



PROTECT | EMPOWER | ASIANS 2021

BATTLE of the MANHATTAN Neighborhoods

EMPOWER | PROTECT | ASIANS 2021

The NBCNEWS article

<https://www.nbcnews.com/news/asi-an-america/anti-asian-hate-crimes-increased-nearly-150-2020-mostly-n-n1260264> stated that **“Anti-Asian hate crimes increased by nearly 150% in 2020, mostly in N.Y. and L.A.”**

“The analysis revealed a surge in cities such as New York, where anti-Asian hate crimes rose from three in 2019 to 28 in 2020, a 833 percent increase.”



Discrimination and harassment due to COVID-19 are illegal in New York City.

Contact the NYC Commission on Human Rights if you or someone you know has faced discrimination or harassment due to COVID-19. We do not ask for your immigration status. Interpretation is available.

To report discrimination or harassment, call 311 and say “human rights” or call us at (212) 416-0197. Call 911 to report a hate crime. Learn more at [NYC.gov/stopcovidhate](https://nyc.gov/stopcovidhate).

NYC Commission on Human Rights
Carmelyn P. Matale, Chair and Commissioner

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NEW YORK CITY NEIGHBORHOODS

New York City Boroughs and Neighborhoods

New York city has a total of 5 boroughs and 306 neighborhoods





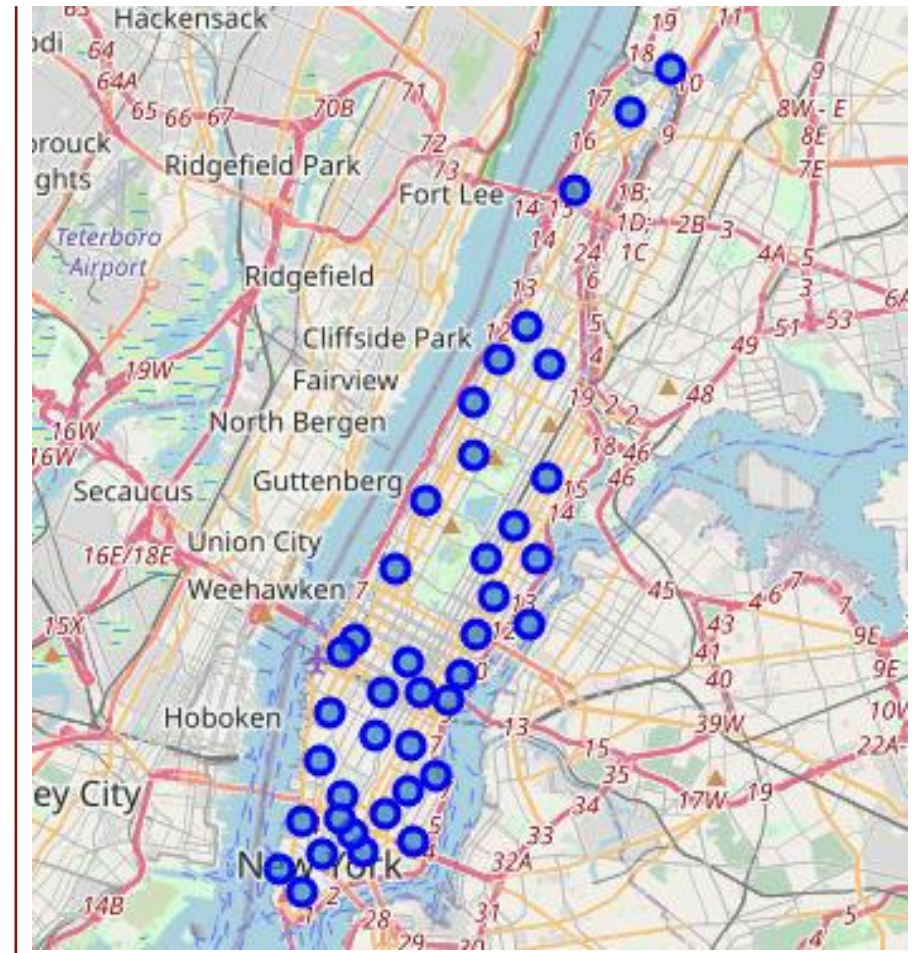
MANHATTAN NEIGHBORHOODS

Manhattan Neighborhoods

Program Organizers would like to launch the project in the Asian community in the Manhattan area.

