NEW YORK VS. TORONTO

RESTAURANT SITE ANALYSIS

INTRODUCTION

PROJECT

- Hypothetical project, and hypothetical client
- Choose a city to open a dessert shop
- New York city or Toronto City
- Which city has a more diverse palette?
- Which city has a better chance of succeed?

INTRODUCTION

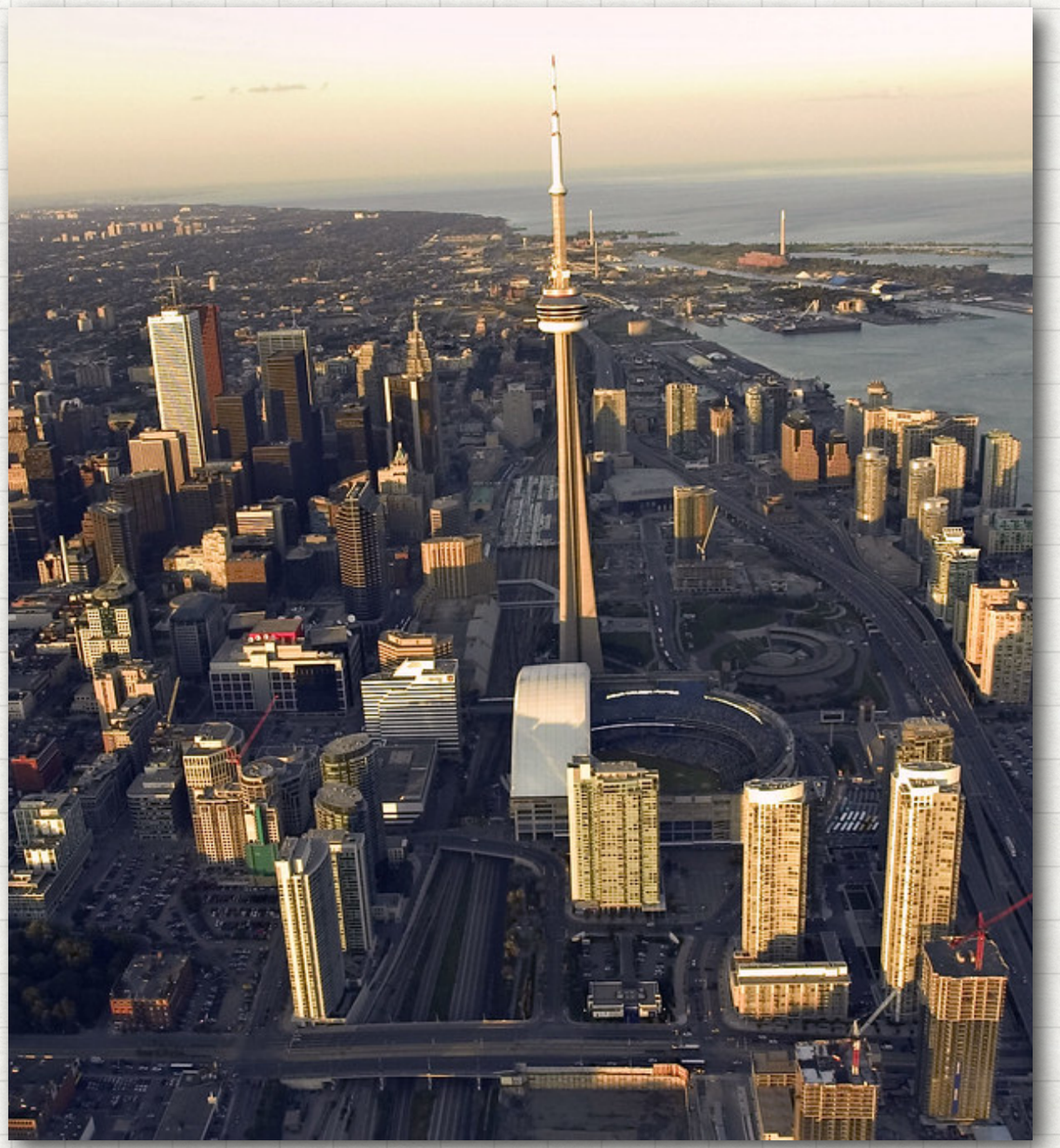
NEW YORK CITY

- One of the most populous city in the U.S.
- 8.4+ million population
- Most densely populated major city
- GMP: $2.0 trillion

