

The Battle of Neighbourhoods

Introduction & Business Problem

Asterix Milind

Case: To find an ideal location for a Sushi Bar

Client: Mr Kobayashi Maru



Problem Statement

- Mr. Kobayashi Maru intends to open a Sushi Bar in Toronto.
- Opening a restaurant is a very expensive affair and its location plays an important role in its success.
- It is generally assumed that a place concentrated with restaurants is a prime location and there is a constant crowd frequenting restaurants
- Competition from peers is another challenge that needs to be looked into.
- In this exercise we are trying to find a location that are hotspots for restaurants and also that currently have no sushi restaurants.

Data Requirements

- List of all the areas or neighbourhoods in Toronto
- Geospatial Data to triangulate co-ordinates
- List of all the Restaurants in Toronto

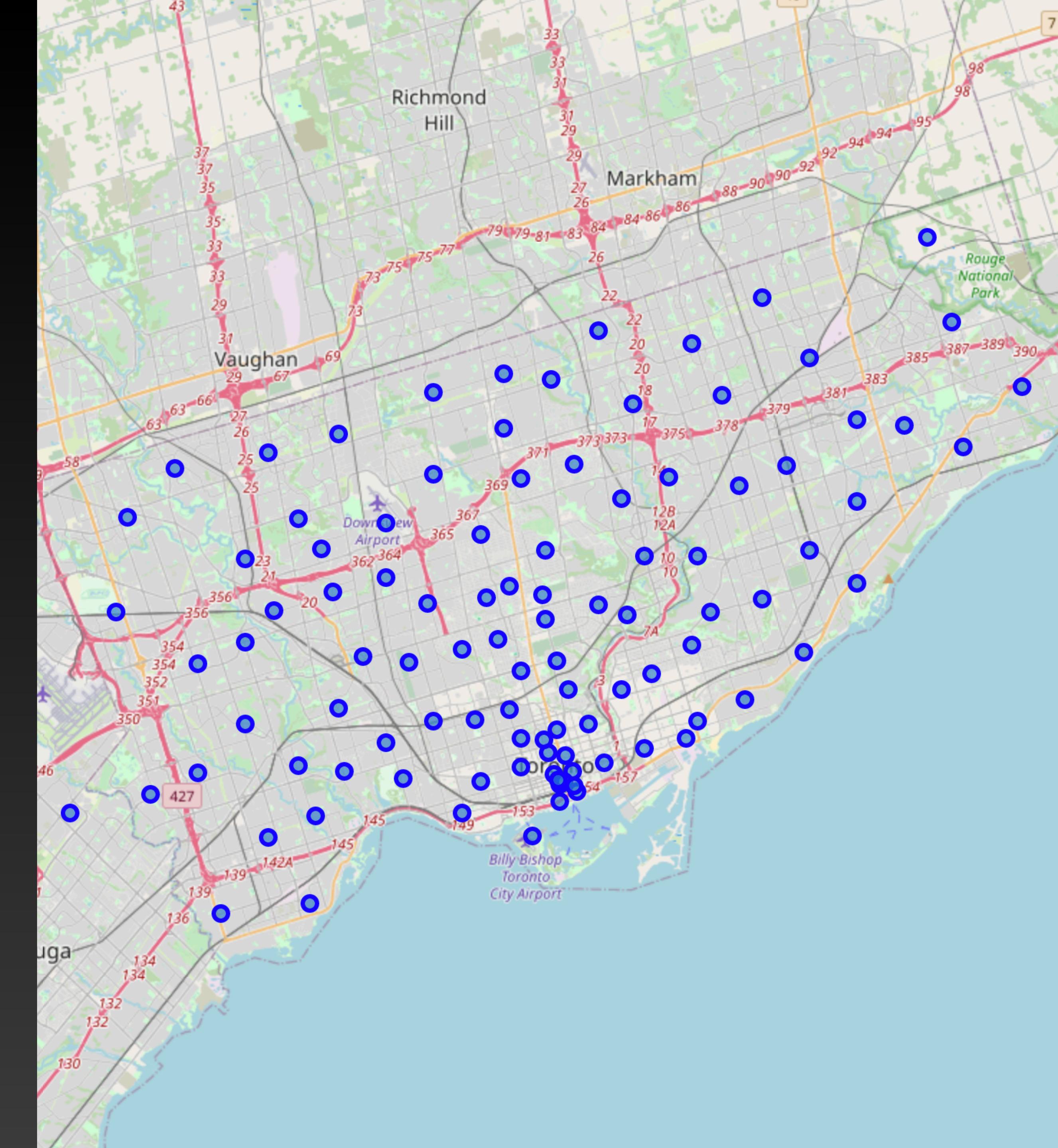
Data Sources

- Neighbourhood locations of Toronto: [https://en.wikipedia.org/wiki/
List_of_postal_codes_of_Canada:_M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)
- Geospatial Data: http://cocl.us/Geospatial_data
- List of restaurants in Toronto using Foursquare API: [https://
developer.foursquare.com/](https://developer.foursquare.com/)

