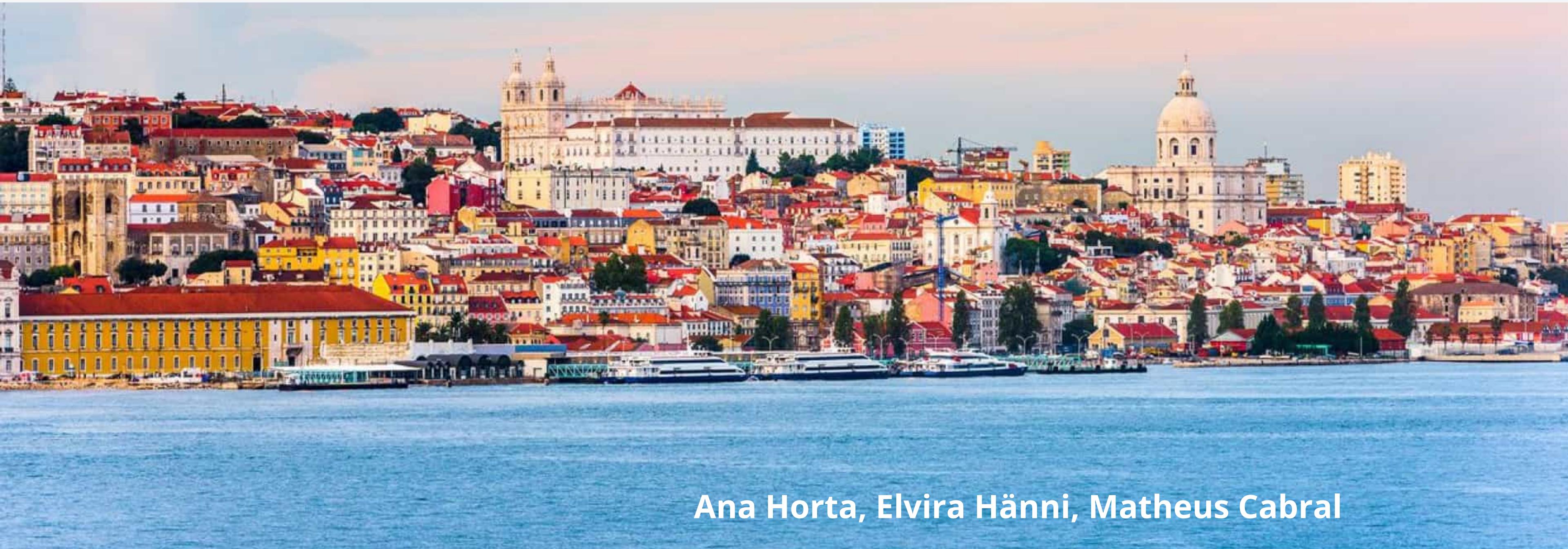


IRONHACK DATA ANALYTICS: WEEK 2 PROJECT

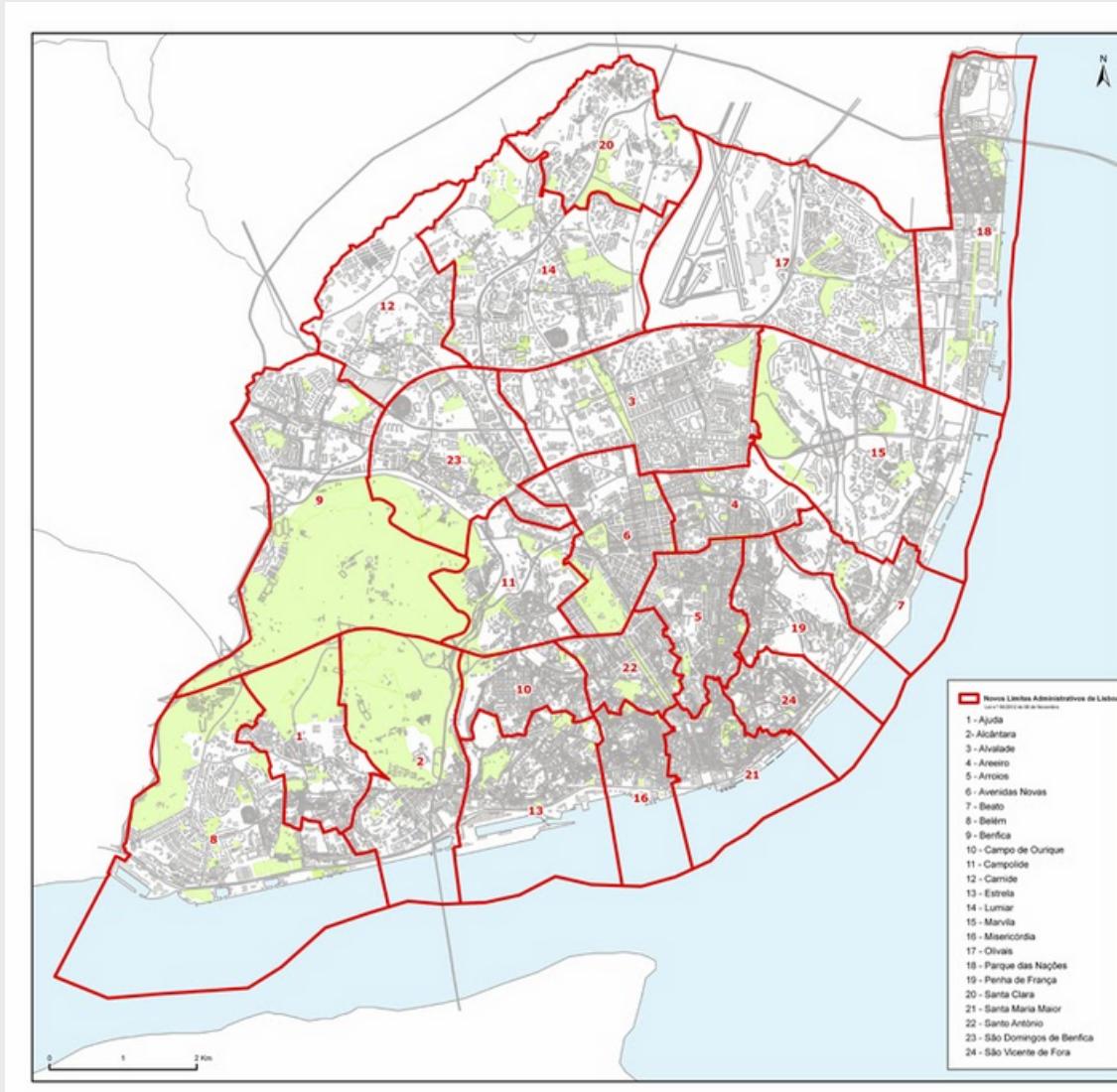
Social Infrastructure in Lisboa



Ana Horta, Elvira Hänni, Matheus Cabral

Main Question & Proposing Questions

Are social infrastructures well distributed within the Lisbon area?



Q1. Which Freguesias have the least and biggest number of social infrastructures?

Examples of Social Infrastructures:

- Public lighting
- Health centers
- Police stations

Q2. Could this be related to the cost of living in each freguesia?

Data Sets...

*... on public
lighting*

list with all public
lights in freguesias

... on population
residents in
freguesias

*... on police
stations*

list with all police
stations & their
post code

... on the area
km2 per freguesias

*... on health
centers*

list with all health
centers in
freguesias

*... on cost of
living*

average cost of living
in each freguesia



Challenges



Postcodes instead of the name of Freguesias;

