

ANALYSIS OF CHICAGO SUBURBS FOR A PROSPECTIVE RESTAURANT LOCATION



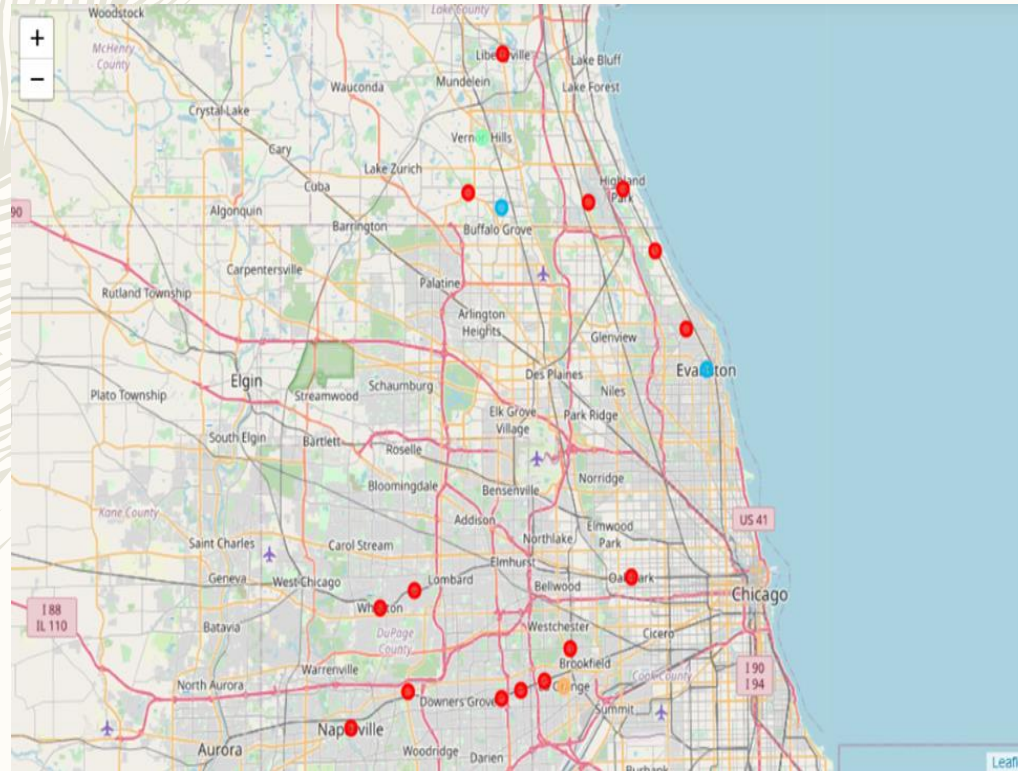
Introduction/Business Problem

- Our Client is running a fine dining restaurant in downtown Chicago.
- Client wants to expand their operations into the suburbs of Chicago.
- Top 20 Suburbs of Chicago (Suburbs with population more than 5000) are been considered as prospective locations for the new restaurant.



Data

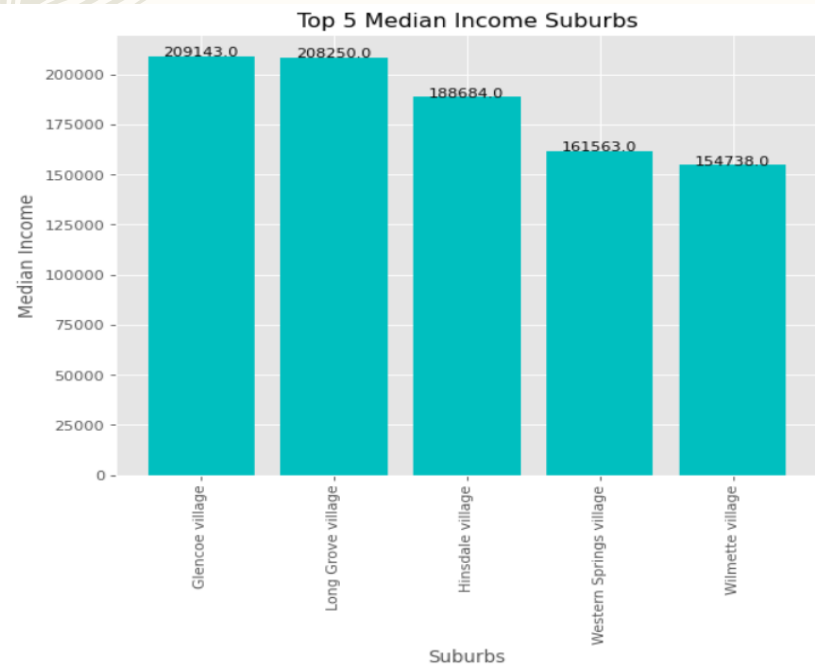
- Top 20 suburbs of Chicago metropolitan area. <https://www.niche.com/places-to-live/search/best-suburbs/m/chicago-metro-area/>
- Suburbs Population data from United States Census Bureau. Ref: <https://www.census.gov/quickfacts/fact/table/US/PST045219>
- Latitude and Longitude is retrieved using OpenCage Geocoder Python package.
- Foursquare API Developer Access: <https://developer.foursquare.com/>