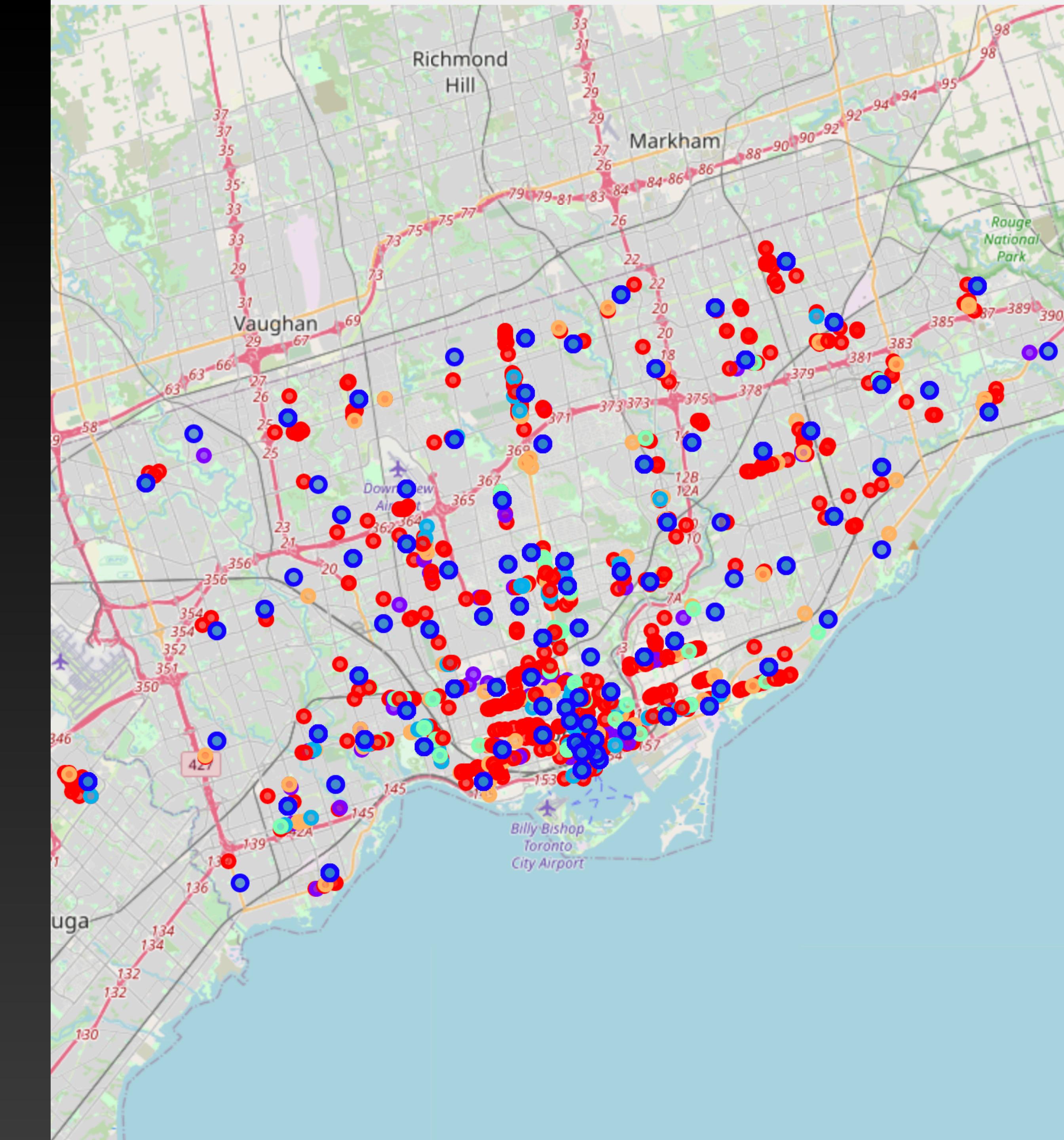
Data Methodology

- The data was extracted, cleaned and the feature selection was done
- Map of all the neighbourhoods in Toronto were plotted
- Foursquare API was used to figure out the nearest restaurants
- The restaurants were classified using KMeans algorithm
- The clustered restaurants were plotted along with the neighbourhood data on the map
