

## Special Topics

## Blaine County Disaster Resiliency Assessment

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

### C.0 Comprehensive Plans & Hazard Mitigation Plans

There are 9 key cities within the county (Watonga, Okeene, Canton, Geary, Longdale, Hitchcock, Hydro, Greenfield). No comprehensive plan was available.

*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.*

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

Blaine County does have a Hazard Mitigation Plan, but was unavailable for use in this study.

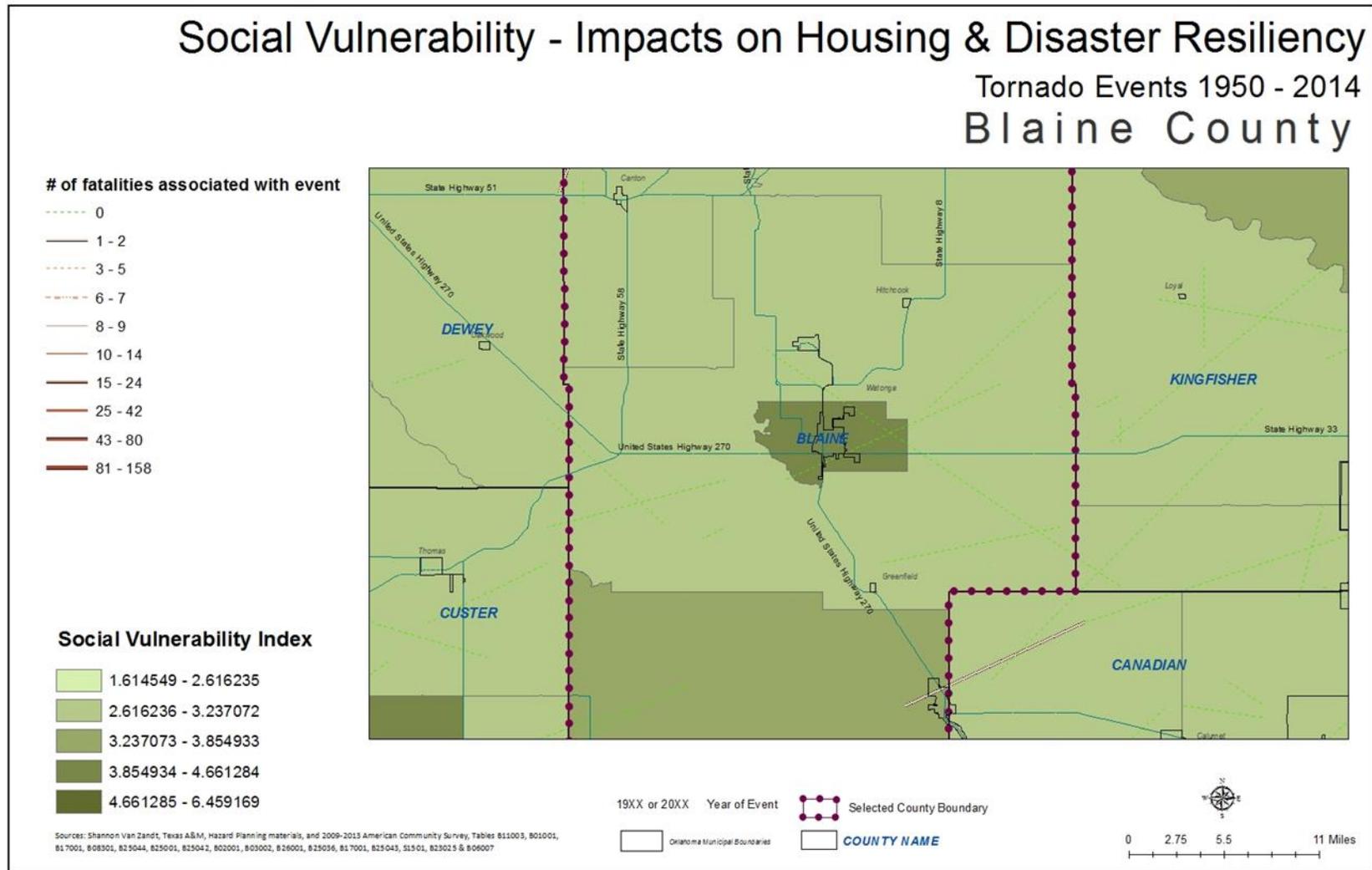
#### C.2.1.1. Historical Data on Natural Disasters and Other Hazards

