

Trends and Possibilities in the city of New York & Comparison of neighborhoods of Toronto and New York.

A. Introduction

A.1 Introduction & Discussion Background

The **City of New York**, is the most populous city in the United States. With an estimated 2018 population of 8,398,748 distributed over a land area of about 302.6 square miles (784 km²), New York is also the most densely populated major city in the United States.¹ Located at the southern tip of the state of New York, the city is the center of the New York metropolitan area, the largest metropolitan area in the world by urban landmass and one of the world's most populous megacities with an estimated 19,979,477 people in its 2018 Metropolitan Statistical Area and 22,679,948 residents in its Combined Statistical Area. A global power city New York City has been described as the cultural, financial and media capital of the world, and exerts a significant impact upon commerce, entertainment, research, technology, education, politics, tourism, art, fashion, and sports. The city's fast pace has inspired the term *New York minute*. Home to the headquarters of the United Nations headquarters, New York is an important center for international diplomacy.

Situated on one of the world's largest harbors New York City consists of five boroughs, each of which is a separate county of the state of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898. The city and its metropolitan area constitute the premier gateway for legal immigration to the United States. As many as 800 languages are spoken in New York, making it the most linguistically diverse city in the world. New York City is home to more than 3.2 million residents born outside the United States, the largest foreign-born population of any city in the world.] As of 2019, the New York metropolitan area is estimated to produce a gross metropolitan product (GMP) of US\$1.9 trillion. If greater New York City were a sovereign state, it would have the 12th highest GDP in the world. New York is home to the highest number of billionaires of any city in the world.

Being such a most populous and important center for international diplomacy, it is very interesting to explore the important places to visit and dine-in, in this city. One of the greatest cities in the world, New York is always a whirlwind of activity, with famous sites at every turn and never enough time to see them all. Some people come here to enjoy the **Broadway shows**; others come specifically to **shop and dine**; and many come simply to see the sites: The **Statue of Liberty**, **Empire State Building**, **Brooklyn Bridge**, **Central Park**, historic neighborhoods, and numerous world-famous museums. Many of the best places to visit in New York are within walking distance of each other, or just a short ride away, making this city a delight for sightseeing.

When we consider all these points it is very interesting to explore the important places to visit and dine-in, in this city, also trending venues and their rating using some machine learning techniques and Foursquare API. An attempt is made to give short description and comparison about the neighborhoods of an adjacent city Toronto.

A2. Data Description

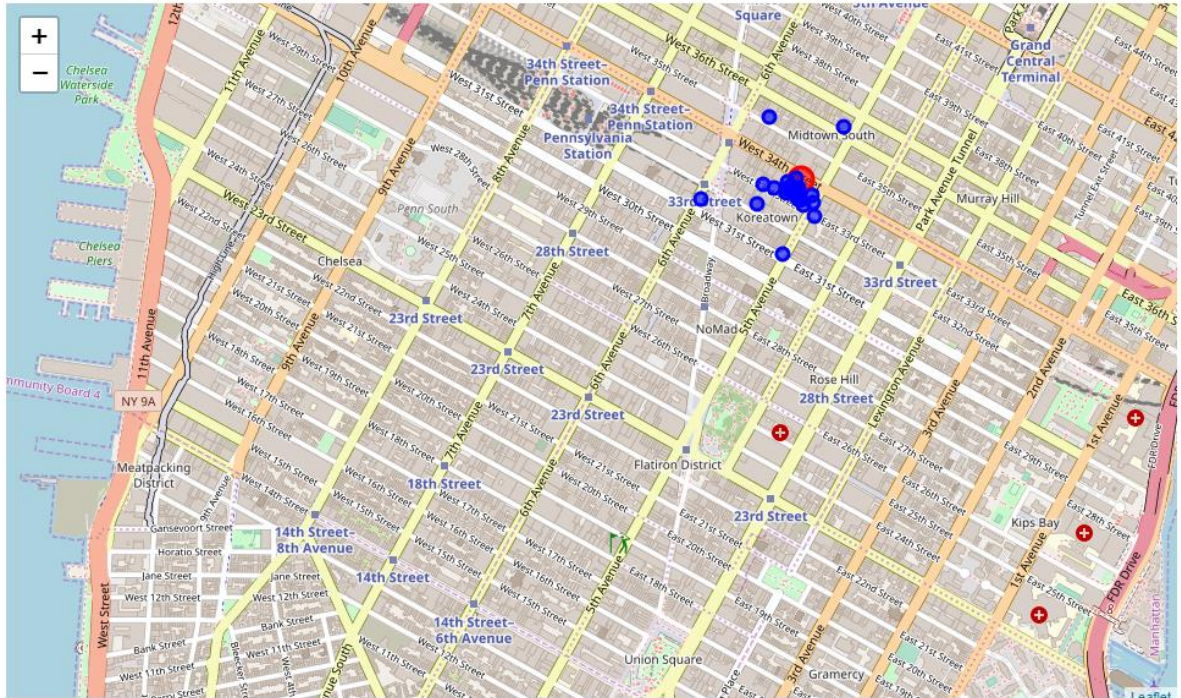
To study the above problem, found the neighborhood data of cities New York and Toronto. Referred some websites related to city of New York to collect some data about latest trends and situations. Used Google map and some other search options to search nearby locations and other details. Used Foursquare API to get most common venues near our places of interest. Used GitHub repositories to showcase the details.

B. Methodology

My data has main components, venue name, categories, neighborhood, borough, longitude and latitude for the cities under study.

