

# Correlation between Superfund Sites and Socially Vulnerable Communities in Hidalgo and Cameron County

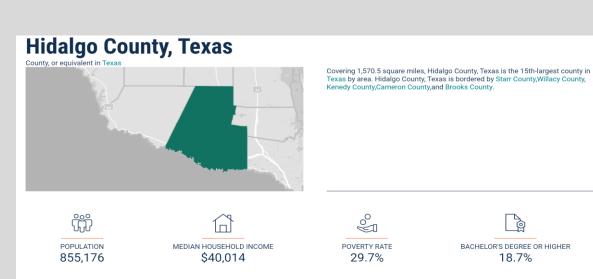
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### Background

#### **Questions**

- Q: What is the probability based on Social Vulnerability Index to live close to an EPA superfund site in Hidalgo and Cameron County?
- **H1:** The more socially vulnerable the more likely is the proximity to a Superfund site in Hidalgo or Cameron County.
- **H2:** There is no proximity trend based on social vulnerability index and superfund site locations in Hidalgo and Cameron County.







## Methodology

#### • Data:

Coordinates for the sites can be found on the TCEQ Superfund sites by County website.

Social vulnerability shapefiles can be downloaded from the CDC SVI Documentation Download.

Download CDC SVI Shapefiles

Unzip CDC SVI shapefiles and open in ArcGIS.

Geocode superfund site location and add to map.

Upload County file and Clip CDC SVI layer for only Hidalgo and Cameron County. Export table to csv and save.

Run spatial analysis for Hidalgo and Cameron Co and observe where most vulnerability is. Using spatial analysis tool analyze proximity to superfund sites.

Export table to CSV. Upload CSV to Jupiter Notebook and convert to Pandas DataFrame. Run Statistical Analysis.