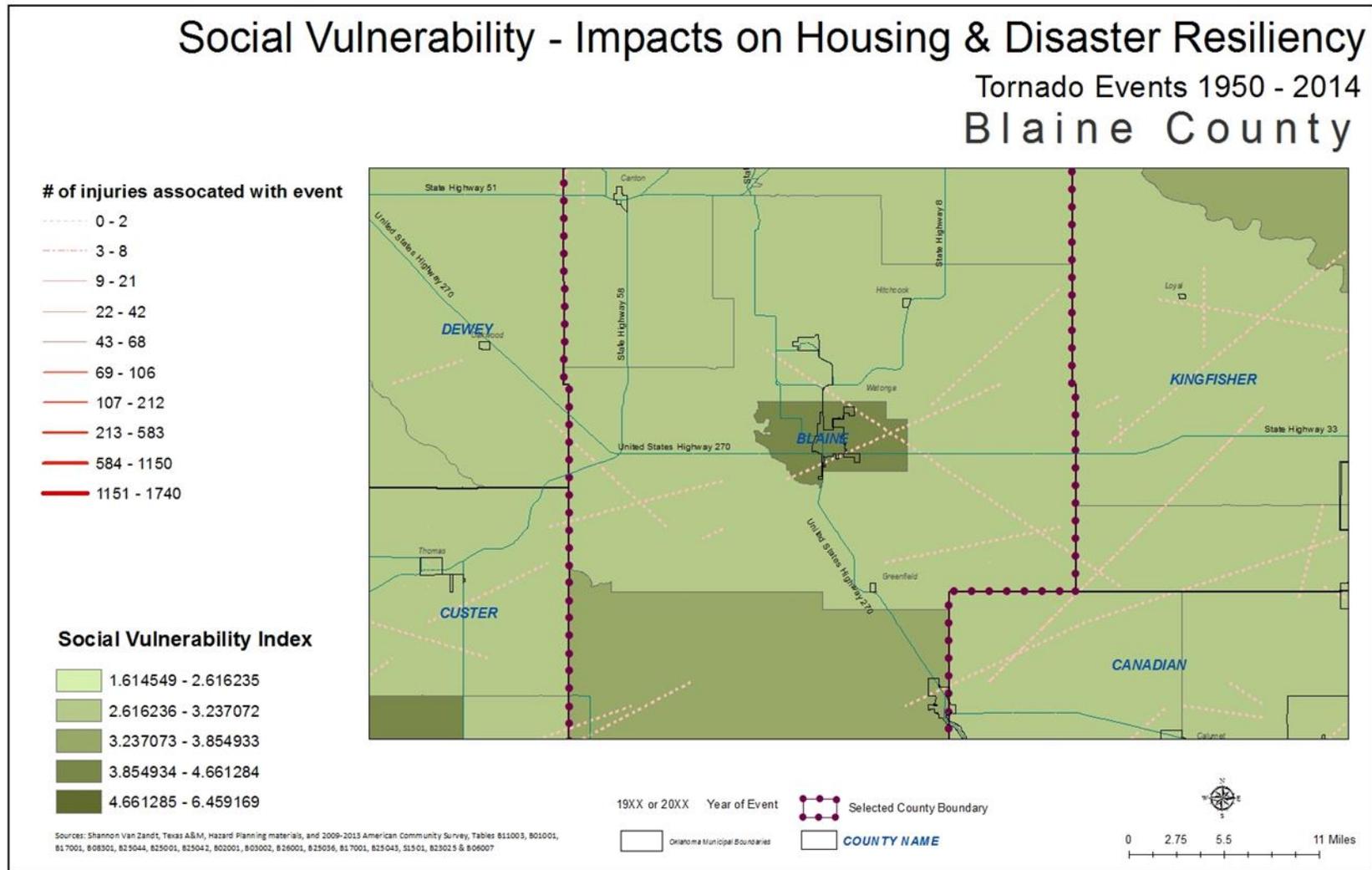
Data on historical damages and casualties is typically collected as part of a **Hazard Mitigation Plan** preparation to determine the appropriate planning measures and actions to take before and after an event.

