

## Special Topics

## Cimarron County Disaster Resiliency Assessment

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

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

There are 5 key cities or towns within the county (Boise City, Kenton, Keyes, Felt and Wheless). Boise City, being the county seat, is the most likely to consider having a comprehensive plan, but at a population under 2,000 it is not surprising that they do not have one.

**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.

As the towns grow, the larger urbanized areas should consider creating a comprehensive plan to guide the way they want to encourage growth and preservation of culture. Additionally, this would be an opportunity to include objectives to manage risks related to disasters.

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.

Cimarron County does not have a Hazard Mitigation Plan. Their HMP has expired. However, the county did meet the criteria of being a StormReady County in August 2012.

<http://www.srh.noaa.gov/ama/?n=cimarronsr>

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

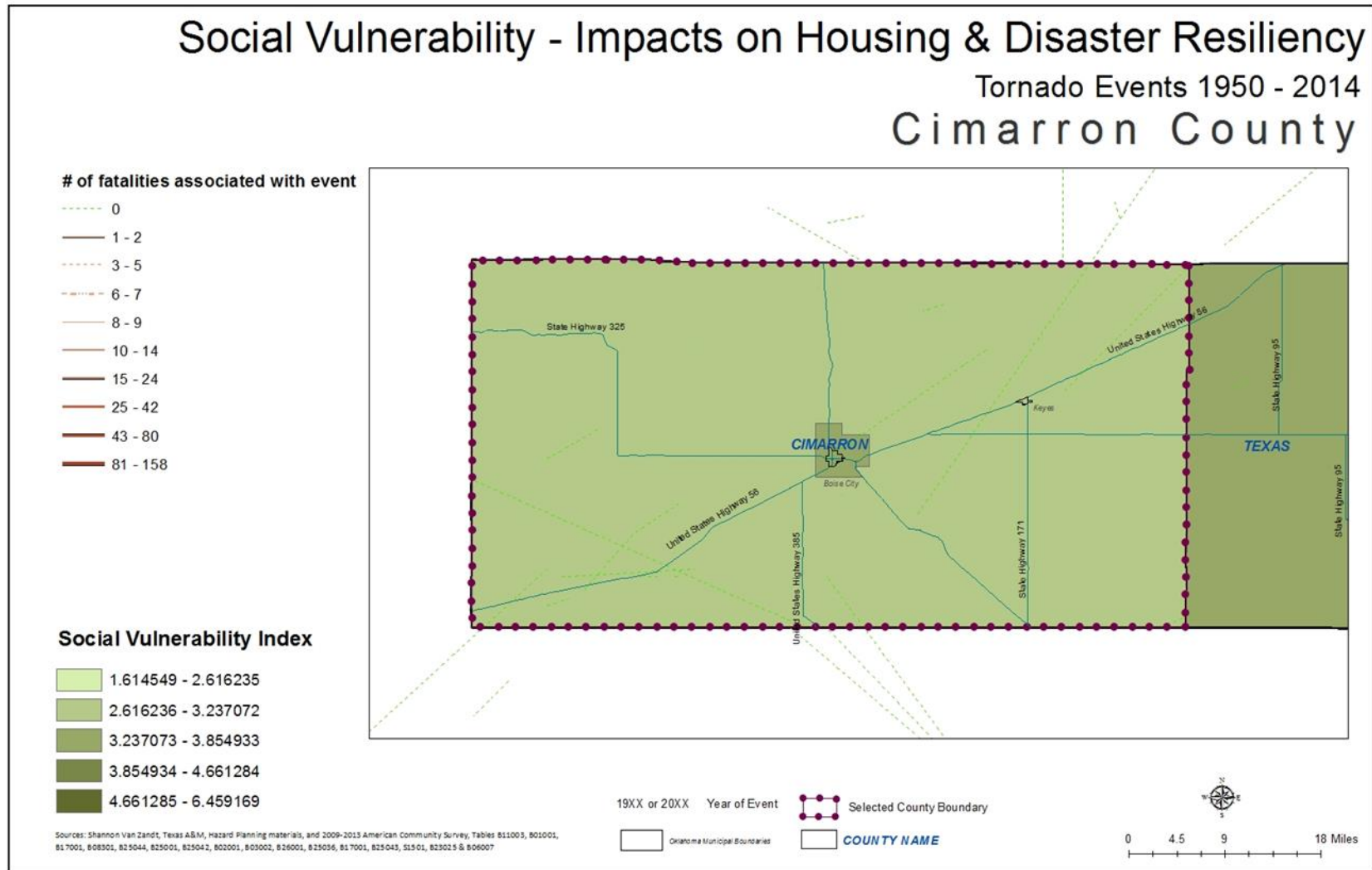
Data on historical damages and casualties is typically collected as part of a **Hazard Mitigation Plan** preparation to determine the appropriate planning measures and actions to take before and after an event. However, given no HMP is available, use of NOAA data on tornados (shapefile) will provide some insight on one risks to the area.

