BATON ROUGE NEIGHBORHOODS

Applied Data Science Capstone - Coursera by IBM - July 2021



BACKGROUND

- Use Foursquare's location-based data to explore the neighborhoods in Louisiana's capital city
- Provide my colleagues with a comprehensive look at ideal areas to look for housing based on the venues available



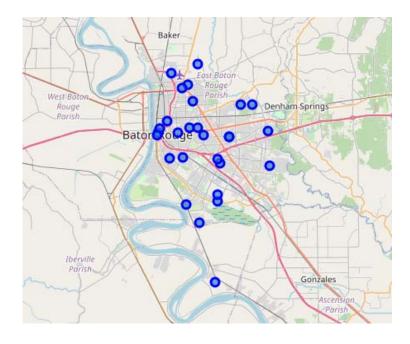
Neighborhood names obtained from Wikipedia

Manually added latitude & longitude (Geocoder did not work)

Resulting dataframe has 3 columns & 30 rows

NEIGHBORHOODS IN BATON ROUGE

| Downtown | Spanish Town | Beauregard Town | Garden District | Old South Baton Rouge |
|--------------------|--------------------|--------------------|--------------------------|--------------------------|
| LSU/Lakeshore | Mid-City | McDonald Land | Brookstown | Melrose Place |
| Melrose East | Inniswold | Goodwood | Hundred Oaks Addition | Southdowns |
| Gardere | Westminster | Oak Hills Place | Scotlandville | Shenandoah |
| Sherwood Forest | Brownfields | Zion City | Monticello | Park Forest |
| Glen Oaks | University Club | Centurion Place | Northdale | Broadmoor |







Asked for top 100 venues categories for each neighborhood

Highest count was Downtown (42), then Garden District (41), Beauregard Town (32) and Spanish Town (17)

Remaining neighborhoods had less than 10 venue types 93 unique venue type categories among all neighborhoods

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Home Service

American Restaurant

Intersection

Trail

Flower Shop

Construction and Landscaping

Convenience Store

Dance Studio

Discount Store

Distillery

Donut Shop

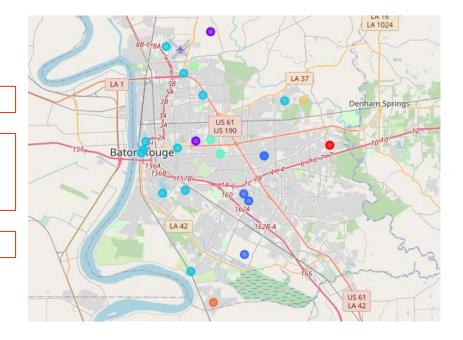
CLUSTERING THE NEIGHBORHOODS

Used Kmeans() to build 8 clusters

Top Clusters:

- Cluster 3: 12 neighborhoods
- Cluster 2: 5 neighborhoods
- Cluster 4 & 1:2 neighborhoods each

Remaining clusters had 1 neighborhood each







LARGEST CLUSTER - #3

Cluster 3 Neighborhoods (12)

- Downtown
- Brookstown
- Spanish Town
- Southdowns
- Beauregard Town
 Gardere
- Garden District
 Scotlandville
- LSU/Lakeshore
 Monticello
- Mid-City
- Glen Oaks

Top Venues in Cluster 3

- Focused on food and active pursuits
- 1. Sandwich Place
- 2. American Restaurant
- 3. Park, Trail, College, Gym, Pool
- 4. Food
- Fishing Store, Music Venue, College Gym

SECOND LARGEST CLUSTER - #2

Cluster 2 Neighborhoods (5)

- Inniswold
- Oak Hills Place
- Broadmoor
- Sherwood Forest
- Westminster

Top Venues in Cluster 2

- Focused on large box stores and proximity to interstate or major highways
- 1. Home Service (Shops & Service)
- 2. Intersection (Travel & Transportation)
- 3. Trail
- 4. Flower Shop
- 5. Construction & Landscaping

DISCUSSION

- Neighborhoods in Cluster 3 are best for those looking for a variety of activities & services
 - Various options with mix of food venues and activity-related venues
- Neighborhoods in Cluster 2 are best for those who want to be surrounded by larger box stores (i.e. Home Depot); or those who need easy access to the interstate (or major highways) for a commute or frequent travel

CONCLUSION

- Before relocating to Baton Rouge, think about one's personal interests
 - Some neighborhoods offer variety of venue types whereas others are dominated by a select 1-2 specific venue types.
- Personal Choice: neighborhoods in Cluster 3
- Important Note: additional factors such as housing availability and proximity to favorite venue types should also be considered before making the final choice on a neighborhood

REFERENCES

 Neighborhood data pulled from Wikipedia https://en.wikipedia.org/wiki/Neighborhoods_in_Baton_Rouge,_Louisiana