Project Overview

Data collection

In RStudio, I collected data from the ACS 5-year 2016-2020 survey and gathered various demographic data at the Census block group level. Next, I gathered data from EPA PM$_{2.5}$ air quality monitors using their API key.

Links to obtain the data for your personal use:

1. https://aqs.epa.gov/aqsweb/documents/data_api.html
2. https://www.socialexplorer.com/data/metadata/

What this map shows

This map shows the percent of BIPOC (Black, Indigenous, and People of Color) in the Baltimore City, Maryland area. What we see is a higher percentage of BIPOC in the downtown area or the "Black Butterfly". The lighter blue colors represent a lower percentage of BIPOC people and majority are located in the "White L." I have added an EPA layer that shows the EPA air quality monitor in the Baltimore area. The EPA monitor is located outside of downtown Baltimore in the NE neighborhood of Lake Montebello. Lake Montebello is a gated community with both BIPOC and white people and is one of the wealthiest in the city (Scout 2023). What we can conclude is that the city of Baltimore needs more monitors than just one because it is not enough. We can also see that the city is a melting pot of different race/ethnicities. The black areas on the map represent missing block groups as those were located on water bodies and needed to be taken out.

How I created the web map

Using QGIS, a GIS software, I imported my data from R as a shapefile and used the qgis2web plugin. While in the plugin, I indicated the parameters that I wanted to show on the map. Once completed I exported it as a mapbox html file.

Bibliography

"Montebello Park Baltimore, MD 21214, Neighborhood Profile - NeighborhoodScout." 2022. Accessed September 13, 2022. https://www.neighborhoodscout.com/md/baltimore/montebello-park#overview.