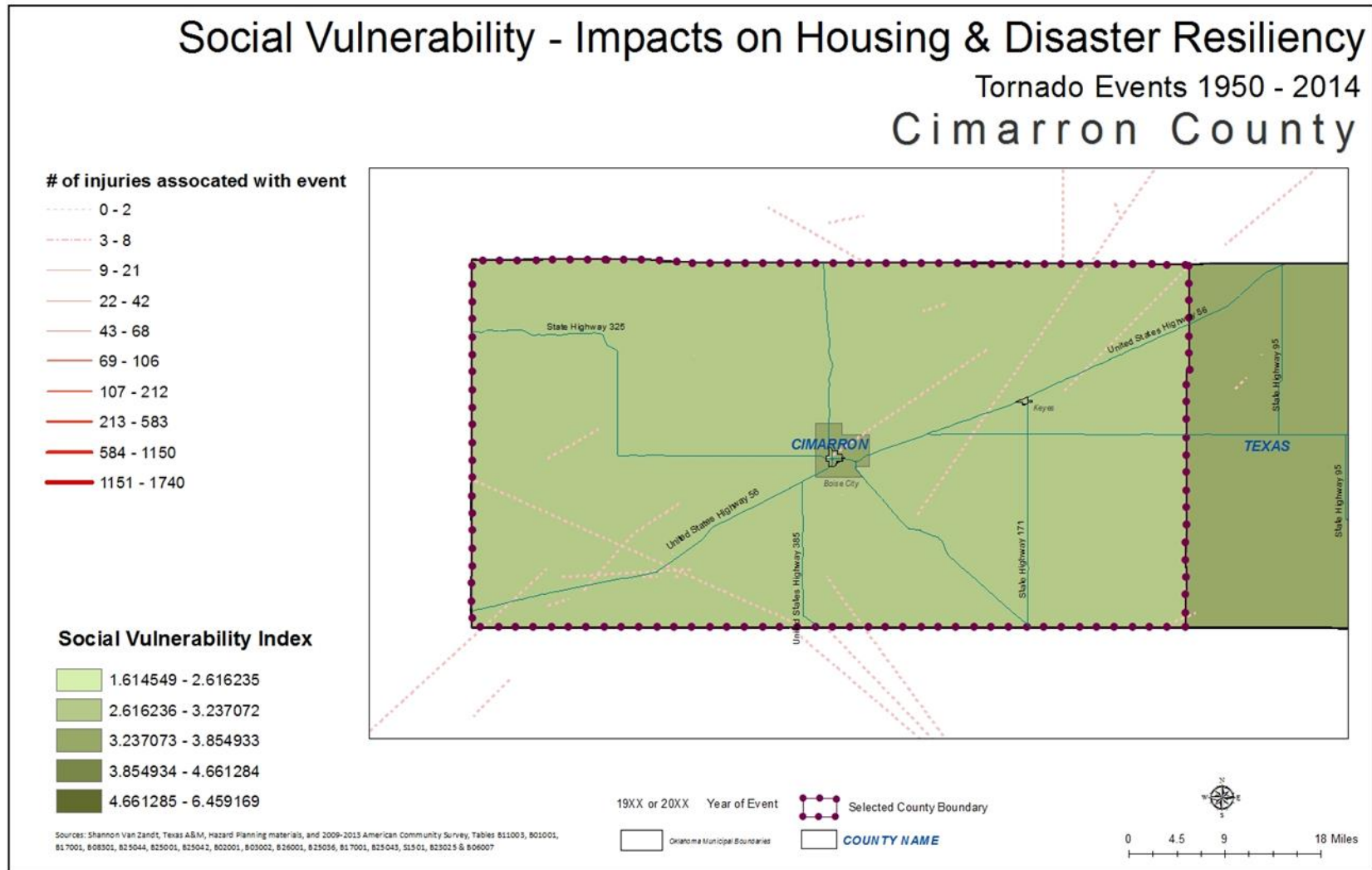
Flooding, based on FEMA FIRM maps, does not show floodplain areas in the county. The National Flood Hazard Layer (Official) is not available for this area. Flash flooding is a concern for all parts of the state after heavy precipitation.