- Cluster = 2 was selected (Sushi Restaurants) and was plotted on the map
- Plots were compared and based on the presence of cluster of restaurants and the absence of competition, locations for the new restaurant was selected

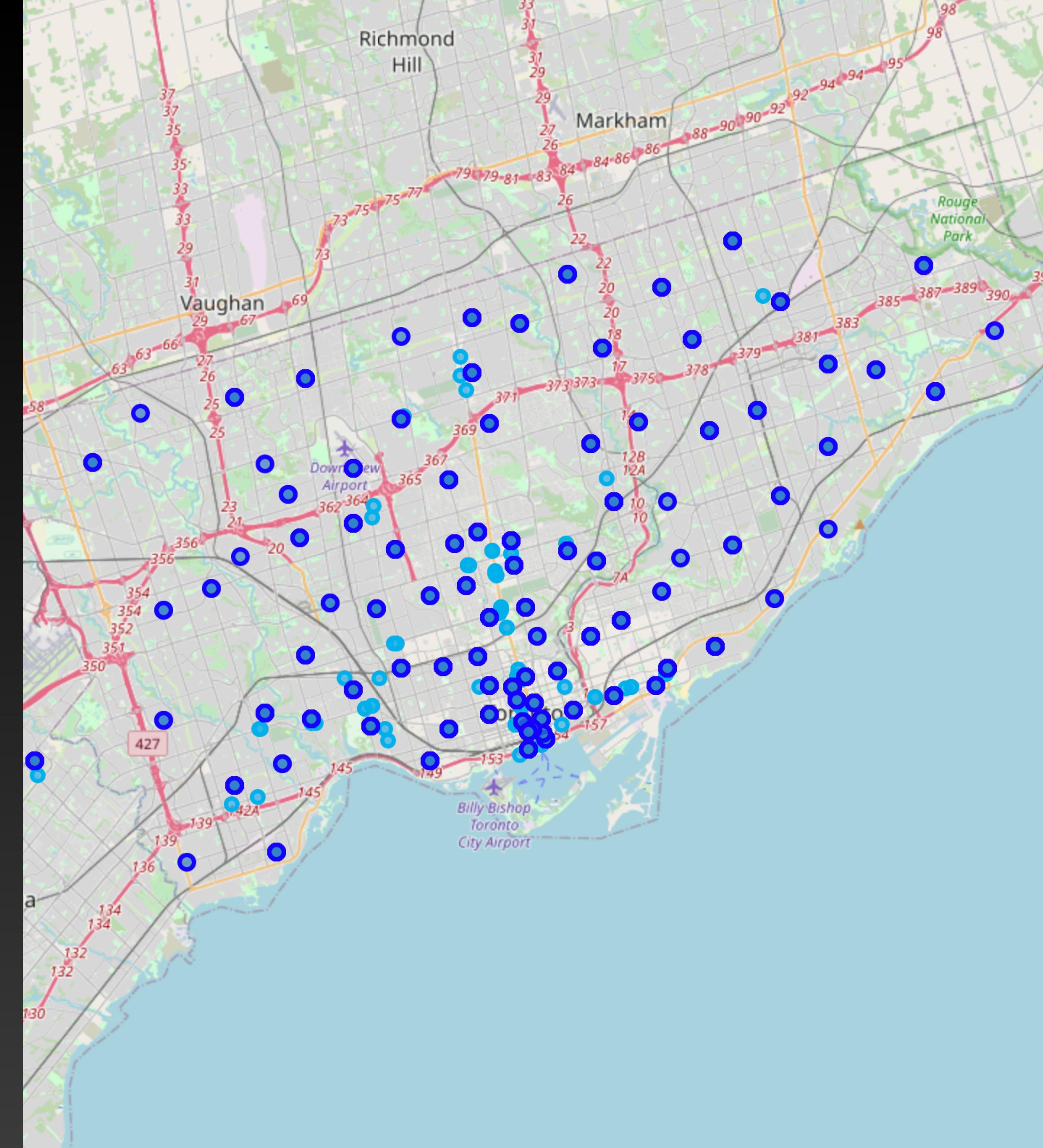
Map of all the neighbourhoods in Toronto



