Best Location Identifier for the Coffee Firm

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Introduction

▶ The leadership team of Ababa Coffee are planning to expand the business footprint by entering the South African coffee market.

▶ The leadership team of Ababa Coffee is aware that Johannesburg is the largest city and the economic hub of South Africa and they have decided that setting up the business in Johannesburg will provide it with the best chance to succeed.

▶ The management team's main problem is deciding where exactly in Johannesburg must they establish the business.

▶ The decision regarding the best location to setup the business will be based on the neighbourhood with the highest density of these customers.
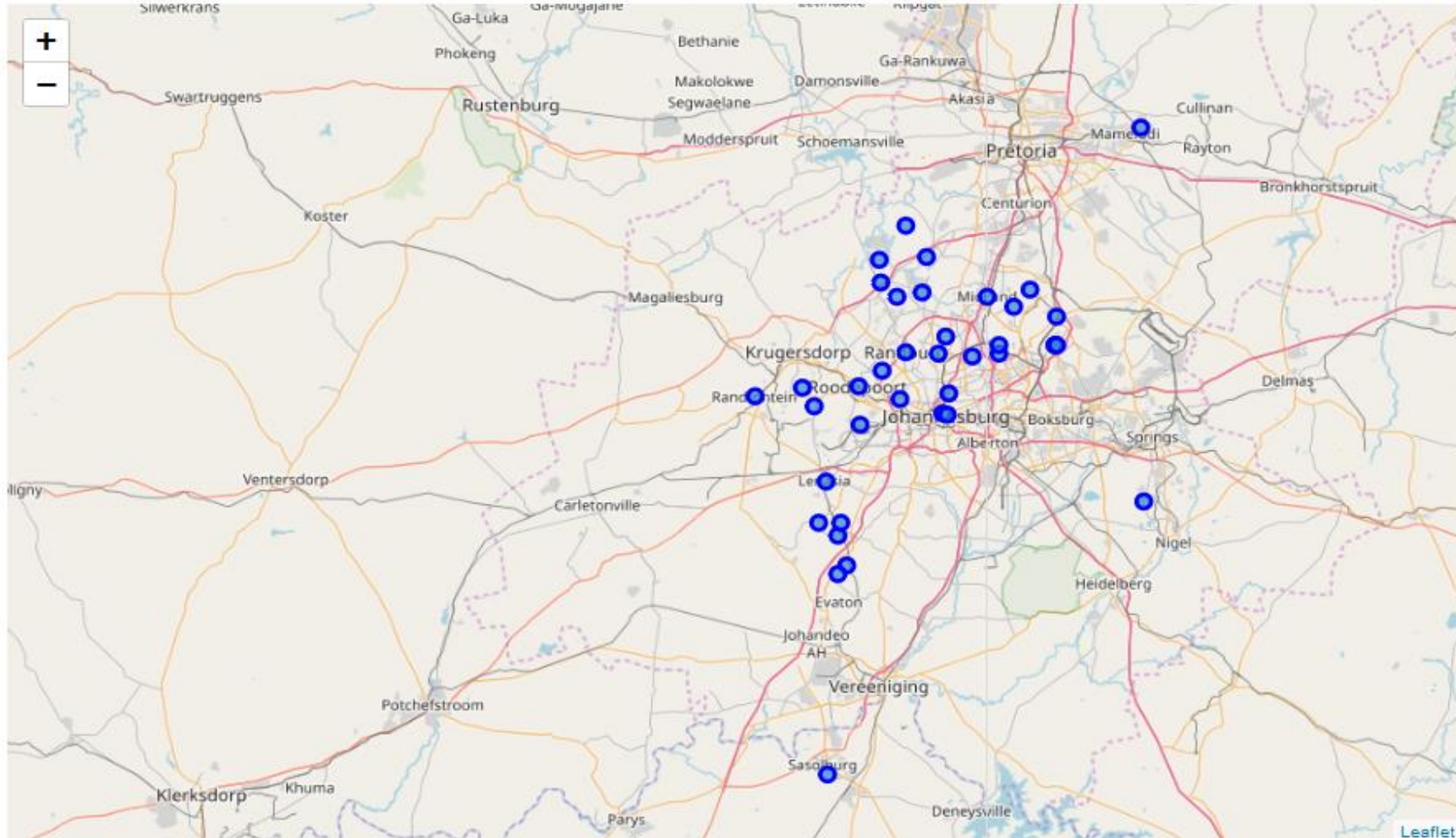
Data

- The Boroughs/Regions and Neighbourhoods/Suburbs of Johannesburg from Wikipedia: https://en.wikipedia.org/wiki/Johannesburg.

