

What impacts Houses Prices in King County?

What can you do to increase the value you of your property?

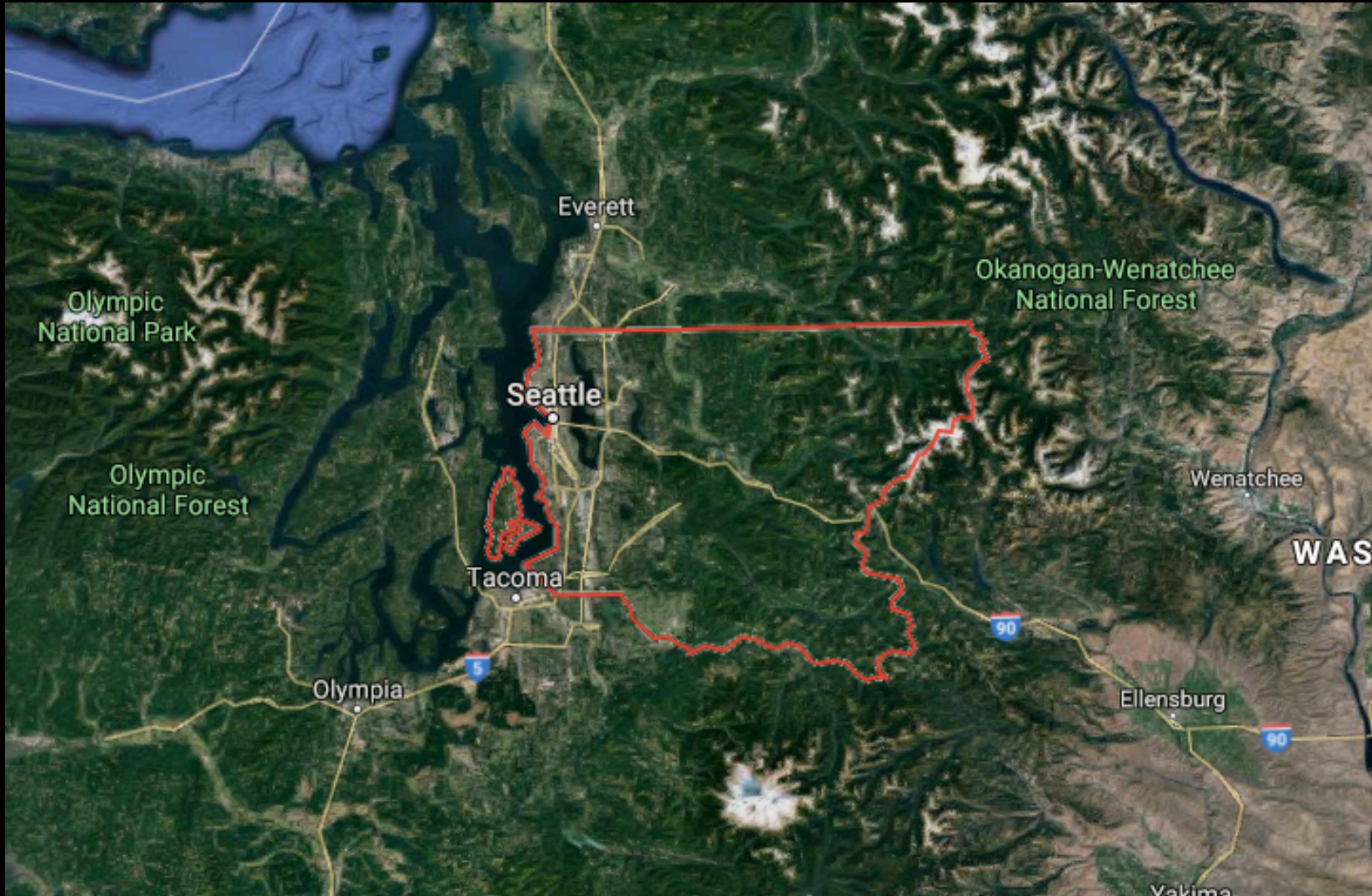


Image Source:
Google maps

Background