Map of all the restaurant clusters along the neighbourhood



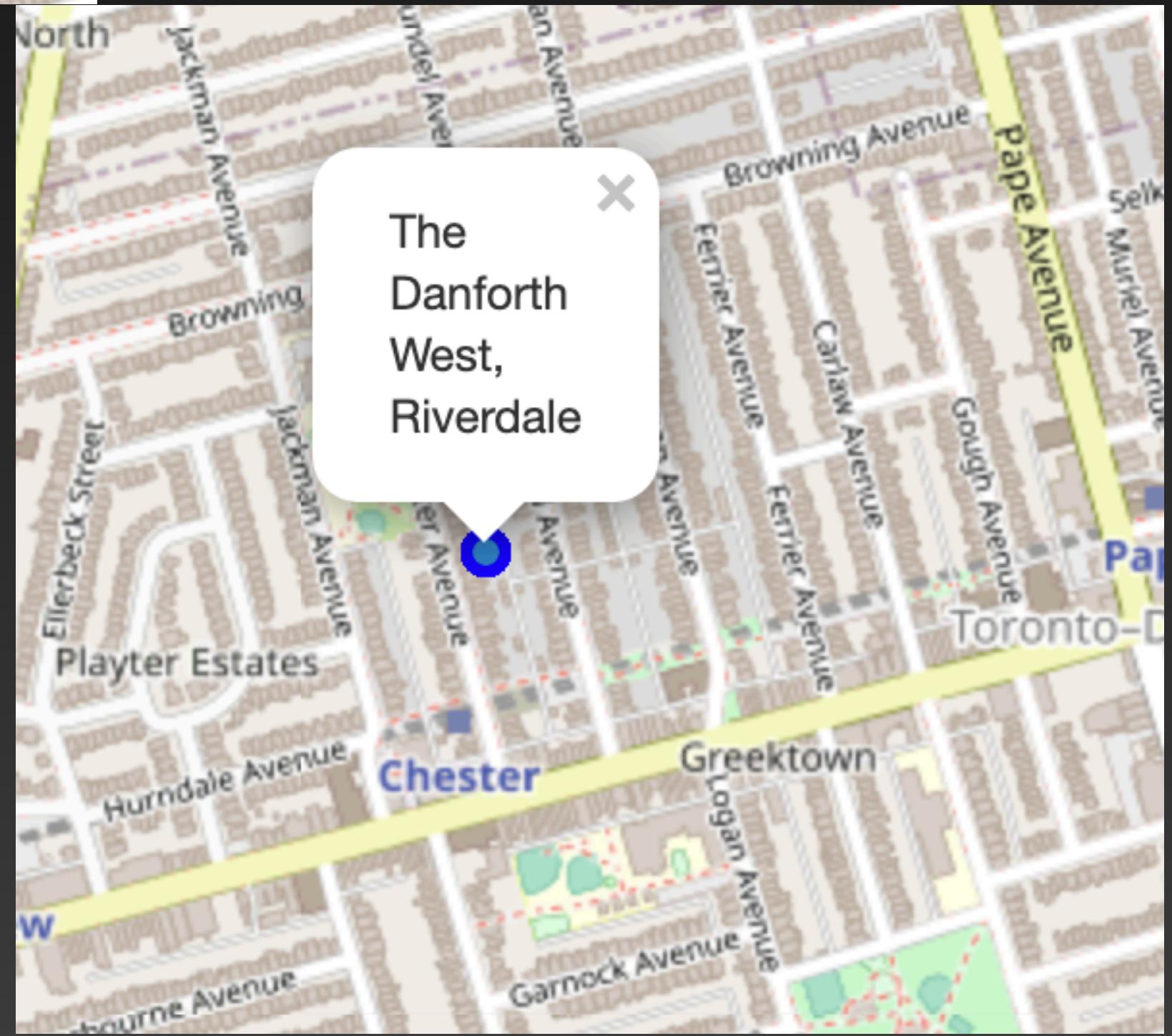
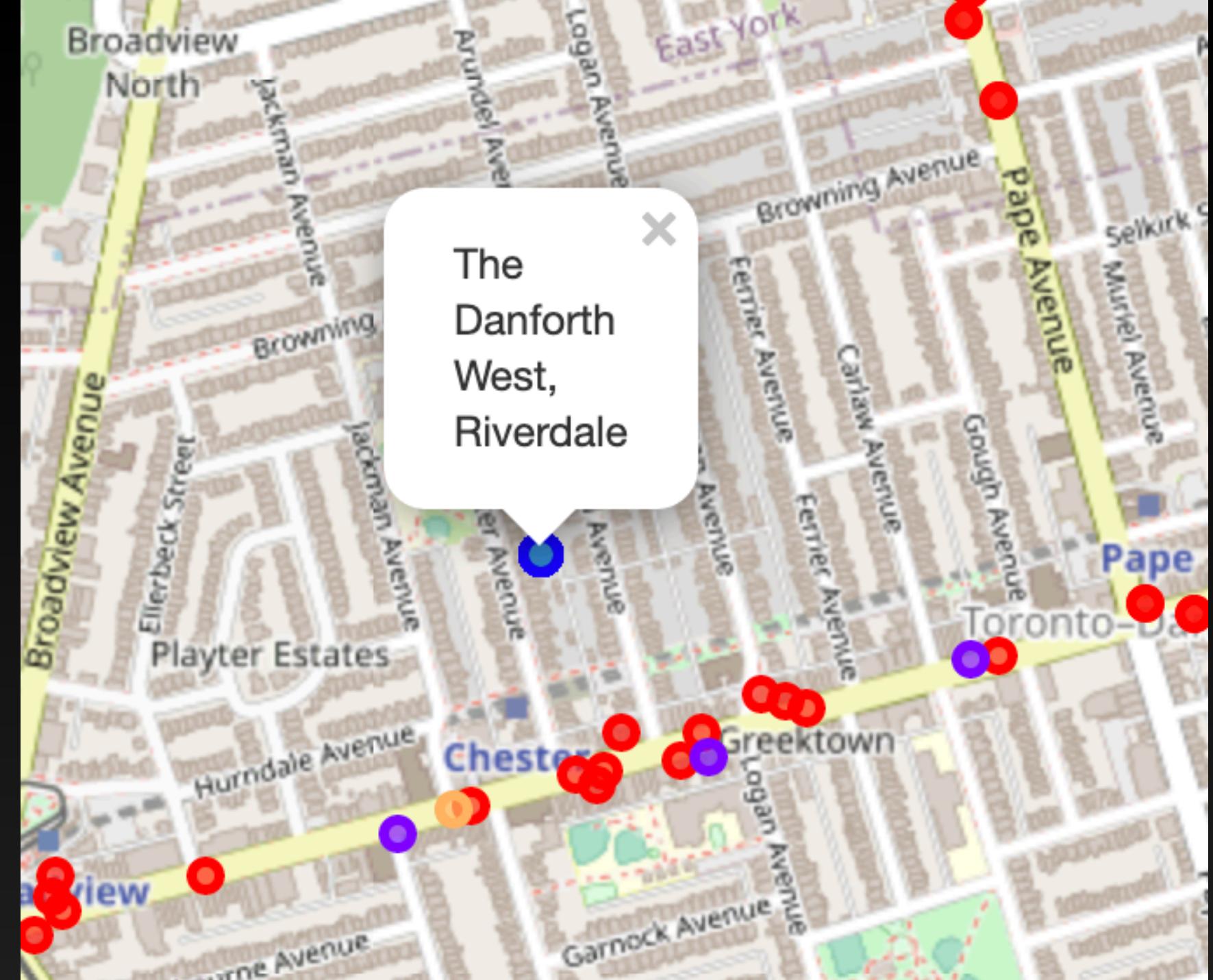
Map of Cluster 2 (Sushi Restaurants) along the neighbourhood



