

# Predicting the best place to open a vegan restaurant

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# The perfect address for a vegan restaurant

- Before opening a restaurant it is necessary to find a good place
- In the present context, we will try to find a good place for a vegan restaurant n the city of Sao Paulo Brazil
- To do so, we consider areas around the Bixiga neighborhood with low quantity of restaurants

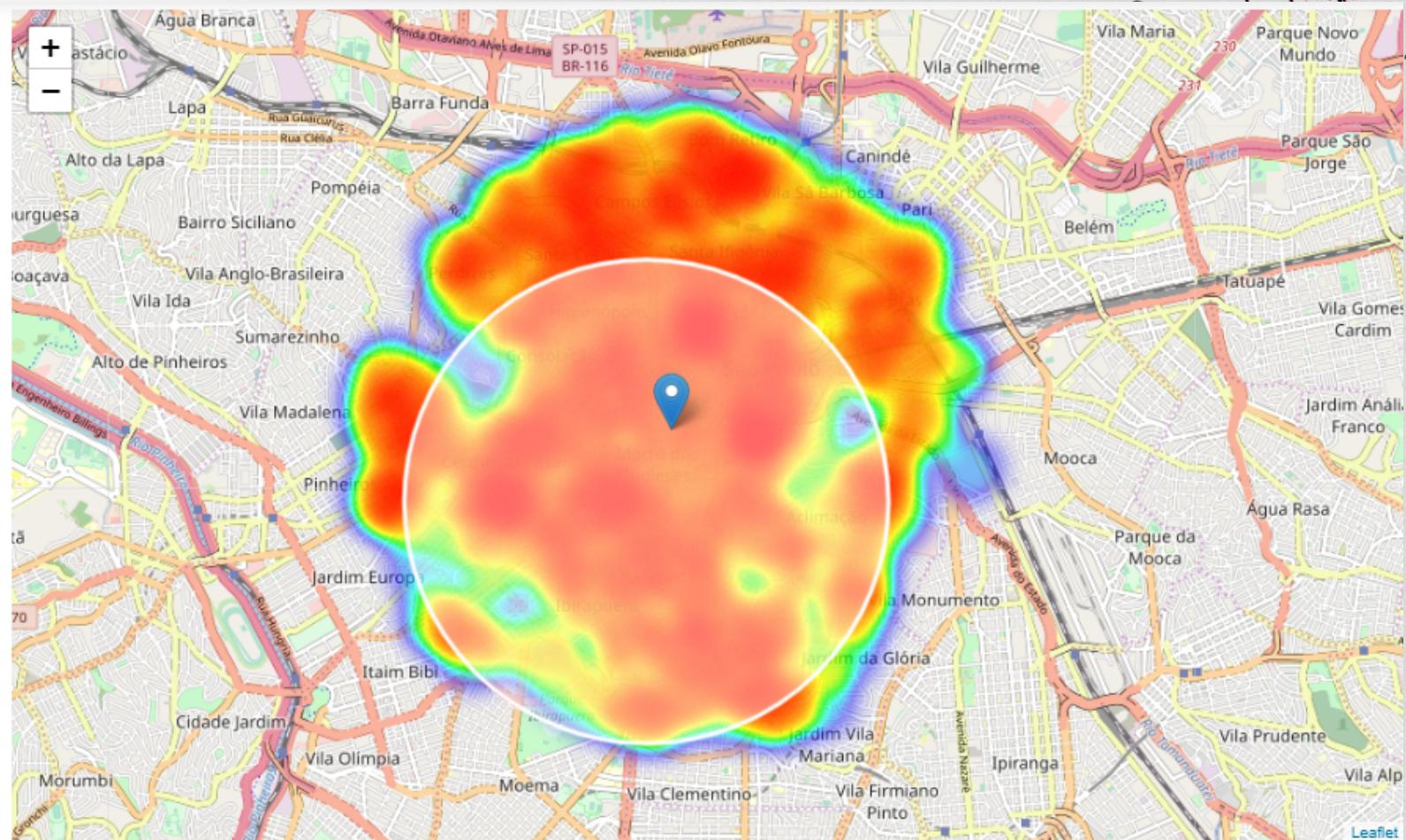
# Data

- centers of candidate areas will be generated using Google Maps API reverse geocoding;
- number of restaurants and their type and location will be obtained using Foursquare

