
SERGIO GARCIA APRIL 2020

The Battle of Neighborhoods - Madrid

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April 2020

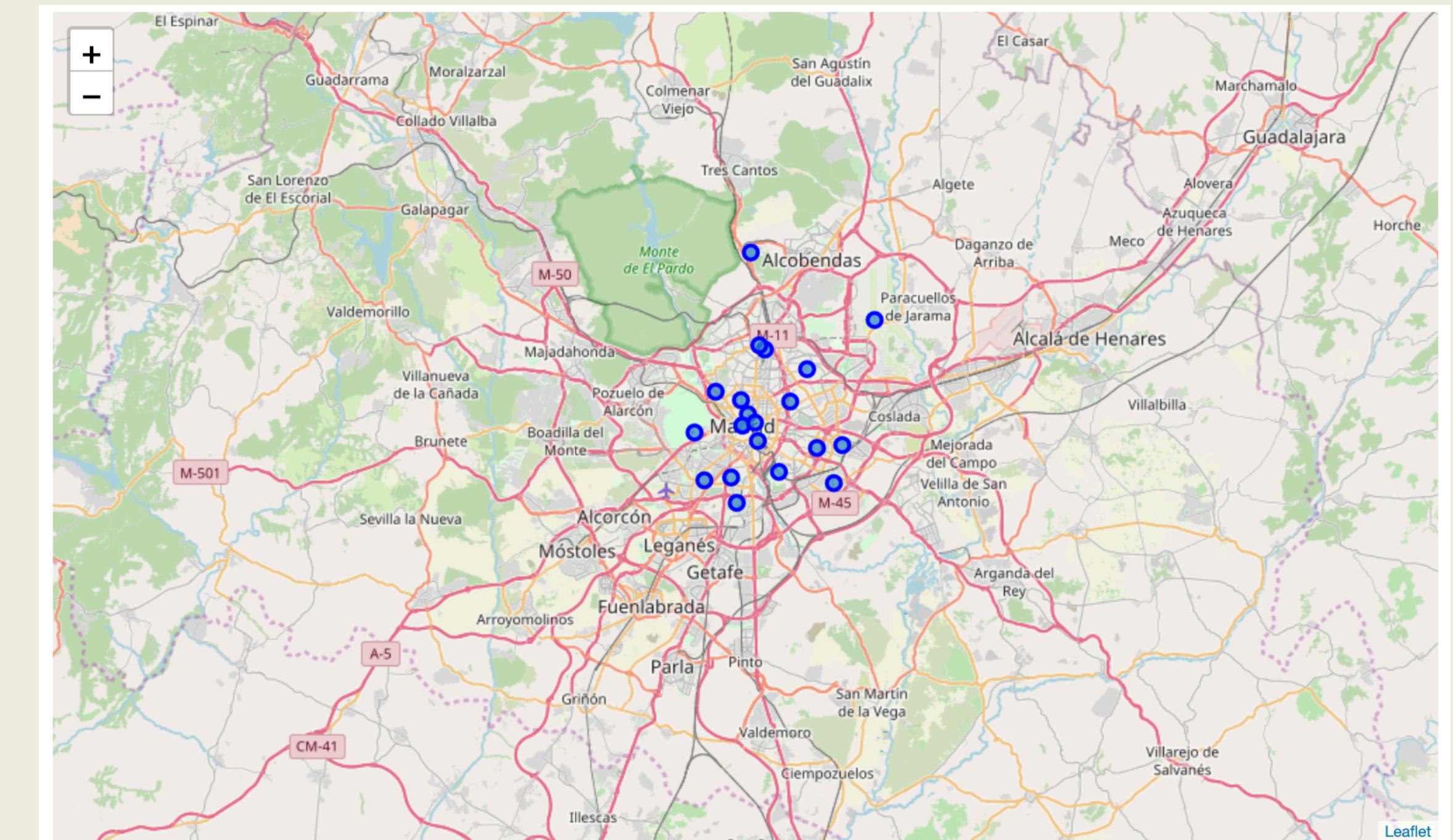
Introduction

- The capital and economic center of Spain, Madrid is a very diverse city with a great culture. Full of charming corners with great restaurants and places of great interest such as the Padro museum or the Santiago Bernabeu stadium.
- For new great chefs it is crucial to correctly select the area where to open a new restaurant. This analysis tries to segment and classify the best areas for the opening of a new restaurant.



