

A thick black L-shaped frame is positioned on the left and right sides of the page, framing the central text. The left part of the frame is a vertical line extending from the top to the bottom, with a horizontal line at the top. The right part is a vertical line extending from the top to the bottom, with a horizontal line at the bottom.

BATTLE OF NEIGHBORHOODS

Madrid

Opening a new Restaurant :

- An area where potential clients are tourists but also locals
- The area has good transport connection: underground stations, parking.
- Busy area where the value added of his restaurant could make an impact “borrowing” customers from restaurants around.

Madrid:

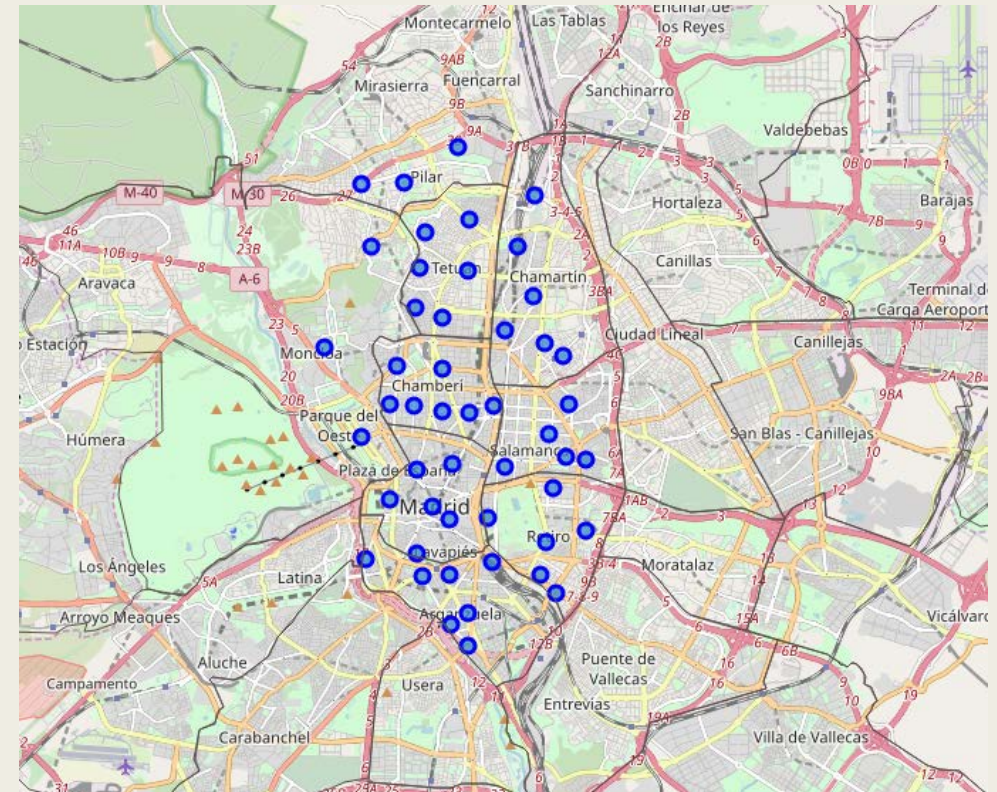
- More than 6 million tourists per year.
- Metropolitan area with approximately 6.5 million inhabitants.

Data acquisition and Metodology:

- City coordiantes: City Council of Madrid at their website datos.madrid.es. Data cleaning with Geopandas and Geocoding API (Google). Data contains 21 boroughs and 131 neighborhood
- Using Foursquare API to get venue data
- Clustering using K-means algorithm for data segmentation

