# **Special Topics**



### **Craig 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 6 key cities within the county (Vinita, Welch, Big Cabin, Ketchum, Bluejacket, White Oak).

**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.

Vinita, OK has a comprehensive (unavailable for use) date in 1973.

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.

Craig County does have a Hazard Mitigation Plan (expires 10-2015), but it was unavailable for use for this study.

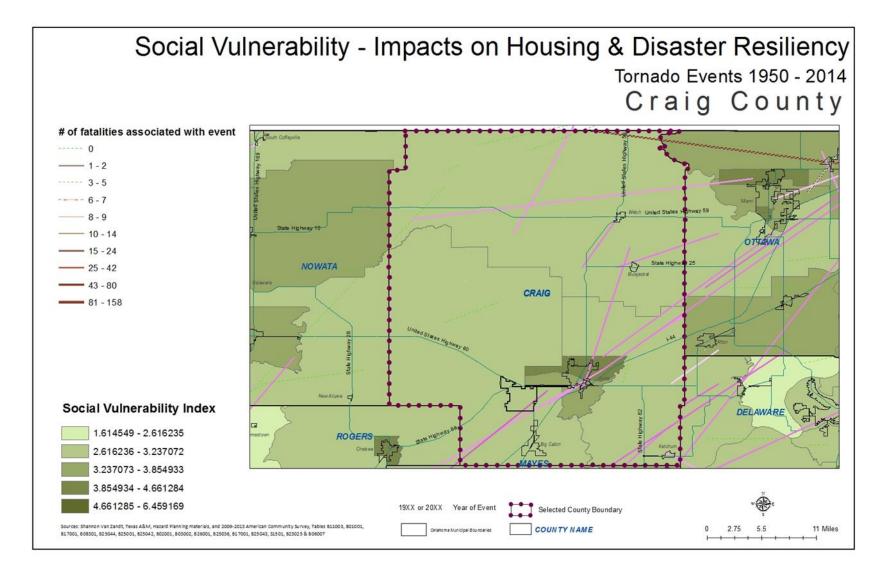
#### C.2.1.1. Historical Data on Natural Disasters and Other Hazards

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

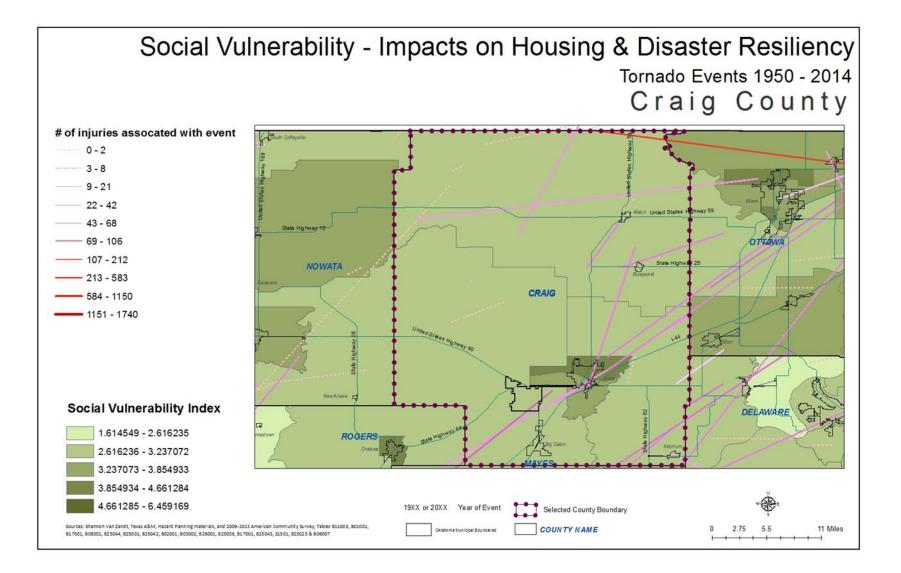
Flooding, based on FEMA FIRM maps, does not show floodplain areas in the county. The National Flood Hazard Layer (Official) is not available for this area. Flash flooding is a concern for all parts of the state after heavy precipitation.

