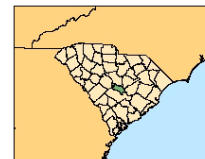


CALHOUN COUNTY, SC

Hazard Profile for 2008

An Excerpt from the State of South Carolina Hazard Assessment for 2008



I. Summary

Calhoun County is vulnerable to both natural (hurricanes/tropical storms) and technological (hazardous material incidents) hazards. Hurricanes/tropical storms, winter weather, and drought produce the highest monetary damages; however, the recurrence interval is 10 years or more, making them relatively rare events. Wildfires, thunderstorms, and hazardous material incidents are some of the prominent hazards that regularly affect the county, based on past occurrences.

II. Social Vulnerability

Social vulnerability examines the socioeconomic and demographic character of places and helps to explain the variation in the population's ability to prepare for and respond to hazards. The Social Vulnerability Index (SoVI) is a statistical measure that compares social vulnerability to environmental hazards among places, and then visually displays these comparisons on a map. SoVI thus illustrates where there is uneven capacity for preparedness and response and where additional planning and response resources might be used most effectively to help residents. The variables used in determining the Social Vulnerability (SoVI) score along with how SoVI is calculated are available on the Hazards and Vulnerability Research Institute SoVI website (<http://www.sovius.org>).

Within Calhoun County, the tracts exhibit moderate to moderately elevated levels of social vulnerability in comparison to the remainder of the state. Figure 1 provides maps of Calhoun County depicting (on the left) social vulnerability by census tract and (on the right) cities and major roads.

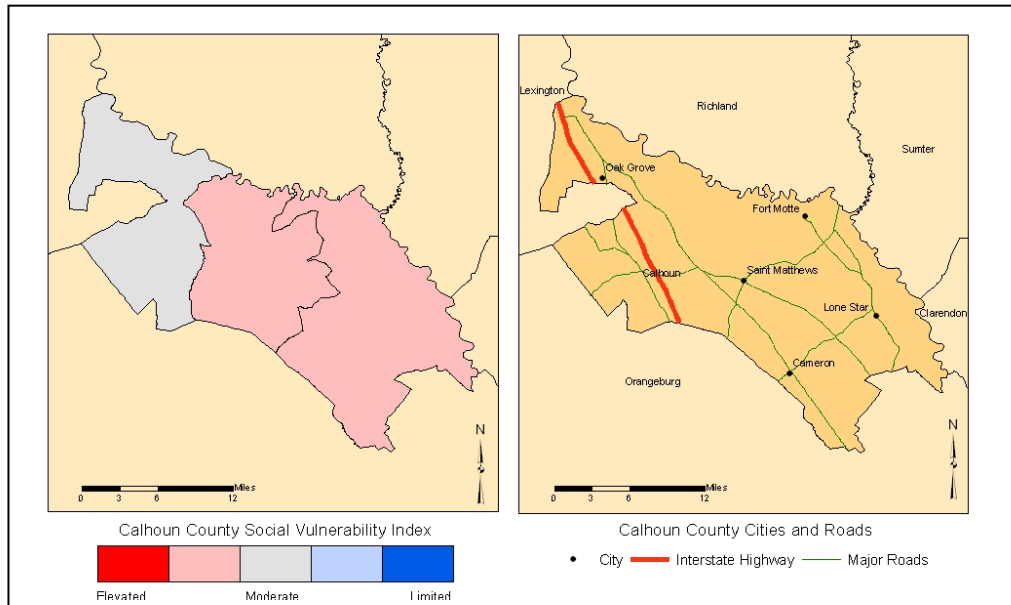


FIGURE 1. The Social Vulnerability for Calhoun County, SC by US Census tracts.

III. Terms

- Disaster** – a singular hazard event that results in widespread human losses or has profound impacts on local environments.
- Frequency** – a calculated number showing the chance of an event occurring each year based on the historic record.
- Hazard** – the potential threat to humans as well as the impact of an event on society and the environment.
- Recurrence** – a calculated number that examines the expected time interval between events based on the historic record.
- Risk** – the likelihood or probability of occurrence of a hazard or adverse event.
- Vulnerability** – the potential for loss or the capacity to suffer harm from a hazard event.



