

# The battle of neighborhoods: Final Report

## Introduction

Suppose we want to open a Indian restaurant, which area in Downtown Toronto is an better?  
So we pay attention to the following factors, based on which to decide where to put our Indian restaurant

- number of restaurants
- Money ratio of people in that area

## 2 Methodology

- *Attractiveness* is our goal, used to measure whether it's a good idea to open the restaurant in this neighborhood

## Data description

Sources of the previously mentioned data where are needed in our research include

- Population by Borough and Neighborhood. Statistics Bureau of Canada, UN Database.
- Restaurants by number, style, and locations. Collection from Foursquare API

## 4 Analytics and Results

### 4.1 Administrative data of Neighborhoods

In the Borough named Downtown Toronto, There are 16 neighborhoods, each with the following Postal Code and coordinates (latitude, longitude respectively), see Figure 1

Index	PostalCode	Neighborhood	Borough	Latitude	Longitude
0	50	M4W	Rosedale	Downtown Toronto	43.679563 -79.377529
1	51	M4X	Cabbagetown, St. James Town	Downtown Toronto	43.667967 -79.367675
2	52	M4Y	Church and Wellesley	Downtown Toronto	43.665860 -79.383160
3	53	M5A	Harbourfront, Regent Park	Downtown Toronto	43.654260 -79.360636
4	54	M5B	Ryerson, Garden District	Downtown Toronto	43.657162 -79.378937
5	55	M5C	St. James Town	Downtown Toronto	43.651494 -79.375418
6	56	M5E	Berczy Park	Downtown Toronto	43.644771 -79.373306
7	57	M5G	Central Bay Street	Downtown Toronto	43.657952 -79.387383
8	58	M5H	Adelaide, King, Richmond	Downtown Toronto	43.650571 -79.384568
9	59	M5J	Harbourfront East, Toronto Islands, Union Station	Downtown Toronto	43.640816 -79.381752
10	60	M5K	Design Exchange, Toronto Dominion Centre	Downtown Toronto	43.647177 -79.381576
11	61	M5L	Commerce Court, Victoria Hotel	Downtown Toronto	43.648198 -79.379817
12	66	M5S	Harbord, University of Toronto	Downtown Toronto	43.662696 -79.400049
13	67	M5T	Chinatown, Grange Park, Kensington Market	Downtown Toronto	43.653206 -79.400049
14	68	M5V	CN Tower, Bathurst Quay, Island airport, Harbo...	Downtown Toronto	43.628947 -79.394420
15	69	M5W	Stn A PO Boxes 25 The Esplanade	Downtown Toronto	43.646435 -79.374846
16	70	M5X	First Canadian Place, Underground city	Downtown Toronto	43.648429 -79.382280
17	75	M6G	Christie	Downtown Toronto	43.669542 -79.422564

Chinese Restaurant	40
Restaurant	39
Italian Restaurant	33
Japanese Restaurant	26
Steakhouse	20
Seafood Restaurant	20
American Restaurant	20
Pizza Place	19
Vegetarian / Vegan Restaurant	17
Thai Restaurant	17
Burger Joint	16
Breakfast Spot	15
Sushi Restaurant	14
Sandwich Place	12
Salad Place	10
Fast Food Restaurant	10
Diner	10
Mexican Restaurant	8
French Restaurant	8
Creperie	7
Indian Restaurant	7
Fried Chicken Joint	7
Vietnamese Restaurant	7
New American Restaurant	6
Burrito Place	5
Greek Restaurant	5
Plaza	5
Mediterranean Restaurant	4
Middle Eastern Restaurant	4
Comfort Food Restaurant	4
Caribbean Restaurant	4
Gluten-free Restaurant	3
Beer Store	3
Latin American Restaurant	3
Eastern European Restaurant	3
Belgian Restaurant	3
Soup Place	3
Taco Place	2

Figure 2: Restaurants of Downtown Toronto

## Restaurants of Neighborhoods

- There are 6 out of 16 neighborhoods in which Indian restaurants consist of more than 9
  - Chinatown, Grange Park, Kensington Market
  - Harbord, University of Toronto
  - Cabbagetown, St. James Town
  - Central Bay Street
  - First Canadian Place, Underground city
  - Ryerson, Garden District

