

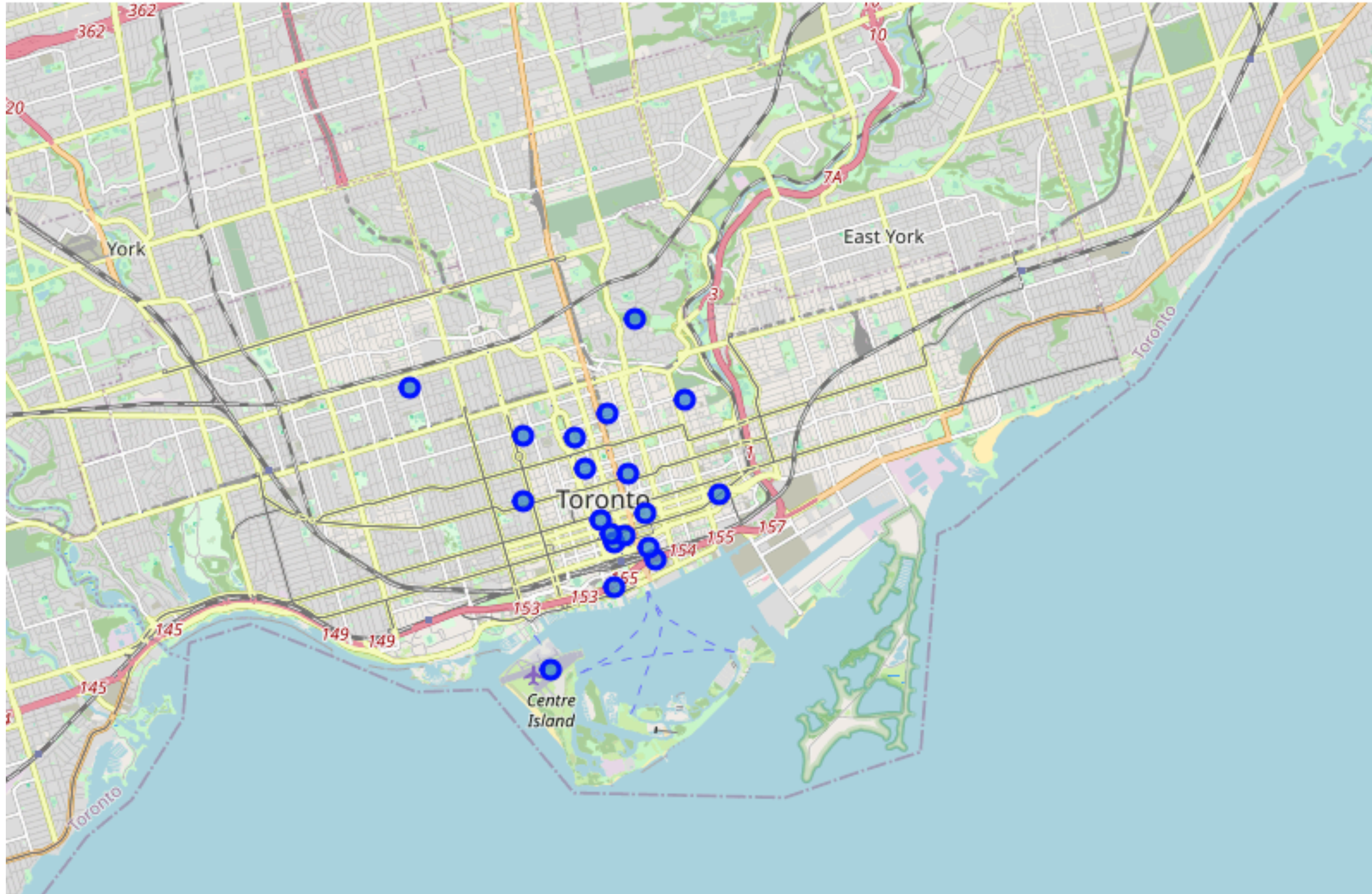
The Best Place to Open a New Restaurant in Toronto

