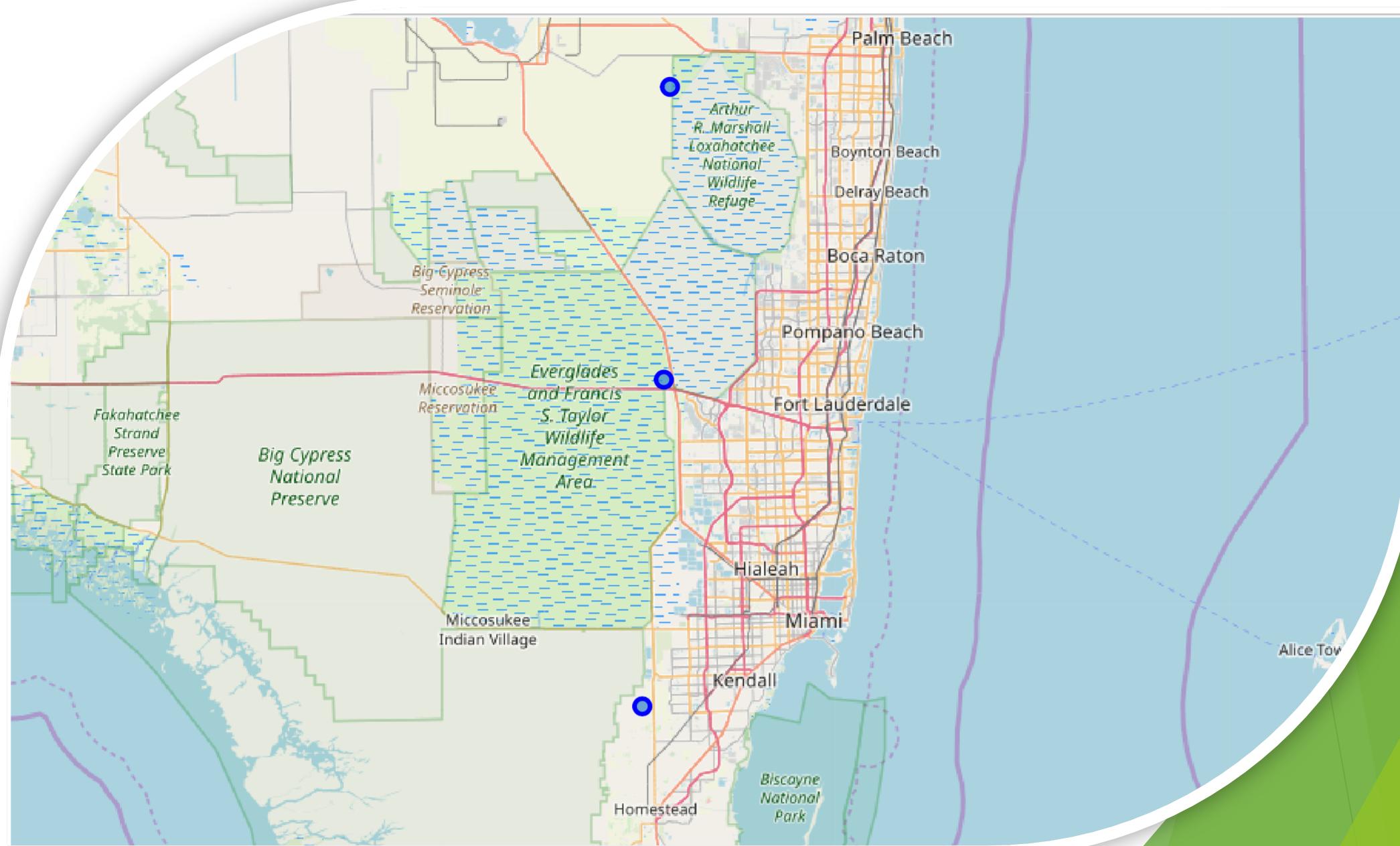


FEASIBILITY STUDY TO OPEN A SOUTH FLORIDA COFFEE SHOP

JOHNNIE PEREZ
OCTOBER 2019

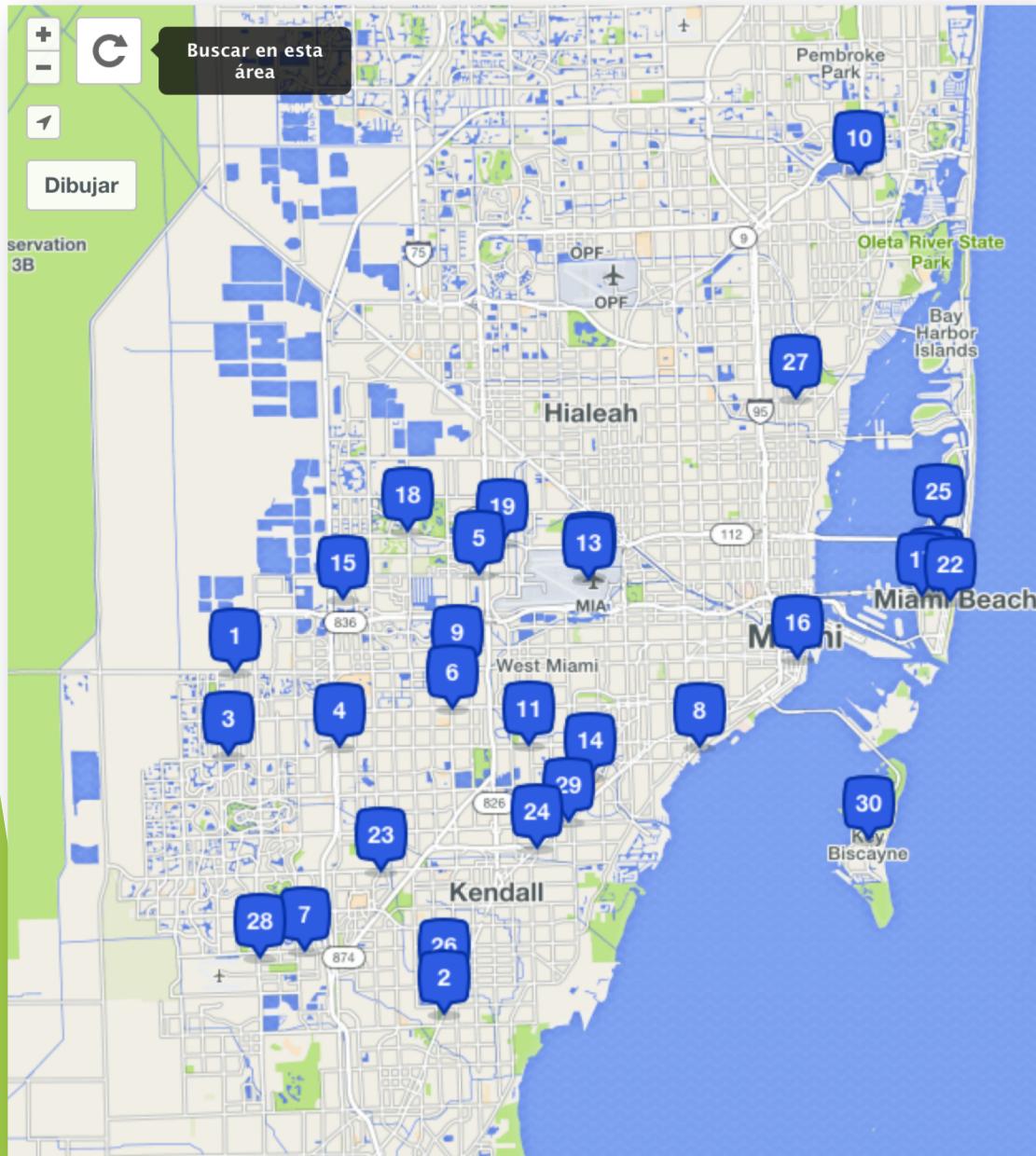
SOUTH FLORIDA MAP VIEW



BUSINESS CASE

A small and dreamer investor asked me about the feasibility to open a crafted coffee and bakery store. He has would like to know which are the main cities (based on density) in South Florida in which he could open his store, but he also wants to know about his possible competitors, shops similar to Starbucks and are present in the area ,in order to know if that kind of businesses are popular in those areas.

DATA TO USE



To this project, I will use the data of Foursquare and Wikipedia as main sources.