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

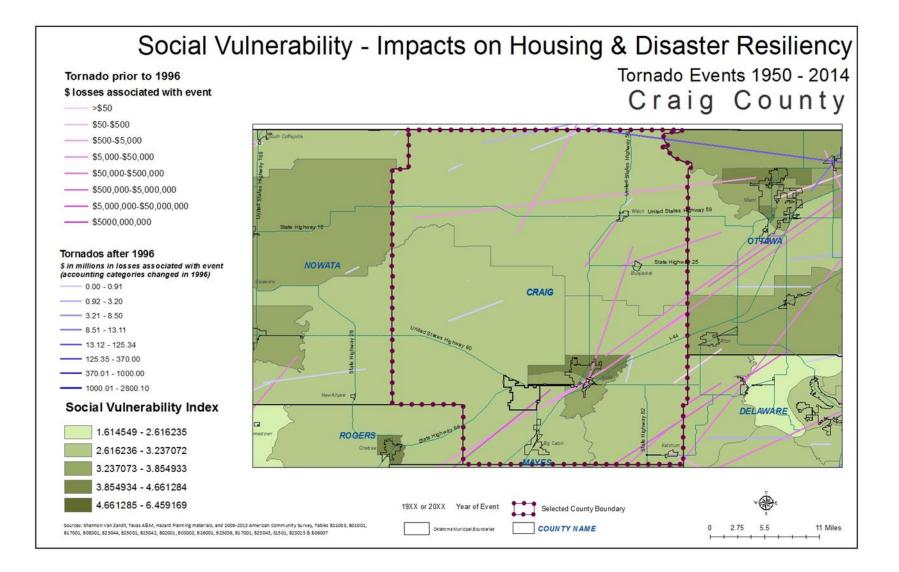
Historic data on tornados between 1951-2014 there are 43 tornados documented. There were 487 injuries that occurred connected to these tornados, with 350 of those injuries happening in the 2008 tornado. There were 25 fatalities connected to tornadoes during this time period, 21 of which occurred in 2008 tornado. Property losses between 1951-1996 ranged from \$5,215,001.00 to \$52,150,050.00. Accounting for losses estimated changed in 1996. The losses estimated between 1996-2014 was \$63,910,000.00.













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

"The Cherokee Nation donated \$15,000 to help the town of Big Cabin in Craig County install a community storm shelter". This shelter will hold up to 60 residents. (http://www.cherokee.org/News/Stories/20150528\_CherokeeNationdonates\$15KtohelpBigCabininsta Ilstormshelter.aspx)

#### 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

City of Vinita, OK has nine sirens and applied for a matching grant in March 2015 to upgrade these nine with three sirens which cover a larger area (VINITA DAILY JOURNAL, WEEKENDER, March 21, 2015).