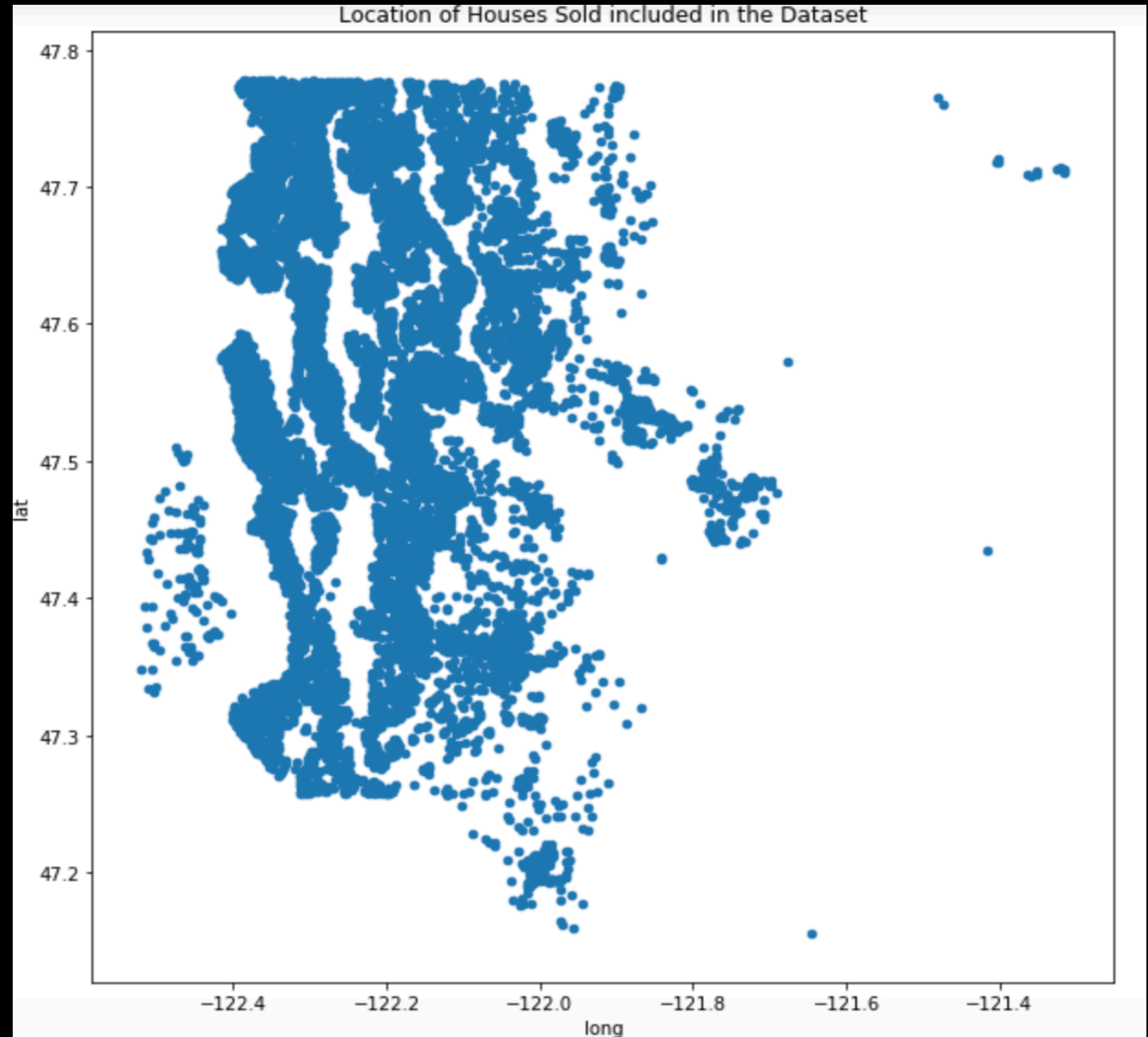
- 21,142 houses
- Average price = \$540,506
- Average size = 2,080 sqft
- Initial Hypotheses:
 - Location
 - Quality
 - Size
 - Features
 - Year built

Features included in the dataset:

- **date** - date house was sold
- **price** - price house sold for, is prediction target
- **bedrooms** - # of Bedrooms/House
- **bathrooms** - # of bathrooms/bedrooms
- **sqft_living** - square footage of the home
- **sqft_lot** - square footage of the lot
- **floors** - total floors (levels) in house
- **waterfront** - House which has a view to a waterfront
- **view** - Has been viewed
- **condition** - How good the condition is (Overall)
- **grade** - overall grade given to the housing unit, based on King County grading system
- **sqft_above** - square footage of house apart from basement
- **sqft_basement** - square footage of the basement
- **yr_built** - Built Year
- **yr_renovated** - Year when house was renovated
- **zipcode** - zip
- **lat** - Latitude coordinate
- **long** - Longitude coordinate
- **sqft_living15** - The square footage of interior housing living space for the nearest 15 neighbors
- **sqft_lot15** - The square footage of the land lots of the nearest 15 neighbors

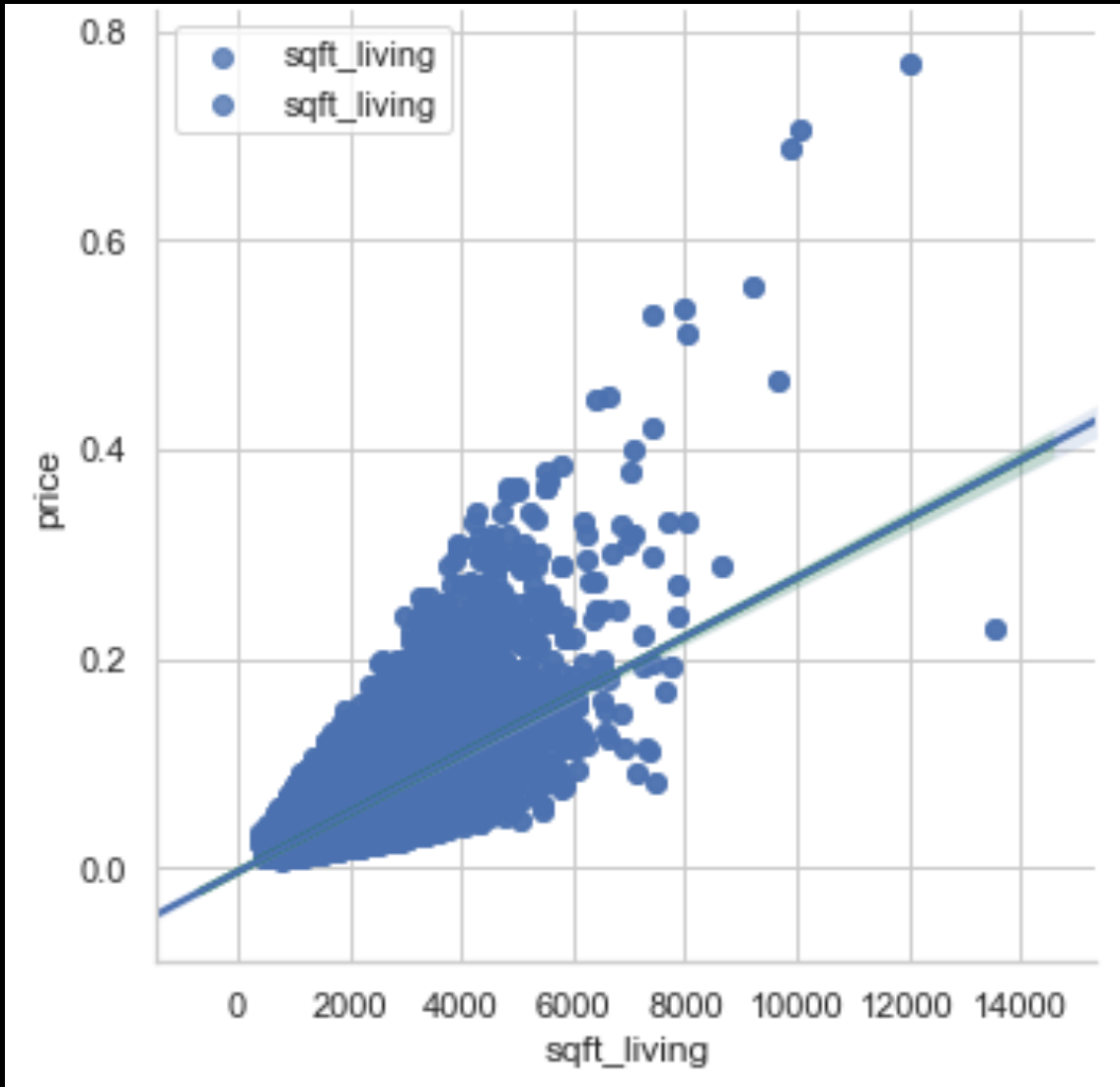
Methodology

1. **Understand the data**
2. **Prepare the data**
3. **Explore the data**
4. **Model the data**
 - Technique: Multiple regression
5. **Interpret results**

