

Capstone Project - The Battle of Neighborhoods

Explore vegan restaurants in the city of Chicago, Illinois

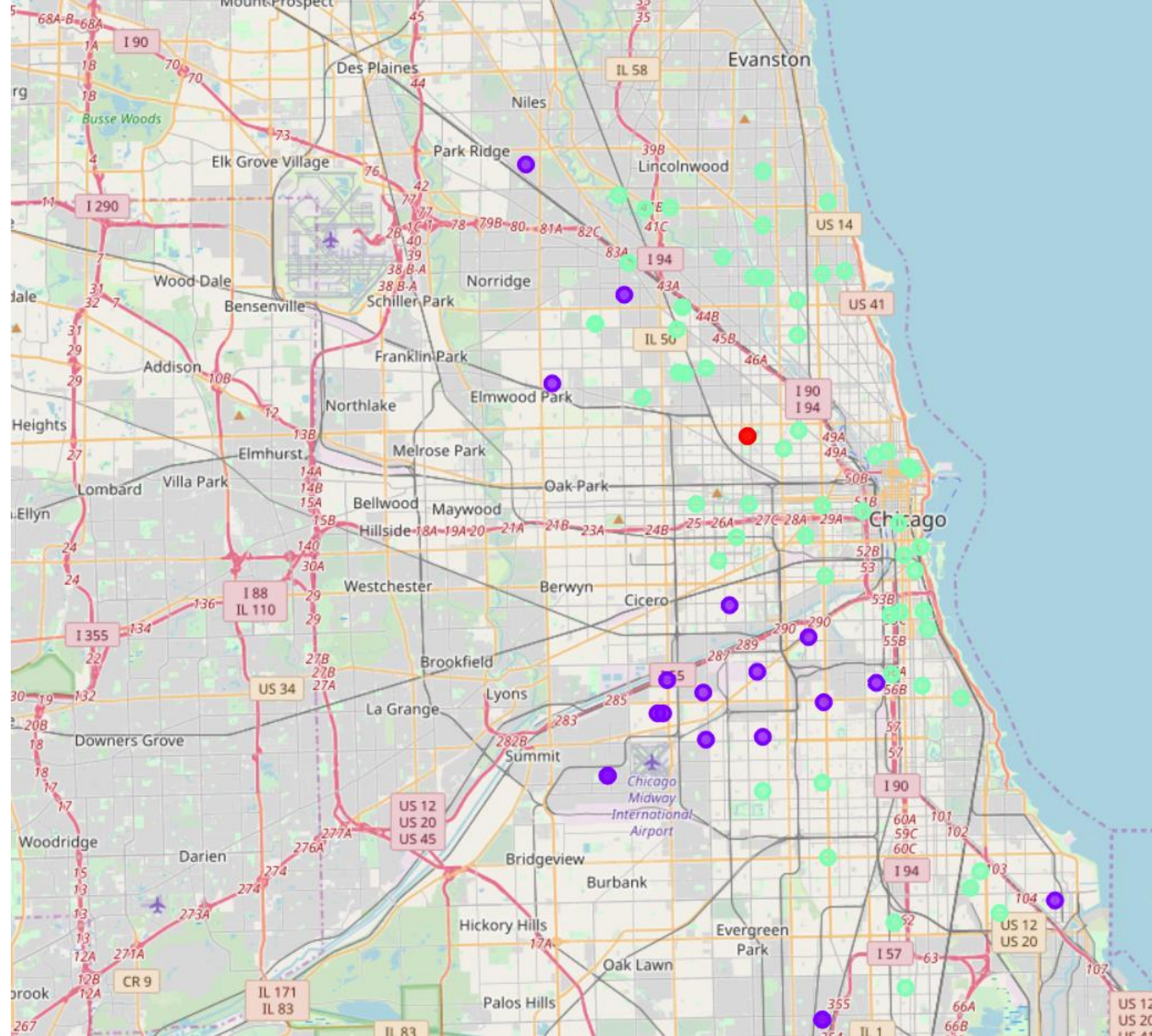
- ▶ Business location is an essential factor in the market analysis for the successful business foundation. The city neighborhood analysis along with the existing business in those area will reduce the business investment risk.
- ▶ The city has a widest racial and ethnic population which gets reflected in the city's food culture.
- ▶ Considering the global environmental impact and sustainability, awareness in the vegan diet has increased since 2010.
- ▶ Hence, as a part of the final project, this work will aim to find out the possible vegan food options in the downtown Chicago and which neighborhood will be most suitable to open the vegan restaurant?

