Homework 5

2023-11-29

library(tidyverse)  
library(dplyr)  
library(stringr)  
library(forcats)  
library(ggplot2)  
library(ggthemes)  
library(broom)  
library(purrr)  
library(tidyr)  
library(scales)  
library(sf)  
library(tigris)

#Choice A

#Loading data and creating object  
  
homicides <- read.csv("homicide-data.csv")  
  
homicides <- homicides %>%  
 mutate(city\_name = str\_c(city, state, sep = ", ")) %>%  
 select(city\_name, everything()) %>%  
 filter( city\_name == "Baltimore, MD")

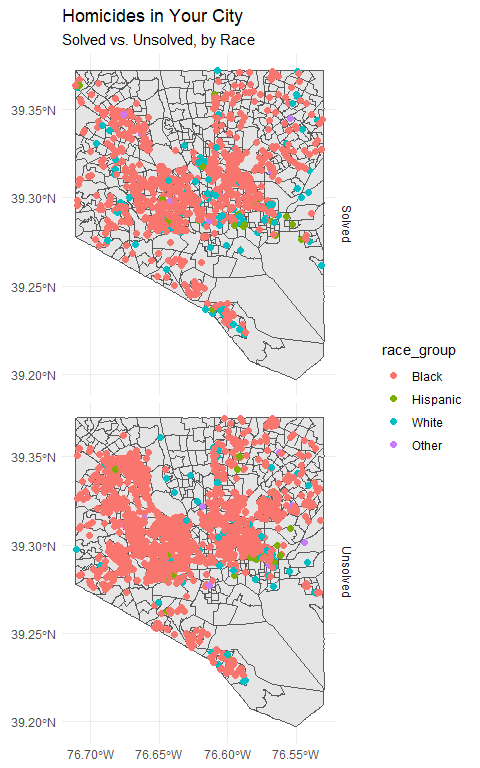
city\_boundaries <- block\_groups(state = "MD",county = "Baltimore city")

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|==================================================================== | 97% | |==================================================================== | 98% | |===================================================================== | 98% | |===================================================================== | 99% | |======================================================================| 100%

homicides\_sf <- st\_as\_sf(homicides, coords = c("lon", "lat"), crs = 4326)

# Create a simplified dataframe for plotting  
plot\_data <- homicides\_sf %>%  
 mutate(  
 race\_group = fct\_lump(victim\_race, n = 3),  
 solved\_unsolved = ifelse(disposition %in% c("Closed without arrest", "Open/No arrest"), "Unsolved", "Solved")  
 )

# Create the plot  
ggplot() +  
 geom\_sf(data = city\_boundaries) +  
 geom\_sf(data = plot\_data, aes(color = race\_group), size = 2) +  
 facet\_grid(solved\_unsolved ~ .) +  
 labs(title = "Homicides in Your City", subtitle = "Solved vs. Unsolved, by Race") +  
 theme\_minimal()



## R Markdown

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