

Seattle Incidents Report: Lock your cars!

Findings in police data shows carprowing as the main violation in Seattle Area.

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1 Introduction

The Seattle Incidents Database offers insight on the amount, type, location and timestamp of crimes in the Seattle Area, in the year 2014. Here we focus on the summer of 2014, for the sake of simplicity.

2 Crime amount analysis

First of all, let's see what are the 6 most common violations in Seattle, between June ad August, in Figure 1.

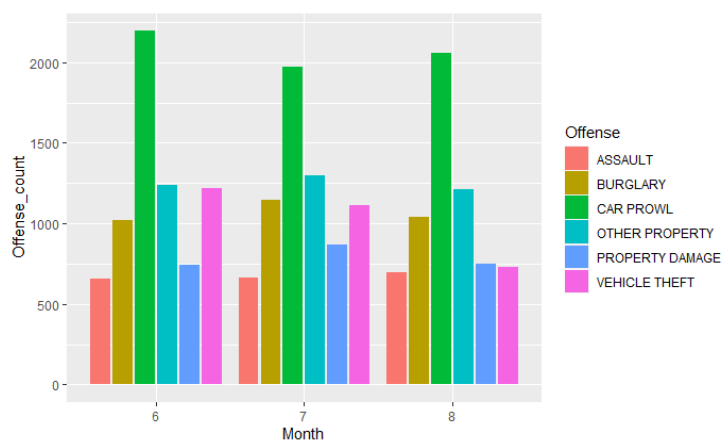


Figure 1: Top 6 violations in Summer 2014.

In June, carprowing accounts at almost double the number of the second top most common crime, and the trend in July and August is almost the same.

Now let's focus on the trend of the number of crimes through the day, for each hour, analysing both the total and the 6 most common crimes.

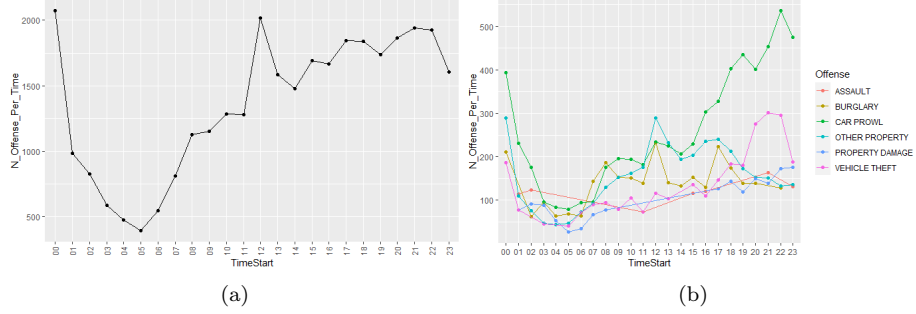


Figure 2: (a) Hourly trend of the total amount of reported crimes (b) Hourly trend of top 6 most common reported crimes.

Figure 2a and 2b show that crimes increase in the late afternoon through the night, with a peak around midday, and abruptly decrease after midnight. These are reported time, hence these abrupt changes may be due to police shifts pattern. Figure 2b shows also a great increase of carprowl during the late afternoon/evening, maybe due to more car parked around, as most people work until 17/18.

3 Crime distribution

Now we focus on the distribution over the city of crimes. First of all let's plot the amount of reported crimes for each zone of the city.

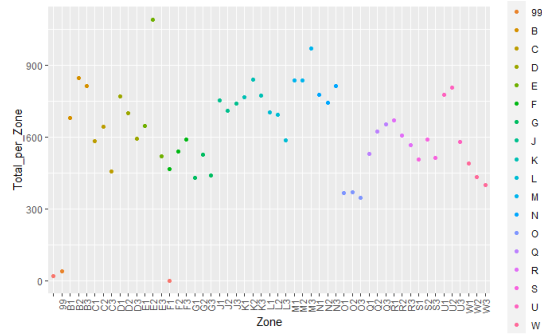


Figure 3: Amount of crimes per zone

Figure 3 shows that E2 zone, in the city center, as the highest amount of

crimes, with more than 1000 reported crimes. Let's us show the distribution of the 6 most common crimes in that area, in Figure 4a, compared with the same distribution in the Universitary District, in Figure 4b, that reports around 700 crimes.

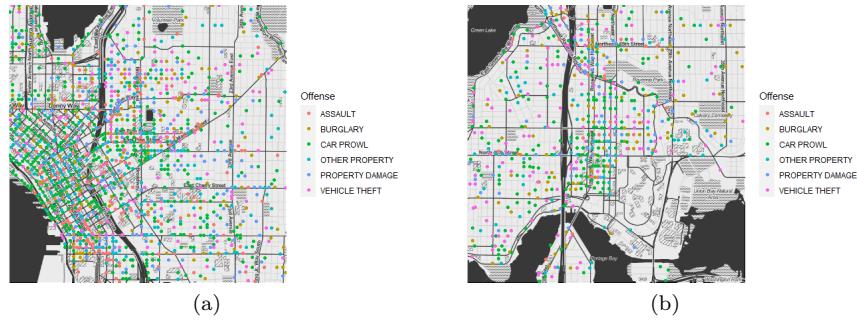


Figure 4: (a) Amount of crimes for zone E2. (b) Amount of crimes for the Universitary District

Of course these plots show raw number, not taking into account the difference in density of population in the two areas, for which data were not provided in the dataset.