We will recommend the areas where a number of Asians frequent in the Manhattan area.

Locating Asian Restaurants will be the ideal venues to begin with.



Use FourSquare API to get nearby venues at the Manhattan neighborhoods

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Marble Hill	40.876551	-73.91066	Bikram Yoga	40.876844	-73.906204	Yoga Studio
1	Marble Hill	40.876551	-73.91066	Arturo's	40.874412	-73.910271	Pizza Place
2	Marble Hill	40.876551	-73.91066	Tibbett Diner	40.880404	-73.908937	Diner
3	Marble Hill	40.876551	-73.91066	Astral Fitness & Wellness Center	40.876705	-73.906372	Gym
4	Marble Hill	40.876551	-73.91066	Starbucks	40.877531	-73.905582	Coffee Shop

Manhattan Neighborhoods Top Venues

----Battery Park City----

	venue	freq
0	Chinese Restaurant	0.5
1	Japanese Restaurant	0.5
2	Asian Restaurant	0.0
3	Shanghai Restaurant	0.0
4	Udon Restaurant	0.0

----Carnegie Hill----

	venue	freq
0	Sushi Restaurant	0.4
1	Vietnamese Restaurant	0.2
2	Chinese Restaurant	0.2
3	Japanese Restaurant	0.2
4	Shanghai Restaurant	0.0

----Central Harlem----

	venue	freq
0	Chinese Restaurant	1.0
1	Asian Restaurant	0.0
2	Malay Restaurant	0.0
3	Udon Restaurant	0.0
4	Thai Restaurant	0.0

----Chelsea----

	venue	freq
0	Thai Restaurant	0.29
1	Sushi Restaurant	0.29
2	Asian Restaurant	0.14
3	Chinese Restaurant	0.14
4	Japanese Restaurant	0.14

----Chinatown----

	venue	freq
0	Chinese Restaurant	0.43
1	Asian Restaurant	0.09
2	Dumpling Restaurant	0.09
3	Malay Restaurant	0.09
4	Vietnamese Restaurant	0.09

----Civic Center----

	venue	freq
0	Korean Restaurant	0.4
1	Sushi Restaurant	0.4
2	Asian Restaurant	0.2
3	Dim Sum Restaurant	0.0
4	Dumpling Restaurant	0.0

----Clinton----

	venue	freq
0	Korean Restaurant	0.25
1	Chinese Restaurant	0.25
2	Dim Sum Restaurant	0.25
3	Thai Restaurant	0.25
4	Shanghai Restaurant	0.00

----East Harlem----

	venue	freq
0	Thai Restaurant	1.0
1	Asian Restaurant	0.0
2	Malay Restaurant	0.0
3	Udon Restaurant	0.0
4	Taiwanese Restaurant	0.0

----East Village----

	venue	freq
0	Korean Restaurant	0.27
1	Vietnamese Restaurant	0.27
2	Japanese Restaurant	0.18
3	Chinese Restaurant	0.09
4	Filipino Restaurant	0.09

----Financial District----

	venue	freq
0	Japanese Curry Restaurant	0.5
1	Japanese Restaurant	0.5
2	Asian Restaurant	0.0
3	Shanghai Restaurant	0.0
4	Udon Restaurant	0.0

----Flatiron----

	venue	freq
0	Japanese Restaurant	0.50
1	Korean Restaurant	0.25
2	Thai Restaurant	0.12
3	Sushi Restaurant	0.12
4	Malay Restaurant	0.00

----Gramercy----

	venue	freq
0	Vietnamese Restaurant	0.2
1	Dim Sum Restaurant	0.2
2	Thai Restaurant	0.2
3	Filipino Restaurant	0.2
4	Sushi Restaurant	0.2

----Greenwich Village----

	venue	freq
0	Sushi Restaurant	0.5
1	Vietnamese Restaurant	0.2
2	Chinese Restaurant	0.2
3	Udon Restaurant	0.1
4	Malay Restaurant	0.0