Neighborhood	14th Street Commons Venue	24th Street Commons Venue	34th Street Commons Venue	44th Street Commons Venue	54th Street Commons Venue	64th Street Commons Venue	74th Street Commons Venue	84th Street Commons Venue	94th Street Commons Venue	104th Street Commons Venue
6 Adelaide, King Richmond	Chinese Restaurant	American Restaurant	Thai Restaurant	Steakhouse	Burger Joint	Sushi Restaurant	Restaurant	Sushi Place	Pizza Place	Breakfast Spot
7 Berczy Park	Italian Restaurant	Steakhouse	Italian Restaurant	Cheese	Comfort Food Restaurant	Eastern European Restaurant	French Restaurant	Restaurant	Breakfast Spot	Cafe
8 Cabbagetown, St. James Town	Chinese Restaurant	Pizza Place	Italian Restaurant	Restaurant	Indian Restaurant	Thai Restaurant	Beer Store	Japanese Restaurant	Breakfast Spot	Cafe
9 Central Bay Street	Italian Restaurant	Chinese Restaurant	Burger Joint	Steakhouse	Fast Food Restaurant	Japanese Restaurant	Sushi Place	Indian Restaurant	Sushi Restaurant	Steakhouse
4 Chinatown, Grange Park, Kensington Market	Chinese Restaurant	Wegmans / Vegan Restaurant	Restaurant	Wegmans Restaurant	Burger Joint	Caribbean Restaurant	Pasta Place	Indian Restaurant	Japanese Restaurant	Coffee Restaurant
9 Church	Italian Restaurant	Cafe	Restaurant	Wings Joint	Cheese	French Restaurant	Flower Shop	Pizzeria Restaurant	Fast Food Restaurant	Waffle Restaurant
4 Church and Wellesley	Japanese Restaurant	Sushi Restaurant	Restaurant	Mediterranean Restaurant	Burger Joint	Chinese Restaurant	Fast Food Restaurant	Chinese Restaurant	Italian Restaurant	Vietnamese Restaurant
7 Commerce Court, Victoria Hotel	American Restaurant	Restaurant	Steakhouse	Steakhouse	Sushi Place	Chinese Restaurant	Breakfast Spot	Japanese Restaurant	Italian Restaurant	The Restaurant
8 Design Exchange Toronto Dominion Centre	Italian Restaurant	Restaurant	American Restaurant	Japanese Restaurant	Steakhouse	Chinese Restaurant	Steakhouse	Burger Joint	Pizza Place	New American Restaurant
8 First Canadian Place Underground city	Steakhouse	Chinese Restaurant	American Restaurant	Restaurant	Italian Restaurant	Sushi Restaurant	Burger Joint	Pasta Place	Japanese Restaurant	Fast Food Restaurant
10 Harbord, University of Toronto	Japanese Restaurant	Chinese Restaurant	Restaurant	French Restaurant	Flower Shop	Canadian Food Restaurant	Beer Store	Italian Restaurant	Sushi Restaurant	Steakhouse
11 Harbourfront East, Toronto Islands, Union Station	Italian Restaurant	Pizza Place	Fast Food Restaurant	Steakhouse	Wegmans	Italian Restaurant	Sushi Place	Japanese Restaurant	Chinese Restaurant	Mexican Restaurant
12 Harbourfront, Regent Park	Breakfast Spot	American Restaurant	Restaurant	French Restaurant	Italian Restaurant	Beer Store	Fast Food Restaurant	Wings Joint	Cafe	Flower Shop
11 Kipling, Garden District	Chinese Restaurant	Fast Food Restaurant	Restaurant	Italian Restaurant	Japanese Restaurant	Mediterranean Restaurant	Cafe	Pizza Place	Wegmans Restaurant	Burger Joint
14 St. James Town	Restaurant	Italian Restaurant	Breakfast Spot	American Restaurant	Japanese Restaurant	Cafe	Steakhouse	Cheese	Italian Restaurant	Fast Food Restaurant
11 St. A PO Boxes 25 The Esplanade	Restaurant	Steakhouse	Cheese	Fast Food Restaurant	Breakfast Spot	Italian Restaurant	Japanese Restaurant	Belgian Restaurant	Steakhouse	Wegmans / Vegan Restaurant

Figure 3: Restaurants of Downtown Toronto

- There are 7 out of 16 neighborhoods in which the percentage of Chinese restaurants is less than 5
  - Commerce Court, Victoria Hotel
  - Harbourfront East, Toronto Islands, Union Station
  - Stn A PO Boxes 25 The Esplanade
  - St. James Town
  - Berczy Park
  - Christie
  - Harbourfront, Regent Park
- The remaining 3 neighborhood have mild competition and satisfactory demand scale, and are of our further consideration for location choice of opening a Chinese restaurant
  - Adelaide, King, Richmond
  - Design Exchange, Toronto Dominion Centre
  - Church and Wellesley

The Borough "Downtown Toronto" of Toronto, there are 3 neighborhoods we can choose to open a new Chinese Restaurant, which are

1. Adelaide, King, Richmond
2. Design Exchange, Toronto Dominion Centre
3. Church and Wellesley