



# **Best District for Business Madrid**

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# Purpose of this project

- Client wants to open a specialty cookie shop but not knowing where in Madrid
- We want to help them choose the right district for this purpose looking at two different variables:
  - Population density of each of the districts
  - Venue category combination that best fits our business idea to get an idea of competition

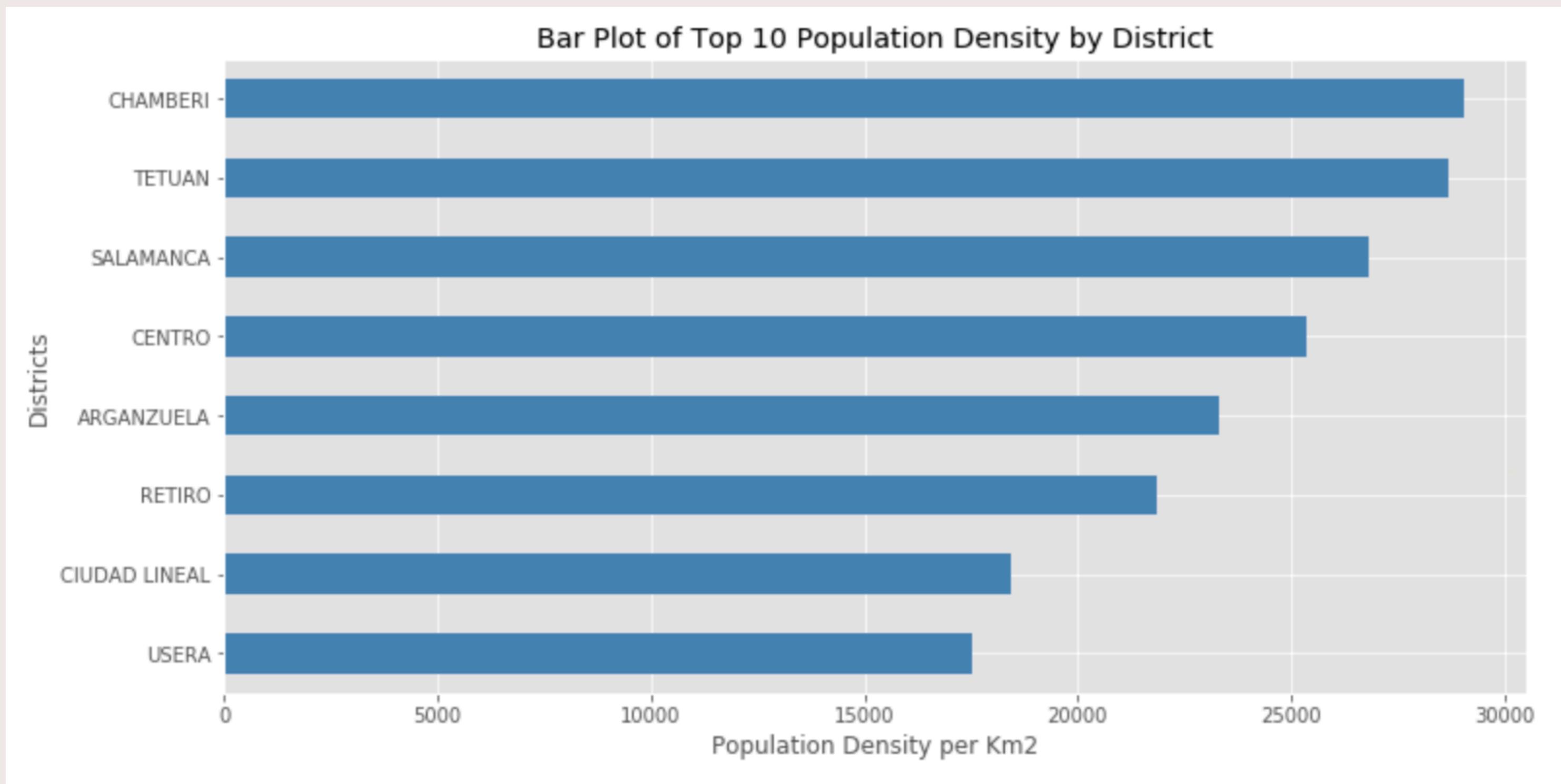
# Data for Analysis

- Foursquare API: to get our venue category per district
- Callejero\_Vigente CSV from official Madrid website: list of official districts of Madrid along with geographical data
- Population data set from Community of Madrid website: population density per district