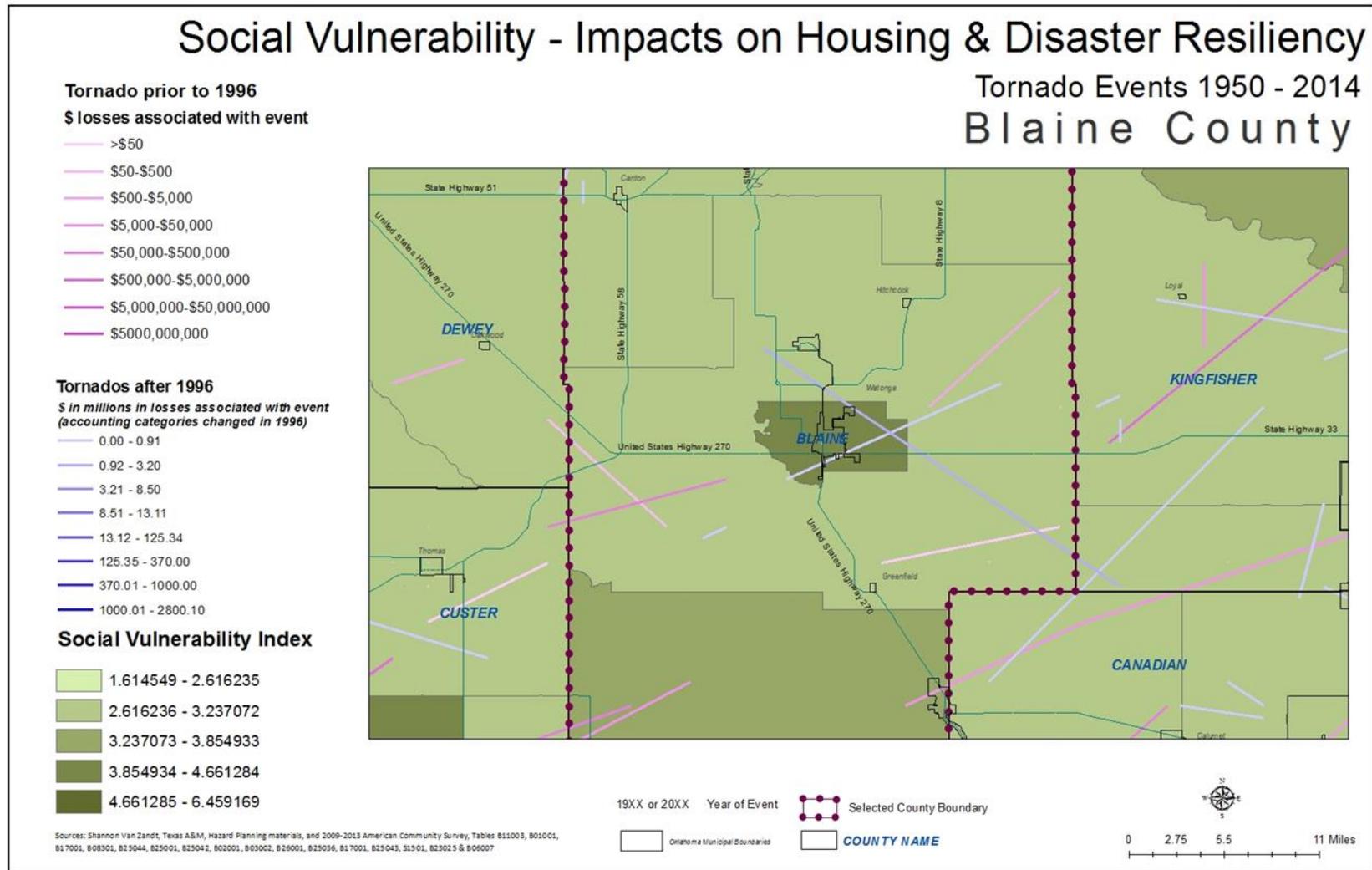
Flooding, based on FEMA FIRM maps, does not show floodplain areas in the county. The National Flood Hazard Layer (Official) is not available for this area. Flash flooding is a concern for all parts of the state after heavy precipitation.