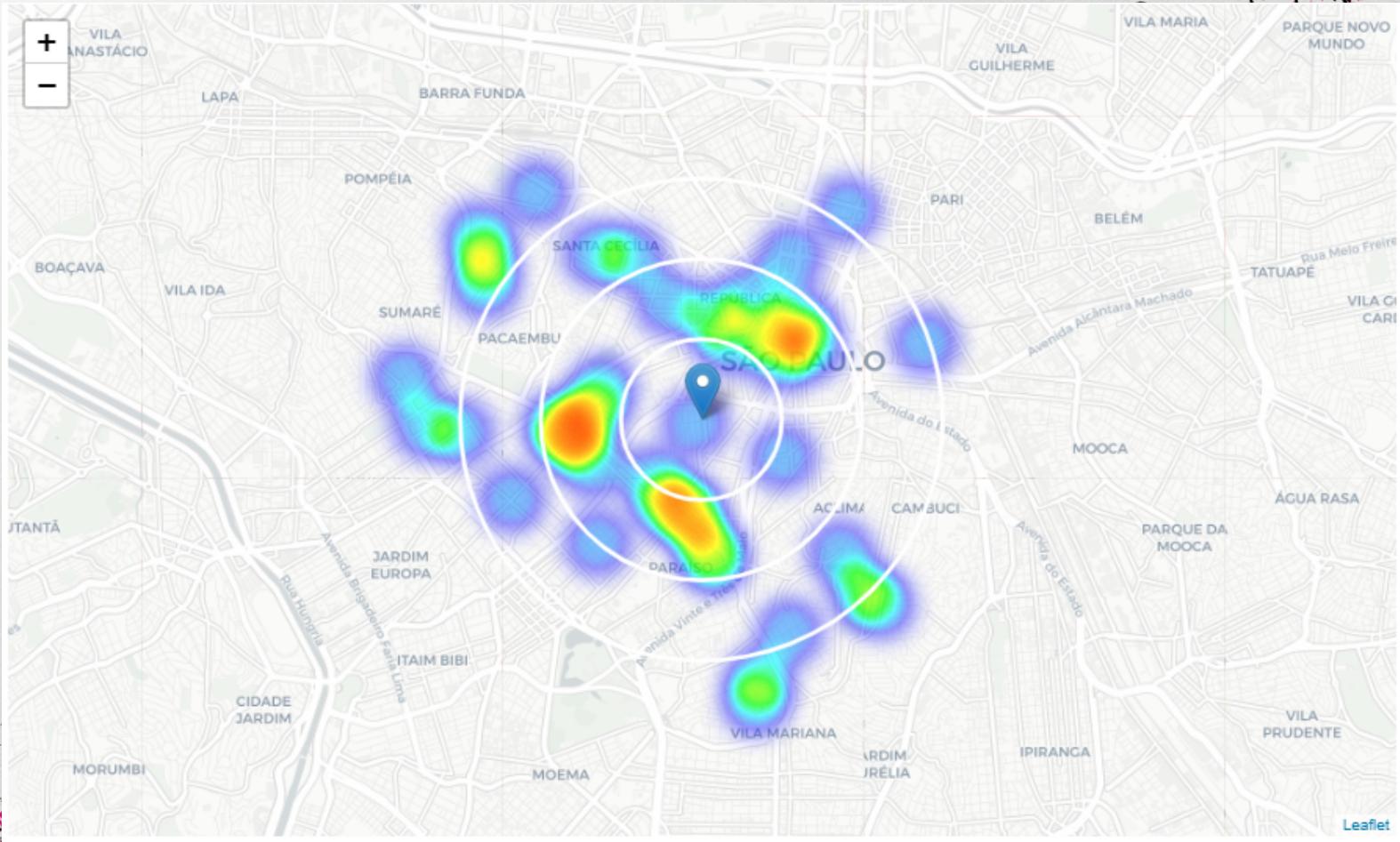
# Methodology

- In first step, we have collected the location and type of every restaurant within 6km from Bixiga.
- Second step, will be calculation and exploration of 'restaurant density' across different areas of Sao Paulo
- In third,we will focus on most promising areas and within those create clusters of locations

