

Linz - exploring the livable districts of this emerging city

1. Introduction

1.1 Background

Linz is the third-largest city of Austria and capital and largest of the state of Upper Austria. It is in the north centre of Austria, approximately 30 kilometres south of the Czech border, on both sides of the River Danube. The population of the city is 204,846, and that of the Greater Linz conurbation is about 789,811.



In 2009 Linz, together with the Lithuanian capital Vilnius, was chosen as the European Capital of Culture. Since 1 December 2014 Linz is a member of the UNESCO Creative Cities (UCCN) network as a City of Media Arts. Cities receive this title for enriching the urban lifestyle through the sponsorship and successful integration of media art and involving society in these electronic art forms. Linz is well known for the Linzer torte, which is said to be the oldest cake in the world, with its first recipe dating from 1653.

Linz draws a new map of innovation. A wealth of creative forces - from newly founded start-ups to cultural institutions to global players - have turned the former city of smoking chimneys into the UNESCO City of Media Arts. These small and large initiators of progress are now to be gradually united on an interactive city map and brought before the curtain - as the heart of the web presence of a new campaign entitled "City of Innovation".

Many students and young professionals move to Linz from all around the country and Europe to be part of the unique innovative and inspiring economic situation.

1.2 Problem

This report assesses and analyzes the districts of Linz in order to identify the most livable places in town. Green areas, market places and culinary opportunities are well known markers of preferred living areas.

1.3 Interest

This report is of high interest for anybody new to the city of Linz. Not only to get a first impression of the various districts, but also when searching for best areas to rent a flat/house and or simply identify enjoyable areas.

2. Data

A comprehensive list of city districts can be found here: <https://en.wikipedia.org/wiki/Linz>. Since January 2014 the city is divided into 16 statistical districts. This table contains the district number, name, inhabitants and area. No data was missing. The table was downloaded and stored as a .csv file on github. This file was read into Pandas Dataframe.

The Foursquare database was consequently used to explore these 16 neighborhoods. Venue groups of positive/enjoyable elements were defined:

- 1) Green areas ("Park", "Mountain", "Hill", "Botanical Garden", "Zoo")
- 2) Markets ("Supermarket", "Fair", "Bakery", "Shop")
- 3) Bar/Restaurant ("Café", "Restaurant", "Bar", "Osteria")

3. Exploratory Data Analysis

Bar plots were used to visualize the inhabitants per district and the inhabitant density (inhabitants normalized to district area). Also, bar plots were used to visualize the quality elements of each district.

4. Results

The comprehensive list of districts in Linz is found in Table 1.

DistrictNr		Name	Population	Area
0	1	Innere-Stadt	25386	279
1	2	Urfahr	24017	427
2	3	Pöstlingberg	4619	858
3	4	St-Magdalena	11990	655
4	5	Dornach-Auhof	7298	683
5	6	Kaplanhof	9914	243
6	7	Franckviertel	6856	121
7	8	Bulgaripplatz	16721	260
8	9	Froschberg	11733	453
9	10	Bindermichl-Keferfeld	20303	412
10	11	Spallerhof	12725	297
11	12	Neue Heimat	13823	413
12	13	Kleinmünchen-Auwiesen	22386	645
13	14	Industriegebiet-Hafen	137	1277
14	15	Ebelsberg	10804	1291
15	16	Pichling	8183	1290

Table 1: District list of Linz including name, inhabitants and area.

Bar plots of the population per district and the population density is shown in Figure 1.