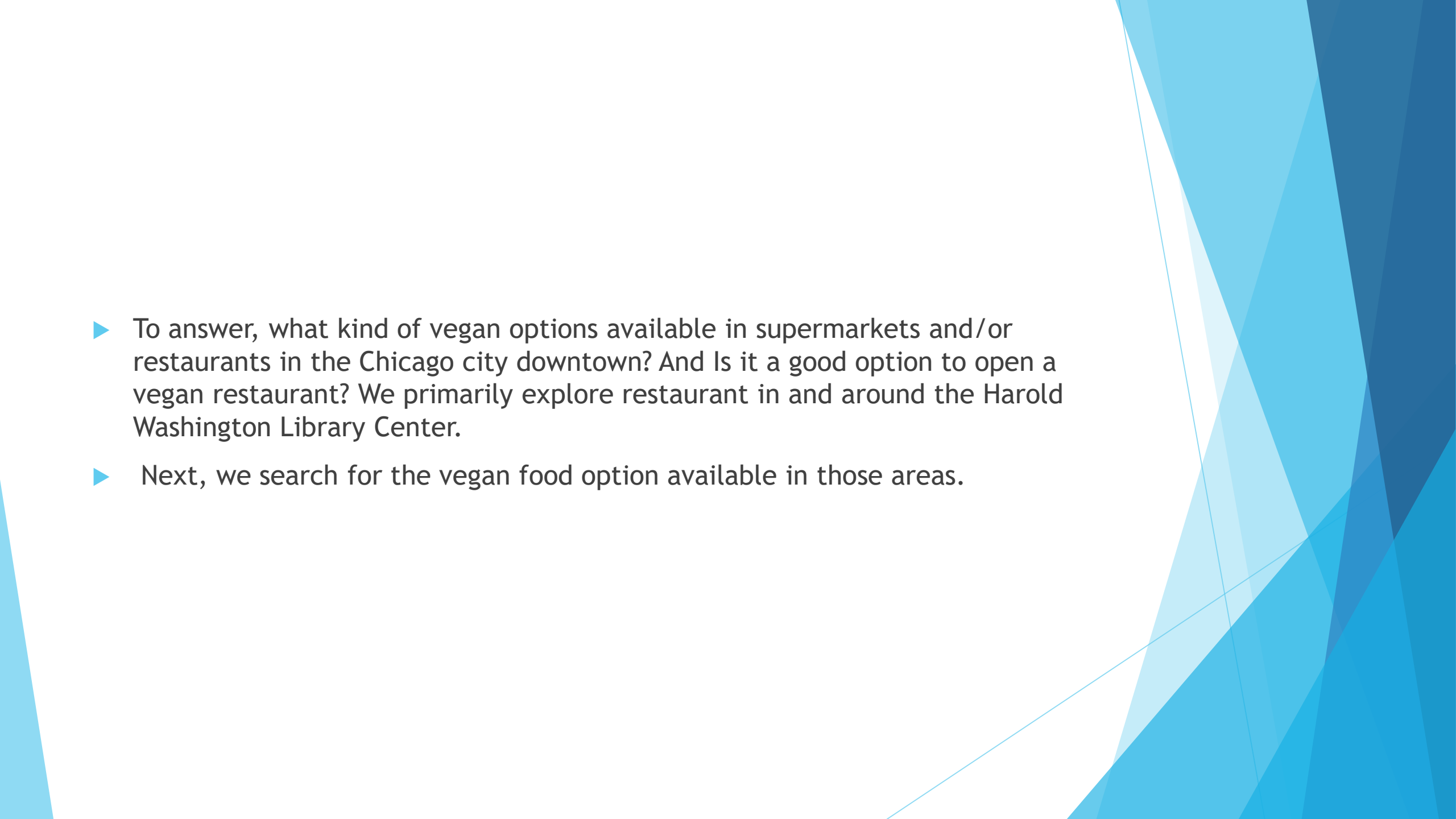
Data acquisition: Vegan Restaurant

- ▶ There are more than 200 neighborhoods by the community area in Chicago. The data was collected to gather information about the neighborhoods and community area using the below link,
https://en.wikipedia.org/wiki/List_of_neighborhoods_in_Chicago
- ▶ The latitude and longitude data of the neighborhoods further collected using the geocoder python library.
- ▶ Using FourSquare API top 5 venues for each neighborhood were identified to check the possible vegan food options in the Chicago city.
- ▶ This work mainly focus on the Chicago downtown area also referred as 'The Loop' by the locals. The loop is a central business district of the city.
- ▶ We explore various restaurants in the Chicago downtown using Foursquare API.
- ▶ Finally, vegan restaurant information collected using Foursquare API.

Chicago downtown Neighborhoods cluster

- ▶ Top 10 venues for each Chicago downtown neighborhood clustered into 3 groups.
- ▶ The red, indigo and green represents the cluster 1,2 and 3 respectively.
- ▶ Cluster 1 in red illustrates the recreational activity area.
- ▶ Cluster 2 in indigo shows the area with top 5 most common venues with food options.
- ▶ Cluster3 in green represents the daily usage shops.