For Applied Data Science Capstone

02/08/2021

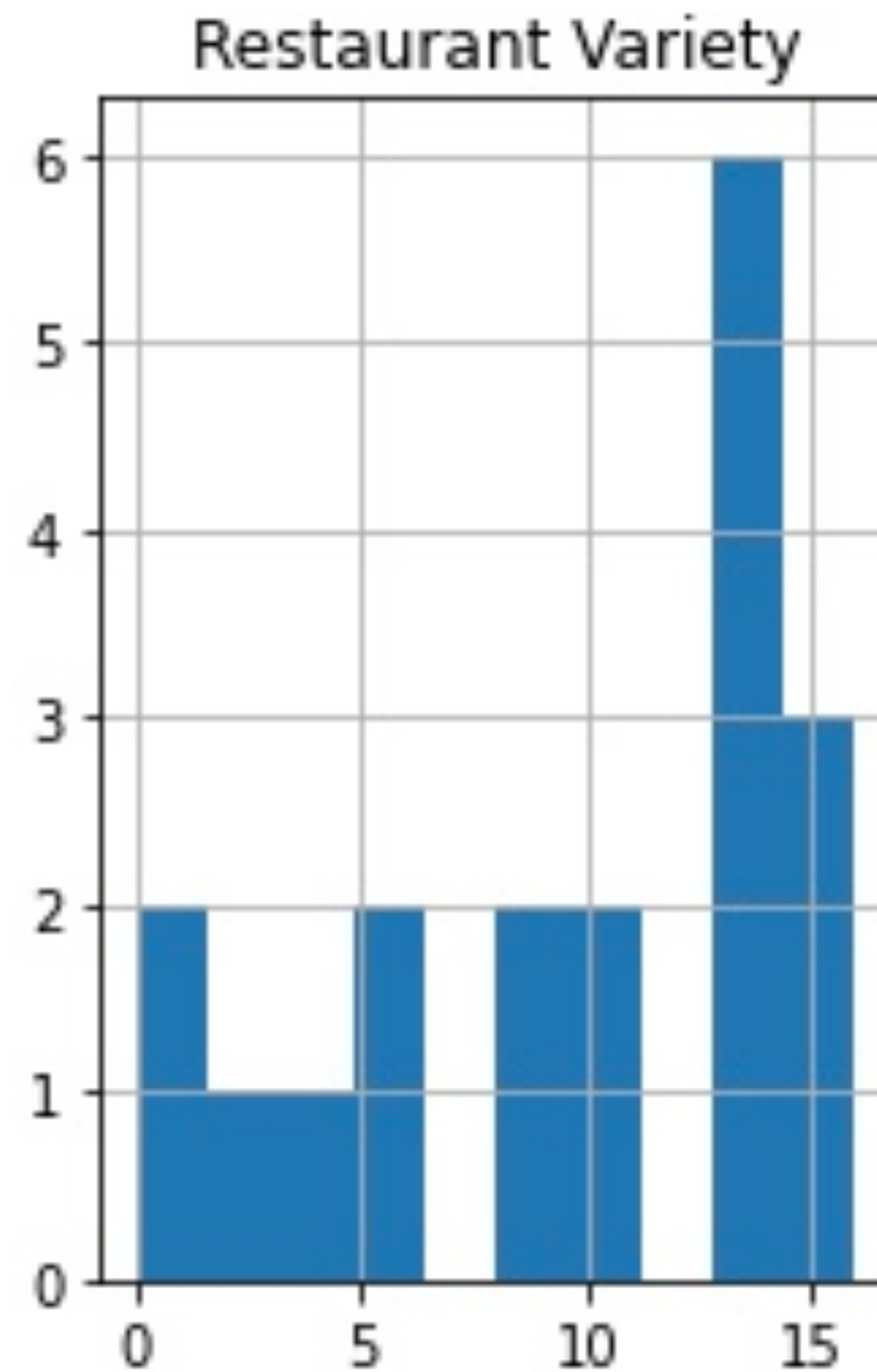
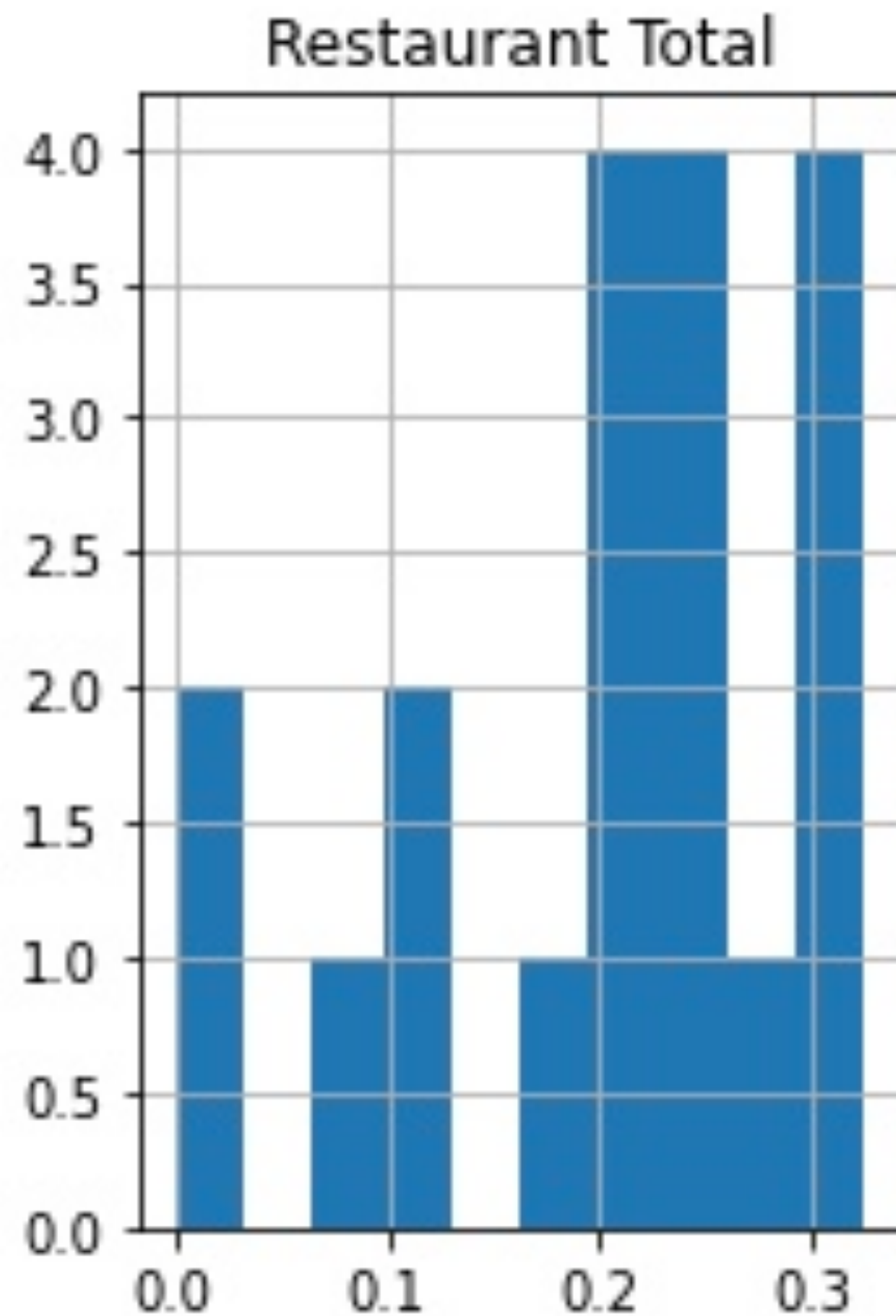
Neighborhoods in Toronto