- The GPS coordinates (latitude, longitude) of these Boroughs/Regions and Neighbourhoods/Suburbs of Johannesburg.

- From Foursquare API we require the following venues data:
  - the Coffee Shops venues of the Johannesburg Neighbourhoods
  - the Restaurants venues of the Johannesburg Neighbourhoods
  - the Diners venues of the Johannesburg Neighbourhoods
  - the Fast Foods Outlets venues of the Johannesburg Places
  - the Grocery Shop venues of the Johannesburg Neighbourhoods

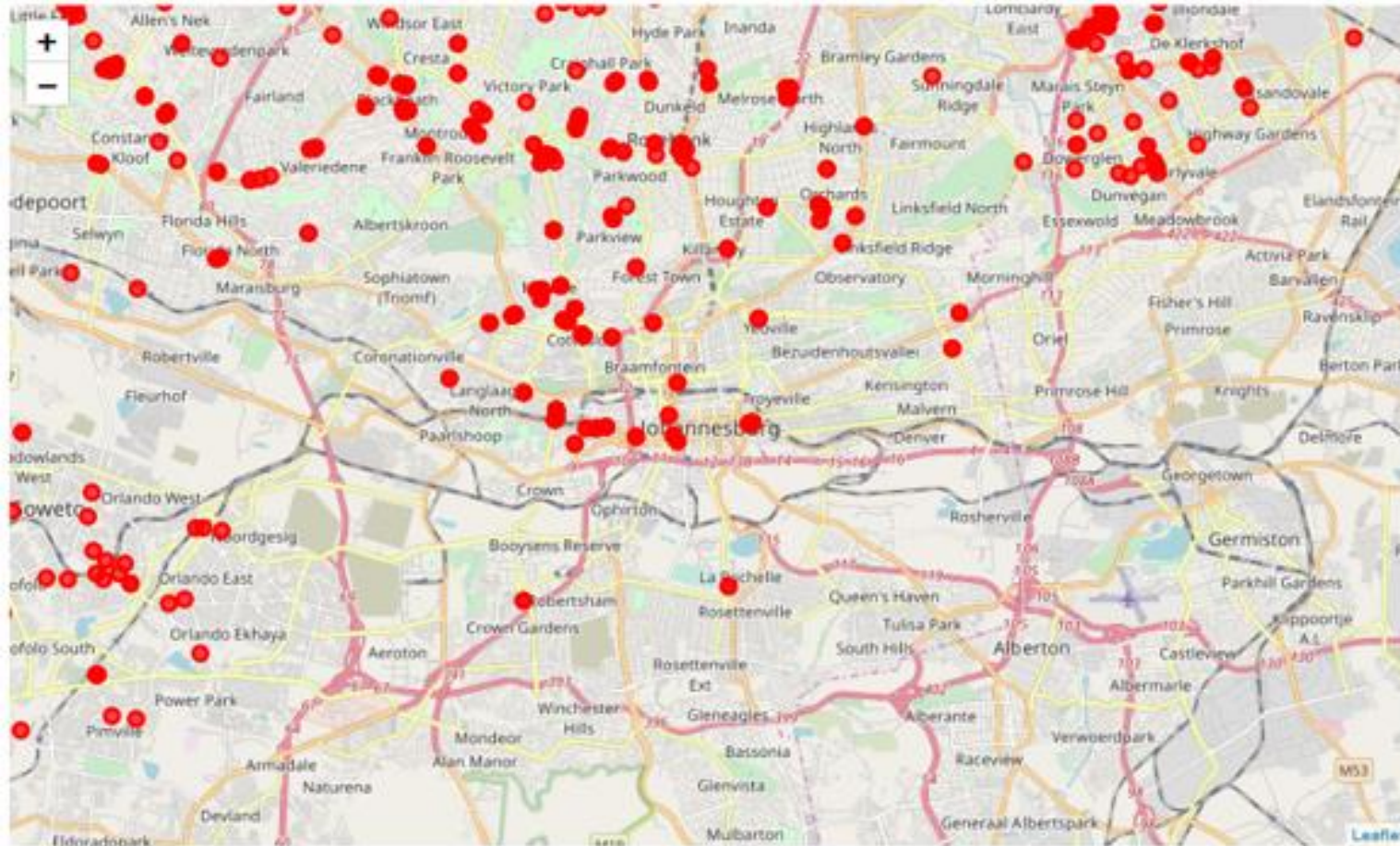# Methodology

- BeautifulSoup Python package was used to scrape the Johannesburg Neighbourhoods data from the Wikipedia website.