----Hamilton Heights----

	venue	freq
0	Chinese Restaurant	0.4
1	Sushi Restaurant	0.4
2	Japanese Restaurant	0.2
3	Asian Restaurant	0.0
4	Shanghai Restaurant	0.0

----Hudson Yards----

	venue	freq
0	Thai Restaurant	1.0
1	Asian Restaurant	0.0
2	Malay Restaurant	0.0
3	Udon Restaurant	0.0
4	Taiwanese Restaurant	0.0

Manhattan Neighborhoods Top Venues

----Inwood----			----Manhattan Valley----			----Noho----		
	venue	freq		venue	freq		venue	freq
0	Chinese Restaurant	1.0	0	Thai Restaurant	0.4	0	Sushi Restaurant	0.3
1	Asian Restaurant	0.0	1	Korean Restaurant	0.2	1	Asian Restaurant	0.2
2	Malay Restaurant	0.0	2	Szechuan Restaurant	0.2	2	Japanese Restaurant	0.2
3	Udon Restaurant	0.0	3	Vietnamese Restaurant	0.2	3	Udon Restaurant	0.1
4	Thai Restaurant	0.0	4	Dumpling Restaurant	0.0	4	Vietnamese Restaurant	0.1
----Lenox Hill----			----Manhattanville----			----Roosevelt Island----		
	venue	freq		venue	freq		venue	freq
0	Sushi Restaurant	0.50	0	Chinese Restaurant	0.4	0	Japanese Restaurant	1.0
1	Thai Restaurant	0.25	1	Dumpling Restaurant	0.2	1	Asian Restaurant	0.0
2	Chinese Restaurant	0.12	2	Japanese Curry Restaurant	0.2	2	Malay Restaurant	0.0
3	Japanese Restaurant	0.12	3	Sushi Restaurant	0.2	3	Udon Restaurant	0.0
4	Asian Restaurant	0.00	4	Asian Restaurant	0.0	4	Thai Restaurant	0.0
----Lincoln Square----			----Midtown----			----Soho----		
	venue	freq		venue	freq		venue	freq
0	Chinese Restaurant	1.0	0	Japanese Restaurant	0.29	0	Asian Restaurant	0.50
1	Asian Restaurant	0.0	1	Sushi Restaurant	0.29	1	Chinese Restaurant	0.25
2	Malay Restaurant	0.0	2	Vietnamese Restaurant	0.14	2	Japanese Restaurant	0.25
3	Udon Restaurant	0.0	3	Chinese Restaurant	0.14	3	Shanghai Restaurant	0.00
4	Thai Restaurant	0.0	4	Szechuan Restaurant	0.14	4	Udon Restaurant	0.00
----Little Italy----			----Midtown South----			----Sutton Place----		
	venue	freq		venue	freq		venue	freq
0	Chinese Restaurant	0.3	0	Korean Restaurant	0.86	0	Chinese Restaurant	0.4
1	Vietnamese Restaurant	0.2	1	Japanese Restaurant	0.14	1	Asian Restaurant	0.2
2	Japanese Restaurant	0.2	2	Malay Restaurant	0.00	2	Thai Restaurant	0.2
3	Thai Restaurant	0.2	3	Udon Restaurant	0.00	3	Sushi Restaurant	0.2
4	Asian Restaurant	0.1	4	Thai Restaurant	0.00	4	Malay Restaurant	0.0
----Lower East Side----			----Murray Hill----			----Tribeca----		
	venue	freq		venue	freq		venue	freq
0	Chinese Restaurant	0.43	0	Japanese Restaurant	0.38	0	Korean Restaurant	0.5
1	Vietnamese Restaurant	0.14	1	Vietnamese Restaurant	0.15	1	Sushi Restaurant	0.5
2	Thai Restaurant	0.14	2	Sushi Restaurant	0.15	2	Malay Restaurant	0.0
3	Filipino Restaurant	0.14	3	Thai Restaurant	0.08	3	Udon Restaurant	0.0
4	Japanese Restaurant	0.14	4	Shanghai Restaurant	0.08	4	Thai Restaurant	0.0

