Athens Fine Dining

Predicting Suitable Areas for investment in the F&D sector

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Fine Dinning

One of the most prolific "tourism capitals" of Europe, Athens Greece, displays numerous businesses in the F&D sector, a considerable portion of which is characterized as "fine dining" where among others venues such as restaurants, cocktail bars and lounge bars operate successfully.

Even after the fiscal distress originated form the economic crisis of 2008 – 2010, Athens displays numerous opportunities for investment in this particular sector mainly due to the increased levels of tourism traffic.

Problem & Interest

❖The identification of the best place for an investment in the F&D sector needs significant consideration as the investors need to filter the location in terms of: a) local trends in every neighborhood (e.g., a place dominated by bars or restaurants), b) neighborhoods that favor "fine dining" due to increased local wealth or increased popularity and c) areas of high tourism traffic.

❖Data-driven identification of the most optimal area, through integrated information of tourism and similarity of venues, can help tremendously future investors in order to narrow down the possible locations for their investment. In fact, the overall process provides a unique tool that gives an immediate review of the city and the most popular areas for that type of investment.

Data acquisition and cleaning

The utilized data-sets for the project will be of three

origins:

i. The segmentation of Athens City will come from the

following Wiki page

ii. The Venue Related data will come from the

FourSquare API

iii. The identification of the most recent expensive

AirBNB places in Athens will come from Inside AirBNB

iv. The coordinates of the locations will come from the

Open Street Map data base through the
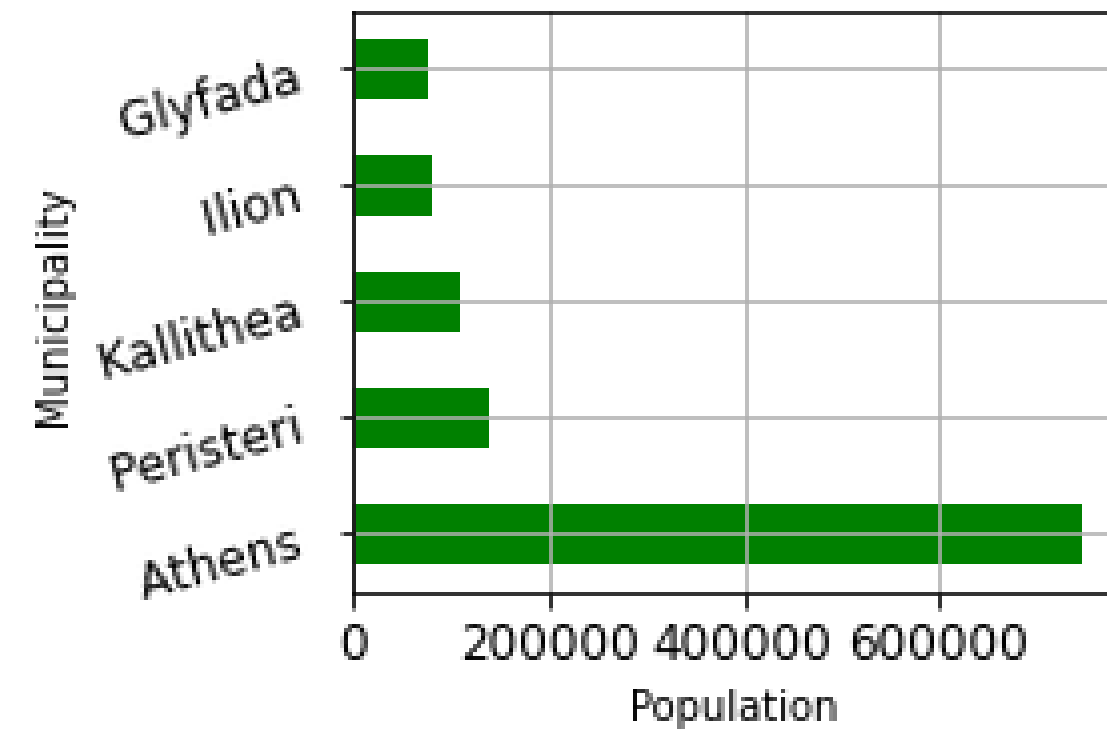
implementation of the tool "*Nominatim*"
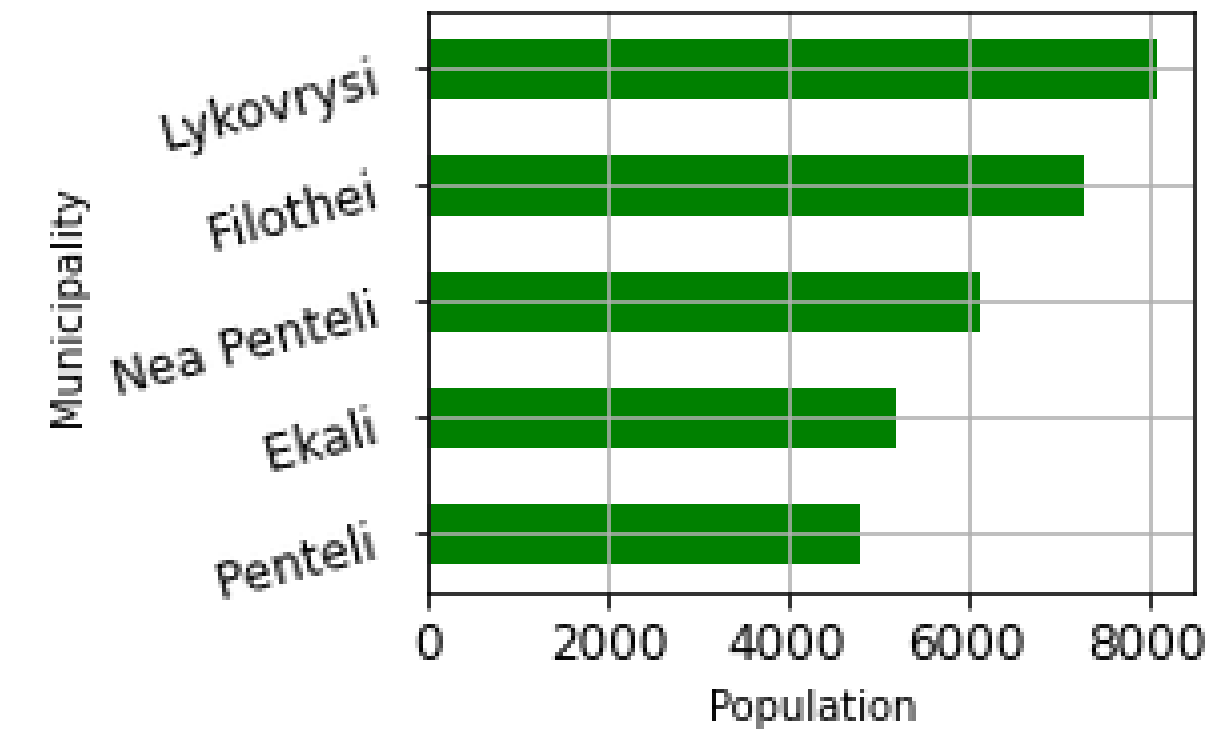
"Character" of the city...
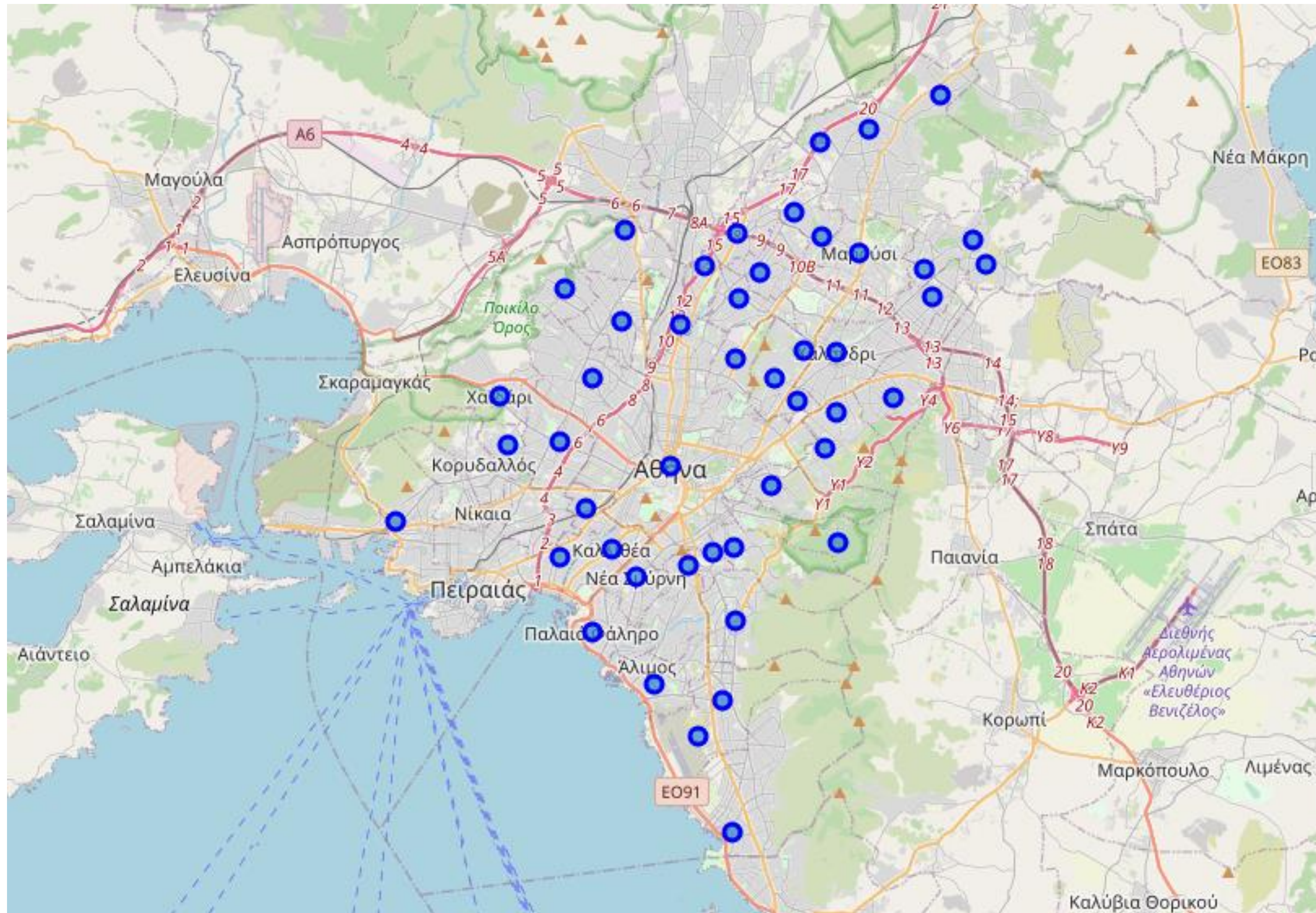
Map of the city of Athens