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CALHOUN COUNTY HAZARD PROFILE 2008

IV. Hazard Identification

The estimated recurrence of a hazard is a useful element (based on event frequency) for distinguishing between infrequent hazards like earthquakes, and frequent hazards such as hazardous materials incidents or traffic accidents. The most common hazard events in Calhoun County are hazardous material accidents, severe thunderstorms and wind, and wildfires. Drought and earthquakes are hazards with the lowest recurrence intervals. The recurrence and hazard frequency table can be seen in Table 1.

TABLE 1. The Hazard Profile for Calhoun County, SC.

Hazard ^a	Number of Events	Years in Record	Recurrence Interval (Years)	Hazard Frequency (Percent Chance per Year)
Coastal Events				
Hurricane/Tropical Storm	14	158	11.29	8.86
Ocean & Lake Surf ^b	1	16	16.00	6.25
Waterspout	0	16	*	*
Dam Failure	-	-	-	-
Drought	1	59	59.00	1.69
Flood	6	59	9.83	10.17
Fog	0	12	*	*
Geophysical Events				
Avalanche	0	49	*	*
Earthquake	2	310	155.00	0.65
Landslide	0	49	*	*
Human-Induced Events				
Civil Disturbance	-	-	-	-
Hazardous Materials (Hazmat)	81	22	<0.50	368.18**
Nuclear Power Plant	0	8	*	*
Terrorism	0	29	*	*
Transportation (Motor Vehicle)	3,402	10	<0.50	34020**
Severe Thunderstorm Events				
Funnel Cloud	0	16	*	*
Hail	55	59	1.07	93.22
Heavy Precipitation	0	15	*	*
Lightning	1	16	16.00	6.25
Thunderstorm & Wind	91	59	0.66	154.24**
Tornado	12	59	4.92	20.34
Temperature Extremes	0	16	*	*
Wildfire	932	21	<0.50	4,438.10**
Winter Weather (Snow & Ice)	5	59	11.80	8.47
^a Data Sources: National Climatic Data Center (www.ncdc.noaa.gov/cgi-win/wcqi.dll?wwEvent-Storm); National Geophysical Data Center (www.ngdc.noaa.gov/hazard/) ^b Includes coastal flooding, coastal erosion, coastal winds			* Unable to calculate (cannot divide by zero) ** Percent is greater than 100.00, therefore hazard can be expected to occur more than once per year - Data Unavailable	

V. Hazard Loss Information

When compared to South Carolina as a whole, Calhoun County has the state average or less than the state's average of loss-causing events. This comparison between the county and state can be seen in Figure 2 (page 3) with hazards that exceeded the state mean in red type. Winter weather, wind, and severe thunderstorms are well below the state mean indicating these hazards had less effect on the county when compared to the state as a whole.

