

## San Francisco crime insight (June 2014 – August 2014)

### Primary finding statement

**Larceny/Theft is the major crime** hampering San Francisco with **major chunk of crime being committed in the evening** and **overall crime rate on the rise**. It is also found that **Southern district being the worst affected district** in terms of overall crime count as well as larceny/theft count.

### Supporting visualization and discussion

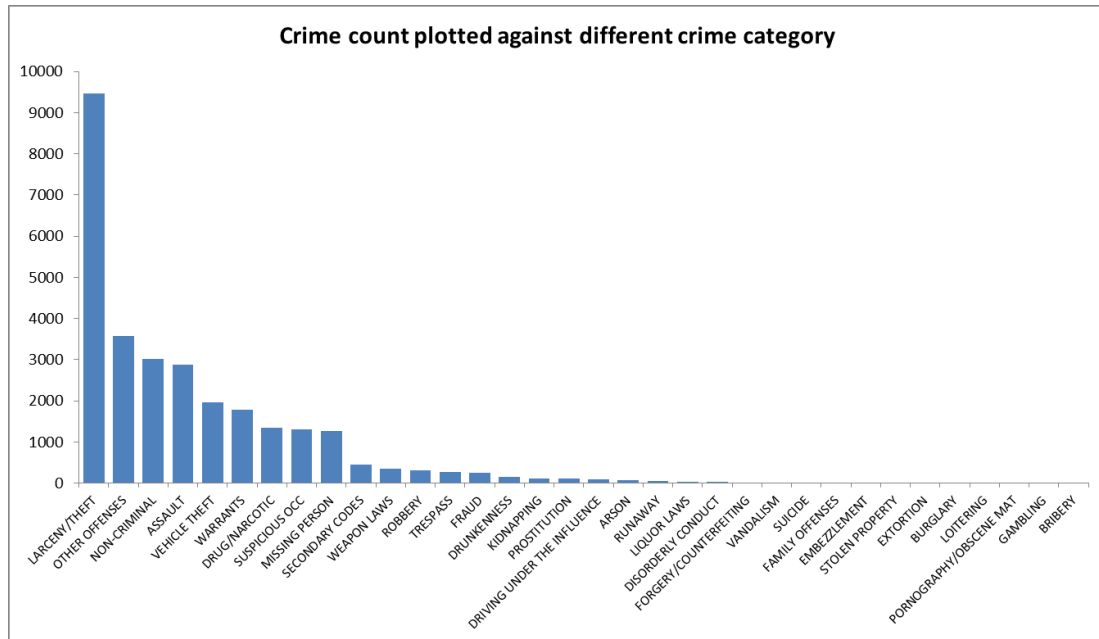


Figure 1.

Here we can clearly see the prominence of Larceny/Theft in the area. We can also see that except for the initial few crimes, the number of incidence of other crime is quite low. Therefore, I have clubbed all other crime with other offense, except for first few (9) and plotted the resultant in pie chart below.

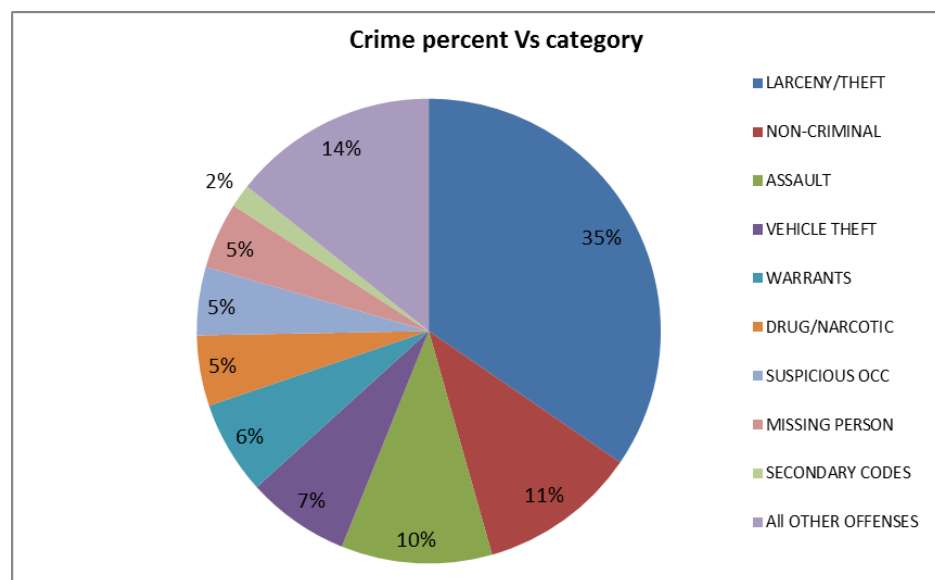


Figure 2.

