KBBQ LOCATION IN TORONTO

INTRODUCTION – BUSINESS PROBLEM

- In this project we will try to find an optimal location for a KBBQ restaurant in the Toronto Area. Korean BBQ has grown in popularity in recent years that requires little cooking equipment due to everything being prepped in the back and cooked at the table. KBBQ is great for an investor not trying to invest heavily in kitchen equipment and still get into the restaurant industry.

- I will be looking for an optimum location that is close to city centers and also close to asian neighborhoods such as China town, little Tokyo, or Korea town that will likely have a high asian population, high resturant density, and close to city centers for all ethnicities to enjoy!

- This is targeted to restaurant entrepreneurs that would like to jump in on the KBBQ craze and open up a KBBQ restaurant in Toronto.
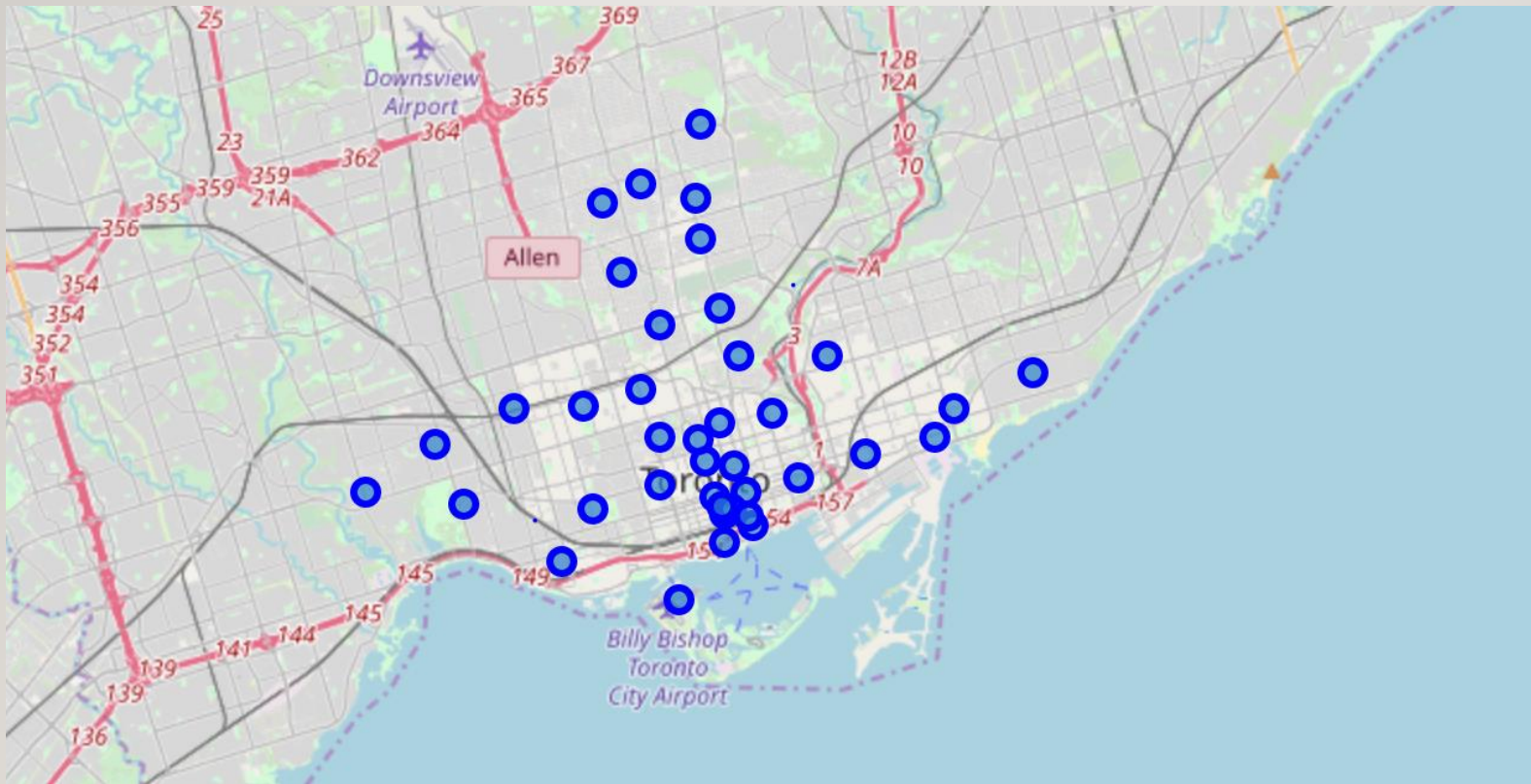
DATA

- Based on definition of our problem, factors that will influence our decission are:
  - number of Asian restaurants in the neighborhood
  - number of and distance to other Asian restaurants in the neighborhood
  - distance of neighborhood from city center
- Following data sources will be needed to extract/generate the required information:
  - number of restaurants and their type and location in every neighborhood will be obtained using Foursquare API
  - coordinate of Toronto center will be obtained using Google Maps API geocoding

METHODOLOGY

- In this project we will be focusing on the areas in Toronto that have a high restaurant density. Looking for a neighborhood with more asian restaurants.

- In the first step we collect location and type of business density in neighborhoods in Toronto. Then we analyze the areas that have asian restaurants as one of their most common venue. Finally we pick the neighborhoods with high asian restaurant neighborhoods.

