

## Battle of the Neighborhoods Toronto vs New York City

BY: VAISHNAVI AGARWAL

### PROBLEM STATEMENT

Understand the similarities and differences of neighborhoods between Scarborough borough in Toronto and Queens borough in New York City.

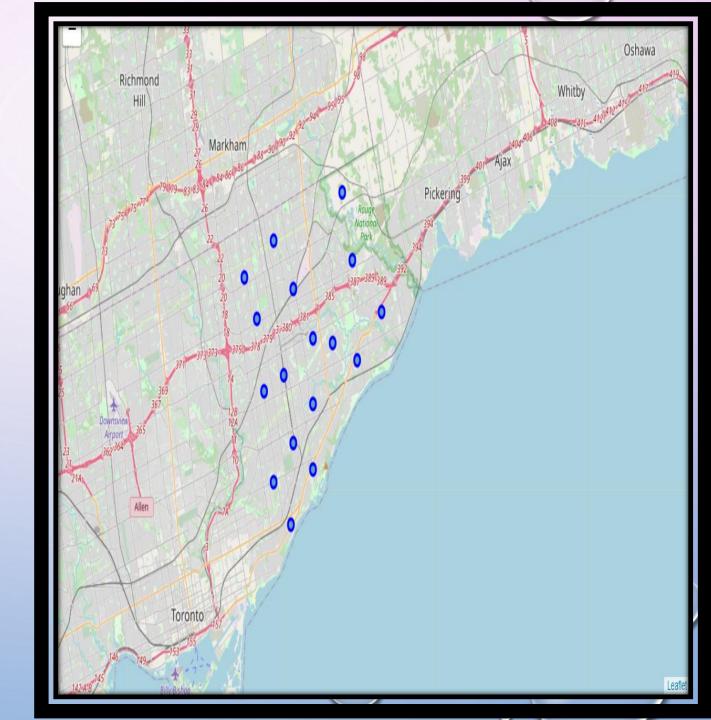
Select the best neighborhood for a company to move its headquarters based on venues.

### Objective

- Collect the neighborhoods top venues using Foursquare.
- Form neighborhood based on venue categories using unsupervised k-means clustering algorithm.
- Identify and understand the similarities and differences between Scarborough and Queens neighborhoods to obtain insights into the neighborhoods.