I will use the Foursquare API to explore neighborhoods, venues and so on to get information about coffeehouse chain shops like Starbucks and use it to group the neighborhoods into clusters. The following information is retrieved on the query:

- ❖ Latitude and Longitude
- ❖ Category Name
- ❖ Venue Name
- ❖ Address

DATAFRAME – VENUES INFORMATION

[18] :

	County	ID	Name	Category	lat	lng	Address
0	Miami-Dade	51168e25e4b05b41eca9496d	Isaac Farms	Farm	25.589987	-80.479187	18800 SW 177th Ave
1	Miami-Dade	4b118d49f964a520217f23e3	Publix	Grocery Store	25.682986	-80.464437	16800 SW 88th St
2	Miami-Dade	4ba55351f964a520e9fa38e3	La Perla Peruvian Restaurant	Peruvian Restaurant	25.625077	-80.415334	13742 SW 152nd St
3	Miami-Dade	4bd4a611637ba593b127f570	Publix	Grocery Store	25.597003	-80.430832	18300 SW 147th Ave
4	Miami-Dade	564a2aa0498e4c6c5736380b	MOOYAH Burgers, Fries & Shakes	American Restaurant	25.627312	-80.415057	13725 SW 152nd St.
5	Miami-Dade	4d40bfb2bd53f04d4b3f4715	X-treme Rock Climbing	Gym	25.637666	-80.420645	13972 SW 139th Ct
6	Miami-Dade	4b8c1427f964a52095bc32e3	Fruit & Spice Park	Park	25.535183	-80.493818	24801 SW 187th Ave
7	Miami-Dade	4c30b19fa0ced13af97c126e	Zoo Miami	Zoo	25.611152	-80.398164	12400 SW 152nd St
8	Miami-Dade	581f5d80001d871478464383	Bonjour Bakery "The real French touch!"	Bakery	25.682823	-80.460980	16650 SW 88th St #104
9	Miami-Dade	4b379f16f964a5202a4325e3	Costco	Warehouse Store	25.653709	-80.412326	13450 SW 120th St
10	Miami-Dade	4b1140a5f964a520527923e3	Knaus Berry Farm	Farmers Market	25.535806	-80.451300	15980 SW 248th St
11	Miami-Dade	4b22eaf1f964a520525024e3	Publix	Grocery Store	25.579702	-80.395887	20201 SW 127th Ave
12	Miami-Dade	4cd56375122ba143649e2ba1	Panaderia 20 De Julio	Latin American Restaurant	25.624315	-80.413604	15415 SW 137th Ave

support

DATA TO USE



Miami

City in Florida

Miami, officially the City of Miami, is the seat of Miami-Dade County, and the cultural, economic and financial center of South Florida in the United States. The city covers an area of about 56 square miles between the Everglades to the west and Biscayne Bay to the east.

[Wikipedia](#)

25.7617° N, 80.1918° W

On **Wikipedia**, I will use the list of counties in Florida to get the information and discover which are the first three counties which more population. The following information is retrieved on the query:

- ❖ County
- ❖ Population
- ❖ Area

DATAFRAME – COUNTIES INFORMATION

8] :

	County	Code FIPS	County Seat	Est	Formed From	Etymology	Density	Population	Area	Map
0	County	None	None	None	None	None	None	None	None	None
1	Alachua County	001	Gainesville	1824	Duval and St. Johns	From a Seminole-Creek word meaning "jug", appa...	285.31	249,365	874 sq mi(2,264 km2)	
2	Baker County	003	Macclenny	1861	New River	James McNair Baker (1821–1892), a Confederate ...	46.42	27,154	585 sq mi(1,515 km2)	
3	Bay County	005	Panama City	1913	Calhoun and Washington	St. Andrew's Bay, the central geographic featu...	222.32	169,856	764 sq mi(1,979 km2)	
4	Bradford County	007	Starke	1858	Columbianamed New River until 1861	Richard Bradford, the first officer from Flori...	96.43	28,255	293 sq mi(759 km2)	
5	Brevard County	009	Titusville	1844	Hillsborough and Mosquitonamed St. Lucie until...	Theodore Washington Brevard, early settler and...	533.95	543,566	1,018 sq mi(2,637 km2)	
6	Broward County	011	Fort Lauderdale	1915	Dade and Palm Beach	Napoleon Bonaparte Broward (1857–1910), 19th g...	1472.43	1,780,172	1,209 sq mi(3,131 km2)	
7	Calhoun County	013	Blountstown	1838	Franklin, Jackson, and Washington	John C. Calhoun (1782–1850) leading Southern p...	26.01	14,750	567 sq mi(1,469 km2)	
8	Charlotte County	015	Punta Gorda	1921	DeSoto	Probably a corruption of the name of the Calus...	231.28	160,511	694 sq mi(1,797 km2)	
9	Citrus County	017	Inverness	1887	Hernando	The county's citrus trees	239.78	140,031	584 sq mi(1,513 km2)	

Support

DATA PREPROCESSING

- ❖ Processing the Retrieved Data
- ❖ Creating a Dataframe for the County, Venues
- ❖ Processing on that raw data
- ❖ Wrangling the data
- ❖ Cleaning the data
- ❖ Encode the data if it is needed
- ❖ Visualize data
- ❖ Explore data with maps

JOINING THE DATA

- ❖ To process the data faster and considering the limitations of the foursquare api, a csv file was created.