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

Historic data on tornados between 1950-2014 there are 43 tornados documented. There were 10 injuries that occurred connected to these tornados, with 2 of those injuries happening in the 2011 tornado. There were 3 fatalities connected to tornadoes during this time period, 1 of which occurred in 2011. Property losses between 1950-1996 ranged from \$767,154.00 to \$7,671,700.00. (The accounting methods used for losses changed in 1996.) The losses estimated between 1996-2014 was \$3,160,000.00.







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

Blaine County Online registration:

<http://gcem.org/storm-shelter-registration/blaine-county/>

Blaine County has three public shelters at the First Baptist Church in Watonga, 301 N. Noble; the Nazarene Church in Watonga, on East Oklahoma 33; and at the Armory Building in Watonga, on Main Street.

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

Information not available.

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

Information not available.

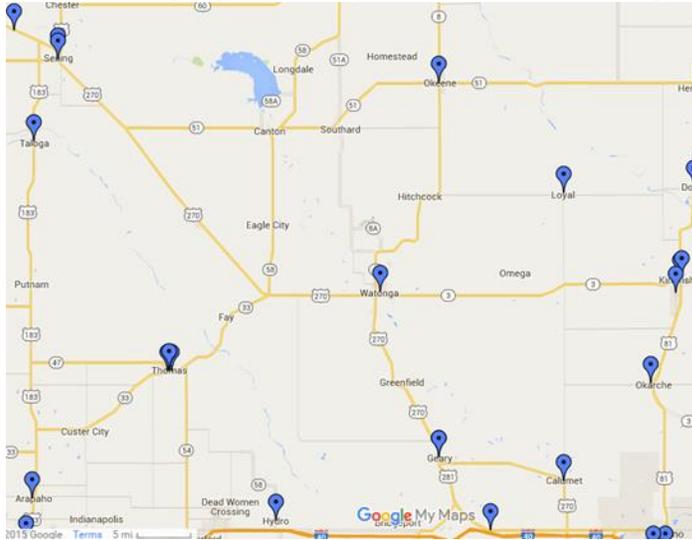
### C.2.1.5 Threat & Hazard Warning Systems

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

- Sirens

Google Mapped sirens in Oklahoma:

<https://www.google.com/maps/d/u/0/viewer?mid=zkgp3PmLxLzg.kXQeGF45FpQg&hl=en>

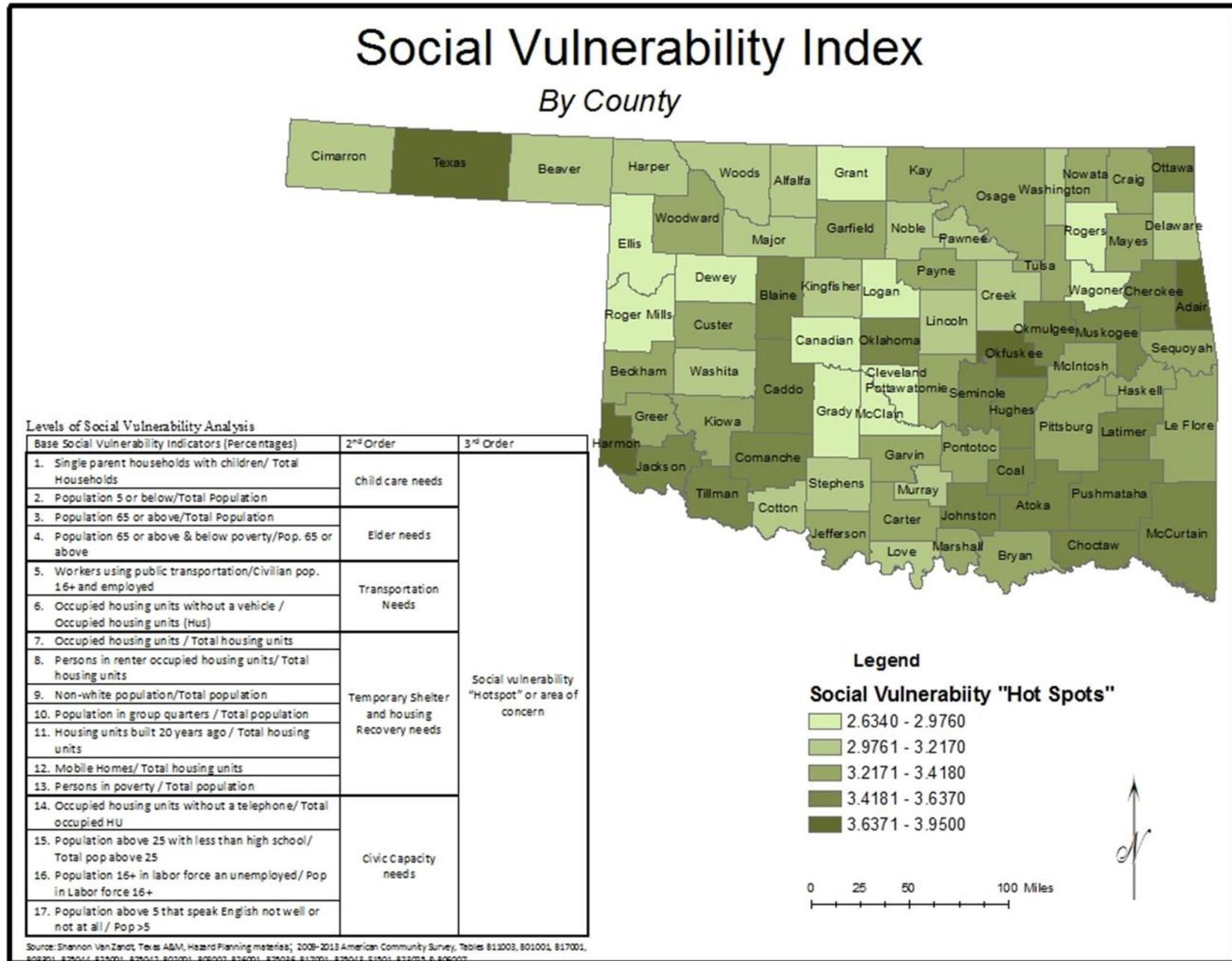


### Social Vulnerability

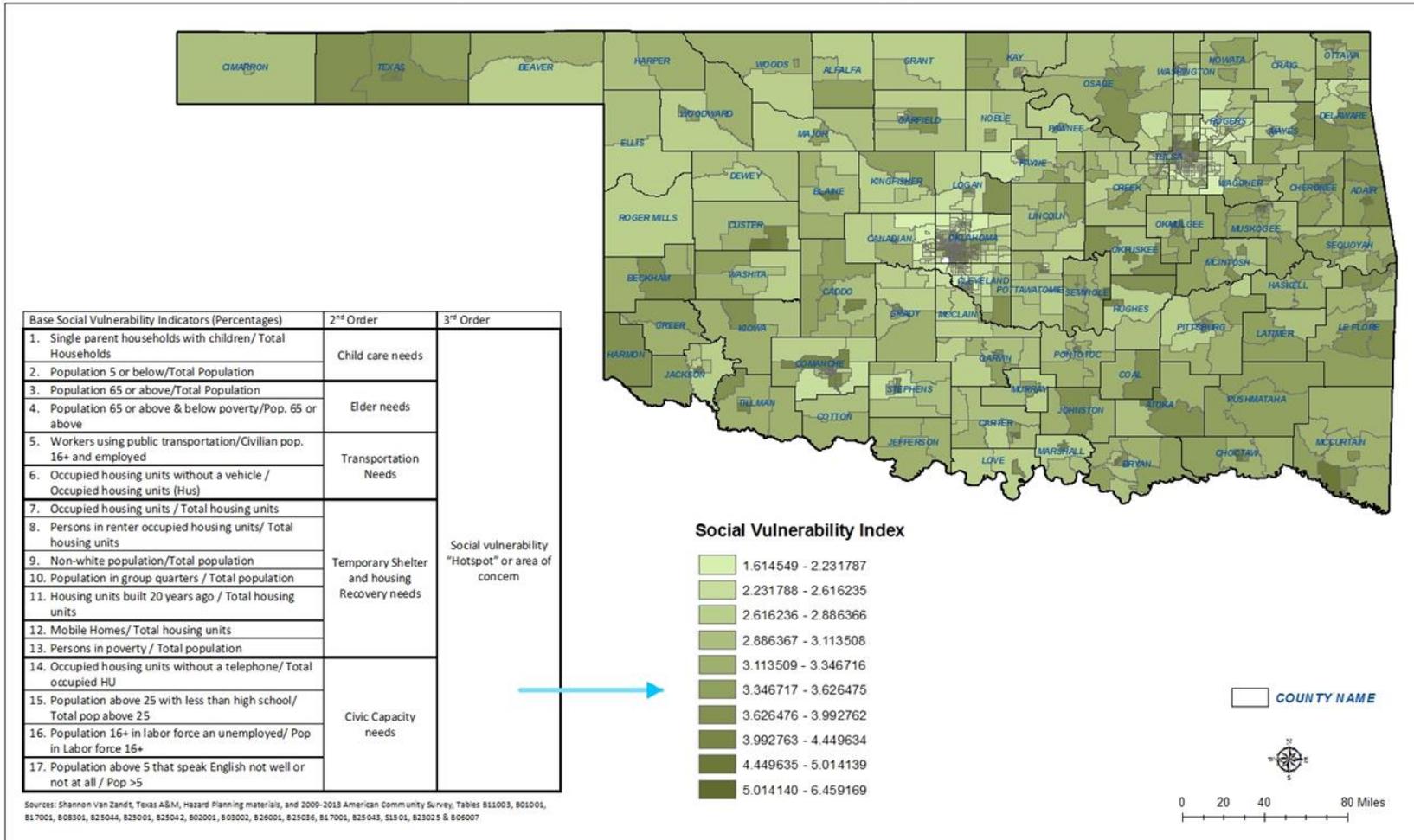
Based on the research work done by the Texas A&M University Hazard Reduction and Recovery Center, an added component is being included in this section. Social vulnerability can place households at a further disadvantage during and after a disaster. This analysis is assessing for the county the levels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