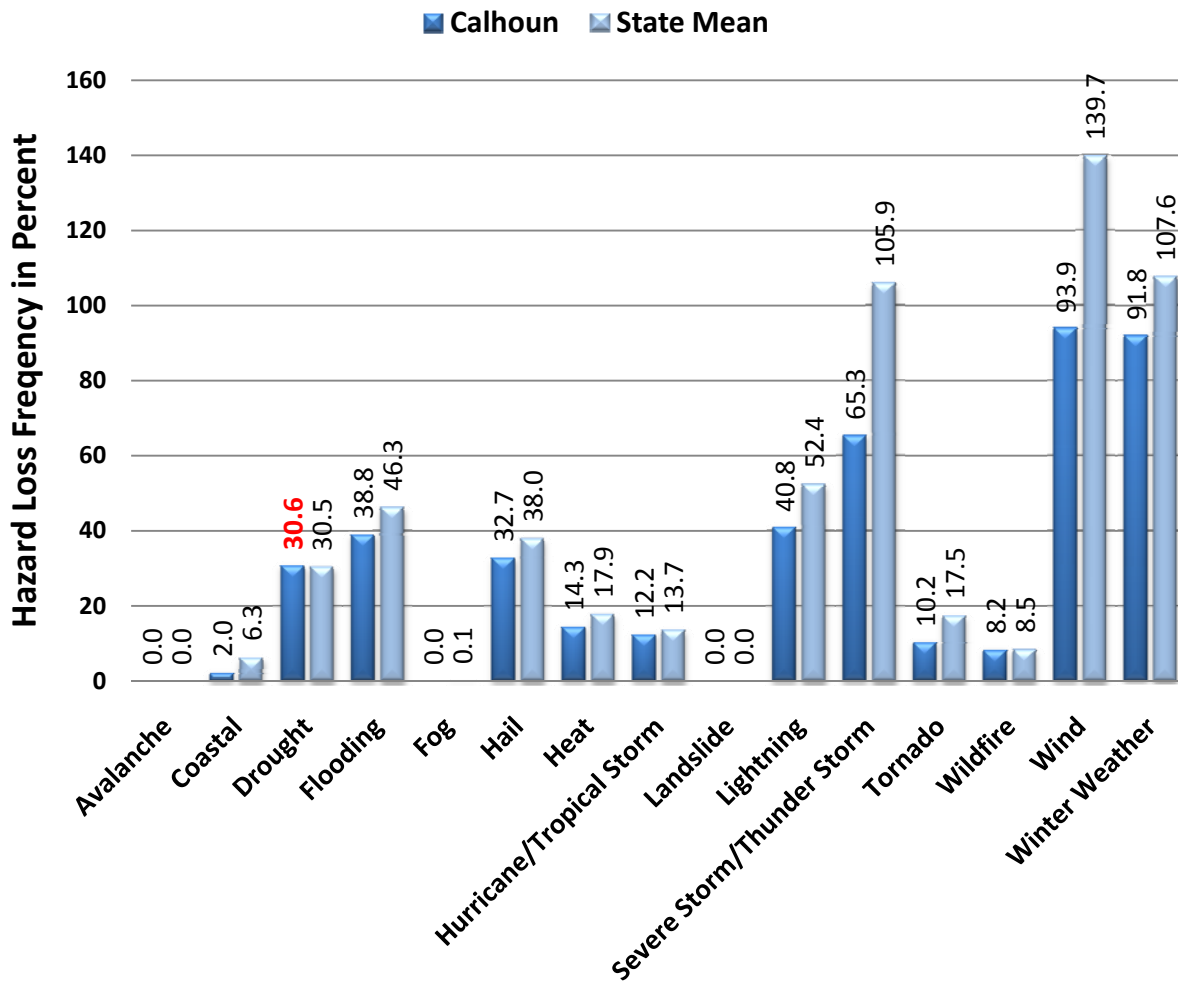


FIGURE 2. The historic loss causing hazard frequency between 1960 and 2008 for Calhoun County compared to South Carolina as reported in SHELUDS. Percentage numbers indicated in red are when the county total exceeds the state mean. Also, a hazard that is identified in the National Climatic Data Center Storm Data reports as a multiple event hazard (flooding, winter weather, coastal storm), and given a statewide or regional location, the impact of the event is equally distributed amongst the counties involved.

Another way of determining how vulnerable a county is to particular hazards is by examining the amount of damage caused by past events. In Figure 3 (page 4), the total damage is calculated as the cumulative amount of damage from 1960 to 2008 based on twelve hazard types from the Hazards and Vulnerability Research Institute's SHELUDS database – available at (<http://www.sheldus.org>). The historic losses in Calhoun County exceed \$63 million and are due to hurricanes, winter weather, and drought. Hurricanes/tropical storms represent 29% of the losses in Calhoun County historically. While significant for the county, these cumulative losses represent less than one percent of the state's overall total.