- Geocoder Python package was used to retrieve the coordinates for each Neighbourhood.

- Each Neighborhood of Johannesburg was analysed of Venue categories available.

- We then computed a Statistic Weighted Average of each Venue Category based on its strategic importance to Ababa Coffee.

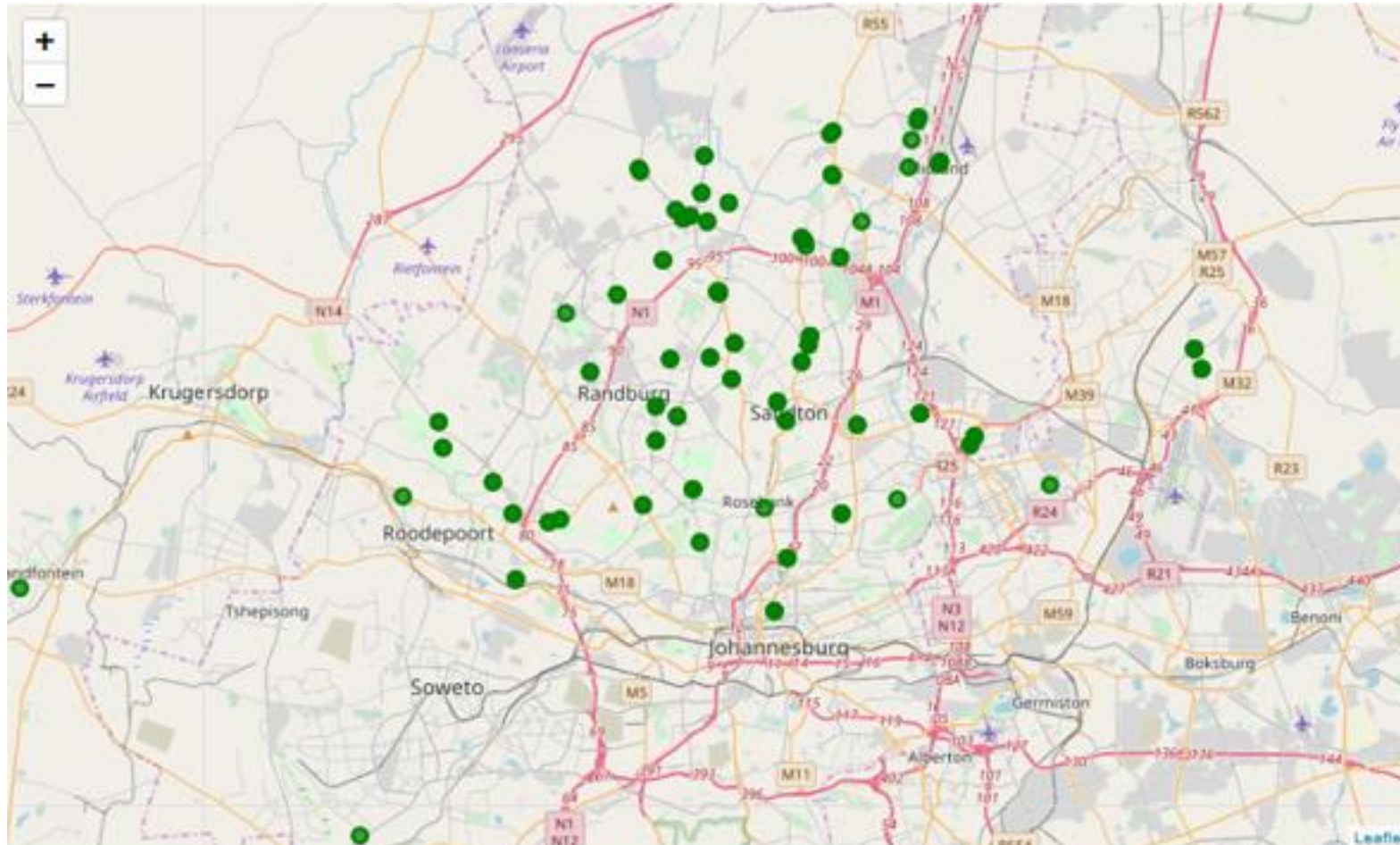- Finally, selected