



THE BATTLE OF NEIGHBORHOODS

Selecting Neighborhood of Houston

Introduction

- Background

- Houston is the largest city in Texas, the fourth-largest in America.
- Houston is a diverse city full of opportunity, excitement, culture, food, art and history.
- Houston draws seven million visitors to the district each year.

- Business Problem

- Visitor always difficult to find out best places to visit in Houston

- Interest/Success Criteria

- Cluster neighborhoods in Houston based on similarity of venue categories.

Data Source

- The name, location and boundaries for all the Houston neighborhoods:

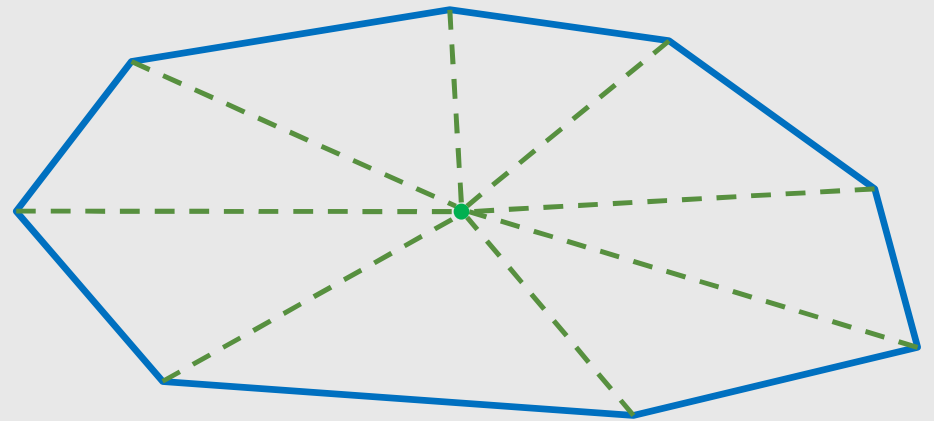
https://opendata.arcgis.com/datasets/deae15e7f3db4b198946c17f0d169c39_3.geojson

- Get the latitude and longitude values of Houston using geopy library.
- Explore the venues and neighborhoods using Foursquare API.

Data Cleaning

- The data is imported and transformed to pandas dataframe.
- The latitude and longitude of each neighborhood is calculated by taking the average center of all of its shape boundary points.

```
neighborhood_latlon  
=pd.DataFrame(  
pd.DataFrame(pd_shape.iloc[0])[0].tolist()).mean(axis=0)
```



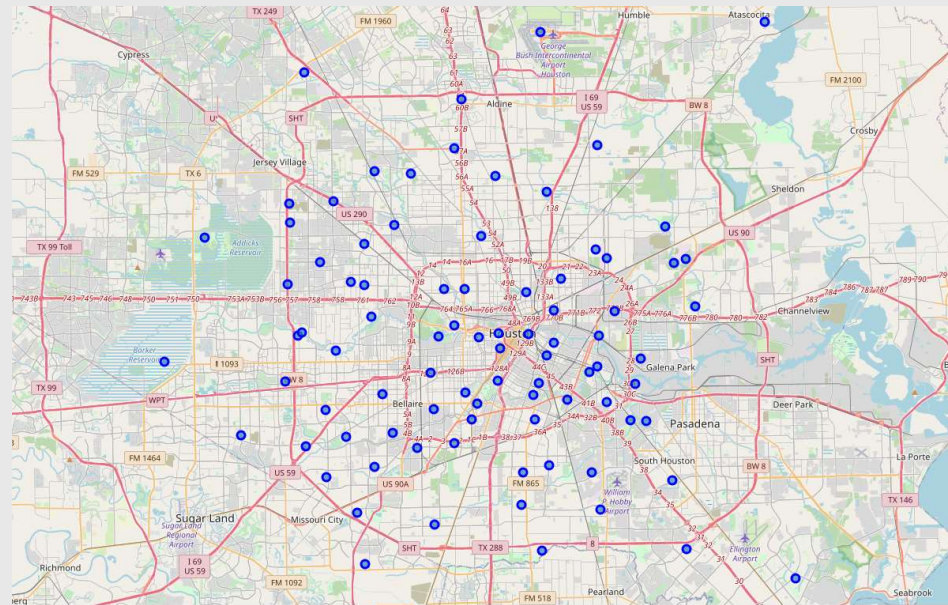
Methodology

- The resulting Houston neighborhood dataframe contains 88 neighborhoods information