The blue markers are indicating the center of each integrated municipality / neighborhood.
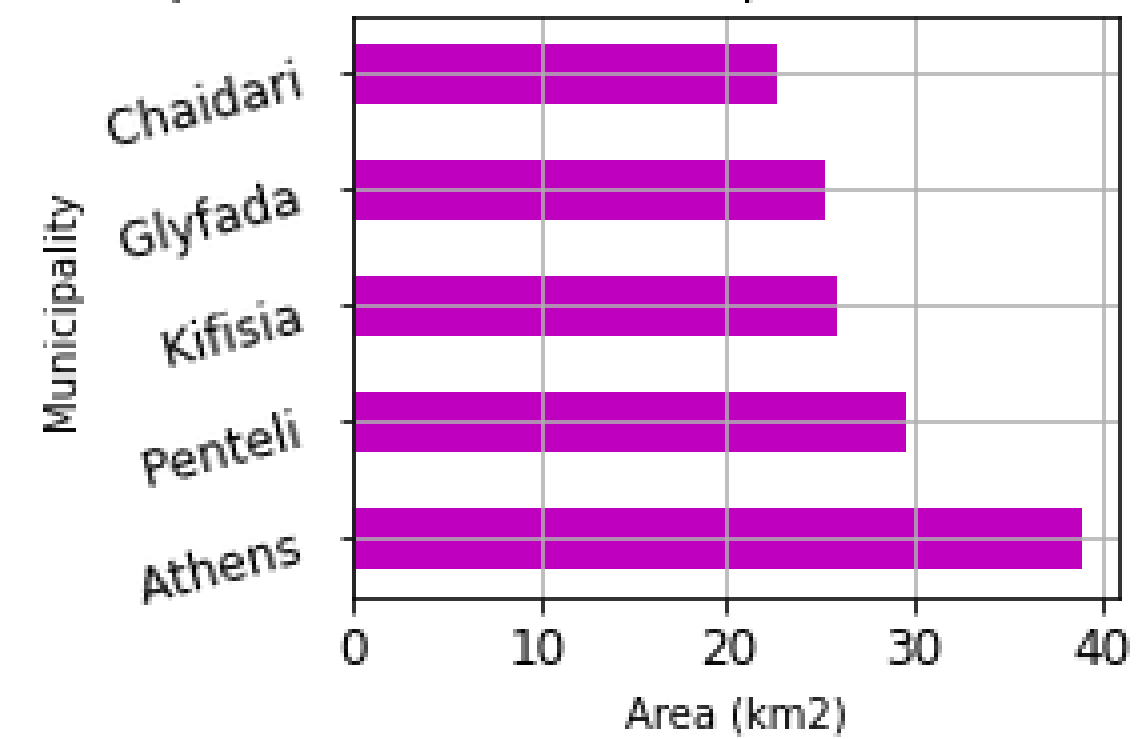
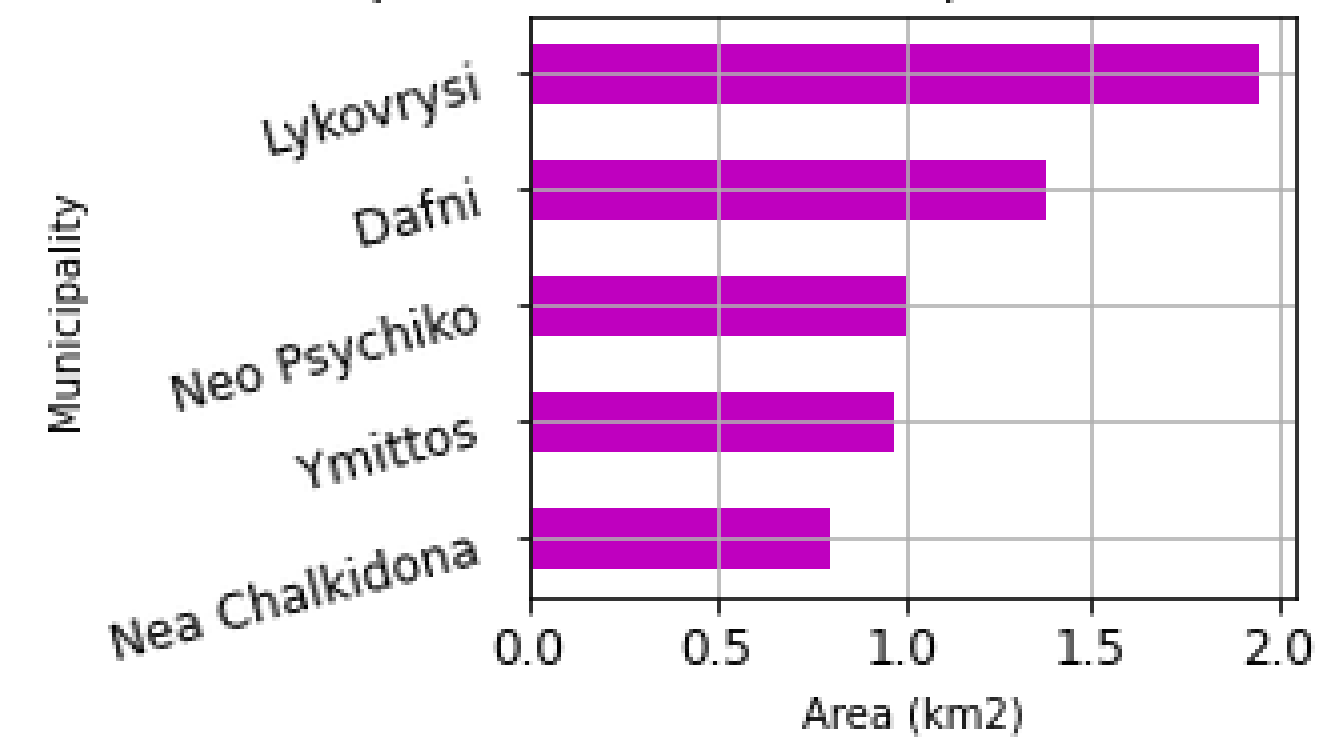Top 5 Municipalities in Athens Metropolitan Area in terms of Population