I used python **folium** library to visualize geographic details of New York and its boroughs and I created a map of New York with places to visit near Empire State Building superimposed on top. I used latitude and longitude values to get the visual as below:

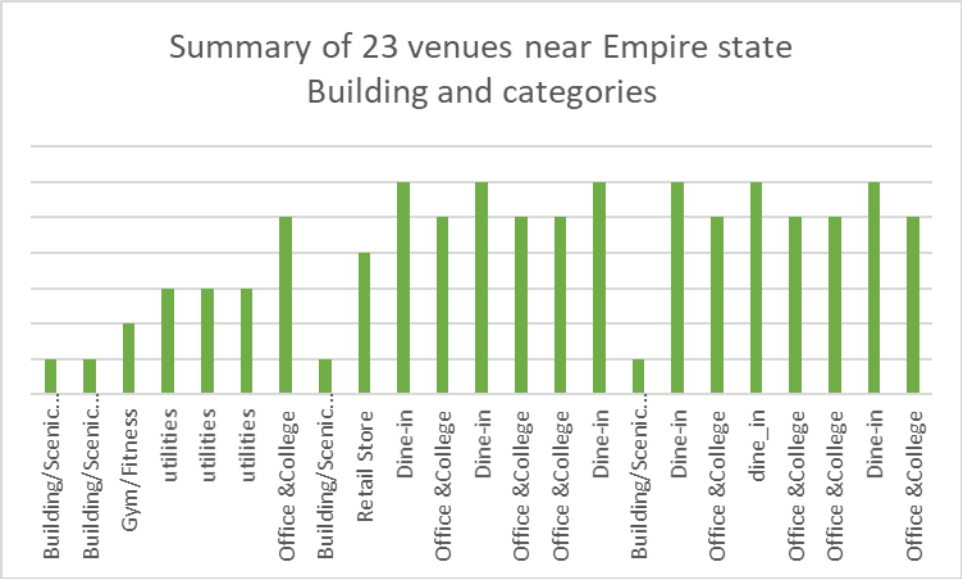
Out[18]:



I utilized the Foursquare API to explore the boroughs and segment them. I designed the limit as 50 venue and the radius 500 meter for each borough from their given latitude and longitude information. Here is a head of the list Venues name, category, latitude and longitude information from Foursquare API.

In summary of this data **23** venues were returned by Foursquare. Here is a merged table.

name	categories	address	cc	city	country	crossStreet	distance	formattedAddress	labeledLatLngs	lat	lng	neighborhood	postalCode	state	id
Empire State Building	Building	350 5th Ave	US	New York	United States	& 34th St	42	4th St), New York, ...	NaN	40.7486	-73.986	New York, NY	10118	NY	c291fe3
100th Floor Observation Deck	Scenic Lookout	350 5th Ave	US	New York	United States	& 34th Sts	39	th Sts), New York,...	44544481811...	40.748445	-73.986	NaN	10118	NY	169491
Empire State Building Gym	Gym / Fitness Center	350 5th Ave	US	New York	United States	34th & 5th St	25	Level (34th & 5th ...	44365858246...	40.748444	-73.985	NaN	10118	NY	0b855cc
Empire State Building	Bus Line	NaN	US	New York	United States	W 31st St	229	rk, NY, United Sta...	74665548, 'Ing'...	40.746655	-73.986	NaN	NaN	NY	784540
Bank of America	Bank	350 5th Ave	US	New York	United States	at 34th St	17	rk, NY 10118,...	69263344692...	40.748693	-73.986	NaN	10118	NY	3720e3
Empire State Building	None	350 5th Ave	US	New York	United States	NaN	40	118, United States)	0.748463, 'Ing'...	40.748463	-73.986	NaN	10118	NY	a70cd2
The Empire State Bui...	Office	350 5th Ave	US	New York	United States	NaN	44	118, United States)	26484276548...	40.748265	-73.985	NaN	10118	NY	349691
12nd Floor Observatory	Scenic Lookout	350 5th Ave	US	New York	United States	& 34th Sts	36	th Sts), New York,...	46452327151...	40.748465	-73.986	NaN	10118	NY	c2ab32
Empire State Building	Electronics Store	350 5th Ave	US	New York	United States	4th street	56	rk, NY 10118,...	22265493004...	40.748223	-73.985	NaN	10118	NY	542c1fd
Empire state building grill	American Restaurant	NaN	US	New York	United States	NaN	200	rk, NY, United States)	0.750064, 'Ing'...	40.750064	-73.984	NaN	NaN	NY	53d5bf6
Shutterstock	Tech Startup	350 5th Ave	US	New York	United States	3rd Street	49	rk, NY 10118,...	39196047307...	40.748392	-73.986	NaN	10118	NY	6ba4a8
Tacombo	Taco Place	3 W 33rd St	US	New York	United States	NaN	83	1018, United States)	44308037416...	40.748443	-73.986	Koreatown	10018	NY	9d9a73
Imperial Jets	Office	350 5th Ave	US	New York	United States	3rd Building	36	ilding), New York...	36237872525...	40.748362	-73.985	NaN	10118	NY	15b662
100th Floor Observatory	Office	350 5th Ave	US	New York	United States	100th Floor	76	rk, NY 10118,...	03725830298...	40.748037	-73.985	NaN	10118	NY	ae8e0
Juice Press	Juice Bar	350 5th Ave, Ste 131	US	New York	United States	at 33rd St	77	3rd St), New York, ...	95832536063...	40.747958	-73.985	NaN	10118	NY	5037da
Empire State Building	Building	350 5th Ave	US	New York	United States	NaN	113	118, United States)	0.747695, 'Ing'...	40.747695	-73.985	NaN	10118	NY	3a590b
Chipotle Mexican Grill	Mexican Restaurant	350 5th Ave	US	New York	United States	100th Ave.	115	t. between Fifth & ...	0.748524, 'Ing'...	40.748524	-73.987	NaN	10118	NY	4620e3
100th Floor Observatory	Language School	350 5th Ave, Ste 6308	US	New York	United States	NaN	58	rk, NY 10118, Uni...	30875964988...	40.748309	-73.986	NaN	10118	NY	5c5434
100th Floor Observatory	Hotel	350 5th Ave, Ste 3508	US	New York	United States	NaN	206	1001, United States)	29681237195...	40.750297	-73.986	NaN	10001	NY	23f20e3
100th Floor Observatory	College & University	NaN	US	New York	United States	NaN	305	1001, United States)	12997319169...	40.74813	-73.989	NaN	10001	NY	25150d
Jimlar	Office	NaN	US	New York	United States	NaN	62	118, United States)	09653255642...	40.748097	-73.985	NaN	10118	NY	bf35645
Au Bon Pain	Bakery	350 5th Ave	US	New York	United States	E 33rd St	56	rk, NY 10118, ...	15532374475...	40.748155	-73.985	NaN	10118	NY	fc18ee
LR Corporate	Office	350 5th Ave	US	New York	United States	3rd Building	148	ilding), New York...	0.74801, 'Ing': ...	40.74801	-73.987	NaN	10118	NY	11610b



Throughout its history, New York City has served as a main port of entry for many immigrants, and its cultural and economic influence has made it one of the most important urban areas in the United States and the world. And our data also make it clear why this place is important for visitor who is interested in visiting historic places.