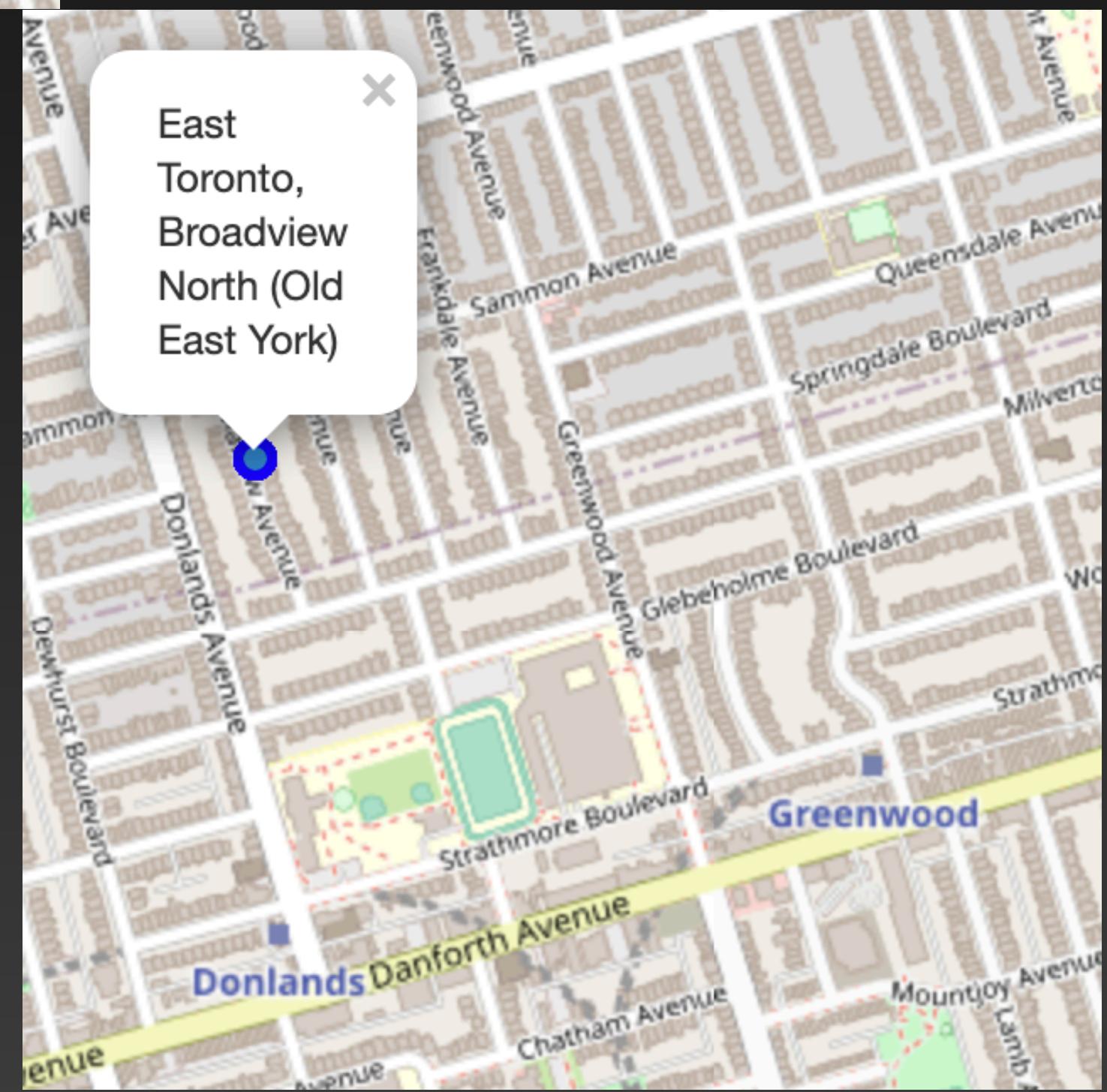
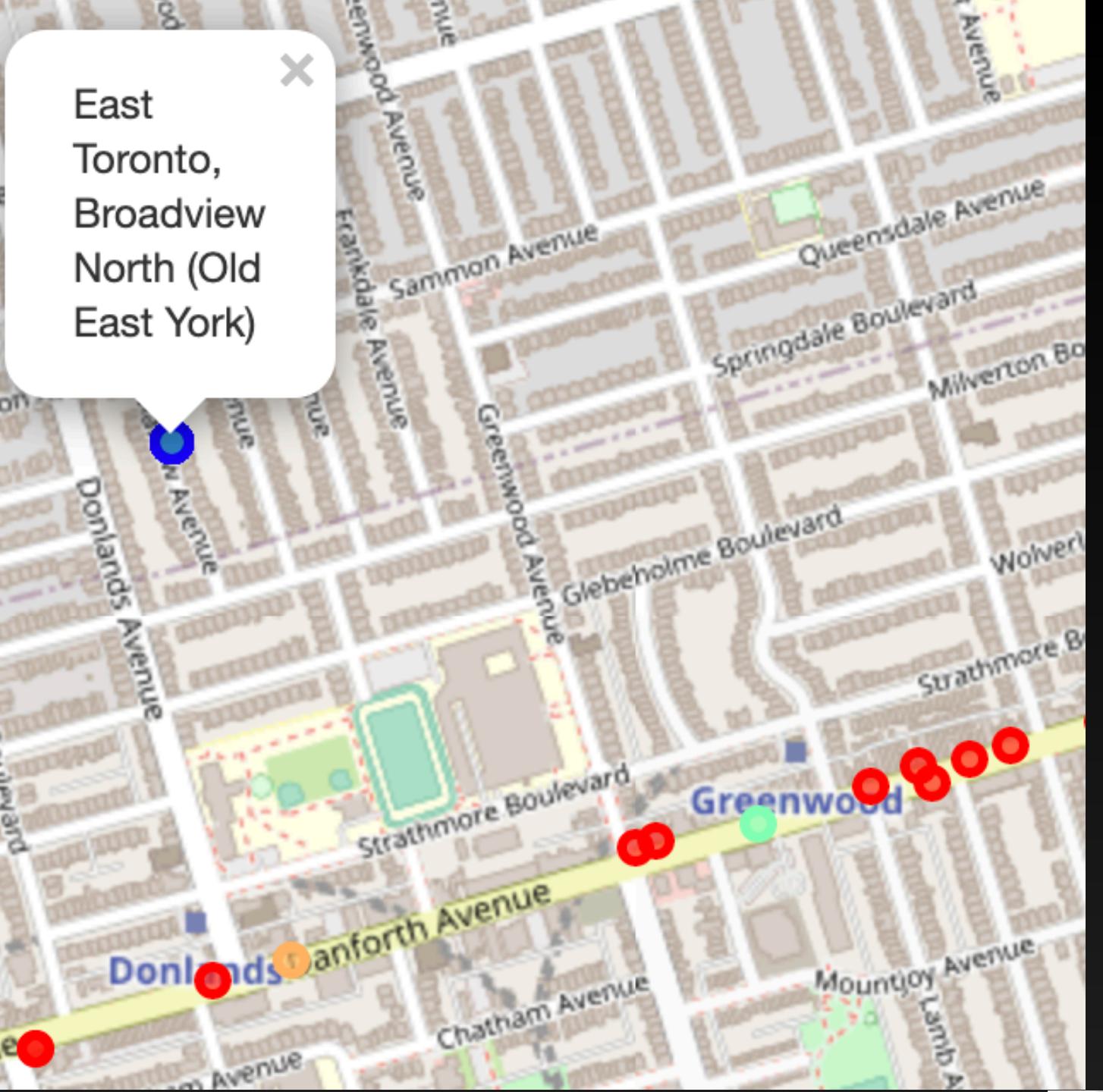
Results

