

TOP CRIMES IN SAN FRANCISCO

AIM OF THE ANALYSIS

In this research will try to identify the top crimes in San Francisco and identify if there are any patterns such location, day of week and time in order to provide insight information on location and timing for police patrolling.

SOURCE OF THE DATA SET

For the analysis the data set used was kindly provided by the Coursera teacher of the Communicating Data Science Result course.

FINDING

Based on the data provided is fair to assume that the most reported crime is “Grand Theft from Locked Car”.

This crime has a strong occurrence in Southern Pd District, which result to the also the District with most reported crime of all.

It fair to suggest a higher police patrolling on the Southern Pd District will enable to prevent not only more occurrences of the “Grand theft from Locked Car” but also tackle the high crime report of this District.

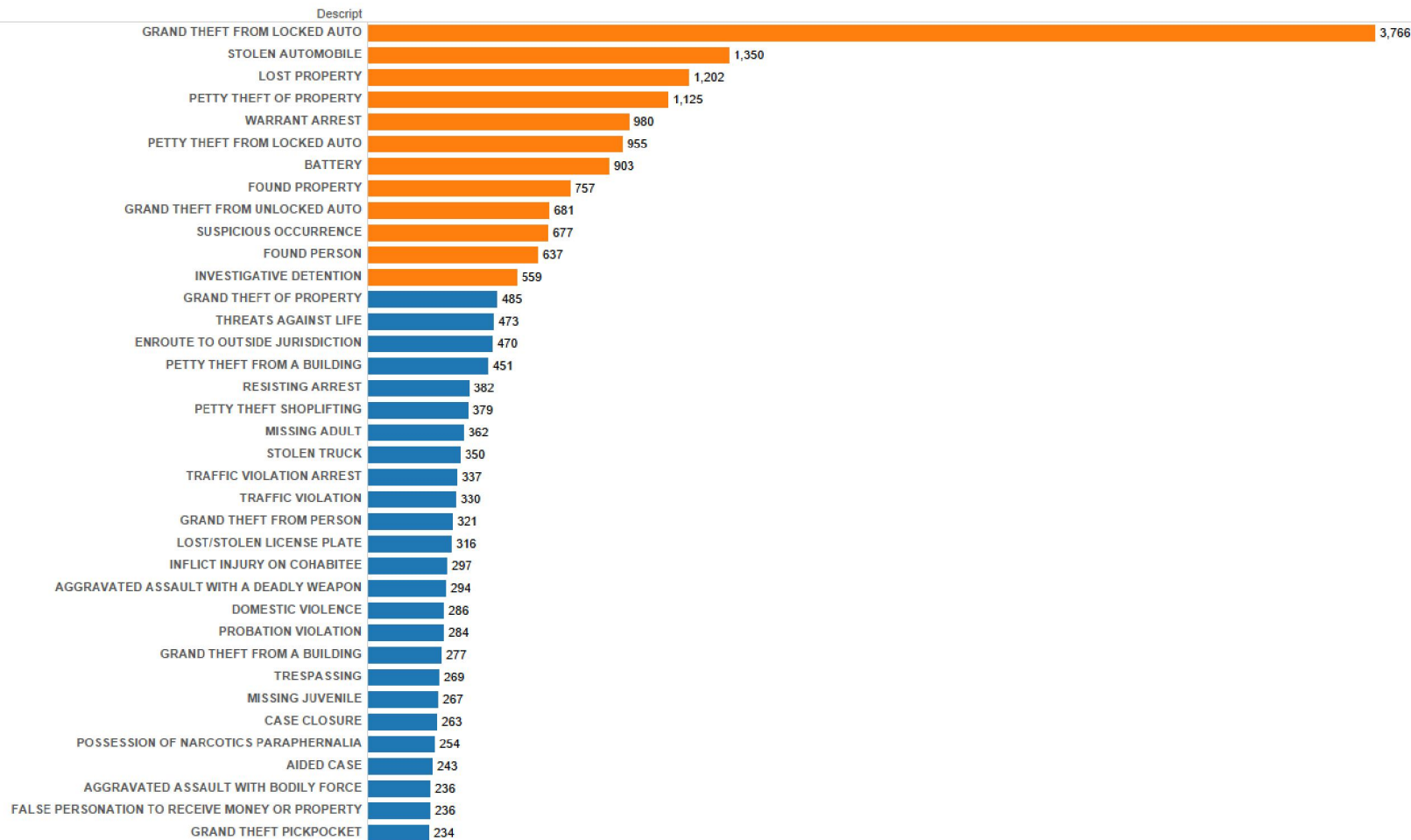
From the data provided was also possible to envisage a strong correlation between the crimes and the months of the years and the hours of the day.

