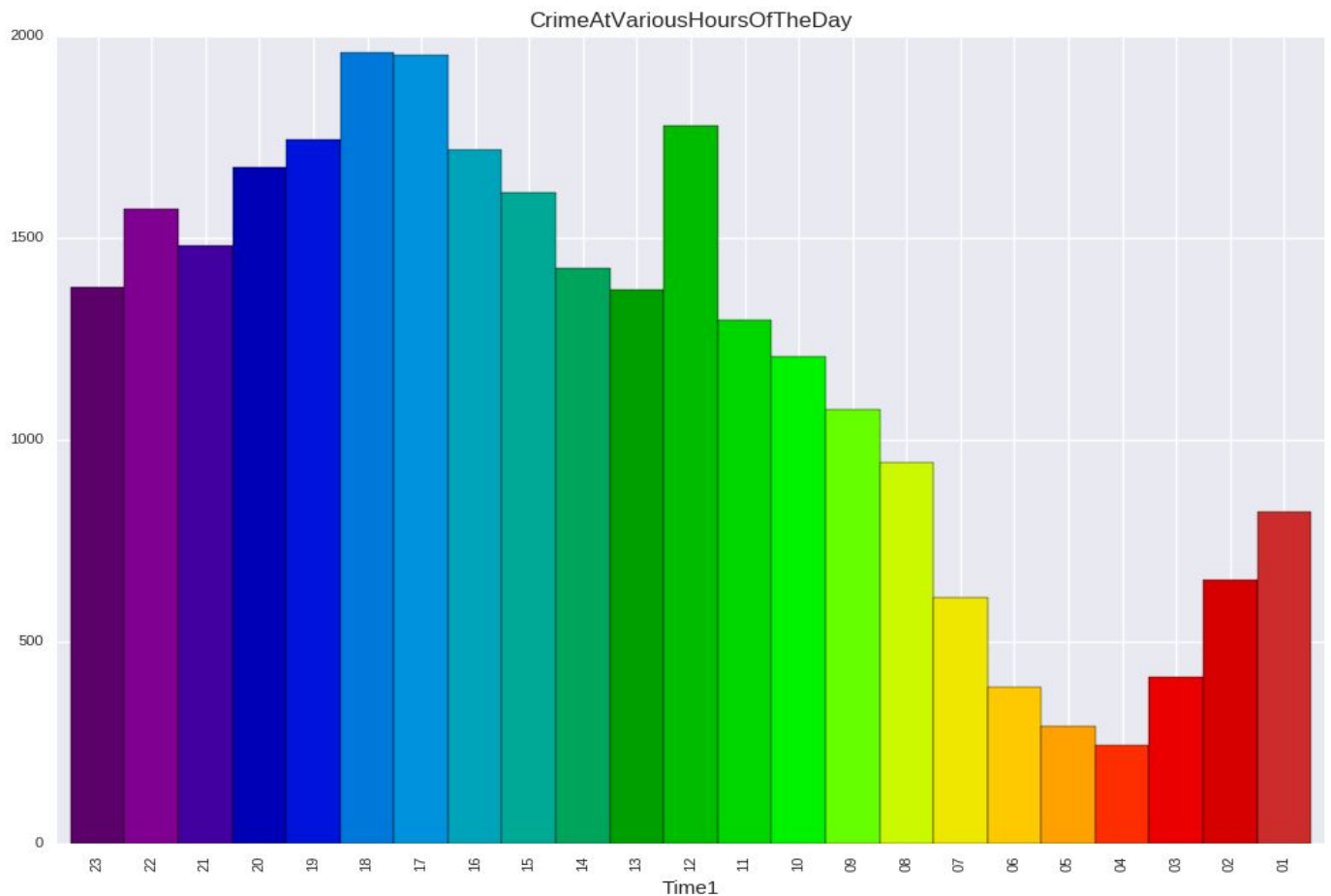


Link to the ipython notebook with code:

https://github.com/mon95/San-Francisco-Crime-Analytics-Visualizations/blob/master/crimeAnalytics_trial2.ipynb