This pie chart shows that larceny/Theft is 35% of all crimes committed. The 2<sup>nd</sup> and 3<sup>rd</sup> most prominent categories (except all other offenses) is non-criminal scenarios (11 %) and assault (10%).

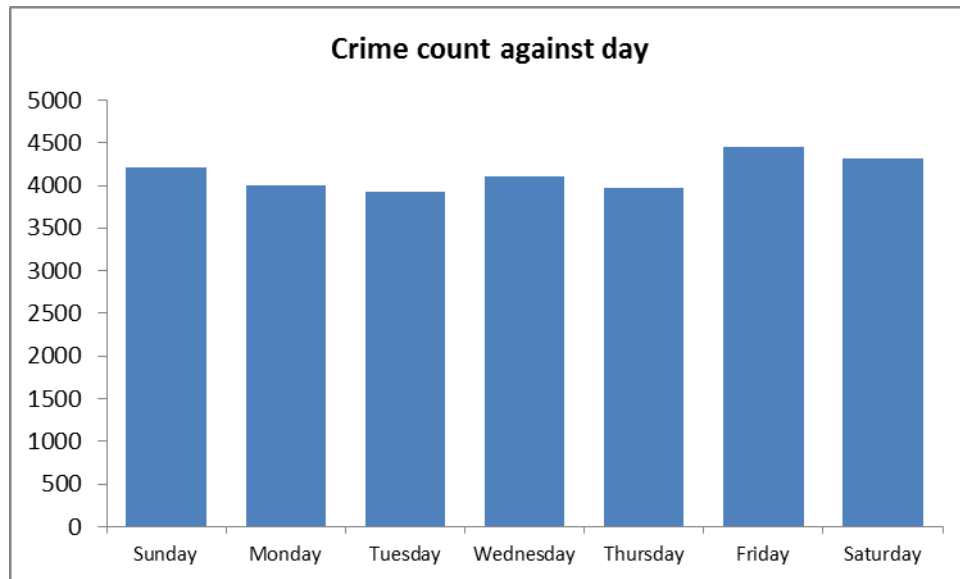


Figure 3.

Next I tried to see if there is any relation between crime rate and day of the week. Though the count is slightly high over the weekend but it is not much different from the weekdays to be a matter of concern.

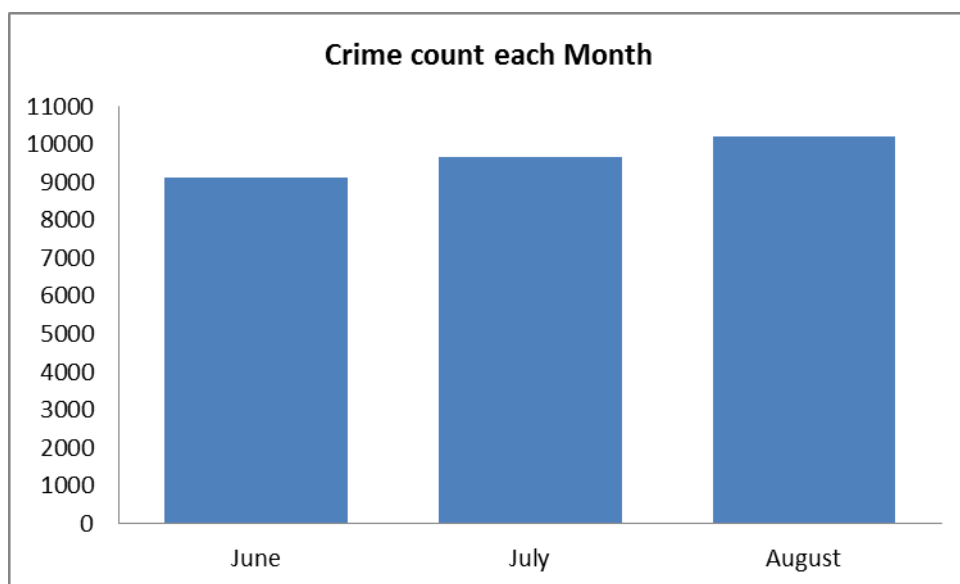


Figure 4.