Least 5 Municipalities in Athens Metropolitan Area in terms of Population

Top 5 Municipalities in Athens Metropolitan Area in terms of Area (km2)

Least 5 Municipalities in Athens Metropolitan Area in terms of Area (km2)

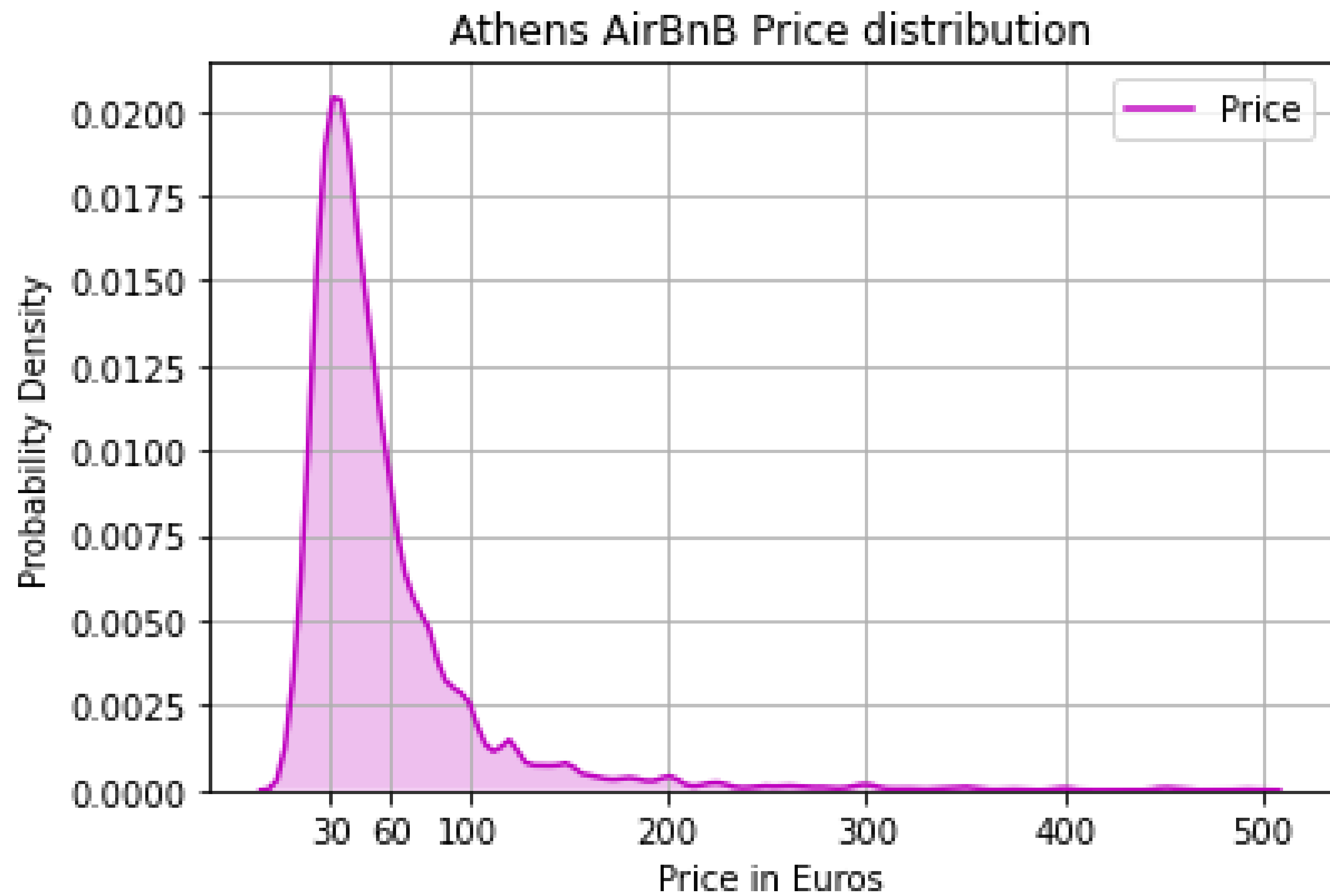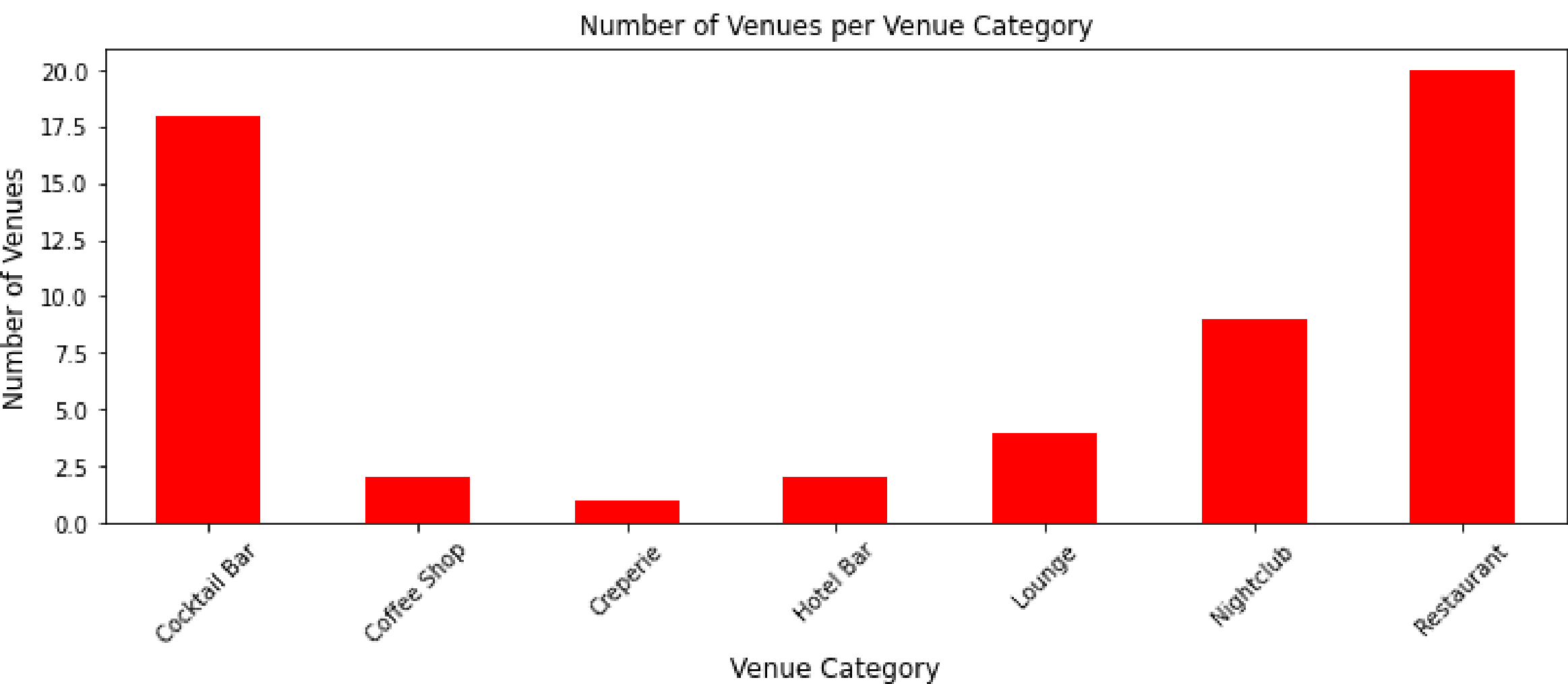Figures with the top and least five municipalities in terms of population and areas (km^2)
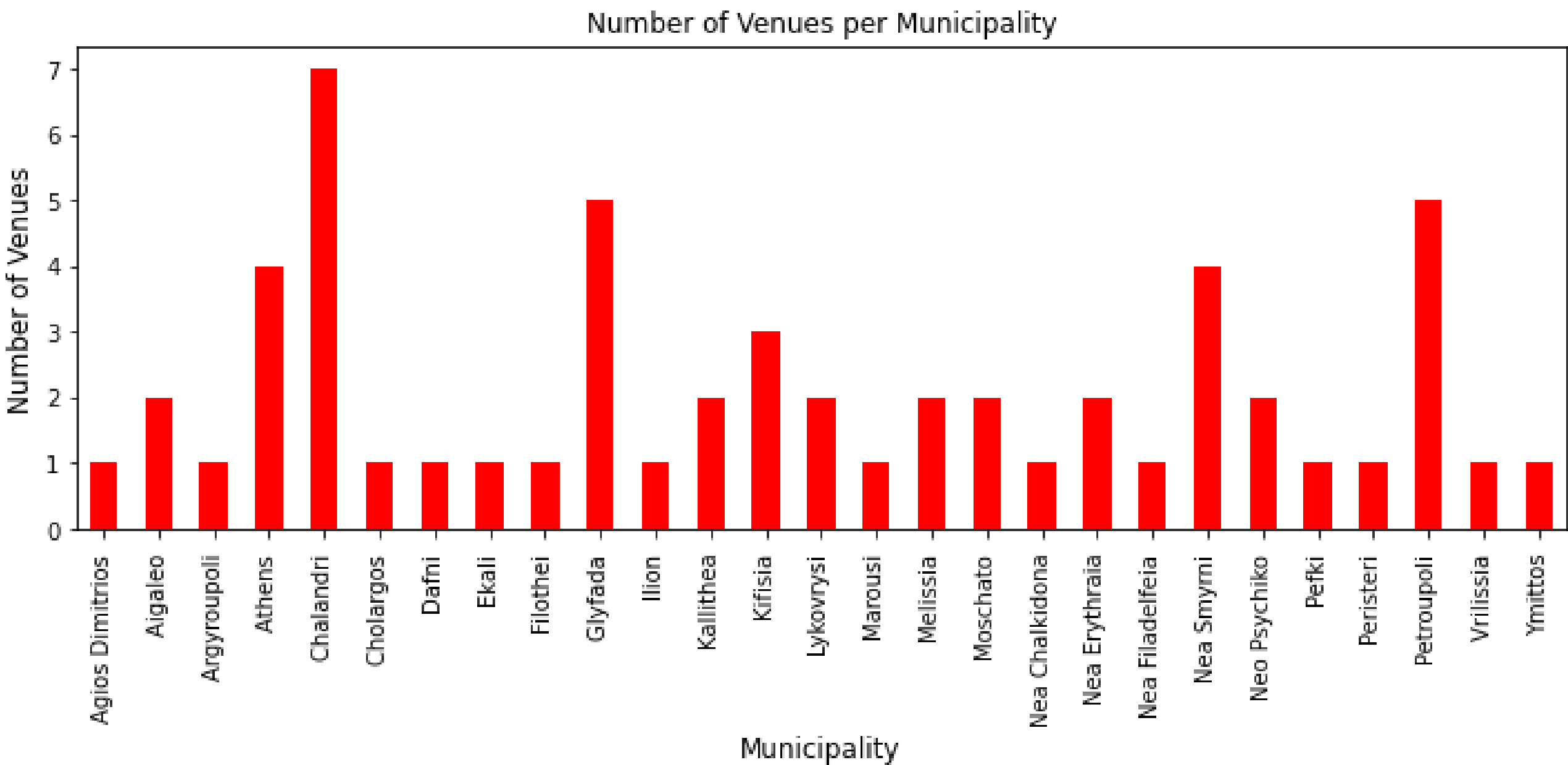
Figure with the price distribution of the Airbnb places in Athens

