About the Data
Social Vulnerability Index 2000

The interactive maps are visual representations of the Social Vulnerability Index (SVI), which data were extracted from US Census 2000 for the fifty states and District of Columbia at census tract level. The SVI was constructed using the following procedure:

1) Percentile Ranking. Each of fifteen Census and ACS variables* was ranked from highest to lowest across all census tracts in the US with a non-zero population.**
2) A percentile rank is defined as the proportion of scores in a distribution that a specific score is greater-than or equal-to. Percentile ranks were calculated using the formula:

   Percentile Rank = (Rank-1)/ (N-1)

   Where N = the total number of data points and all sequences of ties are assigned the smallest of the corresponding ranks.

   Rankings range from 0.00 to 1.00 with 0.00 being those tracts least vulnerable for a particular variable and 1.00 being those tracts most vulnerable for a particular variable.
3) The fifteen variables for each tract were also grouped into four thematic domains (socioeconomic, household composition/disability, minority status/language, housing/transportation) – and four domain rankings were calculated for each tract.
4) An overall social vulnerability ranking was calculated from the four domain rankings. The overall Social Vulnerability ranking of census tracts is displayed on the maps as TOTAL PERCENTILE.
5) We also created within-state rankings for the individual states in the U.S. When the user selects a state or county map, the underlying ranked data drives the display of the map.
6) Flags. Tracts having census variables ranking in the top 10 percent of all values, i.e., at the 90th percentile, were also flagged for high vulnerability. The effort here is to identify vulnerable tracts whose overall vulnerability ranking masks high vulnerability scores on individual variables.
7) The user may also separately display each of the four domains at either national- or state-level.
8) Zip-code areas and FEMA/Census Regions may also be displayed, but do not generate data or percentile rankings as such.

For more information on the method used to construct the SVI, please click here to see: "A Social Vulnerability Index for Disaster Management"

*The fifteen U.S. Census variables are: percent individuals below poverty, percent civilian unemployed, per capita income, percent persons aged 25 and older with no high school diploma, percent aged 65 and older, percent aged 17 and under, percent persons older than 5 years with a disability, percent single-parent households with children under 18 years of age, percent minority, percent persons 5 years and older who speak English less than well, percent housing structures with 10 or more units, percent mobile homes, percent households with more than one person per room, percent households with no vehicle available, and percent persons in group-quarters.

**Per capita income was ranked from lowest to highest because, unlike other variables, a higher value indicates lesser vulnerability.

SVI 2000 Data Dictionary

For information on how the SVI was constructed, please see A Social Vulnerability Index for Disaster Management.

Themes
1. Socioeconomic
2. Household Composition/Disability
3. Minority Status/Language
4. Housing Type/Transportation

VARIABLE	THEME	DESCRIPTION
G1V1R	1	Proportion individuals below poverty level
G1V2R	1	Proportion civilian unemployed 16+yrs
G1V3R	1	Per capita income in 1999
G1V4R	1	Proportion persons with no high school diploma 25+yrs
G2V1R	2	Proportion persons 65 years or older
G2V2R	2	Proportion persons 17 years or younger
G2V3R	2	Proportion persons with disability 5+yrs
G2V4R	2	Proportion single-parent HH with children under 18 yrs
G3V1R	3	Proportion minority
G3V2R	3	Proportion persons 5+yrs who speak English "less than well"
G4V1R	4	Proportion housing 10+units
G4V2R	4	Proportion mobile homes
G4V3R	4	Proportion HH with more people than rooms
G4V4R	4	Proportion HH with no vehicle access
G4V5R	4	Proportion of persons who are in institutional & noninstitutional group quarters
XXG1V1P*	1	Percentile Ranking individuals below poverty level
XXG1V2P	1	Percentile Ranking civilian unemployed 16+yrs
XXG1V3P	1	Percentile Ranking per capita income in 1999
XXG1V4P	1	Percentile Ranking persons with no high school diploma 25+yrs
XXG1TP	1	Socioeconomic Domain Total Percentile Ranking
XXG2V1P	2	Percentile Ranking persons 65 years or older
XXG2V2P	2	Percentile Ranking persons 17 years or younger
XXG2V3P	2	Percentile Ranking persons with disability 5+yrs
XXG2V4P	2	Percentile Ranking single-parent HH with children under 18 yrs
XXG2TP	2	Household Composition & Disability Total Percentile Ranking