It is fair to even further suggest that patrolling during the late evening / early night time can further enhance the crime prevention, in particular during the months of June, July and August.

The supporting charts are present here after along with a brief chart by chart explanation and analysis.

TOP CRIMES IN SAN FRANCISCO

Tornado Chart of Crimes concurrency



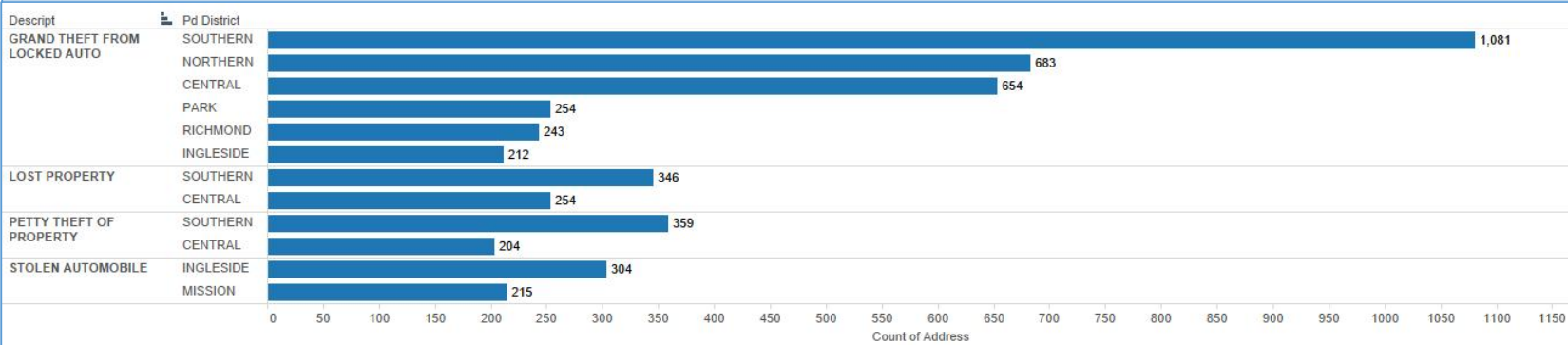
Out of 28,993 offences, the top 12 count for 8,055 records, equal to 46.88% of the overall offences.

The Grand Theft From Locked out count for 3,766 occurrence equal to 12.99% of the overall offences.

It can be envisage that been able to identify patterns on the “grand theft from locked auto” can solve a good quota of the reported crimes.