Venues of the city…

How many venues per municipality. . .?

Number of Venues per Municipality


Number of Venues per Venue Category

How many venues per Venue Category. . .?

Predictive Modeling

We chose to apply the algorithm of k-means clustering while we took under consideration the fact that clustering is a process where the result of the is fed back to the system, which by combining this result with the other inputs, proceeds to extract features and calculates the similarity relations, with key objective to provide the final extraction of the groups.
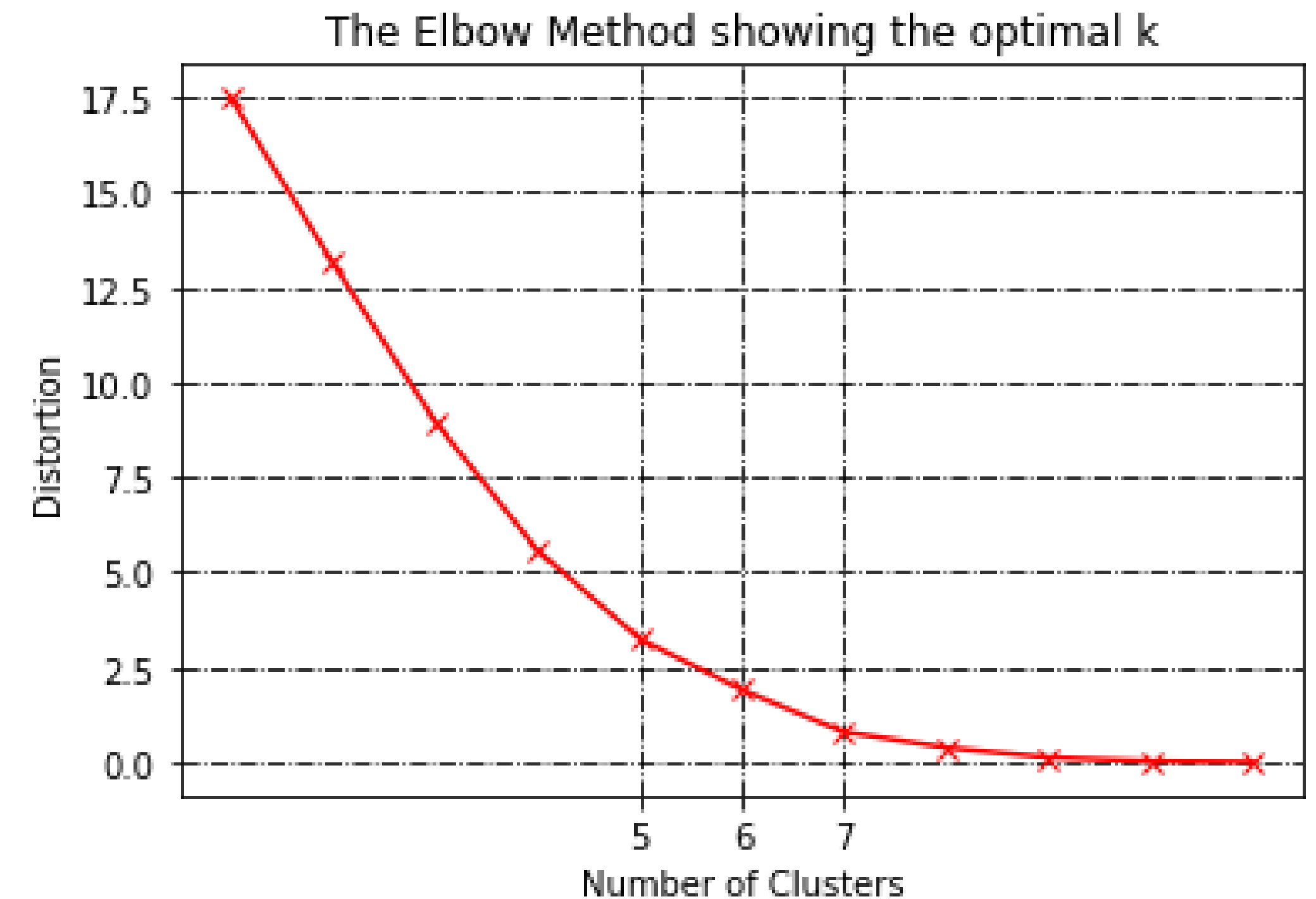
"Fine Dinning" Clusters
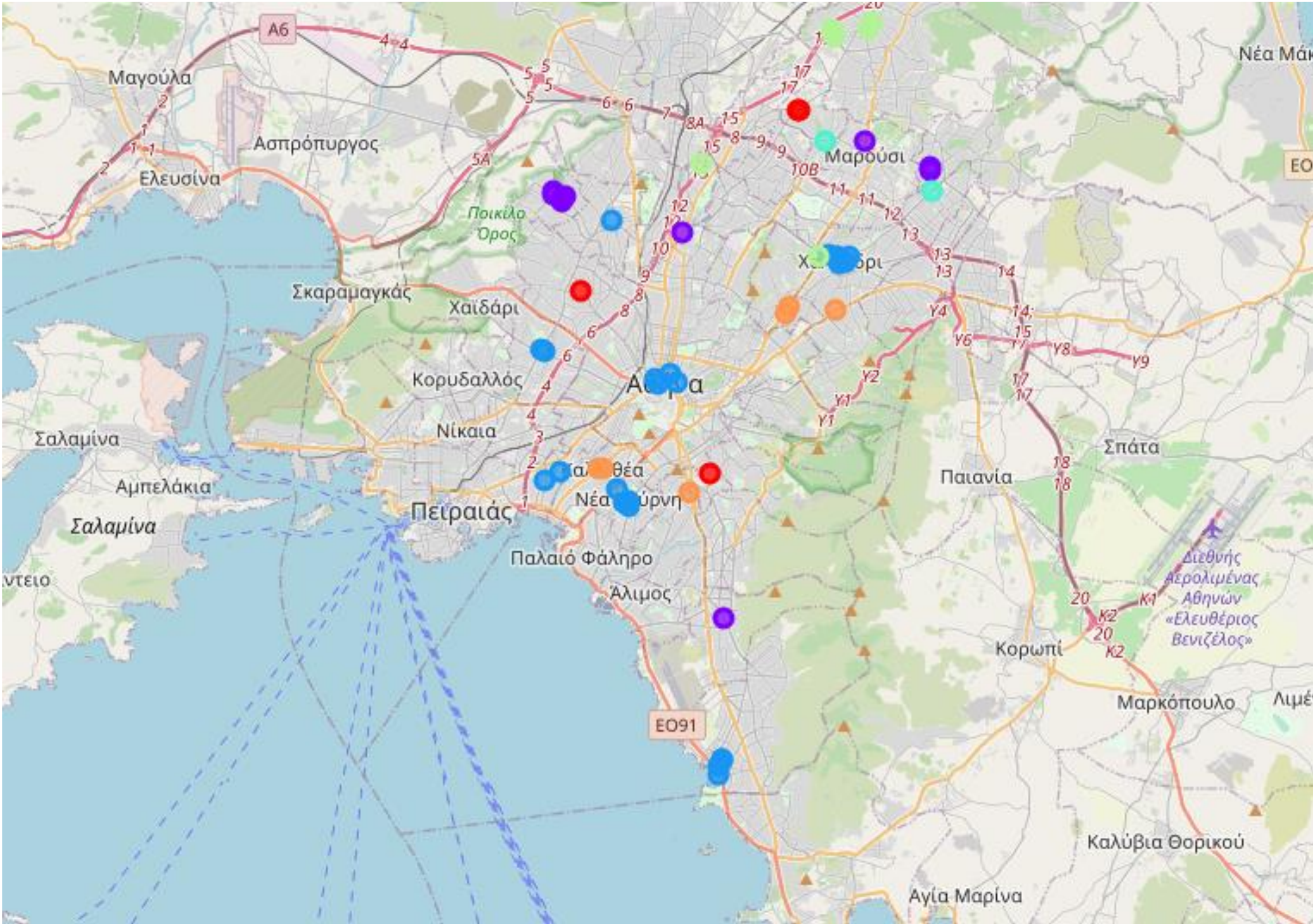
Cluster Label	Color	Venue Type
Cluster 1	Red	Lounge
Cluster 2	Magenta	Nightclub / Restaurant
Cluster 3	Blue	Cocktail Bar / Restaurant
Cluster 4	Blue -Green	Coffee Shop
Cluster 5	Green	Restaurant
Cluster 6	Orange	Cocktail Bar

