Airbnb Berlin 2024

Project Conclusions

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1. Objective

The objective of this analysis is to evaluate the price, location, and seasonality trends of Airbnb listings in Berlin, with a focus on understanding their impact on the city's rental market. By examining the pricing dynamics, geographical distribution, and seasonal fluctuations of Airbnb accommodations, we aim to gain insights into the broader rental landscape in Berlin. This comprehensive assessment will provide valuable information on how the Airbnb market influences the availability and affordability of long-term rentals in the city. By scrutinizing these factors, we can uncover patterns that may contribute to fluctuations in the housing market, helping policymakers, real estate professionals, and residents make informed decisions regarding the regulation and management of short-term rentals in Berlin.

2. Business case

- **Who is it for?** General public and press
- **Why is it being built?** To communicate important information demonstrating how the AirbnB listings influence the rental market and their characteristics.
- **What will it consist of?** Tableau Dashboards
- **When will it be used?** Independent interest, academic study, or official government research project.
- **Where will it be hosted?** Tableau Public.

3. Source

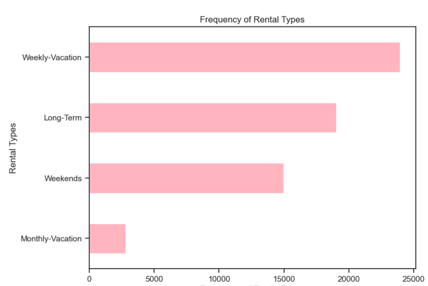
The Airbnb report for Berlin in 2024 provides valuable insights into the city's short-term rental market, utilizing data compiled by Inside Airbnb from the official Airbnb website. This comprehensive report is a result of thorough analysis and exploration of the available data, shedding light on various aspects of the Airbnb landscape in Berlin. The information presented covers details such as property listings, availability, host characteristics, and other relevant metrics. The dataset, sourced from http://insideairbnb.com/explore, serves as a reliable and up-to-date resource for understanding the dynamics of the short-term rental market in Berlin as of January 15, 2024.

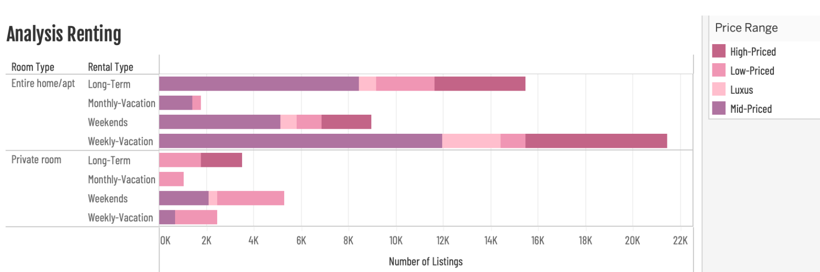
4. Key Questions: Answers

a) **Pricing, Accommodation Types, and Neighborhood Dynamics:**

- ***Are certain types of listings especially popular?***

  The most popular listings are the listings for weekly vacations.



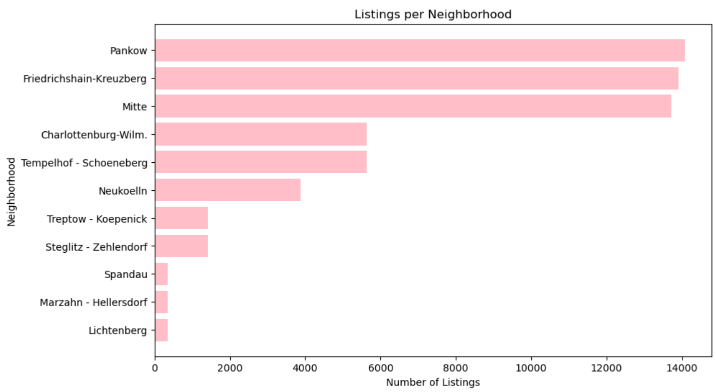


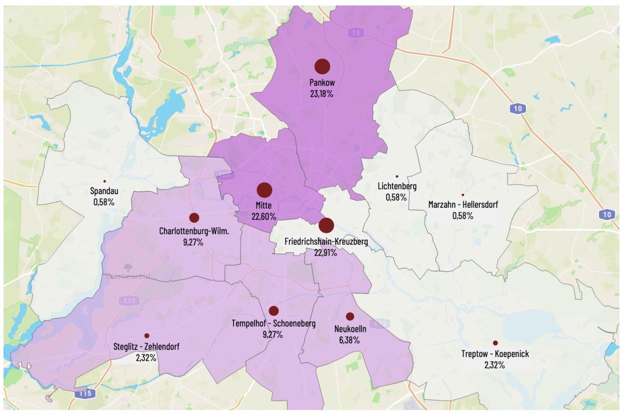
- ***<u>How is the listing distribution per neighborhood</u>***