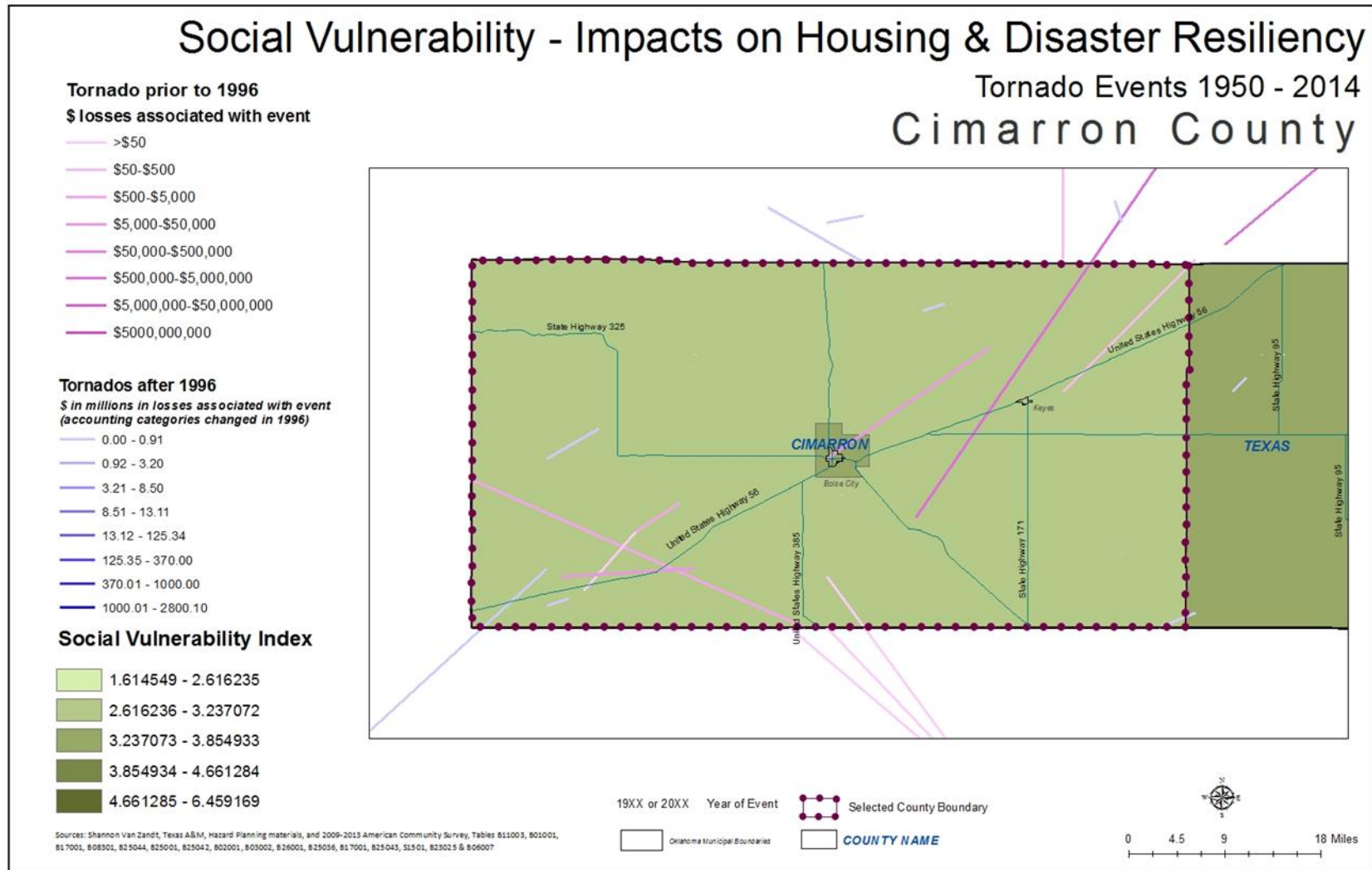
Historic data on tornados between 1950-2014 there are 42 tornados documented. There were 3 injuries that occurred connected to these tornados, with 2 of those injuries happening in the 1992 tornado. There were 0 fatalities connected to tornados during this time period. Property losses between 1961-1996 ranged from \$172,553 to \$1,735,650. (The accounting methods used for losses changed in 1996.) The losses estimated between 1996-2014 was \$450,000.

