0	0.00%
Noninstitutionalized population	3	0.03%	138	0.33%
College/University student housing	0	0.00%	0	0.00%
Military quarters	0	0.00%	0	0.00%
Other noninstitutional facilities	3	0.03%	138	0.33%

Source: 2010 Decennial Census, Table P42

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

Household Income Levels

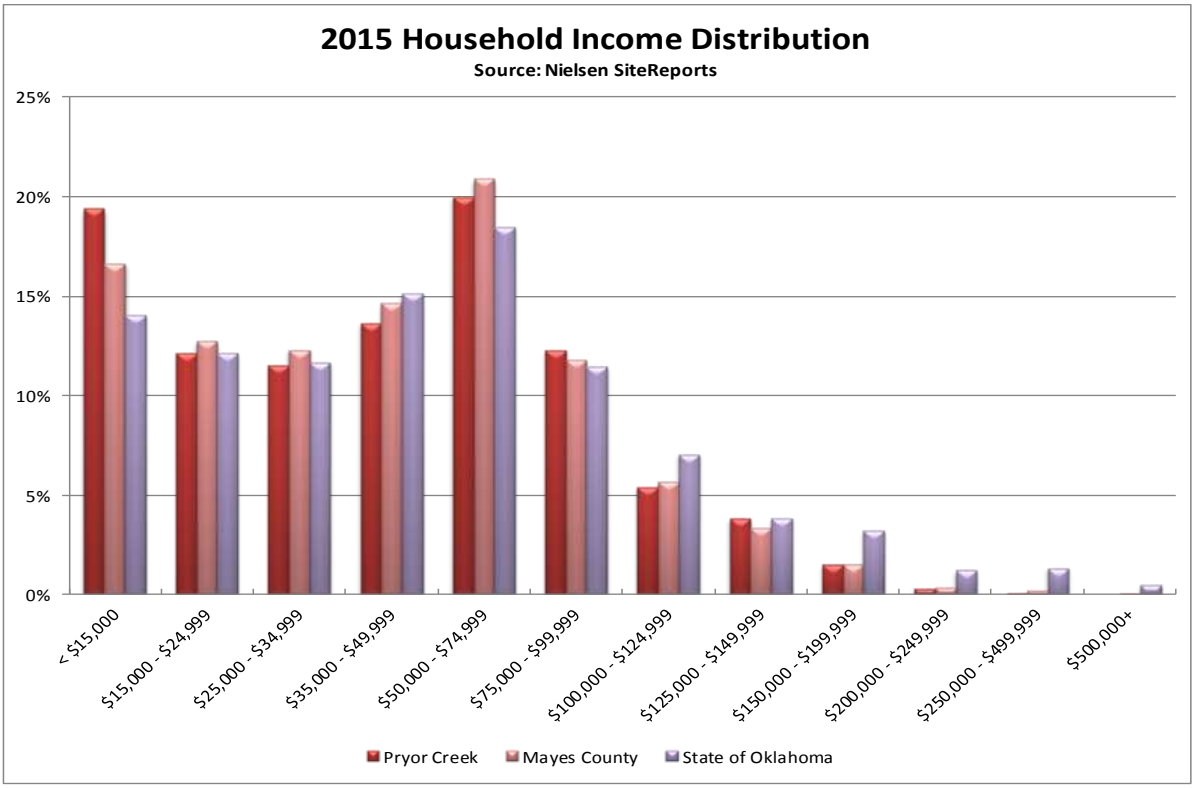
Data in the following chart shows the distribution of household income in Mayes County, as well as median and average household income. Data for Oklahoma is included as a basis of comparison. This data is provided by Nielsen SiteReports for 2015.

2015 Household Income Distribution

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Households by HH Income	3,761		15,719		1,520,327	
< $15,000	729	19.38%	2,611	16.61%	213,623	14.05%
$15,000 - $24,999	457	12.15%	1,999	12.72%	184,613	12.14%
$25,000 - $34,999	432	11.49%	1,931	12.28%	177,481	11.67%
$35,000 - $49,999	513	13.64%	2,296	14.61%	229,628	15.10%
$50,000 - $74,999	751	19.97%	3,280	20.87%	280,845	18.47%
$75,000 - $99,999	461	12.26%	1,850	11.77%	173,963	11.44%
$100,000 - $124,999	204	5.42%	894	5.69%	106,912	7.03%
$125,000 - $149,999	143	3.80%	523	3.33%	57,804	3.80%
$150,000 - $199,999	56	1.49%	244	1.55%	48,856	3.21%
$200,000 - $249,999	12	0.32%	57	0.36%	18,661	1.23%
$250,000 - $499,999	3	0.08%	31	0.20%	20,487	1.35%
$500,000+	0	0.00%	3	0.02%	7,454	0.49%
Median Household Income	$42,675		$43,614		$47,049	
Average Household Income	$51,650		$52,248		$63,390	

Source: Nielsen SiteReports

As shown, median household income for Mayes County is estimated to be $43,614 in 2015. By way of comparison, the median household income of Oklahoma is estimated to be $47,049. For Pryor Creek, median household income is estimated to be $42,675. Compared with the rest of the state, incomes levels in Pryor and Mayes County are generally similar to the state, but with slightly higher concentrations in the under $15,000 income bracket, and the $50,000 to $75,000 income bracket. The income distribution can be better visualized by the following chart.



Household Income Trend

Next we examine the long-term growth of incomes in Mayes 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
Pryor Creek	$29,424	$42,675	2.35%	2.40%	-0.05%
Mayes County	$31,125	$43,614	2.13%	2.40%	-0.27%
State of Oklahoma	$33,400	$47,049	2.16%	2.40%	-0.23%

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

As shown, both Mayes 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 Mayes 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 Mayes 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
Pryor Creek	13.61%	18.63%	502	61.25%	61.69%
Mayes County	14.26%	19.72%	546	44.87%	59.45%
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 Mayes County is estimated to be 19.72% by the American Community Survey. This is an increase of 546 basis points since the 2000 Census. Within Pryor Creek, the poverty rate is estimated to be 18.63%. 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 Mayes 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)
Mayes County	16,657	19,007	2.67%	8.5%	4.1%	-440
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

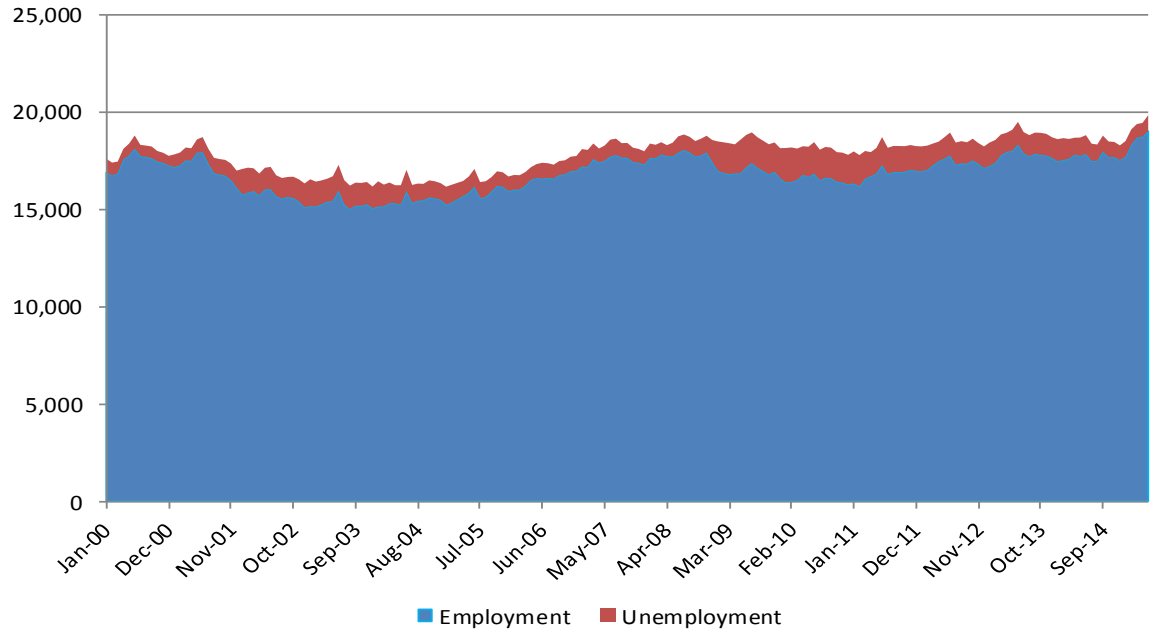
Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Population Survey

As of May 2015, total employment in Mayes County was 19,007 persons. Compared with figures from May 2010, this represents annualized employment growth of 2.67% per year. The unemployment rate in May was 4.1%, a decrease of -440 basis points from May 2010, which was 8.5%. Over the last five years, both the statewide and national trends have been improving employment levels and declining unemployment rates, and Mayes County has outperformed both the state and nation in these statistics.

Employment Level Trends

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

Employment and Unemployment in Mayes County
January 2000 through May 2015



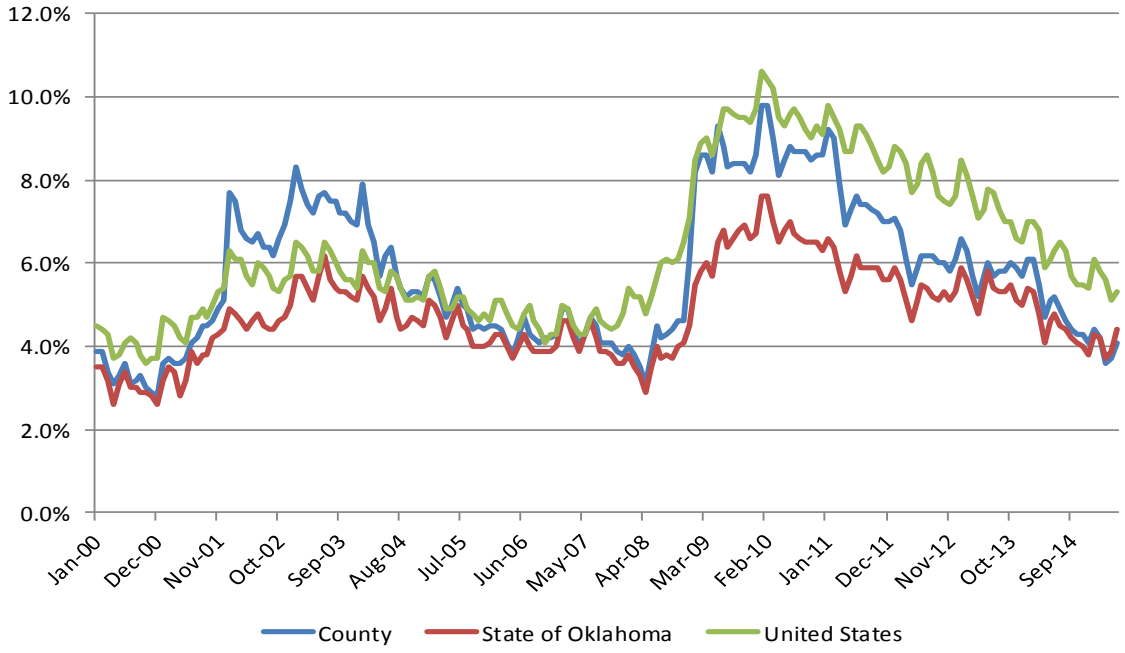
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

As shown, total employment levels have gone through several cycles over the last 15 years, with improving employment figures from 2003 through 2008, when the effects of the national economic downturn where felt. Employment growth resumed in early 2011, and has continued to grow to its current level of 19,007 persons. The number of unemployed persons in May 2015 was 820, out of a total labor force of 19,827 persons.

Unemployment Rate Trends

The next chart shows historic unemployment rates for Mayes 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 Mayes 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 Mayes 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 2011, to their current level of 4.1%. On the whole, unemployment rates in Mayes County have been relatively volatile over the last 15 years. Compared with the United States, unemployment rates in Mayes County and Oklahoma are and have historically been below the national average.

Employment and Wages by Industrial Supersector

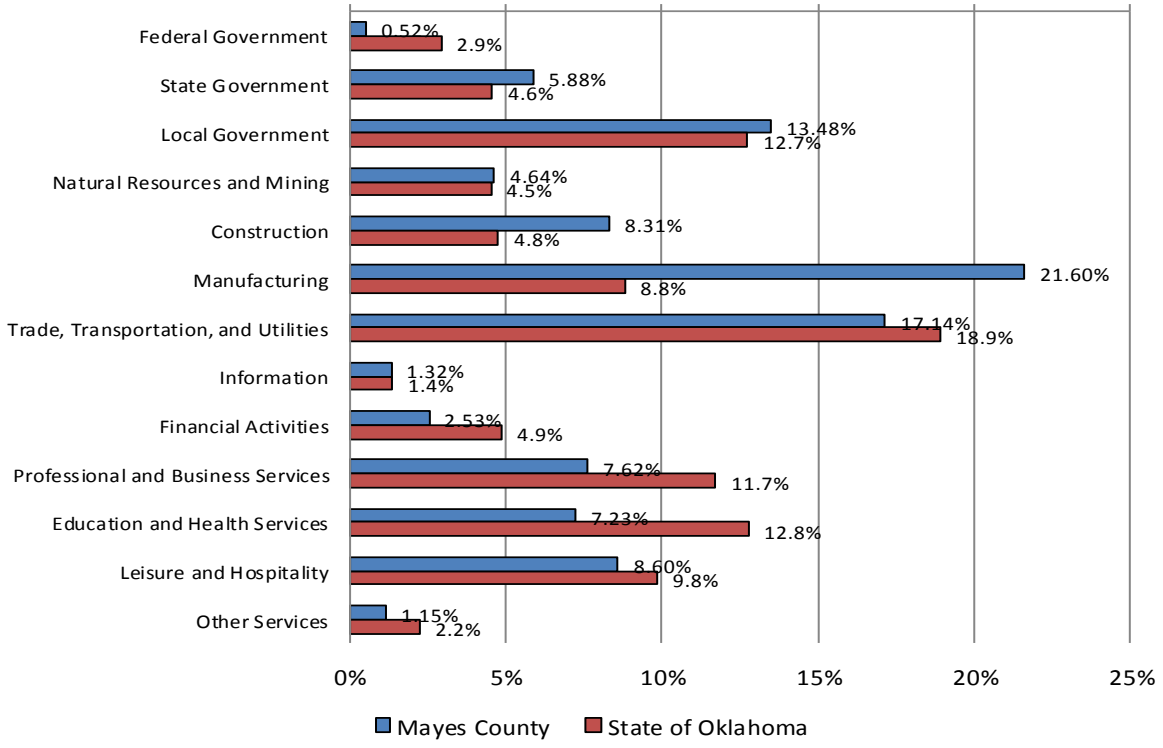
The next table presents data regarding employment in Mayes County by industry, including total number of establishments, average number of employees in 2014, average annual pay, and location quotients for each industry compared with the United States. This data is furnished by the Bureau of Labor Statistics, 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	13	64	0.52%	$46,074	0.26
State Government	27	720	5.88%	$61,667	1.77
Local Government	45	1,651	13.48%	$35,015	1.34
Natural Resources and Mining	13	568	4.64%	$45,075	3.06
Construction	112	1,018	8.31%	$55,149	1.86
Manufacturing	69	2,645	21.60%	$52,848	2.43
Trade, Transportation, and Utilities	221	2,099	17.14%	$32,197	0.90
Information	10	162	1.32%	$76,448	0.66
Financial Activities	62	310	2.53%	$36,949	0.45
Professional and Business Services	87	933	7.62%	$27,304	0.55
Education and Health Services	74	885	7.23%	$28,023	0.48
Leisure and Hospitality	86	1,053	8.60%	$11,966	0.80
Other Services	54	141	1.15%	$22,953	0.37
Total	**873**	**12,248**		**$39,534**	**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 (21.60%) are employed in Manufacturing. The average annual pay in this sector is $52,848 per year. The industry with the highest annual pay is Information, with average annual pay of $76,448 per year.

The rightmost column of the previous table provides location quotients for each industry for Mayes 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 (Mayes 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 Mayes County, among all industries the largest location quotient is in Natural Resources and Mining, with a quotient of 3.06. This sector includes agricultural employment as well as employment related to the oil and gas industry. The second highest is manufacturing at 2.43, which is influenced in large part by MidAmerica Industrial Park.

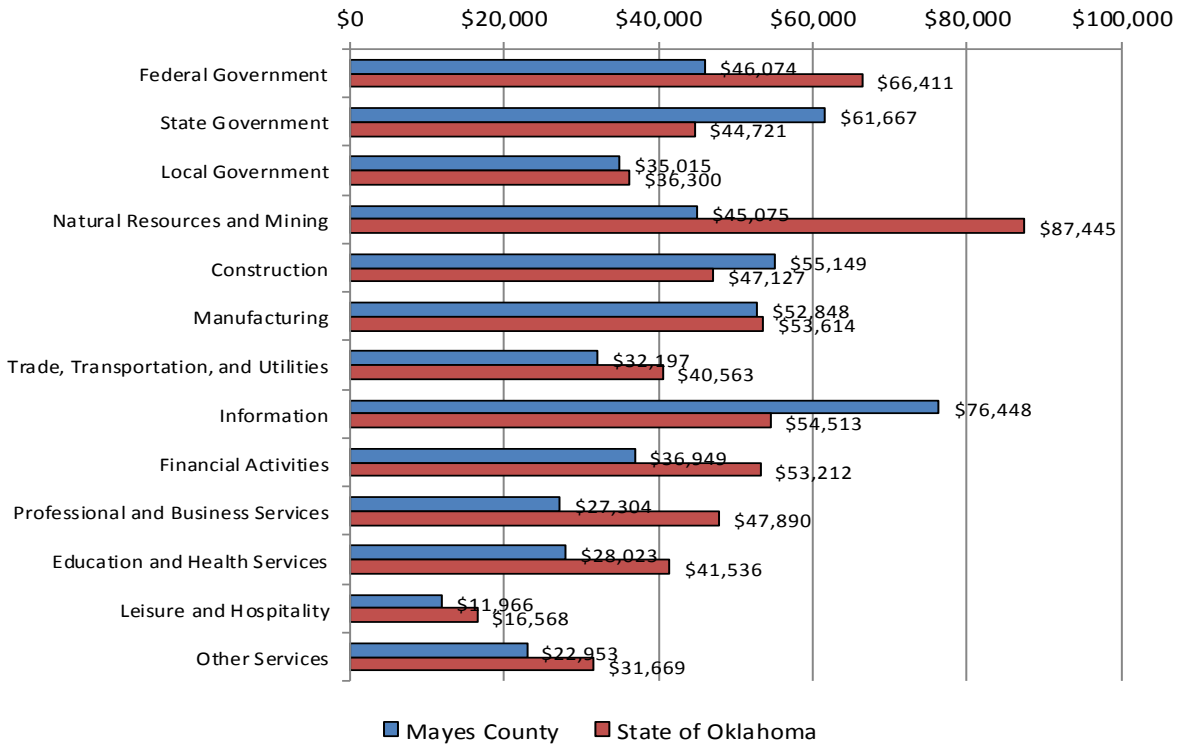
The next table presents average annual pay in Mayes County by industry, in comparison with Oklahoma as a whole and the United States.

Comparison of 2014 Average Annual Pay by Supersector

Supersector	Mayes County	State of Oklahoma	United States	Percent of State	Percent of Nation
Federal Government	$46,074	$66,411	$75,784	69.4%	60.8%
State Government	$61,667	$44,721	$54,184	137.9%	113.8%
Local Government	$35,015	$36,300	$46,146	96.5%	75.9%
Natural Resources and Mining	$45,075	$87,445	$59,666	51.5%	75.5%
Construction	$55,149	$47,127	$55,041	117.0%	100.2%
Manufacturing	$52,848	$53,614	$62,977	98.6%	83.9%
Trade, Transportation, and Utilities	$32,197	$40,563	$42,988	79.4%	74.9%
Information	$76,448	$54,513	$90,804	140.2%	84.2%
Financial Activities	$36,949	$53,212	$85,261	69.4%	43.3%
Professional and Business Services	$27,304	$47,890	$66,657	57.0%	41.0%
Education and Health Services	$28,023	$41,536	$45,951	67.5%	61.0%
Leisure and Hospitality	$11,966	$16,568	$20,993	72.2%	57.0%
Other Services	$22,953	$31,669	$33,935	72.5%	67.6%
Total	**$39,534**	**$43,774**	**$51,361**	**90.3%**	**77.0%**

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, Mayes County has higher average wages in construction, state government and information, and lower average wages in the other employment supersectors.

Working Families

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

Families by Employment Status and Presence of Children

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Families	**2,467**		**11,336**		**961,468**	
With Children <18 Years:	1,027	41.63%	4,564	40.26%	425,517	44.26%
Married Couple:	746	72.64%	3,244	71.08%	281,418	66.14%
Both Parents Employed	409	54.83%	1,807	55.70%	166,700	59.24%
One Parent Employed	280	37.53%	1,246	38.41%	104,817	37.25%
Neither Parent Employed	57	7.64%	191	5.89%	9,901	3.52%
Other Family:	281	27.36%	1,320	28.92%	144,099	33.86%
Male Householder:	80	28.47%	341	25.83%	36,996	25.67%
Employed	80	100.00%	271	79.47%	31,044	83.91%
Not Employed	0	0.00%	70	20.53%	5,952	16.09%
Female Householder:	201	71.53%	979	74.17%	107,103	74.33%
Employed	58	28.86%	562	57.41%	75,631	70.62%
Not Employed	143	71.14%	417	42.59%	31,472	29.38%
Without Children <18 Years:	1,440	58.37%	6,772	59.74%	535,951	55.74%
Married Couple:	1,117	77.57%	5,596	82.63%	431,868	80.58%
Both Spouses Employed	342	30.62%	1,888	33.74%	167,589	38.81%
One Spouse Employed	356	31.87%	1,978	35.35%	138,214	32.00%
Neither Spouse Employed	419	37.51%	1,730	30.91%	126,065	29.19%
Other Family:	323	22.43%	1,176	17.37%	104,083	19.42%
Male Householder:	108	25.78%	430	24.86%	32,243	25.58%
Employed	62	57.41%	240	55.81%	19,437	60.28%
Not Employed	46	42.59%	190	44.19%	12,806	39.72%
Female Householder:	215	66.56%	746	63.44%	71,840	69.02%
Employed	110	51.16%	304	40.75%	36,601	50.95%
Not Employed	105	48.84%	442	59.25%	35,239	49.05%
Total Working Families:	*1,697*	*68.79%*	*8,296*	*73.18%*	*740,033*	*76.97%*
With Children <18 Years:	*827*	*48.73%*	*3,886*	*46.84%*	*378,192*	*51.10%*
Without Children <18 Years:	*870*	*51.27%*	*4,410*	*53.16%*	*361,841*	*48.90%*

Source: 2009-2013 American Community Survey, Table B23007

Within Mayes County, there are 8,296 working families, 46.84% 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 Mayes County area are presented in the following table, as reported by the Mayes County 2013 Multi-Hazard Mitigation Plan.

Major Employers in Mayes County

Company	Location	Industry / Description	No. Employees
Pryor Public Schools	Pryor	Education	300-350
Wal-Mart	Pryor	Retail	300-350
Orchids Paper Products Co.	Mid-America Industrial Park	Sanitary Paper Products	310
Locust Grove Public Schools	Locust Grove	Education	250-300
Chevron Phillips Chemical Co.	Mid-America Industrial Park	Polyethylene Pipe & Tubing	260
RAE Corporation	Mid-America Industrial Park	Refrigeration Equipment	259
Grand River Dam Authority	Chouteau	Utility	200-250
Mayes County Medical Center	Pryor	Health Care	200-250
Northeast Technology Center	Mid-America Industrial Park	Education	200-250
Chouteau-Mazie Public Schools	Chouteau	Education	150-200
Express Metal Fabricators	Locust Grove	Steel Fabricators	190
Express Temporary Services	Pryor	Human Resources Services	100-150
Whitaker Education & Training Center	Pryor	Education	100-150
Sygma	Mid-America Industrial Park	Food Products Distributor	100-150
Salina Public Schools	Salina	Education	100-150
Adair Public Schools	Adair	Education	100-150
Mayes County	Pryor	Government	100-150
Peoplelink, LLC	Pryor	Human Resources Services	100-150
Reasor's	Langley	Retail	100-150
H E M Inc.	Mid-America Industrial Park	Metal Cutting Machine Tools	135
Berry Plastics Corp.	Mid-America Industrial Park	Polyethylene Film, etc.	120
Lone Star Industries	Pryor	Portland Cement	112

Source: Mayes County 2013 Multi-Hazard Mitigation Plan

As can be seen, MidAmerica Industrial Park is a major employment center with number of the largest employers in Mayes County.

Commuting Patterns

Travel Time to Work

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

Workers 16 Years and Over by Commuting Time to Work

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Commuting Workers:	**3,529**		**15,579**		**1,613,364**	
Less than 15 minutes	1,838	52.08%	5,293	33.98%	581,194	36.02%
15 to 30 minutes	1,074	30.43%	4,891	31.39%	625,885	38.79%
30 to 45 minutes	272	7.71%	2,439	15.66%	260,192	16.13%
45 to 60 minutes	283	8.02%	1,751	11.24%	74,625	4.63%
60 or more minutes	62	1.76%	1,205	7.73%	71,468	4.43%

Source: 2009-2013 American Community Survey, Table B08303

Within Mayes County, the largest percentage of workers (33.98%) travel Less than 15 minutes to work. Although Mayes County has an active labor market, it appears some persons living in the area commute to other labor markets.