  We see 4 main areas:

- Friedrichshain-Kreuzberg, Mitte, Pankow: High density (Urban Hub)
- Charlottenburg-Wilm., Tempelhof - Schoeneberg: Medium Density (Cityscape Quarters)
- Neukoeln: Low-Density (non tourist areas)
- Marzahn - Hellersdorf, Lichtenberg, Spandau, Steglitz - Zehlendorf, Treptow - Koepenick: Suburban Enclaves

The areas with high density have also a high tourist interest and include the business areas of the city. The cityscape quarters are tranquil zones which have low tourist interest but are still inside the ring (main line of metro transport). Neukoeln is a special case: There is no tourist interest, but it is well-known for the multi-cultural and nightlife interest. The demography density of this area is extremely high but it is also well connected to the rest of the city. Outside the ring, we have the rest of the areas, which are the suburban enclaves. However, those areas are also well-known during the spring-summer peaks due to the lakes and green areas. Therefore, exploring the prices, availability and room-types will be interesting.



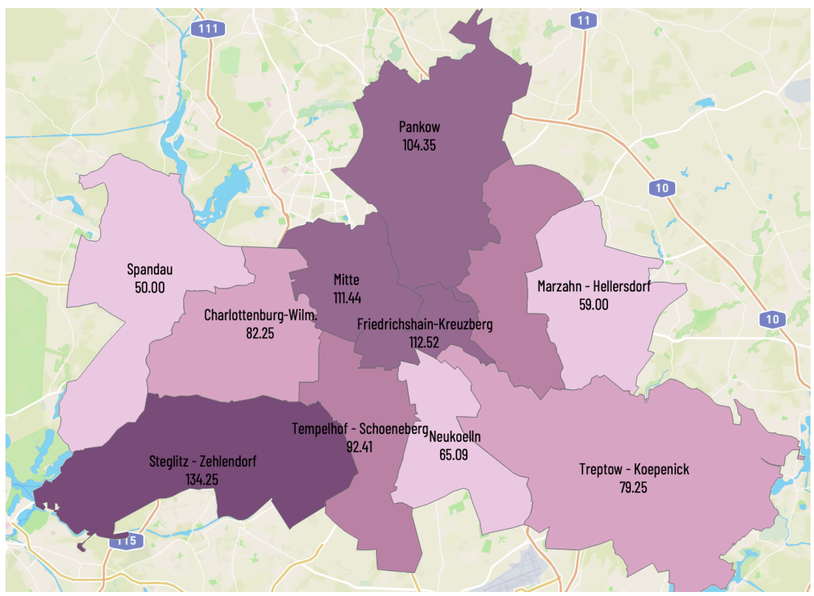


- ***How is the price distribution per neighborhood?***

  The area with higher average price is Steglitz - Zehlendorf, a suburban area far away from any tourist enclave and also with a low density of listings (only 1408, contrary to the more than 10.000 listings placed on the tourist areas). It is really interesting at this point and also answers one of our hypotheses: 1. If a neighborhood has more tourist interest, the listing and the price will be high. Now, we can assure that this hypothesis is false: the listing density is effectively higher in the tourist and business areas, however, the prices are not. Anyways, it will be interesting to check the average price per room-type and number of accommodates.

  Mitte and Friedrichshain-Kreuzberg have a high average price, which would be due to the tourist interest, nightlife and well bus and metro connections. However, we see that Pankow, an area with high density of listings, has a medium-low average price level (same as Lichtenberg and Tempelhof - Schoeneberg, which had low density). The reasons are the following: Pankow is outside the ring, but also it is the area where the main new buildings (also hotels and apartments) were built in the last years. It is also well-known as second or vacation homes, which are increasing the housing speculation, as we will see later. The final insight we have here is the fact Charlottenburg-Wilm. and Neukoeln have a low average price although they are districts inside the ring. Moreover, Charlottenburg-Wilm is one of the most expensive areas to live in Berlin. We will need to explore deeper why Neukoel has a lower average price than Treptow - Koepenick. Probably, it will be related to the type of listings and the number of accommodates.

