USING HISTORY OF CRIME IN WASHINGTON-DC AS A WEAPON TO CURB HIGH CRIME RATE IN MICHIGAN

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Introduction

According to The Washington Post, three decades ago DC was named the "murder capital" of The United States. Being the political hub of the US, the capital suffered from terrorist attacks, homicides, bombing, even crime ridden streets. In 2019, DC was recognized as one of the safest largest cities in the world, scoring an 87.6 out of 100. According to Forbes, Detroit, Michigan is the current crime capital of the US with 2,137 criminals per 100,000 residents. The goal of this project is to analyze crime in DC and new implementations that were taken over the past three decades, to highlight the tactics that provided the best results in curbing crime, and predict if these actions could reduce crime rates in Michigan. This project is intended to help other countries or cities reduce their crime rates by studying the factors that influence crime such as income, education etc., implementing changes, specifically zoning on Michigan.

Data descriptions

As stated earlier in this project, we will be analyzing past crimes in DC and police tactics, current crime in DC and police tactics, and current crime in Michigan and police tactics. Using datasets such as "dc_crime_add_vars.csv"; this data set contains Dataset of all the crimes in the DC metro police system ranging from Theft, Arson, Assault,

Homicide, Sex Abuse, Robbery, and Burglary. We will also be utilizing some data from the metropolitan police department in both DC and Michigan; data from these sites will be analyzed to assess crime rates and statistics. Likewise, we will also be using multiple data sets from the city of Detroit open data portal, that is, "OpenDataAdmin_detroitmi". This database contains datasets of crime reports, 911 call logs, crime incidents in Michigan over the years.

Data sources:

https://data.detroitmi.gov/search?q=crime

https://www.kaggle.com/vinchinzu/dc-metro-crime-data#dc_crime_add_vars.csv

https://guides.lib.umich.edu/c.php?g=283068&p=1885988

https://mpdc.dc.gov/page/district-crime-data-glance

Preliminary plan

So far, because of the proposal we have been able to research, choose our topics and narrow down our data sets. In the coming weeks, we plan to develop our models; Our first model will channel the effects of better government or system laws and their relation to crime by comparing data from both DC and Michigan, our second model will address new techniques that can be adopted by the police in Michigan from the DC police and our third model will be a randomized suggestion based off the Michigan data study. By week 6, we plan to have fully prepared models and test them. Weeks 8 to 9 will be spent preparing for the presentation.

Timeline

My team and I have prepared this tentative schedule to track our progress over the quarter.

Researching and choosing topic, understanding the data sets — Weeks 1 - 4

Model Development — Weeks 4 - 6

Feature Selection, Model Validation — Weeks 6 - 9

Project Report & Presentation — Weeks 8 - 9