- A cluster of restaurants can be implied that it is a prime location and the restaurant business is healthy in that area
- Absence of Sushi restaurant in the cluster can indicate that opening a Sushi restaurant will be beneficial as there will be no competition
- Based on these assumptions following slides shows a comparative model on a set of locations that can prove to be a game changer for Mr Kobayashi Maru

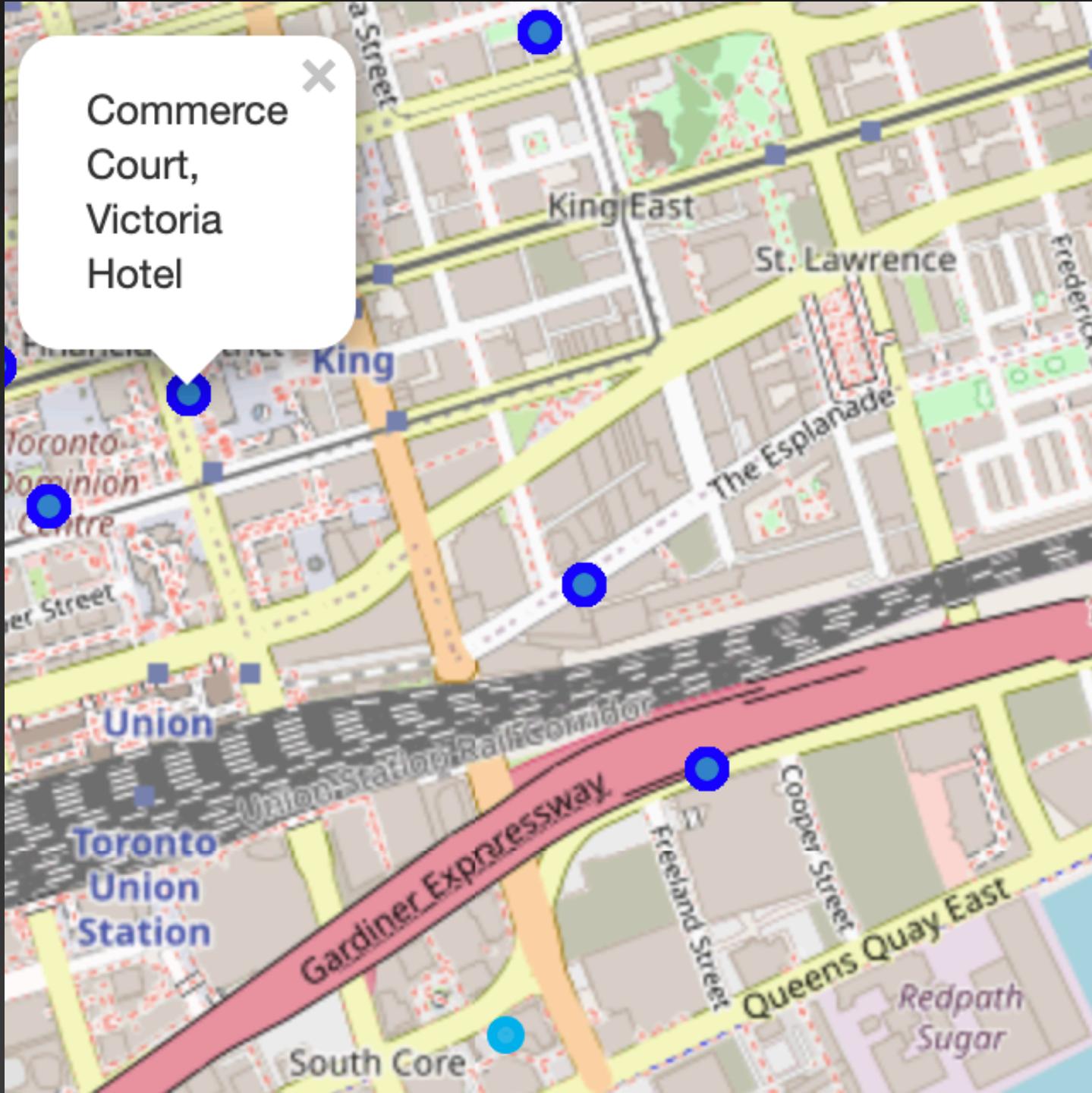
Location 1: Danforth West



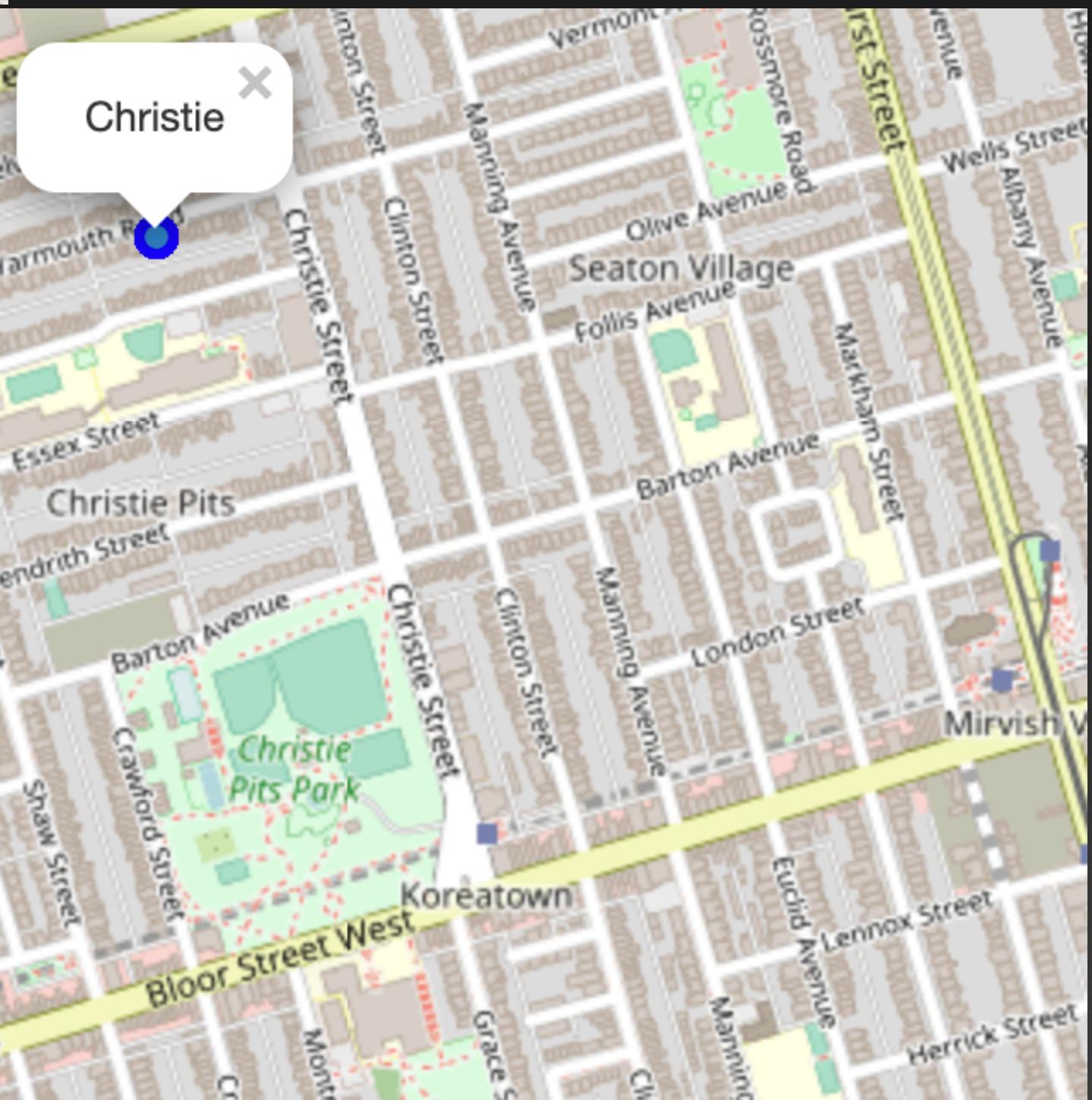
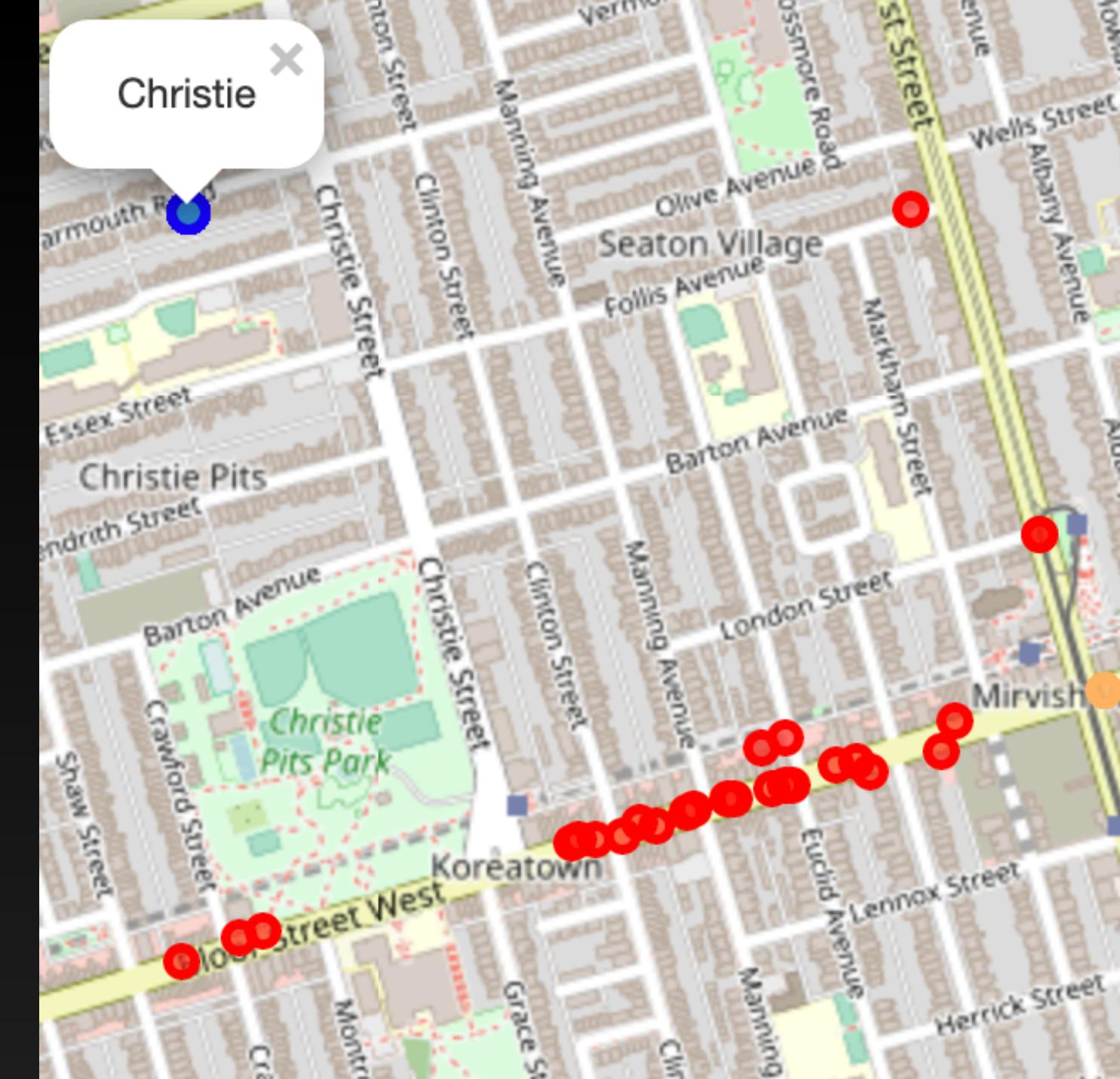
Location 2: Broadview North



