

The background is a dark blue gradient with abstract, semi-transparent financial charts. On the left, a line graph with white circular markers and orange centers connects several points. In the center, a bar chart with blue bars is visible, with the number '289.33' appearing next to one of the bars. Other faint charts and data points are scattered across the background, creating a sense of depth and complexity.

# Capstone Presentation

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# Data

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- To Collect Data I Used the Following Databases and Data Collection:
  - [https://en.wikipedia.org/wiki/List\\_of\\_Houston\\_neighborhoods](https://en.wikipedia.org/wiki/List_of_Houston_neighborhoods)
  - <https://www.census.gov/quickfacts/houstoncitytexas>
  - Venue Data via Foursquare for Mexican Restaurants in the Houston area- looking specifically by zip code.

The logo for the United States Census Bureau is displayed on a dark blue background. It features the words "United States" in a smaller, white, sans-serif font, followed by a registered trademark symbol (®). Below this, the word "Census" is written in a large, bold, white, sans-serif font. A thick white horizontal line is positioned directly under the "Census" text. To the right of this line, the word "Bureau" is written in a white, sans-serif font, aligned with the right side of the "Census" text.



# Methodology

- Web scrapping Wikipedia for neighborhood list
- Cross referencing with US census Data
- Use Foursquare API to get venue data in the Houston Area
- Use latitude and longitude geophyte to get coordinates of metro area
- Visualize clusters
- Make a map to overlay clusters using Folium

