

The Battle of Neighborhoods

Final Capstone Presentation

The Goal

Find a viable location for a medium sized grocery store

Location, Chicagoland's western suburbs, close to major highways and shopping centers

The Data

We used an Illinois government municipality database source

<https://datahub.cmap.illinois.gov/dataset/community-data-snapshots-raw-data>

The extracted data is current and elaborate

We used the best data analysis tools to clean and restructure this data to make it more useful to our analysis project

	SUBURB	POPULATION	MEDIAN_AGE	MEDINC	EMPLOYMENT	UNEMP	BACH	RET_SALES
	Addison	37182	35.1	55203	15313	1791	3488	9.619168e-08
	Algonquin	39413	39.4	100027	16460	1086	5720	7.685687e-08
	Arlington Heights	19335	33.4	53628	9326	1180	1696	3.490859e-08
	Antioch	14342	37.1	81406	7123	391	2091	3.867923e-08
	Aurora	206907	32.0	63967	97755	7633	23962	2.271341e-09
	Burnbrook	1305	24.0	138250	542	28	251	9.622525e-07
	Barrington	10449	43.6	119888	4865	249	2603	5.485858e-08
	Barrington Hills	8574	54.9	131324	1894	65	1102	4.886885e-08
	Bartlett	41475	38.9	100458	22557	1315	8853	2.427547e-08

The Tools

We mostly relied on Pandas for constructing our dataset, Foursquare for exploring venues and Folium for mapping

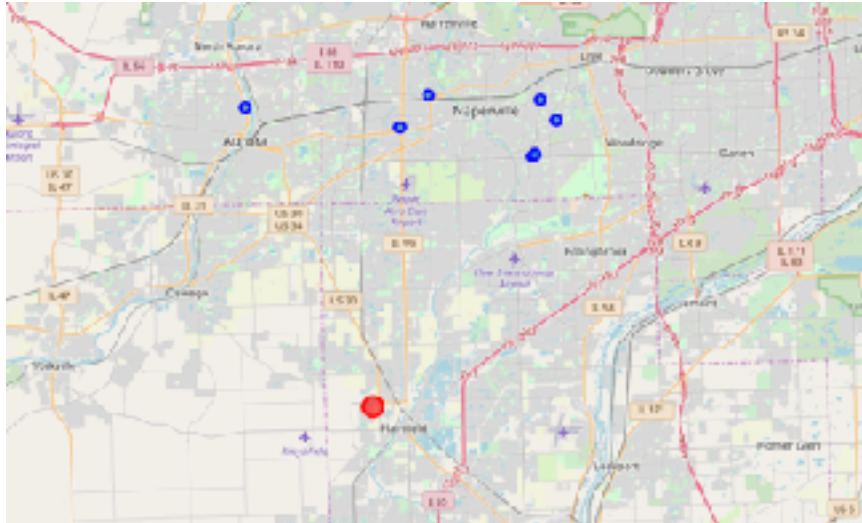
```
nearby_venues.head()
```

	name	categories	lat	lng
0	Foxy Nails - Yorkshire Shopping Center	Spa	41.763933	-88.207609
1	Market Meadows Shopping Center	Shopping Mall	41.749505	-88.115875
2	Fox Run Square Shopping Center	Shopping Mall	41.750450	-88.113500
3	Riverbrook Shopping Center	Shopping Mall	41.781288	-88.188034
4	Northgate shopping center	Department Store	41.774191	-88.314860

The Recommendation

Based on our initial goal of finding a suitable location for a grocery store, our Foursquare maps indicates that the area between Naperville and Woodridge is a viable location which we could

consider for our grocery store. This is essentially because there are shopping centers, businesses and highways in close proximity, traffic flow is consistent throughout the day and yet this location is not as crowded as areas closer to Chicago.



The Final Location

South west corner of the Hobson Road and ROute 53 intersection in Woodridge, IL

```
import folium
# Creating map of Chicago using latitude and longitude values...
map_chicago = folium.Map(location=[41.7885777, -88.8658409], zoom_start=75)
map_chicago
```