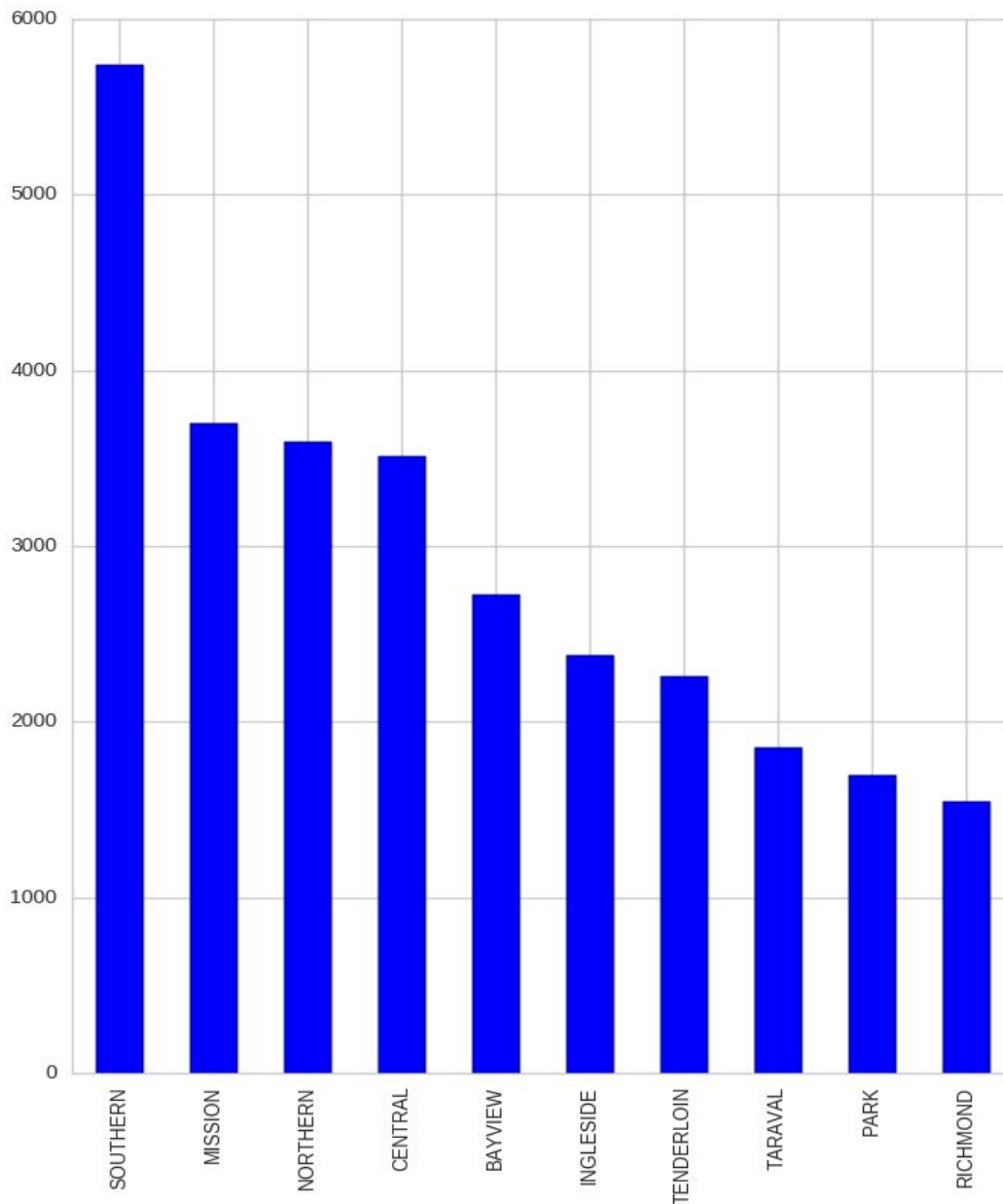
Crime at various hours during the day:



The numbers on the horizontal axis in the above graph denote the hour of the day as seen on a 24 hour clock. In general, the majority of crimes have been reported from 4 pm to 6 pm. A large number of incidents have been reported between 8 and 9 pm as well as between 2 and 3 pm.