On plotting the crime count against the month, an increase in crime rate can be seen. This indicates the need to strengthen the stand against crime, in order to prevent further increase.

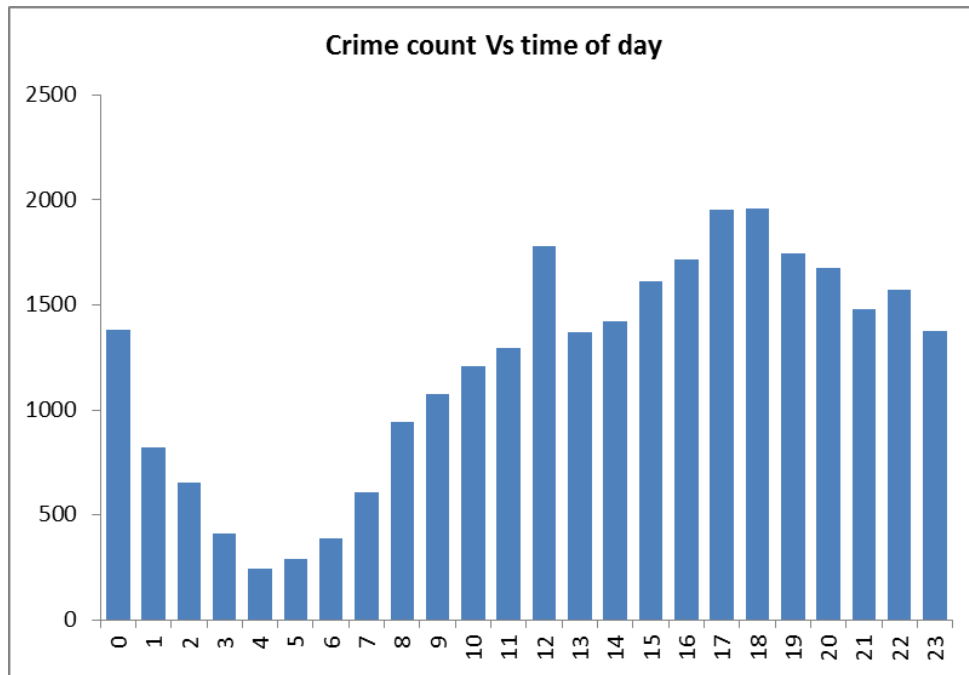


Figure 5.

This plot shows the trend of crime as per the time of the day. The x-axis starts from midnight and finishes in midnight covering the 24 hour range (each bar corresponds to 1 hour interval). We can see that the number of crime peaks in the evening, reaches a maximum around 5-6 pm, followed by a gradual slowdown. The rate is the least late night and early morning, as clearly seen in the plot.