the Neighborhood with the highest score
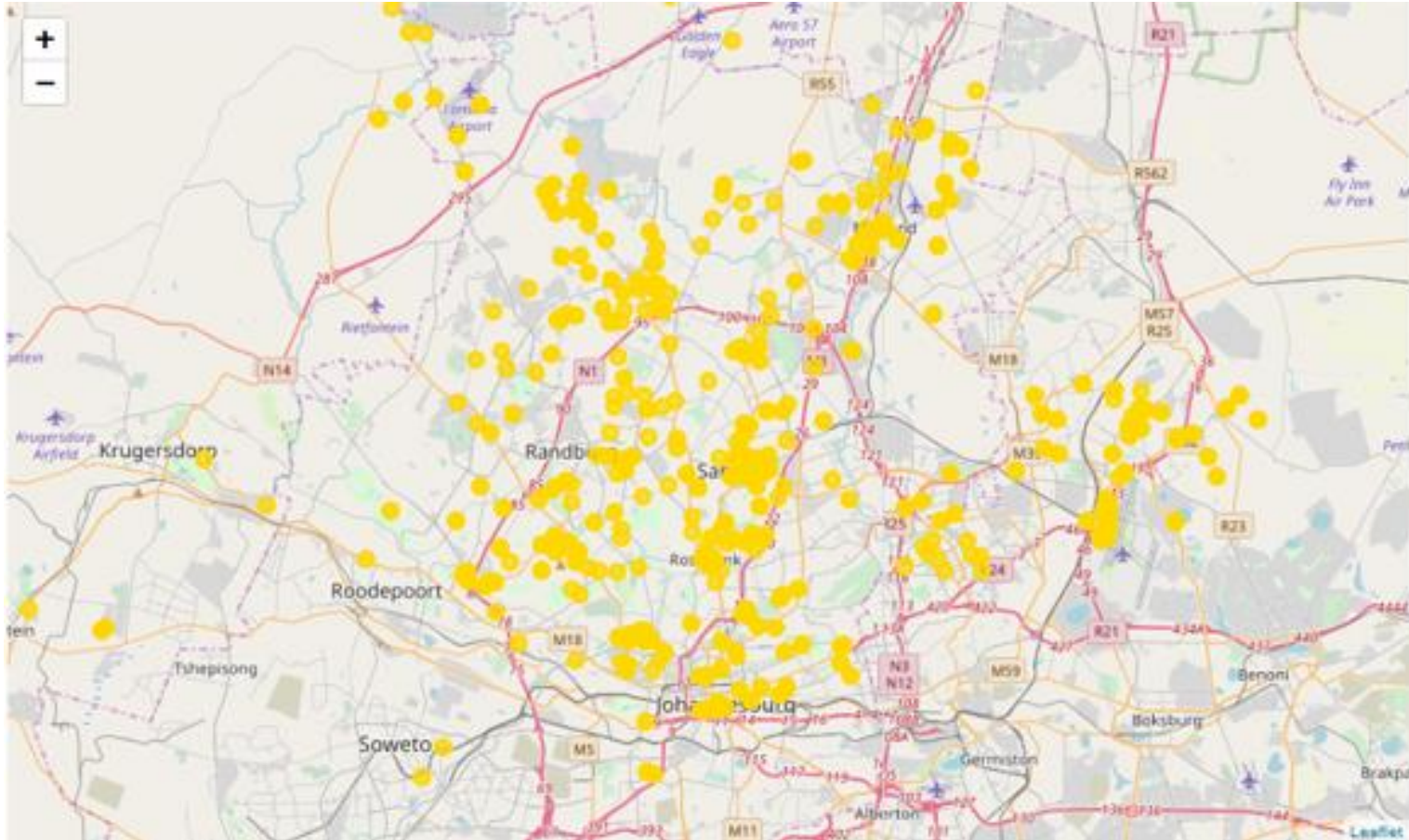
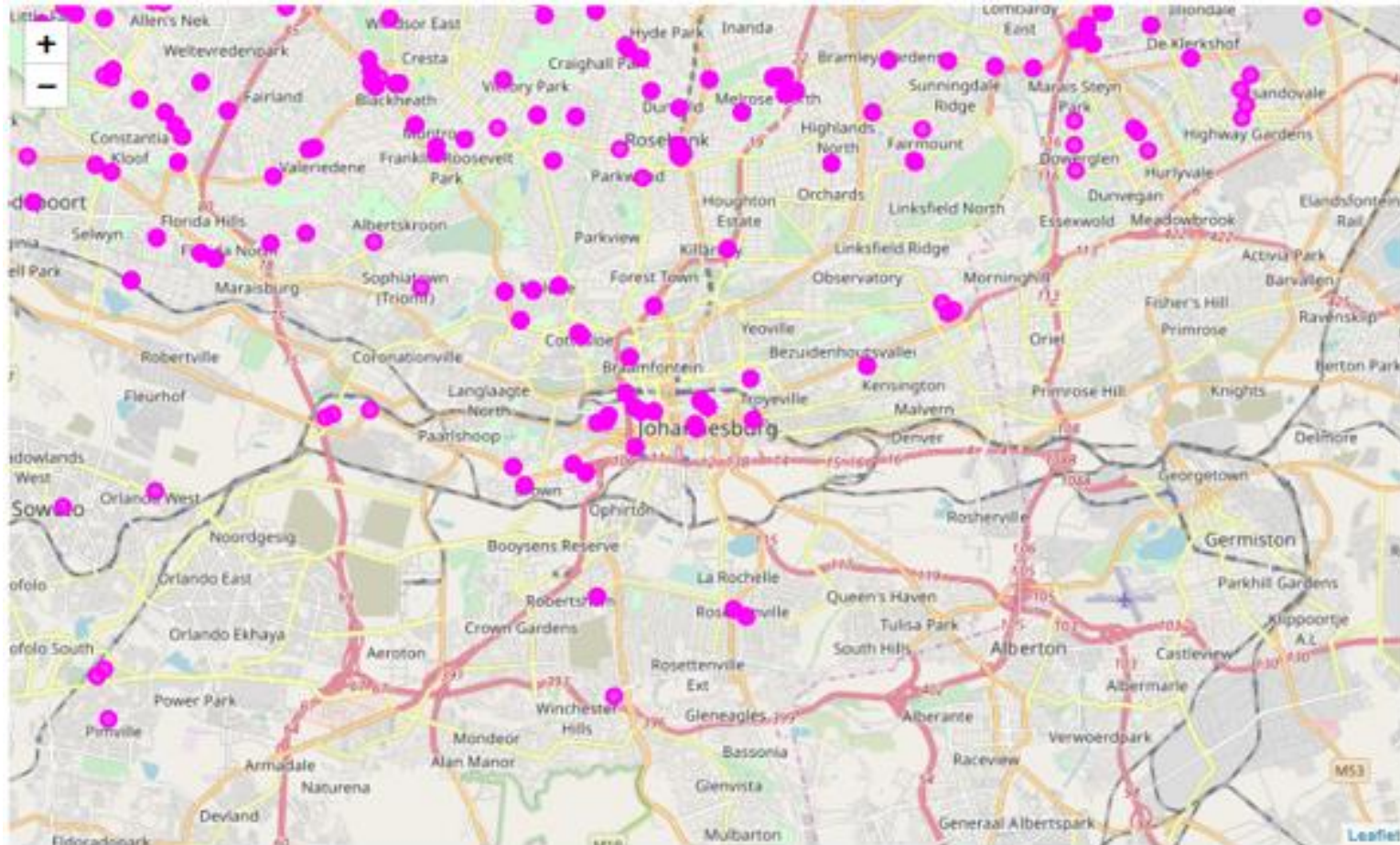# Neighborhoods of Johannesburg