Let's now explore about the dine-in options nearby

As a part of some common interest checked for *PIZZA* destination nearby.

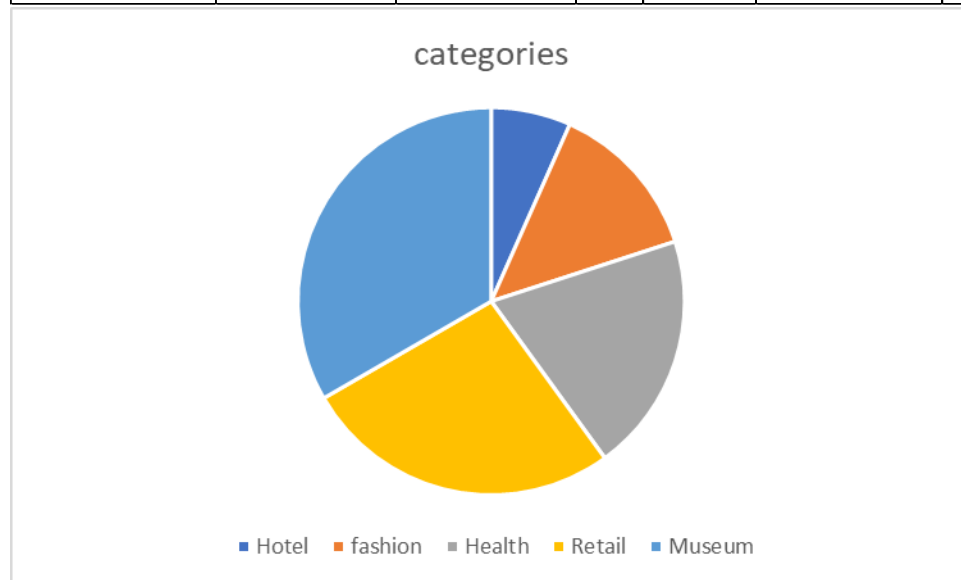
And below are the 50 destinations turned out using Foursquare API