Folium Map



Neighborhoods in Toronto

Top 100 venues in each neighborhood



After cleaning data, we plot histogram of restaurant total and restaurant variety.

Potential Place for Open a Restaurant

Restaurants Counts or Restaurant Variety: Top 5

Top 5 neighborhood by total restaurants

	Neighborhood	Restaurant Total	Restaurant Variety
4	Church and Wellesley	0.325000	14
5	Commerce Court, Victoria Hotel	0.310000	13
6	First Canadian Place, Underground city	0.300000	16
9	Kensington Market, Chinatown, Grange Park	0.295082	10
14	St. James Town	0.269231	15

Top 5 neighborhood by variety

	Neighborhood	Restaurant Total	Restaurant Variety
12	Richmond, Adelaide, King	0.244681	16
6	First Canadian Place, Underground city	0.300000	16
14	St. James Town	0.269231	15
17	Toronto Dominion Centre, Design Exchange	0.260000	14
4	Church and Wellesley	0.325000	14

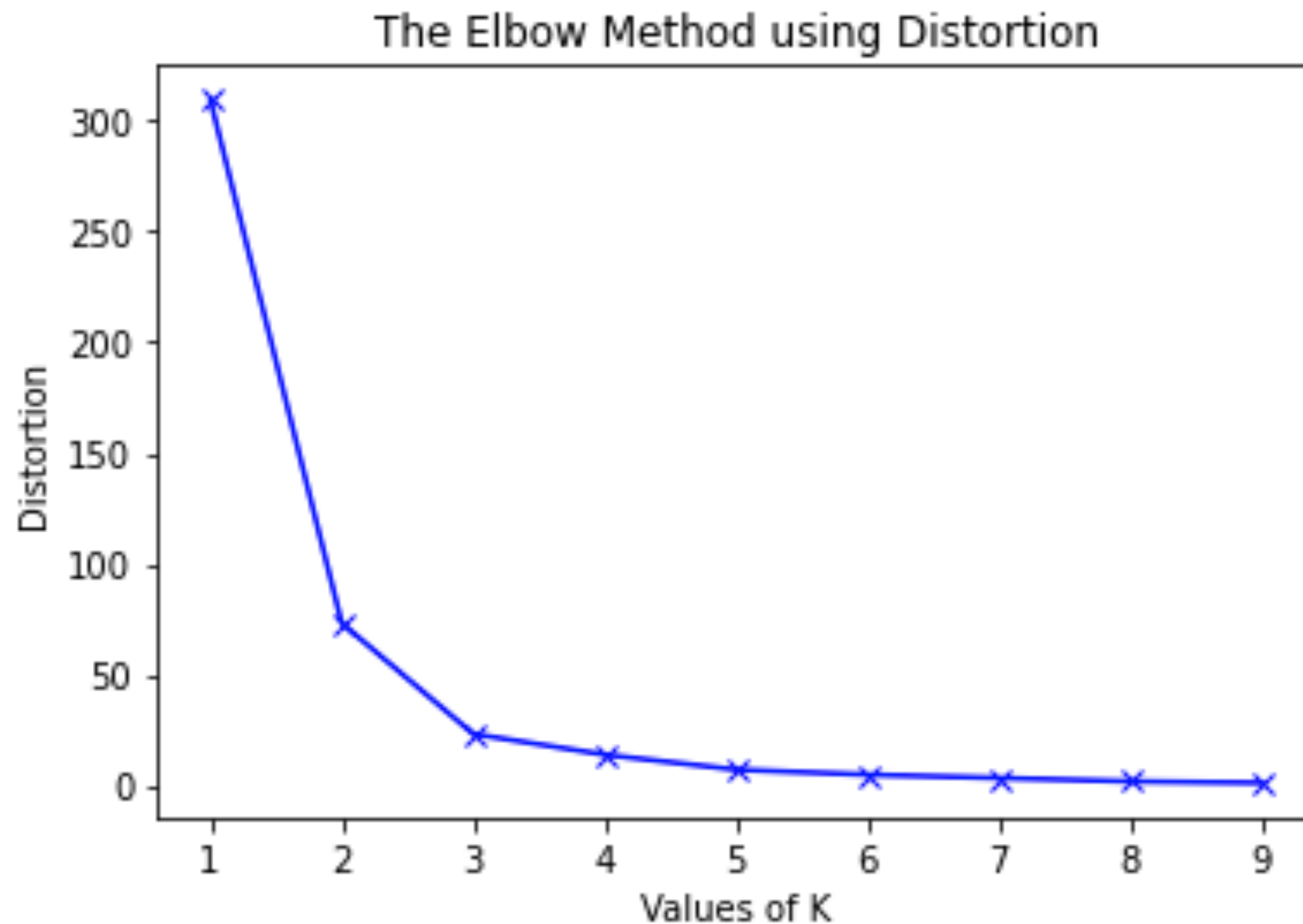
Analysis

Combining the neighborhoods with high total restaurants and high restaurant variety, the following neighborhoods are good places for opening a new restaurant.

- Church and Wellesley
- First Canadian Place, Underground city
- St.James Town

Which type of restaurant?