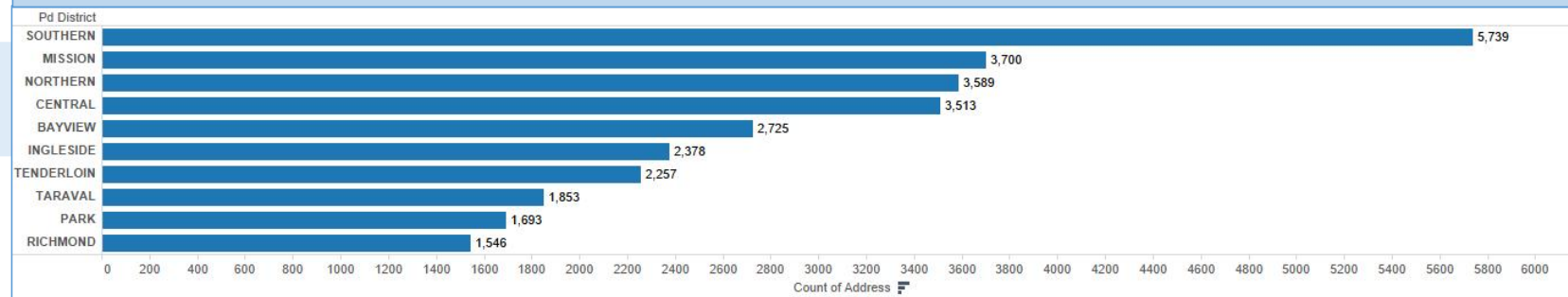
TOP CRIMES IN SAN FRANCISCO

Tornado Chart of Crimes Description Vs Pd District



The “Grand Theft from Locked Car” count of 3,766 occurrence of which 1,081 (18.83%) are reported in the Southern Pd District