INTRODUCTION

TORONTO CITY

- Capital city of Ontario
- Most populous city in Canada
- 3.0+ million population
- Financial Capital of Canada



DATA

ACQUISITION + PREPARATION

- **Location data**
  - Postal Codes, Borough, Neighborhood, Coordinates
  - Sources: Wikipedia, IBM
- **Venues data**
  - Eateries, food type, coordinates
  - Sources: Foursquare API

METHODOLOGY

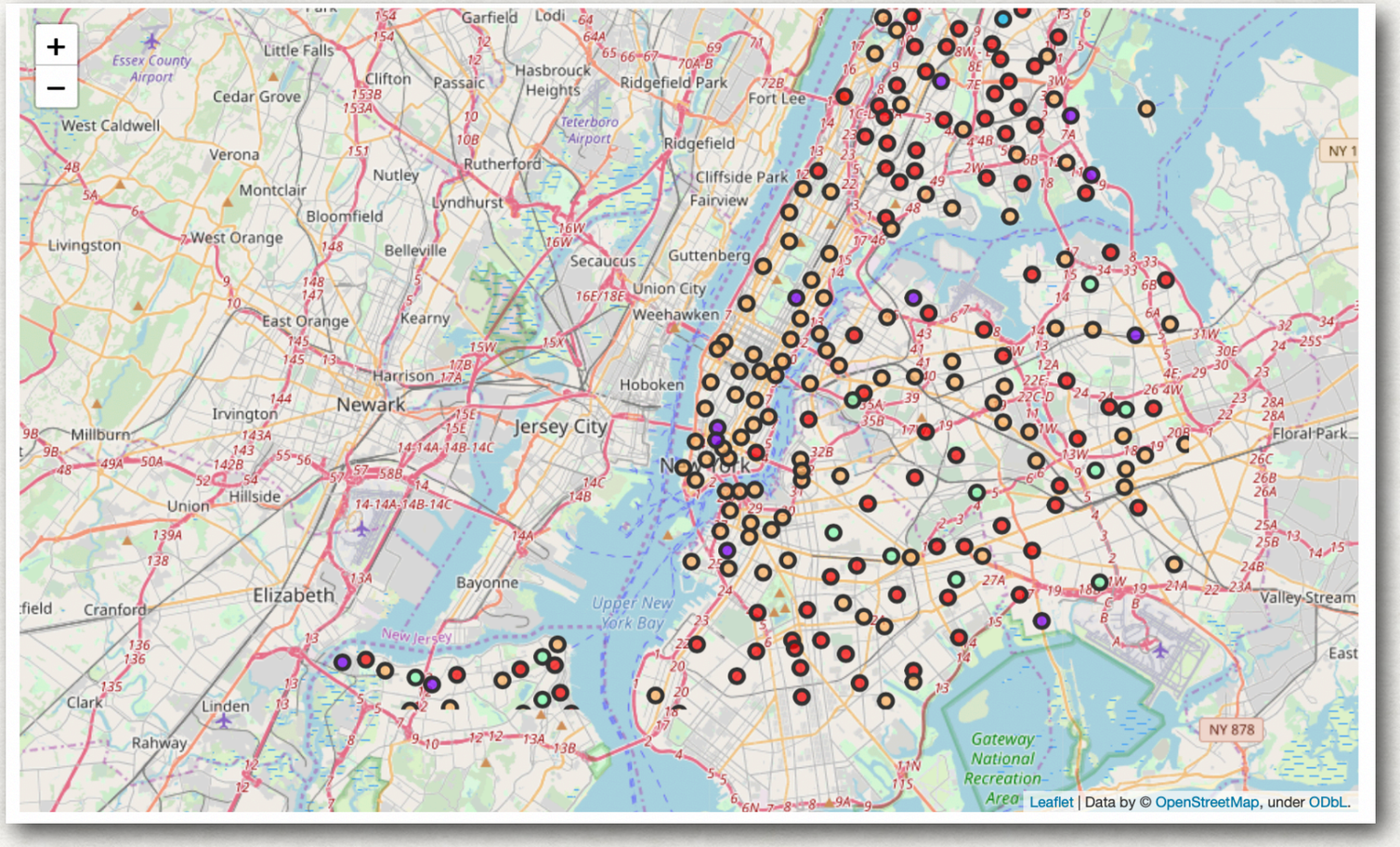
- Load in initial location data and clean
- Attach coordinates to form a merged dataset
- Generate map to show all neighborhoods
- Connect to Foursquare and acquire Venue details
- Merge the Venue data and Location data
- Generate clusters and map

