Primary Finding

Number of Car Prowl Increased at Afternoon Near Pike Place Market During July and August in Seattle

Explanation

I started exploring the dataset by looking the frequency of certain crime happened, and I found that car prowl was the most frequent crime happened in the given dataset. Therefore, I wanted to narrow down my focus on car prowl. Then, I grouped the time into four different categories, namely 'Morning', 'Afternoon', 'Evening', and 'Night'. Fig1 shows the distribution of car prowl in different sectors and different time period in a day. From Fig 1, I found that most of the districts have the similar pattern, which is the number of car prowl happened most frequently at the night, but as you can see, only one district, M, where car prowl happened most frequently in the afternoon. Therefore, I decided to further check this district.

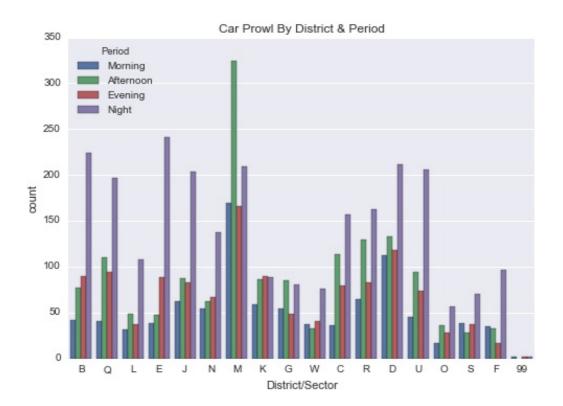


Fig 1. Car Prowl by district and time period in a day

Fig 2 shows car prowl happened in district M by different times of a day and months, in which I found that only in July and August the numbers of car prowl increased in afternoon. Then I used the location of the dataset to draw a heatmap (Fig 3) to show where these car prowls happened. I found that these car prowls happened near Pike Place Market, Seattle, and after checking the website of the place, Pike Place Market is busiest around 12:00 PM and closed at 5:00 or 6:00 PM, which may explains why car prowls peaked in afternoon.

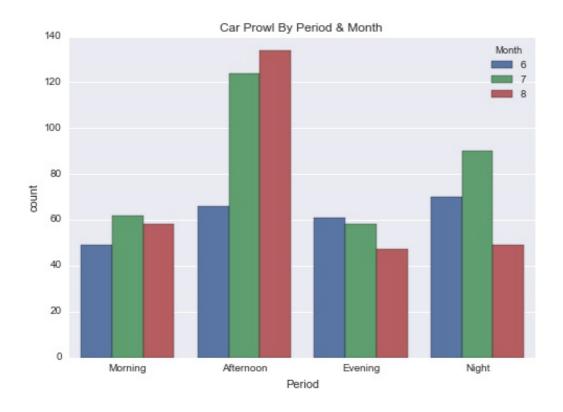


Fig 2. Car Prowl in district M by period and month

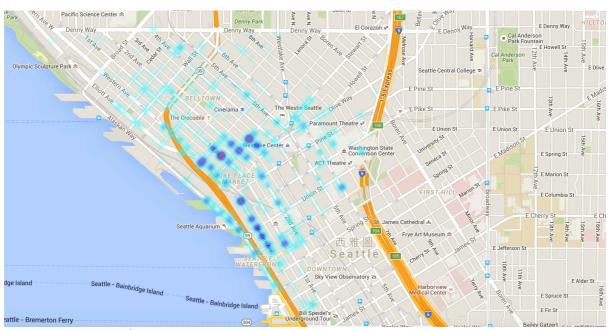


Fig 3. Heatmap of car prowl in district M