The Cimarron County Oklahoma Office of Emergency Services does maintain a website with FEMA-based information on the various risks that may impact the area and advice on preparedness.

<https://ok-cimarroncounty.civically.com/>







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

Status	Shelter Name	Address	City	
Closed	Cimarron County Courthouse	1 Courthouse Sq	Boise City, OK	<a href="#">Details</a>
Closed	First Baptist Church	311 Monroe Ave	Keyes, OK	<a href="#">Details</a>
Closed	First Baptist Church	103 N. Cimarron Ave	Boise City, OK	<a href="#">Details</a>
Closed	St. Paul's United Methodist	400 E Main St	Boise City, OK	<a href="#">Details</a>
Closed	United Methodist Church	401 N. Jefferson	Keyes, OK	<a href="#">Details</a>



<https://ok-cimarroncounty.civicready.com/Shelters>

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

Not available

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

Not available

**C.2.1.5 Threat & Hazard Warning Systems**

Online subscriptions for emails or voicemail notifications for all types of storm events is available for residents to register for here: <https://ok-cimarroncounty.civicready.com/Subscriptions>

## Social Vulnerability

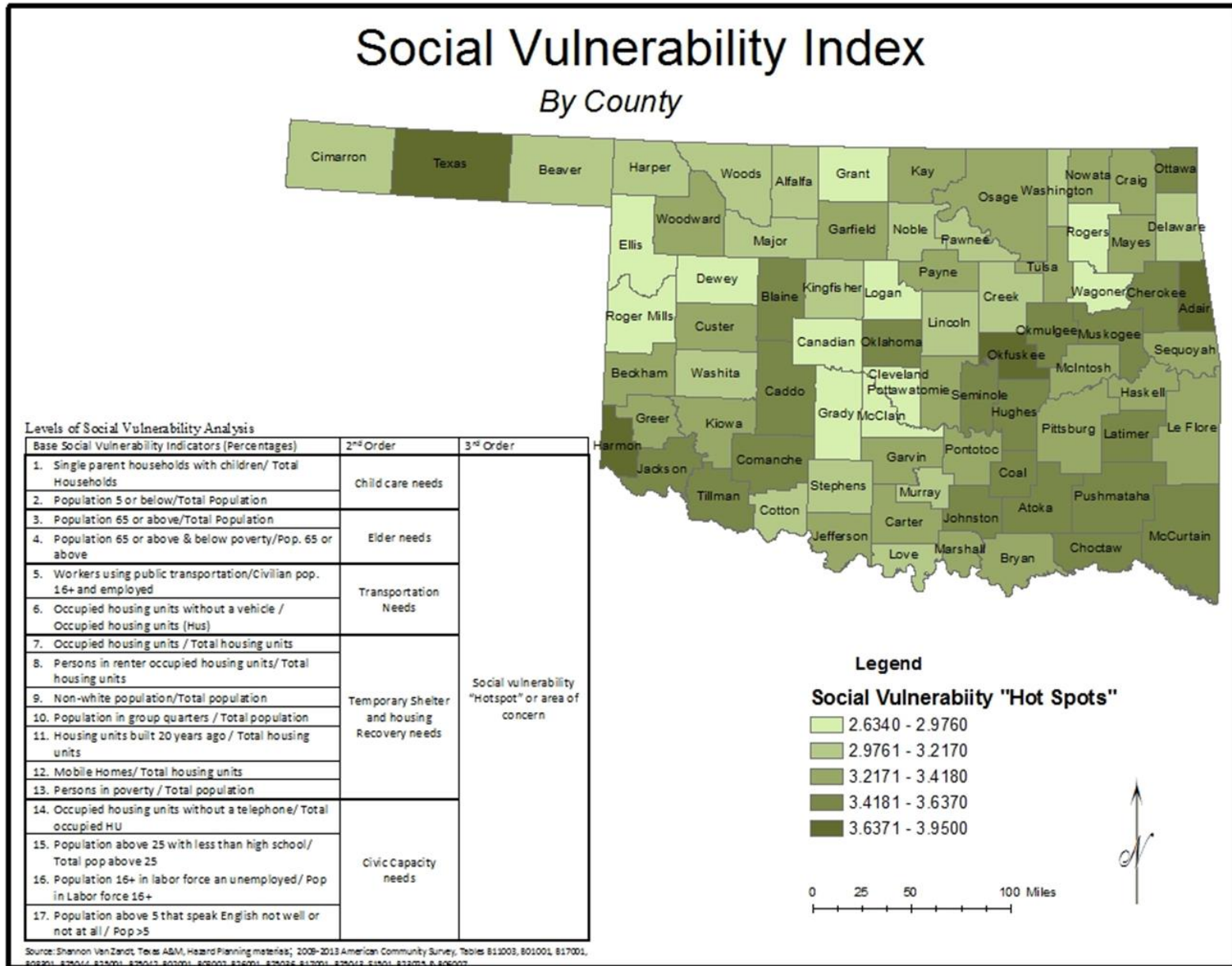
Based on the research work done by the Texas A&M University Hazard Reduction and Recovery Center, an added component is being included in this section. Social vulnerability can place households at a further disadvantage during and after a disaster. This analysis is assessing for the county the levels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