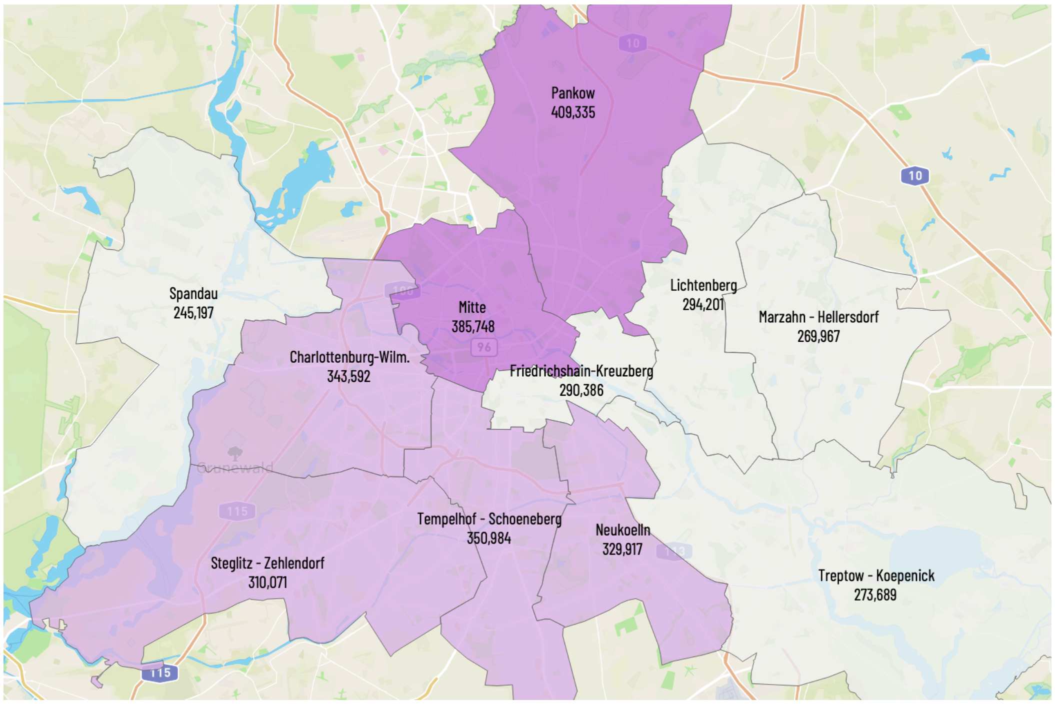
	neighbourhood_group	price
8	Steglitz - Zehlendorf	134.250000
1	Friedrichshain-Kreuzberg	112.518107
4	Mitte	111.438236
6	Pankow	104.351520
2	Lichtenberg	100.000000
9	Tempelhof - Schoeneberg	92.410824
0	Charlottenburg-Wilm.	82.250000
10	Treptow - Koepenick	79.250000
5	Neukoelln	65.090909
3	Marzahn - Hellersdorf	59.000000
7	Spandau	50.000000



b) **Impact of Short-Term Rentals on Housing**:

