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Instructor: Alli Maurer, PhD

Individual Paper for Group 2:   
Larceny from Motor Vehicle   
in Boston

ALY 6070\_Communication and Visualization for Data Analytics

I am in group 2. It’s been a pleasure working with my teammates Sze Chan (Kate) and Garland Williams (Holt). Initially I talked with Prof. Maurer by phone call clarifying the requirements of the final project. Then I shared this information with my teammates during the first meeting. In our first meeting, we went through our individual part of the presentation, figured an outline. We also end up with an agreement on cleaning up the data by eliminating cases in the year of 2015 and located outside of Boston. Then we send out of second draft of dashboard and shared advices. On the second meeting we recorded our group presentation in one take. It was a nice teamwork with smooth communication.

Larceny from Motor Vehicle is one of the top three crime in the Bay Area, which is where I live. It has been a big issue for people’s daily life. The government has funded almost 4 million dollars last year to combat the crime. It is now listed on 11th in Boston, which is in a better situation. But I want to dive in the data with the police department in Suffolk county and bring up some consideration.

A close up of a map

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*Figure 1*. Larceny from MV in Boston

There is a decreasing trend of car break-ins since 2016 with seasonality. But in 2020, there was a sharp increase started in February from 140 to 330 in April. Dividing the total data into 14 districts, 5 of them bring the attentions. The first one is district A7, which is around East Boston up until Orient heights area. There is an obviously increasing trend over 300% from 2019 Q1 until current month. The second one is district B3, with a seasonal increasing line from 2017 Q2. The third one would be C11 located in southeastern Suffolk county. The increasing trend started from 2018 Q1 with a rate of 177%.

A close up of a map

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*Figure 2. Larceny cases in A7, B3, C11*

Taking a look at the reporting time of car break-ins, the peak hour during a day is 18:00 for all districts. But in district E5 and E18, the peak is at 21:00. To compare the timeline between the two districts and the entire Suffolk county, the number of cases increased started from the afternoon and goes all the way up to the late night.

A close up of a map

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*Figure 3. Larceny cases in E5, E18*

In conclusion, all the 5 areas are residential that are far away from the financial district or downtown Boston. Data indicates increasing trend in A7, B3 and C11 districts since 2016. Larceny cases from E5 and E18 districts increasingly reported by the time of bed. These are the situations we found in the East Boston and southeastern Suffolk county.

A close up of a map

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*Figure 4. Map for A7, B3, C11, E5, E18 districts*

# 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>
2. Geha, J. (July 26, 2019). *Bay Area police to get nearly $4 millions of state surplus to combat car break-ins*. Retrieved from: <https://www.mercurynews.com/2019/07/26/local-police-to-get-nearly-4-million-of-state-surplus-to-combat-car-break-ins/>