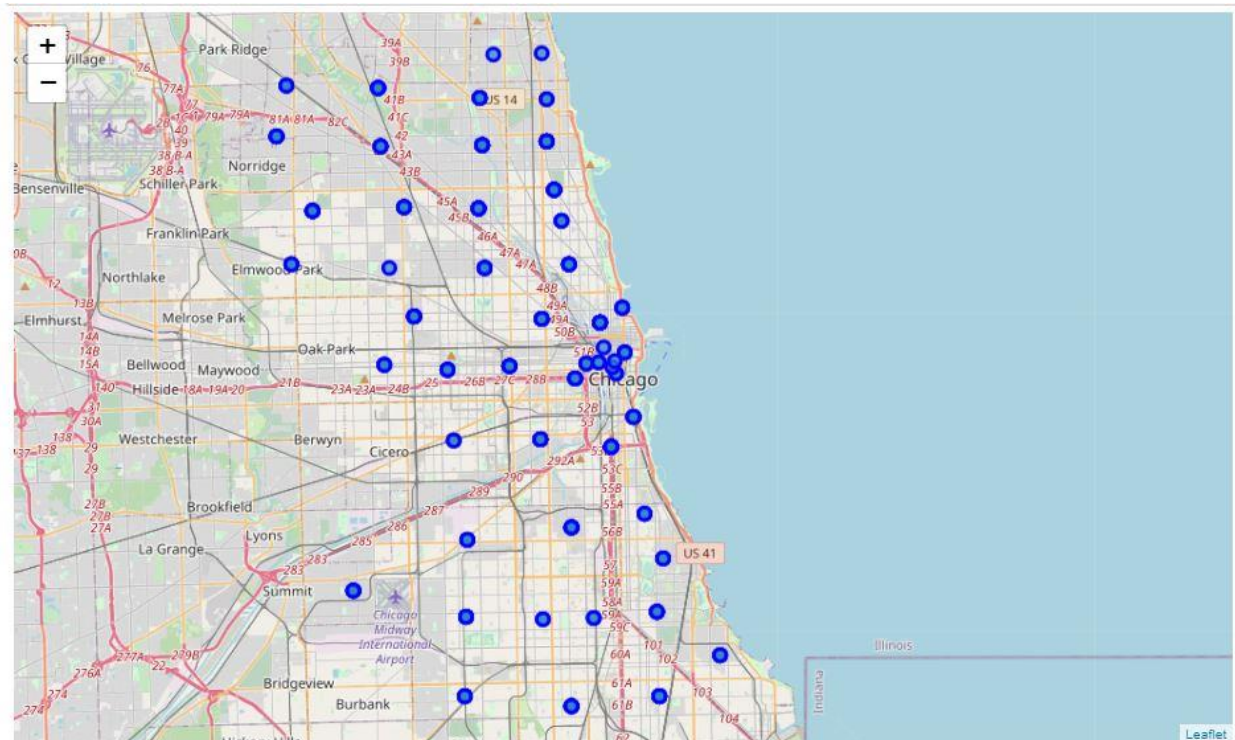


## Newcomer to Chicago

Chicago is the third largest city in the United States, with a population of nearly 3 million with more than 100 neighborhoods. It's a vibrant multicultural cosmopolitan city of the North America.

New listings are harder to find and potential homebuyers want to know what's best area to live and grow your family. Finding a new home can be challenging for newcomers based as there are a number of neighborhoods to choose from. All the potential newcomers would be interested in knowing this information. The map below shows the different neighborhoods of Chicago area.



### Data Gathering:

To get more insights to get meaningful information, we would used the data from Chicago neighborhood by zip code form the following link:

<https://www.dreamtown.com/maps/chicago-zipcode-map>

The geolocation data for the US zip code was found from the following link:

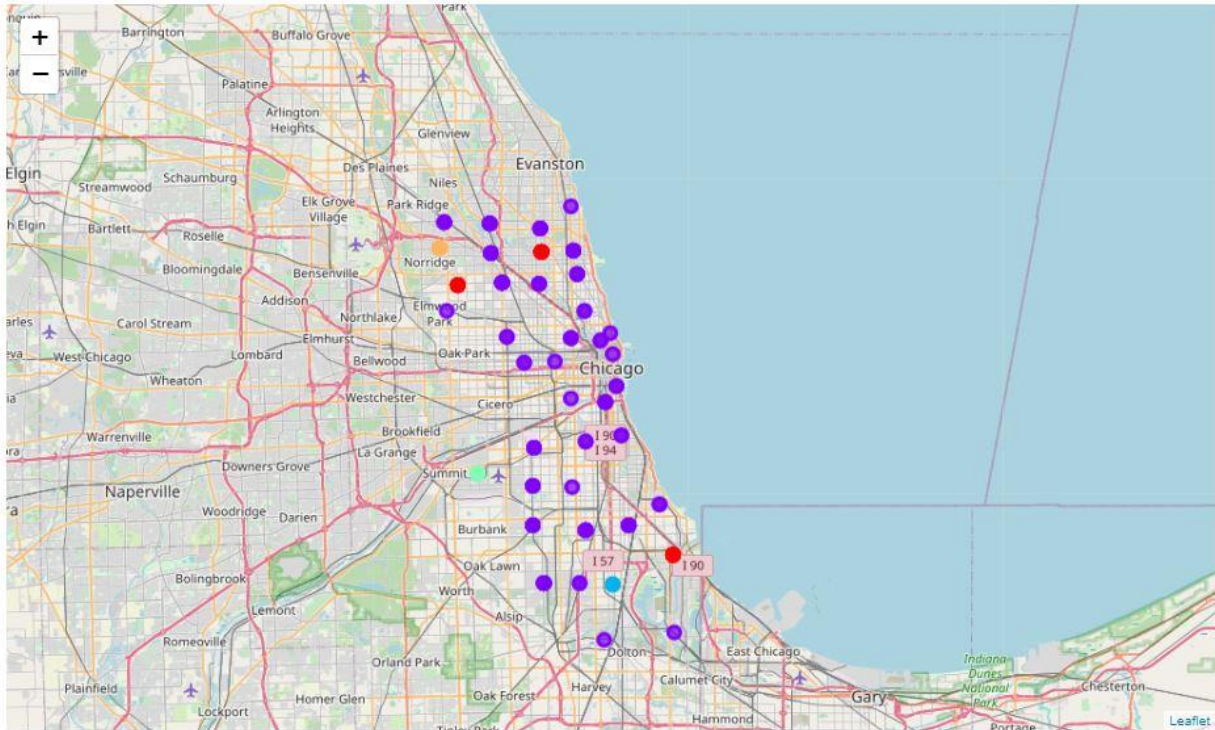
<https://public.opendatasoft.com/explore/dataset/us-zip-code-latitude-and-longitude/table/>

Both these datasets were merged to use for in our project.

Also, we used foursquare data to get places of interest in each neighborhood area.

### Methodology:

The data was formatted and cleaned using pandas library. Using foursquare we found the places of interest in each neighborhood area. The dataset was merged with the Chicago area neighborhood data. Then using k-clusters, the data was divided into 5 clusters of neighborhoods based on the places of interest which is shown in the figure below:



Each cluster was examined with the 10 most common places of interest. The clustered data set were as follows:

	Neighborhood	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
0	Albany Park	0	Mexican Restaurant	Park	Soccer Field	Ice Cream Shop	Gym	Bank	Event Service	Food	Flower Shop	Flea Market
14	Belmont Central	0	Bar	Gaming Cafe	Pet Store	Park	Gym Pool	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop
18	Belmont Heights	0	Bar	Gaming Cafe	Pet Store	Park	Gym Pool	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop
19	Belmont Terrace	0	Bar	Gaming Cafe	Pet Store	Park	Gym Pool	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop
40	Budlong Woods	0	Mexican Restaurant	Park	Soccer Field	Ice Cream Shop	Gym	Bank	Event Service	Food	Flower Shop	Flea Market
59	Dunning	0	Bar	Gaming Cafe	Pet Store	Park	Gym Pool	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop
60	East Chicago	0	Event Service	Park	Bar	Mexican Restaurant	Dive Bar	Dog Run	Food Service	Food	Flower Shop	Flea Market
111	Irving Woods	0	Bar	Gaming Cafe	Pet Store	Park	Gym Pool	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop
115	Jeffery Manor	0	Event Service	Park	Bar	Mexican Restaurant	Dive Bar	Dog Run	Food Service	Food	Flower Shop	Flea Market
134	Lincoln Square	0	Mexican Restaurant	Park	Soccer Field	Ice Cream Shop	Gym	Bank	Event Service	Food	Flower Shop	Flea Market
166	North Park	0	Mexican Restaurant	Park	Soccer Field	Ice Cream Shop	Gym	Bank	Event Service	Food	Flower Shop	Flea Market
182	Pill Hill	0	Event Service	Park	Bar	Mexican Restaurant	Dive Bar	Dog Run	Food Service	Food	Flower Shop	Flea Market
194	Ravenswood Gardens	0	Mexican Restaurant	Park	Soccer Field	Ice Cream Shop	Gym	Bank	Event Service	Food	Flower Shop	Flea Market
195	Ravenswood Manor	0	Mexican Restaurant	Park	Soccer Field	Ice Cream Shop	Gym	Bank	Event Service	Food	Flower Shop	Flea Market
204	Rosehill Cemetery	0	Mexican Restaurant	Park	Soccer Field	Ice Cream Shop	Gym	Bank	Event Service	Food	Flower Shop	Flea Market
210	Schorsch Village	0	Bar	Gaming Cafe	Pet Store	Park	Gym Pool	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop
216	South Chicago	0	Event Service	Park	Bar	Mexican Restaurant	Dive Bar	Dog Run	Food Service	Food	Flower Shop	Flea Market
217	South Deering	0	Event Service	Park	Bar	Mexican Restaurant	Dive Bar	Dog Run	Food Service	Food	Flower Shop	Flea Market
225	Stony Island Park	0	Event Service	Park	Bar	Mexican Restaurant	Dive Bar	Dog Run	Food Service	Food	Flower Shop	Flea Market

## Cluster 1

	Neighborhood	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
51	Cottage Grove Heights	2	Sandwich Place	Steakhouse	Fried Chicken Joint	Fast Food Restaurant	Yoga Studio	Empanada Restaurant	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service
190	Pullman	2	Sandwich Place	Steakhouse	Fried Chicken Joint	Fast Food Restaurant	Yoga Studio	Empanada Restaurant	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service
205	Roseland	2	Sandwich Place	Steakhouse	Fried Chicken Joint	Fast Food Restaurant	Yoga Studio	Empanada Restaurant	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service
206	Rosemoor	2	Sandwich Place	Steakhouse	Fried Chicken Joint	Fast Food Restaurant	Yoga Studio	Empanada Restaurant	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service

## Cluster 3



	Neighborhood	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
50	Clearing	3	Bakery	Dog Run	Other Repair Shop	Yoga Studio	Food	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service	Filipino Restaurant
85	Garfield Ridge	3	Bakery	Dog Run	Other Repair Shop	Yoga Studio	Food	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service	Filipino Restaurant
130	LeClaire Courts	3	Bakery	Dog Run	Other Repair Shop	Yoga Studio	Food	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service	Filipino Restaurant
150	Midway	3	Bakery	Dog Run	Other Repair Shop	Yoga Studio	Food	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service	Filipino Restaurant
243	Vittum Park	3	Bakery	Dog Run	Other Repair Shop	Yoga Studio	Food	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service	Filipino Restaurant

## Cluster 4

	Neighborhood	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
24	Big Oaks	4	Pharmacy	Pub	Supermarket	Locksmith	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service
168	O'Hare	4	Pharmacy	Pub	Supermarket	Locksmith	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service
174	Oriole Park	4	Pharmacy	Pub	Supermarket	Locksmith	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service
209	Schorsch Forest View	4	Pharmacy	Pub	Supermarket	Locksmith	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service
237	Union Ridge	4	Pharmacy	Pub	Supermarket	Locksmith	Yoga Studio	Event Service	Flower Shop	Flea Market	Fish & Chips Shop	Financial or Legal Service

## Cluster 5

### Conclusion:

Upon examining these clusters, we concluded that the cluster 1 consists of some best neighborhoods to choose from, if looking for nearby restaurants, parks and recreation and would be best suitable to live.