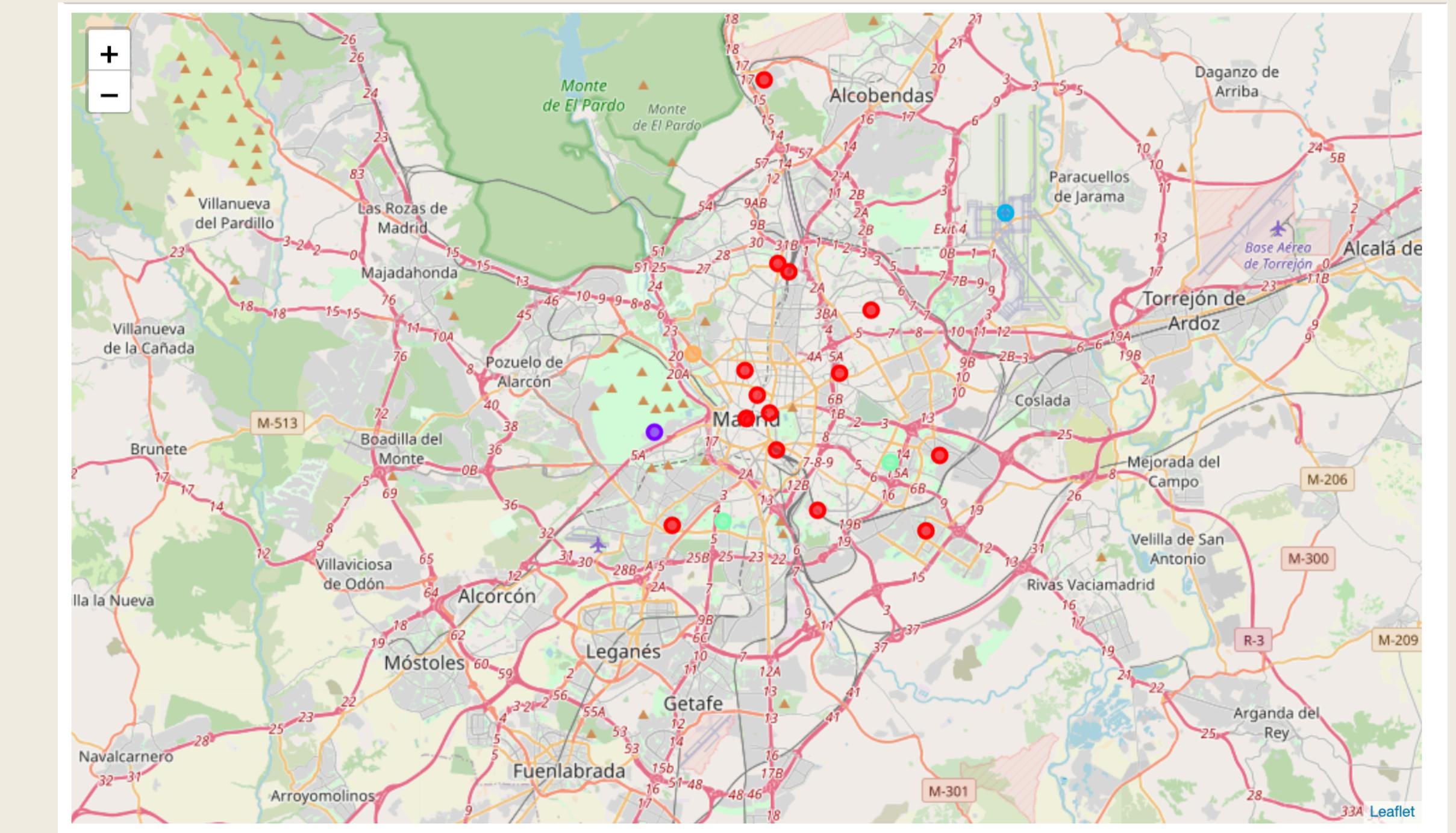
Data acquisition and cleaning

- <http://www.madrid.org/iestadis/fijas/clasificaciones/barrios.htm>
- <http://www.madrid.org/iestadis/fijas/clasificaciones/descarga/cobar18.xls>