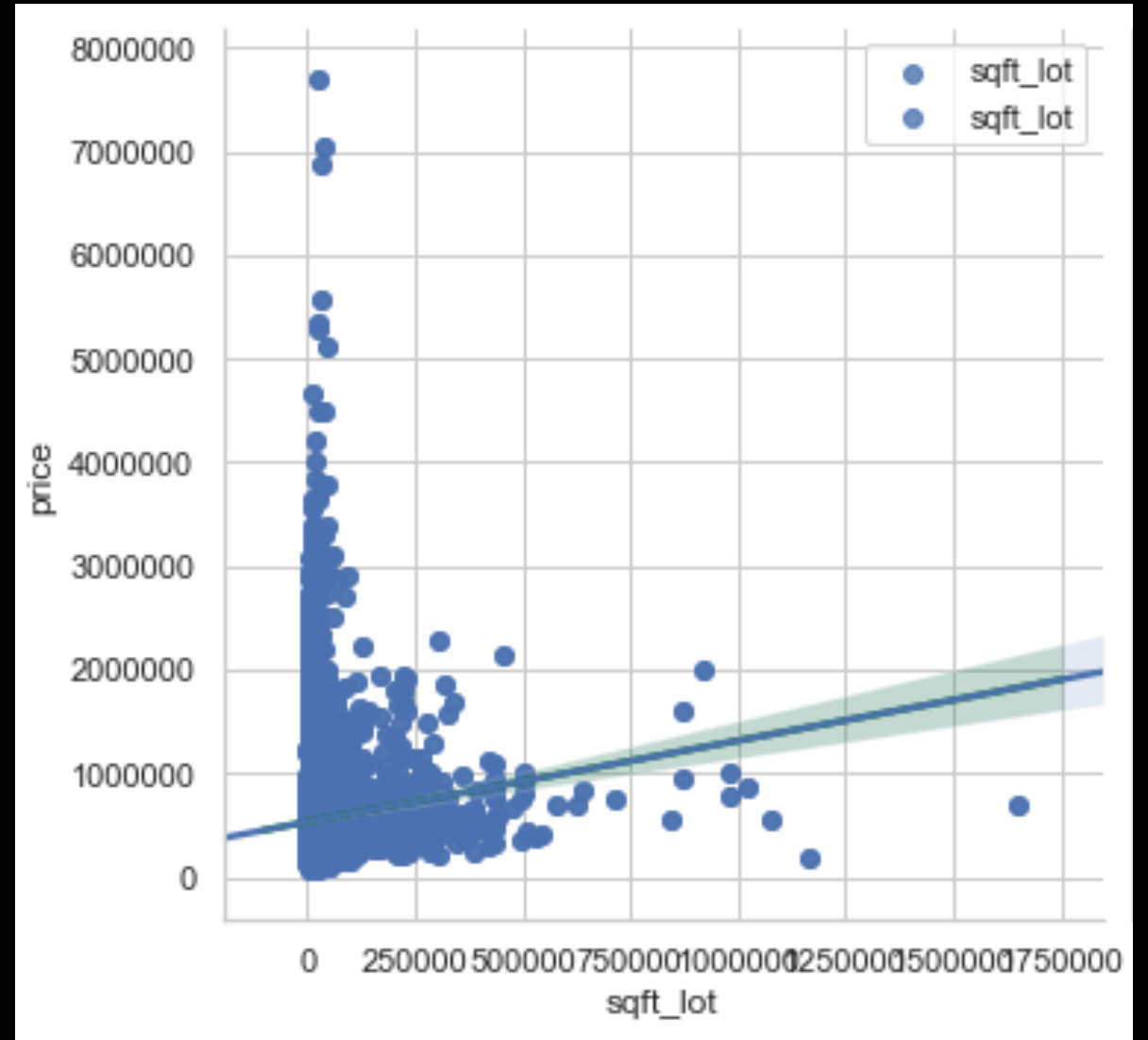


Results: Size