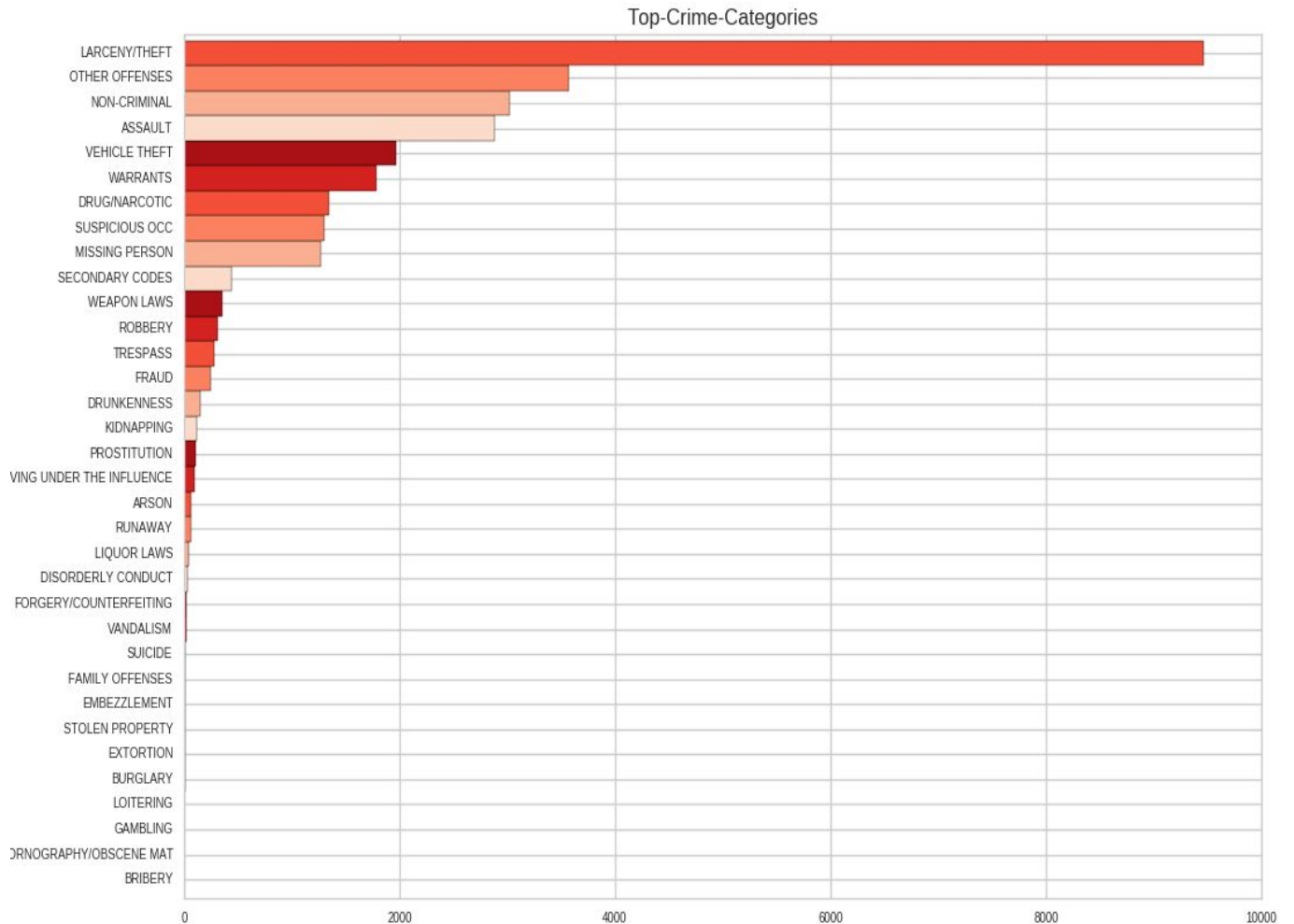
An interesting observation is that a surprisingly large number of crimes have been reported between 11 am and 12 pm.

Crime counts in various districts in San Francisco:



On analyzing the number of crime incidents across various districts in San Francisco, we find that Richmond district has the lowest number of reported incidents while Southern District has the highest number. Southern District has over 1500 reported incidents more than that reported at Mission District, which has the second highest number.

