

## Metadata descriptions for the SV viewer:

### Social Vulnerability Cluster Analysis

Data used, all data at the census tract level:

Variable	Description	Year, Source
Income	Per capita income	2010, ACS
Black	Percent of population that is Black or African American	2010, Census
Over 65	Percent of population that is over 65 years of age	2010, Census
Unemployed	Percent of civilian labor force 16 and over that is unemployed	2010, Census
Poverty	Percent of population for whom poverty status is established that is living in poverty	2006-2010, ACS
No High School	Percent of population 25 and older with no high school degree or equivalent	2006-2010, ACS
Nursing Homes	Percent of population in nursing homes	2010, Census
Urban	Percent of the population living in urban areas	2010, Census
Female Households	Percent of households with female head, no spouse	2010, Census
Social Security	Percent of households with social security income	2010, Census

Method of analysis:

We conducted a k-means cluster analysis using the “cluster kmeans” command in the Stata software program. All of the variables listed above were standardized to z-scores with zero means and unit variances to avoid any confounding effects that might arise from using variables of different magnitudes in the analysis. We ran the cluster command setting the number of clusters to 30. We repeated the cluster command 500 times using a different set of randomly selected initial values for each run and selected the run with the smallest SSE for this map. For each of the 30 clusters we reviewed each cluster’s prototype and made a determination of vulnerability based on the prototype’s full characterization. While the clusters are numbered for identification purposes, the numbers themselves have no significance.