Means of Transportation

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

Workers 16 Years and Over by Means of Transportation to Work

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Workers Age 16+	**3,634**		**16,235**		**1,673,026**	
Car, Truck or Van:	3,486	95.93%	15,087	92.93%	1,551,461	92.73%
Drove Alone	*3,195*	*91.65%*	*13,555*	*89.85%*	*1,373,407*	*88.52%*
Carpooled	*291*	*8.35%*	*1,532*	*10.15%*	*178,054*	*11.48%*
Public Transportation	0	0.00%	29	0.18%	8,092	0.48%
Taxicab	0	0.00%	0	0.00%	984	0.06%
Motorcycle	0	0.00%	21	0.13%	3,757	0.22%
Bicycle	0	0.00%	9	0.06%	4,227	0.25%
Walked	43	1.18%	295	1.82%	30,401	1.82%
Other Means	0	0.00%	138	0.85%	14,442	0.86%
Worked at Home	105	2.89%	656	4.04%	59,662	3.57%

Source: 2009-2013 American Community Survey, Table B08301

As shown, the vast majority of persons in Mayes 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 Mayes 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
Pryor Creek	3,887	4,286	0.98%	4,285	0.00%
Mayes County	17,423	19,239	1.00%	19,189	-0.05%
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 Census, Nielsen estimates that the number of housing units in Mayes County declined by -0.05% per year, to a total of 19,189 housing units in 2015. In terms of new housing unit construction, Mayes County underperformed Oklahoma as a whole between 2010 and 2015.

Housing by Units in Structure

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

2013 Housing Units by Units in Structure

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	**4,531**		**19,175**		**1,669,828**	
1 Unit, Detached	3,323	73.34%	13,794	71.94%	1,219,987	73.06%
1 Unit, Attached	123	2.71%	187	0.98%	34,434	2.06%
Duplex Units	178	3.93%	309	1.61%	34,207	2.05%
3-4 Units	263	5.80%	422	2.20%	42,069	2.52%
5-9 Units	149	3.29%	302	1.57%	59,977	3.59%
10-19 Units	172	3.80%	202	1.05%	57,594	3.45%
20-49 Units	94	2.07%	122	0.64%	29,602	1.77%
50 or More Units	31	0.68%	34	0.18%	30,240	1.81%
Mobile Homes	161	3.55%	3,747	19.54%	159,559	9.56%
Boat, RV, Van, etc.	37	0.82%	56	0.29%	2,159	0.13%
Total Multifamily Units	**887**	**19.58%**	**1,391**	**7.25%**	**253,689**	**15.19%**

Source: 2009-2013 American Community Survey, Table B25024

Within Mayes County, 71.94% of housing units are single-family, detached. 7.25% of housing units are multifamily in structure (two or more units per building), while 19.83% of housing units comprise mobile homes, RVs, etc.

Within Pryor Creek, 73.34% of housing units are single-family, detached. 19.58% of housing units are multifamily in structure, while 4.37% of housing units comprise mobile homes, RVs, etc.

Compared with the rest of the state, Mayes County has relatively few multifamily housing units, and a much higher percentage of mobile homes, while Pryor has a higher percentage of multifamily housing units and comparatively few mobile homes.

Housing Units Number of Bedrooms and Tenure

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

2013 Housing Units by Tenure and Number of Bedrooms

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**3,865**		**15,896**		**1,444,081**	
Owner Occupied:	**2,356**	**60.96%**	**11,960**	**75.24%**	**968,736**	**67.08%**
No Bedroom	6	0.25%	19	0.16%	2,580	0.27%
1 Bedroom	89	3.78%	407	3.40%	16,837	1.74%
2 Bedrooms	402	17.06%	2,689	22.48%	166,446	17.18%
3 Bedrooms	1,478	62.73%	6,608	55.25%	579,135	59.78%
4 Bedrooms	381	16.17%	1,952	16.32%	177,151	18.29%
5 or More Bedrooms	0	0.00%	285	2.38%	26,587	2.74%
Renter Occupied:	**1,509**	**39.04%**	**3,936**	**24.76%**	**475,345**	**32.92%**
No Bedroom	18	1.19%	61	1.55%	13,948	2.93%
1 Bedroom	304	20.15%	557	14.15%	101,850	21.43%
2 Bedrooms	636	42.15%	1,735	44.08%	179,121	37.68%
3 Bedrooms	540	35.79%	1,408	35.77%	152,358	32.05%
4 Bedrooms	0	0.00%	164	4.17%	24,968	5.25%
5 or More Bedrooms	11	0.73%	11	0.28%	3,100	0.65%

Source: 2009-2013 American Community Survey, Table B25042

The overall homeownership rate in Mayes County is 75.24%, while 24.76% of housing units are renter occupied. In Pryor Creek, the homeownership rate is 60.96%, while 39.04% of households are renters.

Housing Units Tenure and Household Income

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

Mayes County Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	**15,896**	**11,960**	**3,936**	**75.24%**	**24.76%**
Less than $5,000	442	273	169	61.76%	38.24%
$5,000 - $9,999	845	373	472	44.14%	55.86%
$10,000-$14,999	1,275	741	534	58.12%	41.88%
$15,000-$19,999	1,101	718	383	65.21%	34.79%
$20,000-$24,999	1,026	636	390	61.99%	38.01%
$25,000-$34,999	1,949	1,443	506	74.04%	25.96%
$35,000-$49,999	2,402	1,867	535	77.73%	22.27%
$50,000-$74,999	3,257	2,696	561	82.78%	17.22%
$75,000-$99,999	1,904	1,621	283	85.14%	14.86%
$100,000-$149,999	1,432	1,337	95	93.37%	6.63%
$150,000 or more	263	255	8	96.96%	3.04%
Income Less Than $25,000	**4,689**	**2,741**	**1,948**	**58.46%**	**41.54%**

Source: 2009-2013 American Community Survey, Table B25118

Within Mayes County as a whole, 41.54% of households with incomes less than $25,000 are estimated to be renters, while 58.46% are estimated to be homeowners.

Pryor Creek Owner/Renter Percentages by Income Band in 2013					
Household Income	Total Households	Total Owners	Total Renters	% Owners	% Renters
Total	**3,865**	**2,356**	**1,509**	**60.96%**	**39.04%**
Less than $5,000	114	64	50	56.14%	43.86%
$5,000 - $9,999	303	98	205	32.34%	67.66%
$10,000-$14,999	325	123	202	37.85%	62.15%
$15,000-$19,999	240	101	139	42.08%	57.92%
$20,000-$24,999	291	106	185	36.43%	63.57%
$25,000-$34,999	431	175	256	40.60%	59.40%
$35,000-$49,999	554	361	193	65.16%	34.84%
$50,000-$74,999	755	619	136	81.99%	18.01%
$75,000-$99,999	420	317	103	75.48%	24.52%
$100,000-$149,999	390	350	40	89.74%	10.26%
$150,000 or more	42	42	0	100.00%	0.00%
Income Less Than $25,000	**1,273**	**492**	**781**	**38.65%**	**61.35%**

Source: 2009-2013 American Community Survey, Table B25118

Within Pryor Creek, 61.35% of households with incomes less than $25,000 are estimated to be renters, while 38.65% 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						
	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Occupied Housing Units	**3,865**		**15,896**		**1,444,081**	
Owner Occupied:	**2,356**	**60.96%**	**11,960**	**75.24%**	**968,736**	**67.08%**
Built 2010 or Later	10	0.42%	103	0.86%	10,443	1.08%
Built 2000 to 2009	301	12.78%	1,782	14.90%	153,492	15.84%
Built 1990 to 1999	185	7.85%	1,812	15.15%	125,431	12.95%
Built 1980 to 1989	345	14.64%	2,076	17.36%	148,643	15.34%
Built 1970 to 1979	546	23.17%	2,731	22.83%	184,378	19.03%
Built 1960 to 1969	253	10.74%	1,241	10.38%	114,425	11.81%
Built 1950 to 1959	411	17.44%	1,178	9.85%	106,544	11.00%
Built 1940 to 1949	193	8.19%	512	4.28%	50,143	5.18%
Built 1939 or Earlier	112	4.75%	525	4.39%	75,237	7.77%
Median Year Built:		1974		1979		1977
Renter Occupied:	**1,509**	**39.04%**	**3,936**	**24.76%**	**475,345**	**32.92%**
Built 2010 or Later	0	0.00%	34	0.86%	5,019	1.06%
Built 2000 to 2009	160	10.60%	435	11.05%	50,883	10.70%
Built 1990 to 1999	103	6.83%	540	13.72%	47,860	10.07%
Built 1980 to 1989	137	9.08%	615	15.63%	77,521	16.31%
Built 1970 to 1979	325	21.54%	767	19.49%	104,609	22.01%
Built 1960 to 1969	194	12.86%	451	11.46%	64,546	13.58%
Built 1950 to 1959	324	21.47%	537	13.64%	54,601	11.49%
Built 1940 to 1949	190	12.59%	291	7.39%	31,217	6.57%
Built 1939 or Earlier	76	5.04%	266	6.76%	39,089	8.22%
Median Year Built:		1968		1976		1975
Overall Median Year Built:		**1974**		**1978**		**1976**

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

Within Mayes County, 14.81% of housing units were built after the year 2000. This compares with 15.22% statewide. Within Pryor Creek the percentage is 12.19%.

70.40% of housing units in Mayes County were built prior to 1990, while in Pryor Creek the percentage is 80.36%. These figures compare with the statewide figure of 72.78%.

Substandard Housing

The next table presents data regarding substandard housing in Mayes 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 Units	Inadequate Plumbing		Inadequate Kitchen		Uses Wood for Fuel	
		Number	Percent	Number	Percent	Number	Percent
Pryor Creek	3,865	18	0.47%	45	1.16%	64	1.66%
Mayes County	15,896	295	1.86%	287	1.81%	1,510	9.50%
State of Oklahoma	1,444,081	7,035	0.49%	13,026	0.90%	28,675	1.99%

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

Within Mayes County, 1.86% of occupied housing units have inadequate plumbing (compared with 0.49% at a statewide level), while 1.81% 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 Mayes County by vacancy and type. This data is provided by the American Community Survey.

2013 Housing Units by Vacancy

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Housing Units	4,531		19,175		1,669,828	
Total Vacant Units	666	14.70%	3,279	17.10%	225,747	13.52%
For rent	247	37.09%	446	13.60%	43,477	19.26%
Rented, not occupied	13	1.95%	86	2.62%	9,127	4.04%
For sale only	146	21.92%	323	9.85%	23,149	10.25%
Sold, not occupied	20	3.00%	156	4.76%	8,618	3.82%
For seasonal, recreational, or occasional use	39	5.86%	1,213	36.99%	39,475	17.49%
For migrant workers	0	0.00%	0	0.00%	746	0.33%
Other vacant	201	30.18%	1,055	32.17%	101,155	44.81%
Homeowner Vacancy Rate	5.79%		2.60%		2.31%	
Rental Vacancy Rate	13.96%		9.98%		8.24%	

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

Within Mayes County, the overall housing vacancy rate is estimated to be 17.10%. The homeowner vacancy rate is estimated to be 2.60%, while the rental vacancy rate is estimated to be 9.98%. A large number of the total vacant units in Mayes County is attributable to units for seasonal or recreational occupancy, and units listed as "other vacant" which are units that are vacant but not listed as available for purchase or for rent. Nonetheless, the homeowner and rental vacancy rates (which do not include seasonal units, or "other vacant" units) are slightly higher than the state average.

In Pryor Creek, the overall housing vacancy rate is estimated to be 14.70%. The homeowner vacancy rate is estimated to be 5.79%, while the rental vacancy rate is estimated to be 13.96%.

Building Permits

The next series of tables present data regarding new residential building permits issued in Pryor Creek. 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.

Pryor Creek
New Residential Building Permits Issued, 2004-2014

Year	Single Family Units	Avg. Construction Cost	Multifamily Units	Avg. Multifamily Construction Cost
2004	28	$101,882	0	N/A
2005	25	$111,344	0	N/A
2006	14	$117,071	0	N/A
2007	3	$145,000	0	N/A
2008	0	N/A	0	N/A
2009	0	N/A	0	N/A
2010	0	N/A	0	N/A
2011	0	N/A	0	N/A
2012	0	N/A	0	N/A
2013	0	N/A	0	N/A
2014	2	$130,000	0	N/A

Source: United States Census Bureau Building Permits Survey

The Census Bureau did not receive building permit data starting in 2007, through most of 2014. Therefore this data is not considered complete; however the available data for 2004-2006 suggests that 10-30 units per year may be a likely figure for new construction within Pryor's city limits. Much of the new construction in Mayes County may be occurring outside of Pryor's city limits, however.

New Construction Activity

For Ownership:

There has been significant new construction in Mayes County over the last fifteen years, though most new homes have been constructed outside of the city limits of Pryor. Many of these homes consist of larger homes on unplatted acreages, though there have also been construction in platted subdivisions: homes in the Summerfield Place IV addition typically sell in the range of $110,000 to $160,000, while homes in the Tall Grass Addition appear to start at $140,000. However, most homes are priced above what could be afforded by households earning at or less than median household income: the average sale price for homes in Mayes County constructed after 2005 (for sales after January 2014) is $247,418 or $119.02 per square foot. This is well above what could be afforded by a household earning $43,614 per year, which is the estimated median household income for Mayes County for 2015.

For Rent:

The most recent and notable new rental construction in Pryor was Pryor Creek Apartments, a market rate garden apartment facility constructed in 2003 (with a second phase added in 2009). Three affordable housing developments have recently been proposed in Mayes County; Harvest Creek Villas in Pryor would add 44 new affordable rental units for seniors age 62 and up. Ciestalla Homes would add 72 affordable rental housing units for families (also in Pryor), and finally Chouteau Glen would add 28 affordable rental housing units for families in Chouteau. If constructed, these facilities would go far in meeting the affordable housing needs of families and seniors in Mayes County.

Homeownership Market

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

Housing Units by Home Value

The following table presents housing units in Mayes 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

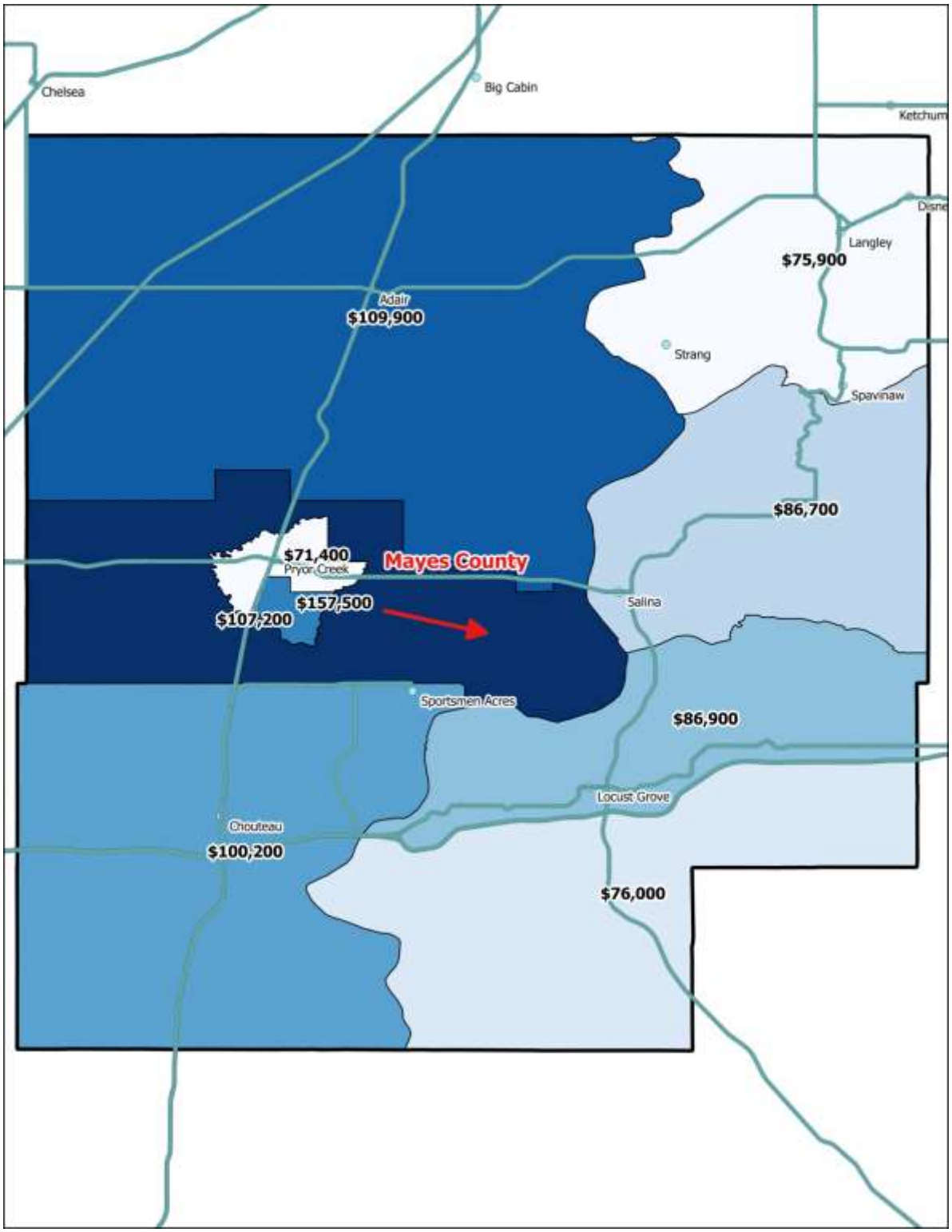
	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Owner-Occupied Units:	**2,356**		**11,960**		**968,736**	
Less than $10,000	91	3.86%	520	4.35%	20,980	2.17%
$10,000 to $14,999	22	0.93%	269	2.25%	15,427	1.59%
$15,000 to $19,999	35	1.49%	148	1.24%	13,813	1.43%
$20,000 to $24,999	0	0.00%	141	1.18%	16,705	1.72%
$25,000 to $29,999	19	0.81%	221	1.85%	16,060	1.66%
$30,000 to $34,999	59	2.50%	344	2.88%	19,146	1.98%
$35,000 to $39,999	51	2.16%	172	1.44%	14,899	1.54%
$40,000 to $49,999	76	3.23%	613	5.13%	39,618	4.09%
$50,000 to $59,999	161	6.83%	675	5.64%	45,292	4.68%
$60,000 to $69,999	237	10.06%	846	7.07%	52,304	5.40%
$70,000 to $79,999	193	8.19%	885	7.40%	55,612	5.74%
$80,000 to $89,999	214	9.08%	733	6.13%	61,981	6.40%
$90,000 to $99,999	185	7.85%	665	5.56%	51,518	5.32%
$100,000 to $124,999	340	14.43%	1,521	12.72%	119,416	12.33%
$125,000 to $149,999	243	10.31%	1,038	8.68%	96,769	9.99%
$150,000 to $174,999	65	2.76%	767	6.41%	91,779	9.47%
$175,000 to $199,999	159	6.75%	653	5.46%	53,304	5.50%
$200,000 to $249,999	78	3.31%	578	4.83%	69,754	7.20%
$250,000 to $299,999	81	3.44%	482	4.03%	41,779	4.31%
$300,000 to $399,999	21	0.89%	365	3.05%	37,680	3.89%
$400,000 to $499,999	0	0.00%	141	1.18%	13,334	1.38%
$500,000 to $749,999	0	0.00%	73	0.61%	12,784	1.32%
$750,000 to $999,999	12	0.51%	58	0.48%	3,764	0.39%
$1,000,000 or more	14	0.59%	52	0.43%	5,018	0.52%
Median Home Value:	**$91,100**		**$96,200**		**$112,800**	

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

The median value of owner-occupied homes in Mayes County is $96,200. This is -14.7% lower than the statewide median, which is $112,800. The median home value in Pryor Creek is estimated to be $91,100.

The geographic distribution of home values in Mayes County can be visualized by the following map. As can be seen, the highest home values are in the central areas of the county, outside of Pryor, while the lowest home values are in northern Pryor, and the northeastern quadrant of the county.

Mayes County Median Home Values by Census Tract



Home Values by Year of Construction

The next table presents median home values in Mayes 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

	Pryor Creek Median Value	Mayes County Median Value	State of Oklahoma Median Value
Total Owner-Occupied Units:			
Built 2010 or Later	-	$261,400	$188,900
Built 2000 to 2009	$87,200	$121,000	$178,000
Built 1990 to 1999	$176,800	$108,800	$147,300
Built 1980 to 1989	$105,500	$110,900	$118,300
Built 1970 to 1979	$107,700	$93,400	$111,900
Built 1960 to 1969	$93,200	$89,000	$97,100
Built 1950 to 1959	$71,900	$74,700	$80,300
Built 1940 to 1949	$64,200	$65,100	$67,900
Built 1939 or Earlier	$63,200	$69,100	$74,400

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

Pryor Creek Single Family Sales Activity

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

Pryor Creek Single Family Sales Activity
Two Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	19	17	24	24	19
Median List Price	$67,000	$64,900	$55,630	$42,950	$49,900
Median Sale Price	$64,000	$63,000	$47,250	$41,285	$42,000
Sale/List Price Ratio	96.3%	97.1%	97.0%	94.6%	94.6%
Median Square Feet	1,144	840	1,036	1,010	1,064
Median Price/SF	$50.34	$63.87	$45.28	$48.54	$42.01
Med. Days on Market	18	43	52	48	40

Source:

Pryor Creek Single Family Sales Activity
Three Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	85	92	105	110	82
Median List Price	$111,360	$107,500	$105,000	$106,500	$121,250
Median Sale Price	$105,000	$99,000	$100,000	$99,750	$116,674
Sale/List Price Ratio	96.3%	96.8%	96.5%	96.1%	98.1%
Median Square Feet	1,485	1,562	1,549	1,546	1,552
Median Price/SF	$64.66	$63.16	$69.81	$68.14	$69.95
Med. Days on Market	66	51	65	50	52

Source:

Pryor Creek Single Family Sales Activity
Four Bedroom Units

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	18	28	26	29	23
Median List Price	$144,950	$134,750	$124,750	$199,900	$191,500
Median Sale Price	$137,000	$130,000	$124,500	$202,500	$195,000
Sale/List Price Ratio	94.1%	97.8%	97.5%	97.6%	98.1%
Median Square Feet	2,310	2,106	1,965	2,488	2,086
Median Price/SF	$59.41	$51.21	$70.88	$78.17	$80.79
Med. Days on Market	61	42	40	39	47

Source:

Pryor Creek Single Family Sales Activity
All Bedroom Types

Year	2011	2012	2013	2014	YTD 2015
# of Units Sold	126	140	155	167	127
Median List Price	$103,700	$101,750	$99,900	$105,000	$114,900
Median Sale Price	$101,356	$99,000	$95,000	$100,000	$112,000
Sale/List Price Ratio	95.9%	97.0%	96.8%	96.2%	97.3%
Median Square Feet	1,485	1,566	1,536	1,568	1,512
Median Price/SF	$61.52	$61.95	$65.66	$68.13	$67.73
Med. Days on Market	57	50	60	47	47

Source:

Between 2011 and year-end 2014, the median list price grew by 0.31% per year. The median sale price was $112,000 in 2015, for a median price per square foot of $67.73. The median sale price to list price ratio was 97.3%, with median days on market of 47 days. This data suggests a steadily improving market, and year-to-date figures for 2015 show a marked improvement over the previous four year with a high sale/list price ratio and declining days on market.

Foreclosure Rates

The next table presents foreclosure rate data for Mayes 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**
Mayes County	3.3%
State of Oklahoma	2.1%
United States	2.1%
Rank among Counties in Oklahoma*:	8

* 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 Mayes County was 3.3% in May 2014. The county ranked 8 out of 64 counties in terms of highest foreclosure rates in Oklahoma. This rate compares with the statewide and nationwide foreclosure rates, both of which were 2.1%. With one of the highest foreclosure rates in the state, it is likely that Mayes County housing market has seen some impact from foreclosures. Relatively high rates of foreclosure can have a depressing effect on home values, and it can be more difficult to secure financing for home purchases in neighborhoods that have been impacted by foreclosures.

Rental Market

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

	Pryor Creek		Mayes County		State of Oklahoma	
	No.	Percent	No.	Percent	No.	Percent
Total Rental Units:	**1,509**		**3,936**		**475,345**	
With cash rent:	1,444		3,138		432,109	
Less than $100	11	0.73%	11	0.28%	2,025	0.43%
$100 to $149	10	0.66%	17	0.43%	2,109	0.44%
$150 to $199	19	1.26%	54	1.37%	4,268	0.90%
$200 to $249	57	3.78%	92	2.34%	8,784	1.85%
$250 to $299	19	1.26%	84	2.13%	8,413	1.77%
$300 to $349	0	0.00%	53	1.35%	9,107	1.92%
$350 to $399	71	4.71%	133	3.38%	10,932	2.30%
$400 to $449	87	5.77%	187	4.75%	15,636	3.29%
$450 to $499	98	6.49%	223	5.67%	24,055	5.06%
$500 to $549	145	9.61%	387	9.83%	31,527	6.63%
$550 to $599	131	8.68%	305	7.75%	33,032	6.95%
$600 to $649	167	11.07%	314	7.98%	34,832	7.33%
$650 to $699	147	9.74%	313	7.95%	32,267	6.79%
$700 to $749	142	9.41%	244	6.20%	30,340	6.38%
$750 to $799	62	4.11%	100	2.54%	27,956	5.88%
$800 to $899	136	9.01%	299	7.60%	45,824	9.64%
$900 to $999	50	3.31%	101	2.57%	34,153	7.18%
$1,000 to $1,249	92	6.10%	155	3.94%	46,884	9.86%
$1,250 to $1,499	0	0.00%	6	0.15%	14,699	3.09%
$1,500 to $1,999	0	0.00%	46	1.17%	10,145	2.13%
$2,000 or more	0	0.00%	14	0.36%	5,121	1.08%
No cash rent	65	4.31%	798	20.27%	43,236	9.10%
Median Gross Rent	**$622**		**$604**		**$699**	

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

Median gross rent in Mayes County is estimated to be $604, which is -13.6% less than Oklahoma's median gross rent of $699/month. Median gross rent in Pryor Creek is estimated to be $622.

