

Individual EDA project

Analysing house sales data in King County (USA)

Data Science Bootcamp

Tamara Pallien, 07.07.2022



What kind of houses are interesting for Mr. Phillips?

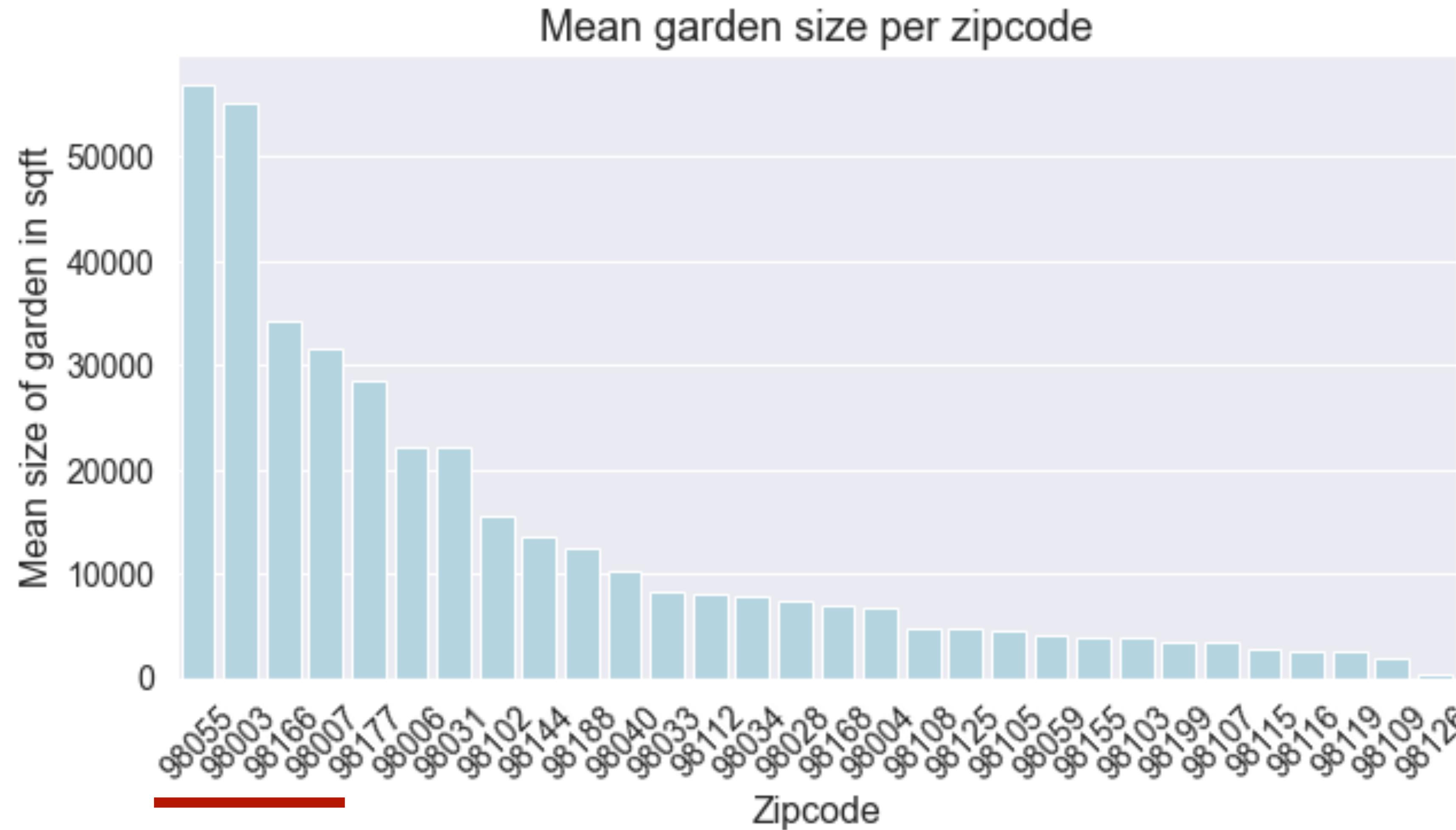
- No waterfront
- Historic (older than 50 years)
- At least four bathrooms
- Big garden that fits in a tennis court (average size = 2100 sqft) and a swimming pool (medium sized pool = 600 sqft)
- Golf resort nearby