NEW YORK

Processed Dataframe

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Wakefield	40.894705	-73.847201	Dunkin'	40.890459	-73.849089	Donut Shop
1	Wakefield	40.894705	-73.847201	Cooler Runnings Jamaican Restaurant Inc	40.898083	-73.850259	Caribbean Restaurant
2	Wakefield	40.894705	-73.847201	SUBWAY	40.890468	-73.849152	Sandwich Place
3	Wakefield	40.894705	-73.847201	Pitman Deli	40.894149	-73.845748	Food
4	Wakefield	40.894705	-73.847201	Central Deli	40.896728	-73.844387	Deli / Bodega

Cluster Map

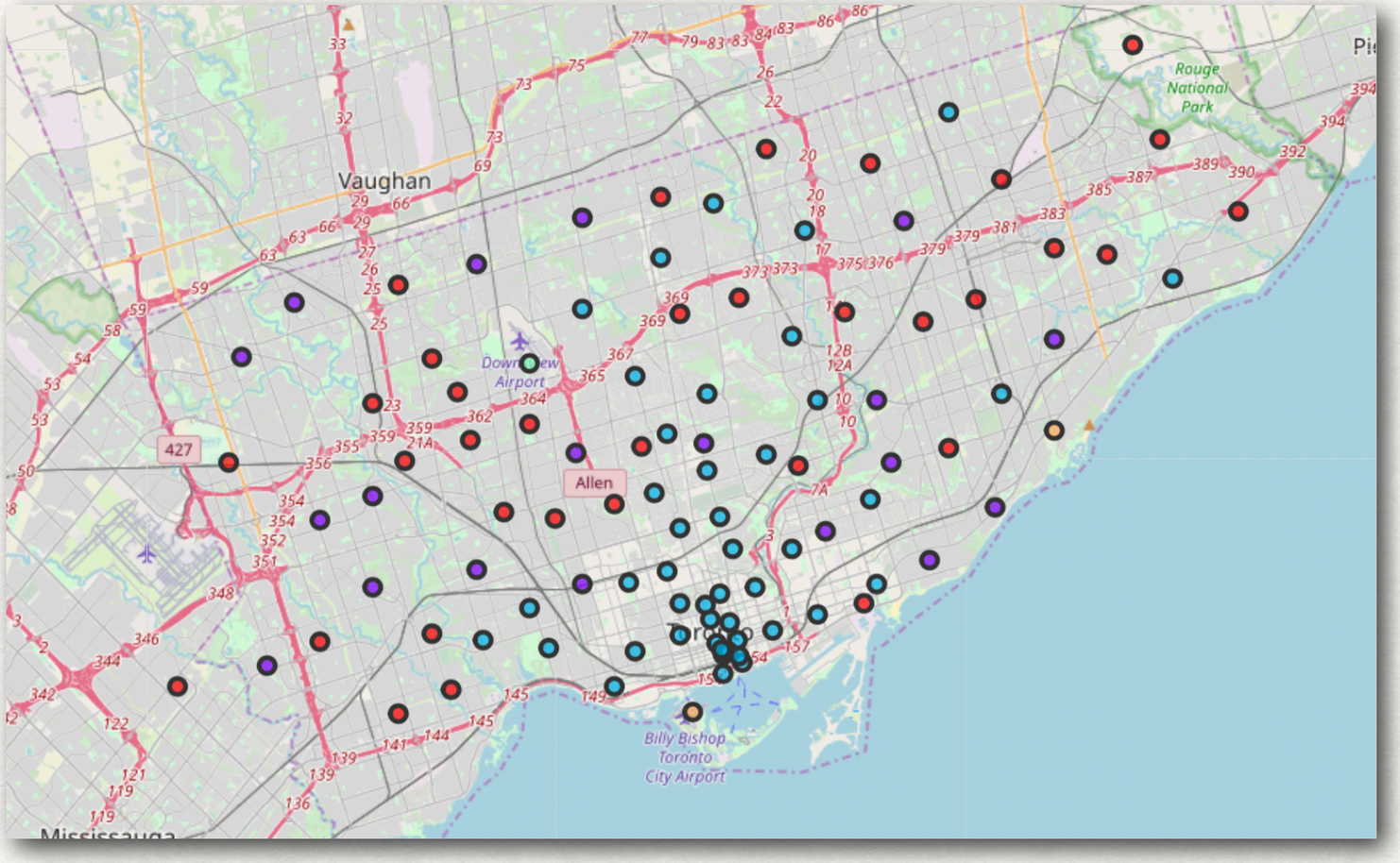


TORONTO

Processed Dataframe

