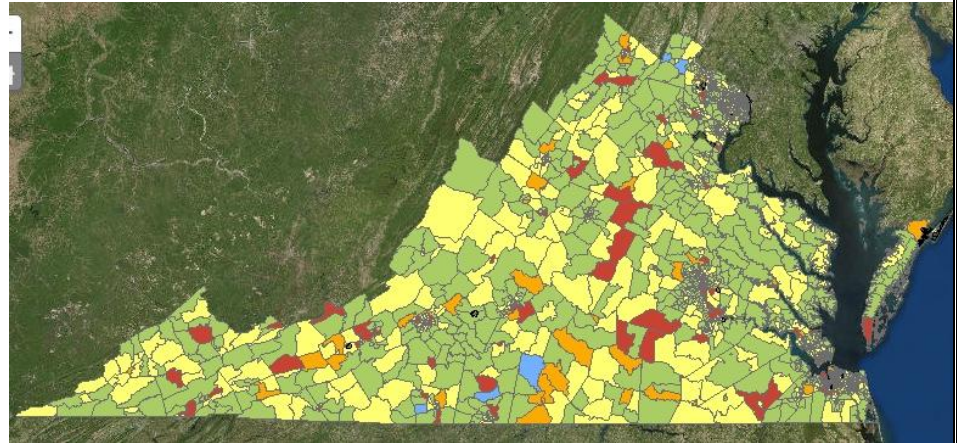


Toxic Vulnerability Quick Facts

What is Toxic Vulnerability?

Toxic vulnerability refers to the proximity of an area to a source of toxic substances (e.g. toxic chemicals, hazardous materials, or oil) that, if damaged by a natural disaster, could impact surrounding areas. This measurement refers to the potential risk of toxic exposure from incorrectly managed toxic substances and does not imply those areas are currently exposed to any toxic substances. Knowing where the potential vulnerability of areas to toxic materials can help governments and policy makers better aid their communities in the event of a natural disaster.



What variables were used to construct the toxic and hazardous exposure index?

We included a variety of measures to capture the potential risk from toxic substances including Superfund sites, hazardous waste sites, sites with toxic chemicals, sites that emit air or water pollution, and sites that store oil. We used a statistical technique to reduce this data to a single index of potential toxic vulnerability.

How can our data on toxic vulnerability help local governments address natural hazards like SLR?

The more prepared a local government is the better it can supply and maintain the proper amount of assistance to vulnerable populations both pre and post disaster. With our data portal, governments can have adequate emergency planning data to respond effectively to things like natural disasters. Increased and recurrent flooding due to sea level rise will impact the Virginia region with most of the costs falling on local governments. Our portal allows local governments to successfully adjust to any long term economic or demographic change that will result from disasters or other natural hazards.