Initially started with 21597 house sales and ended with ca. **24 houses** that would fit all the criteria

The main working hypotheses

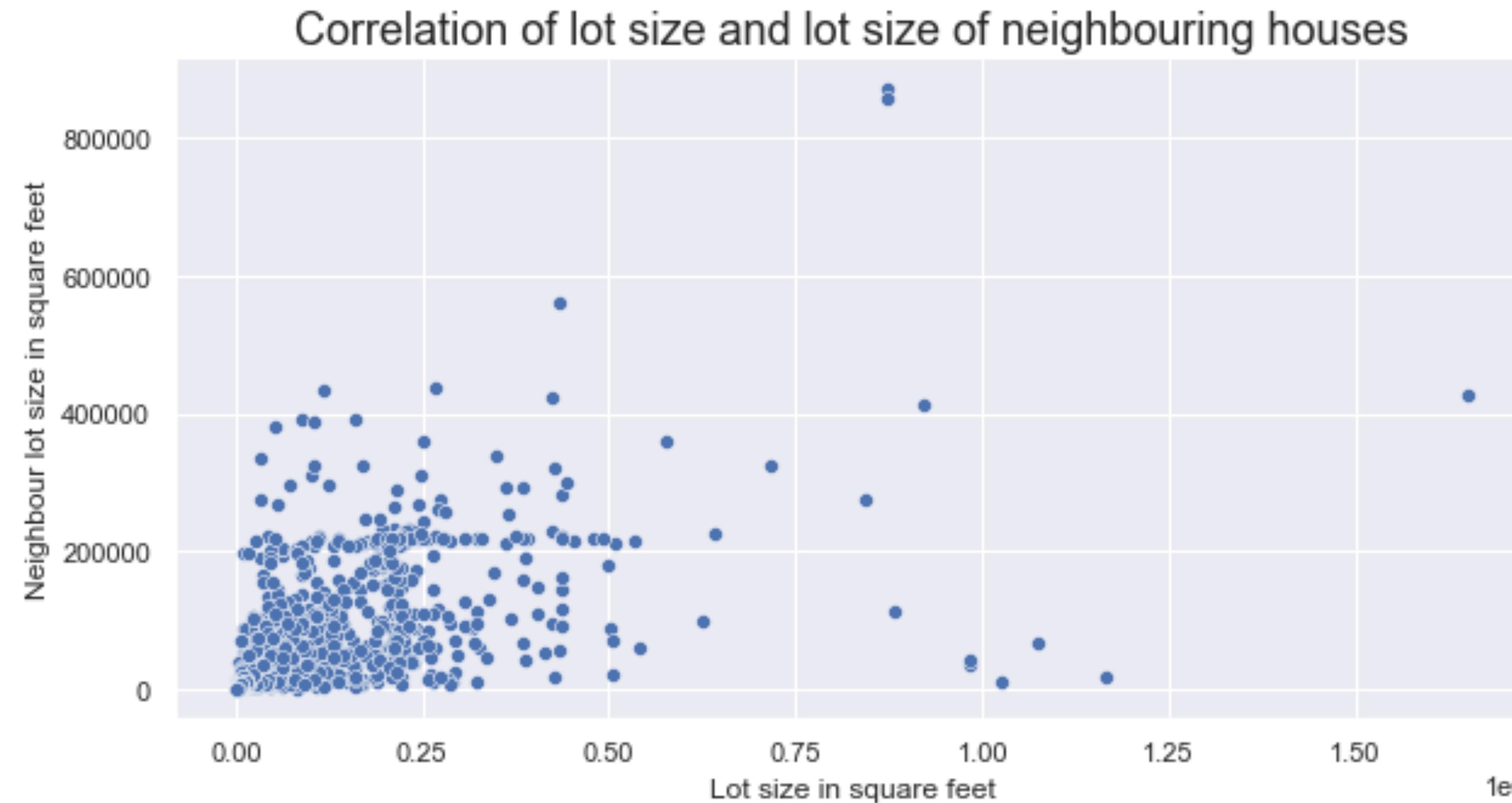
1. The houses with a big garden cluster all in one specific area
2. There is a correlation of the number of bathrooms (which correlates with the size of the house) and the age
3. Houses located close to a Golf resort cluster in the South and North from the city center
4. The size of the garden of each house is similar to the garden size of the neighbouring houses