name	categories	address	cc	city	country	crossStreet	distance	formattedAddress	labelLatLngs	lat	lng	neighborhood	postalCode	state	id
Little Italy Pizza	Pizza Place	2 E 33rd St	US	New York	United States	at 5th Ave	113	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747689, "lng": -73.984883]	40.747689	-73.984883	NaNa	10016	NY	49d0eb2f964520e5f11e3
Fresh Pizzas 99 Cents	Pizza Place	1002 Avenue of the Americas	US	New York	United States	NaNa	468	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752859, "lng": -73.985634]	40.752859	-73.985634	New York	10018	NY	5851a76b0303c6b7003d204
Bravo Pizza	Pizza Place	107 W 37th St	US	New York	United States	at Broadway	444	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752163, "lng": -73.987817]	40.752163	-73.987817	Garment District	10018	NY	446a002e964452058cc1e3
Café Bonjour Deli & Pizzeria	Deli / Bodega	18 W 38th St	US	New York	United States	5th Avenue	327	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.751349, "lng": -73.983762]	40.751349	-73.983762	NaNa	10018	NY	4c163ecaa9c220a1f34a5a9d
Penn Pizza	Pizza Place	33rd St Penn Station	US	New York	United States	Between 7th & 8th	305	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.748429, "lng": -73.98917]	40.748429	-73.98917	NaNa	10001	NY	4b05e0a89644520fe422e3
Sabinas Pizza	Pizza Place	150 W 36th St	US	New York	United States	btw Broadway & 7th Ave	417	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.751369, "lng": -73.988716]	40.751369	-73.988716	NaNa	10018	NY	4b16b831964452080bc23e3
Jimmy's New York Style Pizza Store in Macy's	Pizza Place	Macy's 34th St	US	Manhattan	United States	NaNa	378	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.751965, "lng": -73.98634]	40.751965	-73.98634	NaNa	NaNa	NY	534440c05498ee031ceecdb89
Jimmy's Pizza	Pizza Place	151 W 34th St	US	New York	United States	btwn 7th Ave & Broadway	400	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.750857, "lng": -73.989066]	40.750857	-73.989066	NaNa	10001	NY	4ce4134377fe224b69a467b
Caruso's Pizza	Pizza Place	Penn Station	US	New York	United States	NaNa	551	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.750421, "lng": -73.991417]	40.750421	-73.991417	NaNa	NaNa	NY	4bb534dbf62ef3bc8ab2e5f7
Spizza	Pizza Place	15 W 28th St	US	New York	United States	Broadway	456	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.745205, "lng": -73.988231]	40.745205	-73.988231	NaNa	10001	NY	594076b2840c25672564c2
Pizza Market	Pizza Place	NaNa	US	New York	United States	29th Street	471	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.746467, "lng": -73.990096]	40.746467	-73.990096	NaNa	10001	NY	5a32dc066a59502016aleddb
Frankie Boy's Pizza	Pizza Place	1387 Broadway	US	New York	United States	37th St	425	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752059, "lng": -73.987595]	40.752059	-73.987595	NaNa	10018	NY	596e059da5ed5e716827ae
Gyro & Spinelli's Pizza	Greek Restaurant	Penn Station	US	New York	United States	NaNa	535	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.750591, "lng": -73.99112]	40.750591	-73.99112	NaNa	10001	NY	4b7dcd8d0964a5207d042e3
Little Italy Pizza	Pizza Place	401 7th Ave	US	New York	United States	at W 33rd St	520	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.750285, "lng": -73.991087]	40.750285	-73.991087	NaNa	10001	NY	4bdeff34e75c04768ac903
Tony's Pizza & Restaurant	Pizza Place	58 W 31st St	US	New York	United States	NaNa	45	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.748415, "lng": -73.985738]	40.748415	-73.985738	NaNa	10001	NY	4e4c433bd413c4cc6681600
99 Cent Pizza	Pizza Place	NaNa	US	New York	United States	NaNa	317	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747924, "lng": -73.988946]	40.747924	-73.988946	NaNa	10001	NY	5c28745eb031c002c9c3343
Pizza And Deli	Pizza Place	18 E 33rd St	US	New York	United States	5th Avenue	113	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747716, "lng": -73.984785]	40.747716	-73.984785	NaNa	10016	NY	4ee0e969a52e765a4d5d1b
Pizza Pete's	Pizza Place	NaNa	US	New York	United States	NaNa	148	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747317, "lng": -73.985385]	40.747317	-73.985385	NaNa	10001	NY	4c4c6ad09cd82d7930c656c
DJ Pizza	Pizza Place	120 E 34th St	US	New York	United States	Lexington Ave	515	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.746377, "lng": -73.979977]	40.746377	-73.979977	NaNa	10016	NY	5787b226498e4a619c8b1dd
99 Cent Famous Pizza	Pizza Place	NaNa	US	New York	United States	NaNa	474	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.744522, "lng": -73.98667]	40.744522	-73.98667	NoMed	10016	NY	590c02f3a30619599ab17a77
pizza bar NYC	American Restaurant	151 W 34th St	US	New York	United States	7th Ave	446	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.751266, "lng": -73.989324]	40.751266	-73.989324	NaNa	10001	NY	570bdac9498be0eb5e011a
Big Georges Pizza	Pizza Place	333 5th Ave	US	New York	United States	NaNa	100	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747773, "lng": -73.985046]	40.747773	-73.985046	NaNa	10016	NY	4f525a1619836c91c7cd74d
Dollar Pizza	Pizza Place	NaNa	US	New York	United States	NaNa	129	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747491, "lng": -73.985338]	40.747491	-73.985338	NaNa	10001	NY	5301bce0498e5531e169aae7
Famous Pizza	Pizza Place	1 E 28th St	US	New York	United States	5th Ave	471	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.744576, "lng": -73.9868]	40.744576	-73.9868	NaNa	10016	NY	5c105a14916bc1002c9976e
New York Style Pizza	None	NaNa	US	New York	United States	NaNa	148	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747333, "lng": -73.985039]	40.747333	-73.985039	NaNa	10016	NY	4c913a4f51d9b1f794c37e46
Pizza Shop	Pizza Place	151 W 34th St	US	New York	United States	btwn 7th Ave & Broadway	314	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.751095, "lng": -73.987178]	40.751095	-73.987178	NaNa	10001	NY	4e31ab97483b1bb65b04d38
Little Italy Pizza	Pizza Place	185 West 32nd St	US	New York	United States	7th Ave	498	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.749536, "lng": -73.991099]	40.749536	-73.991099	NaNa	10001	NY	4fb286b9e40ba8c8112a6ce
Pizza Truck	Pizza Place	Broadway & 30th st	US	New York	United States	NaNa	370	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.746547, "lng": -73.988705]	40.746547	-73.988705	NaNa	NaNa	NY	4c3c8482933b0f470a24e421
K Food Pizza	Pizza Place	18 E 33rd St	US	New York	United States	btw Madison & 5th Ave	162	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747438, "lng": -73.984235]	40.747438	-73.984235	NaNa	10016	NY	4c069b9ba8b4520a1dfa8597
Pizza Mercato	Pizza Place	120 E 34th St	US	New York	United States	at Lexington	503	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752131, "lng": -73.985928]	40.752131	-73.985928	NaNa	10016	NY	4a5e5a8db9644520b6e1fe3
Aroma Pizza	Pizza Place	35 W 36th St	US	New York	United States	Btwn 6th & 5th Ave	237	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.750783, "lng": -73.985548]	40.750783	-73.985548	NaNa	10018	NY	4b5c856d9644520243429e3
New Balance Pizza Co	Pizza Place	47 E 34th St	US	New York	United States	NaNa	277	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747642, "lng": -73.982298]	40.747642	-73.982298	NaNa	10016	NY	5da110d2c1e91000c8f182
NB Pizza	Pizza Place	47 East 47th Street	US	New York	United States	NaNa	285	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747378, "lng": -73.982372]	40.747378	-73.982372	NaNa	10016	NY	5d9ee6b99766eb00080e2d68
Pizza king	Pizza Place	11011 Avenue of the Americas	US	New York	United States	W 38th Street	392	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752131, "lng": -73.986068]	40.752131	-73.986068	NaNa	10018	NY	4fb6c277e4b0efa7d3acaeae
Best Ray Pizza	Pizza Place	58 W 31st St	US	New York	United States	NaNa	288	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747607, "lng": -73.988435]	40.747607	-73.988435	NaNa	10001	NY	4f3211ef19833175e0e095bf
6th Avenue Coffee & Pizza Shop	Pizza Place	Avenue of the Americas	US	New York	United States	38th Street	390	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752131, "lng": -73.985928]	40.752131	-73.985928	NaNa	10018	NY	4b9c1baef9644520e14a36e3
Papa John's Pizza	Pizza Place	12 E 37th St	US	New York	United States	btwn Madison & 5th Ave	296	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.749899, "lng": -73.982199]	40.749899	-73.982199	NaNa	10016	NY	4db19a5b97abaf58538a458f
Enrico Caruso Pizza	Pizza Place	Penn Station - LIRR	US	New York	United States	7th Ave @ 32nd St	558	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.750415, "lng": -73.991502]	40.750415	-73.991502	NaNa	10018	NY	4b53397d96445206e9227e3
Frank's Pizza	Pizza Place	333 7th Ave	US	New York	United States	29th Street	410	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.747158, "lng": -73.989755]	40.747158	-73.989755	NaNa	10001	NY	4c0e5643ed5199c8b6a4b1e
Pn Woodfired Pizza	Pizza Place	246 5th Ave	US	New York	United States	NaNa	471	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.744488, "lng": -73.987847]	40.744488	-73.987847	NaNa	10001	NY	5c0ee4ab04d1ae002ceac203a
Spin City Records & Pizza	Pizza Place	460 Park Ave S	US	New York	United States	NaNa	436	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.745092, "lng": -73.983129]	40.745092	-73.983129	NaNa	10016	NY	5cf7c99e588e36002c327ae2
Bravo Kosher Pizza	Pizza Place	1367 Broadway	US	New York	United States	NaNa	388	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.751733, "lng": -73.987482]	40.751733	-73.987482	NaNa	10018	NY	545592a2498e5c511030e53b
Star Gourmet Deli & Pizzeria	Deli / Bodega	797 Avenue of the Americas	US	New York	United States	W 27th St	466	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.746575, "lng": -73.990105]	40.746575	-73.990105	NaNa	10001	NY	52cb01011d234eeched0007
32nd Street Pizza	Pizza Place	32nd off 7th	US	NaNa	United States	NaNa	509	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.749619, "lng": -73.991207]	40.749619	-73.991207	NaNa	NaNa	New York	4e860e67790d38d90b96cd
Pizza King	Pizza Place	120 E 34th St	US	New York	United States	at Lexington Ave.	513	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.746505, "lng": -73.979923]	40.746505	-73.979923	NaNa	10016	NY	4f32322ee4b0a676eba7b46e
Zimari Pizza	Pizza Place	113 E 31st St	US	New York	United States	Park	492	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.745059, "lng": -73.981892]	40.745059	-73.981892	NaNa	10016	NY	4a7089109644520b8d71fe3
Original Ray's Pizza	Pizza Place	341 Lexington Ave	US	New York	United States	39th	562	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.749392, "lng": -73.978707]	40.749392	-73.978707	NaNa	10016	NY	4c5c4659d25320a1d65c27a
Breakfast Lunch Pizza	Pizza Place	NaNa	US	New York	United States	NaNa	518	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.74479, "lng": -73.988743]	40.74479	-73.988743	NaNa	10001	NY	50004f6ee4b04d33bf1ab32
In-N-Out Pizza	Pizza Place	6Ave	US	New York	United States	NaNa	471	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752869, "lng": -73.985897]	40.752869	-73.985897	NaNa	10018	NY	4db853e84341a75c1170e9d9
\$1.00 In-N-Out Pizza	Pizza Place	NaNa	US	New York	United States	6th avenue and 39th street	473	11011 Avenue of the Americas (W 38th Street), New York, NY 10011, United States	["label": "display", "lat": 40.752901, "lng": -73.98511]	40.752901	-73.98511	NaNa	10018	NY	4e0cd1a3483b3608f10c6333