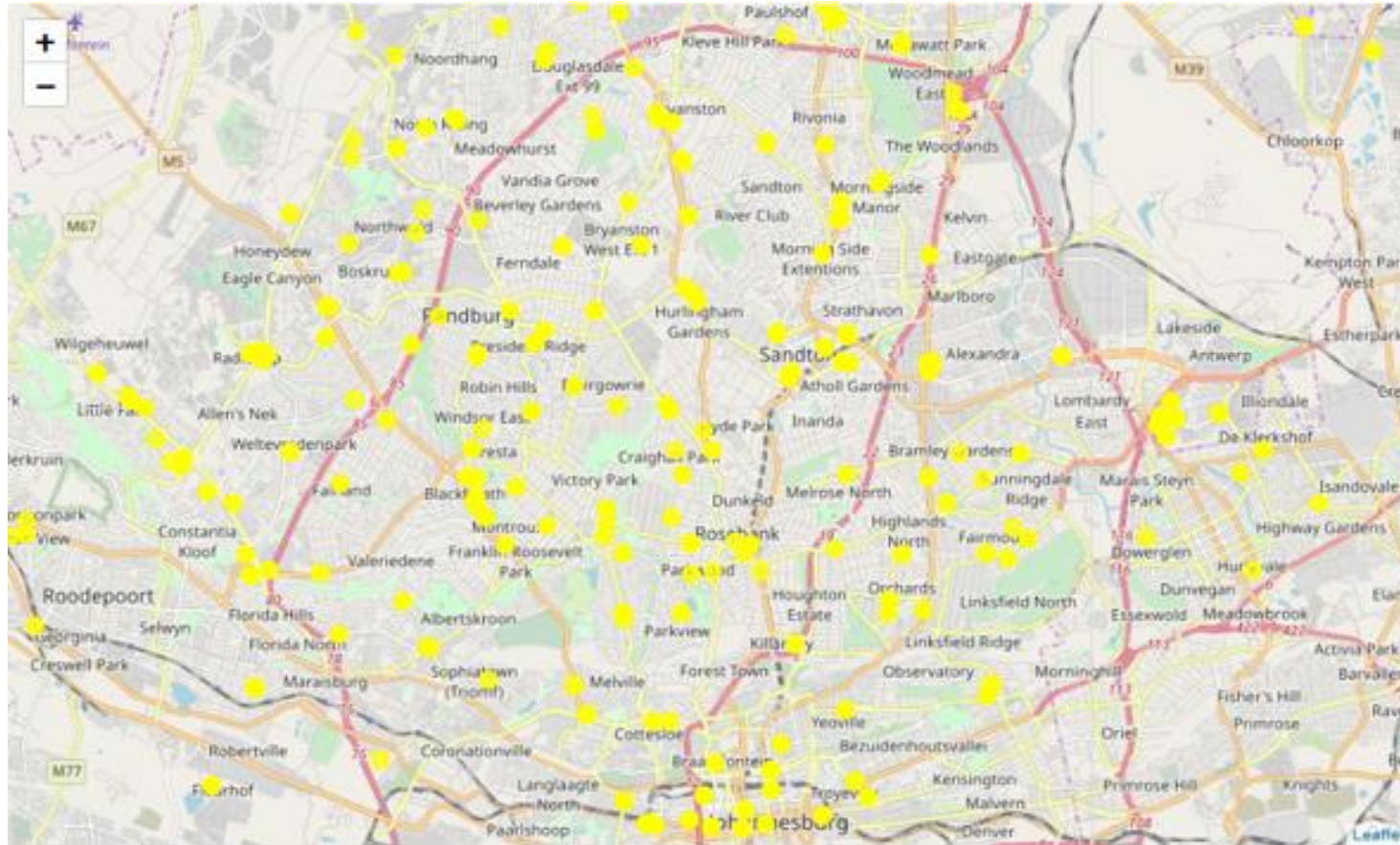# Food Venues in Johannesburg

Supermarkets Venues in Johannesburg

Hotels Venues in Johannesburg

Shopping Malls Venues in Johannesburg
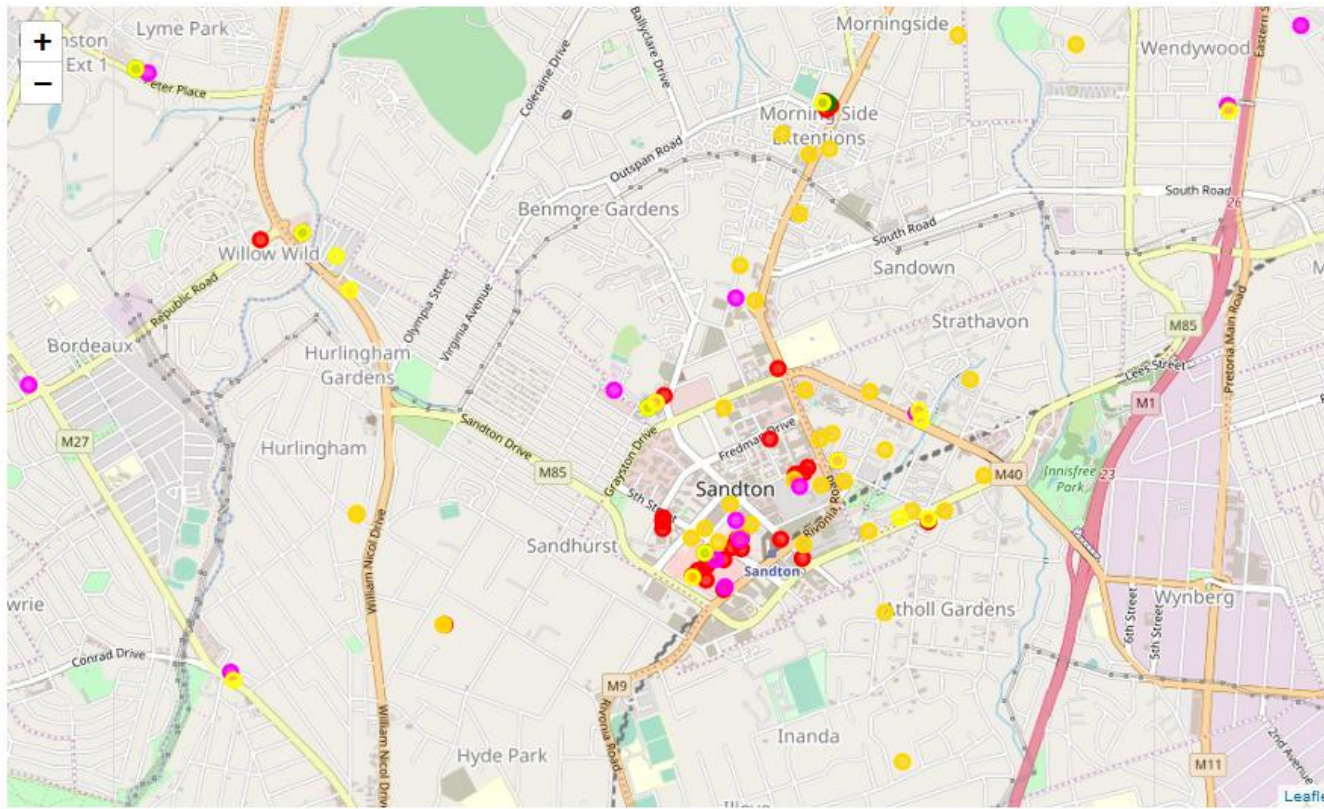
Grocery Stores Venues in Johannesburg

Results

	Places	Score
33	Sandton	352.5
18	Lehae	350.5
29	Randburg	343.0
1	Chartwell	328.0
0	Alexandra	320.0
6	Ebony Park	311.5
11	Johannesburg	293.0
5	Drie Ziek	284.5
3	Dainfern	280.0
2	City of Johannesburg (non-urban)	279.5
8	Farmall	272.5
24	Midrand	268.5
9	Itsoseng	236.5
22	Malatjie	236.5
14	Kanana Park	236.5
32	Roodepoort	200.0
15	Lakeside	192.5
25	Millgate Farm	159.0
12	Kaalfontein	133.5
28	Rabie Ridge	129.0
19	Lenasia	123.5
21	Lucky 7	109.5

Sandton achieved the highest accumulated score as shown above.

The Best Place for Coffee Firm is Sandton

Conclusion and Recommendations

- Sandton is the best Place/ Neighbourhood for Ababa Coffee to setup their business within the City of Johannesburg, in South Africa. This is due to the highest concentration of major customers that Ababa Coffee is targeting.

- Although the rental rates are expensive in Sandton, it is recommended for the Management of Ababa Coffee to proceed with setting up their offices in Sandton as this will provide the best opportunity for the business to succeed.