Average size of gardens per zipcode



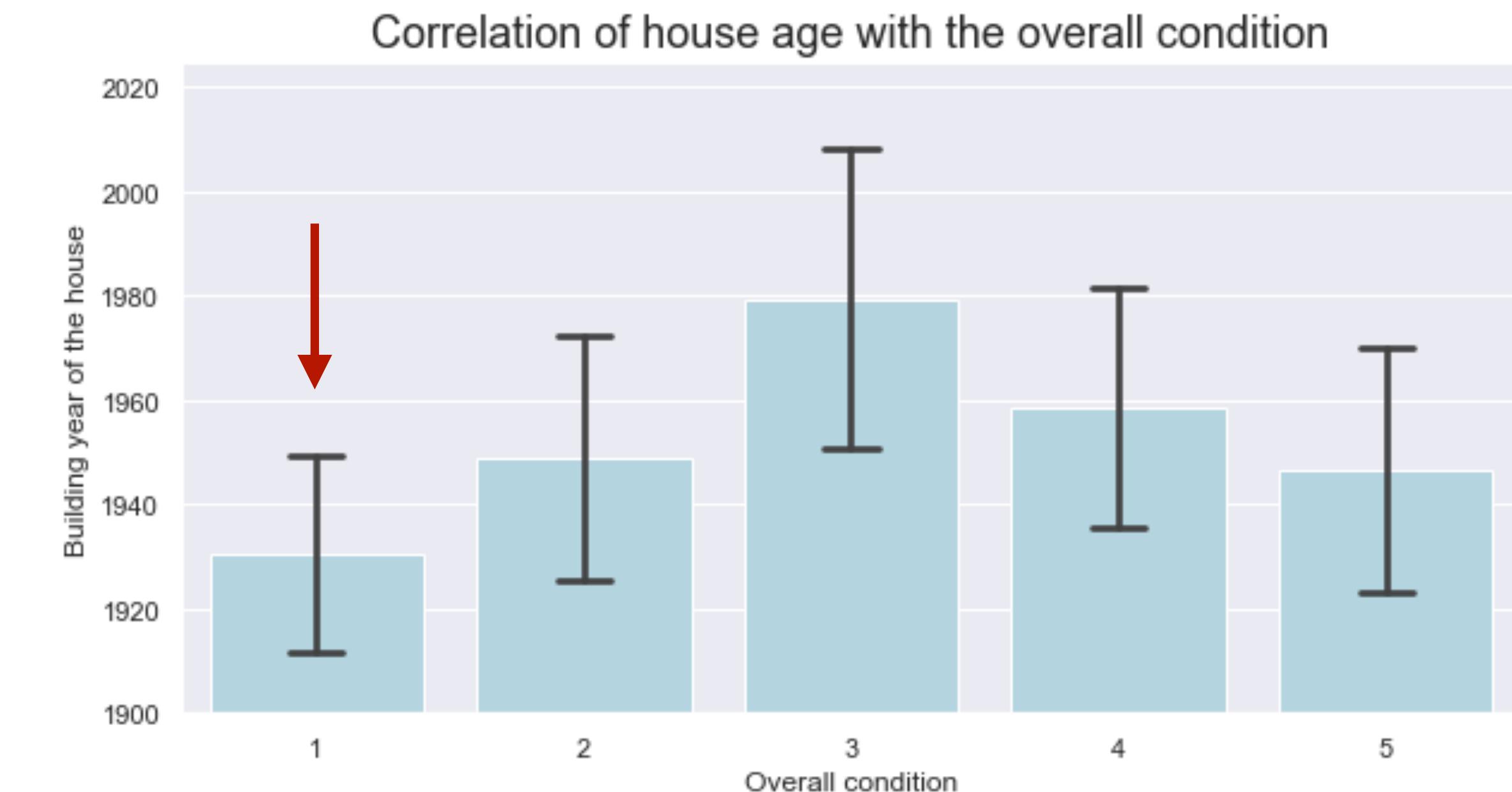
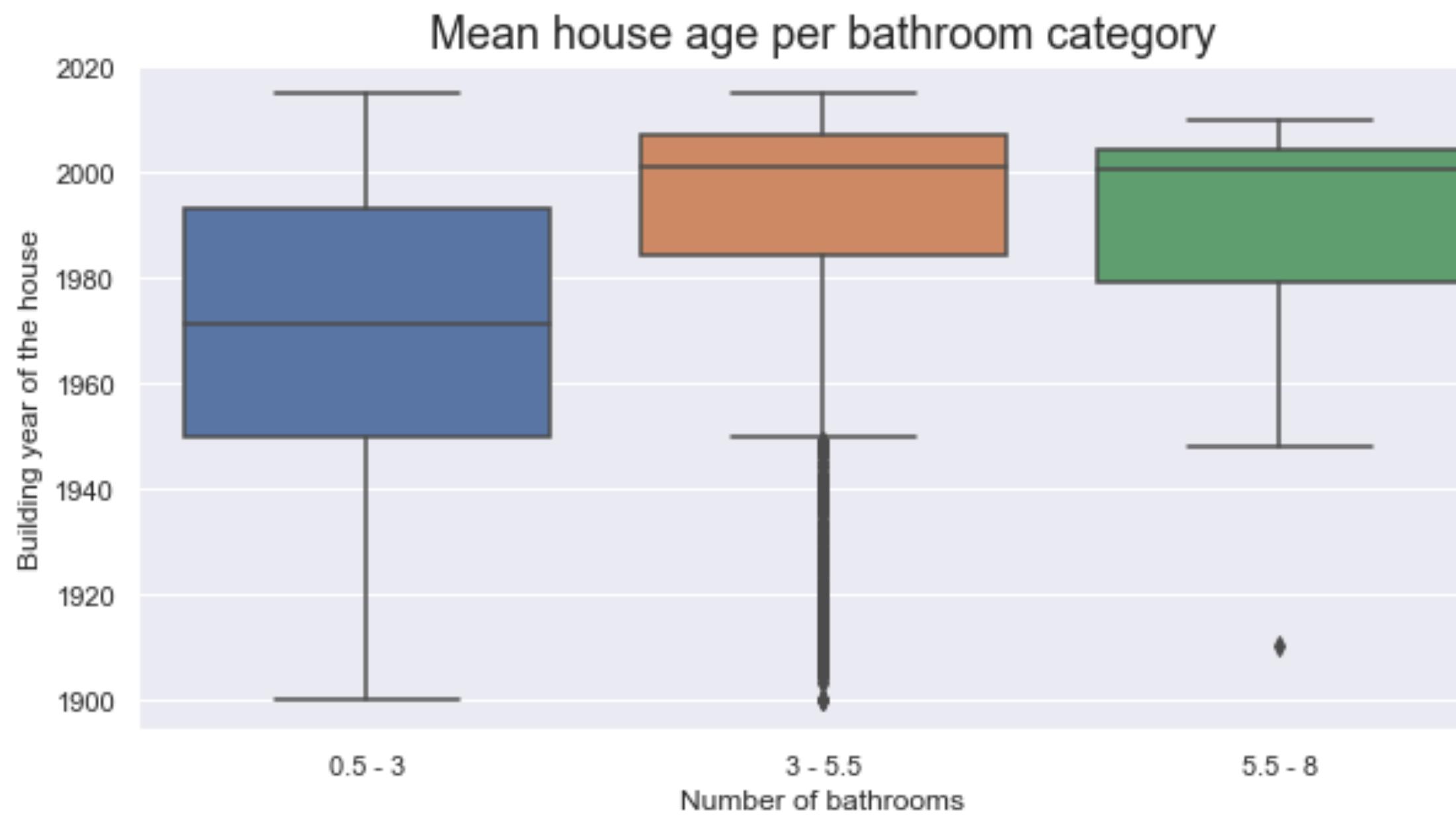
Recommendation 1: If the garden size is very important it might make sense to focus on one of the first five zipcode areas.