Hazard	Total Damage (in 2008 dollars)	Percent of State
Coastal	\$6,476	0.01%
Drought	\$14,058,478	2.26%
Flooding	\$461,017	0.31%
Hail	\$423,160	0.43%
Heat	\$11,286,643	2.26%
Hurricane/ Tropical Storm	\$18,314,866	0.35%
Lightning	\$257,071	0.51%
Severe Storm/ Thunder Storm	\$1,623,665	0.80%
Tornado	\$1,598,035	0.70%
Wildfire	\$334,042	2.18%
Wind	\$722,533	0.52%
Winter Weather	\$14,594,454	1.68%
Calhoun - Total	\$63,680,442	0.69%

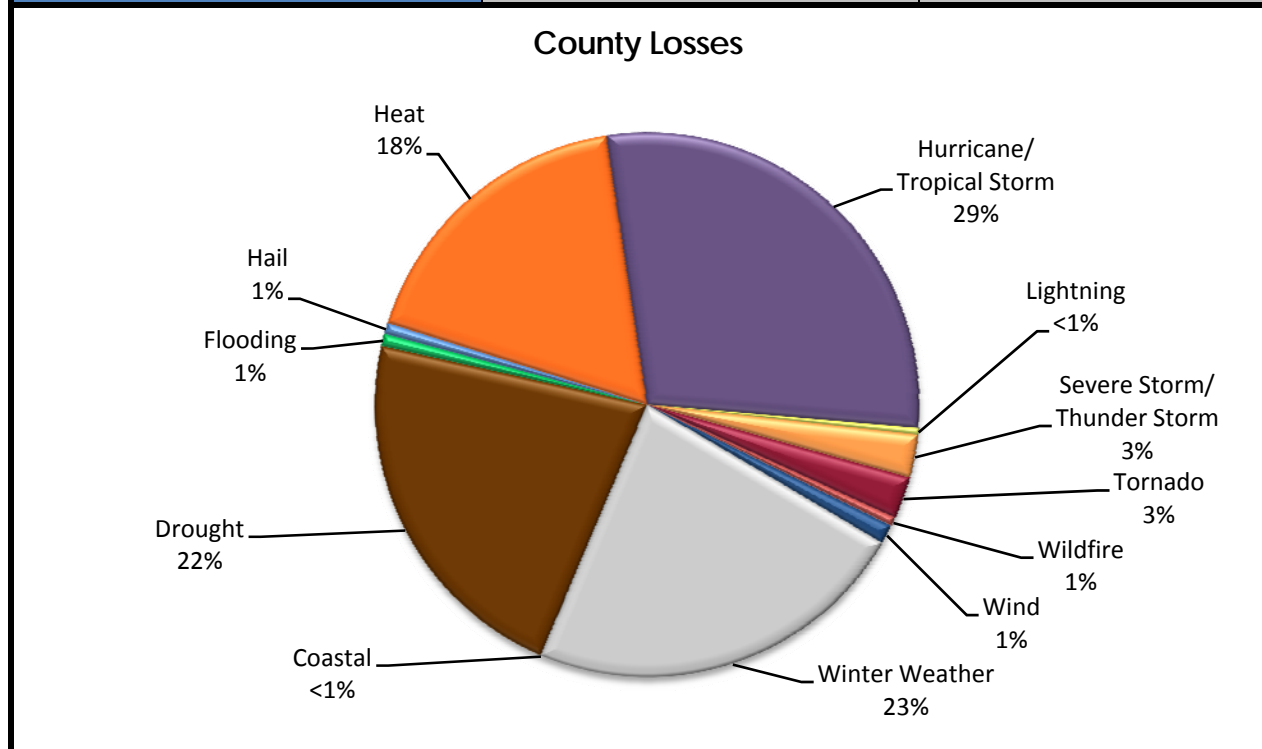


FIGURE 3. Historic Hazard Event Damages (property and crop) between 1960 and 2008 for Calhoun County, SC.