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

	Pryor Creek Median Rent	Mayes County Median Rent	State of Oklahoma Median Rent
Total Rental Units:			
Built 2010 or Later	-	-	$933
Built 2000 to 2009	$663	$677	$841
Built 1990 to 1999	$411	$520	$715
Built 1980 to 1989	$556	$524	$693
Built 1970 to 1979	$672	$630	$662
Built 1960 to 1969	$675	$661	$689
Built 1950 to 1959	$575	$628	$714
Built 1940 to 1949	$640	$630	$673
Built 1939 or Earlier	$607	$552	$651

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

The highest median gross rent in Mayes County is among housing units constructed after 2000, which is $677 per month. In order to be affordable, a household would need to earn at least $27,080 per year to afford such a unit.

Pryor Creek Rental Survey Data

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

Pryor Creek Rental Properties

Name	Type	Year Built	Bedrooms	Bathrooms	Size (SF)	Rate	Rate/SF	Vacancy
Kendrick Apartments	Market Rate	1980	1	1	600	$425	$0.708	12.00%
Kendrick Apartments	Market Rate	1980	2	1	800	$450	$0.563	12.00%
Meadow Trace	Market Rate	1979	2	1	947	$600	$0.634	N/A
Meadow Trace	Market Rate	1979	2	1	1,000	$640	$0.640	N/A
Prairie Village	Market Rate	N/A	1	1	667	$600	$0.900	2.00%
Prairie Village	Market Rate	N/A	2	1	839	$665	$0.793	2.00%
Prairie Village	Market Rate	N/A	3	2	998	$750	$0.752	2.00%
Country Club Villas	Market Rate	2001	2	1	858	$699	$0.815	0.00%
Pryor Creek Apartments	Market Rate	2003	1	1	740	$780	$1.054	1.00%
Pryor Creek Apartments	Market Rate	2003	1	1	740	$930	$1.257	1.00%
Pryor Creek Apartments	Market Rate	2003	2	2	1,000	$880	$0.880	1.00%
Pryor Creek Apartments	Market Rate	2003	2	2	1,000	$930	$0.930	1.00%
Gardens at Pryor Creek	LIHTC	2001	1	1	657	N/A	N/A	N/A
Gardens at Pryor Creek	LIHTC	2001	2	1	830	N/A	N/A	N/A
Gardens at Pryor Creek	LIHTC	2001	3	2	1,132	N/A	N/A	N/A

The previous rent surveys encompass over five hundred rental units in six complexes. These properties are located throughout the community and provide a good indication of the availability and rental structure of multifamily property. Concessions such as free rent or no deposit were not evident in the competitive market survey. Review of historical rental data indicates the comparable rental rates have increased in a predominant range of $10 per unit per month annually over the past several years. Occupancy levels in the Pryor area have continued to increase to its present level in the upper 90% range. Rental rates also increased during this same period. The area should continue to show good rental rate and occupancy support due to proximity to the employment centers and limited number of new available units.

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

Increasing occupancy and rental rates during the early 2000s supports the demand for new apartments in Pryor. Based on the success of the available units, well diversified economy, and continued growth of the business base, it is apparent that additional supply will be needed in the future.

Rental Market Vacancy – Pryor Creek

The developments outlined previously report occupancy levels typically above 95%. These occupancy levels are typical of well-maintained and poorly maintained properties alike. The ability of older, physically deteriorating facilities to maintain high occupancy levels reflects the lack of superior alternatives in the Pryor market. The overall market vacancy of rental housing units was reported at 13.96% by the Census Bureau as of the most recent American Community Survey. This rate appears somewhat high based on our own survey.

Rent Survey 1
Gardens at Pryor Creek

Rent Survey 2
Pryor Creek Apartments

Rent Survey 3
Country Club Villas

Rent Survey 4
Prairie Village

Rent Survey 5
Meadow Trace

Rent Survey 6
Kendrick Apartments

Summary of HUD Subsidized Properties

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

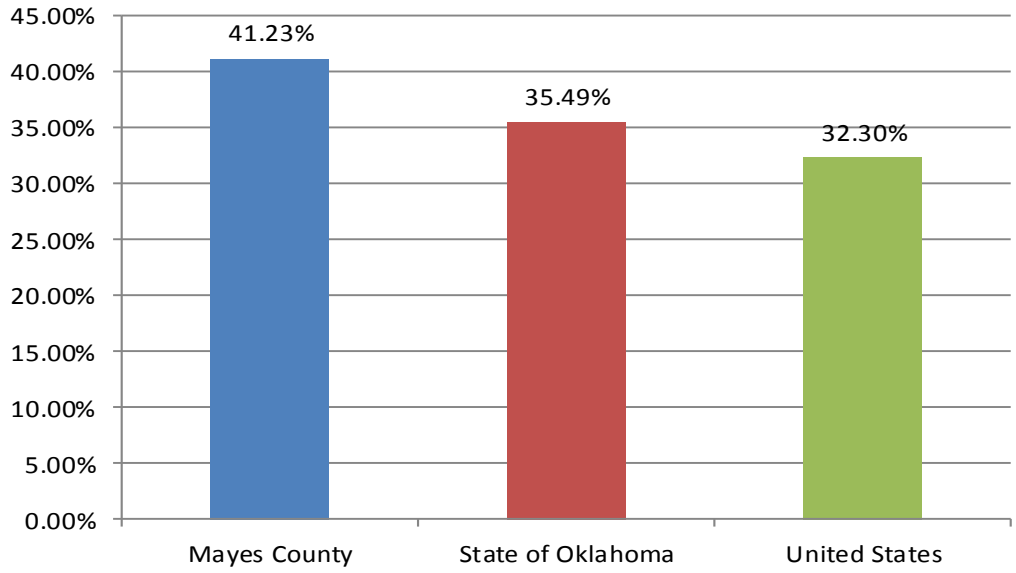
HUD Programs in Mayes County

Mayes County	# Units	Occupancy Rate	Avg. Household Income	Tenant Contribution	Federal Contribution	% of Total Rent
Public Housing	0	N/A	N/A	N/A	N/A	N/A
Housing Choice Vouchers	45	95%	$10,297	$303	$328	47.99%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	161	95%	$8,993	$206	$436	32.14%
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	24	96%	$12,487	$273	$45	85.82%
Summary of All HUD Programs	230	95%	$9,941	$236	$336	41.23%
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 230 housing units located within Mayes County, with an overall occupancy rate of 95%. The average household income among households living in these units is $9,941. Total monthly rent for these units averages $572, with the federal contribution averaging $336 (58.77%) and the tenant's contribution averaging $236 (41.23%).

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.

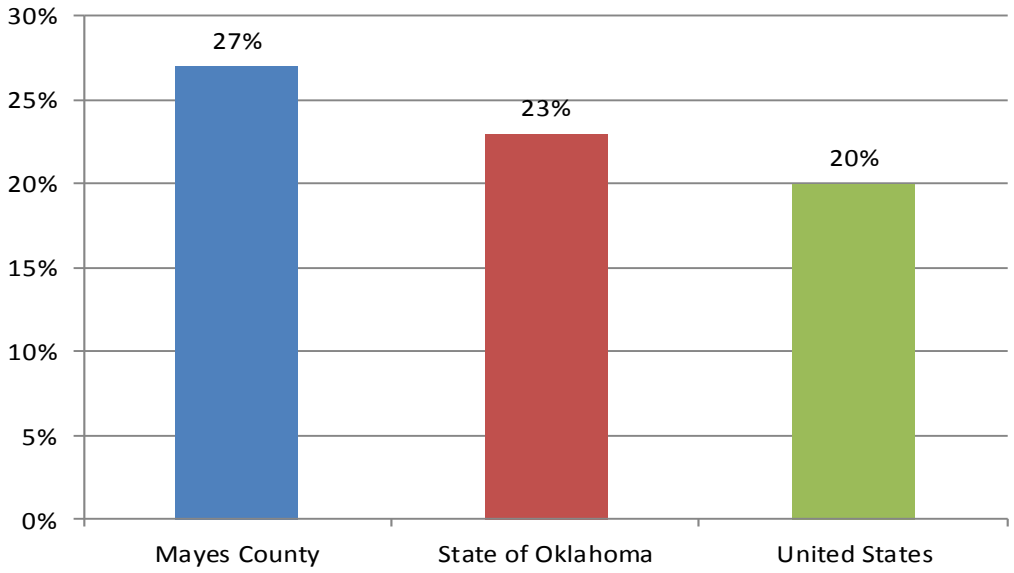
Demographics of Persons in HUD Programs in Mayes County

Mayes County	# Units	% Single Mothers	% w/ Disability	% Age 62+	% Age 62+ w/ Disability	% Minority
Public Housing	0	N/A	N/A	N/A	N/A	N/A
Housing Choice Vouchers	45	30%	46%	30%	85%	32%
Mod Rehab	0	N/A	N/A	N/A	N/A	N/A
Section 8 NC/SR	161	26%	25%	35%	52%	22%
Section 236	0	N/A	N/A	N/A	N/A	N/A
Multi-Family Other	24	0%	15%	100%	15%	6%
Summary of All HUD Programs	230	21%	27%	48%	39%	20%
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

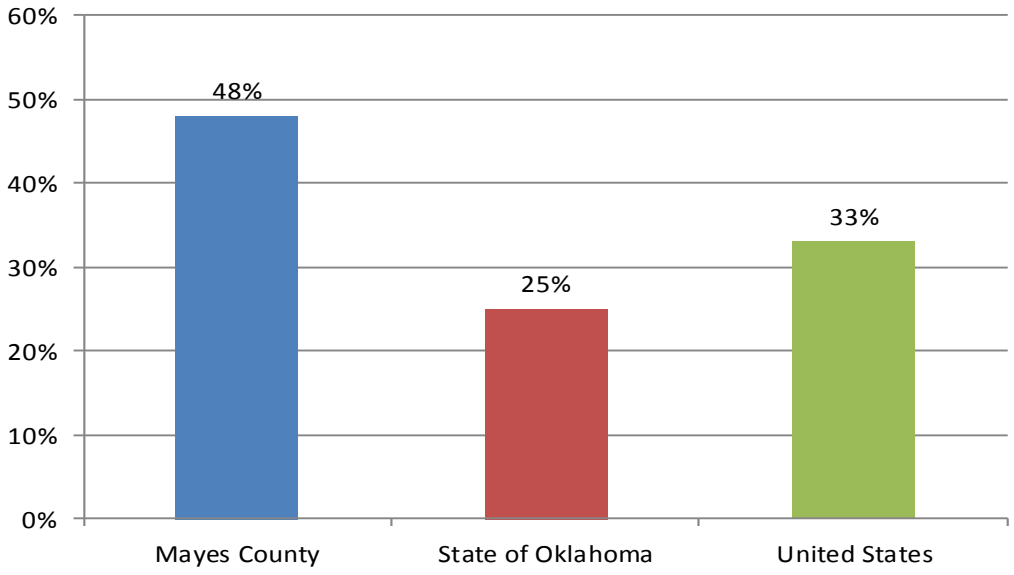
21% of housing units are occupied by single parents with female heads of household. 27% of households have at least one person with a disability. 48% of households have either a householder or spouse age 62 or above. Of the households age 62 or above, 39% have one or more disabilities. Finally, 20% of households are designated as racial or ethnic minorities.

Percentage of Households with Disabilities - HUD Subsidized Properties



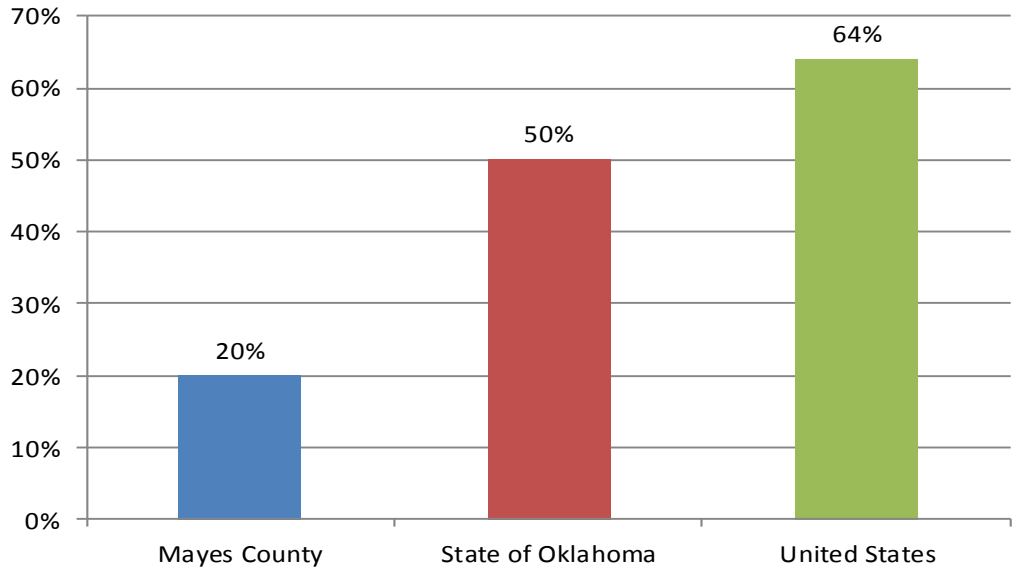
Source: 2013 HUD Picture of Subsidized Households

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 Mayes 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 Mayes 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.

Mayes County : CHAS - Housing Cost Burden by HAMFI

	Owners		Renters	
Household Income / Cost Burden	Number	Percent	Number	Percent
Income < 30% HAMFI	**875**		**970**	
Cost Burden Less Than 30%	150	17.14%	300	30.93%
Cost Burden Between 30%-50%	180	20.57%	85	8.76%
Cost Burden Greater Than 50%	395	45.14%	535	55.15%
Not Computed (no/negative income)	155	17.71%	50	5.15%
Income 30%-50% HAMFI	**1,220**		**1,010**	
Cost Burden Less Than 30%	745	61.07%	485	48.02%
Cost Burden Between 30%-50%	240	19.67%	320	31.68%
Cost Burden Greater Than 50%	235	19.26%	210	20.79%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 50%-80% HAMFI	**1,835**		**790**	
Cost Burden Less Than 30%	1,245	67.85%	595	75.32%
Cost Burden Between 30%-50%	430	23.43%	190	24.05%
Cost Burden Greater Than 50%	160	8.72%	4	0.51%
Not Computed (no/negative income)	0	0.00%	0	0.00%
Income 80%-100% HAMFI	**1,325**		**520**	
Cost Burden Less Than 30%	1,180	89.06%	500	96.15%
Cost Burden Between 30%-50%	140	10.57%	10	1.92%
Cost Burden Greater Than 50%	4	0.30%	10	1.92%
Not Computed (no/negative income)	0	0.00%	0	0.00%
All Incomes	**11,780**		**4,420**	
Cost Burden Less Than 30%	9,540	80.98%	3,010	68.10%
Cost Burden Between 30%-50%	1,250	10.61%	605	13.69%
Cost Burden Greater Than 50%	839	7.12%	759	17.17%
Not Computed (no/negative income)	155	1.32%	50	1.13%

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

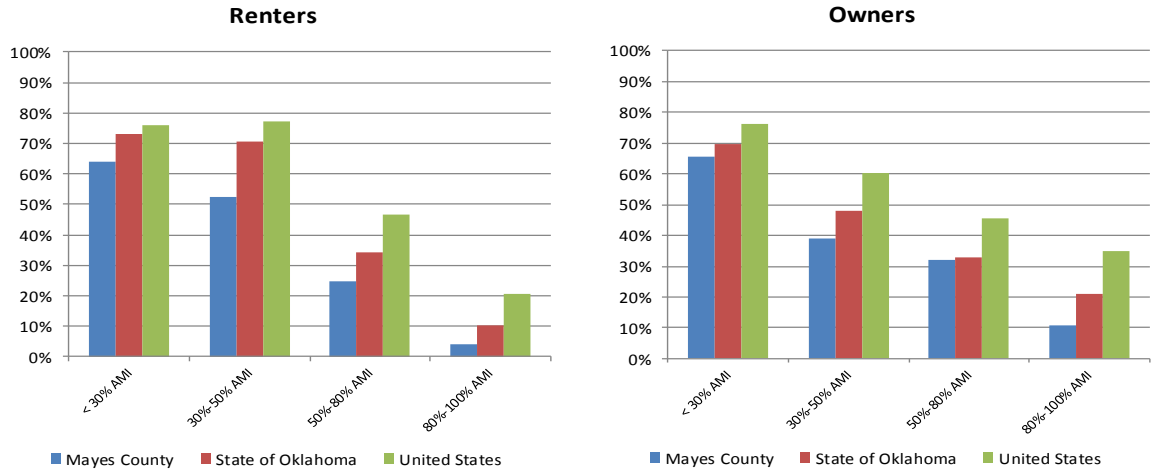
The next table summarizes the data from the previous table for households with cost burden greater than 30% of gross income, followed by a chart comparing these figures for Mayes County with the State of Oklahoma as a whole, and the United States.

Mayes 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	875	65.71%	970	63.92%
Income 30%-50% HAMFI	1,220	38.93%	1,010	52.48%
Income 50%-80% HAMFI	1,835	32.15%	790	24.56%
Income 80%-100% HAMFI	1,325	10.87%	520	3.85%
All Incomes	11,780	17.73%	4,420	30.86%

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.

Mayes County : CHAS - HAMFI by Substandard Conditions / Overcrowding				
	Owners		Renters	
Household Income / Housing Problem	Number	Percent	Number	Percent
Income < 30% HAMFI	**875**		**970**	
Between 1.0 and 1.5 Persons per Room	25	2.86%	15	1.55%
More than 1.5 Persons per Room	4	0.46%	25	2.58%
Lacks Complete Kitchen or Plumbing	10	1.14%	20	2.06%
Income 30%-50% HAMFI	**1,220**		**1,010**	
Between 1.0 and 1.5 Persons per Room	35	2.87%	25	2.48%
More than 1.5 Persons per Room	4	0.33%	10	0.99%
Lacks Complete Kitchen or Plumbing	25	2.05%	15	1.49%
Income 50%-80% HAMFI	**1,835**		**790**	
Between 1.0 and 1.5 Persons per Room	10	0.54%	75	9.49%
More than 1.5 Persons per Room	0	0.00%	4	0.51%
Lacks Complete Kitchen or Plumbing	35	1.91%	0	0.00%
Income 80%-100% HAMFI	**1,325**		**520**	
Between 1.0 and 1.5 Persons per Room	40	3.02%	65	12.50%
More than 1.5 Persons per Room	4	0.30%	0	0.00%
Lacks Complete Kitchen or Plumbing	20	1.51%	0	0.00%
All Incomes	**11,780**		**4,420**	
Between 1.0 and 1.5 Persons per Room	200	1.70%	195	4.41%
More than 1.5 Persons per Room	16	0.14%	39	0.88%
Lacks Complete Kitchen or Plumbing	165	1.40%	175	3.96%

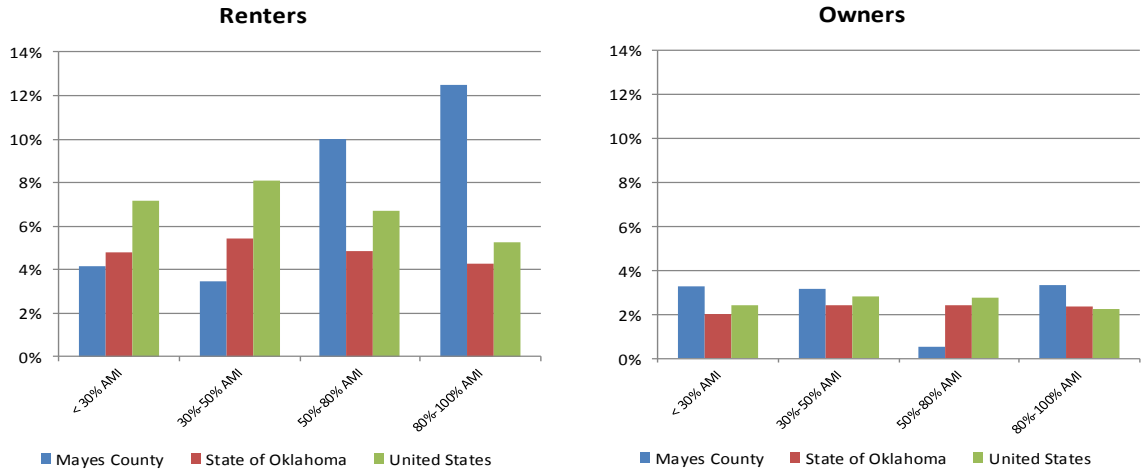
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 3

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 Mayes County, Oklahoma and the nation.

Mayes 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	875	3.31%	970	4.12%
Income 30%-50% HAMFI	1,220	3.20%	1,010	3.47%
Income 50%-80% HAMFI	1,835	0.54%	790	10.00%
Income 80%-100% HAMFI	1,325	3.32%	520	12.50%
All Incomes	11,780	1.83%	4,420	5.29%

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

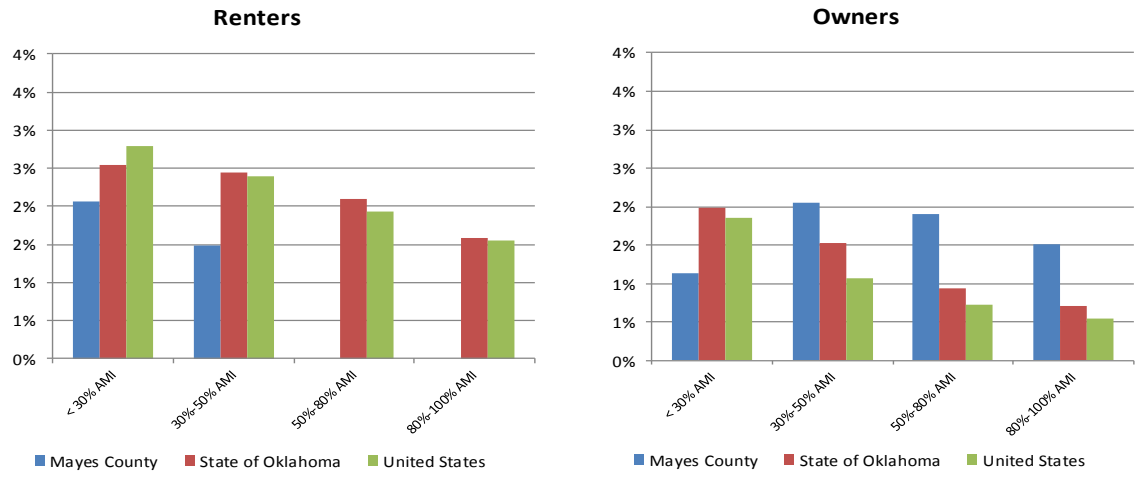
The table following summarizes this data for substandard housing conditions, with a comparison chart between Mayes County, the state and the nation.

Mayes 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	875	1.14%	970	2.06%
Income 30%-50% HAMFI	1,220	2.05%	1,010	1.49%
Income 50%-80% HAMFI	1,835	1.91%	790	0.00%
Income 80%-100% HAMFI	1,325	1.51%	520	0.00%
All Incomes	11,780	1.40%	4,420	3.96%

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.

Mayes 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	**875**	**573**	**65.49%**	**970**	**623**	**64.23%**
Elderly Family	35	14	40.00%	25	8	32.00%
Small Family (2-4 persons)	235	180	76.60%	405	340	83.95%
Large Family (5 or more persons)	75	59	78.67%	110	80	72.73%
Elderly Non-Family	345	220	63.77%	200	55	27.50%
Non-Family, Non-Elderly	190	100	52.63%	230	140	60.87%
Income 30%-50% HAMFI	**1,220**	**479**	**39.26%**	**1,010**	**529**	**52.38%**
Elderly Family	175	55	31.43%	45	34	75.56%
Small Family (2-4 persons)	275	120	43.64%	455	245	53.85%
Large Family (5 or more persons)	165	85	51.52%	85	45	52.94%
Elderly Non-Family	375	84	22.40%	170	75	44.12%
Non-Family, Non-Elderly	230	135	58.70%	255	130	50.98%
Income 50%-80% HAMFI	**1,835**	**595**	**32.43%**	**790**	**203**	**25.70%**
Elderly Family	455	80	17.58%	125	15	12.00%
Small Family (2-4 persons)	665	300	45.11%	275	94	34.18%
Large Family (5 or more persons)	95	30	31.58%	75	4	5.33%
Elderly Non-Family	400	75	18.75%	130	50	38.46%
Non-Family, Non-Elderly	215	110	51.16%	180	40	22.22%
Income 80%-100% HAMFI	**1,325**	**149**	**11.25%**	**520**	**20**	**3.85%**
Elderly Family	340	15	4.41%	15	0	0.00%
Small Family (2-4 persons)	530	64	12.08%	200	20	10.00%
Large Family (5 or more persons)	185	25	13.51%	60	0	0.00%
Elderly Non-Family	180	20	11.11%	50	0	0.00%
Non-Family, Non-Elderly	90	25	27.78%	195	0	0.00%
All Incomes	**11,780**	**2,100**	**17.83%**	**4,420**	**1,375**	**31.11%**
Elderly Family	2,410	209	8.67%	295	57	19.32%
Small Family (2-4 persons)	5,450	814	14.94%	1,980	699	35.30%
Large Family (5 or more persons)	1,075	224	20.84%	410	129	31.46%
Elderly Non-Family	1,560	409	26.22%	554	180	32.49%
Non-Family, Non-Elderly	1,285	444	34.55%	1,180	310	26.27%

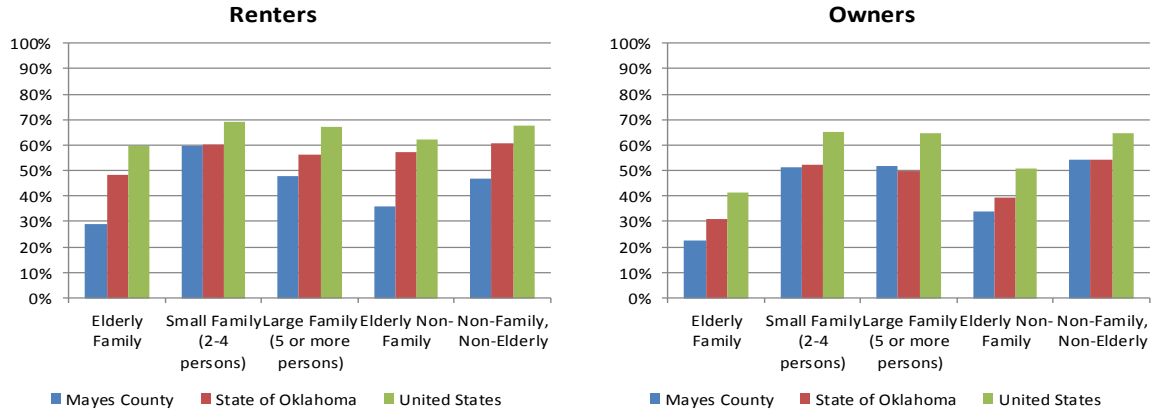
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 7

Mayes 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	**3,930**	**1,647**	**41.91%**	**2,770**	**1,355**	**48.92%**
Elderly Family	665	149	22.41%	195	57	29.23%
Small Family (2-4 persons)	1,175	600	51.06%	1,135	679	59.82%
Large Family (5 or more persons)	335	174	51.94%	270	129	47.78%
Elderly Non-Family	1,120	379	33.84%	500	180	36.00%
Non-Family, Non-Elderly	635	345	54.33%	665	310	46.62%

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).