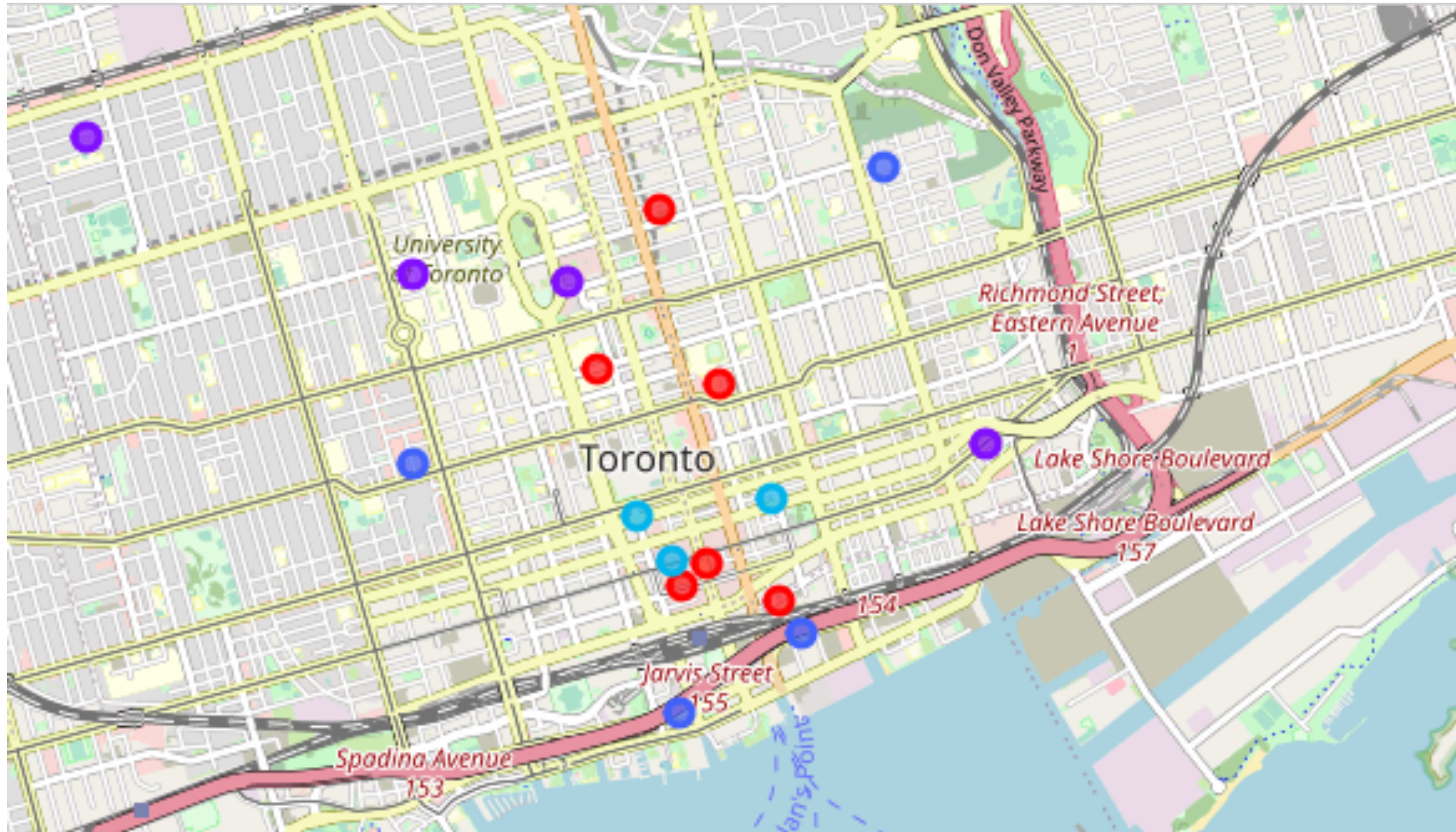
clustering



Analysis

We choose the optimum K for k-Means is 4 by using elbow method.

Toronto Map with Different Clusters



Four clusters have been mapped on the map.

- Church and Wellesley belongs to **Cluster 1**
- First Canadian Place, Underground city belongs to **Cluster 4**
- St. James Town belongs to **Cluster 3**