	Neighborhood	Latitude	Longitude
0	FOURTH WARD	29.759108	-95.380204
1	SECOND WARD	29.751715	-95.331634
2	DOWNTOWN	29.758336	-95.353891
3	CLINTON PARK TRI-COMMUNITY	29.739786	-95.255946
4	GREATER UPTOWN	29.771256	-95.490082
5	GREATER INWOOD	29.881288	-95.487484
6	GREATER HOBBY AREA	29.625936	-95.291085
7	GOLFCREST / BELLFORT / REVEILLE	29.653929	-95.298948
8	ELDRIDGE / WEST OAKS	29.737417	-95.670287
9	WASHINGTON AVENUE COALITION / MEMORIAL PARK	29.765147	-95.418188

Methodology

- A map of Houston city with neighborhoods superimposed on top can be then utilizing the folium library



Methodology

- The Foursquare API is used to retrieve the venue information in neighborhoods.

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	FOURTH WARD	29.759108	-95.380204	Eleanor Tinsley Park	29.761440	-95.379271	Park
1	FOURTH WARD	29.759108	-95.380204	Buffalo Bayou Walk	29.762177	-95.375844	Trail
2	FOURTH WARD	29.759108	-95.380204	Buffalo Bayou Cistern	29.762214	-95.375873	Public Art
3	FOURTH WARD	29.759108	-95.380204	Oporto Fooding House & Wine	29.753179	-95.380243	Portuguese Restaurant
4	FOURTH WARD	29.759108	-95.380204	Cafe Poetes	29.753348	-95.379776	Café
5	FOURTH WARD	29.759108	-95.380204	Sam Houston Park	29.759876	-95.371211	Park
6	FOURTH WARD	29.759108	-95.380204	The Fish Restaurant & Sushi Bar	29.752249	-95.376820	Sushi Restaurant
7	FOURTH WARD	29.759108	-95.380204	Paper Street Crossfit	29.757435	-95.385846	Gym
8	FOURTH WARD	29.759108	-95.380204	Lucio's BYOB	29.758326	-95.385591	Bar
9	FOURTH WARD	29.759108	-95.380204	Catalina Coffee	29.767968	-95.380662	Coffee Shop

Methodology

- The frequency of occurrence of each category was analyzed using one-hot encoding approach.

	Neighborhood	Zoo Exhibit	ATM	Accessories Store	Afghan Restaurant	African Restaurant	Airport	Airport Lounge	Airport Service	Airport Terminal	American Restaurant	Antique Shop	Aquarium	Arcade
0	ACRES HOME	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.00	0.000000
1	ADDICKS PARK TEN	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.00	0.046512
2	AFTON OAKS / RIVER OAKS AREA	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.034483	0.000000	0.00	0.000000
3	ALIEF	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.00	0.000000
4	ASTRODOME AREA	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.010000	0.000000	0.00	0.000000
5	BRAEBURN	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.016667	0.000000	0.00	0.000000
6	BRAESWOOD	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.010526	0.000000	0.00	0.000000
7	BRAYS OAKS	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.00	0.000000
8	BRIAR FOREST	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.021277	0.000000	0.00	0.000000
9	CARVERDALE	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.00	0.000000

Methodology

- The top 10 most common venue categories for each neighborhood was then retrieved

