

## Best location for new Coffee Shop - Chicago

Juan Belaustegui Feb. 2020



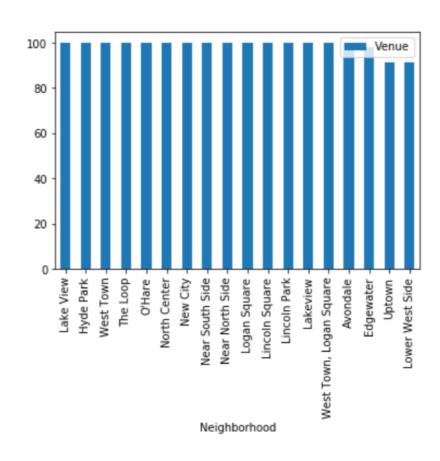
## Choosing location for a new store is challenging

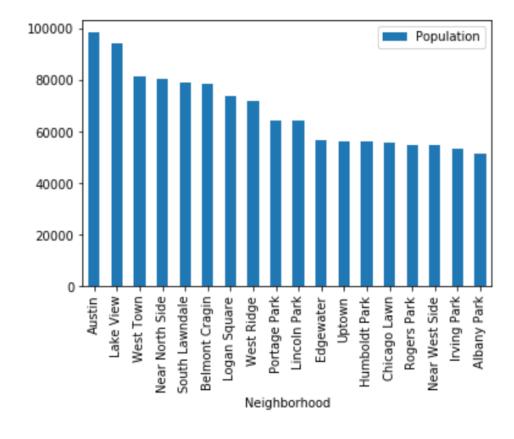
- Select new location is not easy. There are a lot of variables to analyze.
- We can have an idea from someone who knows the city to cover, but it is posible that you don't have a complete visión.
- A data Analysis with georeference can help a lot to make a decisión.

# Data acquisition and cleaning

- This study is to provide a recommendation for a new Coffee shop in Chicago.
- The data of neighborhoods has been gathered from Wikipedia
   https://en.wikipedia.org/wiki/List of neighborhoods in Chicago
- Population information from last census
   <u>www.chicago.gov/content/dam/city/depts/zlup/Zoning</u>
   <u>Main Page/Publications/Census 2010 Community Area</u>
   <u>Profiles/Census 2010 and 2000 CA Populations.pdf</u>
- Total of 4,282 venues and 343 categories were processed in the raw dataset.
- Cleaned data consisted in 31 rows with 10 most common venues plus coordinates and population.

### Data Neighborhood Analysis



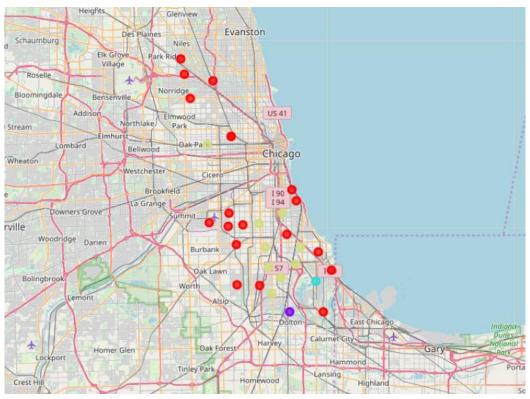


#### Chicago Neighborhoods

#### **Total Neighborhoods**

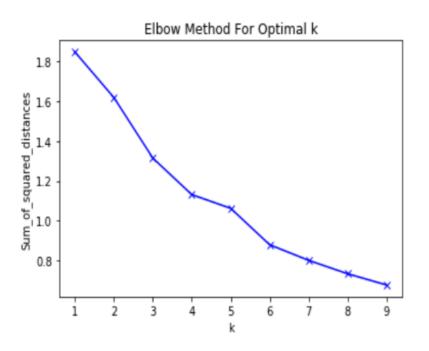


## Neighborhoods with No Coffee Store presence.



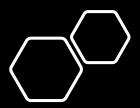
#### Clustering Neighborhoods

#### **Determining K optimum**



#### **K=4 Plotting clusters**





#### Cluster 3 detail of Austin Neighborhood

Neighborhood	Cluster	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	Populatio	on
Auburn Gresham	3	Fast Food Restaurant	Lounge	Park	Currency Exchange	Discount Store	Pharmacy	Southern / Soul Food Restaurant	Boutique	Mexican Restaurant	Seafood Restaurant	48743	3.0
Austin	3	Fried Chicken Joint	Food Court	Southern / Soul Food Restaurant	Gymnastics Gym	Train Station	Seafood Restaurant	Park	Discount Store	Grocery Store	BBQ Joint	98514	
Avalon Park	3	Fast Food Restaurant	Sandwich Place	Pharmacy	Park	Grocery Store	Dance Studio	Bank	Cajun / Creole Restaurant	Supermarket	Automotive Shop	10185	5.0
Burnside	3	Bus Station	Southern / Soul Food Restaurant	Construction & Landscaping	Liquor Store	Gym	Fast Food Restaurant	Intersection	Train Station	Women's Store	Eastern European Restaurant	2916	5.0
Chatham, Roseland	3	Fast Food Restaurant	Discount Store	Fried Chicken Joint	Pharmacy	Sandwich Place	Intersection	Food	Chinese Restaurant	Fish & Chips Shop	Bus Station	Na	aN
Roseland	3	Fast Food Restaurant	Discount Store	Fried Chicken Joint	Pharmacy	Sandwich Place	Intersection	Food	Chinese Restaurant	Fish & Chips Shop	Bus Station	44619	9.0
Washington Heights	3	Fried Chicken Joint	BBQ Joint	Park	Cosmetics Shop	Library	Sandwich Place	Nightclub	Chinese Restaurant	Gift Shop	Discount Store	26493	3.0
Washington Park	3	Fast Food Restaurant	Fried Chicken Joint	Pizza Place	Train Station	Bookstore	Park	Gas Station	Bus Station	Mobile Phone Shop	Chinese Restaurant	11717	7.0
West Englewood	3	Fast Food Restaurant	Liquor Store	Cosmetics Shop	Discount Store	Convenience Store	Sandwich Place	Currency Exchange	Fried Chicken Joint	Women's Store	Eye Doctor	35505	5.0
West Pullman	3	Fast Food Restaurant	Grocery Store	General Entertainment	Clothing Store	Sandwich Place	Bank	Liquor Store	Discount Store	Fried Chicken Joint	Chinese Restaurant	29651	1.0

## Conclusion and Recommendations



This study analyzed the best option where to open a new Coffee Shop in Chicago.



With the information gathered from open sources, like Wikipedia and Foursquare API, we conclude the best option is in Austin Neighborhood.



This study can be replicated to do the same with any kind of store in any place around the world.



For a more detailed information, the data should be crossed with a survey on the field, specially in Austin, where the recommendation is provided.