Cluster 1

Neighborhood

Garden
District,
Ryerson

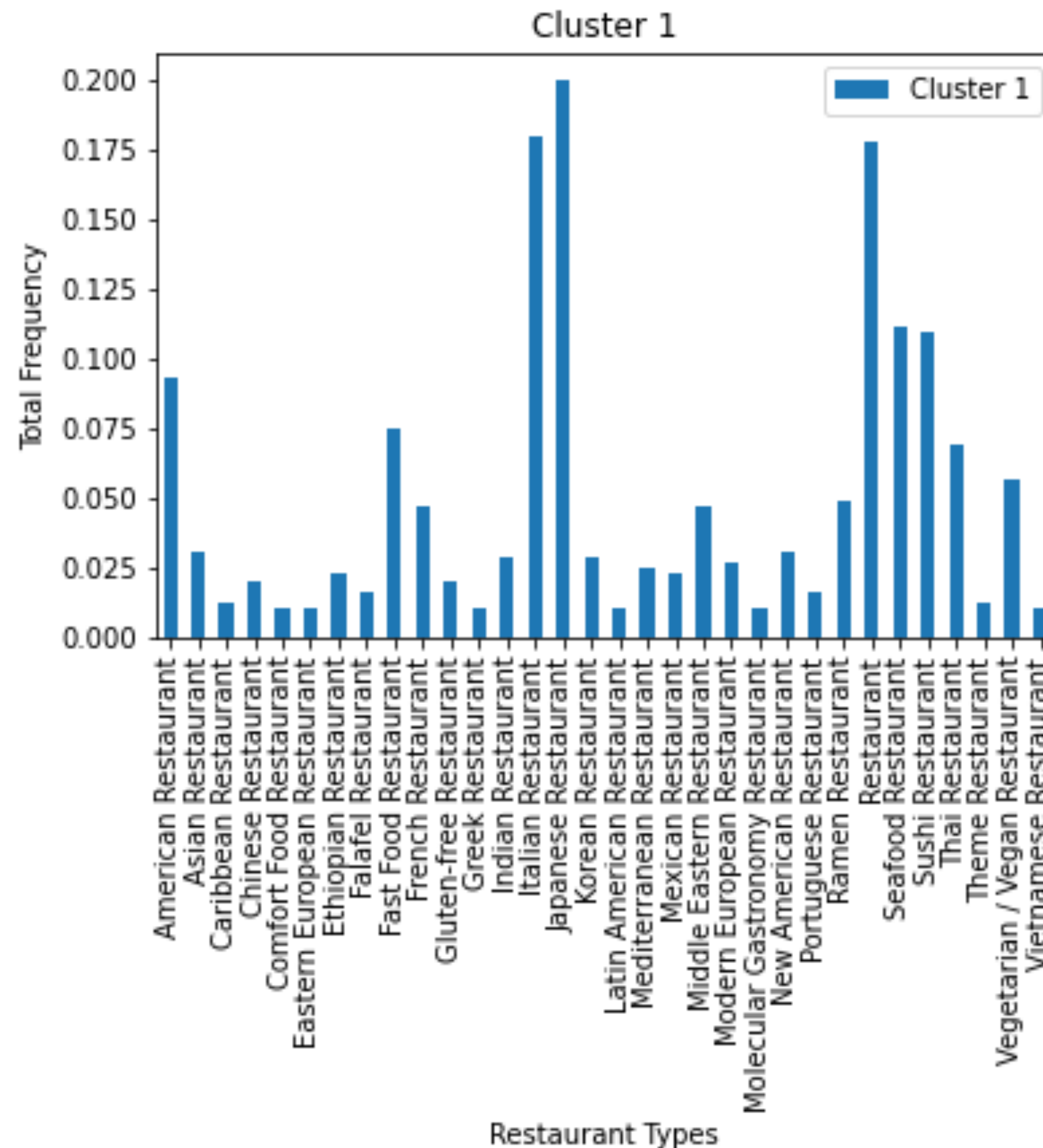
Central Bay
Street

Toronto
Dominion
Centre, Design
Exchange

Commerce