VARIABLE	THEME	DESCRIPTION
XXG3V1P	3	Percentile Ranking minority
XXG3V2P	3	Percentile Ranking persons 5+yrs who speak English “less than well”
XXG3TP	3	Minority Status/Language Domain Total Percentile Ranking
XXG4V1P	4	Percentile Ranking housing with 10+units
XXG4V2P	4	Percentile Ranking mobile homes
XXG4V3P	4	Percentile Ranking HH with more people than rooms
XXG4V4P	4	Percentile Ranking HH with no vehicle access
XXG4V5P	4	Percentile Ranking of persons who are in institutional & noninstitutional group quarters
XXG4TP	4	Housing/Transportation Domain Total Percentile Ranking
XXTP		Total Percentile Ranking
XXG1V1F	1	Flag - the proportion of individuals below poverty level is in the 90th percentile (1 = yes, 0 = no)
XXG1V2F	1	Flag - the proportion of civilian unemployed 16+ years is in the 90th percentile (1 = yes, 0 = no)
XXG1V3F	1	Flag - per capita income in 1999 is in the 90th percentile (1 = yes, 0 = no)
XXG1V4F	1	Flag - the proportion of persons with no high school diploma 25+ years is in the 90th percentile (1 = yes, 0 = no)
XXG1TF	1	Socioeconomic Domain Total Flags
XXG2V1F	2	Flag - the proportion of persons aged 65 and older is in the 90th percentile (1 = yes, 0 = no)
XXG2V2F	2	Flag - the proportion of persons 17 years or younger is in the 90th percentile (1 = yes, 0 = no)
XXG2V3F	2	Flag - the proportion of persons with disability 5+ years is in the 90th percentile (1 = yes, 0 = no)
XXG2V4F	2	Flag - the proportion of single-parent HH with children under 18 yrs is in the 90th percentile (1 = yes, 0 = no)
XXG2TF	2	Household Composition & Disability Total Flags
XXG3V1F	3	Flag - the proportion of minority individuals is in the 90th percentile (1 = yes, 0 = no)
XXG3V2F	3	Flag - the proportion of persons 5+ years who speak English “less than well” is in the 90th percentile (1 = yes, 0 = no)
XXG3TF	3	Minority Status/Language Domain Total Flags
XXG4V1F	4	Flag - the proportion of housing with 10+ units is in the 90th percentile (1 = yes, 0 = no)
XXG4V2F	4	Flag - the proportion of mobile homes is in the 90th percentile (1 = yes, 0 = no)
XXG4V3F	4	Flag - the proportion of HH with more people than rooms is in the 90th percentile (1 = yes, 0 = no)
XXG4V4F	4	Flag - the proportion of HH with no vehicle access is in the 90th percentile (1 = yes, 0 = no)
XXG4V5F	4	Flag - the proportion of persons who are in institutional & noninstitutional group quarters is in the 90th percentile (1 = yes, 0 = no)

VARIABLE	THEME	DESCRIPTION
XXG4TF	4	Housing/Transportation Domain Total Flags
XXTF		Total Flags
Totpop2000		Total 2000 population
Totalhu		Total 2000 housing units
G1V1N	1	Number individuals below poverty level
G1V2N	1	Number civilian unemployed 16+yrs
G1V4N	1	Number persons with no high school diploma 25+yrs
G2V1N	2	Number persons 65 years or older
G2V2N	2	Number persons 17 years or younger
G2V3N	2	Number persons with disability 5+yrs
G2V4N	2	Number single-parent HH with children under 18 yrs
G3V1N	3	Number minority
G3V2N	3	Number persons 5+yrs who speak English “less than well”
G4V1N	4	Number housing with 10+units
G4V2N	4	Number mobile homes
G4V3N	4	Number HH with more people than rooms
G4V4N	4	Number HH with no vehicle access
G4V5N	4	Number of persons who are in institutional & noninstitutional group quarters

*XX represents the two-letter state or US abbreviation