## **Segmenting and Clustering Neighborhoods in** Fredericton, NB

## **Applied Data Science Capstone Week 4 Peer-Graded Project** Report

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## **Data**

To understand and explore we will need the following City of Fredericton Open Data:

- 1. Open Data Site: http://data-fredericton.opendata.arcgis.com/ (http://data-fredericton.opendata.arcgis.com/)
- 2. Fredericton Neighbourhoods: http://data-fredericton.opendata.arcgis.com/datasets/neighbourhoods--
- quartiers (http://data-fredericton.opendata.arcgis.com/datasets/neighbourhoods--quartiers)
  Fredericton Crime by Neighbourhood: http://data-fredericton.opendata.arcgis.com/datasets/crime-by-neighbourhood-2017--crime-par-quartier-2017 (http://data-fredericton.opendata.arcgis.com/datasets/crime-by-neighbourhood-2017--crime-par-quartier-2017)
- 4. Fredericton Census Tract Demographics: <a href="http://data-fredericton.opendata.arcgis.com/datasets/census-tract-demographics--donn%C3%A9es-d%C3%A9mographiques-du-secteur-de-recensement">http://data-fredericton.opendata.arcgis.com/datasets/census-tract-demographics--donn%C3%A9es-d%C3%A9mographiques-dericton.opendata.arcgis.com/datasets/census-tract-demographics--donn%C3%A9es-d%C3%A9mographiques-donn%C3%A9es-d%C3 du- secteur-de-recensement)
- Fredericton locations of interest: https://github.com/JasonLUrquhart/Applied-Data-Science-Capstone/blob/master/Fredericton%20Locations.xlsx (https://github.com/JasonLUrquhart/Applied-Data-Science-Capstone/blob/master/Fredericton%20Locations.xlsx)
- 6. Foursquare Developers Access to venue data: https://foursquare.com/ (https://foursquare.com/)

Using this data will allow exploration and examination to answer the questions. The neighbourhood data will enable us to properly group crime by neighbourhood. The Census data will enable us to then compare the population density to examine if areas of highest crime are also most densely populated. Fredericton locations of interest will then allow us to cluster and quantitatively understand the venues most common to that location.