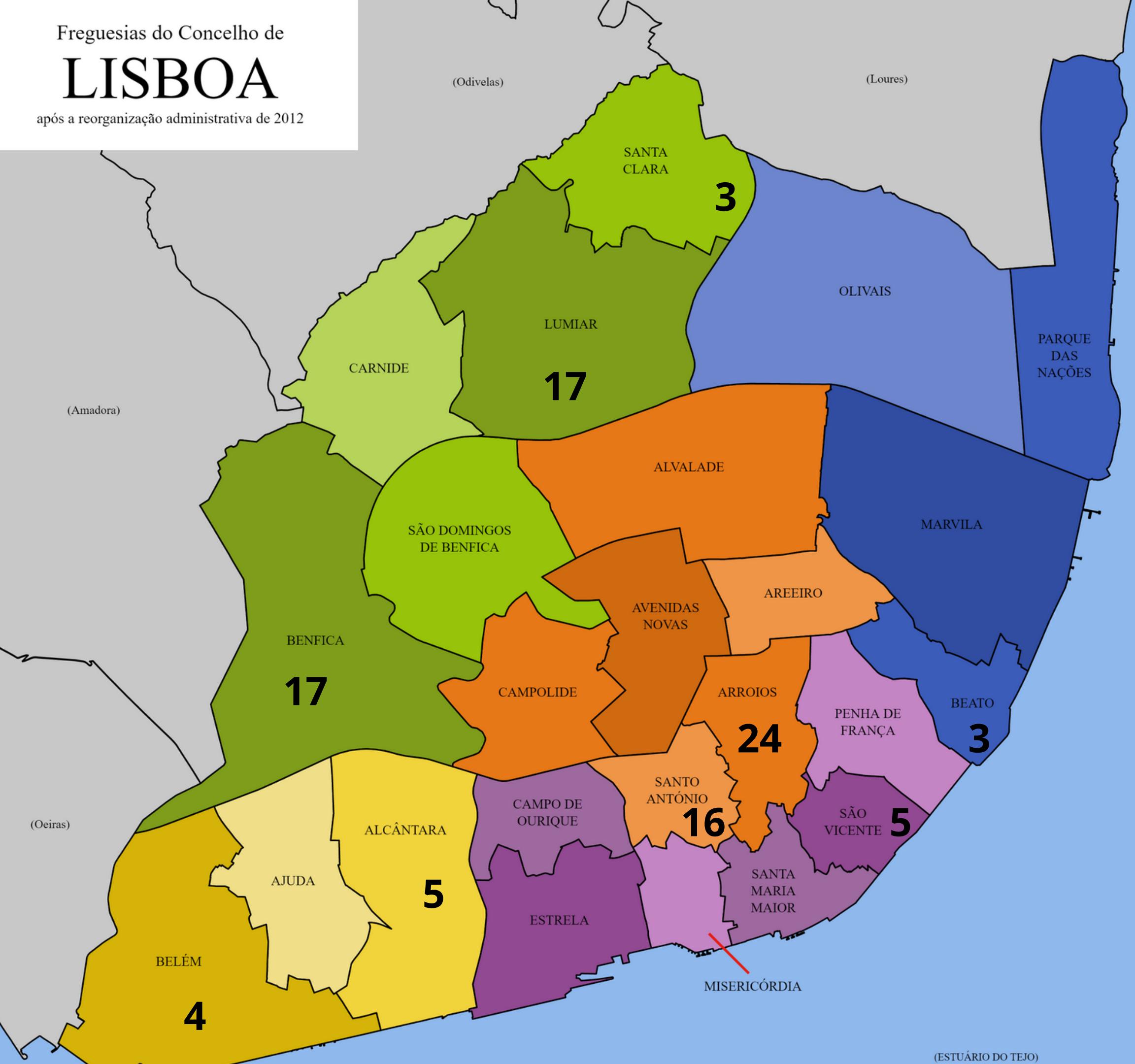
Old Freguesias system;

No indication of freguesia in other datasets;

Other missing information from data sets;

Q1. Freguesias with the least and biggest number of Social Infrastructures

	CURRENT FREGUESIAS	COST OF LIVING	TOTAL POINTS SI	POINT PUBLIC LIGHTS	POINT HEALTH CENTERS	POINT POLICE STATIONS
1	ARROIOS	372	24	9	10	5
2	BENFICA	324	17	5	2	10
3	LUMIAR	428	17	10	3	4
4	SANTO ANTÓNIO	386	16	3	3	10
5	AVENIDAS NOVAS	421	14	6	7	1
6	MARVILA	212	14	6	4	4
7	SANTA MARIA MAIOR	273	14	2	7	5
8	AREEIRO	410	13	6	3	4
9	ALVALADE	381	13	6	5	2
10	CAMPO DE OURIQUE	344	13	5	3	5
11	CARNIDE	317	12	3	1	8
12	CAMPOLIDE	325	11	3	2	6
13	OLIVAIS	330	11	5	2	4
14	SÃO DOMINGOS DE BENFICA	412	10	6	3	1
15	MISERICÓRDIA	321	10	2	6	2
16	ESTRELA	376	9	2	4	3
17	PENHA DE FRANÇA	330	7	4	2	1
18	PARQUE DAS NAÇÕES	496	6	3	1	2
19	AJUDA	271	6	2	2	2
20	ALCÂNTARA	308	5	1	2	2
21	SÃO VICENTE	285	5	2	2	1
22	BELÉM	431	4	1	1	2
23	SANTA CLARA	280	3	1	1	1
24	BEATO	255	3	1	1	1



Conclusions

- **Highest points** are located in the north and in the center. This could be due to space and also because these are the oldest freguesias (Lumiáar, Arroios).
- **Lowest points** are located by the river. This could be because these are areas limited in terms of space with focus on tourism (Belém), recreational spaces, railway and ports (Beato).

Q2. Correlation between Cost of Living & Social Infrastructure

	Cost of Living
Total Points Social Infrastructure	0.186
Points Public Lights	0.359
Points Health Centers	0.065
Points Police Stations	-0.029

Conclusion:

- "No" correlation between cost of living and police stations
- Higher correlation between cost of living and public lights.
- Overall: small correlation between social infrastructure and cost of living

Final Conclusion

- The social infrastructures are not well distributed within Lisbon.
- Social infrastructures are not correlated to the cost of living.
- This analysis does not take into account other types of social infrastructure (ex. entertainment, tourism, commerce, education, etc.) that could be factors in the cost of living);