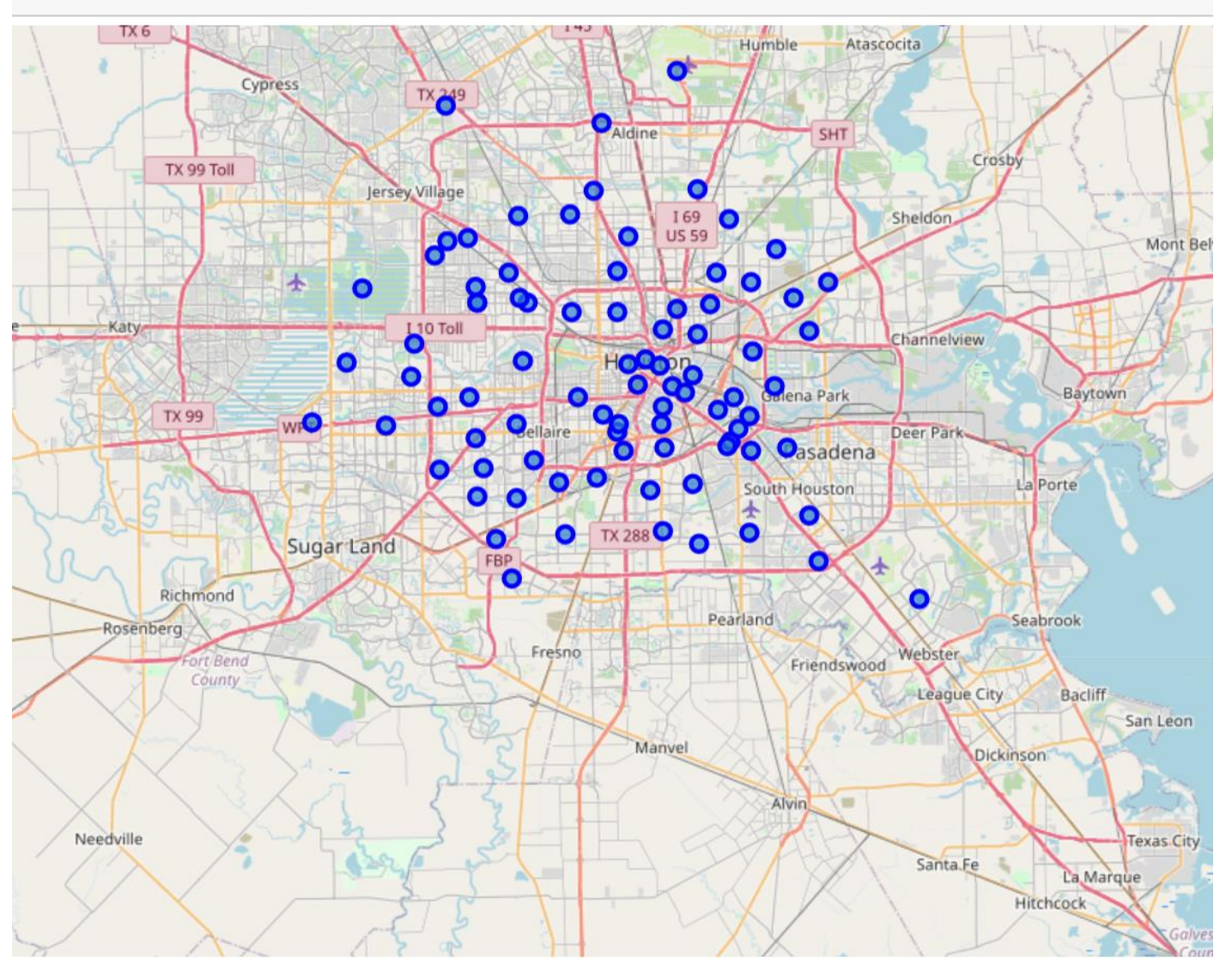
# Results/ Discussion

<b>i</b> Population estimates, July 1, 2019, (V2019)	NA
<b>i</b> Population estimates base, April 1, 2010, (V2018)	2,093,615
<b>i</b> Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	NA
<b>i</b> Population, percent change - April 1, 2010 (estimates base) to July 1, 2018, (V2018)	11.1%
<b>i</b> Population, Census, April 1, 2010	2,099,451
<b>Age and Sex</b>	
<b>i</b> Persons under 5 years, percent	△ 7.7%
<b>i</b> Persons under 18 years, percent	△ 25.0%
<b>i</b> Persons 65 years and over, percent	△ 10.3%
<b>i</b> Female persons, percent	△ 50.0%
<b>Race and Hispanic Origin</b>	
<b>i</b> White alone, percent	△ 57.6%
<b>i</b> Black or African American alone, percent (a)	△ 22.5%
<b>i</b> American Indian and Alaska Native alone, percent (a)	△ 0.3%
<b>i</b> Asian alone, percent (a)	△ 6.9%
<b>i</b> Native Hawaiian and Other Pacific Islander alone, percent (a)	△ 0.1%
<b>i</b> Two or More Races, percent	△ 2.1%
<b>i</b> Hispanic or Latino, percent (b)	△ 44.8%
<b>i</b> White alone, not Hispanic or Latino, percent	△ 24.6%

- The results of this study proved that my theory was correct. First in the sense that Houston has a larger Hispanic population than Birmingham Alabama as reflected in the US Census Data.

# City Center Location

- After web scrapping and creating a folium of density we could see a majority of the Hispanic population lives in the metro area.





# Foursquare Data

- Then, I looked specifically at the number of Mexican restaurants in that area. Based on the Foursquare API Data there are only 4 Mexican restaurants in the metro area where there were the most number of clusters in this map.

	name	categories	address	cc	city	country	crossStreet	distance	formattedAddress	
0	M R Mexican Grill	Mexican Restaurant	1001 Fannin St Ste M162	US	Houston	United States	NaN	409	[1001 Fannin St Ste M162, Houston, TX 77002, United States]	[{"lat": 29.7, "lng": -95.3}]
1	Poblano's Mexican Grill #2	Mexican Restaurant	1000 Main St	US	Houston	United States	Tunnel Level	353	[1000 Main St (Tunnel Level), Houston, TX 77002, United States]	[{"lat": 29.7, "lng": -95.3}]
2	El Regio Mexican Grill	Mexican Restaurant	1000 Main St Ste T33	US	Houston	United States	NaN	353	[1000 Main St Ste T33, Houston, TX 77002, United States]	[{"lat": 29.7, "lng": -95.3}]
3	m r mexican grill	Mexican Restaurant	NaN	US	Houston	United States	NaN	511	[Houston, TX, United States]	[{"lat": 29.7, "lng": -95.3}]
4	Chipotle Mexican Grill	Mexican Restaurant	909 Texas St Ste B	US	Houston	United States	Texas & Main	511	[909 Texas St Ste B (Texas & Main), Houston, TX 77002, United States]	[{"lat": 29.7, "lng": -95.3}]
5	Jefe Bar	Nightclub	502 Main St	US	Houston	United States	NaN	519	[502 Main St, Houston, TX 77002, United States]	[{"lat": 29.7, "lng": -95.3}]

# Conclusion

- Based on the calculations and data gathered above we can therefore say it would be a fantastic idea to open another Mexican restaurant in the Metro Area of Houston. Mainly because there are not enough Mexican restaurants for the density of the amount of Hispanic people that live in the area. We could have also looked at income to determine the type of Mexican restaurant that would be most successful (expensive vs inexpensive). But our overall conclusion is that the metro area of Houston would be the best place in the city to open a new Mexican Restaurant.