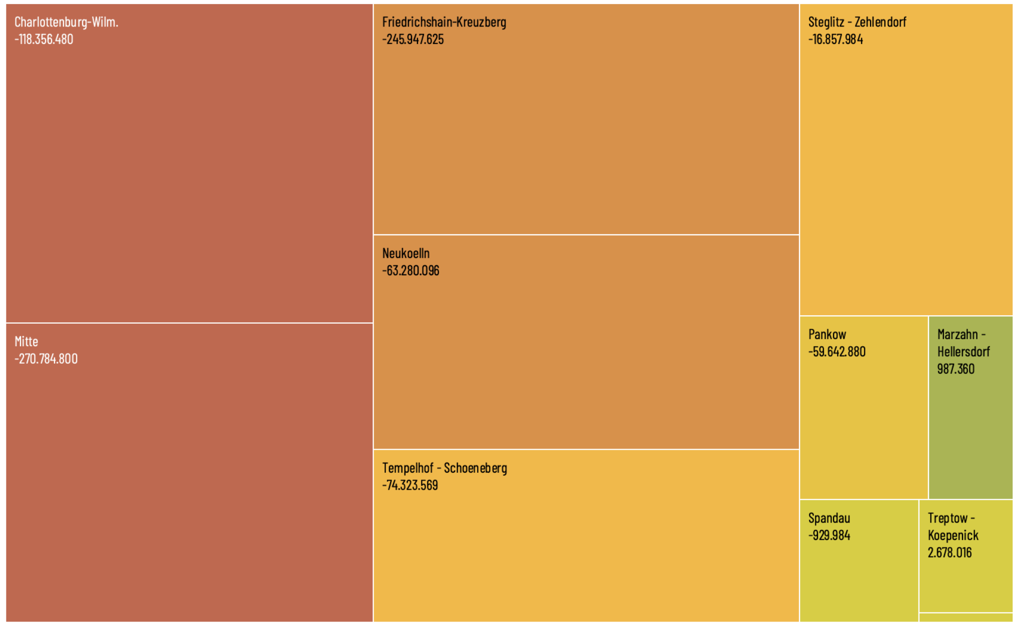
- ***How do short-term rentals impact the local housing landscape in Berlin?***

The neighborhoods with high density are also the ones with a high number of rental units (except Kreuzberg, which has a low density of population but a high number of renting units and high prices). Charlottenburg-Wilmersdorf and Neukoeln, are less touristic-central area, and middle density of population. However, they are areas with highest demand of renting in the market. In this case, the short-term renting is not the problem (as it can be in Mitte).



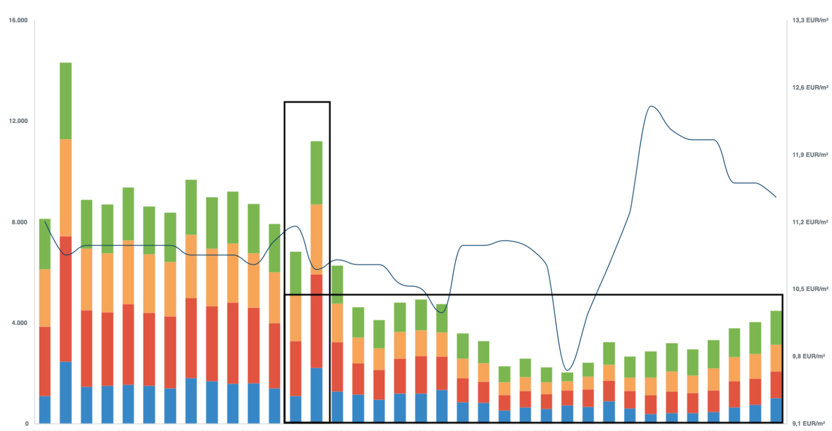
- ***Are there noticeable changes in housing availability?***

The Treemap displays the aggregated situation in the districts. Clicking on the districts takes you to the neighborhood level, and the back button returns you to the overall view. The red-green scale quantitatively shows the need, and the size of the boxes corresponds to the size of the local housing markets. According to this method, there is a total housing deficit of approximately 112,000 units with a decreasing pressure from west to east. Some districts in East Berlin theoretically even have low fluctuation reserves. In the districts of Pankow, Köpenick, and Marzahn-Hellersdorf, the housing market is almost balanced, except for some neighborhoods.



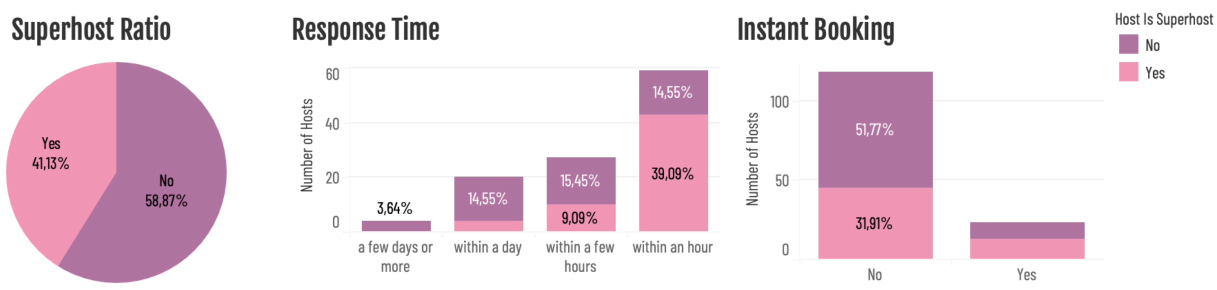
- ***How rent-prices have changed in Berlin in the last 10 years?***

