Project Proposal

Our Topic

We would like to explore the Dallas Police Department API to bring in real-time data and visualize crime, location, and arrest data in the DFW metroplex. Our main questions are if Dallas is a safe place to live and if crime has gone down over time. We would like to determine the relationship between drug-related crimes and total crime incidents as well as explore racial bias in policing.

Data Source

https://www.kaggle.com/datasets/aaronnichowilliams/dallas-police-activity

Inspiration

https://alfcus.github.io/SMU Project 3/index.html

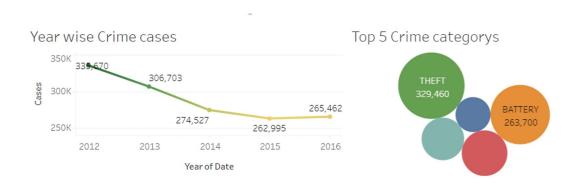
We want to build a interactive dashboard using JavaScript libraries to visualize police arrest data in Dallas, TX. Our main filters will be year (2014 to 2022) and zip code. We would like to design an interactive map similar to the UK Police Tableau Public dashboard showing the location of the incidents colored by type of crime.



Reference:

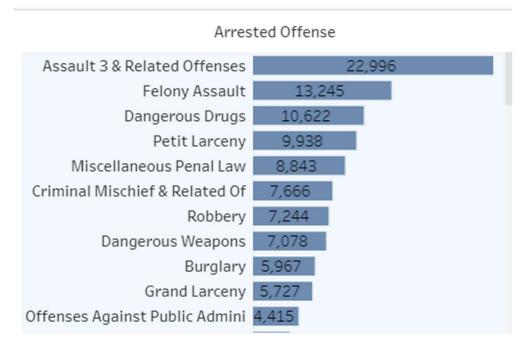
https://public.tableau.com/app/profile/laurentghesquiere/viz/UKPoliceData/UKPoliceIncidentsDashboard

Providing a visualization of crime prevalence over time and the "Top 5 Crimes" categories is on our agenda.



Reference: https://public.tableau.com/app/profile/sai.r/viz/ChicagoCrimes2012-2016/ChicagoCrimesAnalysis

In addition, creating a horizontal bar chart to see trends in types of crime would add value to our project.



Reference: https://public.tableau.com/app/profile/alex.chung/viz/NYPDArrests/Arrests

Roles & Responsibilities

Sam: Data Cleaning, Website design, Write-up, Slide deck, GitHub.

Calvin: Plot.ly graphs and code

Malachai: Geo JSON graphs and code

Rough idea about out Plot.ly and Geo JSON:

Geo JSON of arrests and location, filtered by year and zip code

Plot.ly horizonal bar chart with type of crime and arrest count

Line graph: arrests over time

Bubble chart of top 5 crime categories.