Mayes 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	**875**	**585**	**66.86%**	**970**	**640**	**65.98%**
Elderly Family	35	15	42.86%	25	15	60.00%
Small Family (2-4 persons)	235	180	76.60%	405	340	83.95%
Large Family (5 or more persons)	75	60	80.00%	110	80	72.73%
Elderly Non-Family	345	225	65.22%	200	50	25.00%
Non-Family, Non-Elderly	190	105	55.26%	230	155	67.39%
Income 30%-50% HAMFI	**1,220**	**515**	**42.21%**	**1,010**	**550**	**54.46%**
Elderly Family	175	55	31.43%	45	35	77.78%
Small Family (2-4 persons)	275	135	49.09%	455	245	53.85%
Large Family (5 or more persons)	165	100	60.61%	85	70	82.35%
Elderly Non-Family	375	85	22.67%	170	70	41.18%
Non-Family, Non-Elderly	230	140	60.87%	255	130	50.98%
Income 50%-80% HAMFI	**1,835**	**625**	**34.06%**	**790**	**260**	**32.91%**
Elderly Family	455	85	18.68%	125	15	12.00%
Small Family (2-4 persons)	665	305	45.86%	275	115	41.82%
Large Family (5 or more persons)	95	35	36.84%	75	40	53.33%
Elderly Non-Family	400	90	22.50%	130	50	38.46%
Non-Family, Non-Elderly	215	110	51.16%	180	40	22.22%
Income Greater than 80% of HAMFI	**7,850**	**725**	**9.24%**	**1,650**	**240**	**14.55%**
Elderly Family	1,745	110	6.30%	100	0	0.00%
Small Family (2-4 persons)	4,270	275	6.44%	840	165	19.64%
Large Family (5 or more persons)	740	190	25.68%	140	20	14.29%
Elderly Non-Family	440	40	9.09%	50	0	0.00%
Non-Family, Non-Elderly	655	110	16.79%	515	55	10.68%
All Incomes	**11,780**	**2,450**	**20.80%**	**4,420**	**1,690**	**38.24%**
Elderly Family	2,410	265	11.00%	295	65	22.03%
Small Family (2-4 persons)	5,445	895	16.44%	1,975	865	43.80%
Large Family (5 or more persons)	1,075	385	35.81%	410	210	51.22%
Elderly Non-Family	1,560	440	28.21%	550	170	30.91%
Non-Family, Non-Elderly	1,290	465	36.05%	1,180	380	32.20%

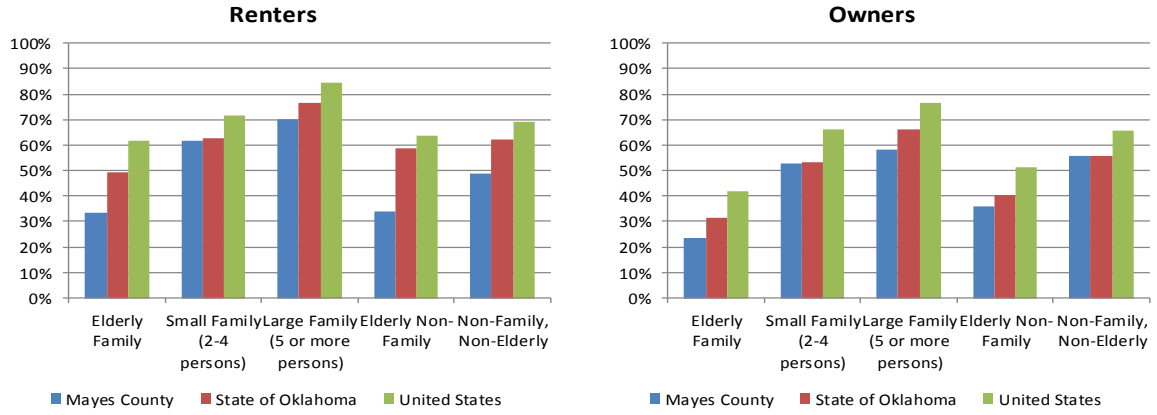
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 16

Mayes 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	**3,930**	**1,725**	**43.89%**	**2,770**	**1,450**	**52.35%**
Elderly Family	665	155	23.31%	195	65	33.33%
Small Family (2-4 persons)	1,175	620	52.77%	1,135	700	61.67%
Large Family (5 or more persons)	335	195	58.21%	270	190	70.37%
Elderly Non-Family	1,120	400	35.71%	500	170	34.00%
Non-Family, Non-Elderly	635	355	55.91%	665	325	48.87%

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 Mayes 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.”

Mayes 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	**875**	**585**	**66.9%**	**970**	**645**	**66.5%**
White alone, non-Hispanic	605	370	61.2%	580	400	69.0%
Black or African-American alone	0	0	N/A	0	0	N/A
Asian alone	4	4	100.0%	0	0	N/A
American Indian alone	80	70	87.5%	159	60	37.7%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	25	15	60.0%	29	4	13.8%
Other (including multiple races)	165	130	78.8%	200	180	90.0%
Income 30%-50% HAMFI	**1,220**	**515**	**42.2%**	**1,010**	**550**	**54.5%**
White alone, non-Hispanic	810	365	45.1%	730	405	55.5%
Black or African-American alone	0	0	N/A	0	0	N/A
Asian alone	0	0	N/A	0	0	N/A
American Indian alone	180	65	36.1%	75	40	53.3%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	4	4	100.0%	15	15	100.0%
Other (including multiple races)	225	80	35.6%	190	90	47.4%
Income 50%-80% HAMFI	**1,835**	**625**	**34.1%**	**785**	**255**	**32.5%**
White alone, non-Hispanic	1,400	435	31.1%	555	135	24.3%
Black or African-American alone	0	0	N/A	0	0	N/A
Asian alone	0	0	N/A	4	4	100.0%
American Indian alone	90	35	38.9%	45	15	33.3%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	19	4	21.1%	40	30	75.0%
Other (including multiple races)	325	150	46.2%	150	75	50.0%
Income 80%-100% HAMFI	**1,325**	**210**	**15.8%**	**515**	**80**	**15.5%**
White alone, non-Hispanic	995	150	15.1%	395	60	15.2%
Black or African-American alone	0	0	N/A	0	0	N/A
Asian alone	0	0	N/A	0	0	N/A
American Indian alone	70	10	14.3%	4	4	100.0%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	8	4	50.0%	10	0	0.0%
Other (including multiple races)	260	50	19.2%	110	20	18.2%
All Incomes	**11,780**	**2,450**	**20.8%**	**4,410**	**1,685**	**38.2%**
White alone, non-Hispanic	8,640	1,715	19.8%	3,120	1,140	36.5%
Black or African-American alone	4	0	0.0%	10	0	0.0%
Asian alone	49	29	59.2%	8	4	50.0%
American Indian alone	875	210	24.0%	313	119	38.0%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	216	27	12.5%	109	49	45.0%
Other (including multiple races)	2,005	475	23.7%	855	380	44.4%

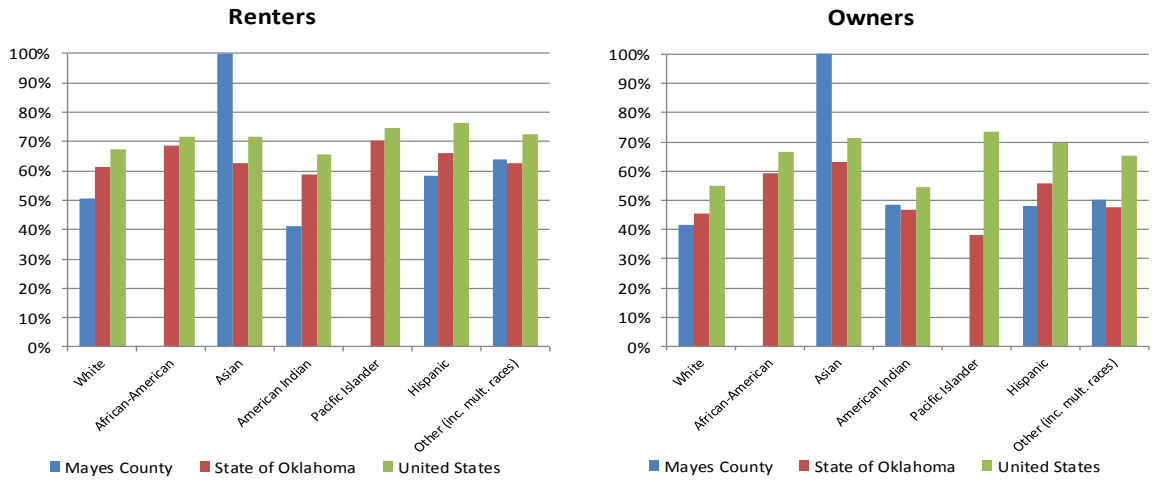
Source: 2008-2012 HUD Comprehensive Housing Affordability Strategy, Table 1

Mayes 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	**3,930**	**1,725**	**43.89%**	**2,765**	**1,450**	**52.44%**
White alone, non-Hispanic	2,815	1,170	41.56%	1,865	940	50.40%
Black or African-American alone	0	0	N/A	0	0	N/A
Asian alone	4	4	100.00%	4	4	100.00%
American Indian alone	350	170	48.57%	279	115	41.22%
Pacific Islander alone	0	0	N/A	0	0	N/A
Hispanic, any race	48	23	47.92%	84	49	58.33%
Other (including multiple races)	715	360	50.35%	540	345	63.89%

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 Mayes County. The greatest needs are among households with incomes less than 30% of Area Median Income. Several other areas of note:

- Among households with incomes less than 50% of Area Median Income, there are 1,150 renter households that are cost overburdened, and 1,050 homeowners that are cost overburdened.
- Among **elderly** households with incomes less than 50% of Area Median Income, there are 172 renter households that are cost overburdened, and 373 homeowners that are cost overburdened.

Overall Anticipated Housing Demand

Future demand for housing units in Mayes 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 Pryor Creek, as well as Mayes County as a whole. The calculations are shown in the following tables.

Pryor Creek Anticipated Demand

Households in Pryor Creek grew at an annually compounded rate of 0.69% from 2000 to 2010. Nielsen SiteReports estimates households have declined -0.32% per year since that time, and that households will decline -0.03% per year through 2020 (effectively stable). Much of the housing growth in Mayes County has been in areas outside of the city limits of Pryor, and therefore our forecast of housing need will concern the county as a whole.

Mayes County Anticipated Demand

Households in Mayes County grew at an annually compounded rate of 0.77% from 2000 to 2010. Esri Business Analyst estimates households have grown 0.28% per year since that time, and that households will grow 0.23% per year through 2020.

For these reasons we will rely on the Esri forecast of 0.23% per year in forecasting future household growth for Mayes County.

The percentage of owner households was estimated at 75.24% with renter households estimated at 24.76%, 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 Mayes County

Year		2015	2016	2017	2018	2019	2020
Household Estimates		16,237	16,274	16,312	16,350	16,387	16,425
Owner %:	75.24%	12,217	12,245	12,273	12,301	12,330	12,358
Renter %:	24.76%	4,020	4,030	4,039	4,048	4,058	4,067
				Total New Owner Households			**141**
				Total New Renter Households			**47**

Based on an estimated household growth rate of 0.23% per year, Mayes County would require 141 new housing units for ownership, and 47 units for rent, over the next five years. Annually this equates to 28 units for ownership per year, and 9 units for rent per year. This forecast is based solely on projected population and household growth over the next five years.

Housing Demand – Population Subsets

This section will address 5-year forecasted needs and trends for population special population subsets for Mayes 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 Mayes 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.

Mayes County: 2015-2020 Housing Needs by Income Threshold

	Owner Subset %	Renter Subset %	Owners	Renters	**Total**
Total New Demand: 2015-2020	100.00%	100.00%	141	47	188
Less than 30% AMI	7.43%	21.95%	11	10	**21**
Less than 50% AMI	17.78%	44.80%	25	21	**46**
Less than 60% AMI	21.34%	53.76%	30	25	**55**
Less than 80% AMI	33.36%	62.67%	47	29	**76**

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.

Mayes 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	33.70%	19.21%	48	9	**57**
Elderly less than 30% AMI	3.23%	5.09%	5	2	**7**
Elderly less than 50% AMI	7.89%	9.95%	11	5	**16**
Elderly less than 60% AMI	9.47%	11.95%	13	6	**19**
Elderly less than 80% AMI	15.15%	15.72%	21	7	**29**

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.

Mayes 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)	35.70%	44.57%	50	21	**71**
Disabled less than 30% AMI	3.95%	13.01%	6	6	**12**
Disabled less than 50% AMI	8.06%	23.30%	11	11	**22**
Disabled less than 60% AMI	9.68%	27.96%	14	13	**27**
Disabled less than 80% AMI	14.77%	31.67%	21	15	**36**

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.

Mayes 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%	141	47	188
Total Veteran Demand	11.88%	11.88%	17	6	**22**
Veterans with Disabilities	4.14%	4.14%	6	2	**8**
Veterans Below Poverty	1.01%	1.01%	1	0	**2**
Disabled Veterans Below Poverty	0.52%	0.52%	1	0	**1**

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).

Mayes County: 2015-2020 Housing Needs for Working Families					
	Owner Subset %	Renter Subset %	Owners	Renters	**Total**
Total New Demand (2015-2020)	100.00%	100.00%	141	47	188
Total Working Families	52.19%	52.19%	74	24	**98**
Working Families with Children Present	24.45%	24.45%	35	11	**46**

Population Subset Conclusions

Based on population and household growth over the next five years, a total of 188 housing units will be needed in Mayes County over the next five years. Of those units:

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

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

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

Special Topics

Mayes County Disaster Resiliency Assessment

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

C.0 Comprehensive Plans & Hazard Mitigation Plans

There are 13 cities and towns within the county. The City of Pryor Creek is the county seat. Towns include Adair, Chouteau, Disney, Grand Lake Towne, Hoot Owl, Langley, Locust Grove, Pensacola, Salina, Spavinaw, Sportsmen Acres and Strang. MidAmerica Industrial Park (MAIP) is also included in the Mayes County Hazard Mitigation Plan.

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.

City of Pryor Creek has a Comprehensive Land Use Plan that is in the process of being updated. Specific objectives and policies are not outlined in the plan; however, within the discussion on transportation, the engineering consultant noted that some arterial roadways flood when Pryor Creek overflows, thus, the roadway elevation should be raised so that arterials are passable during flooding events.

Langley has a comprehensive plan. The towns of Adair, Choteau, Disney, Grand Lake Towne, Locust Grove, Pensacola, Salina, Sportsmen Acres, and Strang do not have a comprehensive plan. MAIP is considered an unincorporated territory in Mayes County.

Emergency Operation Plan

According to Mayes County Emergency Management, Mayes County, as a whole, along with several communities in the county, is National Incident Management System (NIMS) compliant and has incorporated MIMS/ICS (Incident Command System) into its Emergency Operations Plan and other protocols.

- **Emergency Operations Center** – During major emergencies, Mayes County's government will be moved to the Emergency Operations Center (EOC) located at 700 E. Graham in Pryor. The backup location is the Mayes County Courthouse at 1 Court Place. .
- **9-1-1** – Mayes Emergency Services Trust Authority (MESTA) has a 911 system and dispatch center located at MidAmerica Industrial Park.
- **Mass Telephone Notification** – Mayes County has in place a county-wide mass telephone notification system that allows emergency managers to call every telephone number in the database during emergencies.
- **Warning Siren** – The warning siren coverage for the Mayes County includes 26 sirens strategically located in incorporated areas inside the county.

Emergency Operation Center

During major emergencies, Mayes County's government will be moved to the Emergency Operation Center (EOC). The backup EOC is at the Mayes County Courthouse. The Mobile EOC van is equipped with a backup generator and includes communications equipment, radio, television and internet capabilities. The community of Locust Grove built a school gymnasium that is a monolithic dome structure that also serves as a storm shelter. The dome structure deflects wind and can sustain winds up to 250 mph. A new elementary school in Locust Grove is also built as a series of dome structures.

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

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

City of Pryor Creek also has a Hazard Mitigation Plan.

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

The Mayes County Multi-Jurisdictional Multi-Hazard Mitigation 2013 Plan Update has several Goals and Objectives. The following specifically addresses storm shelters and safe rooms.

Tornados

GOAL: To reduce injuries and loss of life; trauma; damage to property, equipment and infrastructure; community disruption; and economic, environmental and other losses caused by tornadoes.

Objective: Structural Projects**.** Provide safe tornado shelters, Safe Rooms, and fortified buildings for vulnerable populations, including children; offer training and incentives to encourage people to include shelters and Safe Rooms in new and retrofit building projects.

The following are high priority mitigation measures within the Mayes County HMP:

Prioritized Mitigation Measures		
Rank	**Lead/Responsible Department**	**Mitigation Strategy**
1	County, Local and Schools Emergency Management	Develop an All-Hazard Public Information, Education, and Awareness Program.
2	City Manager, County Emergency Management	Educate the public on the importance of a Family Disaster Plan and Supply Kit.
3	City Manager, County Emergency Management	Develop and Distribute a Family Emergency Preparedness Guide to all families.

4	County Emergency Management	Develop distribution centers in local libraries, government facilities, and other public buildings where information and safety guidance on natural and manmade hazards can be provided to citizens.
5	Community, OK DHS, County Health Department	Develop an inventory, registry and database of Special Needs Populations (elderly, poor, deaf, blind, etc.) that may require special assistance, that tie in with 9-1-1, GIS Systems, etc., so that vulnerable populations within the community can be checked on, notified, or evacuated effectively in the event of disasters.
6	Emergency Management	Evaluate, upgrade and maintain community-wide outdoor omni-directional voice/siren warning systems.
7	Emergency Management	Acquire and distribute NOAA Weather Radios to all Critical Facilities and the public.
8	City Manager/ Emergency Manager	Develop a public information program designed to communicate the potential severity of a drought, and the appropriate responses by the local population, including voluntary water conservation measures the public can take.
9	Parks Department/ County Emergency Management	Provide lightning warning systems for Community public outdoor sports areas, pools, golf courses, and parks.
10	Public Schools/ Emergency Management	Provide lightning warning systems for Public Schools outdoor sports areas and play grounds.
11	City Manager	Provide surge and lightning protection for computer-reliant critical facilities (e.g. City Hall, 911 Center, EOC, Police and Fire stations, water/wastewater treatment plant and public works buildings).
12	City Manager	Educate the Public, and encourage the Utility Companies to provide information to their clients on Whole House Surge and Lightning Protection.
13	City Manager	When replaced, install Break/Shatter Resistant Glass in Government Offices, and critical facilities.
14	Superintendent, Public Schools	When replaced, install Break/Shatter Resistant Glass in Schools.
15	City Manager/ County Emergency Management/ City Engineer	Provide employee shelters/safe-rooms at critical facilities, such as 911 Center, fire stations and police stations to protect first responders.
16	Public Schools	Perform tornado and high wind and earthquake evaluations of schools and retrofit or remodel buildings to make them more disaster resistant.
17	Superintendent, Public Schools	Install Safe-Rooms in Schools and retrofit/construct safe rooms at existing Schools.
18	City Manager/ County	Develop an Individual Safe Room Program for vulnerable populations that will withstand hazards, including Home owners,

	Emergency Management	Special Needs Populations, elderly, mobile home residents, etc.
19	City Manager/ Emergency Management	Adopt an ordinance requiring registration of Safe Rooms, and create a data base and GIS (lat/long) map to locate Safe Rooms in the event of a disaster.
20	Emergency Manager	Obtain grants for storm shelters/safe rooms in mobile home parks.
21	City Manager	Adopt an Ordinance requiring new Mobile Home Parks to provide storm shelters/safe rooms for their residents.
22	City Manager/ Code Enforcement	Educate residents, building professionals and safe room vendors on the International Codes Council/National Storm Shelter Association's "Standard for the Design and Construction of Storm Shelters" and incorporate this Standard into current regulatory ordinances.
23	Community Development Departments/ Code Enforcement	Identify and develop public information and education programs and provide materials and mitigation measures that protect a building's roof, all outside openings, and the building envelope. Also research ways to improve quality of construction related to wind resistance. Top priority should be given to protection of the roof system, typically the most vulnerable and most expensive component to replace.
24	County Emergency Management	Develop an Emergency Back-up Generator Hazard Mitigation Plan Annex to the Multi-Hazard Mitigation Plan for the community, assessing and prioritizing generator needs for critical facilities, both public and private. Assessment should include emergency generator needs, costs of installation for pads/ transfer panels only, or for complete generator assembly installation.
25	Department of Public Works/ School Superintendent	Obtain emergency generators for continuity of government/use during disaster power outages for critical facilities including Emergency Operations Centers, City Hall, Dispatch, Police, Fire, Community Centers used for emergency housing during disasters, critical facilities, lift stations, water treatment plants, and community medical facilities, as identified in the Emergency Back-up Generator Hazard Mitigation Plan Annex.
26	City Manager	Identify and encourage Private Critical Facilities (Financial Institutions, Elder Care Facilities, Designated/Potential Community Emergency Shelters, etc.) to have generator pad, wiring/transfer switches and Emergency Back-Up Generators, or Reliable Contracts to provide Back-Up Generators.
27	Community Manager	Adopt an Ordinance requiring generator pad and wiring/transfer switches for Elder Care Facilities and Nursing Homes, to accommodate Emergency Back-Up Generators in the event of prolonged power outages.
28	Community Manager	Identify and/or encourage key important private service facilities (gas stations, convenience stores, etc.) to have wiring/transfer

		switches and emergency backup generators installed, or reliable contracts for the provision of back-up generators, in the event of disasters or power outages.
29	Community Manager	Develop Memorandums of Understanding (MOUs) with private sector gasoline service facilities to provide priority fuel to emergency/critical vehicles (government, Police, Fire, ambulance, etc.) in times of emergency or power outage.
30	Community Manager	Provide covered shelters for City First Response/government vehicles to protect against hail damage.
31	Community Manager/ Public Works Director/ Electric Utility	Provide routine trimming of trees to reduce power outages during storms.
32	Fire Chief/ Emergency Manager/ Police Chief	Develop a contingency plan for evacuating population endangered by a wildfire.
33	Emergency Management	Develop a Heat Emergency Action Plan/Heat Emergency Annex to the Emergency Operations Plan for the jurisdiction.
34	Emergency Management/ Fire/ Police	Provide new/retrofit facilities for the 911 Center and the Emergency Operations Center.
35	City Manager/ Code Enforcement	Train/Educate builders, developers, architects and engineers in techniques of disaster-resistant homebuilding, such as the Fortified Home standards developed by the Institute for Business & Home Safety (IBHS), the Blueprint for Safety guidelines developed by the Federal Alliance for Safe Homes (FLASH).
36	City Manager/ Code Enforcement/ School Superintendent	Educate builders on appropriate foundation types for soils with different degrees of shrink-swell potential. For example, using "post-tensioned slab-ongrade" or "drilled pier" vs. standard "slab-on-grade" or "wall-on-grade" foundations.
37	City Manager/ Public Works Director/ School Superintendent	Implement/enforce an administrative procedure/ordinance to require permits for foundation repair.
38	City Manager/ Code Enforcement	Establish an administrative procedure or change in City codes that require builders to check for expansive soils when applying for new residential construction permits, and to consider the use of foundations that mitigate expansive soil damages when in a moderate to high-risk area.
39	Department of Public Works/ Superintendent, Public Schools	Provide and maintain defensible space around structures vulnerable to wildfires.
40	OSU Extension, Mayes County/ NRCS/ Public Schools	Implement red cedar eradication program (NRCS to assist) to reduce red cedar trees and wild fire potential.
41	Community Manager/ Floodplain Manager	Continue Compliance with, and Participation in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS).