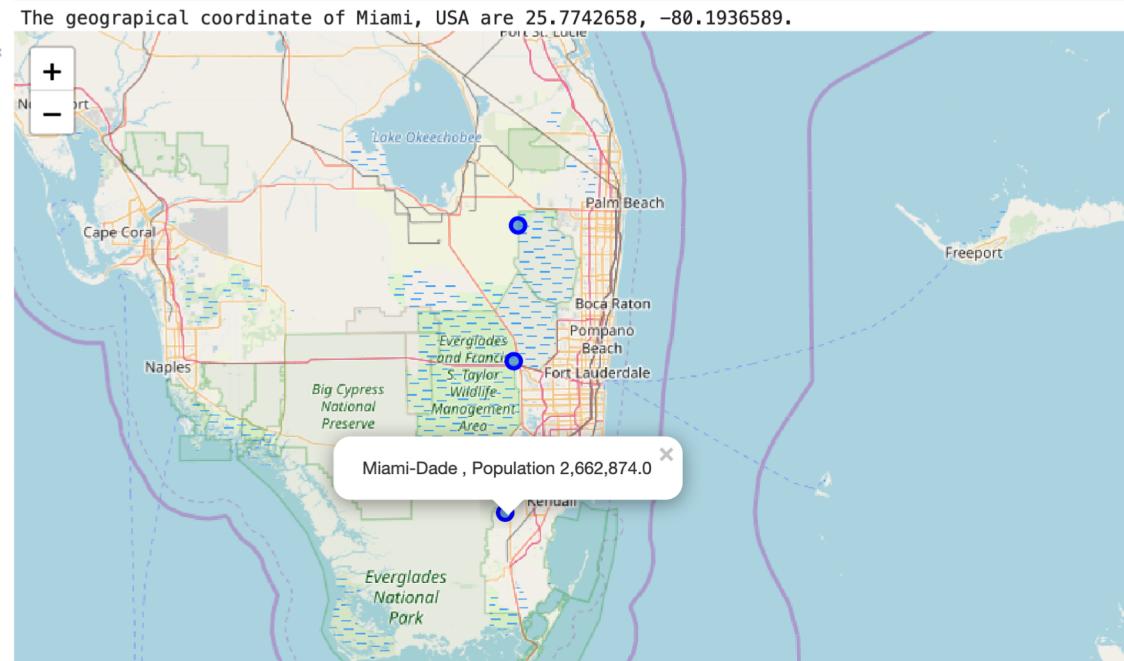
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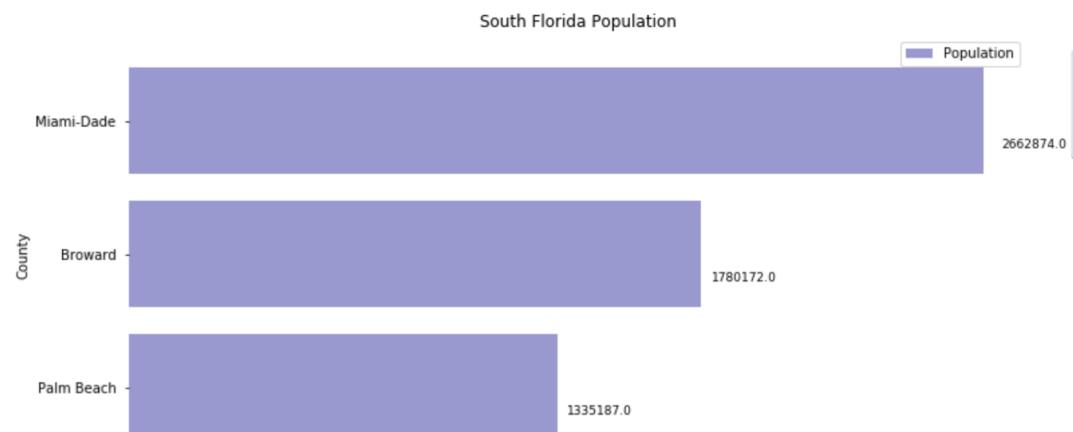
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		County	ID	Name	Category	lat	lng	
1	0	Miami-Dade	68e25e4b05b41eca9496d	Isaac Farms	Farm	25.589987118876373	-80.4791866772461	18800 SW
2	1	Miami-Dade	b118d49f964a520217f23e3	Publix	Grocery Store	25.6829861242879	-80.4644374708224	16800 S
3	2	Miami-Dade	a55351f964a520e9fa38e3	Perla Peruvian Restaurant	Peruvian Restaurant	25.625077292252296	-80.4153337872823	13742 SW
4	3	Miami-Dade	d4a611637ba593b127f570	Publix	Grocery Store	25.597003458228897	-80.430831991817	18300 SW
5	4	Miami-Dade	b2aa0498e4c6c5736380b	H Burgers, Fries & Shakes	American Restaurant	25.627312	-80.415057	13725 SW
6	5	Miami-Dade	b40bfb2bd53f04d4b3f4715	X-treme Rock Climbing	Gym	25.63766551517029	-80.42064458533028	13972 SW
7	6	Miami-Dade	b8c1427f964a52095bc32e3	Fruit & Spice Park	Park	25.535182549004997	-80.49381767098939	24801 SW
8	7	Miami-Dade	b30b19fa0ced13af97c126e	Zoo Miami	Zoo	25.611151642526757	-80.39816379547119	12400 SW
9	8	Miami-Dade	b1f5d80001d871478464383	y "The real French touch!"	Bakery	25.682823047674994	-80.46097961462569	16650 SW
