The Battle of Neighborhoods

Saint Louis by Demography

Overview
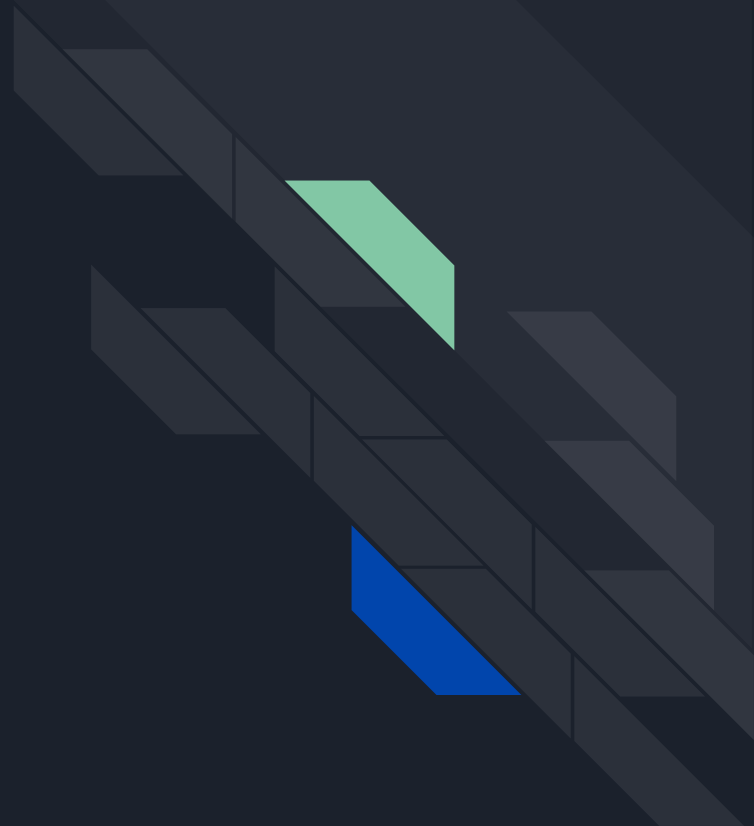
Introduction

The Saint Louis Metro City neighborhoods are grouped as North, Central and South Corridors. It is familiar to STLcians that North corridor is predominantly Black while South corridor is predominantly White. The business problem here is to find what is the most common venues among the Black neighborhoods and see if this is different in White neighborhoods.

This could be interest to anyone who is curious about STL and its neighborhoods.

Data Description

01   We will use public data available in Wikipedia to get demographic data about STL neighborhoods and then Foursquare API to get venues in those neighborhoods

02   We will also use Foursquare API to get data about venues in STL neighborhoods.

Methodology

Gather Data

Use pandas.read_html to scrape STL neighborhood data with demography and add lat/lon using Nominatim geocoder. Also, use Foursquare API to get venues./

Explore & Analyze

Check cluster features, contrast between neighborhoods and see what are the most common venues.

Cluster & Visualize

Cluster the neighborhood and visualize corridors using seaborn and create map using folium.

Conclusion

Summarize the findings

04

01

03

02

STL Neighborhoods

|	Neighborhood	Population	White	Black	Hispanic/Latino2	AIAN1	Asian	Mixed Race	Corridor
0	Academy	3006	16.9	54.7	20.5	1.52	4.3	3.5	North
1	Baden	7268	6.3	91.8	0.5	0.10	0.0	1.3	North
2	Benton Park	3532	68.2	25.1	3.2	0.30	1.2	3.8	South
3	Benton Park West	4404	28.0	59.6	10.5	0.00	1.9	5.1	South
4	Bevo Mill	12654	74.2	13.8	7.5	0.40	4.6	3.9	South
...	...	...	...	...	...	...	...	...	...
74	Walnut Park East	4130	1.5	96.7	0.8	0.10	0.0	1.5	North
75	Walnut Park West	3349	1.1	97.9	0.8	0.00	0.0	0.8	North
76	Wells/Goodfellow	5859	0.7	97.5	0.6	0.20	0.2	1.4	North
77	West End	6574	8.1	84.9	3.8	0.20	1.5	2.5	North
78	Wydown/Skinker	1054	85.7	3.4	3.1	0.00	7.5	2.7	Central

Explore and Analyze

Cluster 0 (red) is predominantly Black and cluster 2 (blue) is predominantly White.