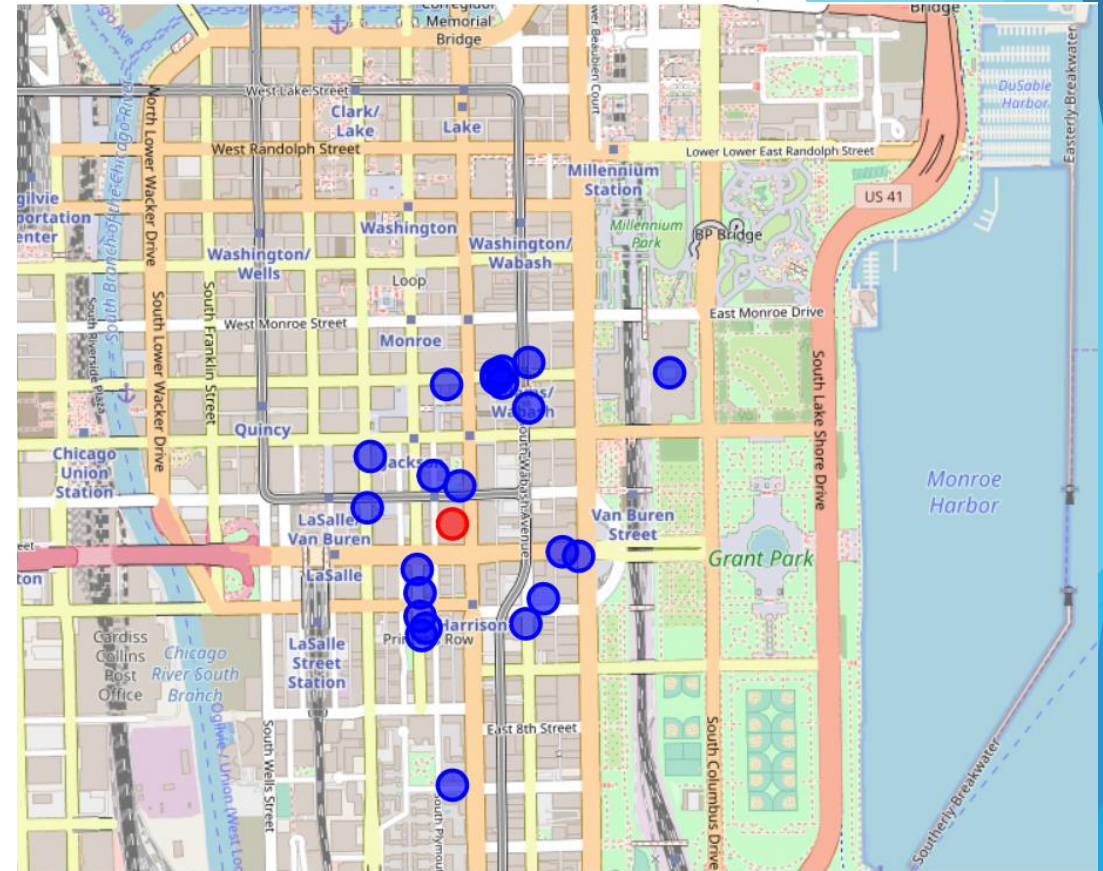


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- The background of the slide features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the slide, creating a modern, dynamic visual effect.
- ▶ To answer, what kind of vegan options available in supermarkets and/or restaurants in the Chicago city downtown? And Is it a good option to open a vegan restaurant? We primarily explore restaurant in and around the Harold Washington Library Center.
 - ▶ Next, we search for the vegan food option available in those areas.

- ▶ List of restaurant option in and around HW library center, Chicago.
- ▶ It can be seen from the list that there is no exclusive vegan restaurant in the list.