During the 17-year rule of left-wing coalition governments in Berlin, the focus shifted towards safeguarding residents rather than expanding housing options. This shift led to a shortage of rental properties, starting with social environment protection measures and ending with the rent cap. Although short-lived, the rent cap significantly decreased available rental units, eroding landlords' trust in legal stability. Consequently, many apartments were withdrawn from the market post the rent cap's introduction in late 2019, either through sales or temporary furnished rentals.

- 

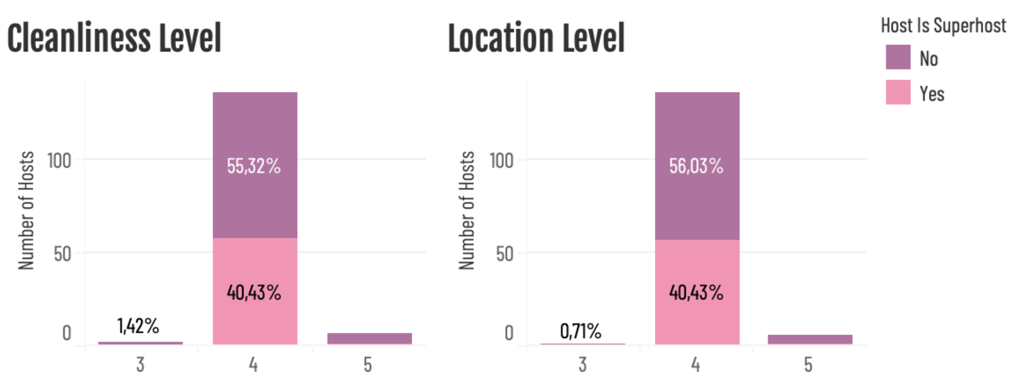
c) **Host Characteristics and Listing Quality:**

- ***What role do host characteristics play in the quality of listings and guest satisfaction?***



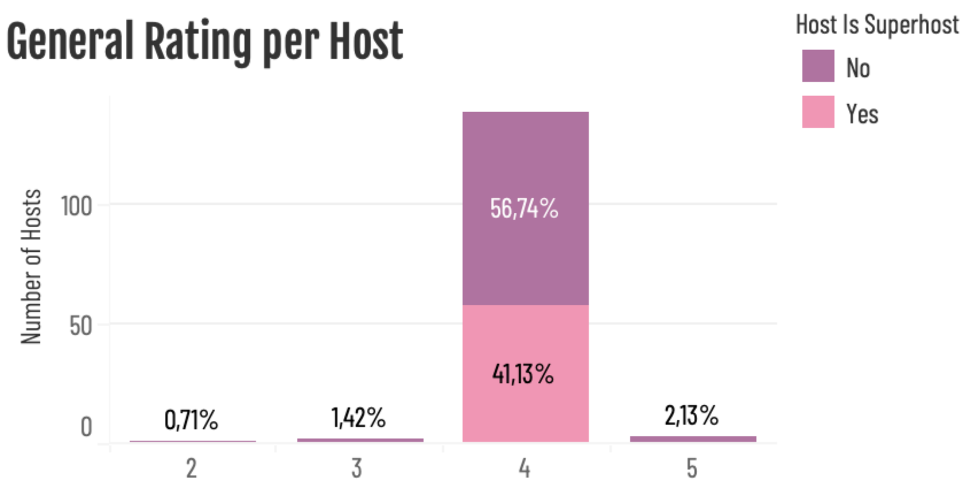
- ***Is there a correlation between host superhost status or high response rates and positive guest reviews?***

  We see that the Superhost is not related to features such as Instant Booking or quick response time. Also 40% of the listings are marked as Superhost, which is not realistic. Also, it is not realistic that 90% of the reviews are > than 4. They don't provide specific information for the users. So, they need to review the real content of the reviews.



- ***How do reviews and ratings contribute to the perceived quality of listings?***

  There is no relation between ratings and quality.