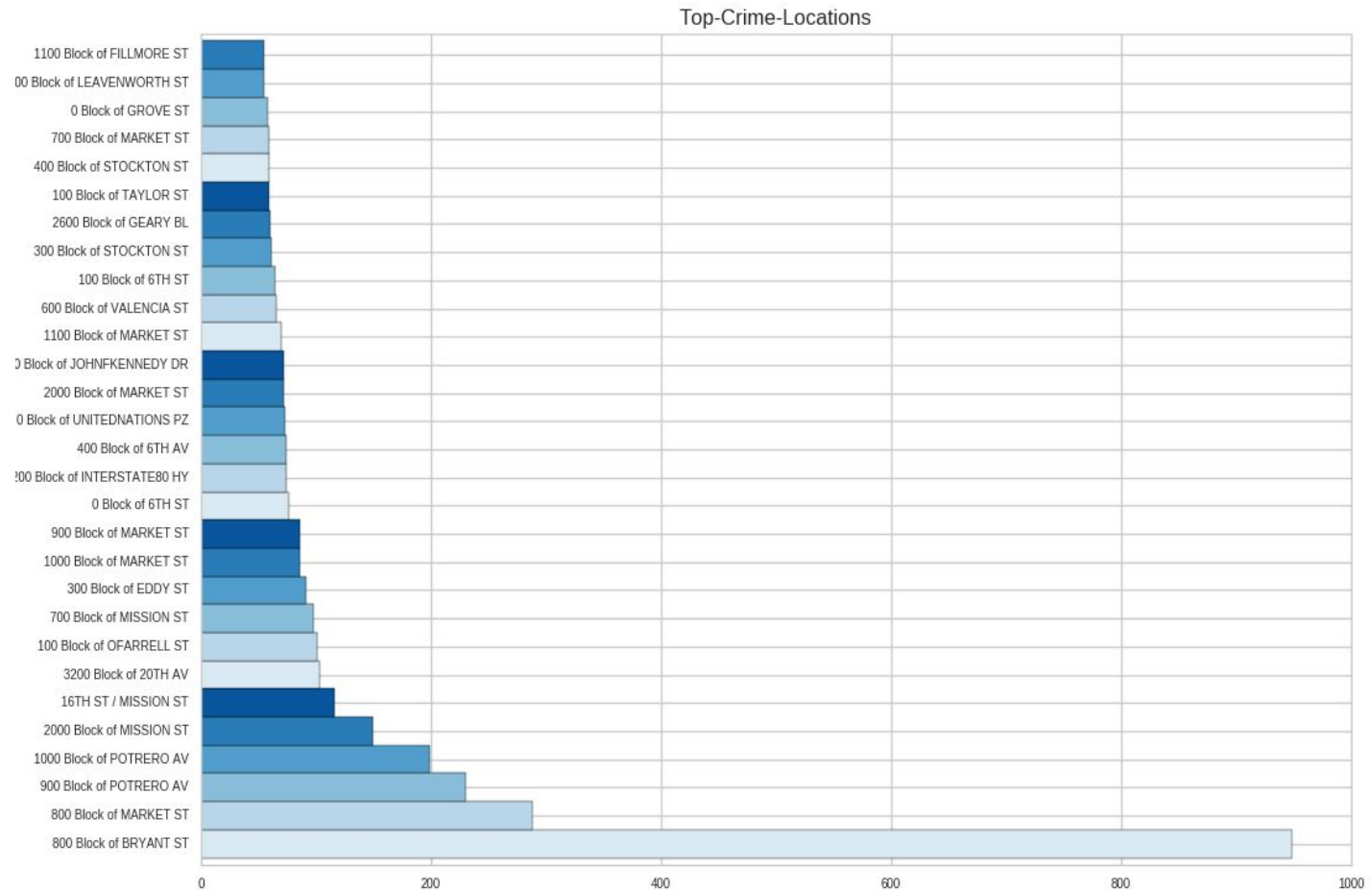
Top Crime Categories in San Fransico:



It is evident that most of the reported incidents, i.e., over 9000 cases, in San Francisco are cases of larceny and theft. Also, over 2000 non-criminal offenses and over 2000 assaults were reported.

Interestingly, the number of burglary cases, bribery cases and suicide cases reported were zero or close to zero.