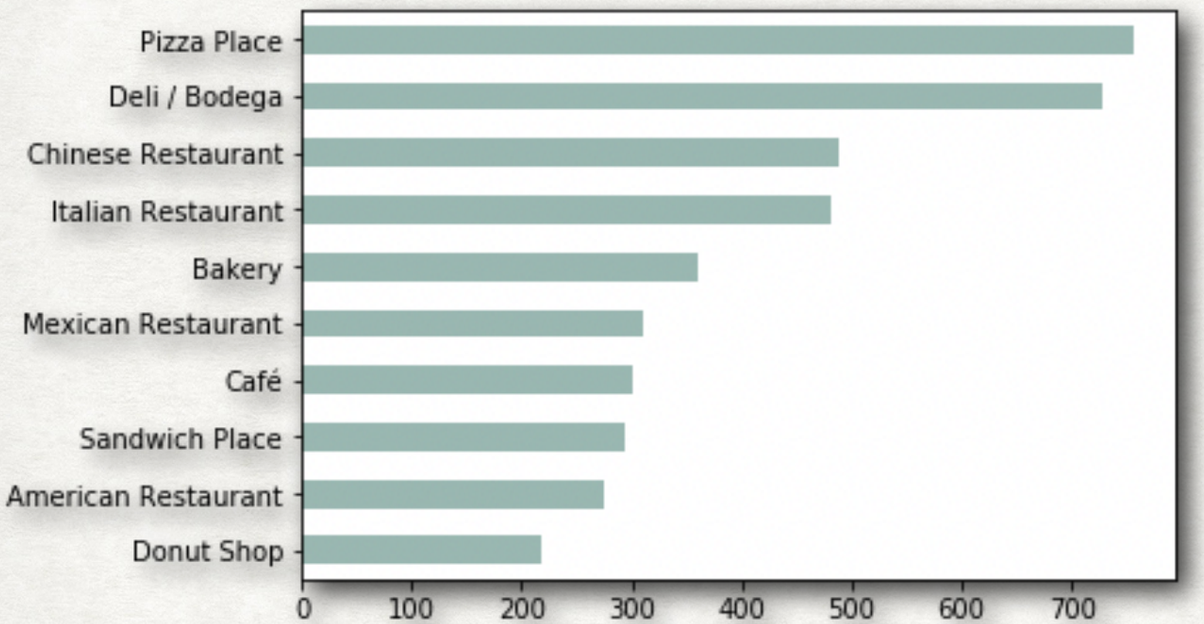
	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Rouge, Malvern	43.806686	-79.194353	Wendy's	43.807448	-79.199056	Fast Food Restaurant
1	Rouge, Malvern	43.806686	-79.194353	Meena's Fine Foods	43.804476	-79.199753	Indian Restaurant
2	Guildwood, West Hill, Morningside	43.763573	-79.188711	Doug's Bakery	43.762400	-79.192285	Bakery
3	Guildwood, West Hill, Morningside	43.763573	-79.188711	Sail Sushi	43.765951	-79.191275	Restaurant
4	Guildwood, West Hill, Morningside	43.763573	-79.188711	Big Bite Burrito	43.766299	-79.190720	Mexican Restaurant