	Neighborhood	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
0	ACRES HOME	Discount Store	Fried Chicken Joint	Intersection	Pizza Place	Construction & Landscaping	Wings Joint	Thai Restaurant	Cosmetics Shop	Department Store	Park
1	ADDICKS PARK TEN	Mexican Restaurant	Park	Fast Food Restaurant	Grocery Store	Sushi Restaurant	Arcade	Latin American Restaurant	Bakery	Bank	Rental Car Location
2	AFTON OAKS / RIVER OAKS AREA	Park	Bank	Sandwich Place	New American Restaurant	Donut Shop	Trail	American Restaurant	Pharmacy	Cosmetics Shop	Salon / Barbershop
3	ALIEF	Pizza Place	Fast Food Restaurant	Discount Store	Grocery Store	Pharmacy	Fried Chicken Joint	Taco Place	Video Store	Pet Store	Diner
4	ASTRODOME AREA	Pizza Place	Burger Joint	Coffee Shop	Mexican Restaurant	Food Service	Food Truck	Chinese Restaurant	BBQ Joint	Italian Restaurant	Restaurant
5	BRAEBURN	Pharmacy	Discount Store	Pizza Place	Sandwich Place	Grocery Store	Cosmetics Shop	Chinese Restaurant	Liquor Store	Convenience Store	Fast Food Restaurant
6	BRAESWOOD	Park	Gym	Pizza Place	Pharmacy	Bakery	Ice Cream Shop	Italian Restaurant	Mexican Restaurant	Coffee Shop	Spa
7	BRAYS OAKS	Grocery Store	Fried Chicken Joint	Fast Food Restaurant	Gas Station	Pizza Place	Burger Joint	Discount Store	Sandwich Place	Pharmacy	Bank
8	BRIAR FOREST	Mexican Restaurant	Sandwich Place	Grocery Store	Bank	Cosmetics Shop	Pharmacy	Kids Store	Coffee Shop	Chinese Restaurant	Beer Garden
9	CARVERDALE	Home Service	Gas Station	Business Service	Hotel	Convenience Store	Burger Joint	Chinese Restaurant	Paper / Office Supplies Store	Auto Garage	Intersection