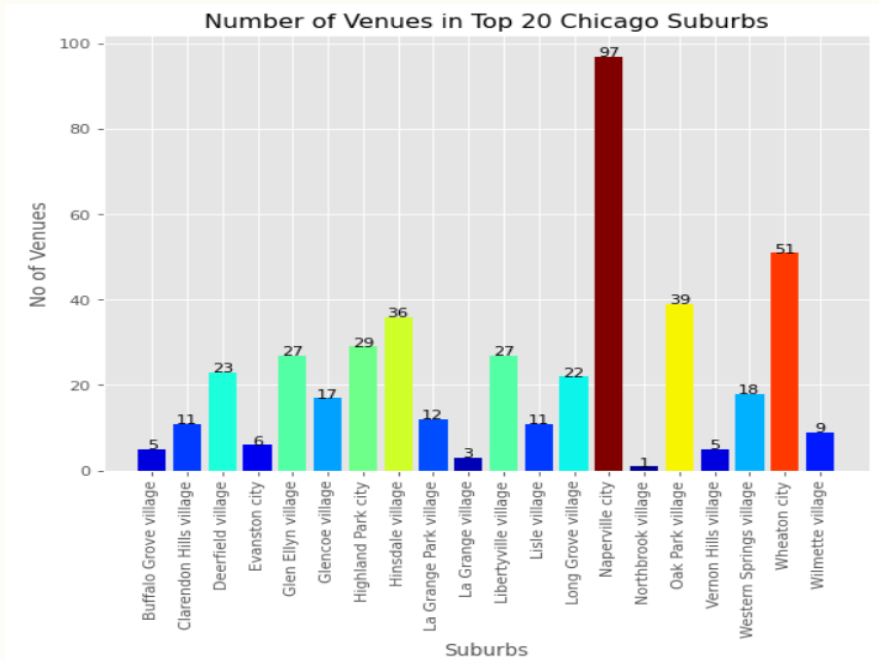
- K-mean clustering does not give a proper interpretation and cluster are scattered.
- A better clustering size needs to be considered for further analysis.

