

Documentation of analysis

1. Download datasets
 - a. Borough boundaries - NYC Open Data
 - b. Census tracts and major roadways - TIGER/LINE NY
 - c. Base map (NJ and Westchester County) - NJGIN Open Data; data.gov
 - d. Asthma/Heart Disease prevalence CSVs – [CDC National Environmental Public Health Tracking Network](#)
 - e. Race/Median HH Income CSVs – ACS 5-year estimates 2021
2. Load Road Dataset
3. Select only relevant segments of Cross Bronx Expressway; export to new layer
4. Load Boroughs dataset
5. Select only Bronx; export to new layer
 - a. Used as basemap
6. Duplicate this layer; make transparent
 - a. Used as transparency to draw focus to relevant tracts
7. Load basemap; make gray
8. Load census tracts data set
9. Clip to just Bronx, using the layer I created.
10. Join tabular data (CSVs that I created in R) to tract shapefile; change string data to decimal data as necessary.
11. Create a buffer of 600 ft for Expressway shapefile
 - a. This is based on EPA recommendations
12. Select tracts by location that intersect with buffer; export to new layer
 - a. These are the relevant tracts that are within 600 ft of the expressways
13. Duplicate this layer; make transparent with black outline
 - a. This is to draw attention to these tracts
14. Create 3 choropleth maps
 - a. Race – Symbolize using equal interval classification
 - b. Median HH Income – Symbolize using equal count (quintile)
 - c. Asthma – Symbolize using natural breaks
15. Create new print layout for each map.
16. Added annotations in Inkscape.