42	Department of Public Works	Prepare a comprehensive basin-wide Flood and Drainage Annex to the Multi-Hazard Mitigation Plan for all watersheds within the jurisdiction. The Annex should identify all flooding problems within the jurisdiction, and recommend the most cost-effective and politically acceptable solutions.
43	Public Works	Continue to acquire and remove floodplain and (future) repetitive loss properties where the community's Flood and Drainage Annex to the Multi-Hazard Mitigation Plans identify acquisition as the most cost-effective and desirable mitigation measure.
44	Community Manager/ Public works	Develop / Review / Update the Debris Management Plan.
45	Emergency Management	Create and maintain habitat for flora and fauna in flood control projects. Maintaining or developing wetlands may be an effective area to receive or reduce floodwaters.
46	Emergency Management	Control erosion during development with vegetation or sediment capture, reducing sedimentation which may fill in channels and lakes, reducing their ability to carry or store floodwaters.
47	Emergency Management	Maintain natural and beneficial functions of streams and floodplains.

City of Pryor Mitigation Measures

Priority	Category	Measure	Current Status (Complete, Ongoing, In Progress, Not yet begun, Modified, Dropped)
1	Floods	Acquire and remove floodplain properties where repetitive loss and master drainage plans identify acquisition is the most cost-effective and desirable mitigation measure.	Ongoing
2	Winter Storms	Reduce the number of overhead power lines through consolidating existing lines and burying new lines underground.	Dropped
3	Winter Storms	Develop a contingency plan and acquire equipment for responding to a massive power outage due to severe winter storm, ice and snow.	ongoing
4	Tornadoes & High Winds	Relocate one or more of the existing water towers away from substations where primary electrical functions for the City are located.	Ongoing
5	General	Provide Certified Disaster Training for City employees, and coordinate efforts with local CERT Teams.	Dropped
6	Tornadoes & High Winds	Install community safe-rooms / storm shelters.	Not yet begun
7	Tornadoes & High Winds	Install safe-rooms in schools.	Not yet begun
8	Lightning	Provide surge protection and backup power generators for computer-reliant critical facilities (e.g. 911 Center, EOC, police sub-stations, fire stations, etc.).	Completed for the 911 Center, EOC, and Police. Still working on Fire Dept.
9	Winter Storms	Provide public awareness on effective ways to monitor and avoid ice damage, frozen pipes, and snow loads on roof systems.	Ongoing
10	Winter Storms	Provide for routine trimming of trees to reduce power outages during storms. Update City of Pryor arborist crew with equipment as needed or for major storm events.	Ongoing
11	Extreme Heat	Install window air conditioners for elderly shut-ins (for whom extreme heat can be a life-threatening hazard).	Dropped
12	Expansive Soils	Investigate codes/incentives for the construction of new foundations to mitigate expansive soil damage.	Dropped
13	Urban Fires	Make sure fire extinguishers are strategically placed and properly maintained in all community facilities.	Completed

Priority	Category	Measure	Current Status (Complete, Ongoing, In Progress, Not yet begun, Modified, Dropped)
14	General	Establish working partnerships involving local government leaders, civic, business, and volunteer groups to create a safer community.	Ongoing
15	General	Develop a "Helping Your Neighbors" program through the school system to encourage children to think of people who require special assistance (e.g., elders, infants, and persons with disabilities) during severe weather conditions (e.g., winter storms and extreme heat.)	Ongoing
16	General	Investigate making educational materials for all hazards standardized, readily available off-the-shelf, and economical.	Ongoing
17	General	Evaluate and upgrade warning systems.	Not yet begun
18	General	Provide backup facilities for the 911 Center and the Emergency Operations Center.	Completed
19	General	Develop a community debris management plan.	Completed
20	General	Identify citizens who can serve as translators.	Completed
21	Floods	Acquire accurate or verify accuracy of existing flood plain maps.	Completed
22	Floods	Develop land-use ordinances to prevent construction in flood-prone locations.	Completed
23	Floods	Construct regional detention ponds to offset impact of future urban development.	Ongoing
24	Floods	Educate the public on the different hazards that multi-sound warning sirens signify (e.g., tornado warning vs. flash-flood warning).	Ongoing
25	Tornadoes & High Winds	Inspect community schools for tornado and high wind vulnerability.	Ongoing
26	Tornadoes & High Winds	Investigate adopting building codes / incentives leading to construction that is more resistant to tornadoes and high winds.	Completed
27	Lightning	Provide educational demonstrations and information on whole-house surge protection technology.	Ongoing
28	Hail Storms	Provide hail-resistant roofing for community buildings.	Dropped
29	Extreme Heat	Educate community employees on the symptoms of heat disorders and how to administer first aid.	Ongoing
30	Extreme Heat	Identify the vulnerable population and individuals at risk from extreme heat.	Completed
31	Drought	Provide public awareness designed to communicate the potential severity of a drought and the appropriate public response.	Completed
32	Drought	Develop secondary water supply system.	Dropped
33	Urban Fires	Continue education and get funding to inform people on proper evacuation plans for city buildings, offices, and homes.	Ongoing

Priority	Category	Measure	Current Status (Complete, Ongoing, In Progress, Not yet begun, Modified, Dropped)
34	Urban Fires	Replace inadequately sized water lines with lines of sufficient size to provide adequate fire protection.	Ongoing
35	Urban Fires	Implement a fire suppression system for City Hall.	Completed
36	General	Develop public information and education plans for responding to natural hazards and hazardous material events.	Completed
37	Tornadoes & High Winds	Develop public awareness programs and provide materials (e.g., hurricane clips) and mitigation measures that protect a building's roof, all outside openings, and the building envelope.	Completed
38	Tornadoes & High Winds	When replaced, install break-resistant glass in county offices and critical facilities.	Dropped
39	Tornadoes & High Winds	Investigate a voluntary pilot program for mobile home communities to provide a storm shelter / safe-room for residents.	Dropped
40	Tornadoes & High Winds	Install safe-rooms in fire and police stations to protect first responders.	Not yet begun
41	Tornadoes & High Winds	Install safe-rooms in daycare centers.	Not yet begun
42	Tornadoes & High Winds	Investigate community tornado shelter programs implemented in other cities or states.	Dropped
43	Tornadoes & High Winds	Consider painting street names and house numbers on curbs for identifying addresses when landmarks are absent.	Not yet begun
44	Lightning	Educate the community about proper lightning safety through public service announcements and other media outlets.	Dropped
45	Lightning	Designate individuals at city recreation facilities who are educated in storm spotting and who have the authority to take proper action.	Completed
46	Lightning	Provide lightning prevention information materials and programs through local power utility.	Not yet begun
47	Hail Storms	Institute public information program for residents informing them of the advantages and costs of hail-resistant roofing.	Not yet begun
48	Urban Fires	Develop a public education program to explain the advantages of individual fire suppression in homes, including fire extinguishers.	Ongoing
49	Wild Fires	Investigate and raise public awareness of fire-resistant materials for buildings.	Ongoing
50	Wild Fires	Provide public education on controlled burns and use of fire-retardant vegetation.	Ongoing
51	Wild Fires	Develop a countywide fire response plan to facilitate the provisioning of water to fire departments during large fires.	Completed

Priority	Category	Measure	Current Status (Complete, Ongoing, In Progress, Not yet begun, Modified, Dropped)
52	Hazardous Materials Events	Provide public awareness about the most-common household pollutants, their danger, and disposal information through media, schools, public offices, police, and fire stations.	Not yet begun
53	Hazardous Materials Events	Develop a plan for responding to hazardous materials incidents on major transportation routes through the community.	Ongoing
54	Dam Failure	Develop warning and evacuation plans for areas at risk from dam failure or large release flooding.	Ongoing
55	General	Install an emergency communications network for fire, police, 911, EMT and other emergency operations.	Completed
56	General	Develop daytime population maps for the community.	Completed
58	General	Provide emergency equipment for City Emergency Teams.	Ongoing
58	General	Provide security and surveillance equipment for police and fire stations.	Completed
59	General	Contact agencies that distribute information to at-risk communities (e.g., elderly, infirm, impoverished, outside workers).	Dropped
60	General	Record GPS locations of private water wells and underground storm shelters (to rescue potentially trapped storm victims).	Completed
61	Floods	Inventory inadequate bridges.	Completed
62	Floods	Continually update basin-wide master drainage plans where changed conditions warrant.	Not yet begun
63	Tornadoes & High Winds	Research construction methods for mitigating wind damage, specifically giving top priority to protecting the roof system.	Not yet begun
64	Tornadoes & High Winds	Educate the public about construction methods designed for overall structural resistance to tornadoes and high winds.	Not yet begun
65	Tornadoes & High Winds	Review and update the debris management plan.	Completed
66	Tornadoes & High Winds	Provide safe-room rebates for especially-vulnerable populations (e.g., elderly, infirm, impoverished).	Not yet begun
67	Tornadoes & High Winds	Supply NOAA Weather Radio to all local government buildings, schools, hospitals, and critical facilities.	Completed
68	Lightning	Study other communities that have lightning warning systems intact.	Completed
69	Hail Storms	Provide hail-resistant measures/materials to protect existing public infrastructure improvements.	Dropped
70	Winter Storms	Update the debris management plan.	Completed
71	Extreme Heat	Obtain funding for providing public awareness materials to vulnerable populations through participating community agencies.	Ongoing

Priority	Category	Measure	Current Status (Complete, Ongoing, In Progress, Not yet begun, Modified, Dropped)
72	Extreme Heat	Develop a Heat Emergency Action Plan for the community.	Ongoing
73	Expansive Soils	Develop and implement a public and builder awareness plan of the dangers and impact to buildings from expansive soils.	Dropped
74	Wild Fires	Train and coordinate community fire, police, and public works on how to respond to a wildfire emergency.	Completed
75	Dam Failure	Install flood level monitoring equipment (e.g., stream gauges) in local steams and rivers.	Dropped
76	General	Update GIS database to include public utility infrastructure.	Completed
77	General	Translate public information to other languages.	Not yet begun
78	Floods	Obtain elevation certificates for homes located in the floodplain.	Not yet begun
79	Floods	Evaluate appropriate mitigation measures for homes located in the floodplain.	Not yet begun
80	Floods	Construct adequate bridges to survive 100-year regulatory flood without overtopping.	Ongoing
81	Floods	Compensate for the impacts of new bridges and channel improvements.	Ongoing
82	Floods	Identify ways of securing and elevating important equipment inside a building.	Ongoing
83	Floods	Install an automatic monitoring and warning system for spot flooding.	Completed
84	Tornadoes & High Winds	Prepare weather-warning systems for interstate travelers, such as traveler message boards and proper education for travelers.	Dropped
85	Tornadoes & High Winds	Insure that community building code requires proper shingle installation.	Completed
86	Lightning	Install lightning rods for protection of Critical Facilities.	Completed on 911, Police and Fire. Working on the EOC
87	Winter Storms	Upgrade communities' equipment and vehicles for combating ice storm damage/adverse impact to public infrastructure.	Ongoing
88	Extreme Heat	Conserve electricity to ensure adequate energy for air-conditioners during extreme heat periods.	Dropped
89	Drought	Develop and implement plans to identify when a drought begins and ends.	Completed
90	Expansive Soils	Identify and repair Critical Facilities that show, or indicate damage from expansive soils.	Ongoing
91	Expansive Soils	Require foundation piers as part of the building code.	Dropped
92	Wild Fires	Develop a contingency plan for evacuating population endangered by a wildfire.	Completed

Priority	Category	Measure	Current Status (Complete, Ongoing, In Progress, Not yet begun, Modified, Dropped)
93	Wild Fires	Consider creating fire breaks along fence rows to thwart "road jumping."	Dropped
94	Hazardous Materials Events	Distribute information identifying hazardous materials to at-risk citizens (e.g., elderly, infirm, poor, and outside workers).	Ongoing
95	Hazardous Materials Events	Develop and reinforce hazardous materials event equipment and response teams.	Ongoing
96	Hazardous Materials Events	Initiate/continue a city-wide household pollutant collection program, and build a year-round collection site.	Dropped
97	Hazardous Materials Events	Coordinate efforts with agencies that distribute information to at-risk populations (e.g., elderly, infirm, poor, and outside workers.	Not yet begun
98	Hazardous Materials Events	Provide public awareness programs relative to dumping household chemicals and automotive fluids into the sanitary sewer drain.	Not yet begun
99	Hazardous Materials Events	Label sanitary sewer drains to warn citizens against dumping chemicals and automotive fluids into the sanitary sewer drain.	Not yet begun
100	Floods	Implement structural and non-structural flood mitigation measures for flood-prone properties.	Not yet begun
101	Tornadoes & High Winds	Begin a revolving fund for families to build safe rooms.	Dropped
102	Lightning	Add lightning warning to the current warning siren system.	Not yet begun
103	Winter Storms	Investigate winterizing exposed elements of residential and commercial structures.	Dropped
104	Urban Fires	Apply for mitigation funding for fire hydrant meter backflow preventers.	Not yet begun
105	Urban Fires	Use City / County money for a fire suppression demonstration project.	Dropped
106	Urban Fires	Review and evaluate the community fire alarm system.	Ongoing
107	Wild Fires	Develop a fire emergency plan that assures access by fire vehicles to all areas included in the rural/urban interface fire danger area.	Ongoing
108	Wild Fires	Develop a warning plan based on drought conditions and moisture measurements to alert officials of increased risk of wildfire.	Completed
109	Earthquakes	Provide public and builder awareness that construction techniques for mitigating tornado damage also mitigate earthquake damage.	Dropped
110	Earthquakes	Provide public information on earthquake insurance.	Not yet begun
111	Earthquakes	Consider more stringent building codes that require all steel construction for public buildings and critical facilities.	Dropped

Priority	Category	Measure	Current Status (Complete, Ongoing, In Progress, Not yet begun, Modified, Dropped)
112	Earthquakes	Consider adopting residential building codes that require earthquake-resistant construction, such as using foundation piers.	Dropped
113	Hazardous Materials Events	Update the study for routing of hazardous materials through the community.	Completed
114	Dam Failure	Develop computerized GIS modeling program for mapping appropriate cubic feet per second (CFS) dam release rates.	Ongoing
115	General	Teach community employees the symptoms of common, life-threatening emergencies and how to administer CPR and first aid	Ongoing

Historical natural disasters in Mayes County are documented in the Mayes County Multi-Jurisdictional Multi-Hazard Mitigation 2013 Plan Update (HMP). Typical hazard disasters in the region include flooding, severe storms, wildfires, severe winter storms, and tornadoes.

Dam Failure Risks

Historical Context: There has not been a historical dam breach in Mayes County.

Table 4-51: Mayes County Area High Hazard Dams

Nat Id	Dam Name	Owner	River	Near City	Year Built	Dam Length (ft)	Dam Height (ft)	Max Discharge	Max Storage
OK00136	Chimney Rock P.S.	GRDA	Salina Creek(also known as Neosho River)	Salina	1968	0	190	0	22,500
OK83002	Forebay	GRDA	Salina Creek (also known as Neosho River)	Salina	1968	356	60	0	22,500
OK00135	Pensacola Dam	GRDA	Neosho River)	Pensacola	1940	6,565	150	525,000	1,537,000
OK00134	Robert S. Kerr Dam	GRDA	Neosho River	Pryor	1964	3,900	80	736,000	200,300
OK83001	Salina Levee	GRDA	Grand River	Salina	1964	6,200	40	0	200,300
OK11025	Spavinaw Lake Dam	City of Tulsa	Spavinaw Creek	Spavinaw	1922	3,680	75	275,000	38,000

Mitigation Strategy / Recommendations from HMP:
No information available.

Drought

Historical Context: Mayes County has experienced **13 drought** events since 2005. No loss of crops or property damage are reported.

Mitigation Strategy / Recommendations from HMP:
No information available.

Earthquake

Historical Context**:** According to the Oklahoma Geological Survey, Mayes County has **1 earthquake** from 1995 through 2010. No deaths, injuries or property damage was reported.

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

Expansive Soils

Historical Context**:** Damage to structures due to expansive soils can be expected following periods of extended drought. Damage from expansive soils is difficult to track. No damage information is available.

Mitigation Strategy / Recommendations from HMP:

- Implement/enforce an administrative procedure/ordinance to require permits for foundation repair.
- Establish an administrative procedure or change in City codes that require builders to check for expansive soils when applying for new residential construction permits, and to consider the use of foundations that mitigate expansive soil damages when in a moderate to high-risk area.
- Educate builders on appropriate foundation types for soils with different degrees of shrink-swell potential. For example, using "post-tensioned slab-ongrade" or "drilled pier" vs. standard "slab-on-grade" or "wall-on-grade" foundations.

Extreme Heat

Historical Context: According to the NCDC, Mayes County experienced **10 extreme heat** events from 1995 through 2010 resulting in **4 deaths.**

Mitigation Strategy / Recommendations from HMP:

- Develop a Heat Emergency Action Plan/Heat Emergency Annex to the Emergency Operations Plan for the jurisdiction.

Flood

Historical Context: Mayes County experienced **29 flood** events between 1995 and 2010 that resulted in **1 death, 2 injuries, and $1,018,000 in property damage.**

Date	Location	General Description of Incident
November 6, 1996	Choteau to Pryor	Severe thunderstorms caused flash flooding.

May 11, 1999	Choteau	A slow moving system of severe thunderstorms caused flash flooding.
June 20, 1999	Adair	4-8 inches of rain in Mayes County caused major flash flooding and forced the closing of US Highway 69, 2 mile north of Adair and OK Highway 28 near Adair. A 53-year-old man drowned when his car was washed away by eight-foot-deep flood waters flowing over OK 28 west of Adair.
June 23, 2007	Adair	Flash flooding caused road closures on OK 28 and secondary roads.
May 1-2, 2009	Choteau	Flash flooding caused damage to school facilities.
March 18, 2008	Adair	Heavy rains resulted in flash flooding and a water rescue.
May 1, 2009	Pryor	7 inches of rain caused flooding from Adair east to Langley closing 75% of county roadways and OK 28.
September 9, 2009	Salina	Heavy rain caused creeks to flow out of their banks creating flash flooding. Part of OK 28 was closed. Multiple water rescues performed. No injuries or fatalities were associated with this event.
March 25, 2010	Adair	Heavy rains flooded several roads in and around Adair including US 69.
July 8, 2010	Pensacola	Flood event, no injuries or property damage.

Mitigation Strategy / Recommendations from HMP:

- Continue Compliance with, and Participation in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS).
- Prepare a comprehensive basin-wide Flood and Drainage Annex to the Multi-Hazard Mitigation Plan for all watersheds within the jurisdiction. The Annex should identify all flooding problems within the jurisdiction, and recommend the most cost-effective and politically acceptable solutions.
- Continue to acquire and remove floodplain and (future) repetitive loss properties where the community's Flood and Drainage Annex to the Multi-Hazard Mitigation Plans identify acquisition as the most cost-effective and desirable mitigation measure.
- Create and maintain habitat for flora and fauna in flood control projects. Maintaining or developing wetlands may be an effective area to receive or reduce floodwaters.
- Maintain natural and beneficial functions of streams and floodplains.

Hail

Historical Context**:** Mayes County has reported **174 hail** events from 1995 through 2010, with $100,000 in reported damage.

Date	Description of Event
July 26, 1995	Two hail events occurred, one with H4 and one with H5.
August 19, 1995	4-inch hail fell in Mayes County.
July 6, 1996	H2 hail occurred in Pensacola. There were no reported damages.
July 29, 1996	Hail of H2 size fell on the Town. There were no damages reported.
May 6, 2000	Hail event at Mid America Industrial Park. No damage reported.
March 11, 2006	H3 hail event in Pensacola. No damage reported.
March 12, 2006	H5 hail caused $25,000 in damage. No injuries reported.
April 7 - 8, 2008	H5-H6 diameter hail (2-inch) generated by a series of severe thunderstorms. Damage to structures and automobiles estimated at $50,000
May 7, 2008	H5 hail fell in Strang. No damage or injuries reported.
May 10,2008	H5 hail (1.75-inch) fell in Locust Grove. No injuries reported. Damage estimate at $25,000.

Mitigation Strategy / Recommendations from HMP:

- Provide covered shelters for City First Response/government vehicles to protect against hail damage.

Hazardous Materials, Fixed Site (and Transportation Incidents)

Historical Context: There were **32 fixed-site hazardous materials** events in Mayes County between 1995 and 2010, most all of them involving petroleum industry products such as oil, Butadiene, and natural gas. 1 injury was reported when unloading a tanker truck on December 22, 2007, the valve failed causing the release to the ground of 25,020 pounds of Maleic Anhydride at the Mid America Industrial Park (MAIP). Remediation of the incident was successful.

Table 4–63: Mayes County Fixed Site Hazardous Materials Events

Incident Date	Nearest City	Suspected Responsible Company	Type Of Incident	Incident Cause	Medium Affected	Material Name
3/23/1995	Salina	Phillips 82 Auto	Fixed	Dumping	Subsurface	Other Oil
1/29/1998	Pryor	Interplastic Incorp.	Fixed	Unknown	Land	Unknown Acid
3/27/2001	Chouteau	Chouteau High School	Fixed	Other	Land	Raw Sewage
2/11/2004	Locust Grove	Grand River Dam Authority	Fixed	Equipment Failure	Water	Turbin Oil
2/2/2005	Locust Grove	Grand River Dam Authority	Fixed	Equipment Failure	Water	Hydraulic Oil
7/2/2009	Pryor	Pryor Chemical Co.	Fixed	Over Pressuring	Air	Anhydrous Ammonia
2/6/2010	Pryor	Pryor Chemical Co.	Fixed	Other	Air	Anhydrous Ammonia

Source: National Response Center

Mayes County also experienced **23 transportation** incidents from 1995 through 2010. 4 of 6 mobile events involved the release of hazardous materials; 6 of 10 railroad incidents were non-release railroad incidents; there was one minor aircraft incident and no pipeline incidents.

Date	Description of Incident	Location	Suspected Responsible Party	Material
	water.			
10/22/2009	A tanker truck was struck in the rear by a pick up truck, resulting in a leak from the Tanker. It was stated a small amount of Dinbutyl Ether had leaked onto the road.	4.5 Miles South of Pryor, Hwy 69 Southbound	Quality Carriers	Di-N-Butyl Ether
Railroad Release				
07/06/2000	Material released from a tank hose due to equipment failure	Highway 412B MidAmerican Industrial Park	Protein Technologies	Hydrochloric Acid
08/09/2000	Tank car leaked a vapor cloud (no other details were available)	Pryor Rail Yard	Union Pacific	Hydrochloric Acid
04/24/2001	Due to an unknown cause, five rail cars derailed in a rail yard	Union Pacific Rail Yard Mile Post	Union Pacific	unknown
12/20/2007	Train derailment due to one train running into the other. The track was misaligned which caused the one set of cars that was moving to collide with the cars that were stationary. There were no reported release materials.	Mile marker 468 Rail Yard		Non-release

Source: National Response Center

Mitigation Strategy / Recommendations from HMP:
No information available.

High winds

Historical Context: According to the NCDC data, Mayes County experienced **138 wind** events between that resulted in **$295,000 in damage**. These events included winds that ranged from 51 mph to 65 mph.

Mitigation Strategy / Recommendations from HMP:

- Identify and develop public information and education programs and provide materials and mitigation measures that protect a building's roof, all outside openings, and the building envelope. Also research ways to improve quality of construction related to wind resistance. Top priority should be given to protection of the roof system, typically the most vulnerable and most expensive component to replace.
- Train/Educate builders, developers, architects and engineers in techniques of disaster-resistant homebuilding, such as the Fortified Home standards developed by the Institute for Business & Home Safety (IBHS), the Blueprint for Safety guidelines developed by the Federal Alliance for Safe Homes (FLASH).

Lightning

Historical Context**:** According to the NCDC, Mayes County experienced 6 lightning events between 1995 and 2010 that resulted in property damages totaling $190,000.

Date	General Description of Event
September 19, 1993	Lightning struck near Locust Grove causing $50,000 in damages. No further detail was reported.
October 5, 1998	Lightning hit a bank building in Pryor, leaving a hole the size of a softball in it outside wall. The force of the lightning strike sent bricks flying, one of which sailed through the bank's sign. Most of the computer terminals at the bank were lost. The event caused $40,000 in damages.
May 4, 1999	Lightning lit fire to and destroyed a new home in the Grand Prairie Estates west of Pryor. Damages were estimated at $50,000.
May 22, 1999	A lightning strike near Locust Grove started a fire that completely gutted a small church on OK Hwy 82 causing $60,000 in damages.
July 4, 2004	Lightning struck a house in Salina. A person in the house was injured due to the lightning strike. $5,000 in damage was reported.
June 4, 2005	Lightning struck and caused a house fire in Pryor. The event caused $10,000 in damages.
September 21, 2009	Lightning struck a home in Strang. The home caught on fire and ensued $25,000 in damages.

Mitigation Strategy / Recommendations from HMP:

- Provide lightning warning systems for Community public outdoor sports areas, pools, golf courses, and parks.
- Provide lightning warning systems for Public Schools outdoor sports areas and play grounds.
- Provide surge and lightning protection for computer-reliant critical facilities (e.g. City Hall, 911 Center, EOC, Police and Fire stations, water/wastewater treatment plant and public works buildings).
- Educate the Public, and encourage the Utility Companies to provide information to their clients on Whole House Surge and Lightning Protection.

Tornado

Historical Context**:** Mayes County has had **54 tornado** occurrences between 1995 and 2010 caused nearly **$26,100,000 in damage**.