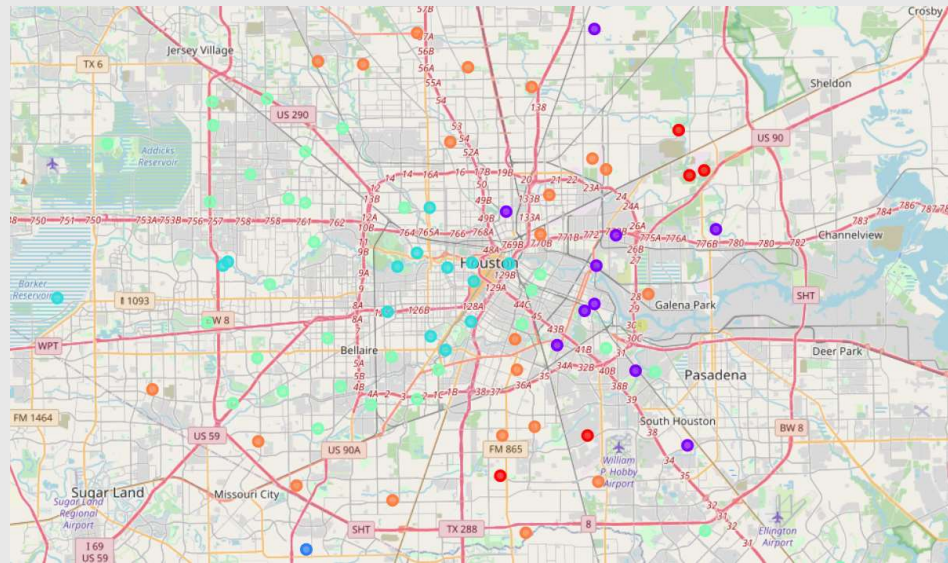
Methodology

- Cluster neighborhoods into 7 different clusters using K-Means clustering

	Neighborhood	Latitude	Longitude	Cluster Labels	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
0	FOURTH WARD	29.759108	-95.380204	3	Coffee Shop	Burger Joint	Pizza Place	Park	Beer Garden	American Restaurant	Brewery	Bar	Sandwich Place	Theater
1	SECOND WARD	29.751715	-95.331634	4	Mexican Restaurant	Music Venue	Gas Station	Park	Fast Food Restaurant	Video Store	Bar	Café	Gym	Discount Store
2	DOWNTOWN	29.758336	-95.353891	3	Hotel	Mexican Restaurant	Bar	Coffee Shop	Brewery	Pizza Place	Baseball Stadium	Beer Garden	Gym	Vietnamese Restaurant
3	CLINTON PARK TRI-COMMUNITY	29.739786	-95.255946	6	Boat or Ferry	Harbor / Marina	Discount Store	Sandwich Place	Baseball Field	Restaurant	Grocery Store	Park	Gas Station	Fast Food Restaurant
4	GREATER UPTOWN	29.771256	-95.490082	4	Pharmacy	Gym / Fitness Center	Coffee Shop	Yoga Studio	Fast Food Restaurant	Mexican Restaurant	Liquor Store	Sandwich Place	Sushi Restaurant	Intersection
5	GREATER INWOOD	29.881288	-95.487484	6	Pharmacy	Discount Store	Grocery Store	Fast Food Restaurant	Video Store	Spanish Restaurant	Convenience Store	Cosmetics Shop	Fried Chicken Joint	Gas Station
6	GREATER HOBBY AREA	29.625936	-95.291085	6	Food Truck	Gas Station	Mexican Restaurant	Airport Terminal	Fast Food Restaurant	Factory	Business Service	Donut Shop	Sandwich Place	Ice Cream Shop
7	GOLFCREST / BELLFORT / REVEILLE	29.653929	-95.298948	0	Rental Car Location	Gas Station	Airport Terminal	Mexican Restaurant	Donut Shop	Airport	History Museum	Park	Discount Store	Burger Joint
8	ELDRIDGE / WEST OAKS	29.737417	-95.670287	3	Bar	Park	Grocery Store	Movie Theater	Athletics & Sports	Italian Restaurant	Gas Station	Vietnamese Restaurant	Dog Run	Coffee Shop
9	WASHINGTON AVENUE COALITION / MEMORIAL PARK	29.765147	-95.418188	3	Bar	Mexican Restaurant	American Restaurant	Gym	Trail	Coffee Shop	New American Restaurant	Art Gallery	Cajun / Creole Restaurant	Golf Course

Methodology

- Cluster neighborhoods into 7 different clusters using K-Means clustering



Results and Discussion

- Cluster 1
 - Rental car store and gas station
 - “Suburb” area

	Neighborhood	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
7	GOLFCREST / BELLFORT / REVEILLE	Rental Car Location	Gas Station	Airport Terminal	Mexican Restaurant	Donut Shop	Airport	History Museum	Park	Discount Store	Burger Joint
21	EL DORADO / OATES PRAIRIE	Rental Car Location	Ice Cream Shop	Gas Station	Sandwich Place	Intersection	Shipping Store	Eye Doctor	Dry Cleaner	Farmers Market	Dive Bar
23	HUNTERWOOD	Fried Chicken Joint	Fast Food Restaurant	Ice Cream Shop	Business Service	Donut Shop	Sandwich Place	Intersection	Rental Car Location	Gas Station	Gym / Fitness Center
31	EAST HOUSTON	American Restaurant	Golf Course	Gas Station	Tree	Rental Car Location	Empanada Restaurant	Dog Run	Donut Shop	Dry Cleaner	Dumpling Restaurant
48	SOUTHACRES / CRESTMONT PARK	Grocery Store	Discount Store	Health Food Store	Nightclub	Pharmacy	Pet Store	Cocktail Bar	Gas Station	Electronics Store	Dog Run