Four Seasons Hotel New York is a luxury hotel in New York that opened in 1993. At 682 feet (208 m) tall and 52 stories, it is the second tallest hotel in New York City, the fourth tallest hotel in the U.S.[5], and the 78th tallest building in New York. The hotel is noted for its luxurious interiors which have an art modern quality.

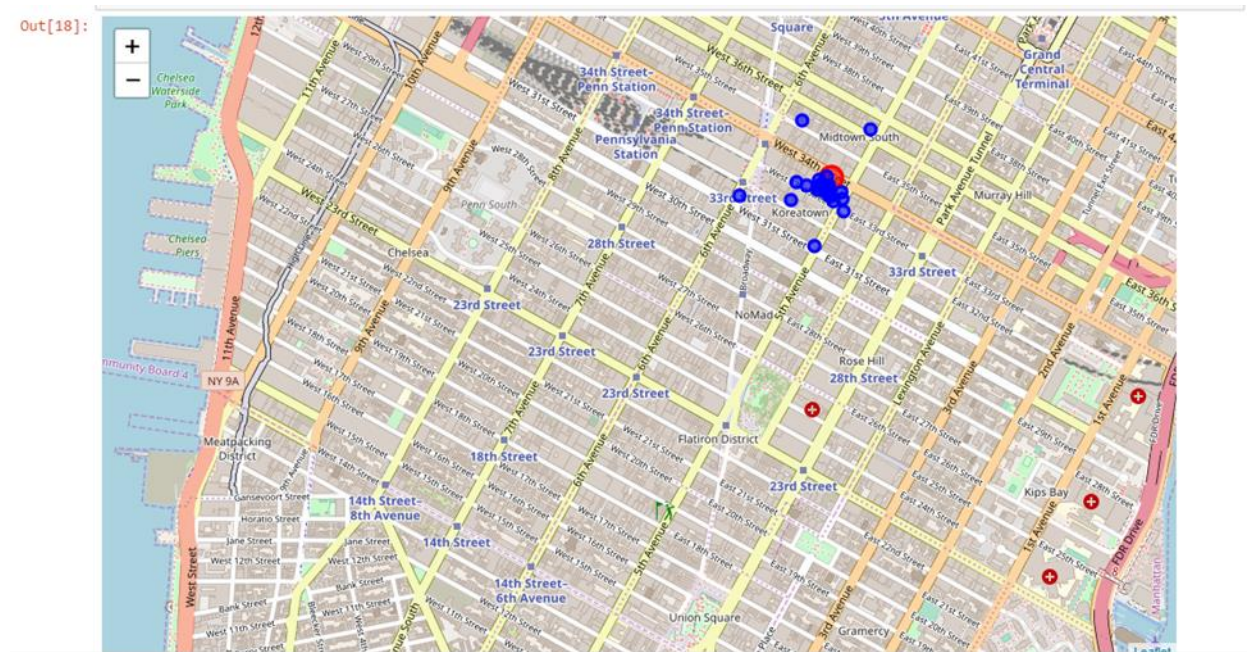
Explored some interesting destination around Four Season Hotel New York. Below are the venues