0	The Berghoff Restaurant
1	Plymouth Restaurant & Bar
2	Exchequer Restaurant & Pub
3	Sofi Restaurant
4	Chicago Curry House Indian Restaurant
5	Luna Cafe Restaurant
6	Gazebo Restaurant at Grant Park
7	Himalayan Restaurant
8	Lord Gore Restaurant
9	Rawabi Grill Mediterranean Restaurant
10	Amarit Thai Restaurant
11	Miller's Pub
12	G & G Restaurant
13	McKinlock Court Restaurant
14	HALO' Restaurant - Chicago
15	Gino's East
16	Dearborn Dentistry
17	Plymouth Street
18	La Cocina Mexican Grill
19	S.R.O. - Standing Room Only
20	Subway
21	Middle Eastern Restaurants

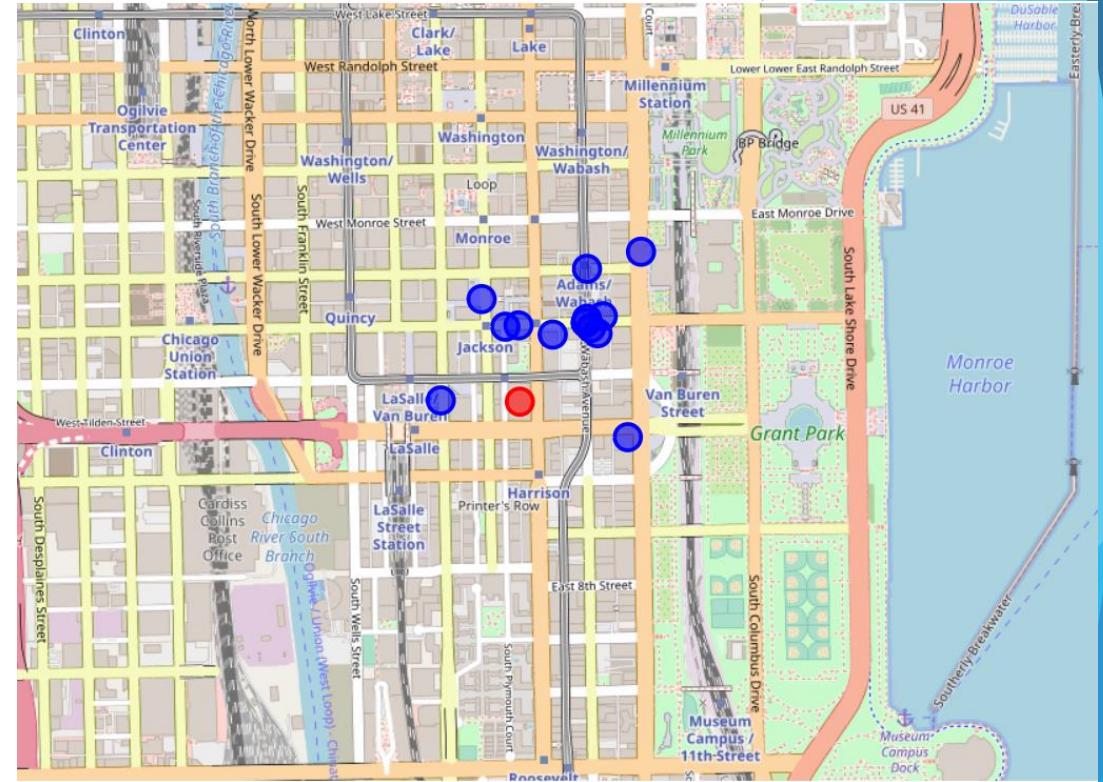
- ▶ The restaurants map in and around HW library center, Chicago.