Results and Discussion

- Cluster 2 and Cluster 7,
 - Fast Food Restaurant
 - “Semi-suburb” area

	Neighborhood	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
11	DENVER HARBOR / PORT HOUSTON	Mexican Restaurant	Boat or Ferry	Fast Food Restaurant	Intersection	Convenience Store	Restaurant	Optical Shop	Bay	Baseball Field	Pier
12	PLEASANTVILLE AREA	Rental Service	Gas Station	Mexican Restaurant	Brewery	Taco Place	Fast Food Restaurant	Office	Sandwich Place	Intersection	Fried Chicken Joint
13	NORTHSHORE	Mexican Restaurant	Fast Food Restaurant	Seafood Restaurant	Fried Chicken Joint	Convenience Store	Chinese Restaurant	Discount Store	Gas Station	BBQ Joint	Pizza Place
18	NEAR NORTHSIDE	Mexican Restaurant	Fast Food Restaurant	Sandwich Place	Fried Chicken Joint	Bank	Food Truck	Bar	Pizza Place	Gas Station	Food
35	EAST LITTLE YORK / HOMESTEAD	Mexican Restaurant	Fast Food Restaurant	Convenience Store	Gas Station	Park	Taco Place	Bakery	Cajun / Creole Restaurant	Discount Store	Wings Joint
62	PARK PLACE	Mexican Restaurant	Gas Station	Discount Store	Ice Cream Shop	Vietnamese Restaurant	Golf Course	Fast Food Restaurant	Convenience Store	Smoke Shop	Electronics Store
67	GULFGATE RIVERVIEW / PINE VALLEY	Fast Food Restaurant	Mexican Restaurant	Convenience Store	Discount Store	Taco Place	Grocery Store	Furniture / Home Store	Light Rail Station	Park	Diner
72	LAWNDALE / WAYSIDE	Mexican Restaurant	Pizza Place	Fried Chicken Joint	Convenience Store	Fast Food Restaurant	Pharmacy	Discount Store	Sandwich Place	Snack Place	Seafood Restaurant
80	EDGEBROOK AREA	Mexican Restaurant	Fast Food Restaurant	Discount Store	Sandwich Place	Bank	Video Store	Rental Car Location	Seafood Restaurant	Burger Joint	Latin American Restaurant
81	MAGNOLIA PARK	Mexican Restaurant	Fried Chicken Joint	Pizza Place	Discount Store	Fast Food Restaurant	Convenience Store	Chinese Restaurant	Sandwich Place	Grocery Store	Cosmetics Shop

	Neighborhood	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
3	CLINTON PARK TRI-COMMUNITY	Boat or Ferry	Harbor / Marina	Discount Store	Sandwich Place	Baseball Field	Restaurant	Grocery Store	Park	Gas Station	Fast Food Restaurant
5	GREATER INWOOD	Pharmacy	Discount Store	Grocery Store	Fast Food Restaurant	Video Store	Spanish Restaurant	Convenience Store	Cosmetics Shop	Fried Chicken Joint	Gas Station
6	GREATER HOBBY AREA	Food Truck	Gas Station	Mexican Restaurant	Airport Terminal	Fast Food Restaurant	Factory	Business Service	Donut Shop	Sandwich Place	Ice Cream Shop
10	GREATER FIFTH WARD	Park	Sandwich Place	Pharmacy	Fast Food Restaurant	Gas Station	Intersection	Video Store	Discount Store	Music Venue	Beer Garden
16	KASHMERE GARDENS	Fast Food Restaurant	Discount Store	Fried Chicken Joint	Bus Stop	Grocery Store	Gas Station	Nightclub	Chinese Restaurant	Intersection	Restaurant
17	MINNETEX	Fast Food Restaurant	Golf Driving Range	Shipping Store	Locksmith	Liquor Store	Fried Chicken Joint	Donut Shop	Baseball Field	Lake	Discount Store
24	SETTEGAST	Convenience Store	Burger Joint	American Restaurant	BBQ Joint	Motel	Gas Station	Discount Store	Sandwich Place	Fried Chicken Joint	Event Service
26	INDEPENDENCE HEIGHTS	Discount Store	Fried Chicken Joint	Mobile Phone Shop	Fast Food Restaurant	Mexican Restaurant	Sandwich Place	BBQ Joint	Pharmacy	American Restaurant	Breakfast Spot
28	TRINITY / HOUSTON GARDENS	American Restaurant	Discount Store	Burger Joint	Fried Chicken Joint	BBQ Joint	Gas Station	Sandwich Place	Home Service	Motel	Convenience Store
30	EASTEX - JENSEN AREA	Fast Food Restaurant	Pizza Place	Discount Store	Pharmacy	Mexican Restaurant	Intersection	Brewery	Construction & Landscaping	Flea Market	Supermarket
32	ACRES HOME	Discount Store	Fried Chicken Joint	Park	Liquor Store	Baseball Field	Thai Restaurant	Intersection	Department Store	Pizza Place	Wings Joint
33	NORTHSIDE/NORTHLINE	Food Truck	Home Service	Flea Market	Discount Store	Convenience Store	Pizza Place	Clothing Store	Chinese Restaurant	Dessert Shop	Casino