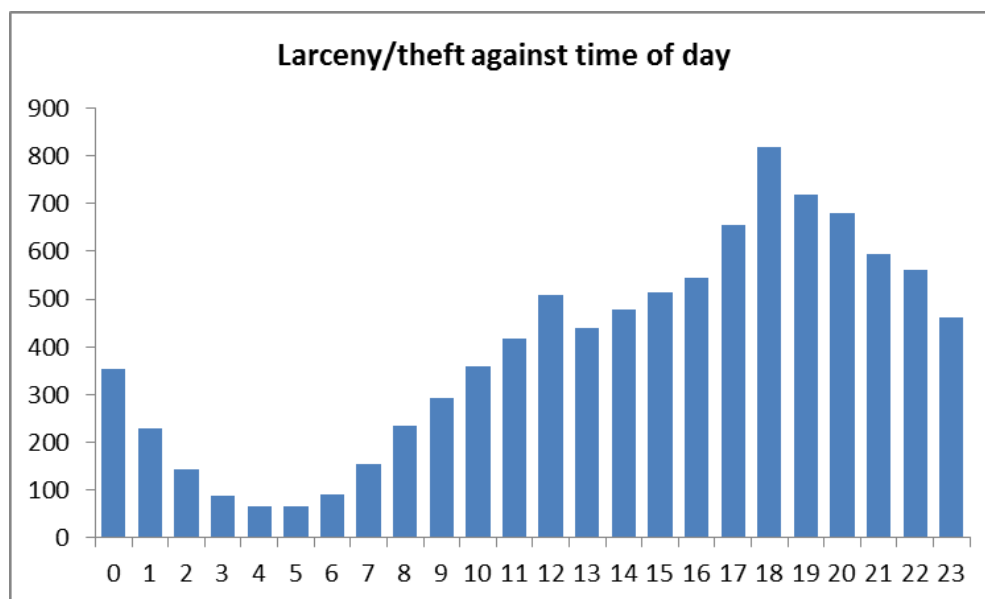


Figure 6.

This plot of larceny/theft against time of day closely follows the overall crime trend.

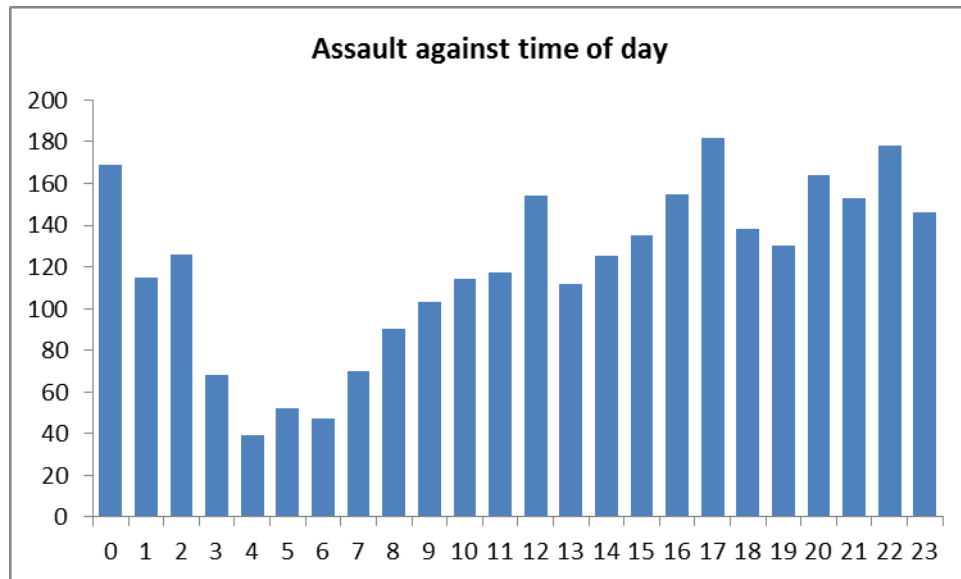


Figure 7.

Assault pattern is different from the overall trend and is nearly uniform from 4 pm to 1 in the morning. Rest of the night and early morning also see a relatively high amount of assault cases when compared to the overall dip in crime rate during these hours.

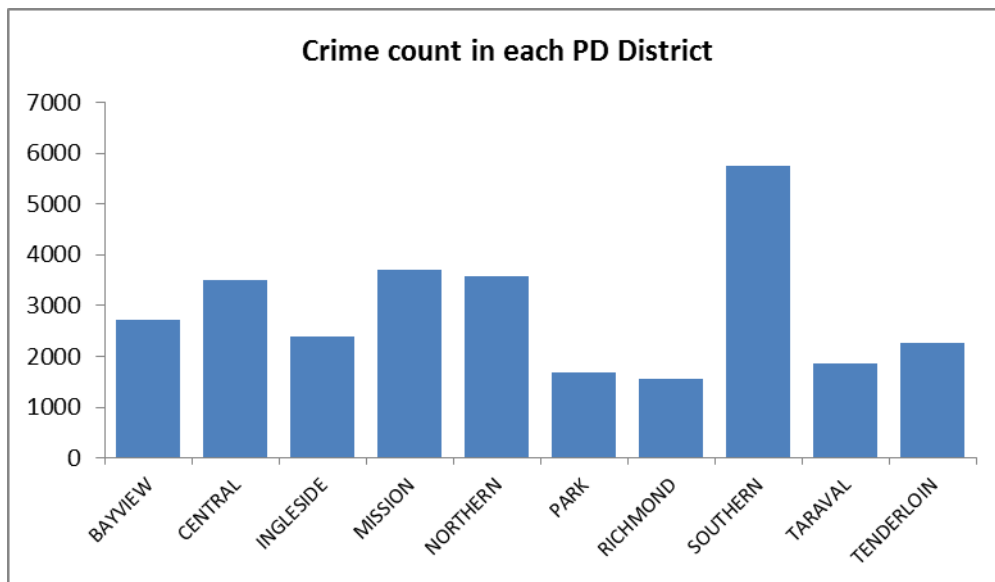


Figure 8.