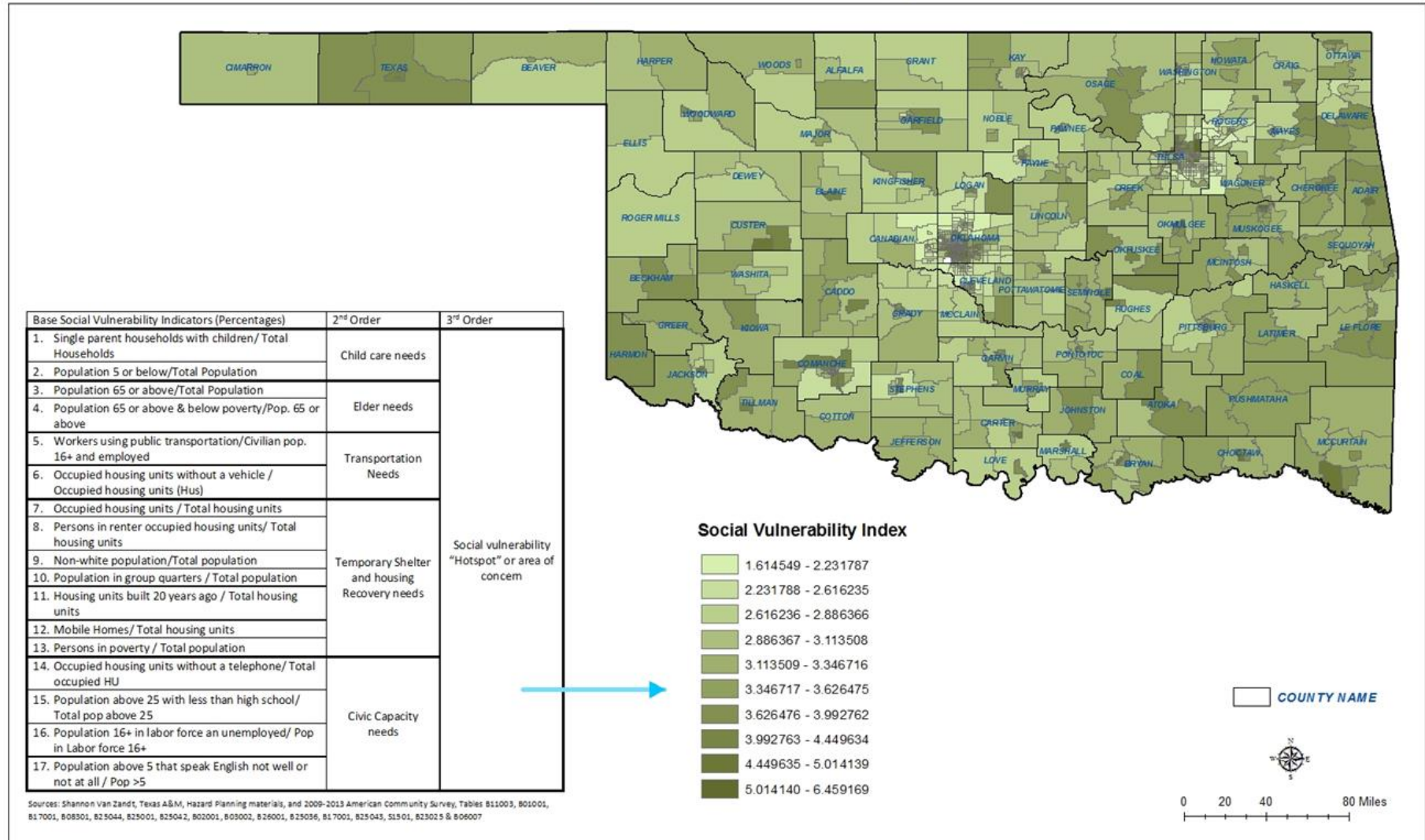
Base Social Vulnerability Indicators (%)		2nd Order	3rd Order
1.) Single Parent Households	12.50%	0.187	<b>3.169 Social Vulnerability 'Hotspot' or Area of Concern</b>
2.) Population Under 5	6.21%	(Child Care Needs)	
3.) Population 65 or Above	22.12%	0.287	
4.) Population 65 or Above & Below Poverty Rate	6.55%	(Elder Needs)	
5.) Workers Using Public Transportation	0.00%	0.049	
6.) Occupied Housing Units w/o Vehicle	4.87%	(Transportation Needs)	
7.) Housing Unit Occupancy Rate	67.40%	2.356 (Temporary Shelter and Housing Recovery Needs)	
8.) Rental Occupancy Rate	28.21%		
9.) Non-White Population	23.15%		
10.) Population in Group Quarters	1.40%		
11.) Housing Units Built Prior to 1990	79.85%		
12.) Mobile Homes, RVs, Vans, etc.	15.54%		
13.) Poverty Rate	20.03%		
14.) Housing Units Lacking Telephones	0.66%	0.291 (Civic Capacity Needs)	
15.) Age 25+ With Less Than High School Diploma	18.30%		
16.) Unemployment Rate	1.26%		
17.) Age 5+ Which Cannot Speak English Well or Not At All	8.86%		

