

Context

Are *Black drivers* getting stopped **more** so than *White drivers*?



Project Role



Data Cleaning and Manipulation



Geocoding



Measurement



Data Visualization

The Data

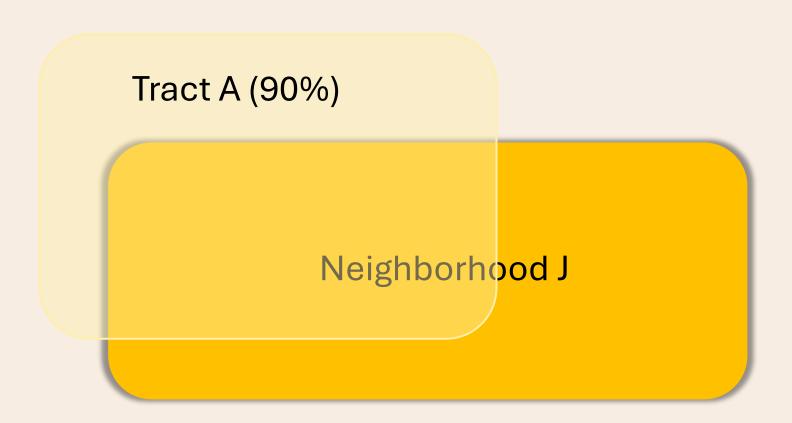
Police vehicle stops data

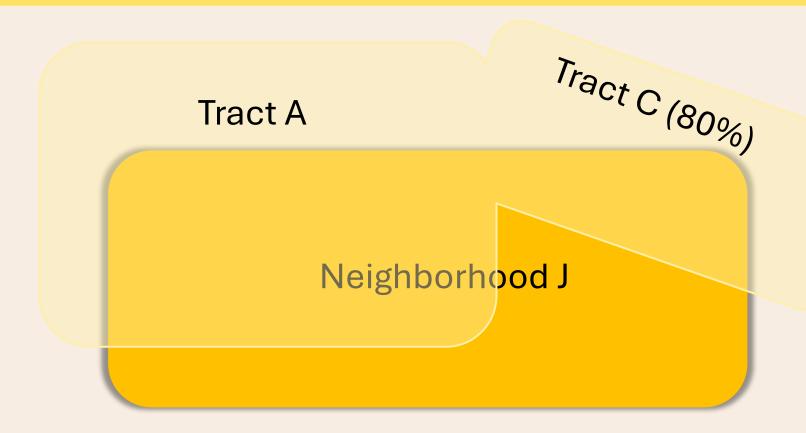
Neighborhood shapefiles

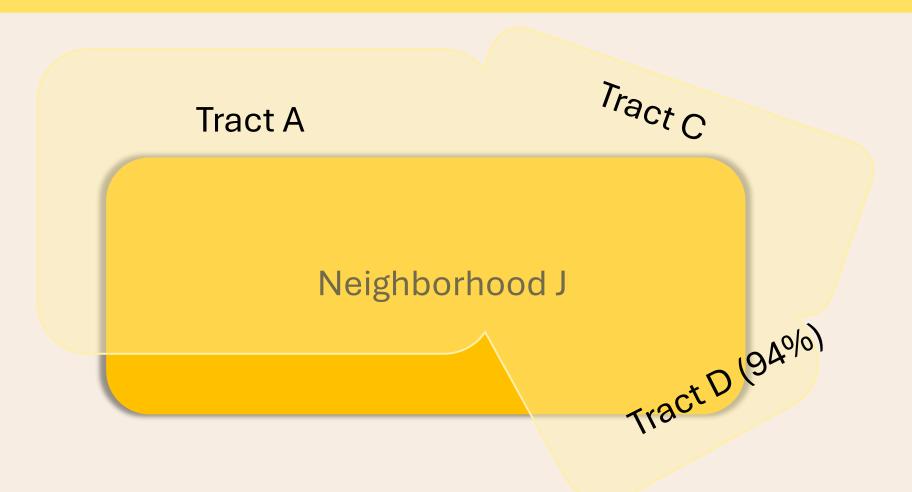
Demographic details from ACS for Census tracts but not neighborhood

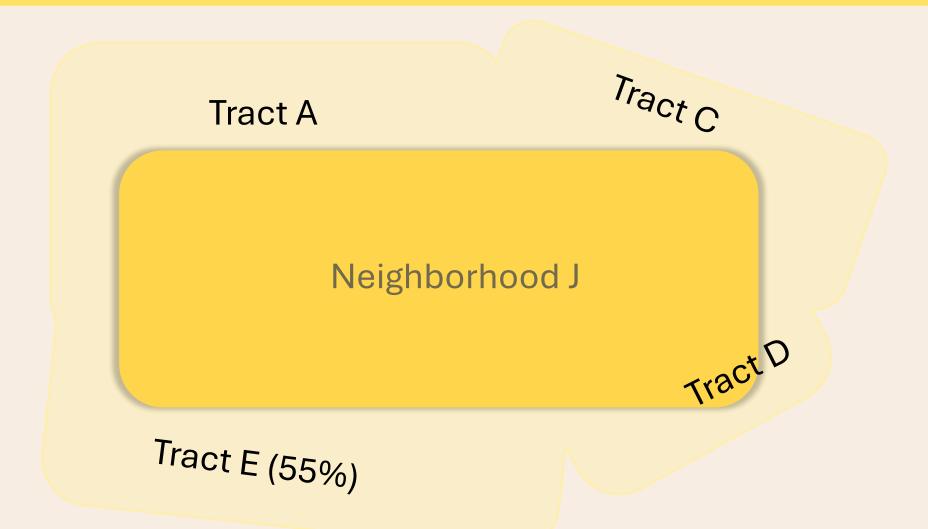
Conducted areal interpolation and merged data

Neighborhood J









The Data

Police vehicle stops data

Neighborhood shapefiles

Demographic details from ACS for Census tracts but not neighborhood

Conducted areal interpolation and merged data

Final dataset N = 54,398

Data Pipeline

Clean addresses

Identify neighborhoods

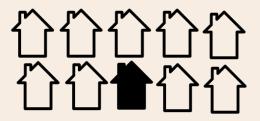
Areal Interpolation

Index creation

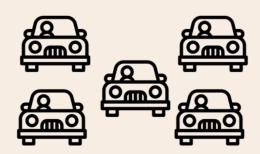
Data visualization

 $Disparity\ Index = \frac{vehicle\ stop\ rate\ of\ group}{population\ proportion\ of\ that\ given\ group}$

10% Black residents



$\frac{50}{100}$ of stops are Black drivers



Disparity Index = 5.0

Interpretation: Black drivers are stopped 5× more than their population size.

For the 150 neighborhoods...

	Black Individuals Disparity Index	White Individuals Disparity Index
Min	0.90	0
Max	702.33	13.82
Mean	9.50	0.94

There are more neighborhoods where Black drivers get stopped more often than White drivers.