Results and Discussion

- Cluster 3 and Cluster 6
 - Only one neighborhood each
 - “Outliner” area

	Neighborhood	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
45	FORT BEND HOUSTON	Construction & Landscaping	Discount Store	Convenience Store	Fast Food Restaurant	Exhibit	Dry Cleaner	Dumpling Restaurant	Duty-free Shop	Electronics Store	Empanada Restaurant

	Neighborhood	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
68	HARRISBURG / MANCHESTER	Park	Mexican Restaurant	Harbor / Marina	Donut Shop	Restaurant	Athletics & Sports	Pier	Cosmetics Shop	Event Service	Construction & Landscaping

Results and Discussion

- Cluster 4
 - Hotel, Bar and Coffee Shop.
 - “Modern” area

	Neighborhood	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
0	FOURTH WARD	Coffee Shop	Burger Joint	Pizza Place	Park	Beer Garden	American Restaurant	Brewery	Bar	Sandwich Place	Theater
2	DOWNTOWN	Hotel	Mexican Restaurant	Bar	Coffee Shop	Brewery	Pizza Place	Baseball Stadium	Beer Garden	Gym	Vietnamese Restaurant
8	ELDRIDGE / WEST OAKS	Bar	Park	Grocery Store	Movie Theater	Athletics & Sports	Italian Restaurant	Gas Station	Vietnamese Restaurant	Dog Run	Coffee Shop
9	WASHINGTON AVENUE COALITION / MEMORIAL PARK	Bar	Mexican Restaurant	American Restaurant	Gym	Trail	Coffee Shop	New American Restaurant	Art Gallery	Cajun / Creole Restaurant	Golf Course
15	GREATER HEIGHTS	Mexican Restaurant	Coffee Shop	Ice Cream Shop	Burger Joint	Cajun / Creole Restaurant	New American Restaurant	Gym / Fitness Center	Bar	American Restaurant	Gift Shop
38	IAH / AIRPORT AREA	Coffee Shop	Airport Lounge	Sandwich Place	Fast Food Restaurant	Airport Terminal	Airport Service	Pizza Place	Restaurant	American Restaurant	Airport
64	MEDICAL CENTER AREA	Zoo Exhibit	Food Truck	Burger Joint	Food Service	Restaurant	Coffee Shop	American Restaurant	Art Gallery	Hotel	Trail
69	UNIVERSITY PLACE	Zoo Exhibit	Coffee Shop	Burger Joint	Bar	Italian Restaurant	Bookstore	Sandwich Place	Food Service	American Restaurant	Wine Bar
71	MUSEUM PARK	Zoo Exhibit	Coffee Shop	Bar	Science Museum	Trail	American Restaurant	Art Gallery	Sculpture Garden	Park	Southern / Soul Food Restaurant
73	GREENWAY / UPPER KIRBY AREA	Coffee Shop	Mexican Restaurant	Café	American Restaurant	Bakery	Gym	Burger Joint	Chinese Restaurant	New American Restaurant	Clothing Store
77	MIDTOWN	Coffee Shop	Bar	Pizza Place	Park	Nightclub	Sandwich Place	Burger Joint	Vietnamese Restaurant	Breakfast Spot	American Restaurant
82	AFTON OAKS / RIVER OAKS AREA	Bank	Park	New American Restaurant	Trail	Cosmetics Shop	American Restaurant	Coffee Shop	Sandwich Place	Donut Shop	Sushi Restaurant