Cluster Map

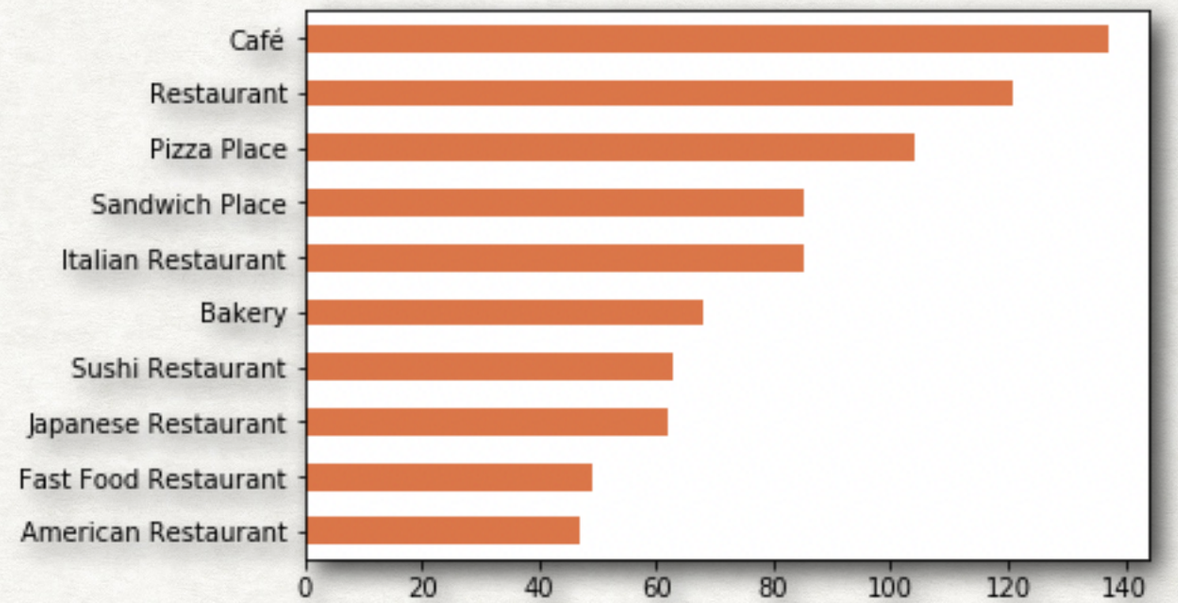


ANALYSIS

New York City



Toronto City



New York really like its pizza! Toronto seems to be more open to niche cuisines.

For detailed cluster analysis, please refer to accompanied report

CONCLUSION

DISCUSSION FOR FUTURE STUDY

- **Toronto for the win!**
- The city has a preference for cafes, niche cuisines and etc.
- More palette diverse compared to New York City
- Future deeper analysis on neighborhood selection, and bring in demographics to redo clusterings, or discover palette preference for different neighborhood.