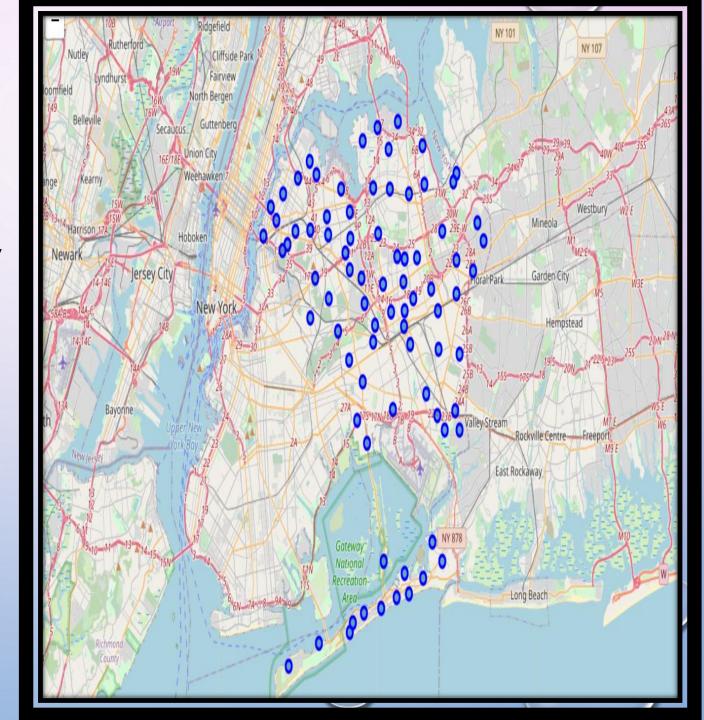
# Map of Scarborough in Toronto

Different neighborhood clusters



# Map of Queens in New York City

Different neighborhood clusters



### Each neighborhood with the top venues in Scarborough

	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	Agincourt	Skating Rink	Breakfast Spot	Latin American Restaurant	Lounge	Vietnamese Restaurant	Convenience Store	Gas Station	Gaming Cafe	Furniture / Home Store	Fried Chicken Joint
1	Birch Cliff, Cliffside West	College Stadium	General Entertainment	Skating Rink	Farm	Café	Vietnamese Restaurant	Gas Station	Gaming Cafe	Furniture / Home Store	Fried Chicken Joint
2	Cedarbrae	Thai Restaurant	Caribbean Restaurant	Athletics & Sports	Hakka Restaurant	Bakery	Bank	Gas Station	Fried Chicken Joint	Donut Shop	Electronics Store
3	Clarks Corners, Tam O'Shanter, Sullivan	Fast Food Restaurant	Pizza Place	Noodle House	Fried Chicken Joint	Thai Restaurant	Bank	Shopping Mall	Intersection	Italian Restaurant	Chinese Restaurant
4	Cliffside, Cliffcrest, Scarborough Village West	American Restaurant	Motel	Skating Rink	Gas Station	Gaming Cafe	Furniture / Home Store	Fried Chicken Joint	Fast Food Restaurant	Farm	Electronics Store
5	Dorset Park, Wexford Heights, Scarborough Town	Indian Restaurant	Vietnamese Restaurant	Gaming Cafe	Furniture / Home Store	Light Rail Station	Pet Store	Chinese Restaurant	Convenience Store	Gas Station	Fried Chicken Joint
6	Golden Mile, Clairlea, Oakridge	Bakery	Ice Cream Shop	Intersection	Park	Bus Station	Bus Line	Metro Station	Soccer Field	Fried Chicken Joint	Fast Food Restaurant
7	Guildwood, Morningside, West Hill	Rental Car Location	Electronics Store	Medical Center	Bank	Intersection	Breakfast Spot	Restaurant	Mexican Restaurant	Donut Shop	Department Store
8	Kennedy Park, Ionview, East Birchmount Park	Discount Store	Coffee Shop	Department Store	Chinese Restaurant	Hobby Shop	Convenience Store	General Entertainment	Gas Station	Gaming Cafe	Furniture / Home Store
9	Malvern, Rouge	Fast Food Restaurant	Vietnamese Restaurant	College Stadium	General Entertainment	Gas Station	Gaming Cafe	Furniture / Home Store	Fried Chicken Joint	Farm	Electronics Store
10	Milliken, Agincourt North, Steeles East, L'Amo	Park	Intersection	Playground	Vietnamese Restaurant	College Stadium	Gas Station	Gaming Cafe	Furniture / Home Store	Fried Chicken Joint	Fast Food Restaurant



#### Each neighborhood with the top 5 venues in Queens

	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	Arverne	Surf Spot	Sandwich Place	Metro Station	Beach	Board Shop	Coffee Shop	Donut Shop	French Restaurant	Café	Burrito Place
1	Astoria	Middle Eastern Restaurant	Bar	Greek Restaurant	Seafood Restaurant	Hookah Bar	Mediterranean Restaurant	Bakery	Pizza Place	Deli / Bodega	Café
2	Astoria Heights	Hostel	Bakery	Playground	Plaza	Deli / Bodega	Chinese Restaurant	Museum	Bus Station	Burger Joint	Supermarket
3	Auburndale	Pharmacy	Train	Mobile Phone Shop	Mattress Store	Fast Food Restaurant	Food Truck	Supermarket	Sushi Restaurant	Noodle House	Discount Store
4	Bay Terrace	Clothing Store	American Restaurant	Shoe Store	Women's Store	Donut Shop	Bank	Kids Store	Cosmetics Shop	Mobile Phone Shop	Steakhouse
5	Bayside	Bar	Mexican Restaurant	Indian Restaurant	Sushi Restaurant	Pizza Place	Ice Cream Shop	Italian Restaurant	Donut Shop	Steakhouse	Chinese Restaurant
6	Bayswater	Playground	Construction & Landscaping	Yoga Studio	Filipino Restaurant	Empanada Restaurant	Event Space	Falafel Restaurant	Farm	Farmers Market	Fast Food Restaurant
7	Beechhurst	Chinese Restaurant	Yoga Studio	Boutique	Pizza Place	Convenience Store	Deli / Bodega	Park	Dessert Shop	Optical Shop	Restaurant
8	Bellaire	IT Services	Halal Restaurant	Convenience Store	Chinese Restaurant	Moving Target	Bus Station	Breakfast Spot	Greek Restaurant	Grocery Store	Gym
9	Belle Harbor	Beach	Spa	Deli / Bodega	Boutique	Pub	Restaurant	Donut Shop	Bakery	Bagel Shop	Chinese

### Comparison between Neighborhoods Scarborough vs Queens

- Scarborough has 87 distinct venues in 59 categories
- The most common venues in Scarborough are coffee shops, international restaurants, and skating rinks
- Queens has 1758 distinct venues in 272 categories
- The most common venues in Queens are bodegas, bakeries, coffee shops, and parks

### Conclusion

Based on the quantity of venues and variety of venues, Queens is a better choice than Scarborough to relocate the headquarters of the company. Queens offer a greater amount of gyms, grocery stores, restaurants for individual and families of the employees.