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Initial Analysis:   
Crime Incident Reports   
in Boston

ALY 6070\_Communication and Visualization for Data Analytics

# **Introduction**

This is an initial analysis for the final group project of Crime Incident Reports in Boston. The original data has provided crime incident cases from August 2015 to June 2020. There are 69 groups of offense cases occurred in 13 different districts. In our project, we are going to focus on ‘Larceny from Motor Vehicle’ crime. We are going to analyze data from different angles to see if there are any preventive actions could be taken place in future.

# **Analysis**

## **What do you see as variables in the data?**

The Larceny from MV cases are the focused variables including all 5 types of detailed descriptions.

## **What correlations, patterns and trends do you see?**

After plot the data, we found that larceny cases are correlated to time. For example, summer is the peak time during a year. Weekends are more likely to occur larceny then weekdays. During a day, the rash hours are the peak time to report larceny cases.

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*Figure 1*. Larceny cases by months, day of week and hours

For the location aspect, there are more larceny cases happened nearby some commercial areas, such as the Quincy Market, Massachusetts General Hospital, Back bay area, etc.

A picture containing sitting, table, computer, computer

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*Figure 2*. Larceny cases by locations

## **Who will be the audience of the data? What question would they ask about the data?**

The police department would be the audience, since we are trying to recommend some preventive actions to lower the case volume in future. They may ask details about the larceny, such as what are the targets, such as parts or personal belongings.

## **How could a dashboard be used to show data clearly?**

In the dashboard, we are going to combine graphs and charts to show the analysis that mentioned above.

## **What types of graphs and charts can be used to clearly explain the data?**

We are going to draw a map to show the locations, few charts to show the correlation and trend, as well as a table to explain some details.

# **Conclusions**

After analysis, we know time and locations that larceny cases are more likely to be reported. The preventive actions such as increase patrol in certain time and places, detailed recommendation to public will be suggested to the police department.

# Reference

1. Analyze Boston. *Crime Incident Reports (August 2015 – To Date) (Source: New System).* Retrieved from: <https://data.boston.gov/dataset/crime-incident-reports-august-2015-to-date-source-new-system>