name	categories	address	cc	city	country	crossStreet	distance
Four Seasons Hotel	Hotel	57 E 57th St	US	New York	United States	btwn Madison & Park	85
Saint Laurent	Boutique	3 W 57th St	US	New York	United States	btwn 5th Ave and 6th	207
Phillips	Art Gallery	450 Park Ave	US	New York	United States	at E 57th St	118
Jim's Shoe Repair	Shoe Store	50 E 59th St	US	New York	United States	Madison/Park	90
Apple Fifth Avenue	Electronics Store	767 5th Ave	US	New York	United States	btwn E 58th & E 59th S	164
Mizu Salon	Spa	505 Park Avenue	US	New York	United States	at 59th St	135
Tiffany & Co.	Jewelry Store	727 5th Ave	US	New York	United States	at E 57th St	212
Pierre Michel Salon	Salon / Barbershop	135 E 57th St	US	New York	United States	Lexington Avenue	194
Mark Garrison Salon	Salon / Barbershop	108 E 60th St	US	New York	United States	Between Lexinton and	202
BLT Steak	Steakhouse	106 E 57th St	US	New York	United States	at Park Ave	149



The Four-Season New York is located on bustling East 57th Street, one of Manhattan's major east/west thoroughfares, between Park and Madison avenues. The area offers most of luxuries in terms of fashion and retails stores.

Another important point noted during the study is trending venue in this area which is Gardenia Terrace. Blow is the details and map for the same.



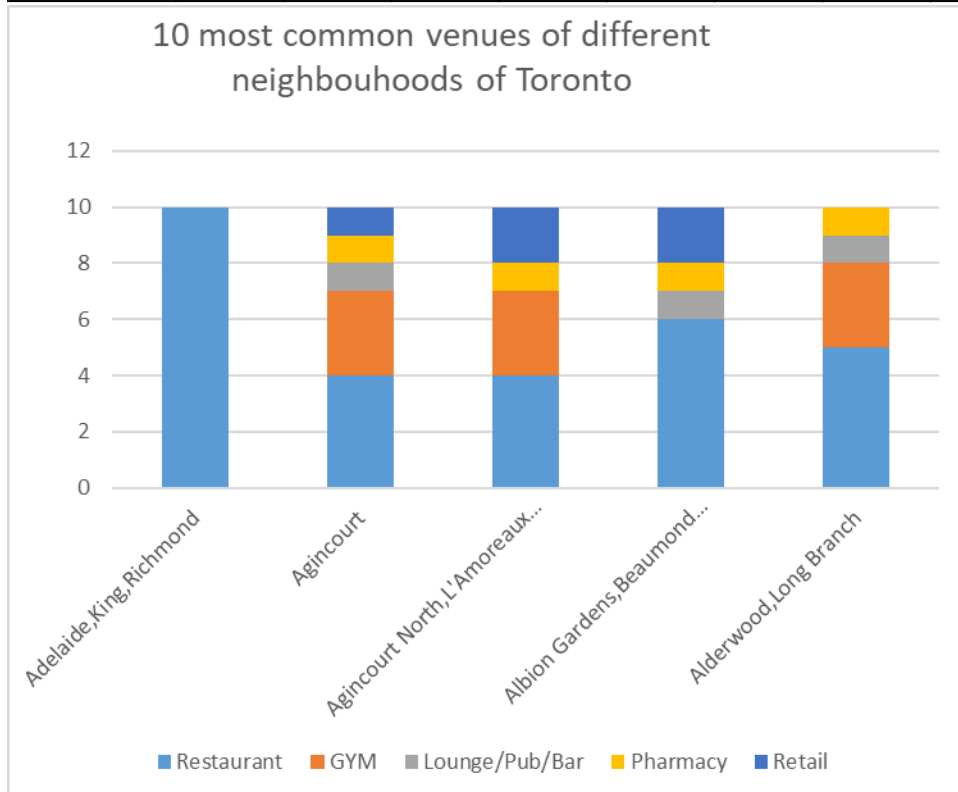
Comparison of neighborhoods of New York and Toronto.

Using Foursquare API found the Top 10 most common venues near Manhattan neighborhood.

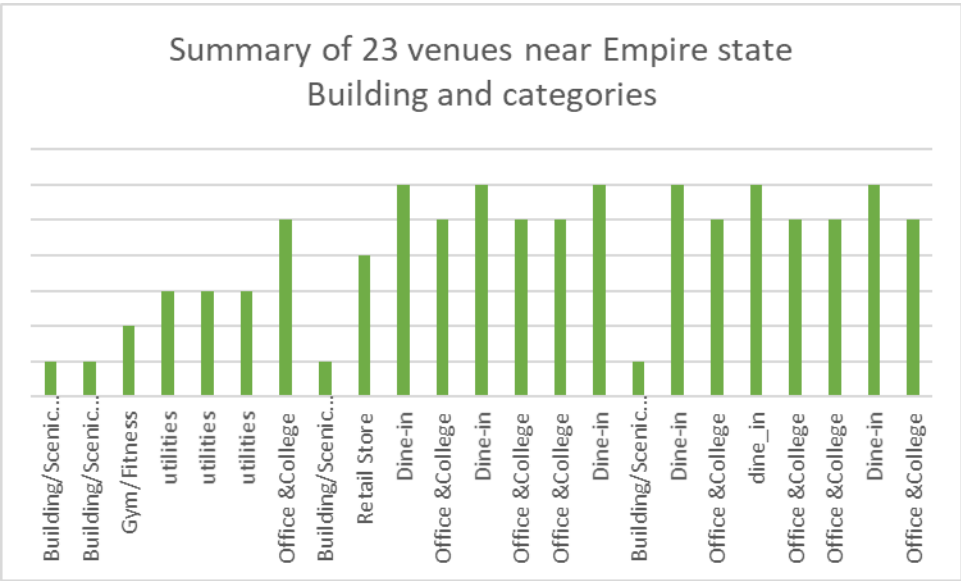
Neighborhood	1st Most Common	2nd Most Common	3rd Most Common	4th Most Common	5th Most Common	6th Most Common	7th Most Common	8th Most Common	9th Most Common	10th Most Common
Battery Park City	Park	Coffee Shop	Hotel	Memorial Site	Gym	Boat or Ferry	Wine Shop	Grocery Store	Food Court	Shopping Mall
Carnegie Hill	Coffee Shop	Pizza Place	Café	Yoga Studio	Japanese Restaurant	Cosmetics Shop	Bar	Bakery	Spa	French Restaurant
Central Harlem	Cosmetics Shop	Seafood Restaurant	African Restaurant	American Restaurant	Bar	Chinese Restaurant	French Restaurant	Cafeteria	Bookstore	Boutique
Chelsea	Coffee Shop	Italian Restaurant	Bakery	Ice Cream Shop	Theater	American Restaurant	Seafood Restaurant	Nightclub	Hotel	Health & Beauty
Chinatown	Chinese Restaurant	Cocktail Bar	American Restaurant	Salon / Barbersho	Spa	Vietname se	Bubble Tea Shop	Bakery	Asian Restaurant	Mexican Restaurant

