**Dataset Selection**

Considerable time was spent on the selection of a relevant dataset, as the group felt strongly that the building a presentation would be far more interesting if the information being analyzed was compelling. After applying the constraints that the dataset must have spatial and temporal information, a search of Kaggle with the key word ‘Canada’ yielded a Vancouver Crime dataset that contained all crime information from 2003 to 2017, broken out by time of day, type of crime, location, and neighbourhood. After exploring the data, it was recognized that many questions the group had could not be answered without expanding the data. Subsequently, monthly data from 2016 census was added, with features such as household income, employment, dwelling valuation and household size. From here, the team brainstormed several questions that could be explored in a Tableau Dashboard:

Does the amount (and type of crime) vary by neighborhood?  
How has the amount of crime changed over time (month or year, by neighborhood?)  
Does day of week impact crime?  
Does time of day impact crime?  
Does affordability impact crime?  
Do demographics impact crime?

**Data Cleaning**

In order to join the two datasets, some manipulation was required to ensure the neighbourhoods were similarly named before merging. Once this was complete, thought was given to how the information would be manipulated in Tableau. As a result, several of the columns were stacked on each other using a melt method in python. As the team was focusing on neighbourhood for a lot of the analysis, a quick search of the Vancouver open data portal displayed shape files that were easily imported into Tableau, and subsequently joined to the data. At this point, the focus turned to creating a series of visualizations that would answer the aforementioned questions.