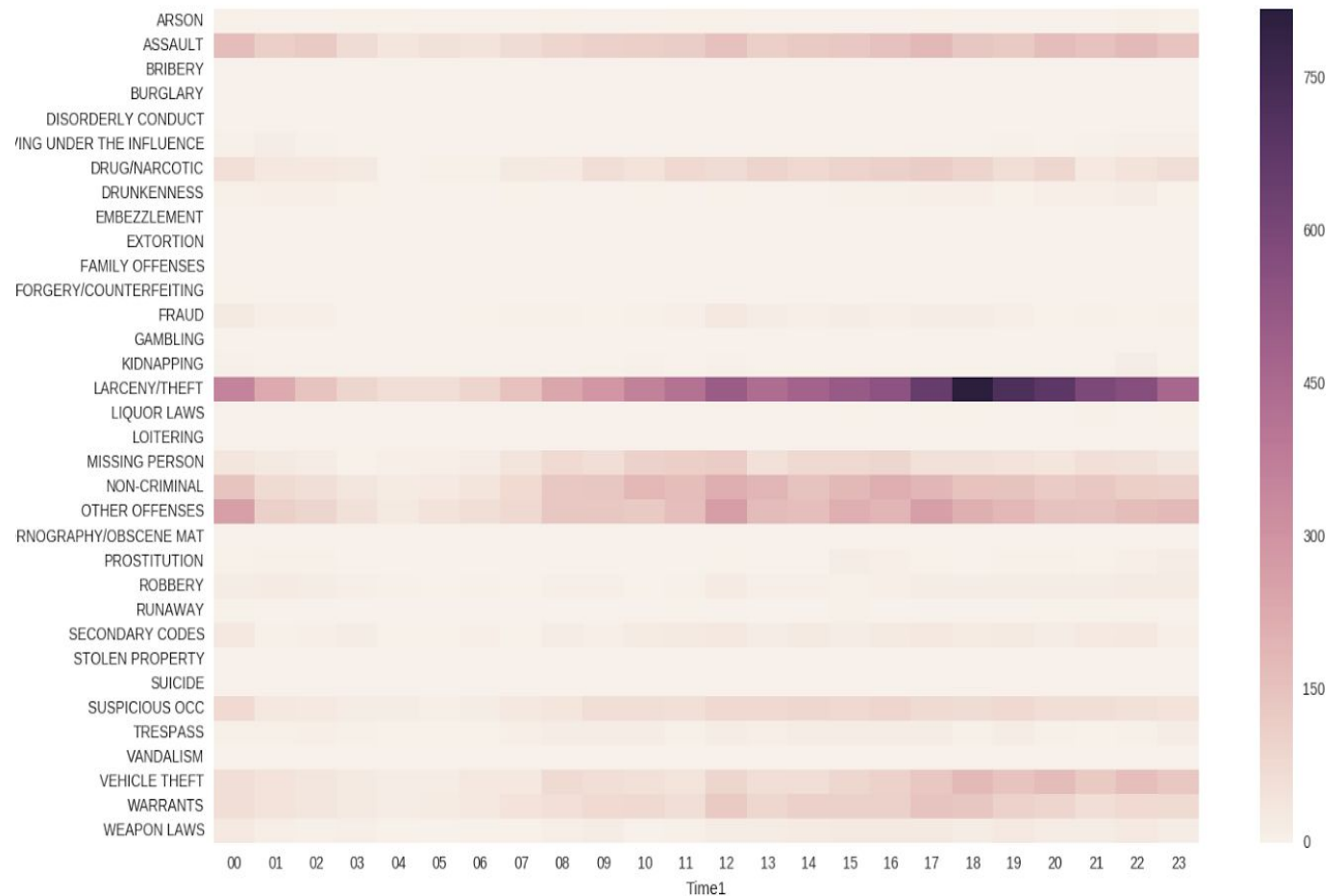
Top Crime Locations:



It was interesting to note that crime was more prevalent in certain neighborhoods than in others. The above graph shows that 800 Block of Bryant Street saw over 4 times the number of criminal incidents reported at 1000 Block of Portrero Avenue!

Although we haven't yet explored the following with the given dataset, this could have a connection with where these neighborhoods are situated, the majority type of jobs of the people living there, the police department's task force at the various places, etc.

HeatMap of the crimes reported during different hours of the day:



The above heatmap helps us analyze if there are patterns in when the reported crimes are reported to have taken place.

For instance, it is evident that the **cases of theft have mostly been reported at around 5 pm to 8 pm**, while, a **major portion of cases pertaining to non-criminal offenses have been reported during the day between 11 am and 5 pm**.

Also, **vehicle thefts are more common at night than during the day**. Another observation is that **cases of assault seem to get reported throughout the day, with the numbers increasing after nightfall**.