The same has done for city Toronto, Canada and below are the results:

Neighbourhood	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
Adelaide,King,Richmond	Coffee Shop	Café	Thai Restaurant	Bar	American Restaurant	Hotel	Restaurant	Burger Joint	Steakhouse	Sushi Restaurant
Agincourt	Lounge	Breakfast Spot	Skating Rink	Clothing Store	Yoga Studio	Eastern European Restaurant	Dog Run	Doner Restaurant	Donut Shop	Drugstore
Agincourt North,L'Amoreaux East,Miliken,Steel...	Park	Playground	Eastern European Restaurant	Discount Store	Dog Run	Doner Restaurant	Donut Shop	Drugstore	Dumpling Restaurant	Electronics Store
Albion Gardens,Beaumont Heights,Humbergate,Jam...	Grocery Store	Pizza Place	Fast Food Restaurant	Pharmacy	Fried Chicken Joint	Video Store	Beer Store	Sandwich Place	Doner Restaurant	Diner
Alderwood,Long Branch	Pizza Place	Pharmacy	Gym	Sandwich Place	Coffee Shop	Skating Rink	Athletics & Sports	Pub	Doner Restaurant	Dim Sum Restaurant

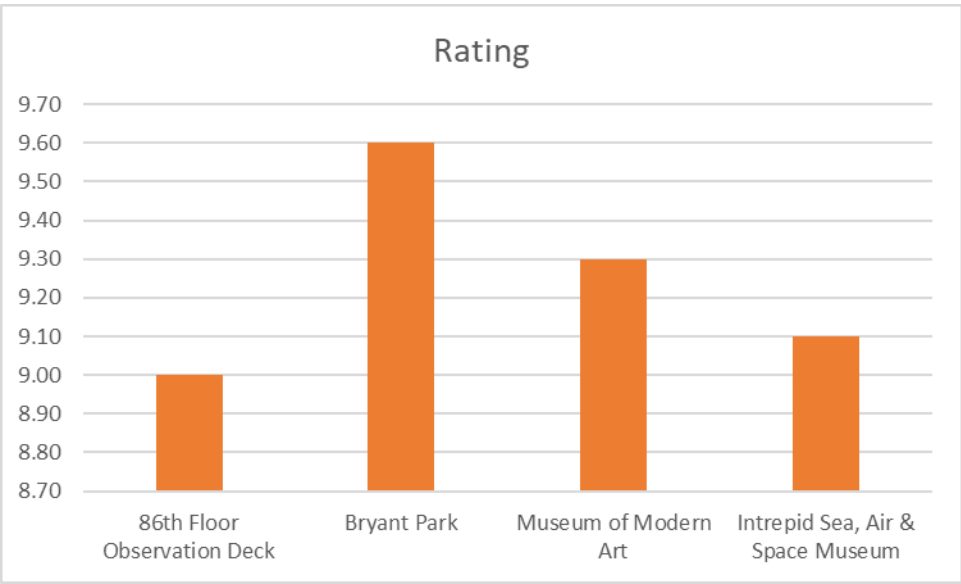


C. Results

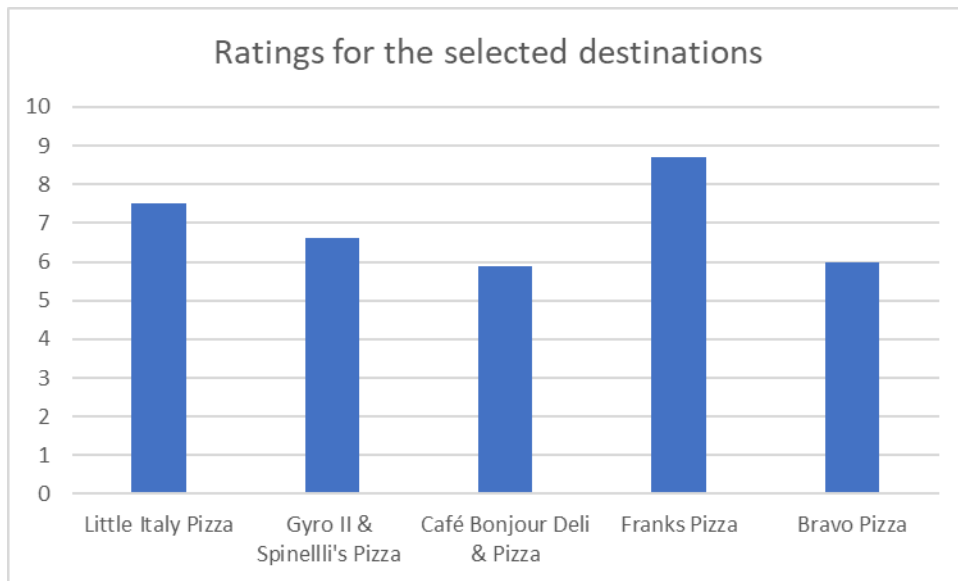


Out of these different categories turned out conducted a study on the ratings of each venues, that's most attracted by visitors/a must visit place in this area.