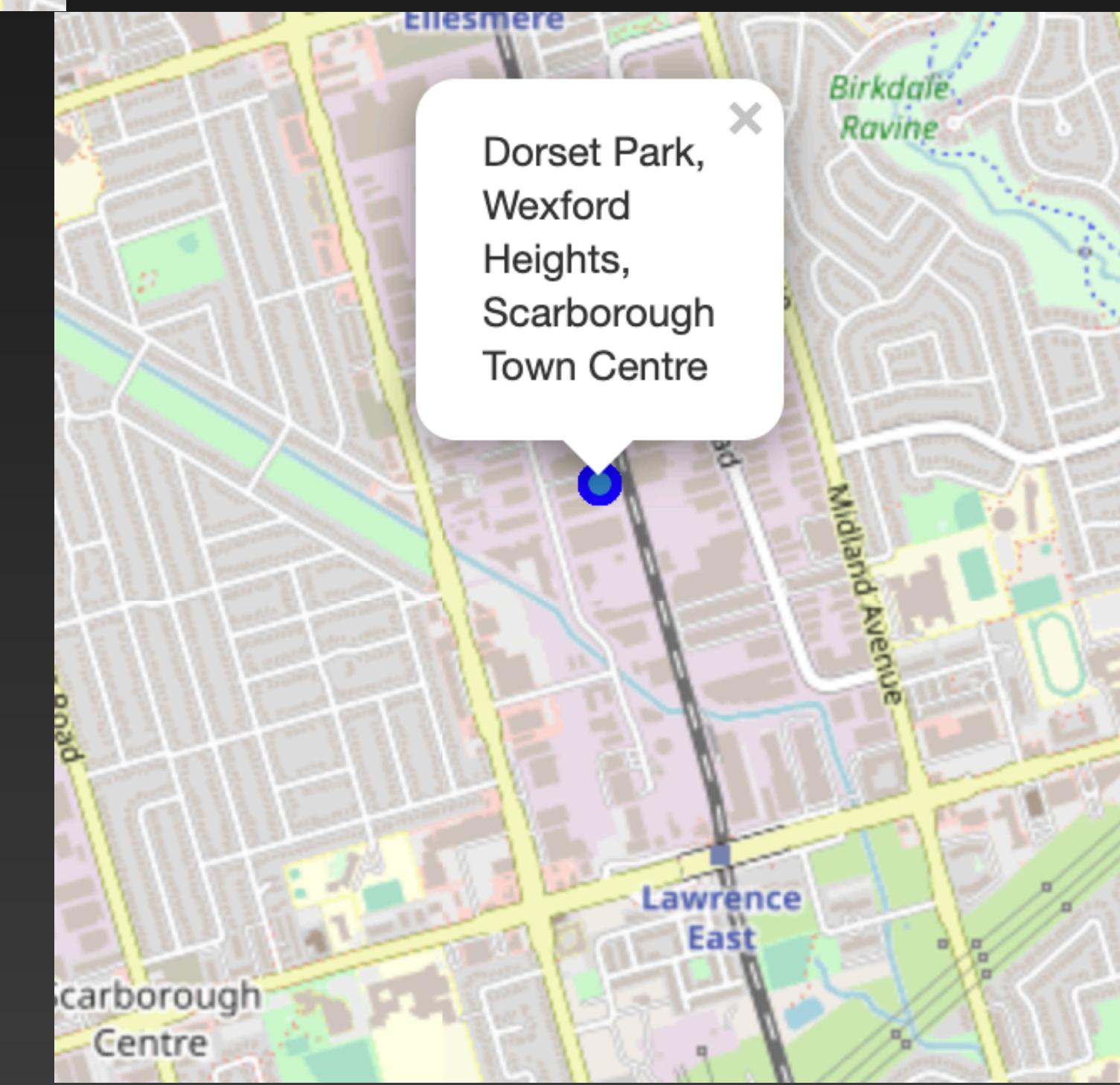
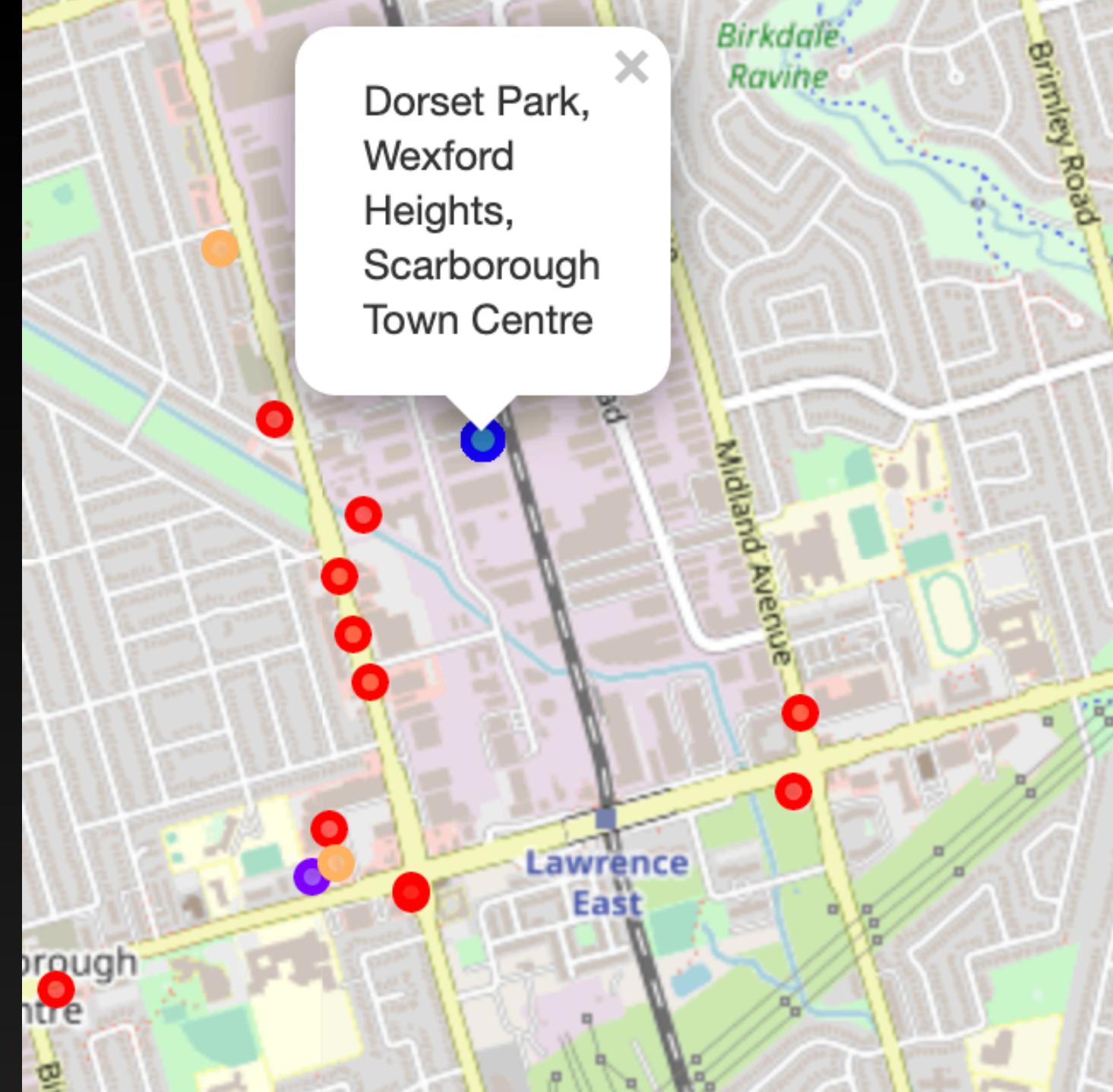
Location 3: Commerce Court



Location 4: Christie



Location 5: Dorset Park



Conclusion

- Based on the results. Kobayashi Maru can open his Sushi Bar in one of the following locations:
 - Danforth West
 - Broadview North
 - Commerce Court
 - Christie
 - Dorset Park