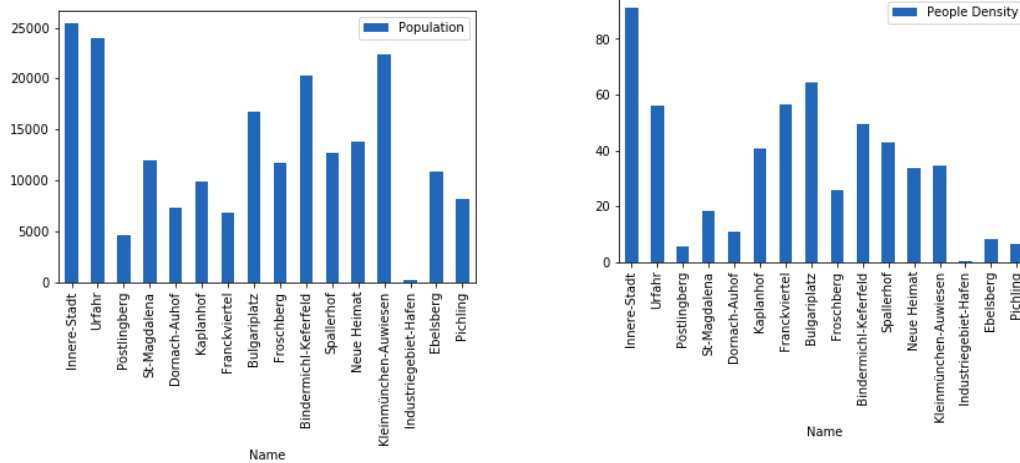
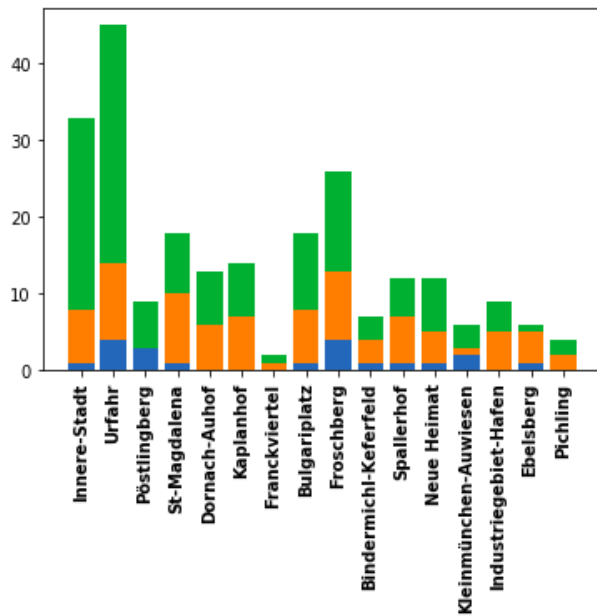


Figure 1: Bar plots of population and population density for all Linz districts.

A map showing all the districts can be found in Figure 2. Foursquare API calls were used to gather the important venues for each district. There are 117 unique categories for all 16 districts. Venue categories were grouped into three classes as defined in the Data Section and are summarized in Figure 3.



Figure 2: Folium map of Linz with blue dots representing the individual district centers.



[19]:

	Name	Green	Market	Bar
0	Innere-Stadt	1	7	25
1	Urfahr	4	10	31
2	Pöstlingberg	3	0	6
3	St-Magdalena	1	9	8
4	Dornach-Auhof	0	6	7
5	Kaplanhof	0	7	7
6	Franckviertel	0	1	1
7	Bulgariplatz	1	7	10
8	Froschberg	4	9	13
9	Bindermichl-Keferfeld	1	3	3
10	Spallerhof	1	6	5
11	Neue Heimat	1	4	7
12	Kleinmünchen-Auwiesen	2	1	3
13	Industriegebiet-Hafen	0	5	4
14	Ebelsberg	1	4	1
15	Pichling	0	2	2

Figure 3: Table and bar plot showing the amount of green areas, market places and bars/restaurants for the individual districts.

5. Discussion

Industrie-Hafen is by far the biggest district, but as the name suggests it is very unappealing to live there due to industry facilities and little green areas.

The most appealing districts for young professionals are Innere-Stadt (the old town), Urfahr and Froschberg. Overall, Urfahr had the highest amount of appealing elements is therefore. Although having the same number of green areas than Froschberg, Urfahr has significantly more Bars and Restaurants, which is a big plus for modern people.

6. Conclusion

To conclude, this report motivates young professionals to search for flats and accommodations in Urfahr and Innere-Stadt. These two districts offer the highest quality of life.