

Project Description:

San Francisco was infamous for housing some of the world's notorious criminals in the past. Today the city is known more for its tech scene than its criminal past. But, with rising wealth inequality, housing shortages, and a proliferation of expensive digital toys riding BART to work, there is no scarcity of crime in the city by the bay.

This project seeks to identify both temporal and spatial patterns of the city. The data was real time crime data from summer 2014 and the dataset was composed of the data elements below:

Incident Number – Numeric identifier unique for the incident

Category – Category of the Crime

Description – Detailed Description of the Crime Category

Day of week - Day of crime.

Date – Date on which the incident occurred

Month

Time

Police Department District

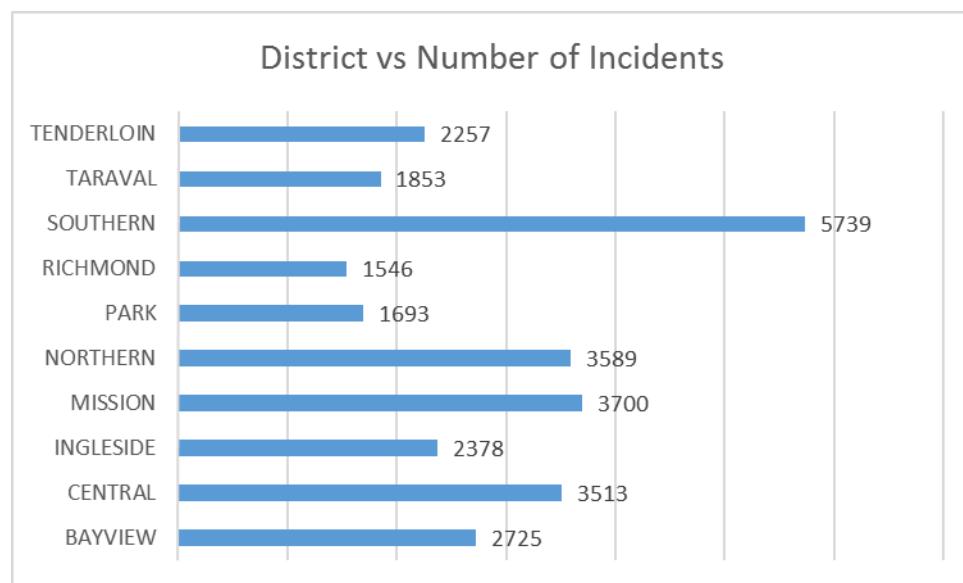
Resolution – What action was taken

Address

GPS coordinates

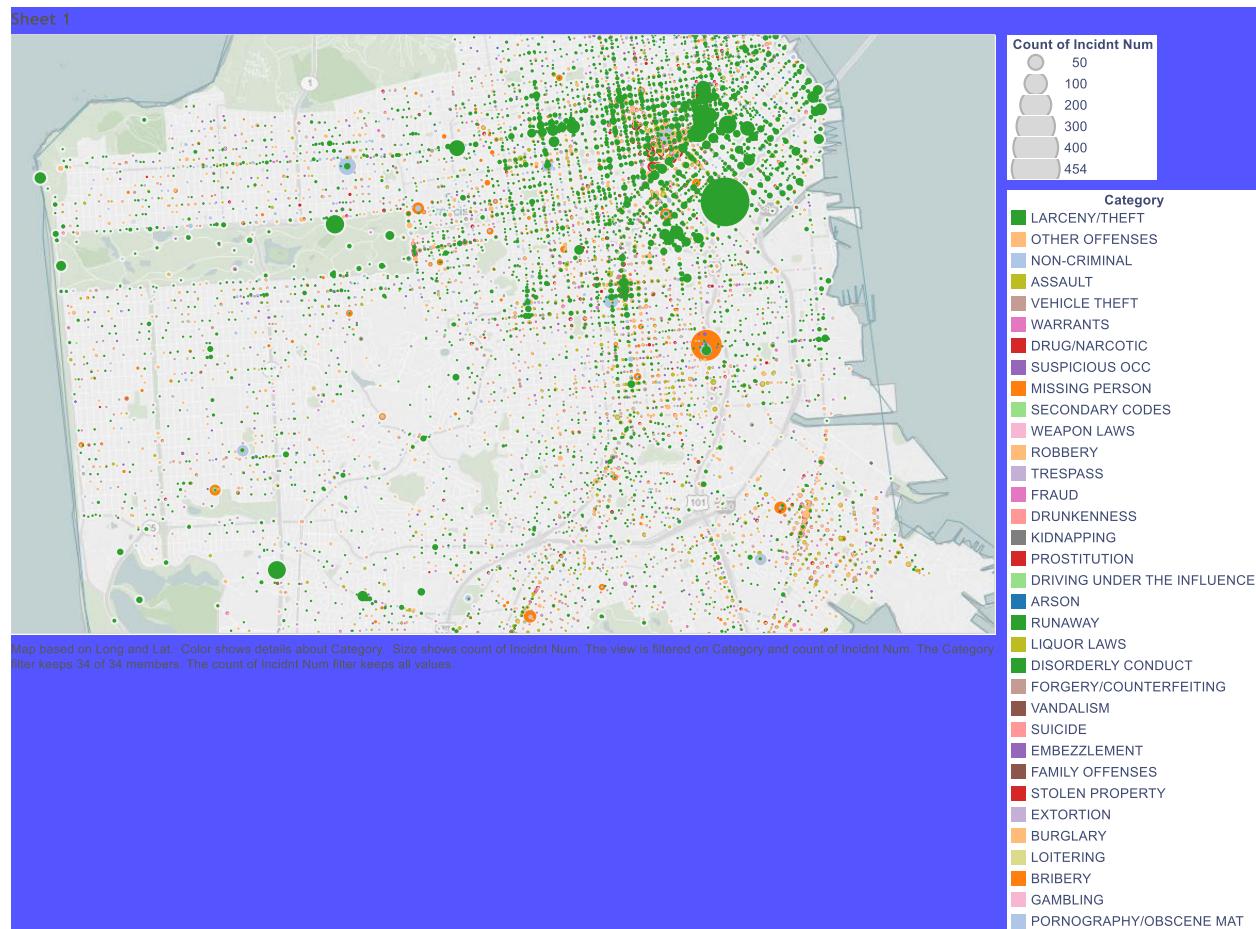
Data Visualization:

Tableau was used for the Data Visualization. The graph below shows the PD District wise report on number of crime Incidents. Southern District has the highest crime rate in San Francisco. Mission, Northern and Central districts have higher crime rates > 3500.



Geographical analysis - Crime Categories and location with high crime Rates:

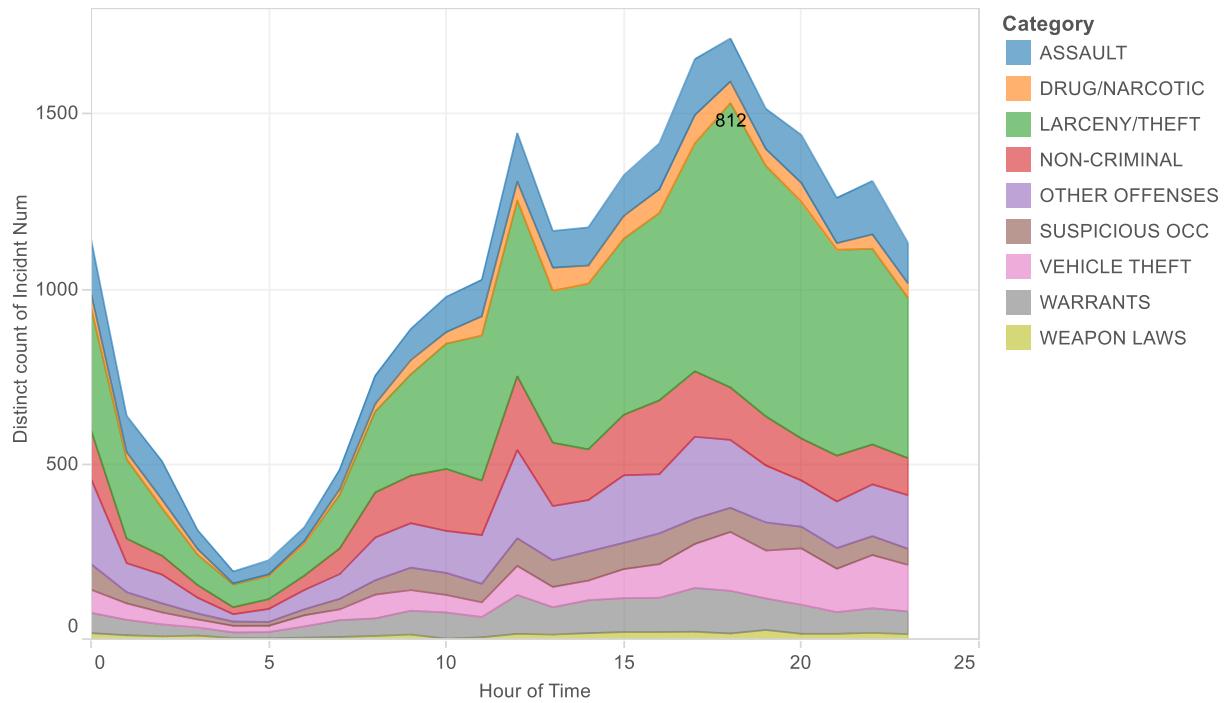
The map below shows the category of crime in San Francisco geographical map and it clearly shows the Larceny theft is the most frequent crime and maximum number of this Larceny theft occurs in zipcode **94103**.



Hours of the day when Criminals are more active

The plot below explains the Crime for each Category for each hour of the day. The Crimes mostly occurs between 12 PM till 11 PM in a day and peak during 6 PM. Larceny/Theft is the most frequent crime in San Fransisco.

Crime Vs Time of a day



The plot of distinct count of Incidnt Num for Time Hour. Color shows details about Category. The view is filtered on Category and distinct count of Incidnt Num. The Category filter keeps 9 of 34 members. The distinct count of Incidnt Num filter keeps all values.

Correlation between Crimes:

The graph below is a four dimensional view of the Crimes, District, Monthly trend for 4 most occurring crimes Larcent/Theft, Suspicious OCC, Drug/Narcotic and Warrants. It clearly shows a pattern for three crimes Larcent/Theft, Suspicious OCC and Drug/ Narcotic.