Results and Discussion

- Cluster 5
 - Variety of restaurants
 - “Restaurant” area

	Neighborhood	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
1	SECOND WARD	Mexican Restaurant	Music Venue	Gas Station	Park	Fast Food Restaurant	Video Store	Bar	Café	Gym	Discount Store
4	GREATER UPTOWN	Pharmacy	Gym / Fitness Center	Coffee Shop	Yoga Studio	Fast Food Restaurant	Mexican Restaurant	Liquor Store	Sandwich Place	Sushi Restaurant	Intersection
14	LAZYBROOK / TIMBERGROVE	Bar	Park	Mexican Restaurant	American Restaurant	Gym / Fitness Center	Fast Food Restaurant	Smoothie Shop	Sandwich Place	Beer Bar	Sports Bar
19	SPRING BRANCH EAST	Mexican Restaurant	Sandwich Place	Pharmacy	Coffee Shop	Italian Restaurant	Pizza Place	Video Store	Donut Shop	Sporting Goods Shop	Sushi Restaurant
20	SPRING BRANCH NORTH	Mexican Restaurant	Korean Restaurant	Pizza Place	Pharmacy	Discount Store	Fried Chicken Joint	Vietnamese Restaurant	Sandwich Place	Grocery Store	Food Truck
22	SPRING BRANCH CENTRAL	Korean Restaurant	Mexican Restaurant	Gym / Fitness Center	Sandwich Place	BBQ Joint	Pharmacy	Bubble Tea Shop	Sporting Goods Shop	Bank	Bakery
25	LANGWOOD	Hotel	Fast Food Restaurant	Sandwich Place	Bank	Donut Shop	Pizza Place	Gas Station	Mexican Restaurant	Sports Bar	Convenience Store
27	CENTRAL NORTHWEST	Hotel	Fast Food Restaurant	Chinese Restaurant	Park	Dive Bar	Gym / Fitness Center	Donut Shop	Burger Joint	Sandwich Place	Pizza Place
29	CARVERDALE	Home Service	Donut Shop	Gas Station	Burger Joint	Hotel	Business Service	Sandwich Place	Music Store	Restaurant	Intersection
36	WILLOWBROOK	Clothing Store	Mexican Restaurant	Burger Joint	Cosmetics Shop	Furniture / Home Store	Coffee Shop	Chinese Restaurant	Latin American Restaurant	Electronics Store	Lingerie Store
37	GREATER GREENSPPOINT	Fast Food Restaurant	Mexican Restaurant	Pizza Place	Hotel	Sandwich Place	Mobile Phone Shop	Shoe Store	Seafood Restaurant	Fried Chicken Joint	Discount Store
39	KINGWOOD AREA	Asian Restaurant	Pizza Place	Hotel	Mexican Restaurant	Gas Station	American Restaurant	Sandwich Place	Chinese Restaurant	Pharmacy	Bakery
40	LAKE HOUSTON	Mexican Restaurant	Burger Joint	Coffee Shop	Fast Food Restaurant	Cosmetics Shop	Donut Shop	Frozen Yogurt Shop	Bank	Sushi Restaurant	Arts & Crafts Store

Conclusion

- People who like to taste varieties of food can choose cluster 5.
- People who enjoy the modern city feel, can visit cluster 4.