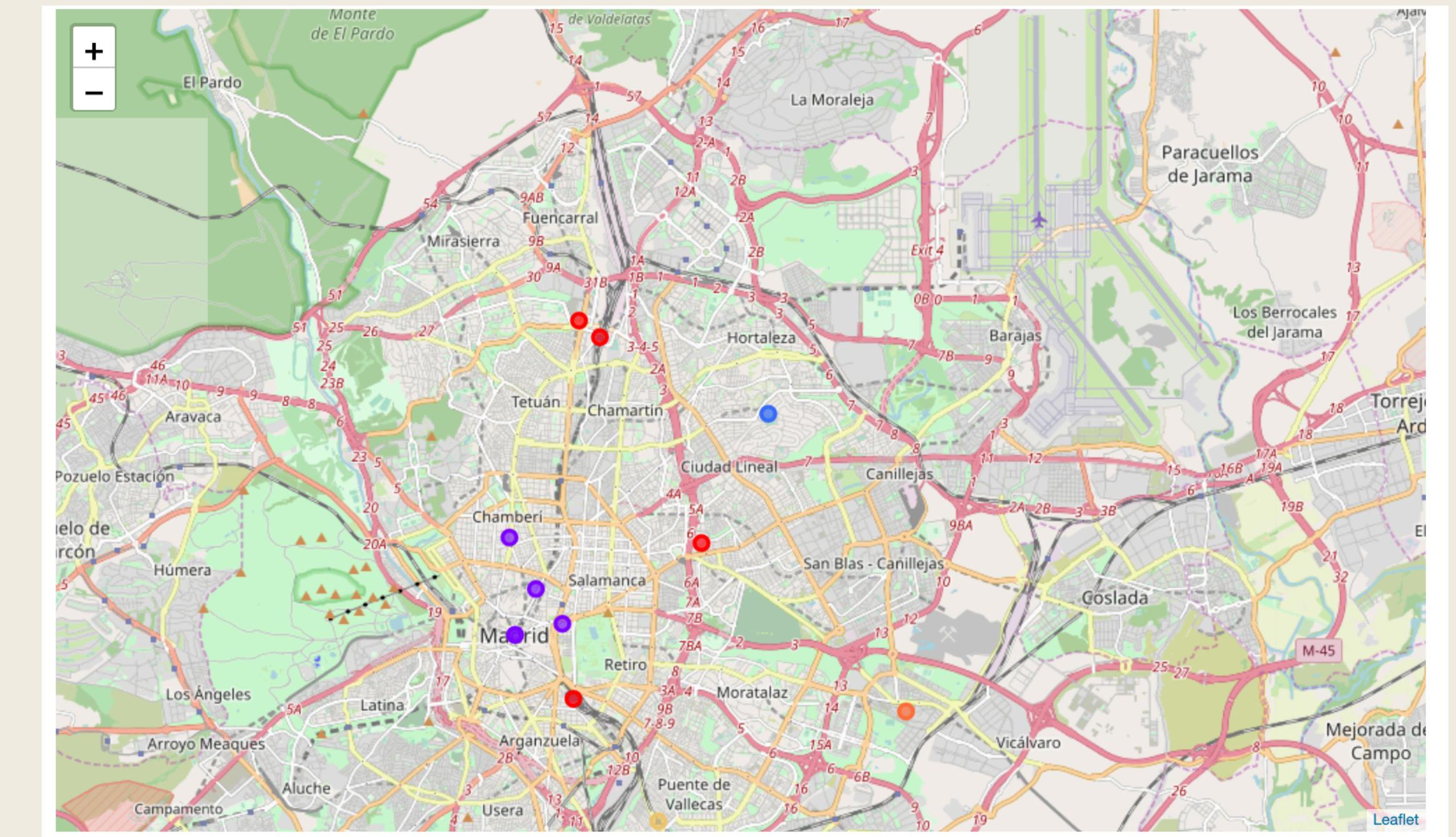
Predictive Modeling (1/2)

- A cluster technique has been applied to perform the segmentation. For this, the number of the cluster has been established as 5.
- The red dots mark these areas. As we can see Madrid is a very gastronomic area, so this analysis does not give us much information



Predictive Modeling (2/2)

- But our analysis wants to go further. Therefore, within cluster number 1, the most prone cluster, a re-segmentation has been carried out to further adjust the most appropriate areas for each type of restaurant.
- For this reason, a clustering technique has been applied to better understand the areas. The cluster number has been set to 8.



Conclusions

- This analysis has allowed us to know which sites are more suitable for the opening of a new restaurant with only the use of data from the community of Madrid and the help of the Foursquare API. This allows us to make better decisions based on real data.
- This will make our new open business more likely to succeed. What improves the conditions for people who have and use this analysis.

	Borough	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
6	Ciudad Lineal	0	Spanish Restaurant	Grocery Store	Restaurant	Chinese Restaurant	Mediterranean Restaurant	Tapas Restaurant	Hotel	Gourmet Shop	Park	Butcher
11	Arganzuela	0	Spanish Restaurant	Hotel	Restaurant	Grocery Store	Sandwich Place	Train Station	Museum	Gym	Brewery	Latin American Restaurant
16	Chamartin	0	Spanish Restaurant	Café	Platform	Hotel	Gym / Fitness Center	Restaurant	Bar	Sandwich Place	Train Station	Skating Rink
17	Tetuán	0	Spanish Restaurant	Hotel	Sandwich Place	Restaurant	Breakfast Spot	Italian Restaurant	Burger Joint	Building	Business Service	Fast Food Restaurant

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0	Centro	1	Restaurant	Spanish Restaurant	Bakery	Hotel	Cocktail Bar	Cosmetics Shop	Café	Vegetarian / Vegan Restaurant	Bar	Italian Restaurant
12	San Blas	1	Hotel	Plaza	Tapas Restaurant	Spanish Restaurant	Hostel	Wine Bar	Gourmet Shop	Clothing Store	Restaurant	Dessert Shop
14	Retiro	1	Hotel	Plaza	Tapas Restaurant	Spanish Restaurant	Hostel	Wine Bar	Gourmet Shop	Clothing Store	Restaurant	Dessert Shop
15	Salamanca	1	Hotel	Spanish Restaurant	Plaza	Restaurant	Theater	Park	Café	Japanese Restaurant	Art Gallery	BBQ Joint
18	Chamberí	1	Restaurant	Tapas Restaurant	Theater	Bar	Spanish Restaurant	Café	Bakery	Multiplex	Plaza	Mexican Restaurant

Future directions

- As future steps we should try to expand the analysis including new variables and new sources of information. Since in this case we have based ourselves on the advantages of Foursquare. But important data such as the average income in the area or the saturation level of restaurants could be very rich analyzes for decision-making when opening a new restaurant

Thanks for your time