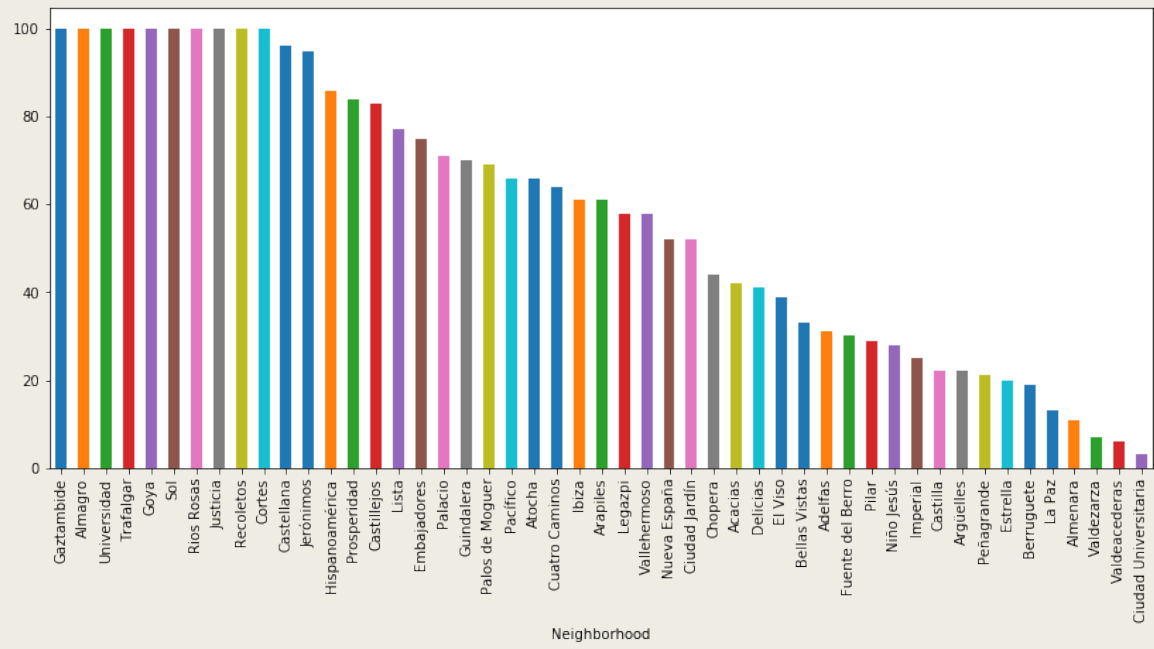
Area of study:

- Madrid Central: 9 boroughs and 49 neighborhoods.



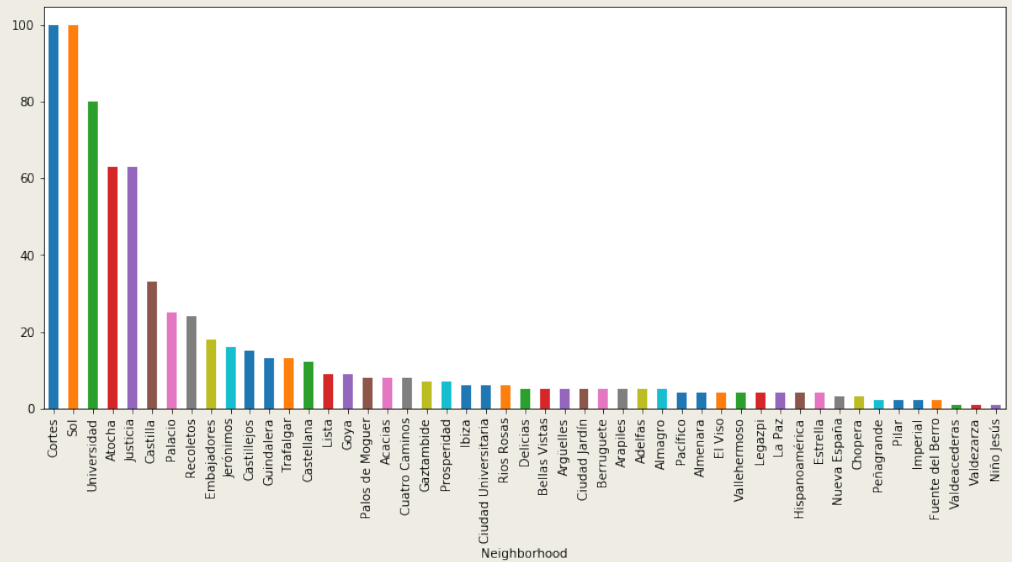
Total Venues:

- 2830



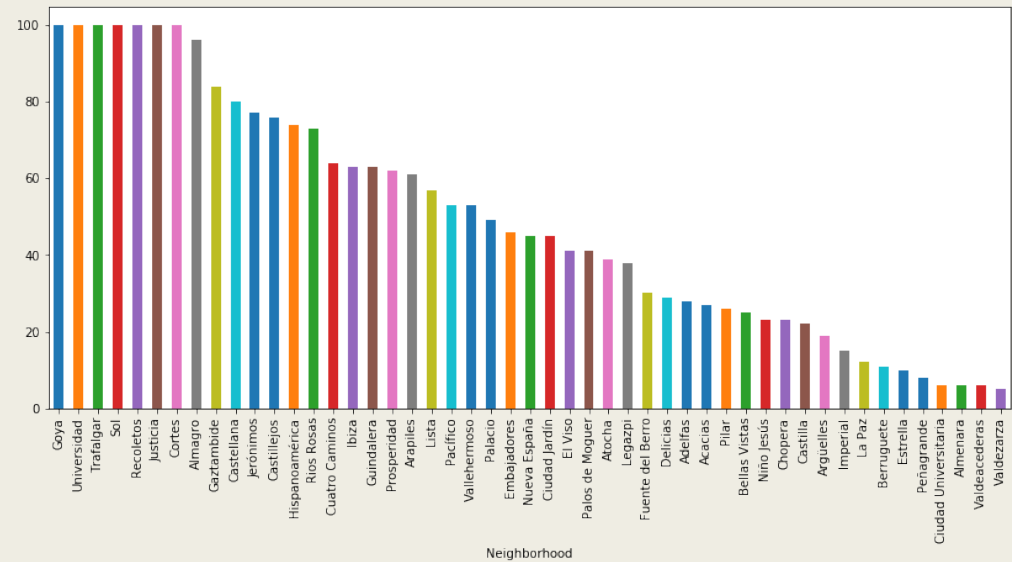
Travel & Transport:

- 738



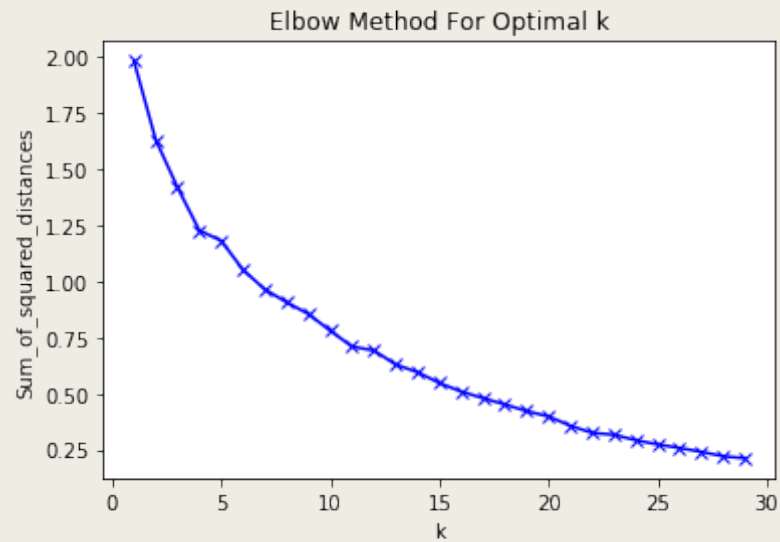
Food:

- 2411

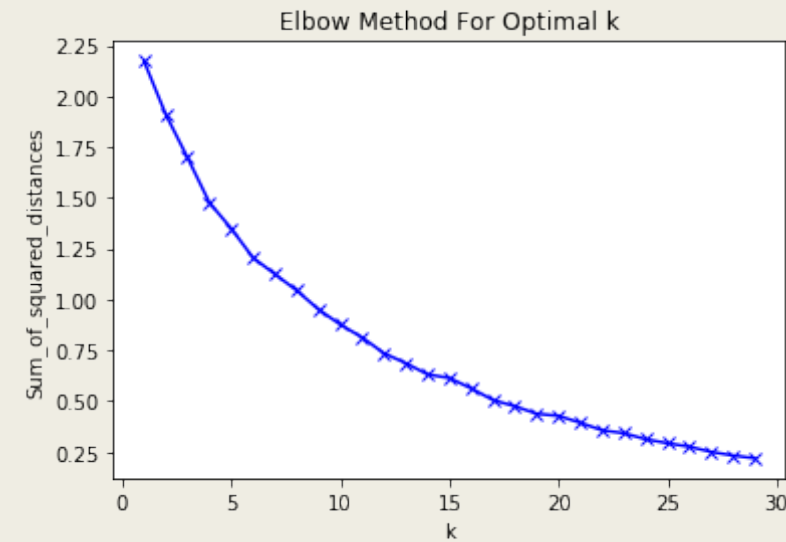


K-Means optimization

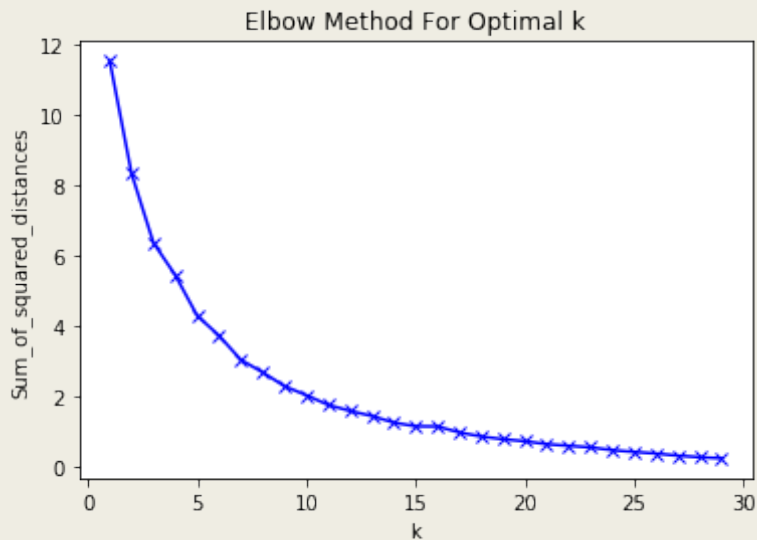
All venues: $K = 11$



Food: $K = 11$



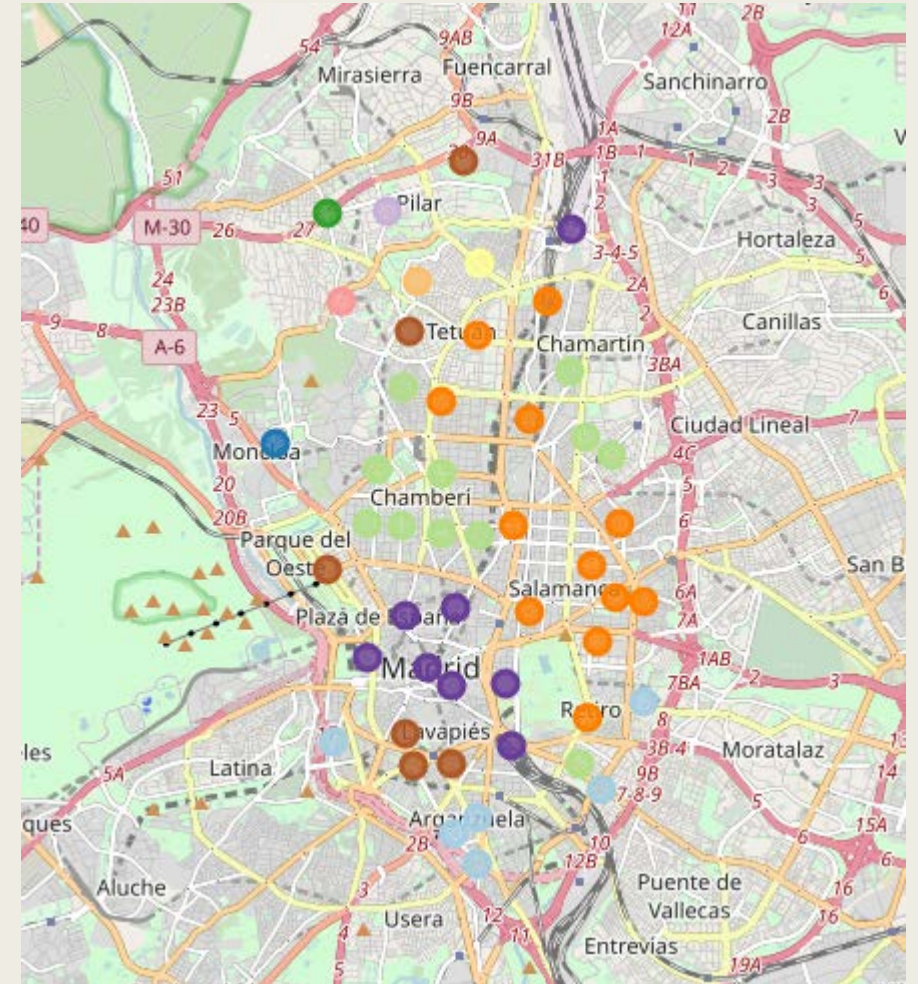
Travel and Transport: $K = 6$



Clustering: All venues

All Venues