Court, Victoria
Hotel

Stn A PO
Boxes

Church and
Wellesley



Analysis for cluster 1

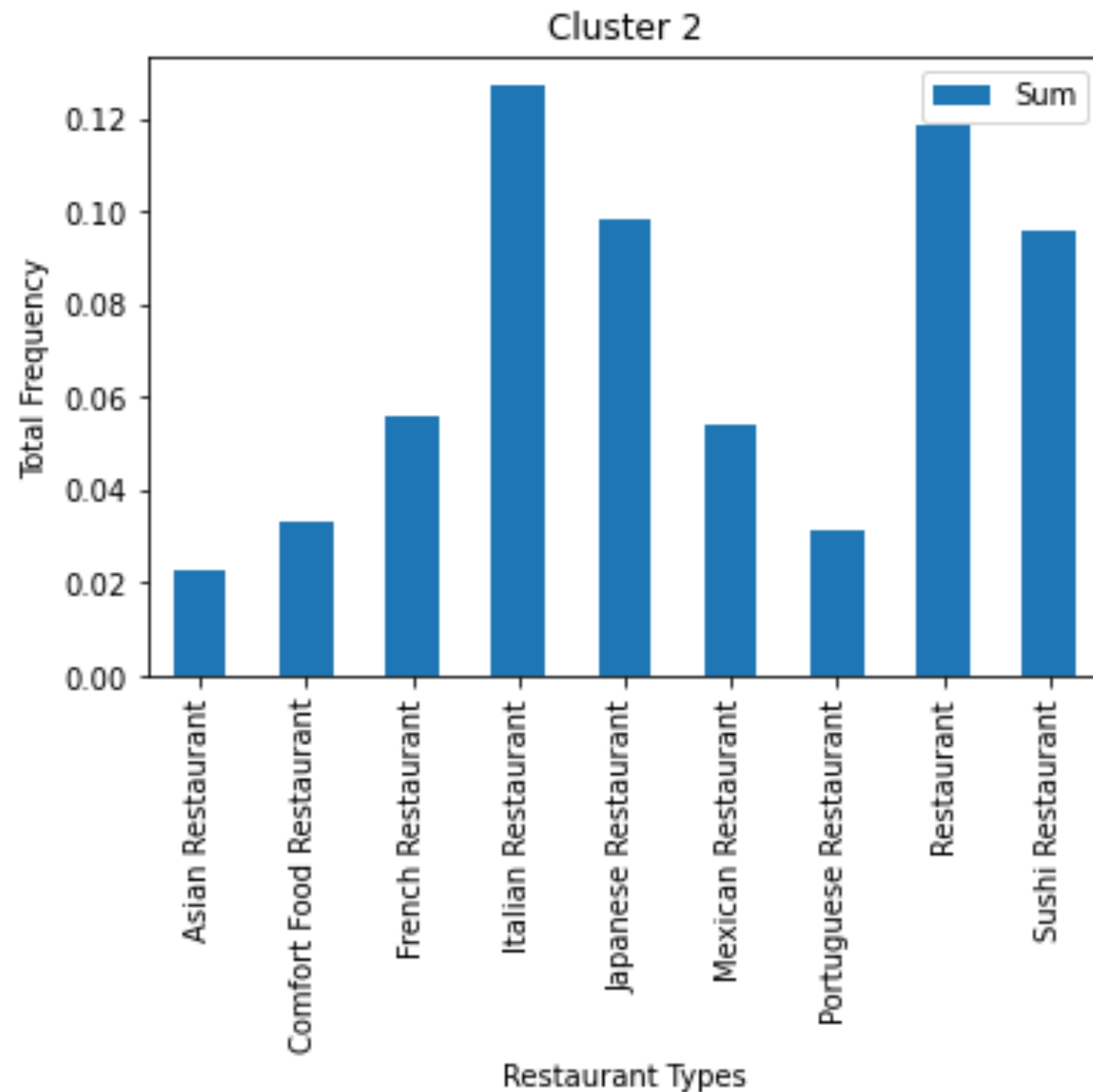
High rate of restaurant types:

- Italian restaurant
- Japanese restaurant
- Seafood restaurant
- Sushi restaurant
- unclassified restaurant

Cluster 2

Neighborhood

Regent Park, Harbourfront
Queen's Park, Ontario Provincial Government
Christie
University of Toronto, Harbord



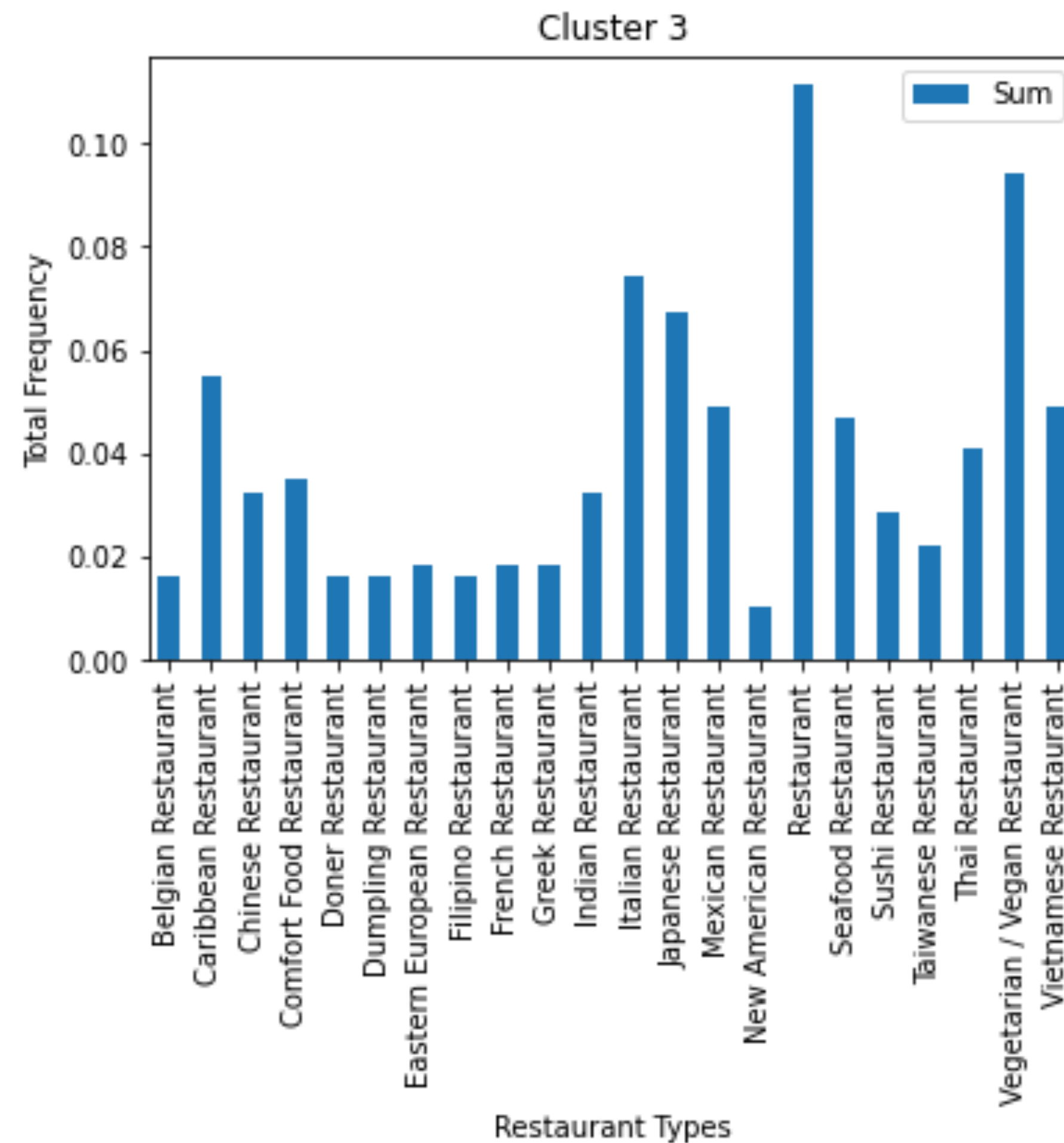
Analysis for cluster 2

High rate of restaurant types:

- Italian restaurant
- Japanese restaurant
- Unclassified restaurant
- Sushi restaurant

Cluster 3

Neighborhood	
4	Berczy Park
8	Harbourfront East, Union Station, Toronto Islands
12	Kensington Market, Chinatown, Grange Park
16	St. James Town, Cabbagetown