Manhattan Neighborhoods Top Venues

----Tudor City----

	venue	freq
0	Sushi Restaurant	0.3
1	Vietnamese Restaurant	0.2
2	Thai Restaurant	0.2
3	Japanese Restaurant	0.1
4	Shanghai Restaurant	0.1

----Washington Heights----

	venue	freq		venue	freq
0	Japanese Restaurant	0.33	0	Chinese Restaurant	0.33
1	Sushi Restaurant	0.33	1	Thai Restaurant	0.33
2	Thai Restaurant	0.17	2	Sushi Restaurant	0.33
3	Asian Restaurant	0.08	3	Asian Restaurant	0.00
4	Japanese Curry Restaurant	0.08	4	Malay Restaurant	0.00

----Upper East Side----

	venue	freq
0	Chinese Restaurant	0.25
1	Thai Restaurant	0.25
2	Japanese Restaurant	0.25
3	Sushi Restaurant	0.25
4	Asian Restaurant	0.00

----West Village----

	venue	freq
0	Chinese Restaurant	0.50
1	Korean Restaurant	0.25
2	Sushi Restaurant	0.25
3	Malay Restaurant	0.00
4	Udon Restaurant	0.00

----Upper West Side----

	venue	freq
0	Thai Restaurant	0.25
1	Sushi Restaurant	0.25
2	Asian Restaurant	0.12
3	Japanese Restaurant	0.12
4	Vietnamese Restaurant	0.12

----Yorkville----

	venue	freq
0	Sushi Restaurant	0.33
1	Japanese Restaurant	0.25
2	Vietnamese Restaurant	0.17
3	Thai Restaurant	0.08
4	Asian Restaurant	0.08

Total Asian Restaurants per Neighborhood

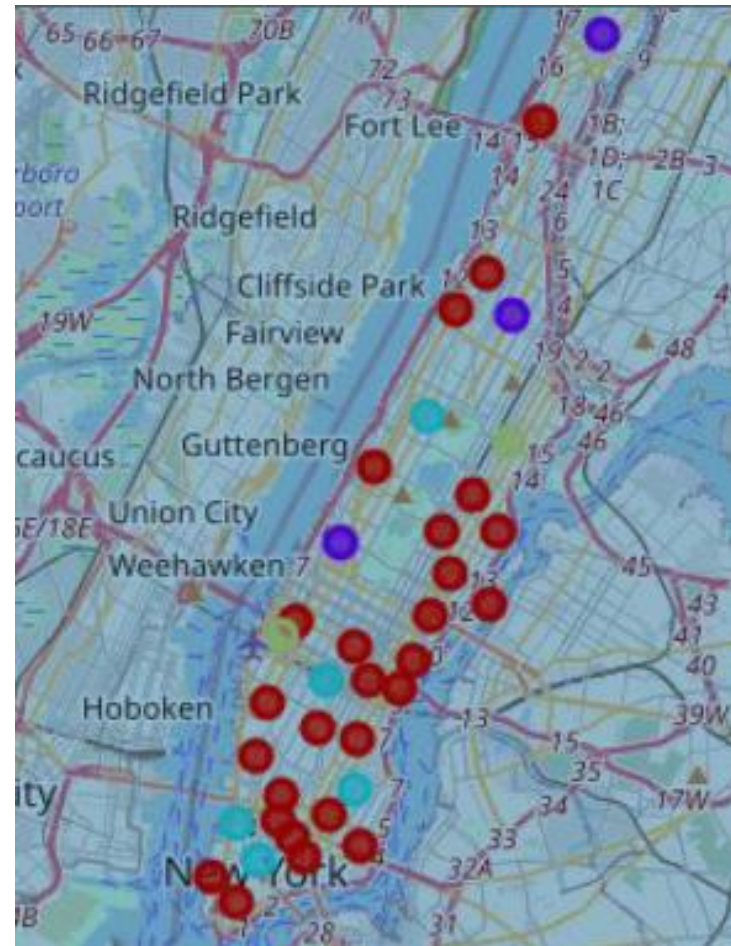
Neighborhood	Latitude
Chinatown	23
Midtown South	21
Murray Hill	13
Yorkville	12
Turtle Bay	12
East Village	12
Greenwich Village	10
Tudor City	10
Noho	10
Little Italy	10
Flatiron	8