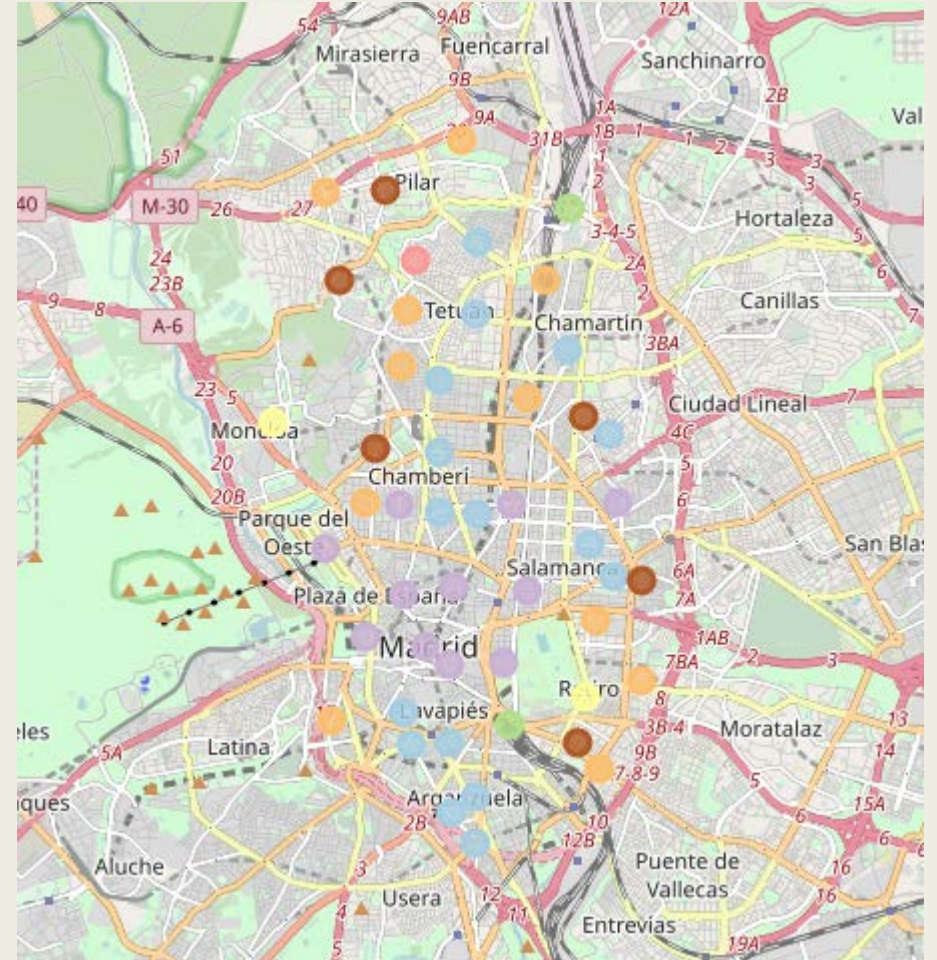
- Cluster 3 (light green): Spanish Restaurants and Tapas, with bars and cafes
- Cluster 7 (orange): More variety of restaurants, more expensive area
- Cluster 9 (violet): Tourist area with Hotels, museums and also Spanish Restaurants and