# Population Density

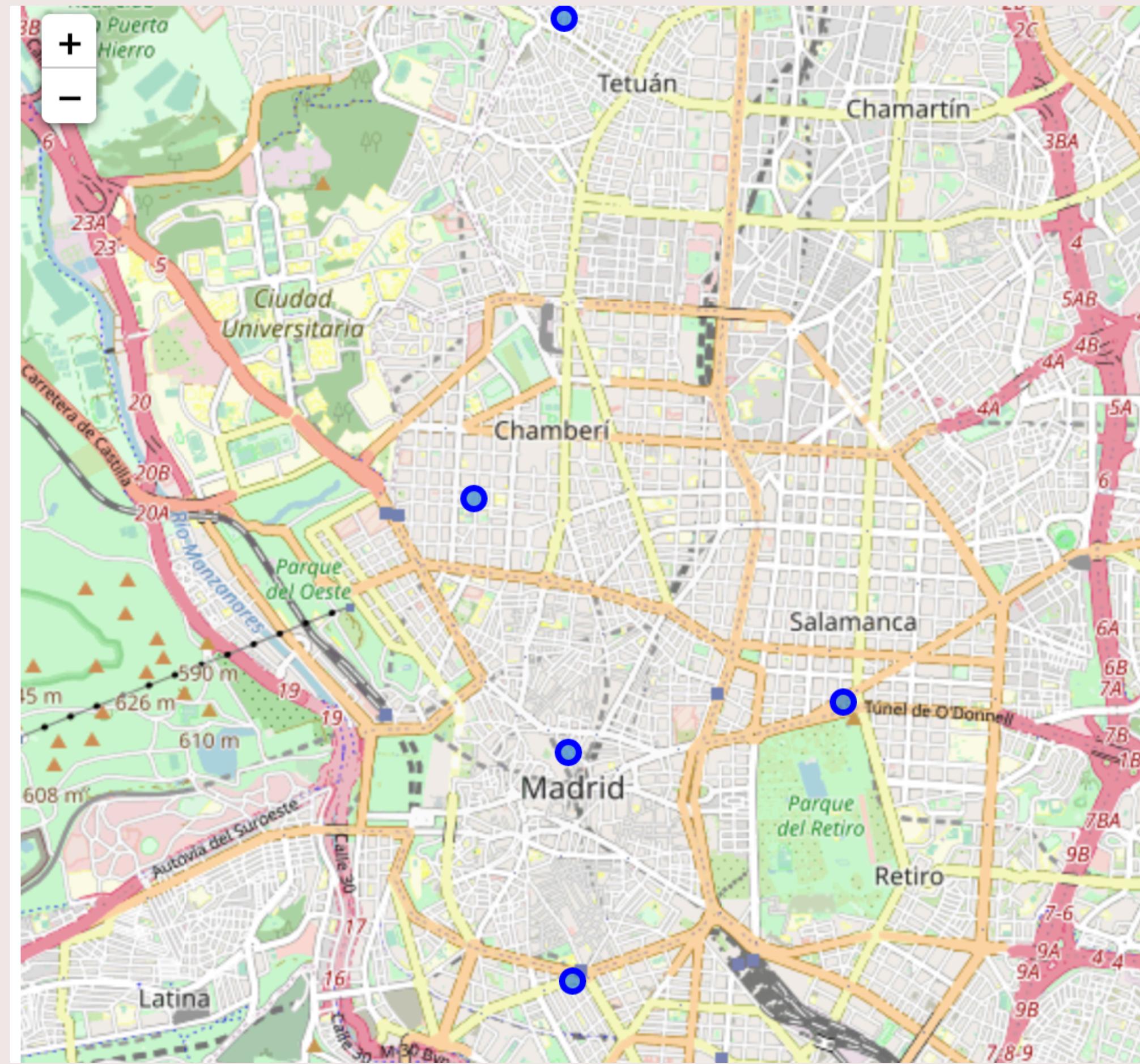
Narrowing down our district candidates



Selected Top 5 Districts to continue analysis with:

- Chamberi
- Tetuan
- Salamanca
- Centro
- Arganzuela

# Location of our selected districts



# Getting top venue categories per district

Top 10 venue categories per district of our selected top 5 candidates

	Districts	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
0	ARGANZUELA	Bar	Tapas Restaurant	Restaurant	Spanish Restaurant	Café	Art Gallery	Plaza	Indie Theater	Coffee Shop	Bookstore
1	CENTRO	Plaza	Hotel	Clothing Store	Tapas Restaurant	Restaurant	Hostel	Café	Cocktail Bar	Bookstore	Gourmet Shop
2	CHAMBERI	Bar	Spanish Restaurant	Pub	Tapas Restaurant	Café	Restaurant	Sandwich Place	Beer Garden	Italian Restaurant	Coffee Shop
3	SALAMANCA	Restaurant	Spanish Restaurant	Bakery	Ice Cream Shop	Burger Joint	Café	Dessert Shop	Italian Restaurant	Tapas Restaurant	Clothing Store
4	TETUAN	Spanish Restaurant	Hobby Shop	Gym / Fitness Center	Ice Cream Shop	Mediterranean Restaurant	Mexican Restaurant	Park	Pizza Place	Restaurant	Breakfast Spot

# Clustering our Data Set

Top 10 venue categories per district of our selected top 5 candidates

	Districts	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
0	ARGANZUELA	Bar	Tapas Restaurant	Restaurant	Spanish Restaurant	Café	Art Gallery	Plaza	Indie Theater	Coffee Shop	Bookstore
1	CENTRO	Plaza	Hotel	Clothing Store	Tapas Restaurant	Restaurant	Hostel	Café	Cocktail Bar	Bookstore	Gourmet Shop
2	CHAMBERI	Bar	Spanish Restaurant	Pub	Tapas Restaurant	Café	Restaurant	Sandwich Place	Beer Garden	Italian Restaurant	Coffee Shop
3	SALAMANCA	Restaurant	Spanish Restaurant	Bakery	Ice Cream Shop	Burger Joint	Café	Dessert Shop	Italian Restaurant	Tapas Restaurant	Clothing Store
4	TETUAN	Spanish Restaurant	Hobby Shop	Gym / Fitness Center	Ice Cream Shop	Mediterranean Restaurant	Mexican Restaurant	Park	Pizza Place	Restaurant	Breakfast Spot

# Cluster 1: Residential

Districts	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
16 TETUAN	Spanish Restaurant	Hobby Shop	Gym / Fitness Center	Ice Cream Shop	Mediterranean Restaurant	Mexican Restaurant	Park	Pizza Place	Restaurant	Breakfast Spot

- I decided to call this the residential cluster as fitness centers are very common, there are parks and hobby shops are one of the most common categories. These indicate that this district isn't very touristy.

# Cluster 2: Dining Area

Districtos	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
0 ARGANZUELA	Bar	Tapas Restaurant	Restaurant	Spanish Restaurant	Café	Art Gallery	Plaza	Indie Theater	Coffee Shop	Bookstore
5 CHAMBERI	Bar	Spanish Restaurant	Pub	Tapas Restaurant	Café	Restaurant	Sandwich Place	Beer Garden	Italian Restaurant	Coffee Shop

- This cluster includes a variety of venues but mostly related to bars and restaurants. These districts are probably very busy as there are many dining places.

# Cluster 3: Dessert Area

Districts	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
14 SALAMANCA	Restaurant	Spanish Restaurant	Bakery	Ice Cream Shop	Burger Joint	Café	Dessert Shop	Italian Restaurant	Tapas Restaurant	Clothing Store