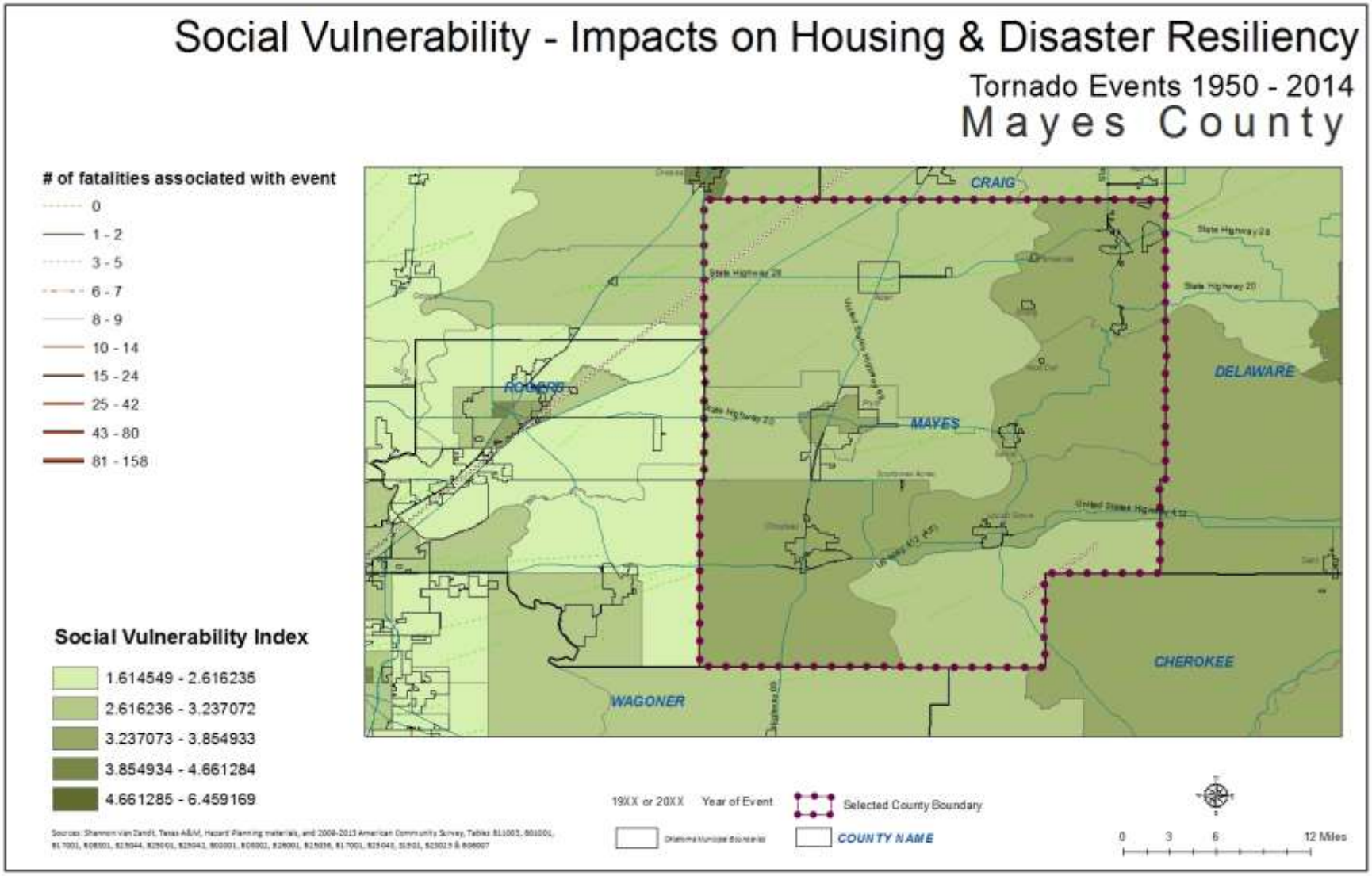
Date	General Description of Event
June 12, 1957	An F1 tornado formed on the east side of Adair and dissipated near Pensacola. One person was injured and damage was estimated at $25,000.
May 9, 1959	And F3 tornado touched down southeast of Pensacola and was on the ground for 7.3 miles. The tornado path paralleled Pensacola Dam and went directly through Disney. There were three injuries and $250,000 in damage.
May 26, 1973	An F1 tornado passed through the southern edge of Town of Choteau. There were no injuries or damages.
May 26, 1973	An F1 tornado created a 10.5 mile path from southeast of Chouteau that moved through the southern portion of MAIP before dissipating north of Locust Grove. There was one fatality associated with this event and damage was $25,000. The location of the fatality and the damage is not reported.
June 8, 1974	A F3 tornado cut through the middle of the Town of Chouteau. There were seven injuries and $25 million in damages.
April 7, 1986	A tornado recorded as an F2 north of the Town of Adair. Damage totaled $250,000. There were no reported injuries.
May 13, 2010	An EF2 tornado was on the ground for four miles beginning four miles west of Town and dissipating one mile northwest of Town of Choteau. The tornado resulted in two injuries and caused $300,000 in damage.
May 15, 1990	An F2 tornado cut an eight mile path from seven miles west of Adair into the Town Limits. There were no injuries, but $250,000 in damage was caused.

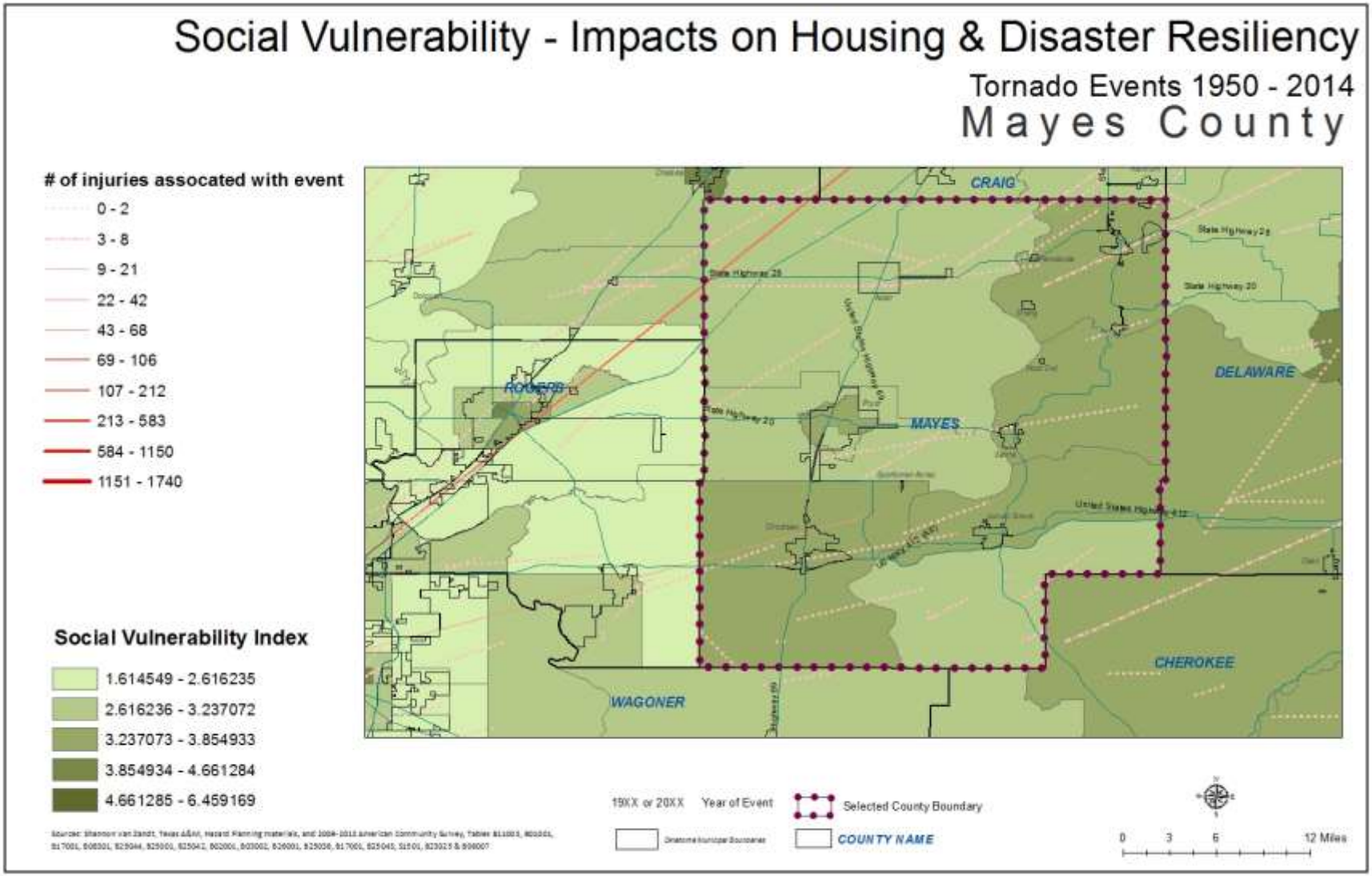
Mitigation Strategy / Recommendations from HMP:

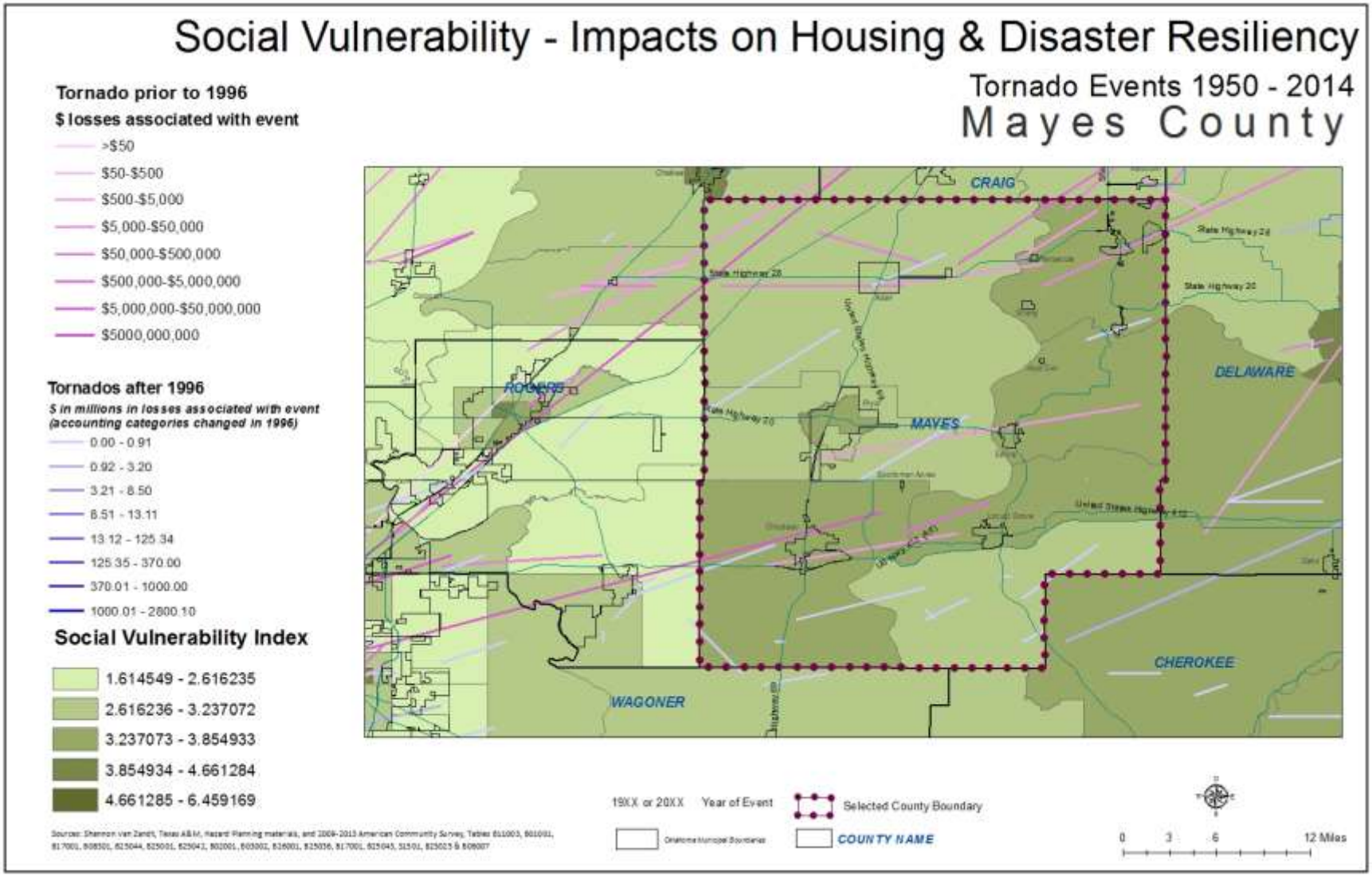
- Provide employee shelters/safe-rooms at critical facilities, such as 911 Center, fire stations and police stations to protect first responders.
- Perform tornado and high wind and earthquake evaluations of schools and retrofit or remodel buildings to make them more disaster resistant.
- Install Safe-Rooms in Schools and retrofit/construct safe rooms at existing Schools.
- Develop an Individual Safe Room Program for vulnerable populations that will withstand hazards, including Home owners, Special Needs Populations, elderly, mobile home residents, etc
- Adopt an ordinance requiring registration of Safe Rooms, and create a data base and GIS (lat/long) map to locate Safe Rooms in the event of a disaster.
- Obtain grants for storm shelters/safe rooms in mobile home parks.
- Adopt an Ordinance requiring new Mobile Home Parks to provide storm shelters/safe rooms for their residents. Educate residents, building professionals and safe room vendors

on the International Codes Council/National Storm Shelter Association's "Standard for the Design and Construction of Storm Shelters" and incorporate this Standard into current regulatory ordinances.

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


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Mayes 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
CRAIG
ROGERS
MAYES
DELAWARE
CHEROKEE
WAGONER
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3 6 12 Miles


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Mayes 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
CRAIG
ROGERS
MAYES
DELAWARE
CHEROKEE
WAGONER
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3 6 12 Miles


Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Mayes 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
CRAIG
ROGERS
MAYES
DELAWARE
WAGONER
CHEROKEE
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3 6 12 Miles

Urban (Structure) Fires

Historical Context**:** Mayes County experienced **35 fires** in critical facilities from 2000 to 2010 that resulted in the loss of **$234,980 in damage** and **13 civilian injuries, 15 civilian deaths, and 13 firefighter injuries**. Losses in other structures are outline below.

Location	Description of Event
Adair	21 structure resulted in **5** civilian injuries and 4 civilian deaths. No firefighters suffered injury or death. The property damage amounted to $2,208,101.
Choteau	116 structure fires that resulted in 3 civilian injuries and one firefighter death. Property damage was reported at 10,207,863.
Disney	There have been 33 structure fires that resulted in no civilians injured or killed and one firefighter injury. Property damage was reported at $374,000.
Langley	37 structure fires that resulted in 1 civilian death, and no firefighters were injured or killed. Property damage was reported at $1,979,121.
Locust Grove	81 structure fires that resulted in 4 civilian injuries and 4 civilian deaths. 1 firefighter was injured. Property damages amounted to $787,300.
Pensacola	21 structure fires that resulted in $388,400 in property damage.
Salina	125 structure fires that resulted in $3,338,873 in property damage.
Spavinaw	55 structure fires that resulted in $740,200 in property damage.
Strang	27 structure fires that resulted in $1,374,700 in property damage.

Mitigation Strategy / Recommendations from HMP:

- Provide and maintain defensible space around structures vulnerable to wildfires.

Wildfires

Historical Context**:** Based on the Oklahoma State Fire Marshall, from 2000 to 2010, Mayes County fire departments made a total of **42,327 wildfire runs** that burned 11,930 square miles and caused **$507,373 in damage**.

Mitigation Strategy / Recommendations from HMP:

- Develop a contingency plan for evacuating population endangered by a wildfire.
- Provide and maintain defensible space around structures vulnerable to wildfires.
- Implement red cedar eradication program (NRCS to assist) to reduce red cedar trees and wild fire potential.

Winter Storms

Historical Context**:** There have been **28 winter storm** events in Mayes County from 1995 to 2010. The Town of Salina reported a winter storm on February 12, 2011 that left roads virtually impassable. The Town of Spavinaw received 27 inches of snow in a 24-hour period during the same winter storm in 2011. No injuries or deaths resulted. Property damage is estimated at $50,021,500.

Mitigation Strategy / Recommendations from HMP:

No information available.

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

Most jurisdictions have elected to not have public shelters in order to discourage people from leaving safe places and ultimately be caught on the road trying to reach a public shelter. However, Locust Grove built a public school facility that also serves as a community shelter. The 24,000-square-foot dome-shaped structure is built to withstand winds up to 250 mph and can hold more than 1,500 people.

Mayes County has a storm shelter program whereby residents can register locations of private shelters. Mayes County also received FEMA funding for 55 private storm shelters.

http://www.emergencymgmt.com/disaster/FEMA-funding-55-storm-shelters.html

The City of Pryor HMP includes mitigation measures that support implementing a community storm shelter program like other communities have.

C.2.1.3 Public Policy and Governance to Build Disaster Resiliency

Mayes County does not enforce a building code. There are no planning or zoning restrictions in the unincorporated areas of the county except for floodplain regulations adopted in December 1999.

Mayes County Hazard Mitigation Planning Team includes representation by all towns and school districts within the county. City of Pryor has its own Hazard Mitigation Plan.

C.2.1.4 Local Emergency Response Agency Structure

Mayes County Emergency Operation Plan clearly identifies that local resilience to risks starts with prepared individuals. The EOP for Mayes County has a detailed list of task assignments and responsibilities.

C.2.1.5 Threat & Hazard Warning Systems

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

Mayes County Emergency Notification and Warning Systems

NOAA Weather Radios

The Mayes County HMP states that the community should consider a NOAA weather radio program.

Warning Systems

Mayes County outdoor warning system includes 26 sirens.

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.

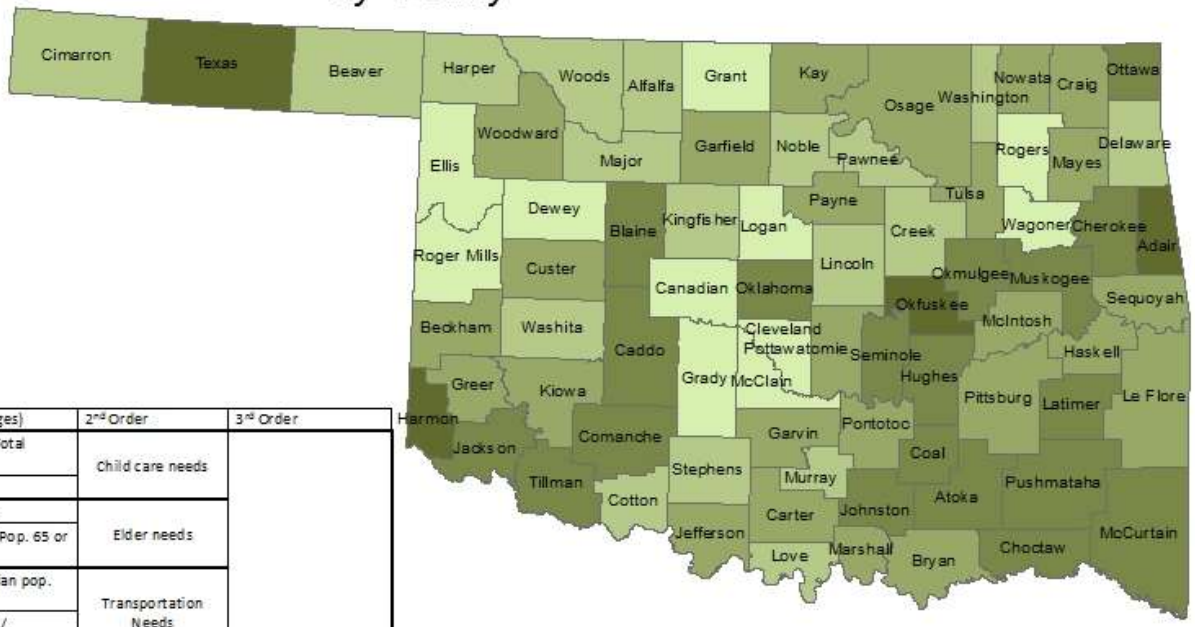
Social Vulnerability Analysis - Mayes County

Base Social Vulnerability Indicators (%)		2nd Order	3rd Order
1.) Single Parent Households	11.64%	0.184 (Child Care Needs)	**3.327 Social Vulnerability 'Hotspot' or Area of Concern**
2.) Population Under 5	6.76%		
3.) Population 65 or Above	15.88%	0.265 (Elder Needs)	
4.) Population 65 or Above & Below Poverty Rate	10.66%		
5.) Workers Using Public Transportation	0.18%	0.059 (Transportation Needs)	
6.) Occupied Housing Units w/o Vehicle	5.76%		
7.) Housing Unit Occupancy Rate	82.90%	2.526 (Temporary Shelter and Housing Recovery Needs)	
8.) Rental Occupancy Rate	24.76%		
9.) Non-White Population	33.52%		
10.) Population in Group Quarters	1.45%		
11.) Housing Units Built Prior to 1990	70.40%		
12.) Mobile Homes, RVs, Vans, etc.	19.83%		
13.) Poverty Rate	19.72%		
14.) Housing Units Lacking Telephones	3.81%	0.292 (Civic Capacity Needs)	
15.) Age 25+ With Less Than High School Diploma	15.70%		
16.) Unemployment Rate	8.74%		
17.) Age 5+ Which Cannot Speak English Well or Not At All	0.95%		

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

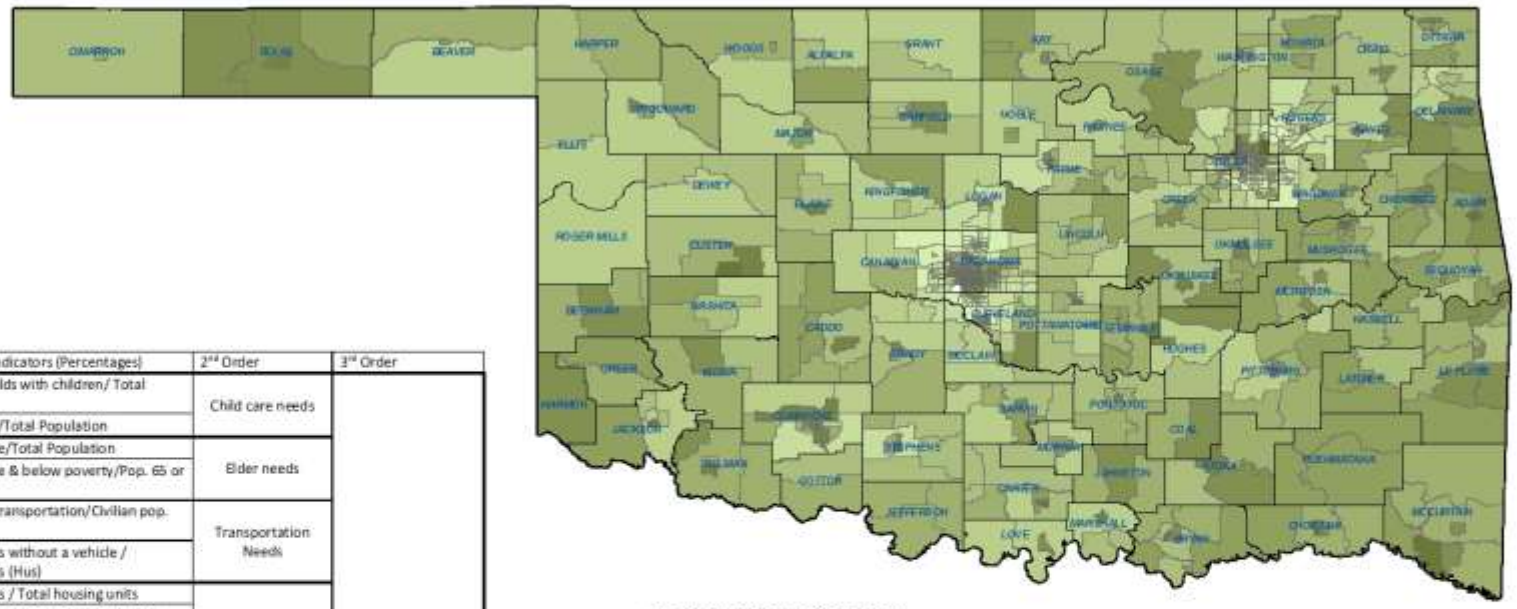
Social Vulnerability "Hot Spots"