10	9	Miami-Dade	b379f16f964a5202a4325e3	Costco	Warehouse Store	25.653709334686766	-80.41232582672662	13450 SW
11	10	Miami-Dade	b1140a5f964a520527923e3	Knaus Berry Farm	Farmers Market	25.535806124739622	-80.45129995732724	15980 SW
12	11	Miami-Dade	b22eaf1964a520525024e3	Publix	Grocery Store	25.579701594756482	-80.39588722484245	20201 SW
13	12	Miami-Dade	b56375122ba143649e2ba1	Panaderia 20 De Julio Latin American Restaurant	Latin American Restaurant	25.624315363182962	-80.41360366748536	15415 SW
14	13	Miami-Dade	bad1e4af964a520742f3be3	PetSmart	Pet Store	25.6827387	-80.4600831	16514 S
15	14	Miami-Dade	b92977cf964a520920734e3	Burr's Berry Farm	Food & Drink Shop	25.566201634439395	-80.39848983879966	12712-12726 SW
16	15	Miami-Dade	b256d652b16b2491c717d4	Pueblito Paisa	Arepas Restaurant	25.550436913477036	-80.47521674141272	17480 SW
17	16	Miami-Dade	b29d43a5eb76b09a80beb7	ABC Fine Wine & Spirits	Liquor Store	25.6555702	-80.398681	12620 SW
18	17	Miami-Dade	b1be7bda006dc9b6274dfb3f	Publix	Grocery Store	25.655449212929454	-80.40062799737542	12100 SW
19	18	Miami-Dade	b1d186df1838a75196463e3c	Family Aviary, Wings of Asia	Zoo Exhibit	25.610814880058122	-80.39991146552383	12400 SW
20	19	Miami-Dade	b1e0ca14901b48a80eb5725	Amazon & Beyond	Zoo Exhibit	25.605326024575525	-80.39819049310518	12400 SW