85.27%
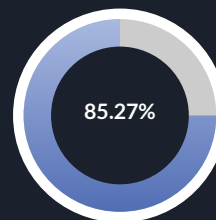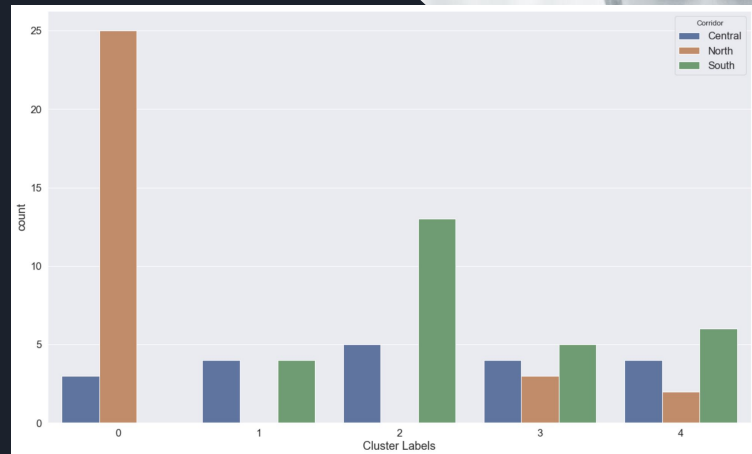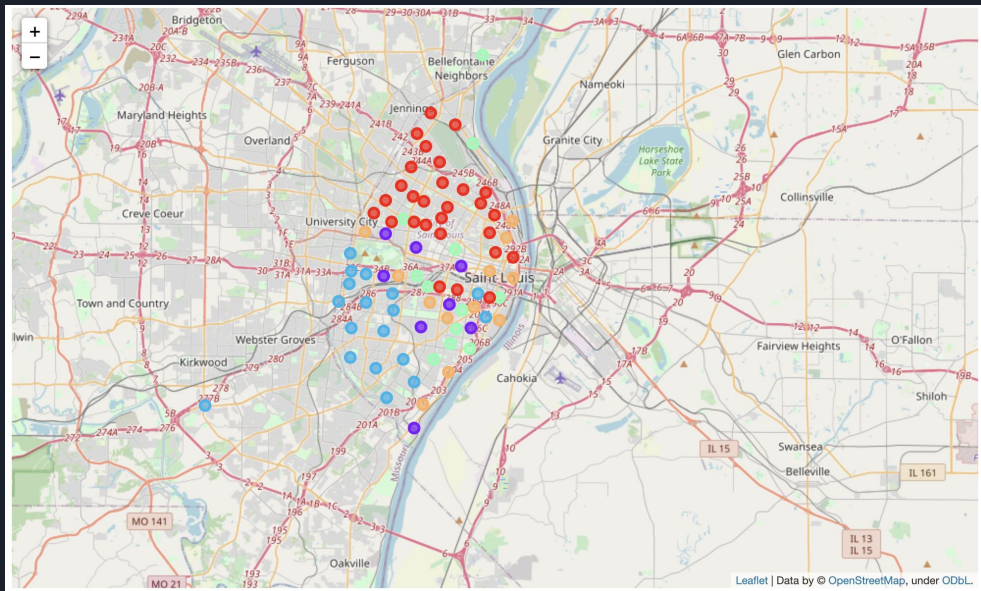
White population in predominantly White neighborhoods

93.29%
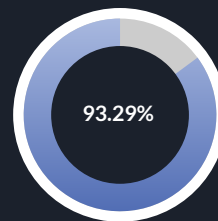
Black population in predominantly Black neighborhoods

Explore and Analyze

Based on the data it appears that people in Cluster 0 neighborhoods use Foursquare app less frequently compared to people on Cluster 2 neighborhoods.

Neighborhood	Venue Category
Peabody Darst Webbe	15
Tiffany	9
Fountain Park	7
O'Fallon	5
Vandeventer	5
Hamilton Heights	5
Visitation Park	5

Neighborhood	Venue Category
South Hampton	37
The Hill	30
Ellendale	28
Lafayette Square	25
Soulard	23

15
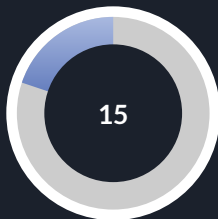
Highest number of venue categories in Cluster 0 (Black) neighborhoods

37
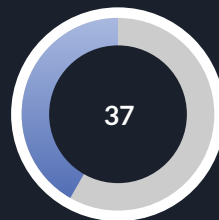
Highest number of venue categories in Cluster 2 (White) neighborhoods

Final Analysis and Remarks

1st Most Common Venue	count
Park	4
American Restaurant	3
Bar	3
Discount Store	2
Pizza Place	2
Gym	2
Convenience Store	2

1st Most Common Venue	count
American Restaurant	2
Bar	2
Italian Restaurant	2
Park	2
Pizza Place	2
Convenience Store	1

Park appears to be the most common venues for Black neighborhoods followed by American Restaurant and Bar at tie. On the other hand, American Restaurant, Bar, Italian Restaurant and Park are the most common venues in White neighborhoods.