

Social Vulnerability Index (SoVI®)

The State has recognized that it must be deliberate in delivering CDBG-DR programs to the most vulnerable and devastated communities. Because of the vast amount of damage throughout the declared counties and the limited recovery dollars available, the State has primarily assessed the unmet housing need of the most vulnerable populations by utilizing the SoVI® method. Given the almost \$300 million in estimated remaining unmet housing need, but the limited funding available to address those unmet needs, West Virginia considered where within the impacted areas exists uneven capacity for preparedness and response; thus, where resources might be used most effectively to reduce the pre-existing vulnerability. To that end, West Virginia utilized the SoVI®, which is a tool for assessing pre-existing vulnerabilities to environmental hazards and was developed by the University of South Carolina in response to the devastating flood that hit South Carolina in October 2015.

The SoVI® is a comparative metric that facilitates the analysis of differences in social vulnerability at a certain level of geography – in the case of West Virginia, at the county level. The index, in this iteration, synthesizes 29 socioeconomic variables, listed below, which, with support from research literature, can contribute to a reduction in a community’s ability to prepare for, respond to and recover from hazards.

Socioeconomic Variables	Variable Description
QASIAN	Percent Asian
QBLACK	Percent Black
QHISP	Percent Hispanic
QNATAM	Percent Native American
QAGEDEP†	Percent of Population Under 5 Years of 65 and Over
QFAM†	Percent of Children Living in Married Couple Families
MEDAGE	Median Age
QSSBEN	Percent of Households Receiving Social Security
QPOVTY	Percent Poverty
QRICH200K	Percent of Households Earning Greater Than 200000 Annually
PERCAP	Per Capita Income
QESL†	Percent Speaking English as a Second Language with Limited English Proficiency
QFEMALE	Percent Female
QFHH	Percent Female Headed Households
QNRRES	Percent of Population Living in Nursing and Skilled Nursing Facilities
HOSPTEPC	Hospitals Per Capita (County Level Only)
QNOHLTH†	Percent of Population Without Health Insurance (County Level ONLY)
QED12LES	Percent with Less Than 12th Grade Education
QCVLUN	Percent Civilian Unemployment

PPUNIT	People Per Unit
QRENTER	Percent Renters
MDHSEVAL†	Median House Value
MDGRENT†	Median Gross Rent
QMOHO	Percent Mobile Homes
QEXTRCT	Percent Employment in Extractive Industries
QSERV	Percent Employment in Service Industry
QFEMLBR	Percent Female Participation in Labor Force
QNOAUTO†	Percent of Housing Units with No Car
QUNOCCHU	Percent of Unoccupied Housing Units

The SoVIR built in West Virginia’s impact and needs assessment is primarily derived from U.S. Census Bureau and FEMA IHP data. The SoVIR created for the state’s 12 counties affected by DR-4273 incorporates six general components synthesizing the 29 socioeconomic variables:

- Class and race
- Non-extractive (less rural)
- Age
- Ethnicity
- Gender
- Housing characteristics (persons per unit, renters, unoccupied units, female-headed households)