Median Income and Venues

Top 5 Median Income Suburbs



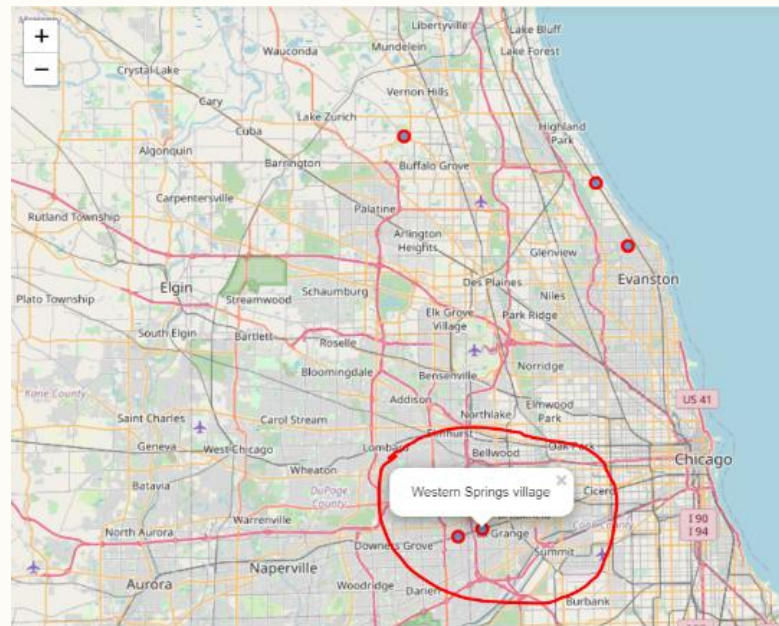
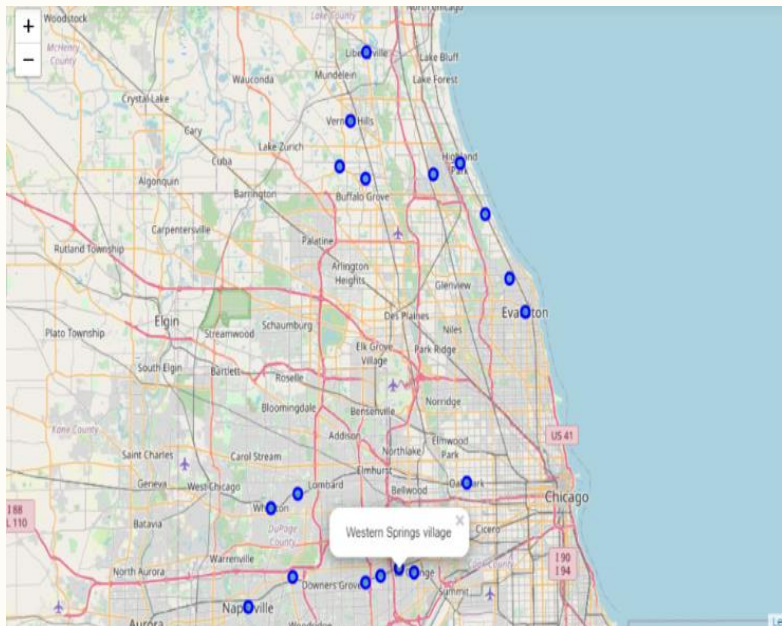
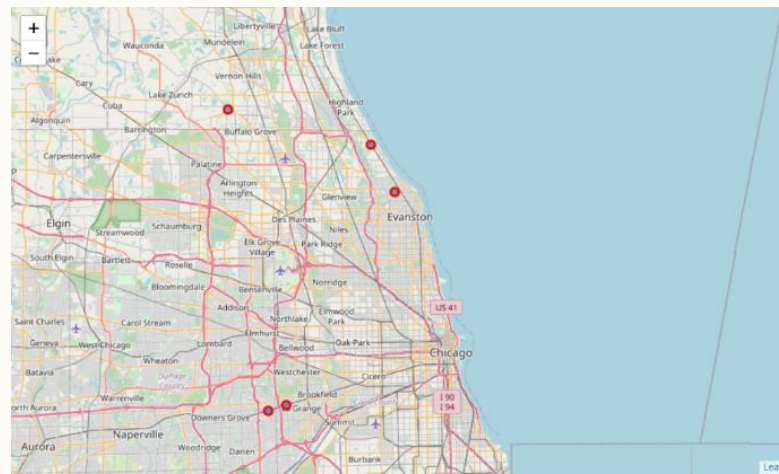
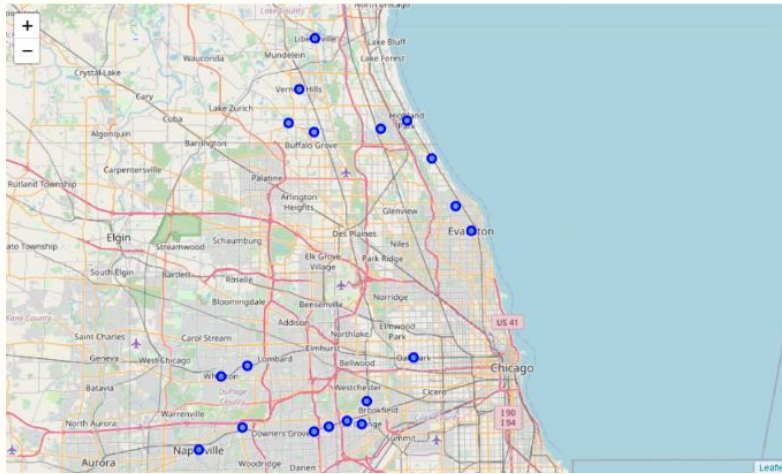
Suburb Venue Count