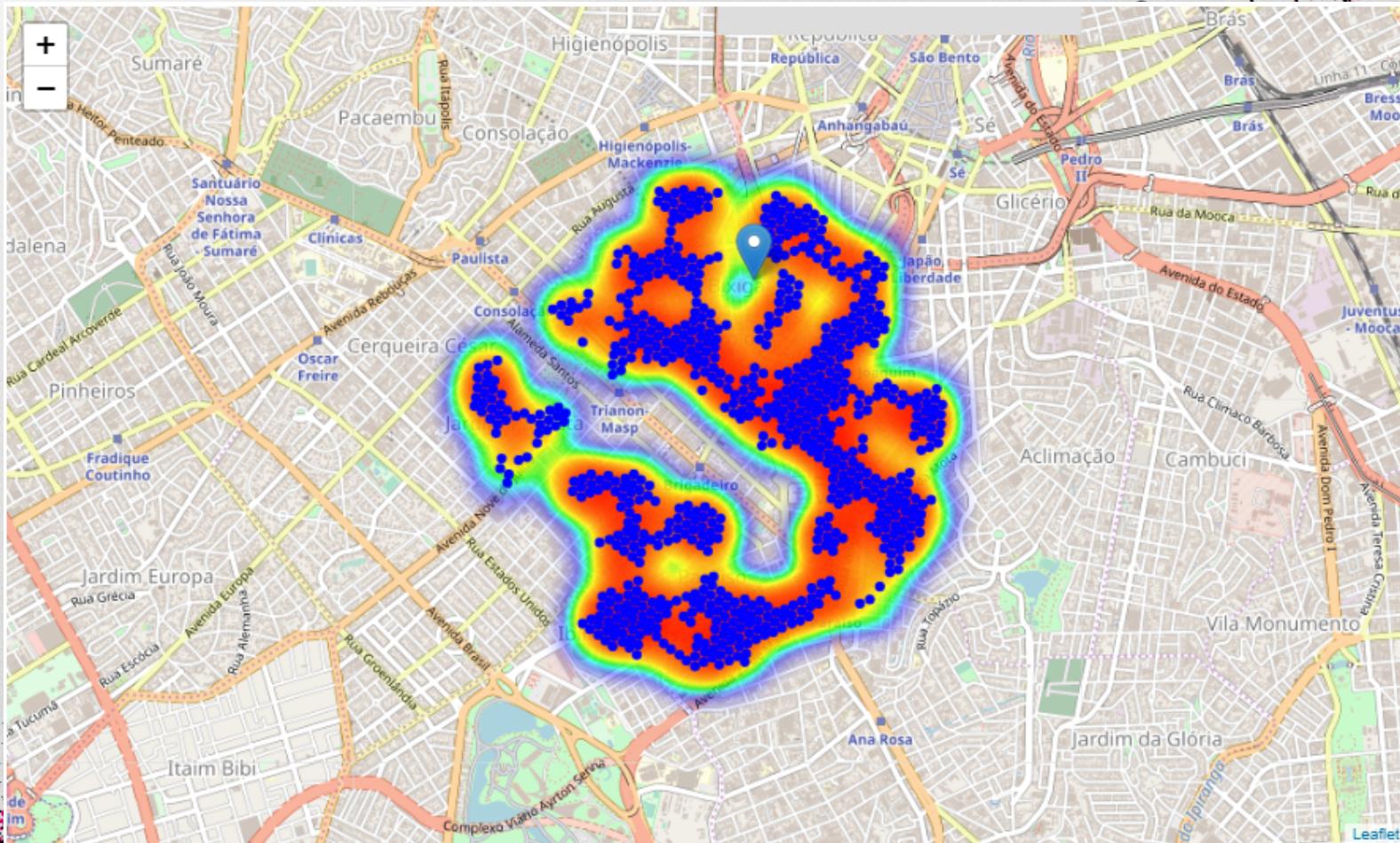
# The heatmap of all the restaurants



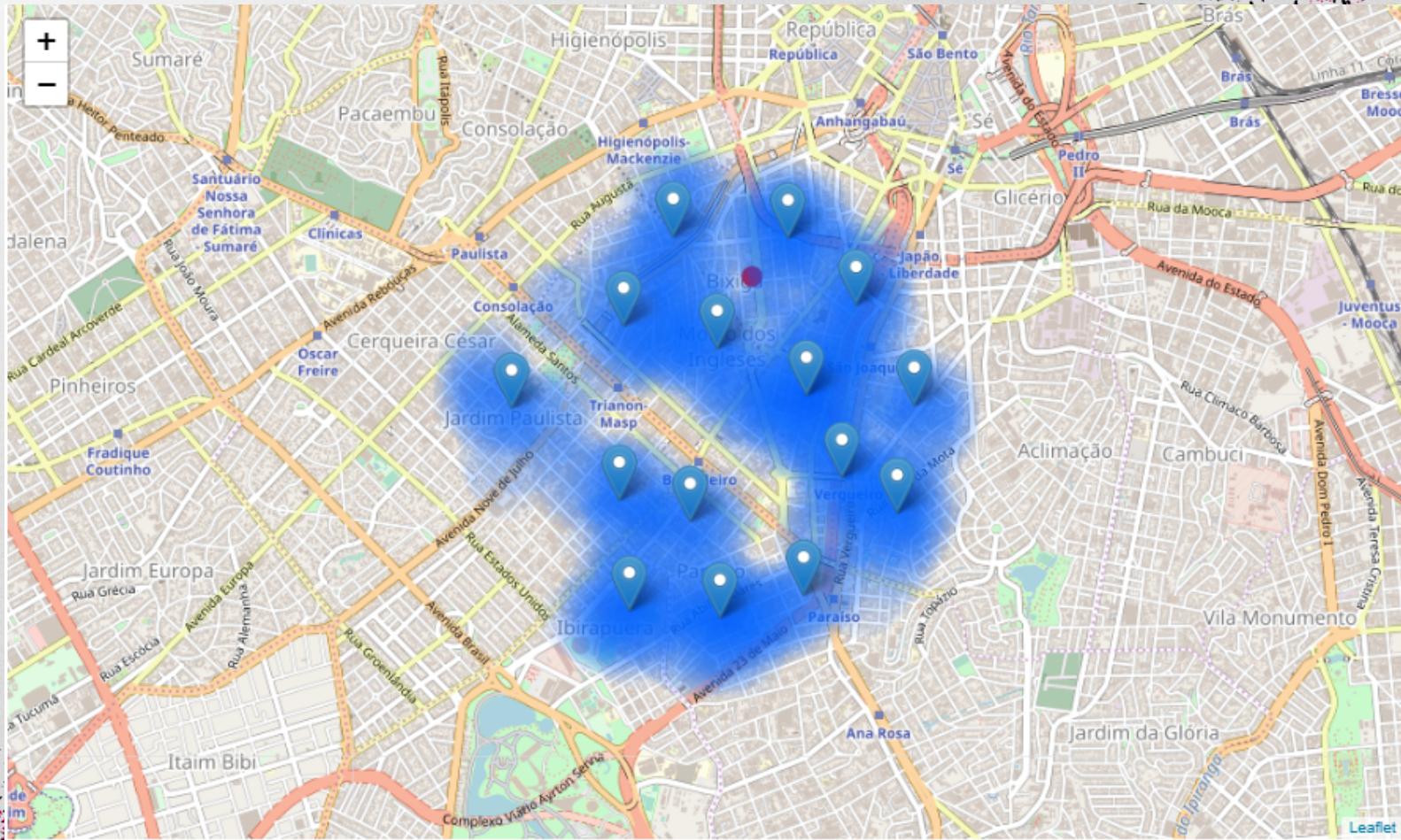
# The heatmap of the vegan restaurants



# Zones with no vegan restaurants nearby



# good places to open a vegan restaurant



# 5 Results and Discussion

- Our analysis shows that although there is a great number of restaurants around Bixiga, there are pockets of low restaurant density fairly close to this area.
- Highest concentration of restaurants was detected northeast and southwest from Bixiga, so we focused on the area around the Paulista Avenue.

- We obtained 15 zones containing largest number of potential new restaurant locations based on number of and distance to existing venues.
- This, of course, does not imply that those zones are actually optimal locations for a new restaurant! Purpose of this analysis was to predict good options.

# Conclusion

- Purpose of this project was to identify Sao Paulo areas close to Bixiga neighborhood with low number of restaurants
- By calculating restaurant density distribution from Foursquare data we have first identified general boroughs that justify further analysis (Paulista Avenue)

- We generated extensive collection of locations which satisfy some basic requirements regarding existing nearby restaurants.
- Clustering of those locations was then performed in order to create major zones of interest
- We obtained addresses of those zone centers were created to be used as starting points for final exploration by stakeholders.