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



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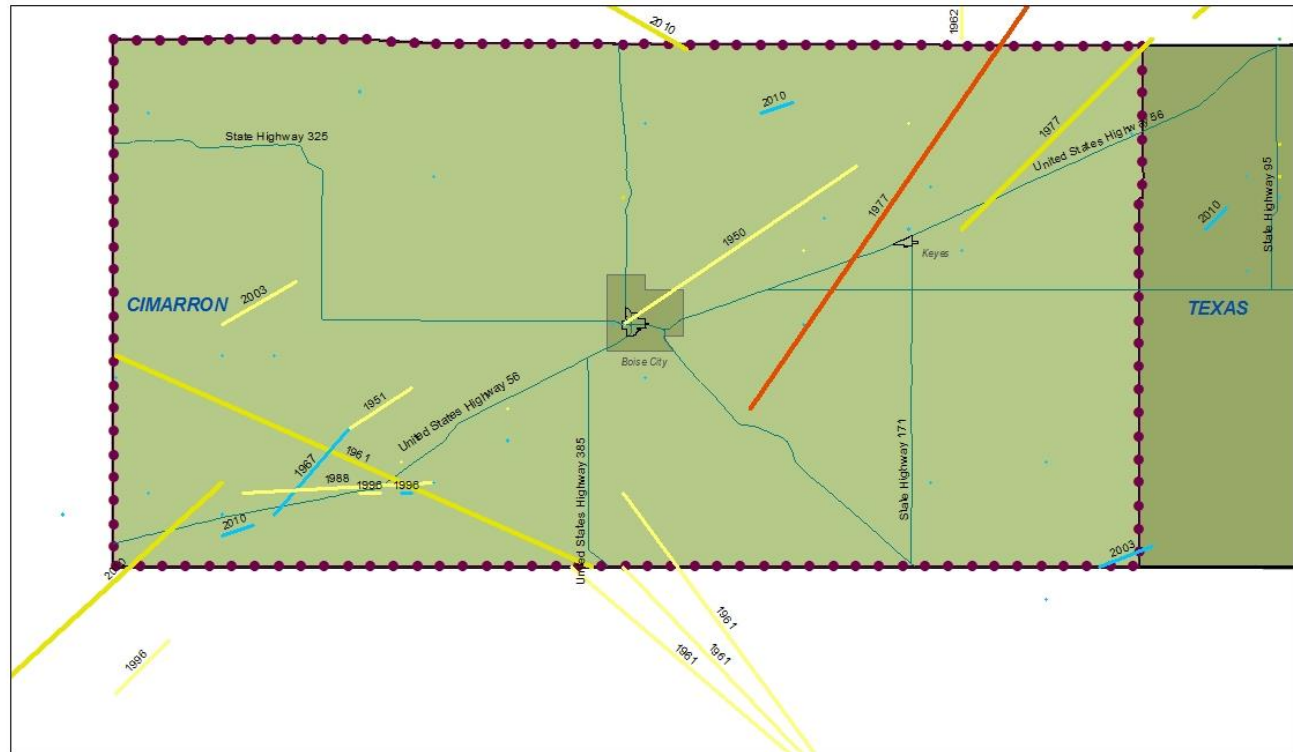
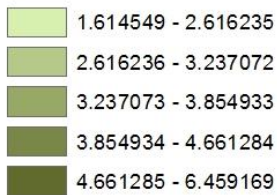
## Tornado Events 1950 - 2014

### Cimarron County

#### Tornado Magnitude

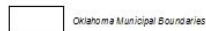


#### Social Vulnerability Index

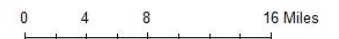


Sources: Shannon Van Zandt, Texas A&M, Hazard Planning materials, and 2009-2013 American Community Survey, Tables B11003, B01001, B17001, B08301, B25044, B25001, B25042, B02001, B03002, B26001, B25036, B17001, B25043, S1501, B23025 & B06007

19XX or 20XX Year of Event



Selected County Boundary



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 materials)

This county falls within the average level of social vulnerability for the county per this index for social vulnerability when comparing as a county to other counties in the state. The area of higher level of social vulnerability by census tract is the Boise City area. This is logical as this is the more populated portion of the county and thus where attention in terms of emergency management is appropriate.

Recommendations for this county:

- Create an online shelter registry for location of individual and business-based shelters.
- 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.