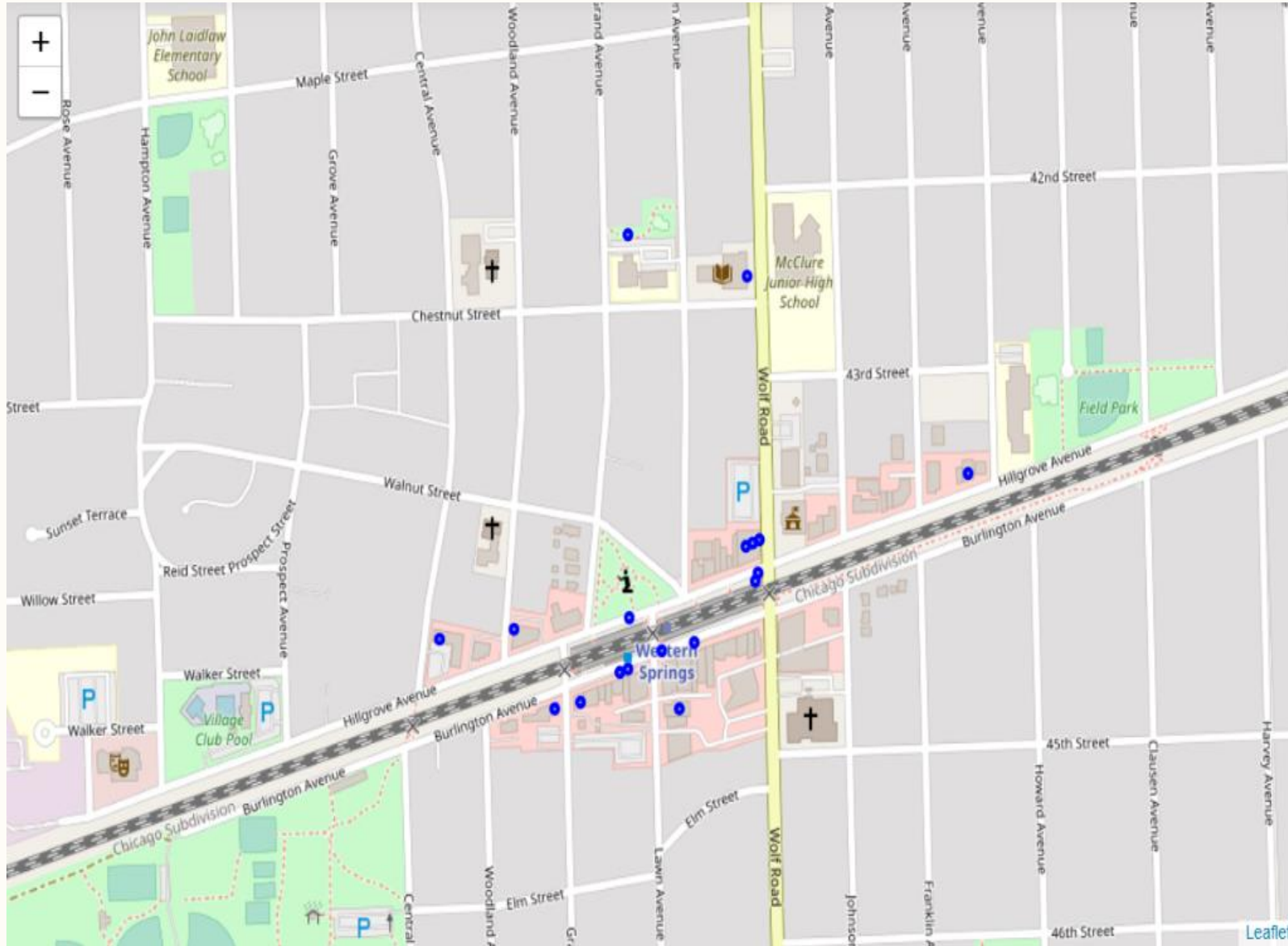


Prospective Location

Western Springs village is considered as the ideal location for the following reasons

- High Median Income of \$161,563
- Located nearer to like La Grange Park village, Clarendon Hills village, La Grange village, Hinsdale village.
- 78.4% of the adult population above 25 years holds a bachelor's degree
- Hinsdale village is among top 5 richest suburb which is located nearer





Suggestion

- Most of the venues in Western Springs village are located near the railway line. So, It is highly recommended to open the restaurant in the downtown Western Springs village nearer to the intersection of Rail line and Wolf Road



Conclusion and future direction

- Standalone dataset from United States Census Bureau website along with geo location coordinates was sufficient to determine the prospective location.
- Census dataset can be combined with another dataset like sale in getting better insight of operating a restaurant in that locality.
- Addition information from U.S. Department of Labor can be used to determine the operation cost which would be most valued by the client in predicting the profits.