Clustering: Travel and Transport

Travel and Transport Venues:

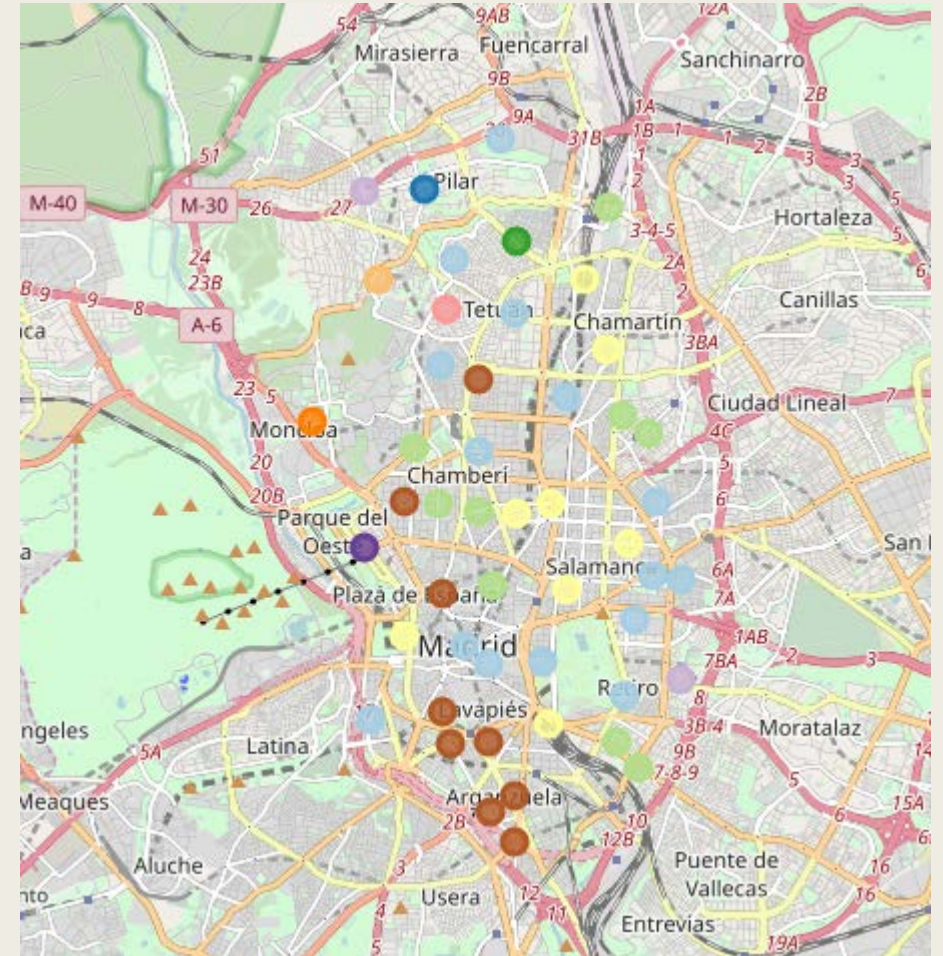
- Cluster 1 (light blue): Transport links and hotels
- Cluster 5 (light violet): Tourist area: Hotels, bed and breakfasts and good transport links.



Clustering: Food

Food venues:

- Cluster 0 (brown): Middle class area with a lot of tapas restaurants
- Cluster 1 (light blue): Area with lots of restaurants and cafes.
- Cluster 3 (green): Cafes and restaurants
- Cluster 10 (yellow): More expensive restaurants and big variety



Conclusion

Areas to open the a new Restaurant in Madrid:

- Area of Sol and Cortes, is a tourist area with:
 - Plenty of accommodation: Hotels and Bed & Breakfast
 - Places to visit: Museums, squares, city tours
 - Spanish Restaurants and Tapas Bars.
- Area of Castellana, Lista and Recoletos: well known area with plenty of shops and more expensive restaurants. All type of food:
 - Seafood
 - Japanese
 - Italian
 - Argentinian
 - also Spanish restaurants.