Assessing a Social and Tornado Vulnerability Index (STVI) based on Analysis of Long Term Historical Tornado Events

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Overview
Individual SVI and TVI maps are combined to form a Social and Tornado Vulnerability Index (STVI); this index will enable us to assess the vulnerability specific to a tornado event at the census tract level for the entire United States.

SVI
• Function of socioeconomic and demographic factors affecting the resilience of a community

TVI
• Function of long term historical frequency and intensity of a tornado incidents only.

STVI
• This index takes into account socioeconomic as well as tornado vulnerability combined.

Impact
Injuries and Fatalities Caused by Tornadoes in the U.S.

Explaination
These maps help us identify areas most vulnerable to tornadoes based on socioeconomic variables (SVI) and frequency of past events (TVI). Identification of these areas helps not only with preparedness but also with response to events.

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