Tornado Chart of Crimes Description Count Vs Pd District

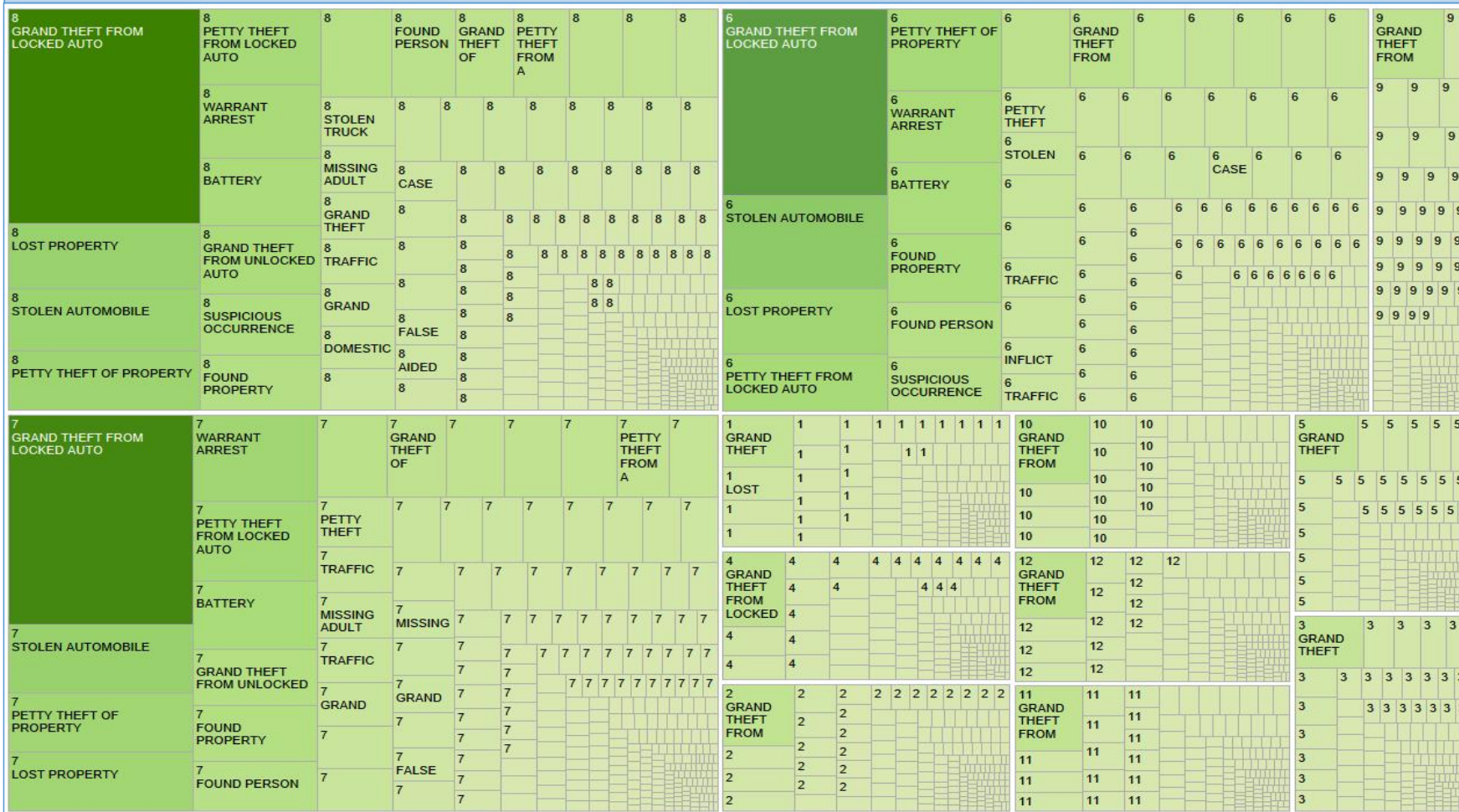


A further analysis of the reported crimes highlight that the Southern Pd District is the one with most reported cases (5,739 count)

It is reasonable, based on the data available, to assume that a higher deployment of police patrolling on in the Southern Pd District will not only help in decrease the most reported case of offence “Grand theft form Locked Car”, but will also prevent various other crimes that are effecting this area.

TOP CRIMES IN SAN FRANCISCO

Tornado Chart of Crimes concurrency

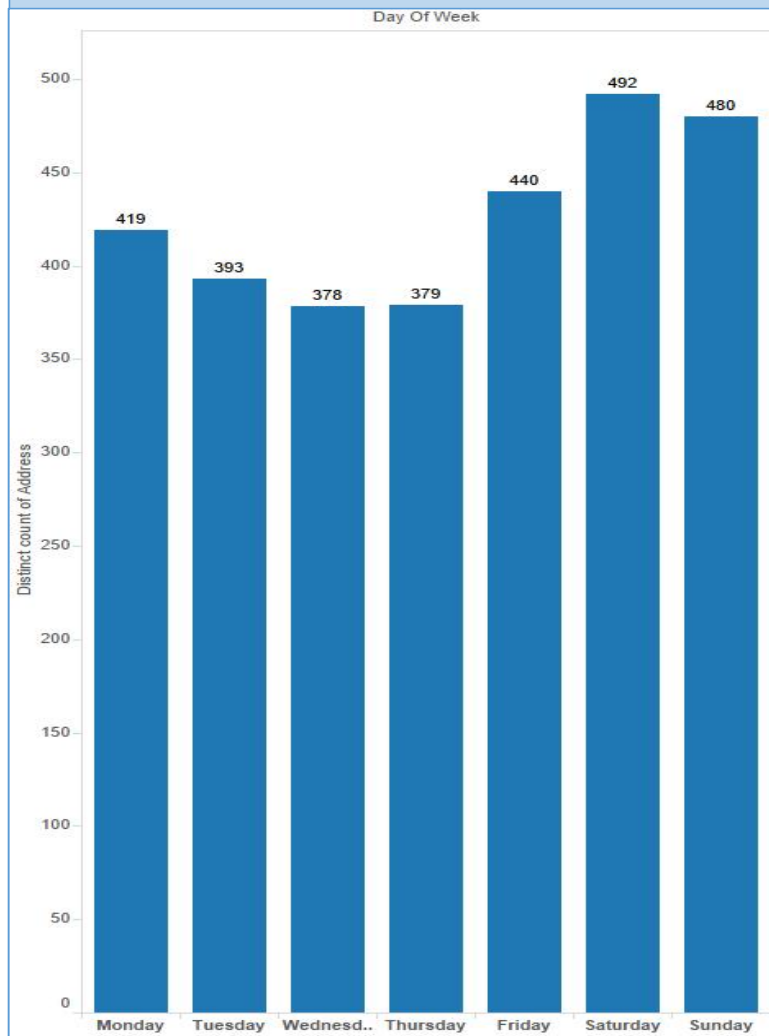


This tree chart representation of the crime description occurrence by the various months, does highlight again the “Grand theft from locked auto” as the most reported crime every month.