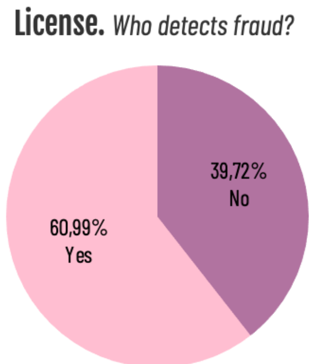
- ***<u>How is the regulation situation for hosts in Berlin?</u>***

The policy regarding Airbnb listings in Berlin includes several regulations aimed at managing short-term rentals and addressing housing availability concerns:

1. Regulation of Short-Term Rentals: Berlin introduced stringent regulations to restrict the short-term rental of entire properties through platforms like Airbnb. Under these regulations, hosts are required to obtain a permit before listing their properties for short-term rental. This regulation was implemented to address concerns about housing affordability and availability, particularly in popular tourist areas.

2. Limitation on Rental Periods: Hosts in Berlin are typically limited in the number of days they can rent out their entire property for short-term stays. The exact limitations may vary depending on the specific regulations in place, but typically hosts are allowed to rent out their primary residence for a limited number of days per year for short-term stays. This limitation aims to prevent properties from being exclusively used for short-term rentals, thereby preserving long-term housing stock.

3. Enforcement Measures: The city of Berlin has implemented measures to enforce these regulations, including fines for hosts who operate without the required permits or exceed the allowable rental days. Additionally, platforms like Airbnb are often required to cooperate with local authorities by sharing data on listings to ensure compliance with regulations.



5. Hypothesis

Hypothesis
1. If a neighborhood has more tourist interest, the listing density and the price will be high: We can assure that this hypothesis is false: the listing density is effectively higher in the tourist and business areas, however, the prices are not. Anyways, it will be interesting to check the average price per room-type and number of accommodates.
2. If there are more short-term listings per region, there will be more housing deficit: We see in the tree map that it is not always like this, for example in Charlottenburg.
3. If the number of minimum nights is higher, the price will be lower: After analyzing the data and removing outliers, we found that: - Low-priced accommodations are typically offered for groups of 4 or fewer people, with variable minimum nights ranging from 1 to 30. Contrary to our initial hypothesis, higher minimum nights do not necessarily correlate with higher prices. - Mid-priced options are commonly available for 2 or 4 people, with minimum nights typically less than 5. - High-priced accommodations are often suitable for 4 people but with some variability. However, they are usually available for fewer than 5 nights, similar to mid-priced options. - Luxury units cater to families or large groups and are typically available for weekend stays.
4. If a listing has a high number of reviews, the availability will be lower because its popularity: Steglitz - Zehlendorf, Lichtenberg and Treptow - Koepenick are the neighborhoods with more availability, however the number of reviews are low. We can confirm our hypothesis.
5. If a listing has a high number of accommodates, the price will be higher than for couple or solo guests: For long term and short term, ilt is interesting to see how the average of accommodates are for Couples (2ppl) or Families

(between 3 and 5 ppl). Spandau seems to be the area with less average accommodations per listing. However, Lichtenberg, Marzahn - Hellersdorf and Mitte seems to be high (4). It is interesting how Mitte has such a high number of accommodations according to the average size of the apartments (contrary to the other areas). If we analyze only short term listings, we see that on average, the price increased for all the areas except for Steglitz - Zehlendorf. The conclusion is, the long-term listing were having lower prices per night than the short-term ones. Therefore, after dropping the long-term listings, the average price increased. The 50% of the listing in Steglitz - Zehlendorf were long-term listing with high prices (they all are Entire home/apt for >= 2 accommodates). That is the reason why the average price in the full-data analysis was so high. We can continue denying our hypothesis: "If a neighborhood has more tourist interest, the listing and the price will be high".

6. If the neighborhood is outside the ring, the availability will be higher: We can confirm partially our hypothesis: "If the neighborhood is outside the ring, the availability will be higher". Steglitz - Zehlendorf, Lichtenberg, Treptow - Koepenick are the areas with more days availables for rent, contrary to Mitte, Pankow and Friedrichshain-Kreuzberg. However, again, Neukoeln and Charlottenburg-Wilm., which are inside the ring, have also a high availability. Another strange case is Spandau, a suburban area which seems to have the lowest availability of all. Knowing that, we are not able to confirm our hypothesis.