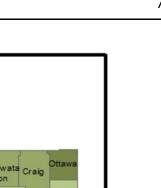


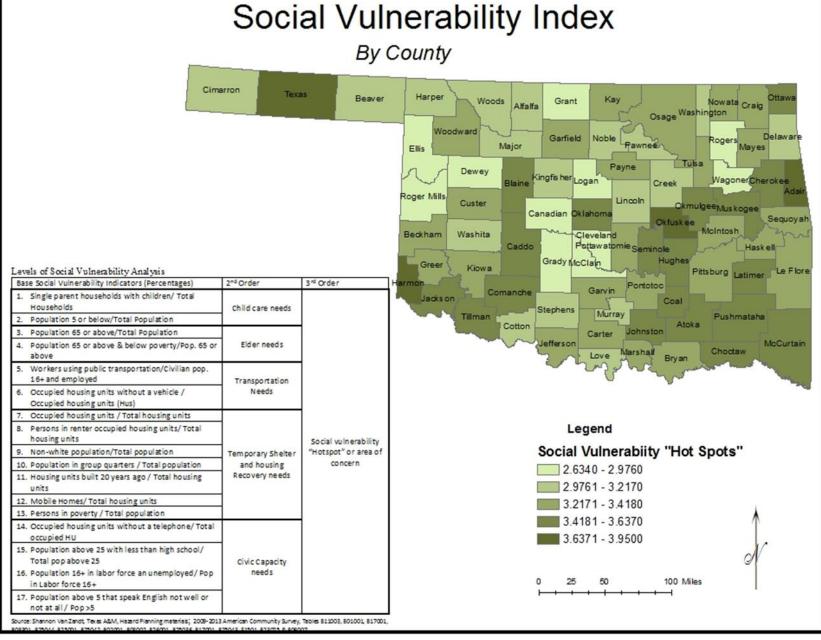
#### **Social Vulnerability**

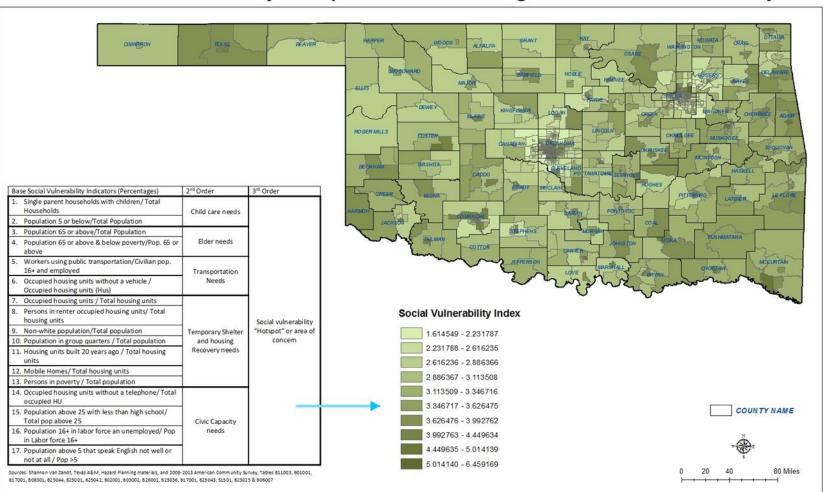
Based on the research work done by the Texas A&M University Hazard Reduction and Recovery Center, an added component is being included in this section. Social vulnerability can place households at a further disadvantage during and after a disaster. This analysis is assessing for the county the levels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

Base Social Vulnerability Indicators (%)		2nd Order	3rd Order
1.) Single Parent Households	13.09%	0.187	
2.) Population Under 5	5.66%	(Child Care Needs)	3.369 Social Vulnerability 'Hotspot' or Area of Concern
3.) Population 65 or Above	17.86%	0.333 (Elder Needs)	
4.) Population 65 or Above & Below			
Poverty Rate	15.46%		
5.) Workers Using Public Transportation	0.25%	0.051 (Transportation Needs)	
6.) Occupied Housing Units w/o Vehicle	4.80%		
7.) Housing Unit Occupancy Rate	83.45%	2.54 (Temporary Shelter and Housing Recovery Needs)	
8.) Rental Occupancy Rate	21.20%		
9.) Non-White Population	34.65%		
10.) Population in Group Quarters	7.34%		
11.) Housing Units Built Prior to 1990	77.28%		
12.) Mobile Homes, RVs, Vans, etc.	12.21%		
13.) Poverty Rate	17.83%		
14.) Housing Units Lacking Telephones	2.02%		
15.) Age 25+ With Less Than High School Diploma	16.90%	0.258 (Civic Capacity Needs)	
16.) Unemployment Rate	5.67%		
17.) Age 5+ Which Cannot Speak English		i i ceus,	
Well or Not At All	1.17%		

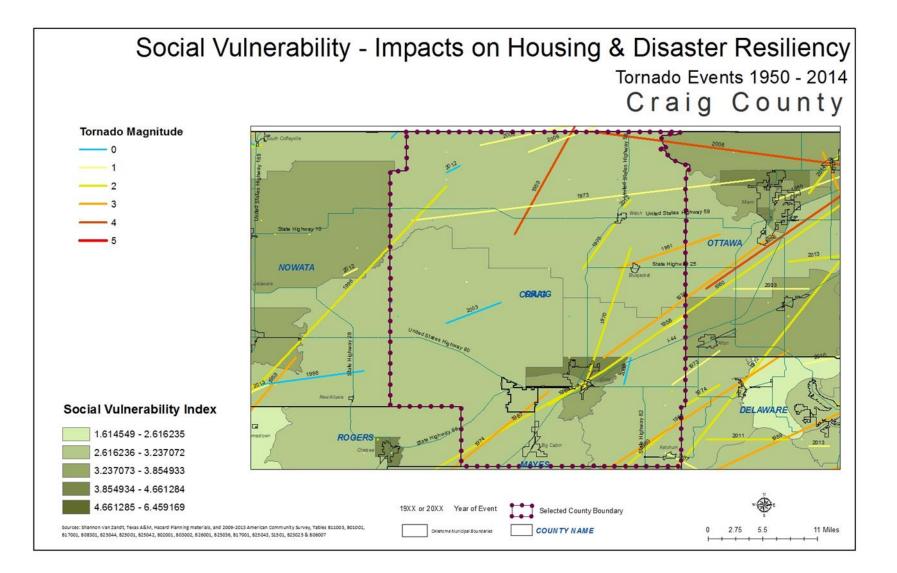
Sources: Shannon Van Zandt, Texas A&M, Hazard Planning materials, and 2009-2013 American Community Survey, Tables B11003, B01001, B17001, B08301, B25044, B25001, B25042, B02001, B03002, B26001, B25036, B17001, B25043, S1501, B23025 & B06007







## 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 great gap or disadvantage prior to the event (Shannon Van Zandt, Texas A&M, Hazard Planning).

This county falls about 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 census tract near Vinita has an increased social vulnerability score and has historically had tornado events.

Recommendations for this county:

- 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.