The chart is highlighting that the month 8, 7, 6 (August, July and June) does have the more reported offences for this crime.

TOP CRIMES IN SAN FRANCISCO

Grand theft Reported Crime vs Week days

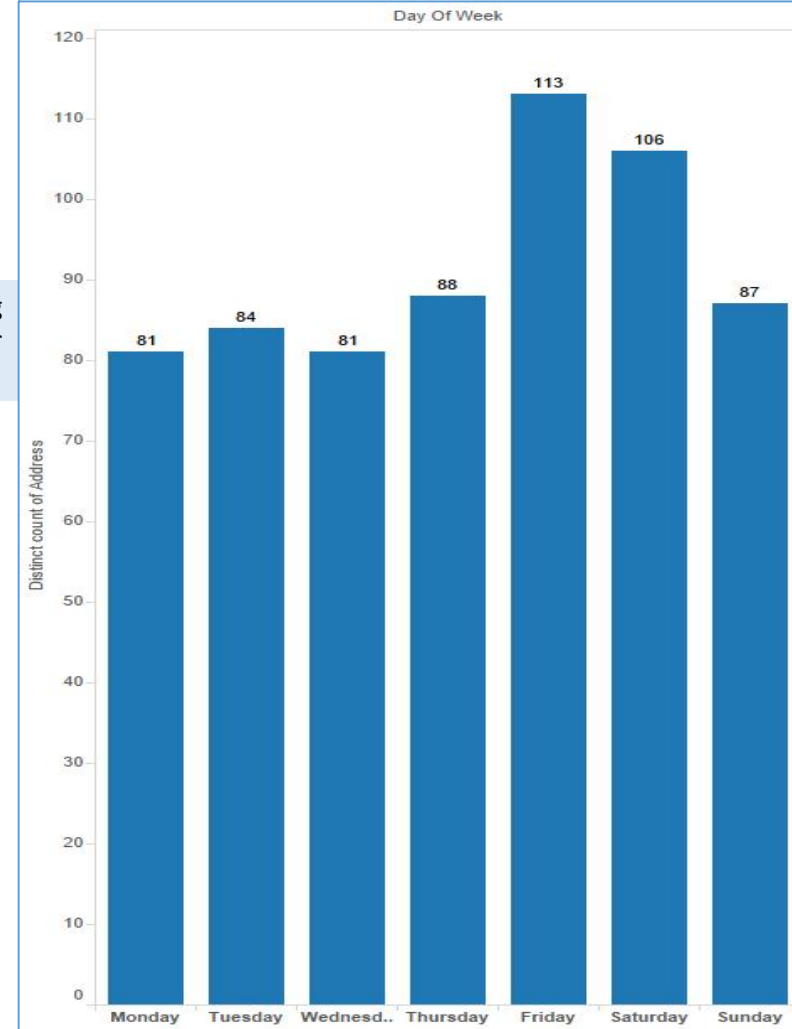


The Grand Theft From Locked out count overall does show a higher reported oncurrency during the weekend (Friday, Saturday and Sunday)

Similar conclusion can be derived analysing the reported Grand theft from locked car for the Southern Pd District