- ▶ List of vegan food/restaurant option in and around HW library center, Chicago.
- ▶ It can be seen from the list that there is no exclusive vegan restaurant in the list. And some restaurants provide few vegan food options.

0	Metra Food Court
1	CTA - Adams/Wabash
2	Coco's southern style soul food
3	Wabash Food & Liquors
4	Southern Pitch Food Truck
5	Japan Food Express 6
6	Japan Food Express
7	Giordano's Food Truck
8	Hot Dog Fiend Food Truck
9	University Food Services
10	DePaul Center Cafeteria
11	Hat Trick Food Truck
12	H&J Deli

- ▶ The vegan restaurants map in and around HW library center, Chicago.
- ▶ As one can see from the map that there are no vegan restaurant towards the Chicago south side. Furthermore, there are only 1 option towards the east and west side of the city.
- ▶ Opening vegan restaurant at the south side of Chicago city would be the best option.



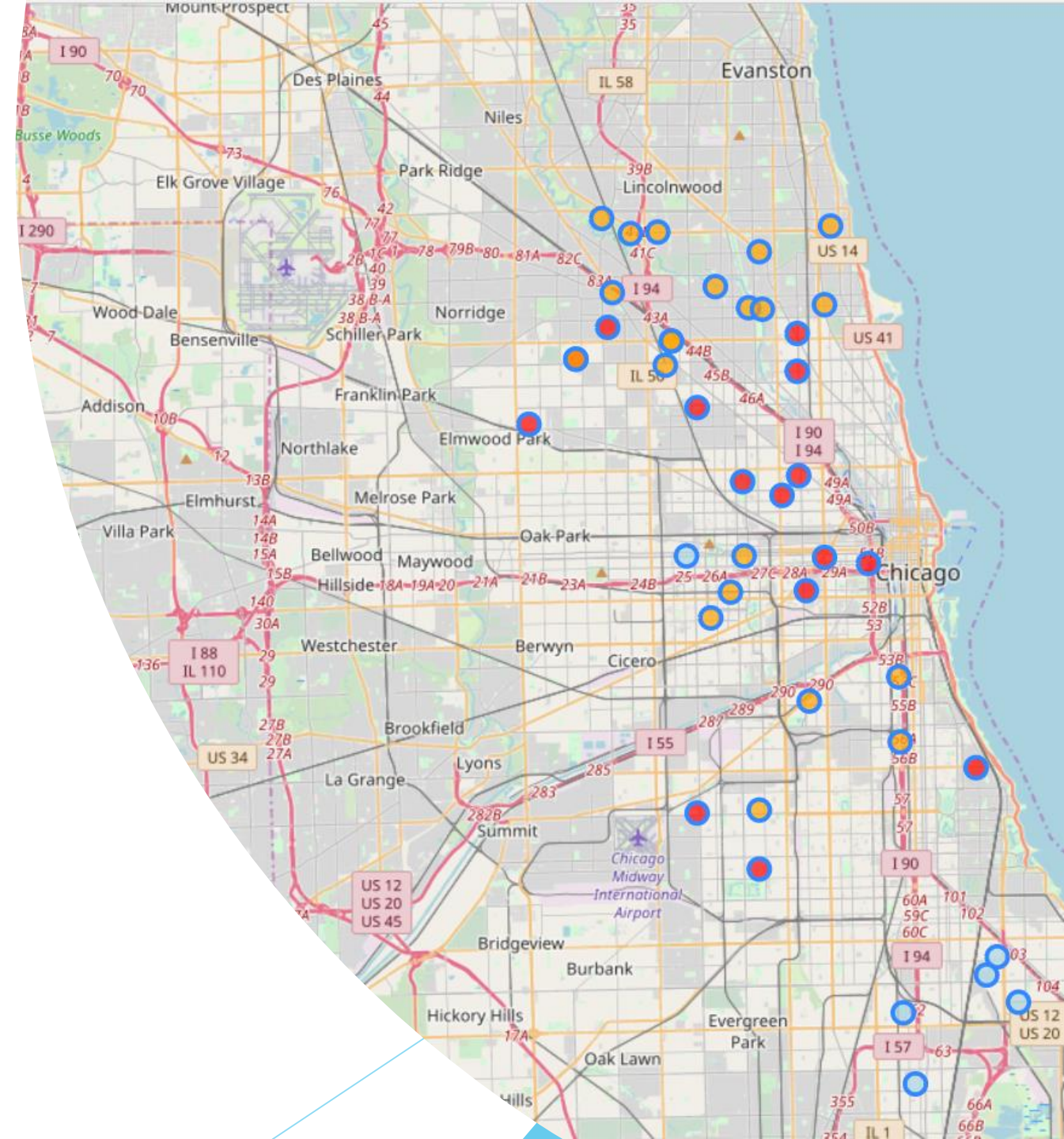
Recommendation for the contractor office setup

Data acquisition: Contractor office setup

- ▶ There are more than 200 neighborhoods by the community area in Chicago. The data was collected to gather information about the neighborhoods and community area using the below link, https://en.wikipedia.org/wiki/List_of_neighborhoods_in_Chicago
- ▶ The latitude and longitude data of the neighborhoods further collected using the geocoder python library.
- ▶ This work mainly focus on the Chicago downtown area also referred as 'The Loop' by the locals. The loop is a central business district of the city.