ASIAN RESTAURANT CLUSTERING

Asian Restaurants Clusters

Using K-means clustering to partition Asian Restaurants in Manhattan and for further analysis



The 4 Clusters

Cluster 0

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 Battery Park City	Japanese Restaurant	Chinese Restaurant	Vietnamese Restaurant	Cantonese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Korean Restaurant	Udon Restaurant
1 Carnegie Hill	Sushi Restaurant	Vietnamese Restaurant	Japanese Restaurant	Chinese Restaurant	Cantonese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Korean Restaurant
3 Chelsea	Thai Restaurant	Sushi Restaurant	Asian Restaurant	Chinese Restaurant	Japanese Restaurant	Japanese Curry Restaurant	Cantonese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant
4 Chinatown	Chinese Restaurant	Vietnamese Restaurant	Malay Restaurant	Dumpling Restaurant	Asian Restaurant	Shanghai Restaurant	Taiwanese Restaurant	Dim Sum Restaurant	Thai Restaurant	Cantonese Restaurant
6 Clinton	Korean Restaurant	Thai Restaurant	Chinese Restaurant	Dim Sum Restaurant	Japanese Restaurant	Cantonese Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Vietnamese Restaurant
9 Financial District	Japanese Restaurant	Japanese Curry Restaurant	Vietnamese Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Korean Restaurant	Udon Restaurant
10 Flatiron	Japanese Restaurant	Korean Restaurant	Thai Restaurant	Sushi Restaurant	Japanese Curry Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant

Cluster 1

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
2 Central Harlem	Chinese Restaurant	Vietnamese Restaurant	Japanese Restaurant	Cantonese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Korean Restaurant	Udon Restaurant
15 Inwood	Chinese Restaurant	Vietnamese Restaurant	Japanese Restaurant	Cantonese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Korean Restaurant	Udon Restaurant
17 Lincoln Square	Chinese Restaurant	Vietnamese Restaurant	Japanese Restaurant	Cantonese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Korean Restaurant	Udon Restaurant

Cluster 2

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
5 Civic Center	Korean Restaurant	Sushi Restaurant	Asian Restaurant	Taiwanese Restaurant	Szechuan Restaurant	Thai Restaurant	Shanghai Restaurant	Malay Restaurant	Udon Restaurant	Japanese Restaurant
8 East Village	Vietnamese Restaurant	Korean Restaurant	Japanese Restaurant	Taiwanese Restaurant	Pilipino Restaurant	Chinese Restaurant	Thai Restaurant	Szechuan Restaurant	Sushi Restaurant	Shanghai Restaurant
20 Manhattan Valley	Thai Restaurant	Vietnamese Restaurant	Szechuan Restaurant	Korean Restaurant	Taiwanese Restaurant	Sushi Restaurant	Shanghai Restaurant	Malay Restaurant	Udon Restaurant	Japanese Restaurant
23 Midtown South	Korean Restaurant	Japanese Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Vietnamese Restaurant	Udon Restaurant
29 Tribeca	Korean Restaurant	Sushi Restaurant	Japanese Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Vietnamese Restaurant

Cluster 3

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
7 East Harlem	Thai Restaurant	Vietnamese Restaurant	Japanese Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Korean Restaurant
14 Hudson Yards	Thai Restaurant	Vietnamese Restaurant	Japanese Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Pilipino Restaurant	Japanese Curry Restaurant	Korean Restaurant

RECOMMENDATIONS

- The project can target the top neighbourhoods with the most Asian restaurants.
- The top Asian restaurants per neighbourhood can give insights to the customization of the program
- Cluster 0 shows that the most common are Japanese restaurants
- Cluster 1 shows that the most common are Chinese Restaurants
- Cluster 2 shows that most common are Korean Restaurants
- Cluster 3 shows that the most common are Thai Restaurants



CONCLUSION

CONCLUSION

- The program team can start with Chinatown and Midtown South where they can find most of the Asian restaurants.
- Adapt the program to the following communities which make up the different clusters:
 - Japanese
 - Chinese
 - Korean
 - Thai