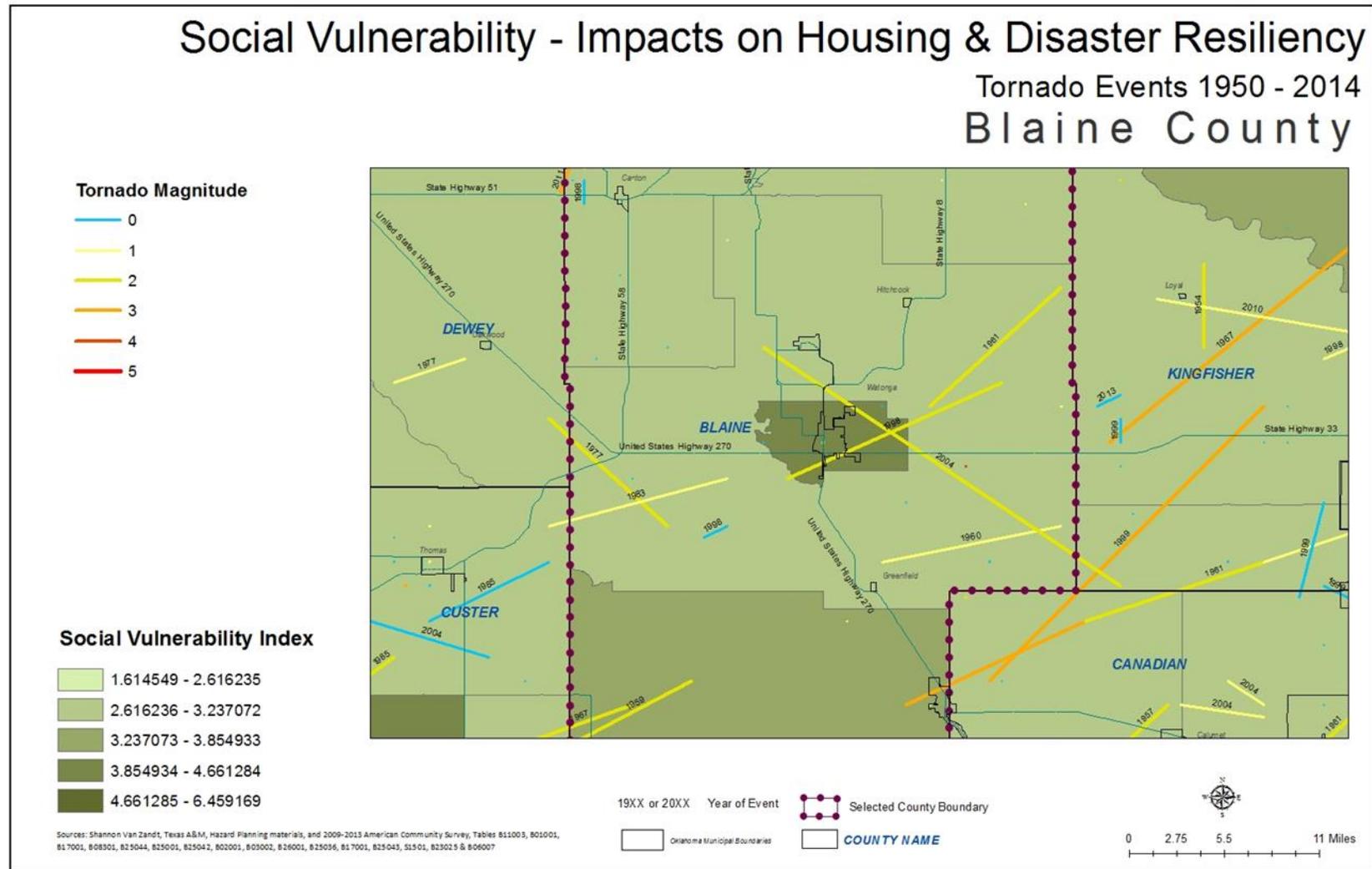
<b>Social Vulnerability Analysis - Blaine County</b>		
<b>Base Social Vulnerability Indicators (%)</b>	<b>2nd Order</b>	<b>3rd Order</b>
1.) Single Parent Households	15.20%	0.226
2.) Population Under 5	7.38%	(Child Care Needs)
3.) Population 65 or Above	16.81%	0.286
4.) Population 65 or Above Poverty Rate	11.76%	(Elder Needs)
5.) Workers Using Public Transportation	0.08%	0.051
6.) Occupied Housing Units w/o Vehicle	5.01%	(Transportation Needs)
7.) Housing Unit Occupancy Rate	77.46%	
8.) Rental Occupancy Rate	27.50%	
9.) Non-White Population	27.26%	2.69
10.) Population in Group Quarters	18.28%	(Temporary Shelter and Housing Recovery Needs)
11.) Housing Units Built Prior to 1990	87.29%	
12.) Mobile Homes, RVs, Vans, etc.	16.24%	
13.) Poverty Rate	15.00%	
14.) Housing Units Lacking Telephones	2.41%	
15.) Age 25+ With Less Than High School Diploma	17.30%	0.291
16.) Unemployment Rate	2.89%	(Civic Capacity Needs)
17.) Age 5+ Which Cannot Speak English Well or Not At All	6.46%	
		<b>3.543 Social Vulnerability 'Hotspot' or Area of Concern</b>

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



# Social Vulnerability - Impacts on Housing & Disaster Resiliency





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

This county falls above the average per this index for social vulnerability when comparing as a county to other counties in the state. The census tract in the central portion of the county, Watonga area, does have elevated social vulnerability score.

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.