ANALYSIS

- Using https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M we were able to save down the table into a dataframe and use a folium library to see a map of Toronto and the neighborhoods surrounding it.
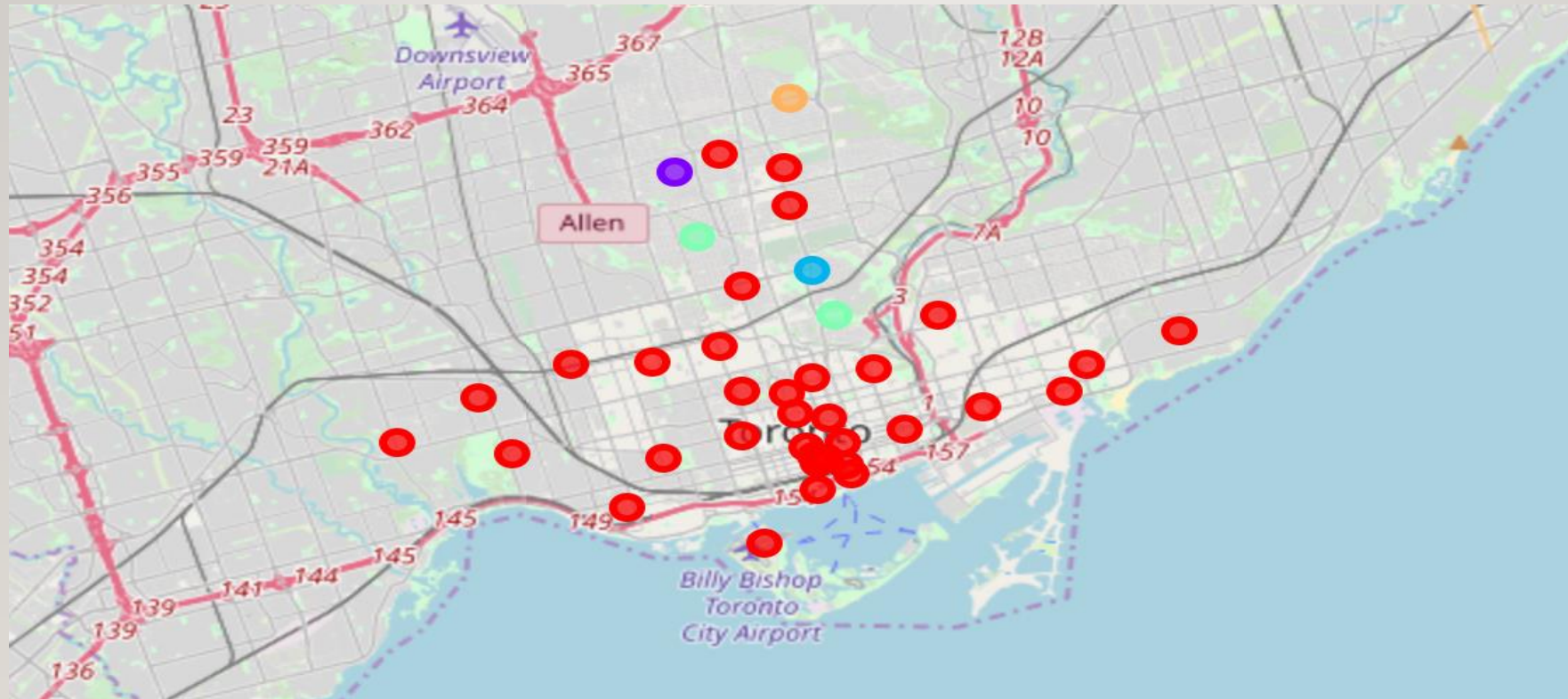
- Using Foursquare API we were able to use the longitude and latitudes to see venues by categories in a 500m radius within each neighborhood and create a dataframe by most common venue.

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Berczy Park	Coffee Shop	Beer Bar	Bakery	Cocktail Bar	Seafood Restaurant	Steakhouse	Farmers Market	Cheese Shop	Café	Park
1	Brockton,Parkdale Village,Exhibition Place	Café	Breakfast Spot	Coffee Shop	Bakery	Bar	Italian Restaurant	Restaurant	Climbing Gym	Stadium	Burrito Place
2	Business Reply Mail Processing Centre 969 Eastern	Gym / Fitness Center	Auto Workshop	Park	Comic Shop	Pizza Place	Recording Studio	Restaurant	Burrito Place	Brewery	Light Rail Station
3	CN Tower,Railway Lands,South Niagara,Harbourfr...	Airport Service	Airport Terminal	Airport Lounge	Plane	Bar	Airport	Airport Food Court	Airport Gate	Sculpture Garden	Harbor / Marina
4	Cabbagetown,St. James Town	Coffee Shop	Bakery	Restaurant	Café	Italian Restaurant	Pub	Market	Pizza Place	Pharmacy	Breakfast Spot

RESULTS

We cluster the neighborhoods into 5 clusters to examine each cluster

RESULTS

- Central Toronto in Cluster 3 and 4 are close enough to the city center, yet is full of other restaurants and has Dim Sum and Dumpling restaurants as their 5th and 8th most common venue.

	Borough	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
4	Central Toronto	4	Park	Swim School	Bus Line	Women's Store	Dim Sum Restaurant	Event Space	Ethiopian Restaurant	Electronics Store	Eastern European Restaurant	Dumpling Restaurant

	Borough	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
8	Central Toronto	3	Restaurant	Playground	Trail	Women's Store	Ethiopian Restaurant	Electronics Store	Eastern European Restaurant	Dumpling Restaurant	Donut Shop	Doner Restaurant