Venue	Rating
<i>86th Floor Observation Deck</i>	9.00
<i>Bryant Park</i>	9.6
<i>Museum of Modern Art</i>	9.3
<i>Intrepid Sea, Air & Space Mu</i>	9.1

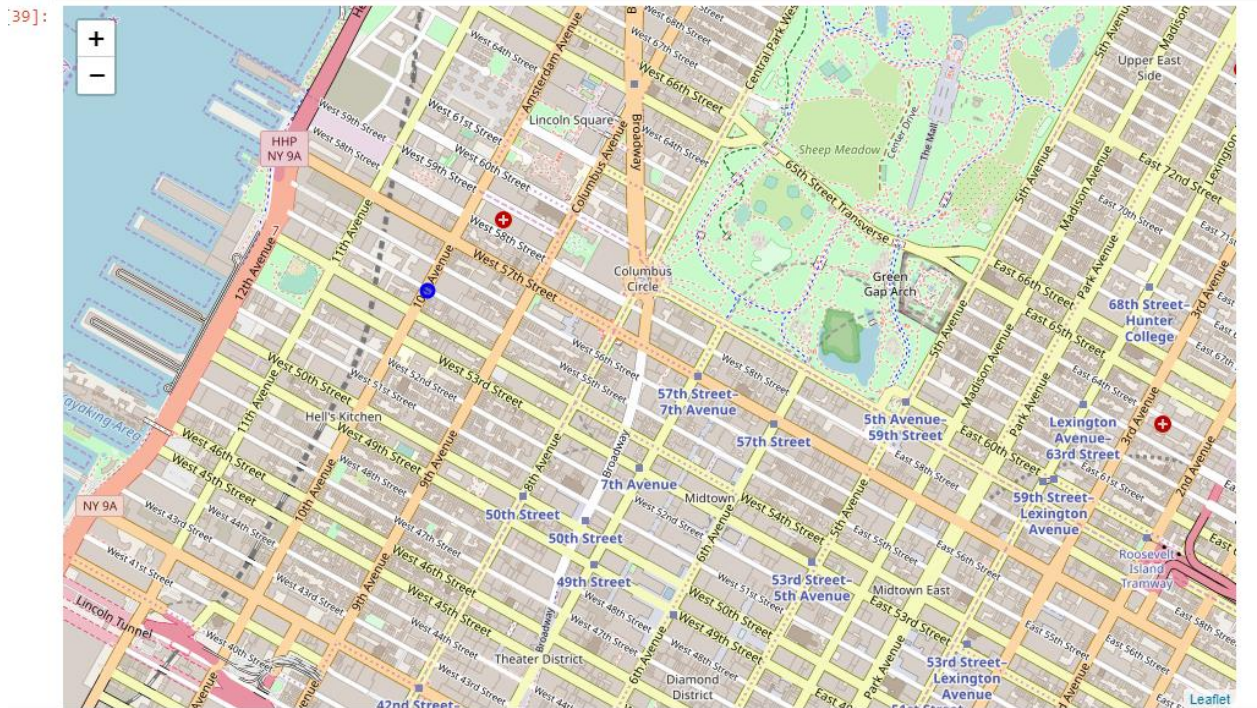


Out of the 50 pizza destinations turned out by Foursquare API found the ratings for some selected destinations. Here it is the chart:



Trending venue near Four Season, NY.

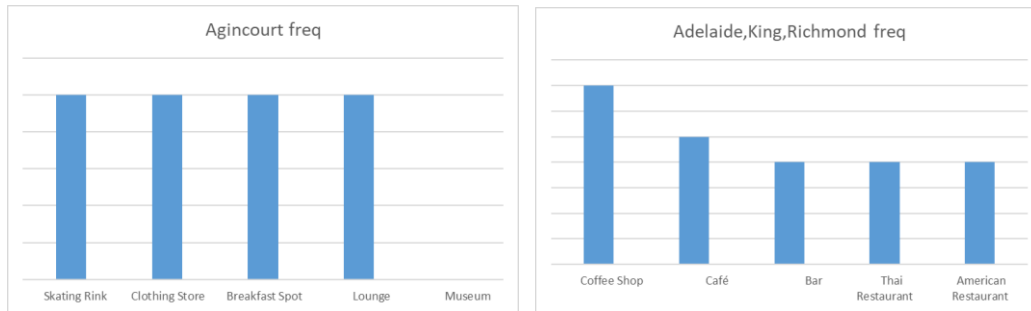
name	categories	location.distance	location.city	location.postalCode	location.state	location.country	location.lat	location.long
Gardenia Terrace	Lounge	1641	New York	10019	NY	United States	40.76776	-73.9894



Within this two neighborhoods *Adelaide, King, Richmon* and *Agincourt* dragged attention because of its dissimilarity.

Agincourt		Adelaide,King,Richmond	
venue	freq	venue	freq
Skating Rink	0.25	Coffee Shop	0.07
Clothing Store	0.25	Café	0.05
Breakfast Spot	0.25	Bar	0.04
Lounge	0.25	Thai Restaurant	0.04
Museum	0	American Restaurant	0.04

Two interesting neighborhoods of city of Toronto.



D. Discussion

As it is mentioned in the beginning of this study, New York it's not only a most populous city but it is an important place for diplomatic interest also. And people from different walk of life visit the place. So, it pulled the attention of study to cover the areas that a resident and visitor of the city would like to know. Using the analytical and classification techniques found the interesting areas and their ratings. Also given visual representation through maps.

Another important point noted during study is about two particular neighborhoods of city of Toronto, namely: *Adelaide, King, Richmond & Agincourt*. Agincourt has one of the largest Asian communities in Toronto and as it indicated in the table given in the result section of this document that there are chances for Asian restaurants in that neighborhood. Richmond is home to the city's industrial and business region housing most of the city's hotels. When we analyzed the top10 venues in this neighborhood, it's all about restaurants and food. It means business related to this industry have great scope.

F. Conclusion

As we see the outcomes of this study, it's very clear that people who turn out to explore a new destination, these kind of analysis techniques which we achieved through the advancement of technology is of grate help.