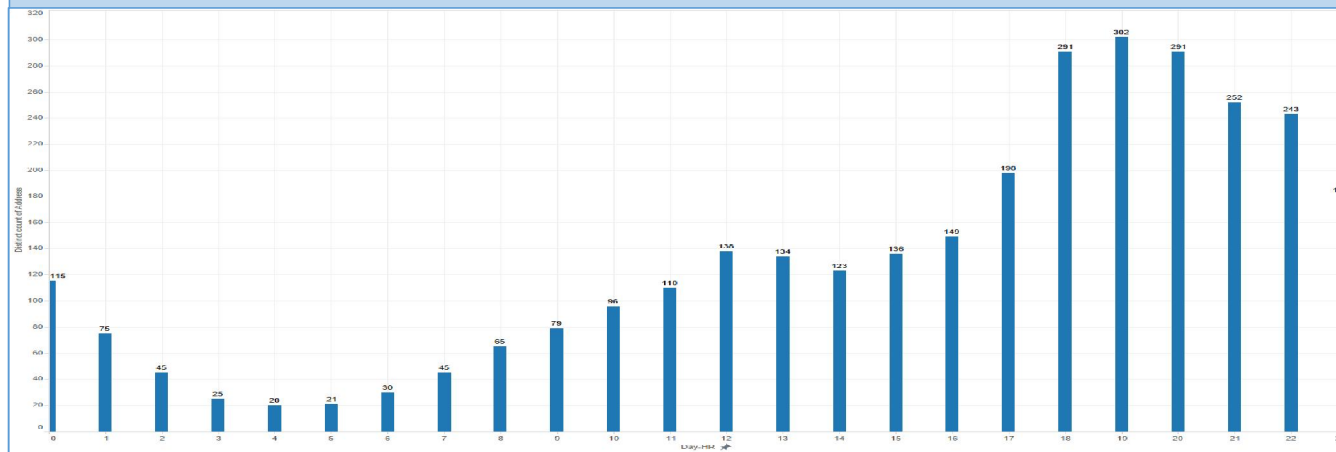
Based on the data available, is reasonable to recommend a higher deployment of police patrolling during week end day

Grand theft Reported Crime vs Week days



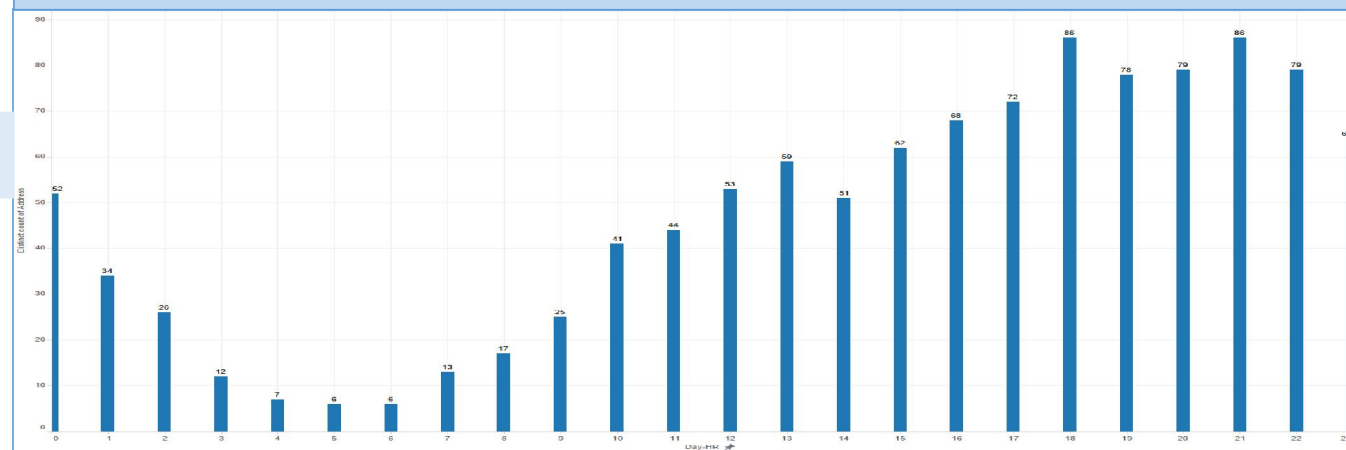
TOP CRIMES IN SAN FRANCISCO

Grand Theft From Locked Car Vs Hours of Day



The Grand Theft From Locked show an increase of occurrence during the late evening, early night