Here I have plotted the number of crimes in each district and we see that the Southern district has the highest crime count; nearly 50% more than the following district. So an attempt was made to see what the major crime in the Southern district is.

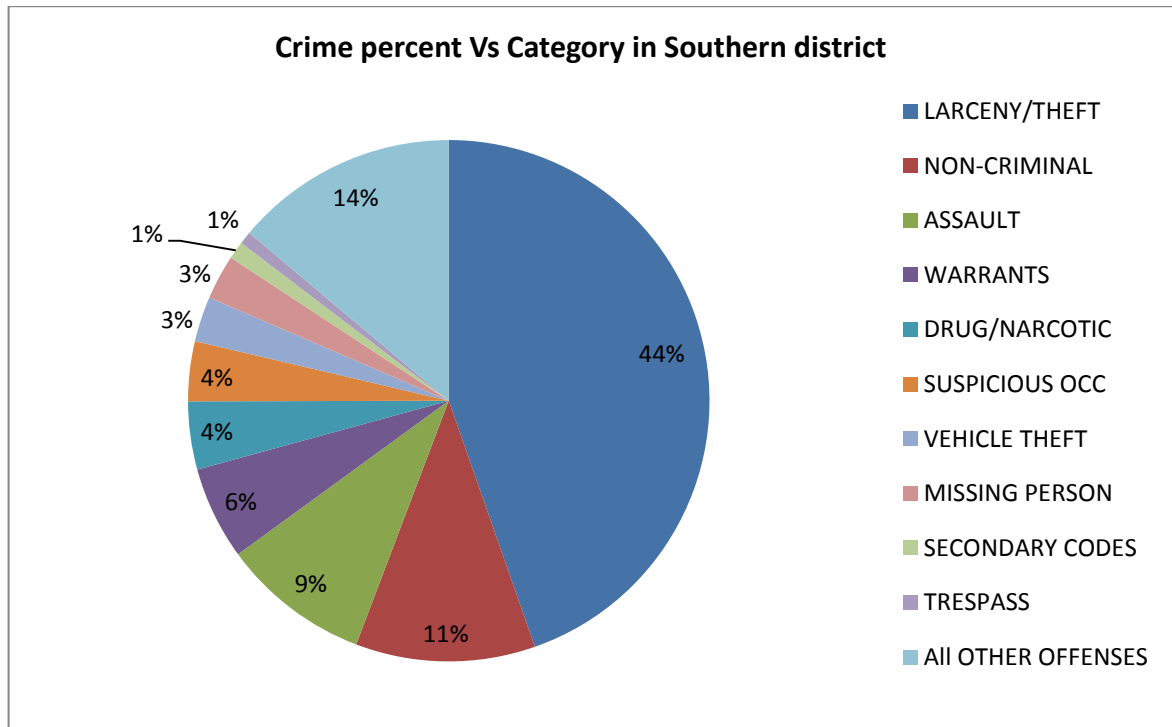


Figure 9.

It is found that Larceny/theft is the major concern here too. But if we see closely, the percent of larceny/theft is 44% compared to the overall 35%. This provides some hint why the overall crime is high and also points to the weak area from law enforcement point of view.

### Report summary

*Larceny/Theft is the major crime* committed in San Francisco area during the period June 2014 – August 2014 (Figure 1-2). We also find a *gradual increase in the crime* with each passing month (Figure 4). Figure 5 shows the *peak hours of crime is the evening* and similar trend is followed by larceny/theft (figure 6). On the other hand assault is relatively higher through evening till late night as shown in figure 7. Finally we notice that the *Southern district* has *very high crime rate* compared to others and the percentage of larceny/theft in southern district is much more than for total SF area. (Figure 8-9).