- ▶ For the contractor to set up his new office, we will try to collect data from the following, <https://www.rentcafe.com/average-rent-market-trends/us/il/chicago/>
- ▶ The data gives the Chicago rental market trend in the city of Chicago neighborhood to identify the possible suitable sites for the operation.

Chicago downtown Neighborhoods rental trend.

- ▶ Figure shows the Chicago downtown neighborhood rental market trend.
- ▶ Light green illustrates the rental price below 600 \$/month, Light blue shows rent between 600-1000 \$/month, Orange between 1000-1500 \$/month and red represents the monthly rent >1500 \$/month.
- ▶ It is difficult to find an office space for rent below 1000 \$/month in Chicago downtown.
- ▶ Monthly rent below 1000 \$ only possible in south loop. However, West Garfield park seems in the downtown seems the most suitable option from the map.



Conclusions:

Restaurant location recommendation.

- ▶ The Chicago south side has top 5 most common venues restaurants.
- ▶ However, south side lacks the vegan market / restaurant options.
- ▶ There are few restaurants in the downtown which provides selective vegan options.
- ▶ Chicago downtown south, east and west side would be most suitable option to open an exclusive vegan restaurant.

Contractor office setup recommendation.

- ▶ West Garfield park in the downtown seems the most suitable option from the map.