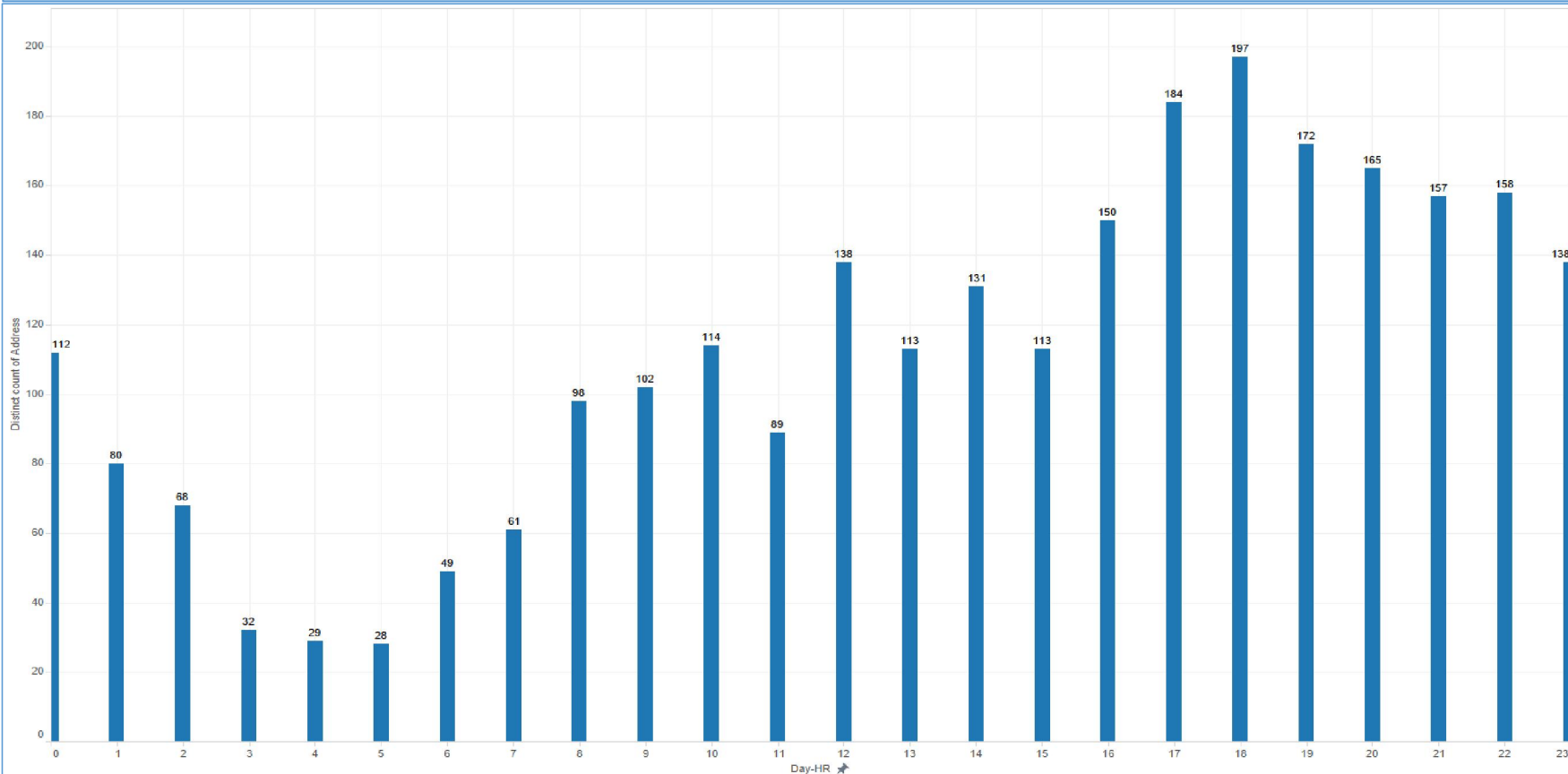
Grand Theft From Locked Car Vs Hours of Day in Southern Pd District