Garden sizes tend to be similar to their neighbours



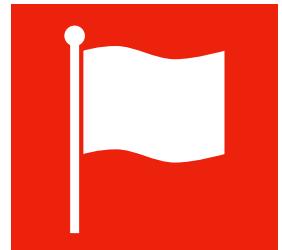
Conclusion: There is a tendency that lots are surrounded by similar sized lots.

Why older houses might have disadvantages

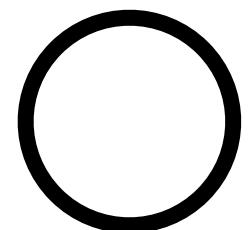


Recommendation 2: The old houses have rarely more than 5 bathrooms and some of them are also in very bad condition (category 1). These things should be kept in mind when looking for the perfect home.

Houses with big gardens are located outside of the city center



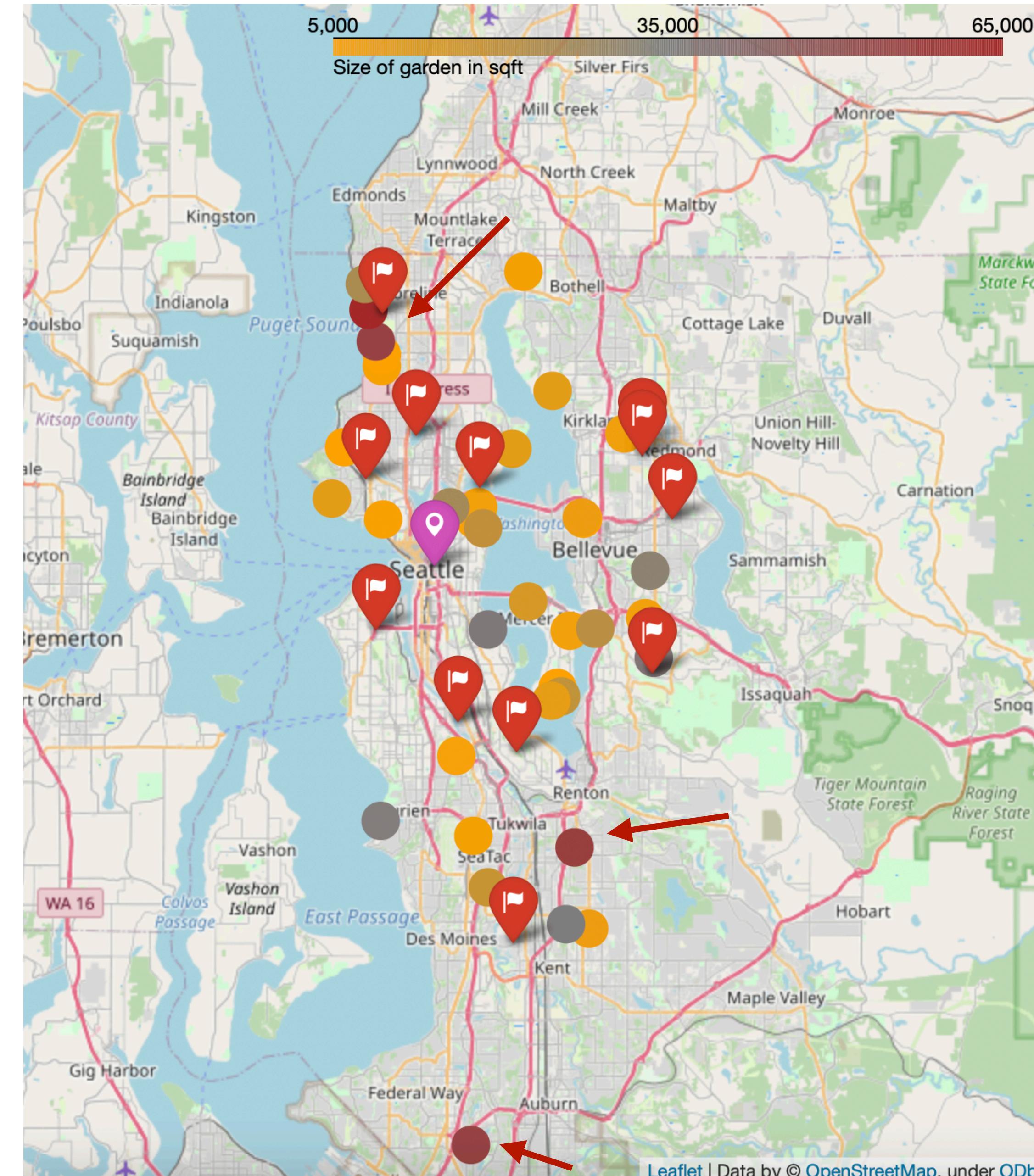
Golf Resort



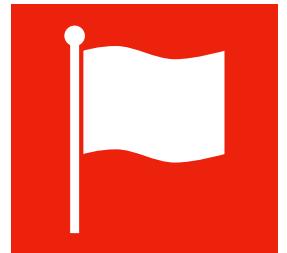
House



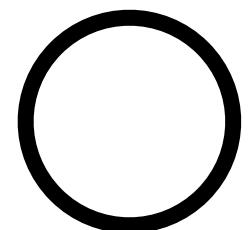
City Center



The most expensive houses cluster around the city center



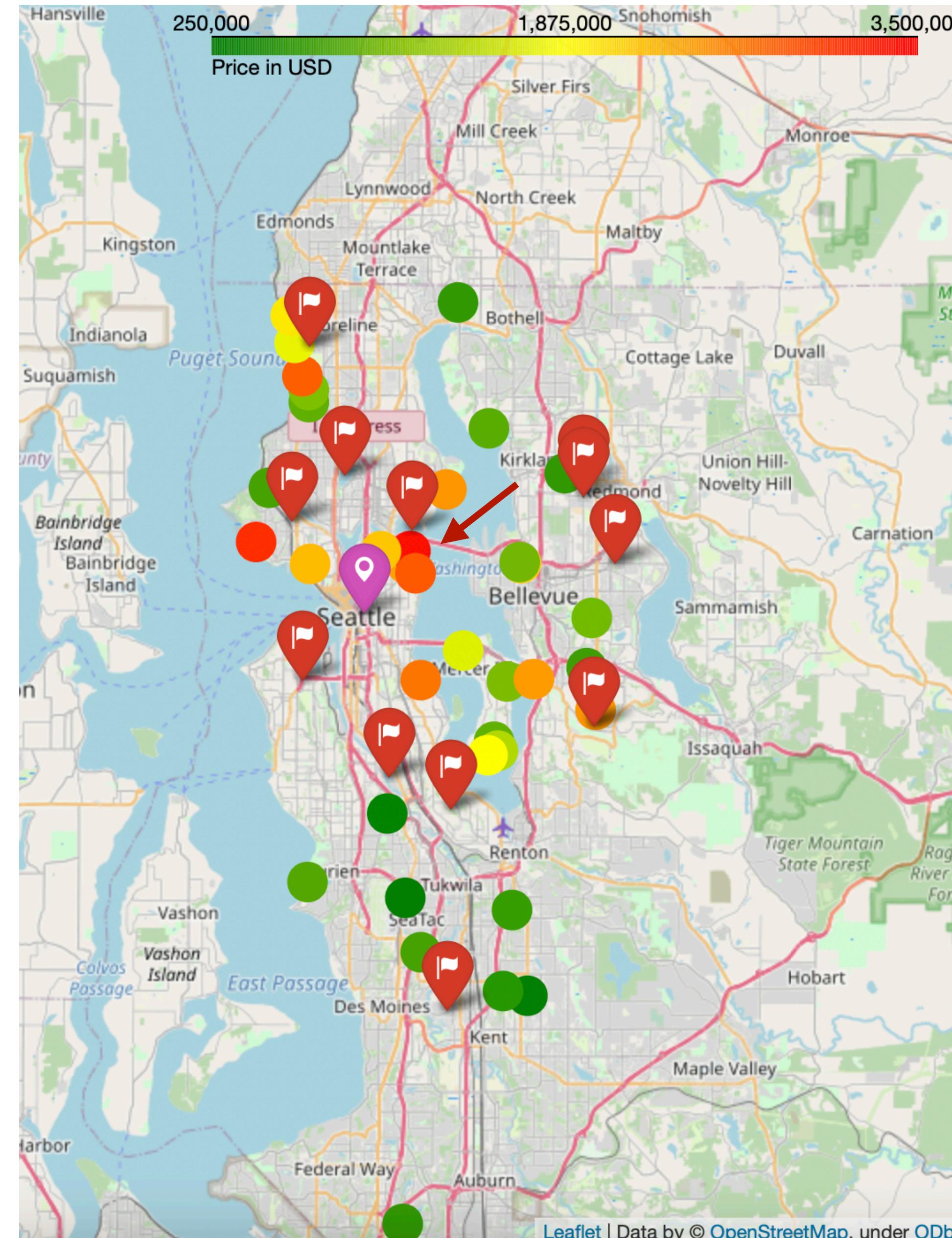
Golf Resort



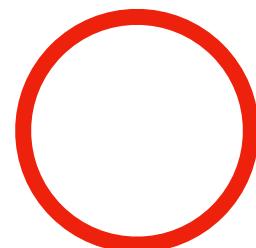
House



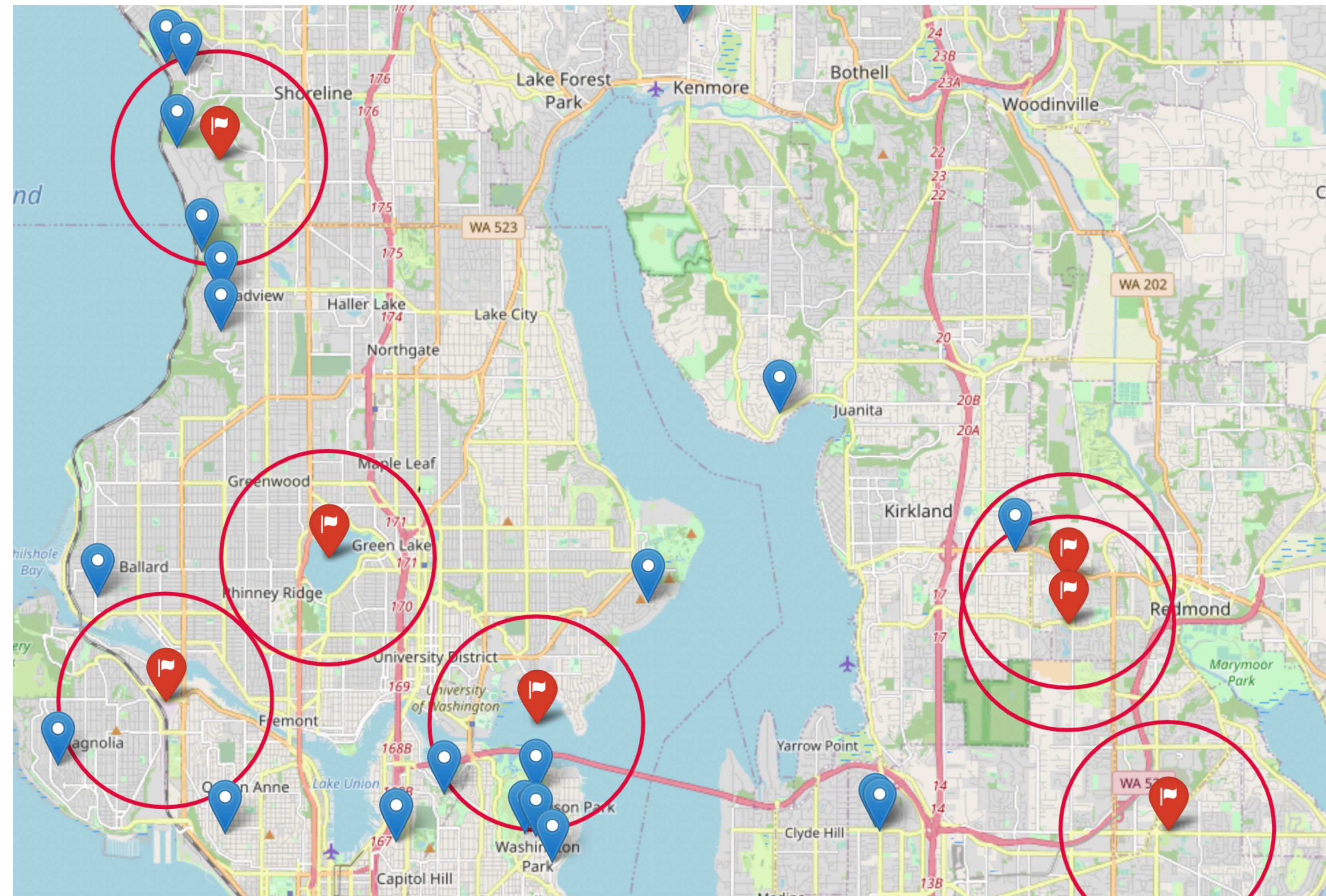
City Center



The houses in the North are located close to a Golf Resort



2 km Radius



Why the area 98177 might be the most attractive

1. The area is among the top five areas with the biggest gardens (average garden size = 29,000 sqft)
2. There are a couple of houses located in the area that fit the stakeholders criteria
3. There is a Golf Resort nearby and three other Golf Resorts a bit more to the south
4. The area is not too far away from the city center
5. The houses are not as cheap as in the south but are still in the medium price range