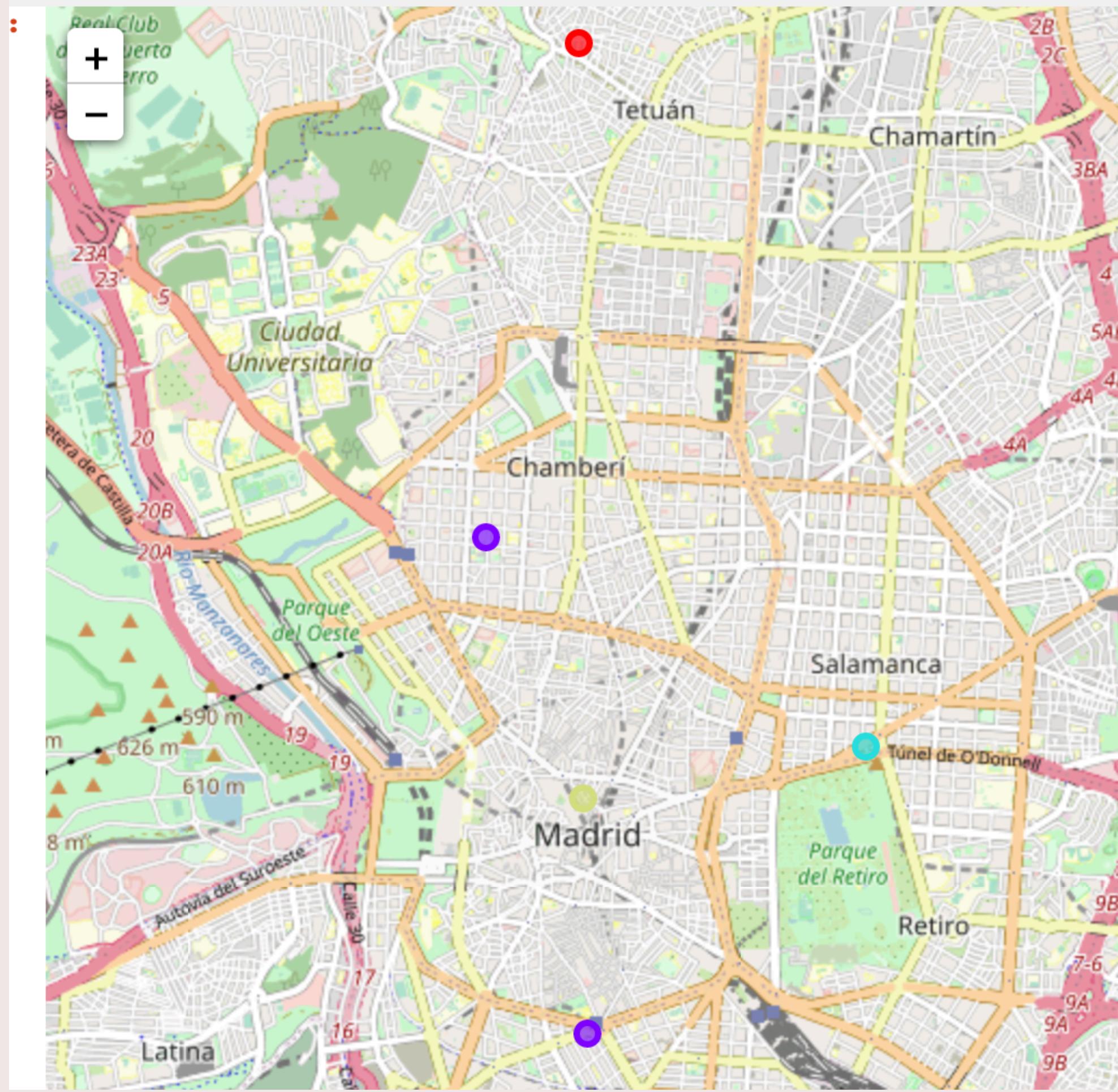
- This cluster shows many different dessert/coffee places among their most common venues.

# Cluster 4: Tourist Area

Districts	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
3 CENTRO	Plaza	Hotel	Clothing Store	Tapas Restaurant	Restaurant	Hostel	Café	Cocktail Bar	Bookstore	Gourmet Shop

- This cluster has been marked as tourist area as hotels and hostels are very common along with plazas and a good variety of shops and restaurants.

# Clusters on Map



# Conclusion and Recommendations

- Based on population density, Chamberi would be the top choice.
- Based on the venue categories, Centro is the district to go, but it is only the fourth in terms of population density.
- Chamberi is in the second choice cluster, which is a good cluster as well.
- Therefore, our recommendation is to choose Chamberi as the business location.