Analysis for cluster 3

High rate of restaurant types:

- Unclassified restaurant
- Italian restaurant
- Japanese restaurant
- Vegetarian/Vegan restaurant

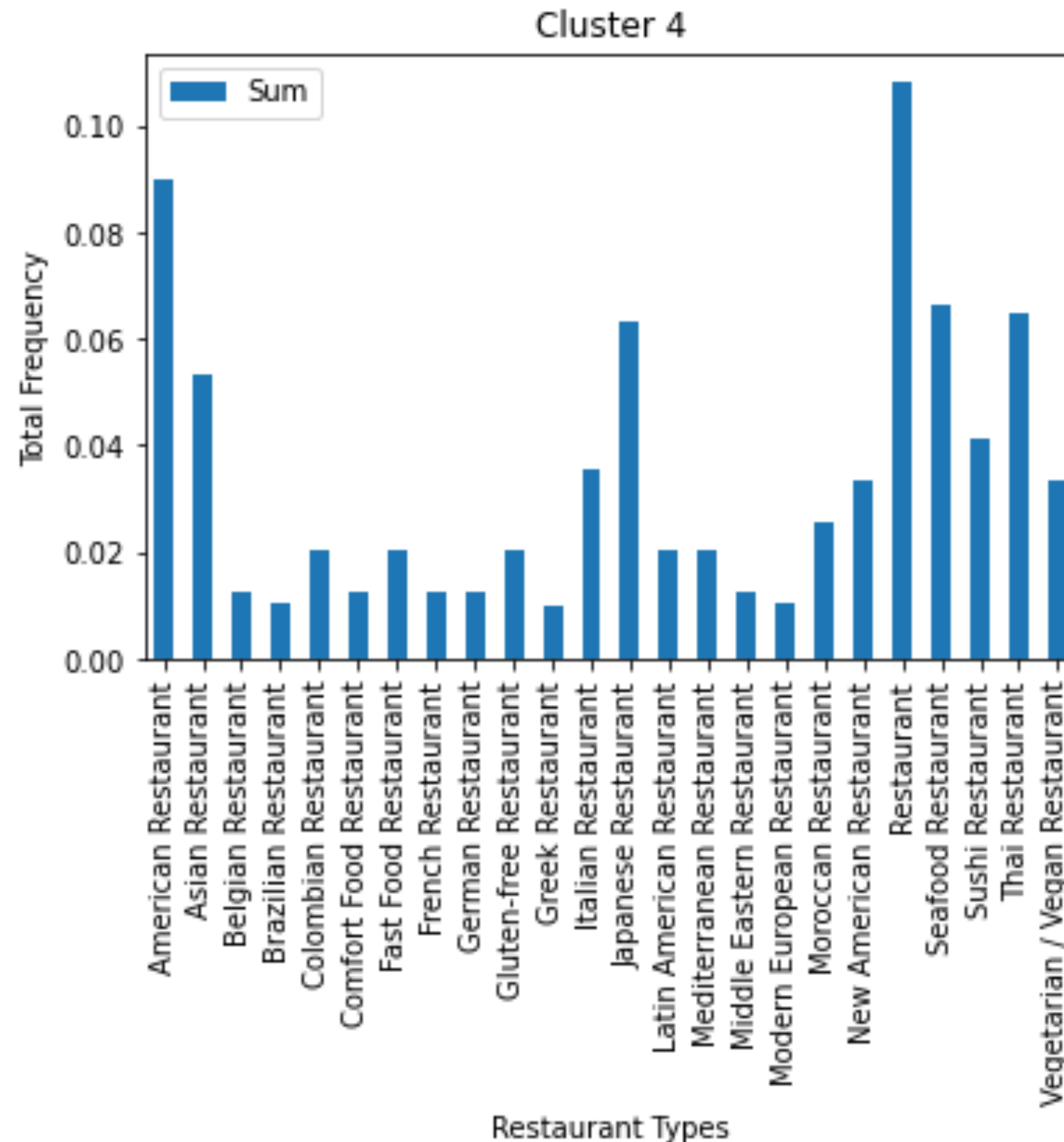
Cluster 4

Neighborhood

St. James
Town

Richmond,
Adelaide, King

First Canadian
Place,
Underground
city



Analysis for cluster 4

High rate of restaurant types:

- Unclassified restaurant
- American restaurant
- Seafood restaurant
- Japanese restaurant

Results

Suggestions

Church and Wellesley

(cluster 1)

- Italian restaurant
- Japanese restaurant
- Seafood restaurant

Suggestions

St.James Town

(cluster 3)

- Italian restaurant
- Japanese restaurant
- Vegetarian/Vegan restaurant

Suggestions

First Canadian Place,
Underground city

(cluster 4)

- American restaurant
- Seafood restaurant
- Japanese restaurant