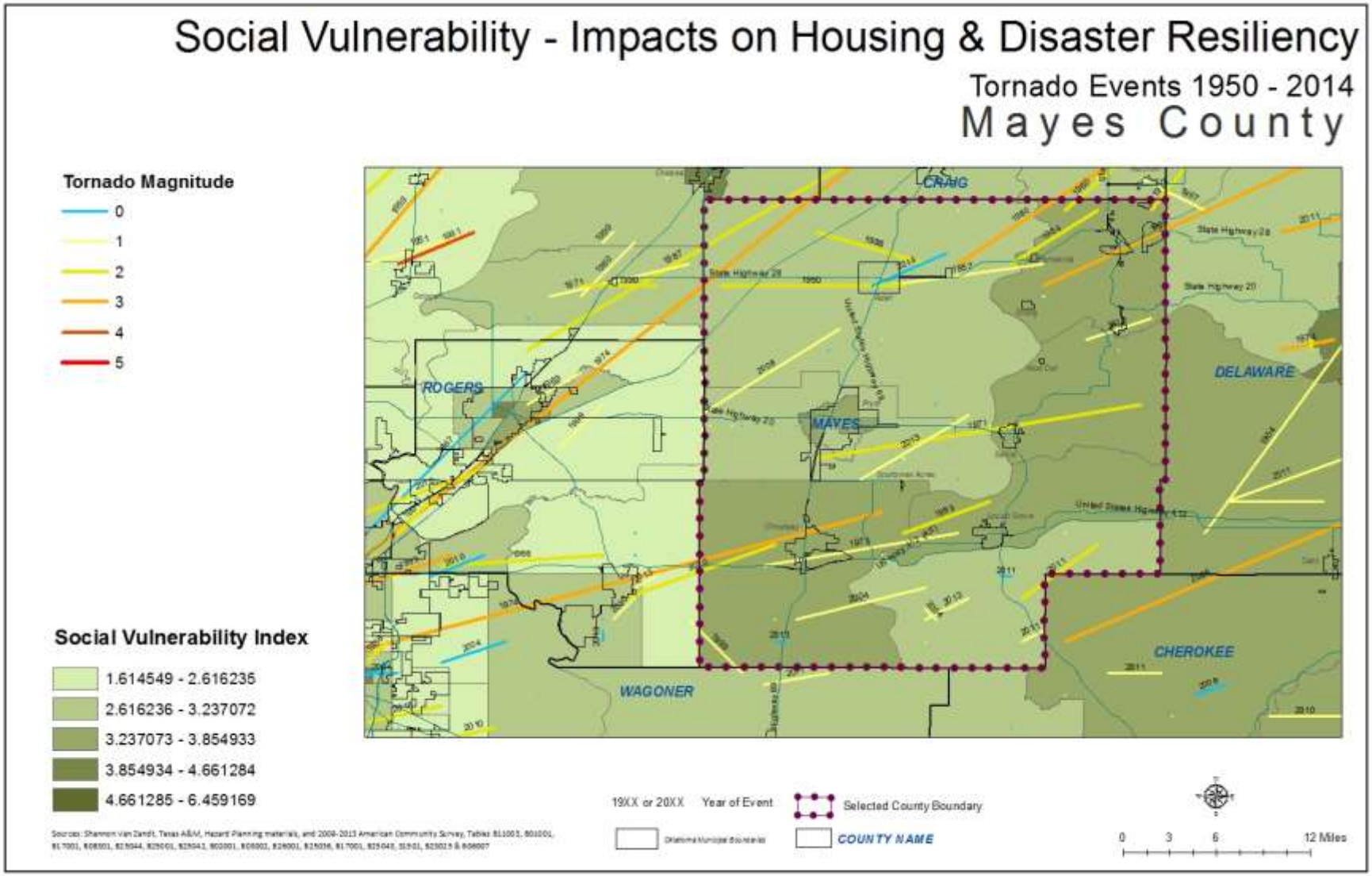
- 2.6340 - 2.9760
- 2.9761 - 3.2170
- 3.2171 - 3.4180
- 3.4181 - 3.6370
- 3.6371 - 3.9500

0 25 50 100 Miles

Social Vulnerability - Impacts on Housing & Disaster Resiliency

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




Social Vulnerability - Impacts on Housing & Disaster Resiliency
Tornado Events 1950 - 2014
Mayes County
Tornado Magnitude
0
1
2
3
4
5
CRAIG
ROGERS
MAYES
DELAWARE
CHEROKEE
WAGONER
Social Vulnerability Index
1.614549 - 2.616235
2.616236 - 3.237072
3.237073 - 3.854933
3.854934 - 4.661284
4.661285 - 6.459169
19XX or 20XX Year of Event
Selected County Boundary
COUNTY NAME
0 3 6 12 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 has an above average score per this index for social vulnerability when comparing as a county to other counties in the state. Looking at the census tract level, the Pryor area and a corridor running from southwest to northeast portion of the county have elevated scores for 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.
- 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 Mayes 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 505 Northeast Oklahoma

OK 505 represents the northeast region of Oklahoma, including Craig, Ottawa, Delaware, Cherokee, Adair, Sequoyah, Washington, Nowata, Rogers, Mayes, and Wagoner counties. There is a disproportionately high number of homeless households comprised of children in this CoC (24 out of 300). Eight of these 24 child only households are unsheltered. This area also has a high incidence of homeless victims of domestic violence (168). This group, for the most part, appears to be finding shelter. However, of the homeless veterans (51), the majority are unsheltered (30). The population of homeless substance abusers is also significant in this CoC (122). They, too, are finding shelter with only 10 reported instances of the failure to find shelter.

This CoC has invested in the creation of a significant number of temporary and permanent units of shelter for homeless individuals and family. There are 449 units of temporary housing available to individual and families in this region year around. An additional 90 units of permanent housing are available to homeless families and individuals. There exists a need for more units of rapid rehousing for veterans given the current population of unsheltered vets.

OK 505 Northeast OK	Emergency Shelter(sheltered)	Transitional Housing(sheltered)	Unsheltered	Total
Households without children	155	33	47	235
Households with at least 1 adult & 1 child	29	3	9	41
Households with only children	16	0	8	24
total homeless households	200	36	64	300
Persons in households without children	156	33	47	236
persons age 18-24	32	3	19	54
persons over age 24	124	30	28	182
Persons in households with at least 1 adult & 1 child	87	8	28	123
children under age 18	55	4	17	76
persons age 18-24	6	0	0	6
persons over 24	26	4	11	41
persons in households with only 1 children	16	0	8	24
Total homeless persons	259	41	83	383
Subpopulations	**Sheltered**		**Unsheltered**	**Total**
Chronically Homeless	81		22	103
Chronically Homeless Individuals	61		12	73
Chronically Homeless Persons in Families	20		10	30
Severely Mentally Ill	33		16	49
Chronic Substance Abuse	112		10	122
Veterans	21		30	51
HIV/AIDS	0		0	0
Victims of Domestic Violence	159		9	168

CoC Number: OK-505

CoC Name: Northeast Oklahoma CoC

Summary of all beds reported by Continuum of Care:

	Family Units[1]	Family Beds[1]	Adult-Only Beds	Child-Only Beds	Total Yr-Round Beds	Seasonal	Overflow / Voucher	Subset of Total Bed Inventory: Chronic Beds[2]	Veteran Beds[3]	Youth Beds[3]
Emergency, Safe Haven and Transitional Housing	**55**	**167**	**256**	**26**	**449**	**0**	**0**	**n/a**	**0**	**26**
Emergency Shelter	52	159	219	26	404	0	0	n/a	0	26
Transitional Housing	3	8	37	0	45	n/a	n/a	n/a	0	0
Permanent Housing	**9**	**30**	**65**	**0**	**95**	**n/a**	**n/a**	**n/a**	**14**	**0**
Permanent Supportive Housing*	7	22	53	0	75	n/a	n/a	53	8	0
Rapid Re-Housing	1	5	5	0	10	n/a	n/a	n/a	6	0
Other Permanent Housing**	1	3	7	0	10	n/a	n/a	n/a	0	0
Grand Total	**64**	**197**	**321**	**26**	**544**	**0**	**0**	**53**	**14**	**26**

CoC beds reported by Program Type:

Emergency Shelter for Families[1]

Provider Name	Facility Name	Family Units[1]	Family Beds[1]	Adult-Only Beds	Child-Only Beds	Seasonal	Overflow / Voucher	Total Beds	Subset of Total Bed Inventory: Chronic Beds[2]	Veteran Beds[3]	Youth Beds[3]
Hope House	Hope House	5	18	0	0	0	0	18	n/a	0	0
Total		**5**	**18**	**0**	**0**	**0**	**0**	**18**	**n/a**	**0**	**0**

COC Conclusion

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

A Snap Shot of Homelessness in the State

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

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

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

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

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

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

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

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

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

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

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

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

Summary by household type reported:

	Sheltered		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.

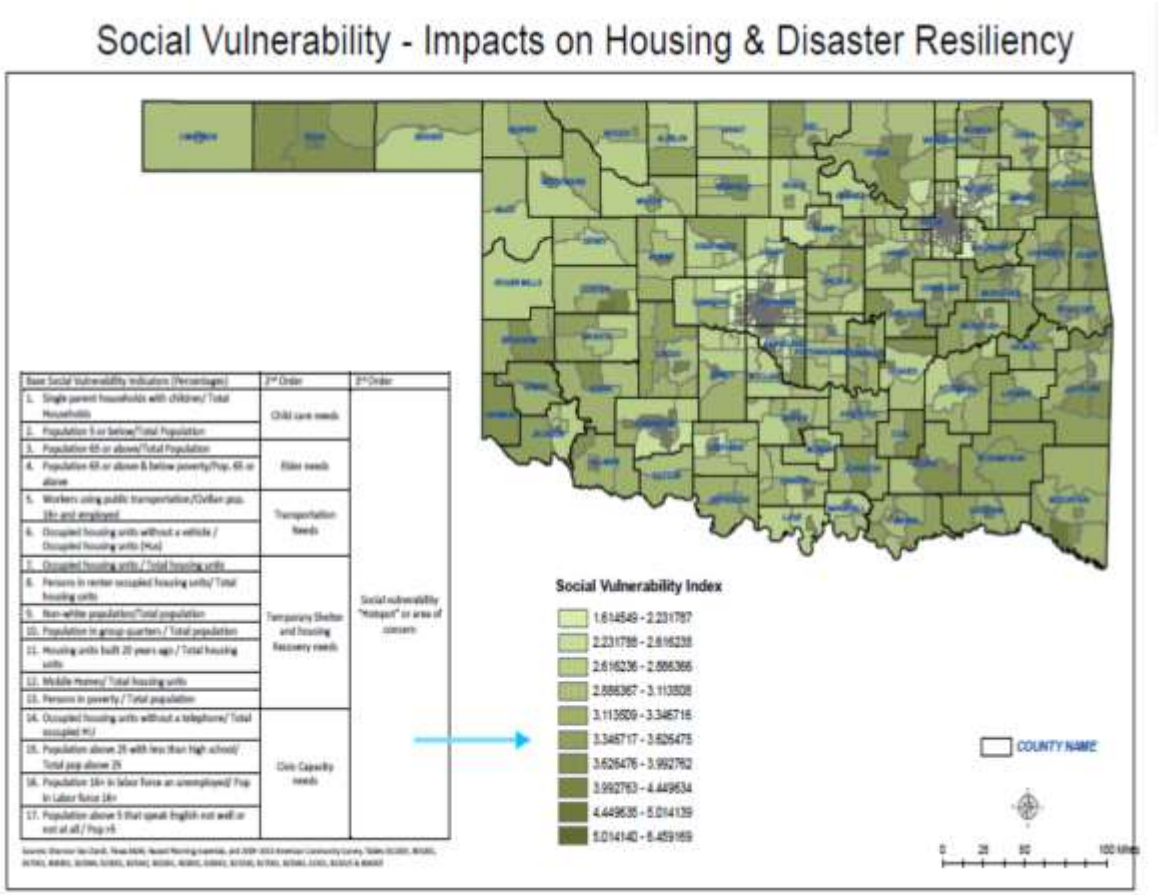
It is not surprising that rural areas typically lack both emergency shelters and temporary housing options. Services that provide temporary housing and provide relief and support services for those who cannot find food are virtually nonexistent in rural communities across the United States (Moore, 2001).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

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

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

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

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

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

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

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

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

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Fair Housing

Summary

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

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

Key Findings:

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

Recommendations:

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

What is Fair Housing?

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

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

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

Approach

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

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

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

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

Data

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

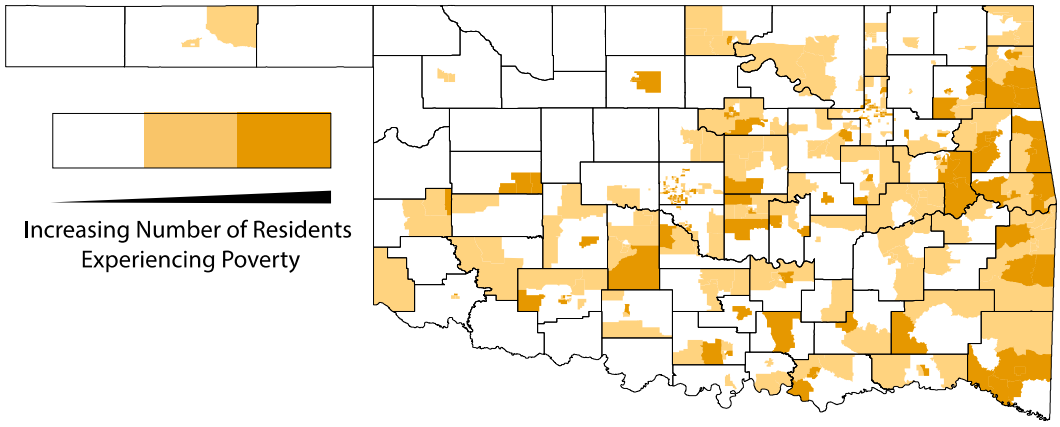
1. Urban/Rural

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

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

2. Poverty

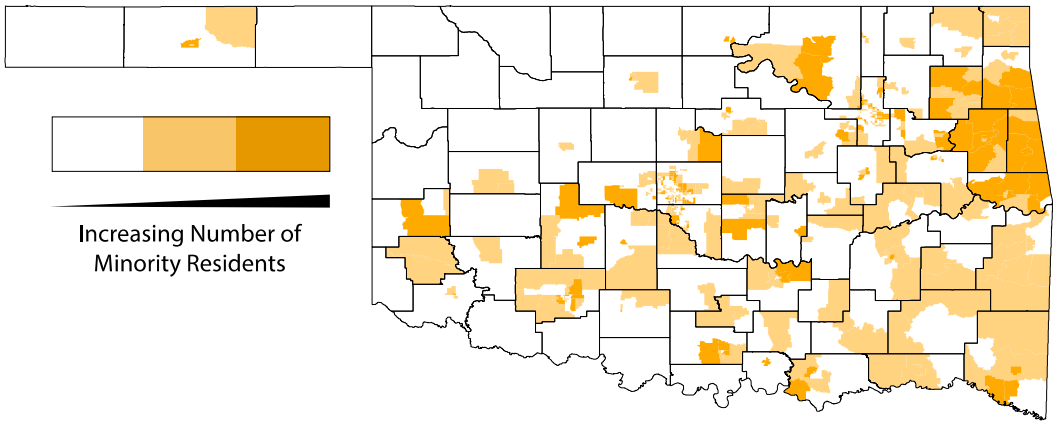
Approximately 70% of affordable housing units in Oklahoma are located in census tracts where the number of residents living in poverty is above the state average. About half of these units are located in areas of extreme poverty, where the number of individuals who are economically vulnerable exceeds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



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

3. Non-white Enclaves

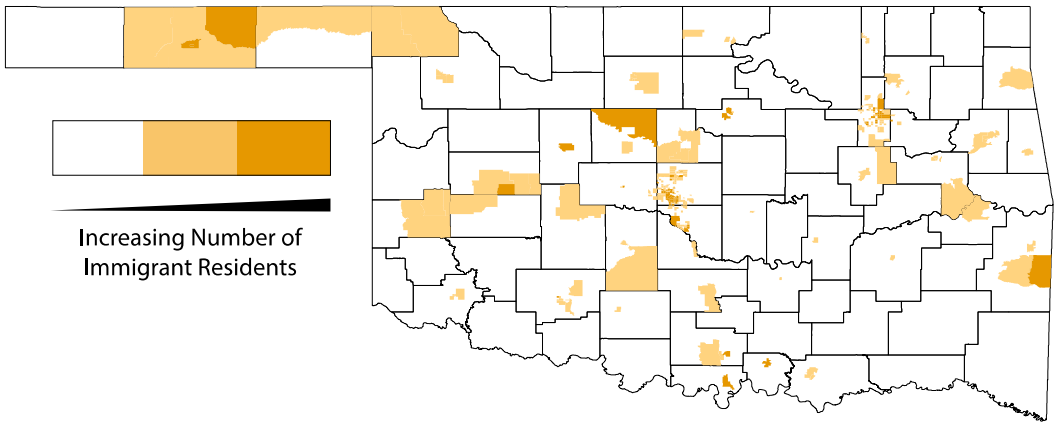
Just over 60% of affordable housing units in Oklahoma are located in census tracts where a majority of the residents are non-white. With just fewer than 24% of the total affordable housing units in census tracts heavily populated with residents who are not white – identified as census tracts where the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



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

4. Immigrant Enclaves

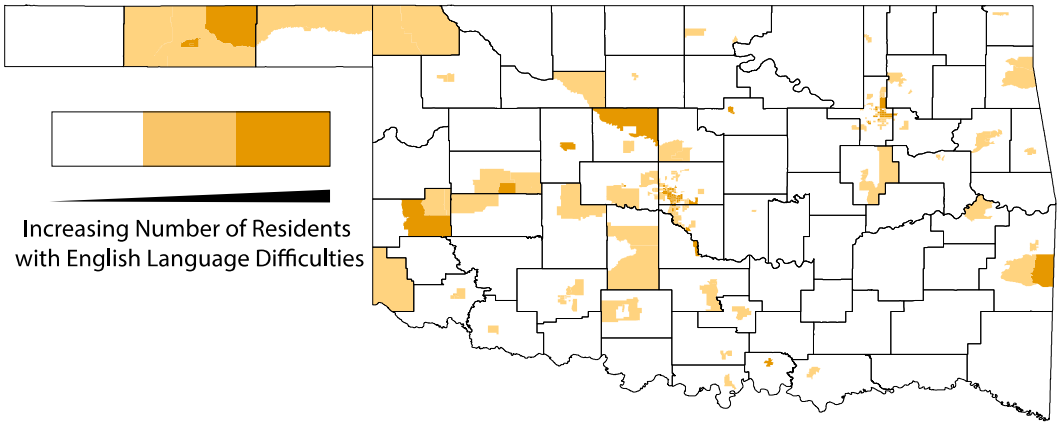
One-third of affordable housing units in Oklahoma are located in census tracts where more than the average number of residents are immigrants. About half of these units are located in areas dense with immigrants, where the number of individuals who are not citizen exceeds 349, more than one standard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



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

5. Limited English Proficiency

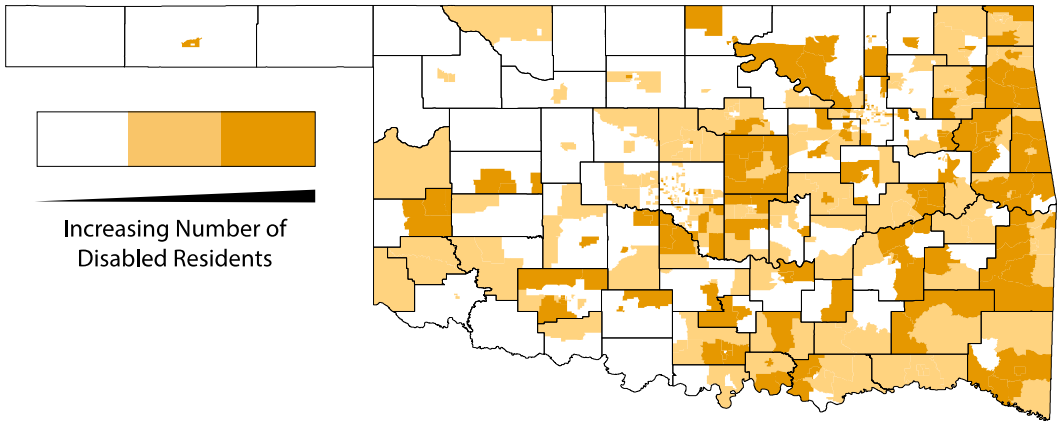
Almost 17,000 existing affordable housing units in Oklahoma are located in census tracts where more residents than average do not speak English very well. A little more than half of these units are located in areas dense with individuals with limited English proficiency, where the number of individuals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



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

6. Disability

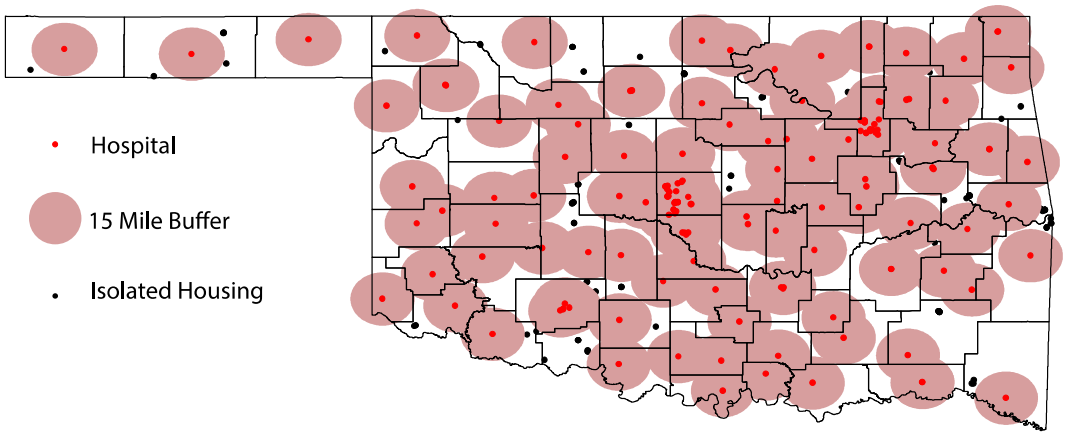
Almost 60% of existing affordable housing units in Oklahoma are located in census tracts where more residents than average have a disability. A little more than half of these units are located in areas dense with individuals with a disability, where the number of individuals who are disabled is greater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



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

7. Hospitals

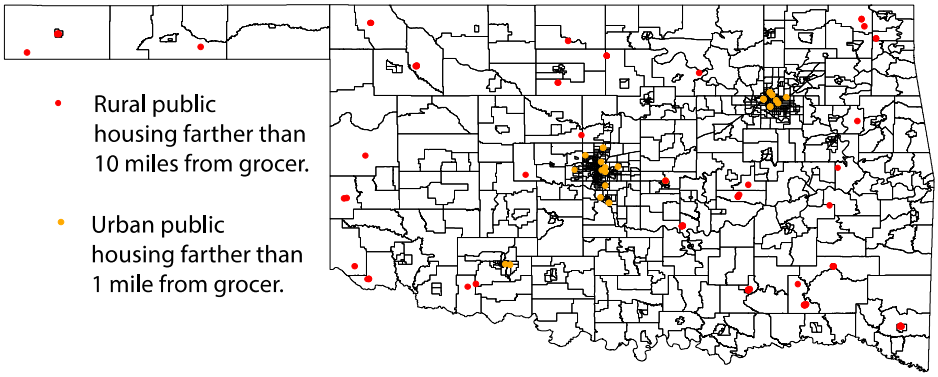
There are no affordable housing units more than 30 miles from a hospital. Approximately 2.6% of affordable housing units are farther than 15 miles from the nearest hospital. As indicated by the larger percentage of Rural Rental Housing Loan units, most of these are located in rural areas.



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

8. Grocery Stores

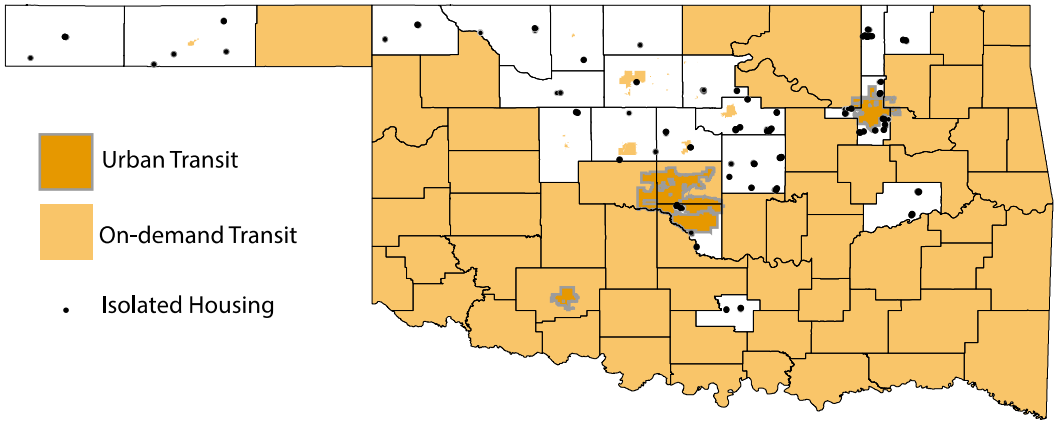
Approximately 7.8% of affordable housing units are in areas that are classified as food deserts. According to the United States Department of Agriculture, food deserts exist in urban environments further than 1 mile from a grocery store and in rural environments further than 10 miles from a grocery store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



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

9. Transit

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



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

What does this mean for Oklahoma?