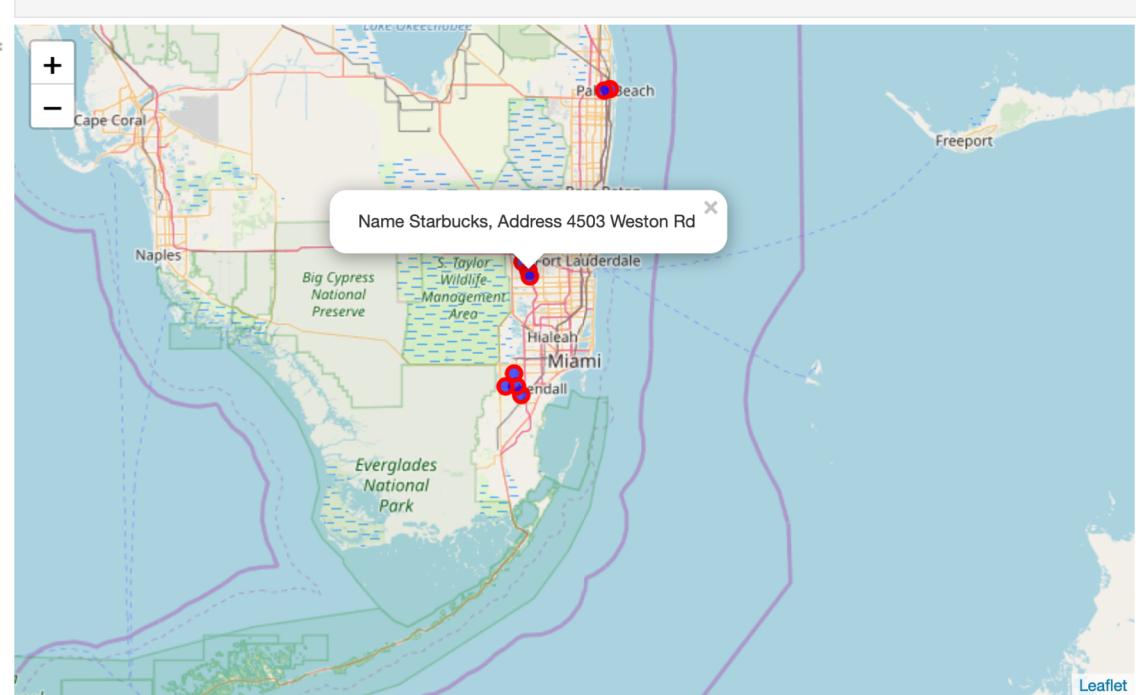
DATA INFORMATION - POPULATION DENSITY



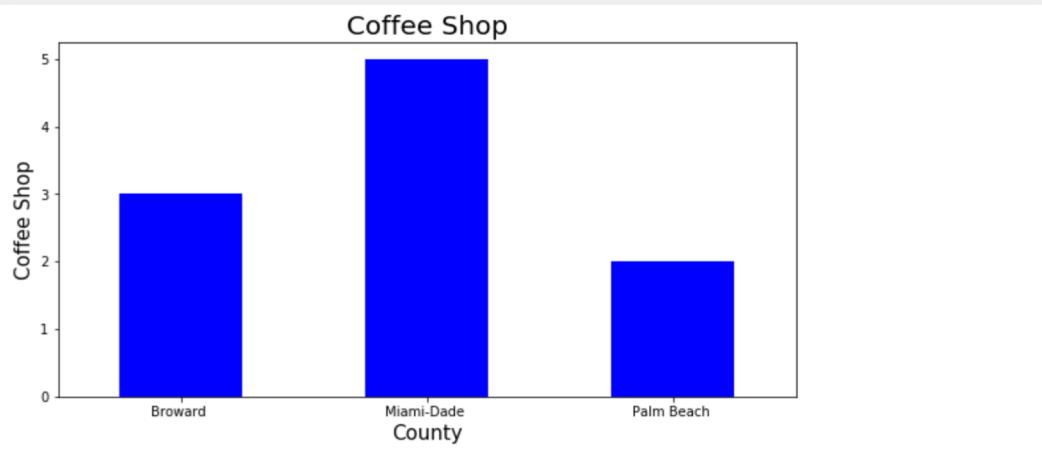
This data obtained from wikipedia allowed to obtain the necessary information to understand the population density and also be the source to obtain the coordinates of locations through the geolocation of the addresses.



DATA INFORMATION – COFFEE SHOPS



This data obtained from the api of foursquare allows me to obtain all the venues that are in the selected counties (by population density), then identify the types of stores to finally classify and obtain all those classified as cafeterias..



CONCLUSION AND RECOMMENDATIONS

It can be concluded that through the available data it was possible to visualize and understand the density of the population of the counties located in the south of Florida and stores similar to the business idea of the investor, however, the surface is very wide and determining an exact sector involves more analysis and data.

Some recommendation

- ❖ Is select the street with more visibility and open the cafeteria in Miami-Dade County
- ❖ Make a more in-depth study on the consumption of coffee and cakes in the area, taking into account that Foursquare data is limited a certain number of files.
- ❖ Get better information from external databases.

THANKS