The same pattern can be found also when analysing the Southern Pd District in its own

TOP CRIMES IN SAN FRANCISCO

Overall Crime Count Vs Hours of Day in Southern Pd District



The Chart showing the count of crime occurrence during the hours of the day for the Southern Pd District does exhibit similar pattern with increase of occurrence during the late evening, early night

Based on the data available, is reasonable to recommend a higher deployment of police patrolling during the late evening and early night time in Southern Pd District may not only reduce the crime occurrence of "Grand Theft from Locked Car" but all other crimes associated with this district

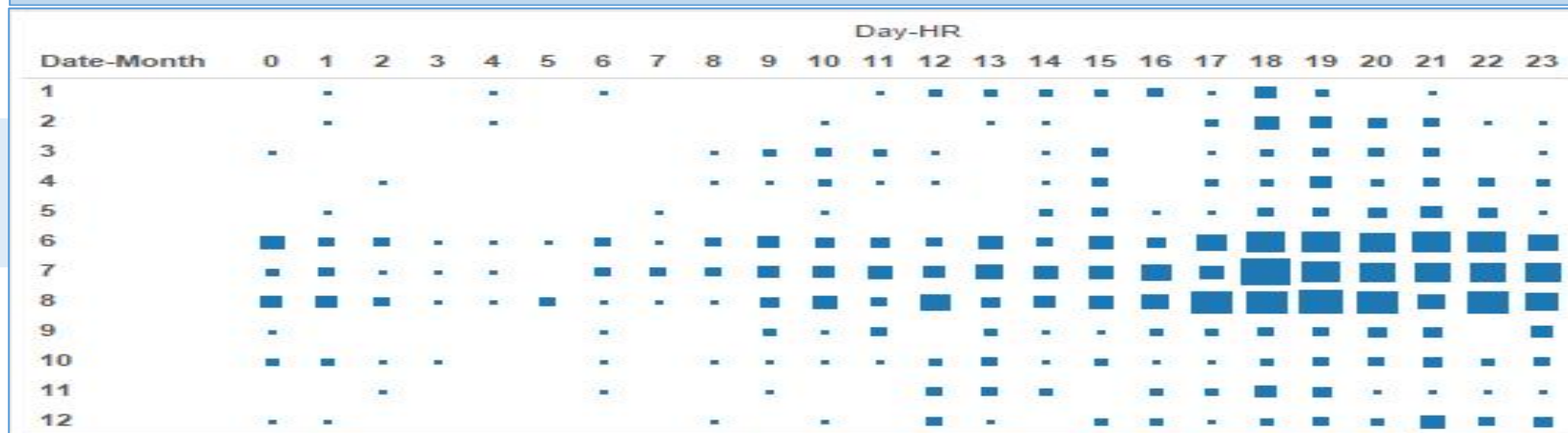
TOP CRIMES IN SAN FRANCISCO

Crime Count Month Vs Hour of Day for Southern Pd District



The Grand Theft From Locked Car heat map for Southern Pd District across the months does confirm a stable pattern of increase offences during late evening hours and confirm the pattern for months of June, July and August (6, 7 and 8)

Grand Theft From Locked Car Crime Count Month Vs Hour of Day for Southern Pd District



Similar pattern can be drawn plotting the same data filtered by Southern Pd District and Grand Theft from Locked Car as well