"Fine Dinning" Clusters
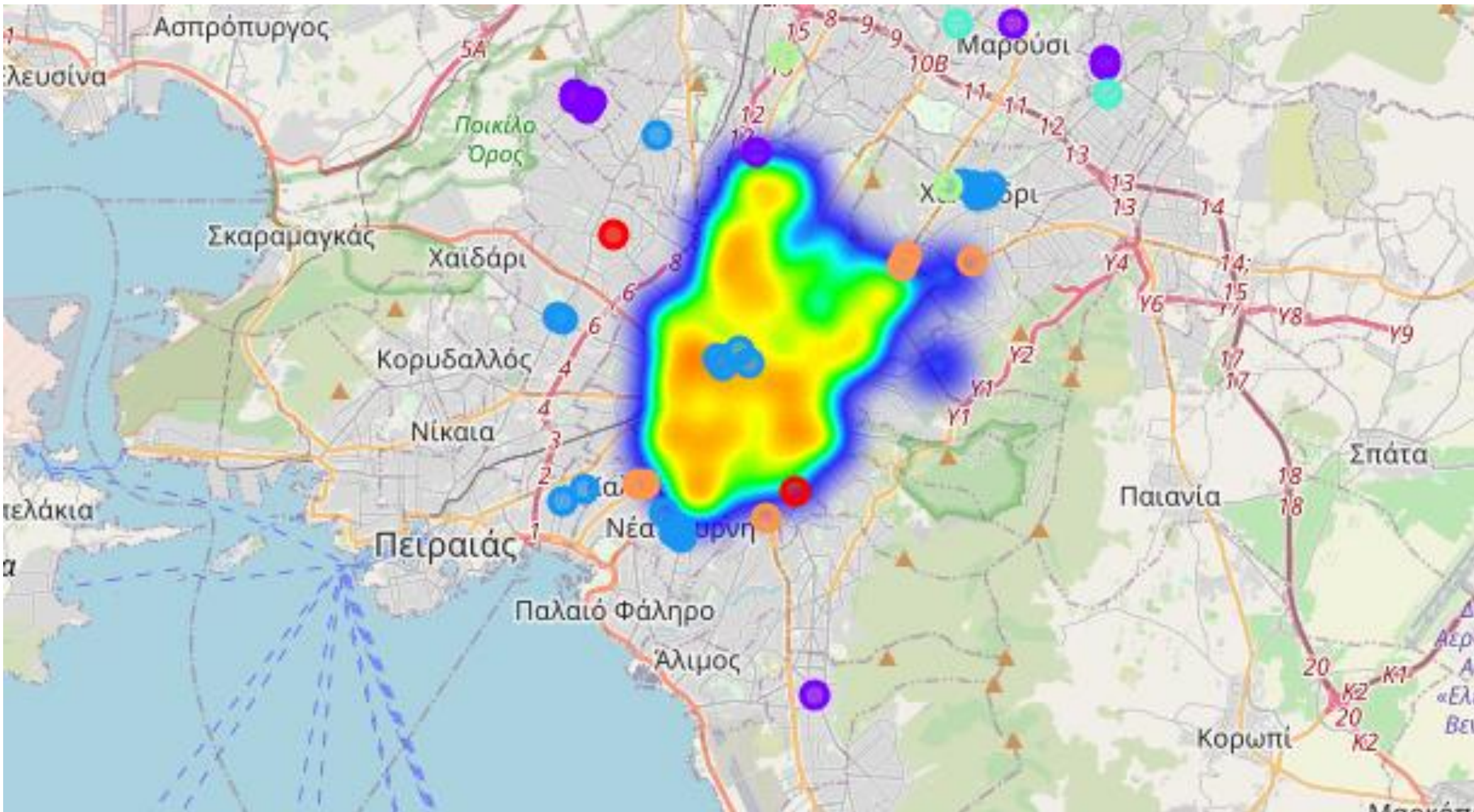
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Table with the clusters classification and heat map for the Airbnb places with price greater than 70€.

Conclusions & Future Directions

The city of Athens indicates a rather dense grid of areas with increased potential for future investments in the sector of "fine-dining". The parameter of tourism which may be one of the most critical factors in the decision of an investor towards the F&D sector indicates that the best location is the down town center of Athens. Nevertheless, the generated results of our project provide adequate information for the initial planning on an investment in the sector as also a through understanding of the "nature" of each municipality. The process of identifying the venue categories and the correlative character of the various municipalities in Athens proves to be a robust way that can serve the initial planning of an investment team in order to get the "big picture" of the F&D setting of the city. Due to limitations of the data set as also the return results limit of the FOURSQUARE API we firmly believe that without these restrictions, the process can be enhanced and elevated in terms of precision and result fidelity.