

# Segmenting and Clustering Neighborhoods in Fredericton, NB

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

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### Introduction to the opportunity

Fredericton is the Capital City of the only Canadian fully-bilingual Province of New Brunswick and is beautifully located on the banks of the Saint John River. While one of the least populated provincial capital cities with a population base of less than 60 thousand residents, it offers a wide spectrum of venues and is a government, university and cultural hub.

As the city grows and develops, it becomes increasingly important to examine and understand it quantitatively. The City of Fredericton provides open data for everyone and encourages entrepreneurial use to develop services for the benefit of its citizens.

Developers, investors, policy makers and/or city planners have an interest in answering the following questions as the need for additional services and citizen protection:

1. What neighbourhoods have the highest crime?
2. Is population density correlated to crime level?
3. Using Foursquare data, what venues are most common in different locations within the city?
4. Does the Knowledge Park really need a coffee shop?

Does the Open Data project have specific enough or thick enough data to empower decisions to be made or is it too aggregate to provide value in its current detail? Let's find out.