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

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

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

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

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

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

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Data Sources

2014 American Community Survey Estimates

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

University of Oklahoma Center for Spatial Analysis: Data Warehouse

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

University of Oklahoma Division of Regional and City Planning

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

Appendix 1: County affordable housing Summaries

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

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

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

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

Lead-Based Paint Hazards

Findings / Health and Well-being

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

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

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

Statewide Findings

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

Lead-Based Paint Hazards in Oklahoma

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

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

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

Disaster Resiliency/ Economy and Society, Infrastructure and Environment

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

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

Leadership and Strategy

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

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

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

Survey of Previous Lead-based Paint Studies

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

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

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

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

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

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

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

Mayes County Findings

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

Total Housing Units in Mayes 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	5,644	3.57%	201
1960-1977	3,767	11.18%	421
1940-1959	1,840	38.48%	708
1939 or Earlier	580	63.38%	368
Total	**11,830**	**14.35%**	**1,698**
Total Renter-Occupied Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,997	3.57%	71
1960-1977	1,274	11.18%	142
1940-1959	770	38.48%	296
1939 or Earlier	215	63.38%	136
Total	**4,255**	**15.18%**	**646**
Total Housing Units	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	7,640	3.57%	272
1960-1977	5,040	11.18%	564
1940-1959	2,610	38.48%	1,004
1939 or Earlier	795	63.38%	504
Total	**16,085**	**14.57%**	**2,344**

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

Housing Units in Mayes 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	853	3.57%	30
1960-1977	833	11.18%	93
1940-1959	305	38.48%	117
1939 or Earlier	195	63.38%	124
Total	**2,185**	**16.68%**	**364**

Renter-Occupied Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	964	3.57%	34
1960-1977	437	11.18%	49
1940-1959	345	38.48%	133
1939 or Earlier	125	63.38%	79
Total	**1,870**	**15.78%**	**295**

Total Housing Units < 50% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,816	3.57%	65
1960-1977	1,269	11.18%	142
1940-1959	650	38.48%	250
1939 or Earlier	320	63.38%	203
Total	**4,055**	**16.27%**	**660**

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

Housing Units in Mayes 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	804	3.57%	29
1960-1977	486	11.18%	54
1940-1959	310	38.48%	119
1939 or Earlier	125	63.38%	79
Total	**1,725**	**16.32%**	**282**

Renter-Occupied Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	396	3.57%	14
1960-1977	234	11.18%	26
1940-1959	135	38.48%	52
1939 or Earlier	10	63.38%	6
Total	**775**	**12.72%**	**99**

Total Housing Units 50%-80% AMI	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,200	3.57%	43
1960-1977	720	11.18%	81
1940-1959	445	38.48%	171
1939 or Earlier	135	63.38%	86
Total	**2,500**	**15.20%**	**380**

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

To conclude, we estimate that there are a total of 2,344 homes in Mayes County containing lead-based paint hazards, 1,698 owner-occupied and 646 renter-occupied. Of the 2,344 homes in the county estimated to have lead-based paint hazards, 660 are estimated to be occupied by households with low-incomes (incomes less than 50% of Area Median Income), and 380 are estimated to be occupied by households with moderate incomes (between 50% and 80% of Area Median Income), for a total of 1,040 housing units in Mayes 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 Mayes 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 Mayes 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	322	3.57%	11
1940-1977	318	19.98%	64
1939 or Earlier	49	63.38%	31
Total	**689**	**15.40%**	**106**
Housing Units 50%-80% AMI w/ Children under 6 Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	283	3.57%	10
1940-1977	143	19.98%	28
1939 or Earlier	8	63.38%	5
Total	**433**	**10.07%**	**44**
Total LMI Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	604	3.57%	22
1940-1977	461	19.98%	92
1939 or Earlier	57	63.38%	36
Total	**1,122**	**13.34%**	**150**
Total Housing Units w/ Children Present	Total Housing Units	Percent w/LBP Hazards	Number w/LBP Hazards
1978 or Later	1,332	3.57%	47
1940-1977	1,278	19.98%	255
1939 or Earlier	101	63.38%	64
Total	**2,711**	**13.53%**	**367**

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

As shown, we estimate there are 367 housing units in Mayes County with lead-based paint hazards and children under the age of six present, and that 150 of those housing units are occupied by families with low to moderate incomes.

Research Footnotes/Sources

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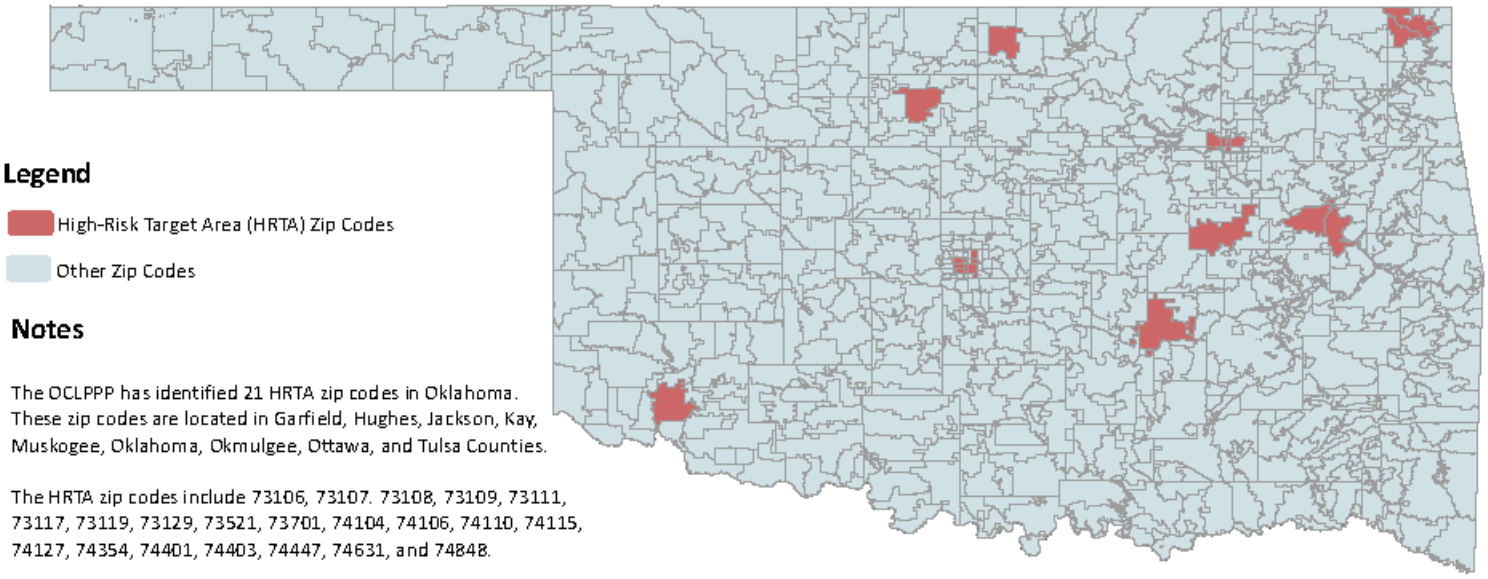
Oklahoma State Department of Health, Oklahoma Childhood Lead Poisoning Prevention Program Focusing in High Risk Groups”

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

Exhibit #1

Map 2: High-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.

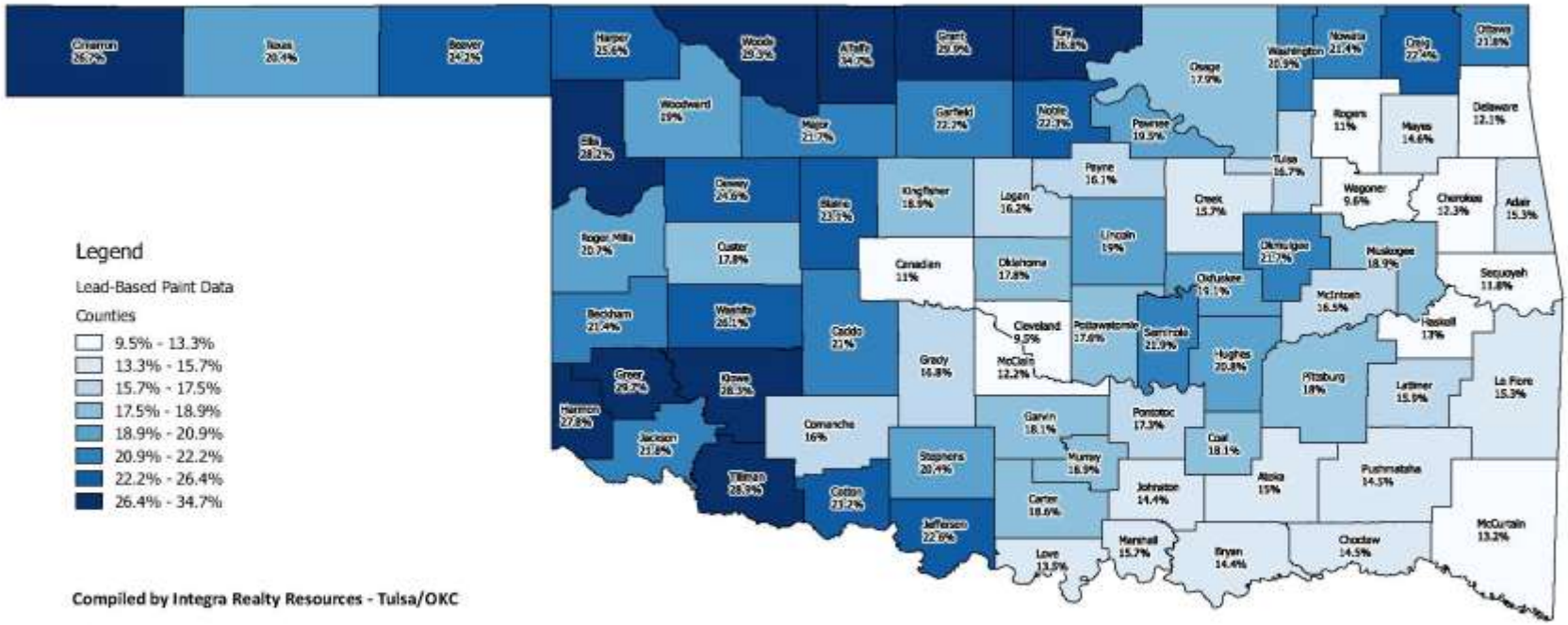
0 40 80 160 Miles

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

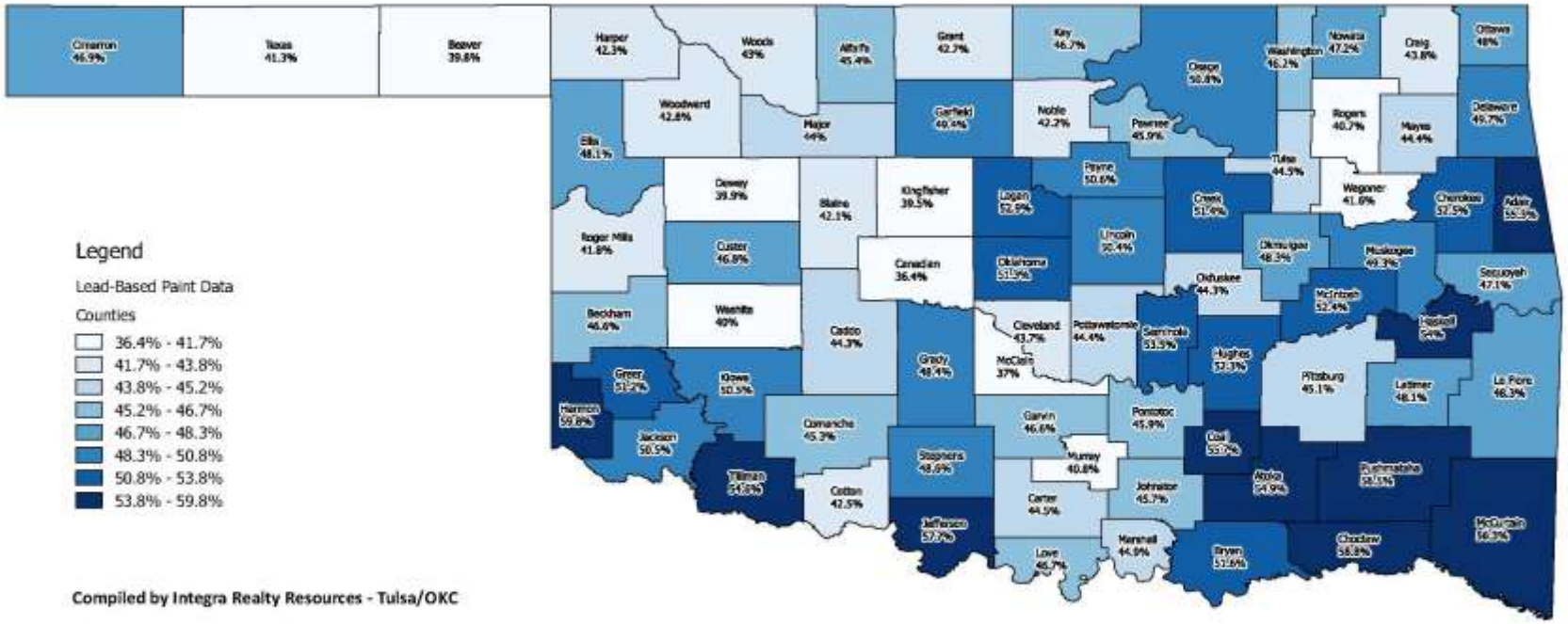


Compiled by Integra Realty Resources - Tulsa/OKC

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

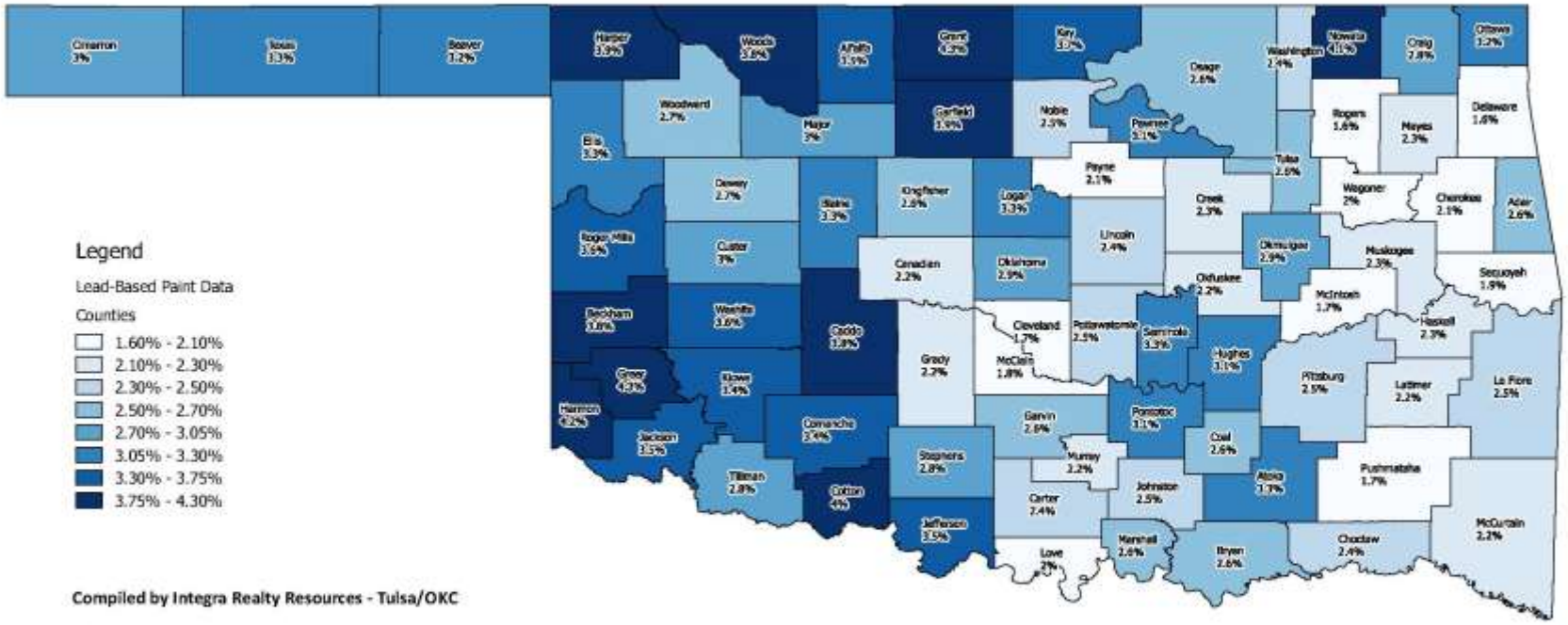


Compiled by Integra Realty Resources - Tulsa/OKC

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

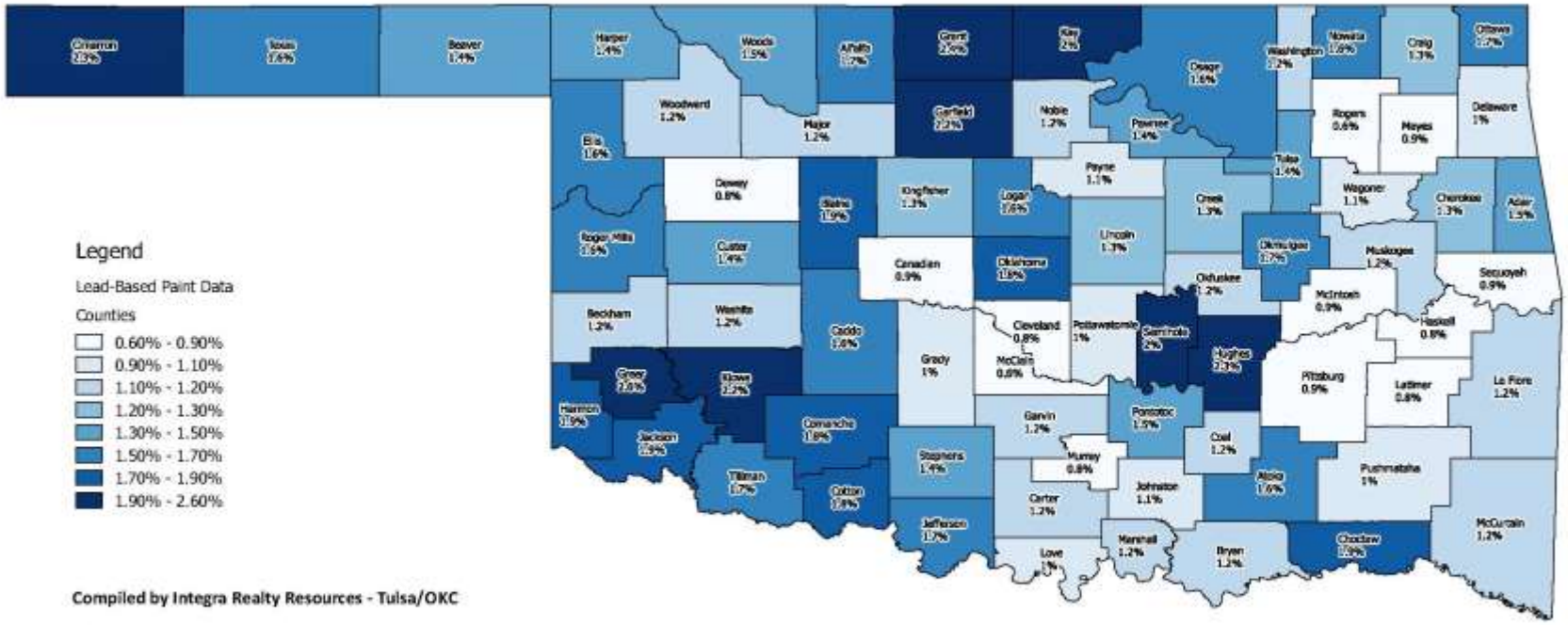


Compiled by Integra Realty Resources - Tulsa/OKC

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

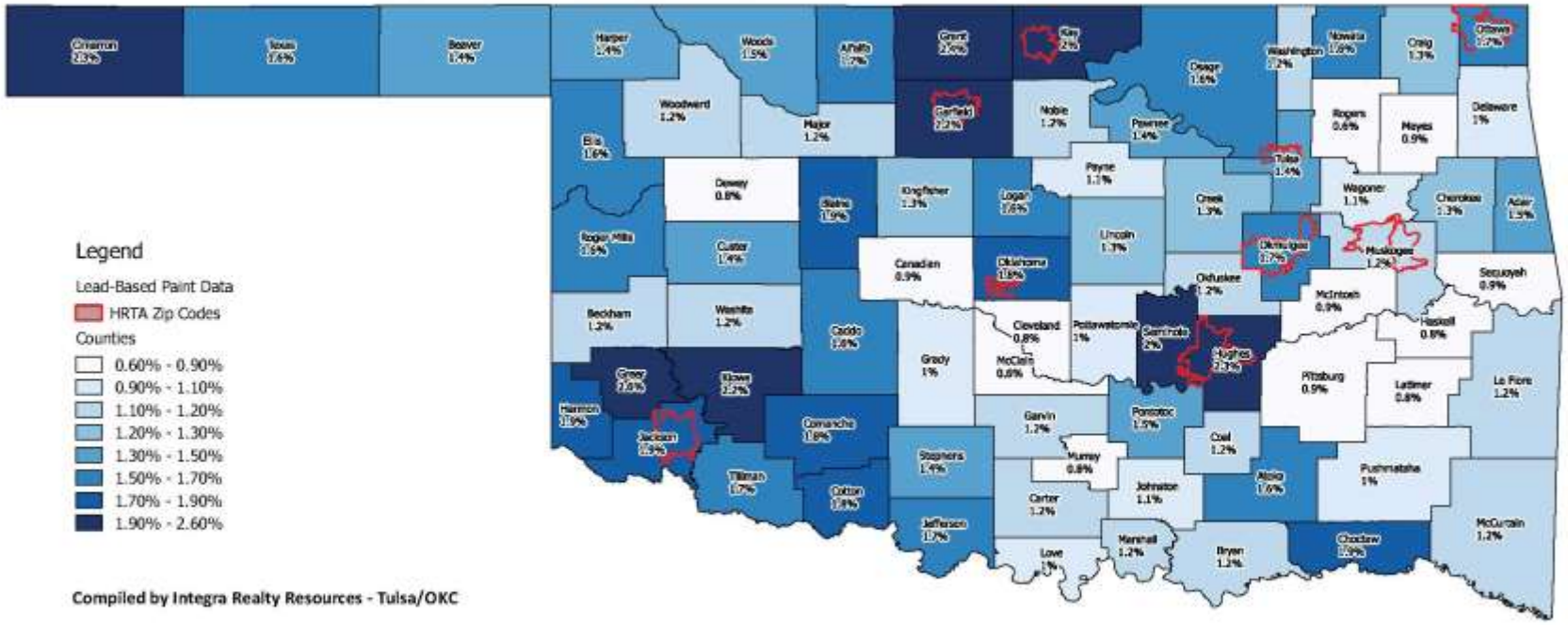


Compiled by Integra Realty Resources - Tulsa/OKC

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 Mayes 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.

Mayes County has undergone steady growth over the last fifteen years, in terms of population, households and employment levels. The Mid-America Industrial Park is a major driver of this growth. There has been new construction of single family homes for ownership, and although some of this construction appears reasonably affordable (priced under $150,000) the average price of homes constructed since 2005 is estimated to be $247,418, which is well above what could be afforded by a household earning at or less than median household income for Mayes County ($43,614 in 2015).

Mayes County has a relatively moderate rate of renters with high rent costs (30.86%) as well as homeowners with high ownership costs (17.73%). The county's poverty rate is also above the state, at 19.72% compared with 16.85% statewide.

In terms of disaster resiliency we note that 60 tornadoes have impacted the county between 1959 and 2014, with 145 injuries and three fatalities combined, and that Mayes County has experienced 29 flood events between 1995 and 2010 resulting in over one million dollars in cumulative property damage.

Mayes County is located within the Northeast Oklahoma Continuum of Care (CoC), which provides services to the area's homeless populations among other functions. Throughout the entire Northeast Oklahoma CoC, there are an estimated 383 homeless persons, 300 of which are estimated to be sheltered. This Continuum of Care has a disproportionately high number of homeless households entirely comprised of children under the age of 18, and a high incidence of homeless victims of domestic violence. We also note that the majority of homeless veterans in this region are unsheltered.

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

Due to the age of the county's housing stock, lead-based paint hazards are an issue, with an estimated 2,344 occupied housing units with such hazards, and 367 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 Mayes 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 Mayes County as a whole, this demand will continue to increase. We estimate the county will need 141 housing units for ownership and 47 housing units for rent over the next five years, in order to accommodate projected population and household growth. These units should include a mixture of both market rate rental units, affordable housing units, and housing for ownership affordable to a range of incomes.

Addendum A

Acknowledgments

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

University of Oklahoma Intern Team

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

Federal Agencies

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

US Federal Emergency Management Agency, Harold Latham

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

Oklahoma State Agencies

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

Department of Human Services, Connie Schlittler

Department of Emergency Management Dara Hayes

Department of Commerce, Rebekah Zahn-Pittser

Local Organizations

Regional Council of Governments and Oklahoma Association of Regional Councils

Continuums of Care Network

Hazard Mitigation Plan personnel/administrators

Community economic development professionals

City Managers and Planners

Community Action Agencies

Chambers of Commerce

Affordable housing developers, owners and investors

Homeless Alliance, Dan Straughan, Sunshine Hernandez

Pathways, Patrice Pratt

Women's Resource Center, Vanessa Morrison

AIDS Care Fund, Sunshine Schillings

Addendum B

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Professional Activities & Affiliations

Central Oklahoma Chapter, Appraisal Institute (Past Chapter President)
National Association of Realtors
Urban Land Institute
National Council of Affordable Housing Market Analysts
Appraisal Institute National Committees
Tulsa Metropolitan Area Planning Commission
Tulsa Preservation Commission
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.

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District Court of Garfield County, Oklahoma
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United States Federal Bankruptcy Court, Tulsa, Oklahoma
United States Federal Bankruptcy Court, Minneapolis, Minnesota
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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

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

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Integra Realty Resources, Inc.
Corporate Profile

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

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

ATLANTA, GA - Sherry L. Watkins., MAI, FRICS
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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
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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
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NAPLES, FL - Carlton J. Lloyd, MAI, FRICS
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SAN FRANCISCO, CA - Jan Kleczewski, MAI, FRICS
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SYRACUSE, NY - William J. Kimball, MAI, FRICS
TAMPA, FL - Bradford L. Johnson, MAI, MRICS
TULSA, OK - Owen S. Ard, MAI
WASHINGTON, DC - Patrick C. Kerr, MAI, FRICS, SRA
WILMINGTON, DE - Douglas L. Nickel, MAI, FRICS
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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)

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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.

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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)

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Refereed Journal Articles

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

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

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.*

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PUBLICATIONS:

Refereed Journal Articles

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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.

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

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