

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:

$$\text{Percentile Rank} = (\text{Rank}-1) / (\text{N}-1)$$

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](#).

Domain Colors
Socioeconomic
Household Composition/Disability
Minority Status/Language
Housing/Transportation

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

XXG2V2P	Percentile Ranking persons 17 years or younger
XXG2V3P	Percentile Ranking persons with disability 5+yrs
XXG2V4P	Percentile Ranking single-parent HH with children under 18 yrs
XXG2TP	Household Composition & Disability Total Percentile Ranking
XXG3V1P	Percentile Ranking minority
XXG3V2P	Percentile Ranking persons 5+yrs who speak English less than 'well'
XXG3TP	Minority Status/Language Domain Total Percentile Ranking
XXG4V1P	Percentile Ranking housing with 10+units
XXG4V2P	Percentile Ranking mobile homes
XXG4V3P	Percentile Ranking HH with more people than rooms
XXG4V4P	Percentile Ranking HH with no vehicle access
XXG4V5P	Percentile Ranking of persons who are in institutional & non-institutional group quarters
XXG4TP	Housing/Transportation Domain Total Percentile Ranking
XXTP	Total Percentile Ranking
XXG1V1F	Flag - the proportion of individuals below poverty level is in the 90th percentile (1 = yes, 0 = no)
XXG1V2F	Flag - the proportion of civilian unemployed 16+ years is in the 90th percentile (1 = yes, 0 = no)
XXG1V3F	Flag - per capita income in 1999 is in the 90th percentile (1 = yes, 0 = no)
XXG1V4F	Flag - the proportion of persons with no high school diploma 25+ years is in the 90th percentile (1 = yes, 0 = no)
XXG1TF	Socioeconomic Domain Total Flags
XXG2V1F	Flag - the proportion of persons aged 65 and older is in the 90th percentile (1 = yes, 0 = no)
XXG2V2F	Flag - the proportion of persons 17 years or younger is in the 90th percentile (1 = yes, 0 = no)
VARIABLE	DESCRIPTION
XXG2V3F	Flag - the proportion of persons with disability 5+ years is in the 90th percentile (1 = yes, 0 = no)
XXG2V4F	Flag - the proportion of single-parent HH with children under 18 yrs is in the 90th percentile (1 = yes, 0 = no)

XXG2TF	Household Composition & Disability Total Flags
XXG3V1F	Flag - the proportion of minority individuals is in the 90th percentile (1 = yes, 0 = no)
XXG3V2F	Flag - the proportion of persons 5+ years who speak English less than 'well' is in the 90th percentile (1 = yes, 0 = no)
XXG3TF	Minority Status/Language Domain Total Flags
XXG4V1F	Flag - the proportion of housing with 10+ units is in the 90th percentile (1 = yes, 0 = no)
XXG4V2F	Flag - the proportion of mobile homes is in the 90th percentile (1 = yes, 0 = no)
XXG4V3F	Flag - the proportion of HH with more people than rooms is in the 90th percentile (1 = yes, 0 = no)
XXG4V4F	Flag - the proportion of HH with no vehicle access is in the 90th percentile (1 = yes, 0 = no)
XXG4V5F	Flag - the proportion of persons who are in institutional & non-institutional group quarters is in the 90th percentile (1 = yes, 0 = no)
XXG4TF	Housing/Transportation Domain Total Flags
XXTF	Total Flags
Totpop2000	Total 2000 population
Totalhu	Total 2000 housing units
G1V1N	Number individuals below poverty level
G1V2N	Number civilian unemployed 16+yrs
G1V4N	Number persons with no high school diploma 25+yrs
G2V1N	Number persons 65 years or older
G2V2N	Number persons 17 years or younger
G2V3N	Number persons with disability 5+yrs
G2V4N	Number single-parent HH with children under 18 yrs
G3V1N	Number minority
G3V2N	Number persons 5+yrs who speak English less than 'well'
G4V1N	Number housing with 10+units
G4V2N	Number mobile homes
G4V3N	Number HH with more people than rooms
G4V4N	Number HH with no vehicle access
G4V5N	Number of persons who are in institutional & non-institutional group quarters

*XX represents the two-letter state or US abbreviation