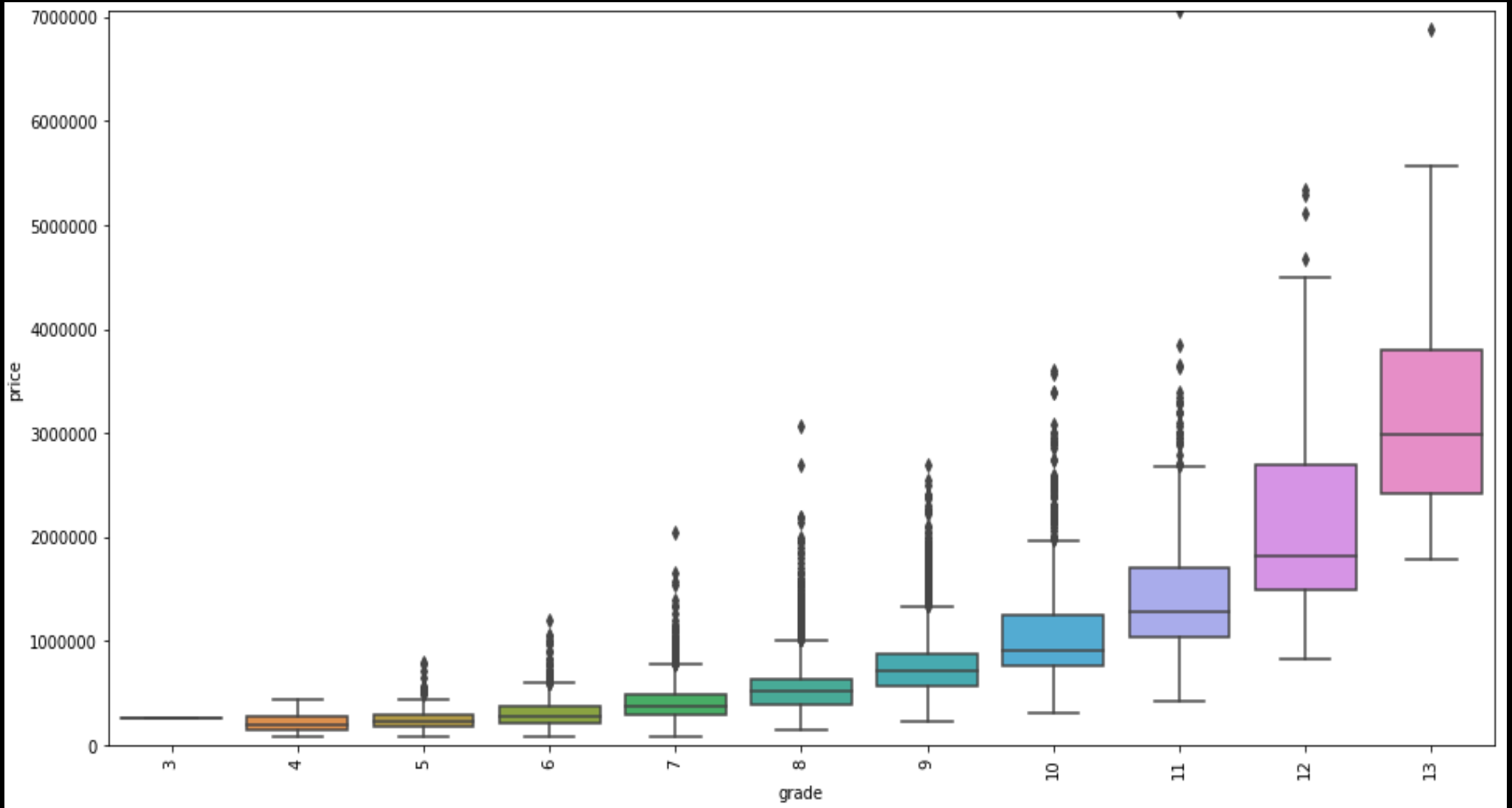
Square Footage of House



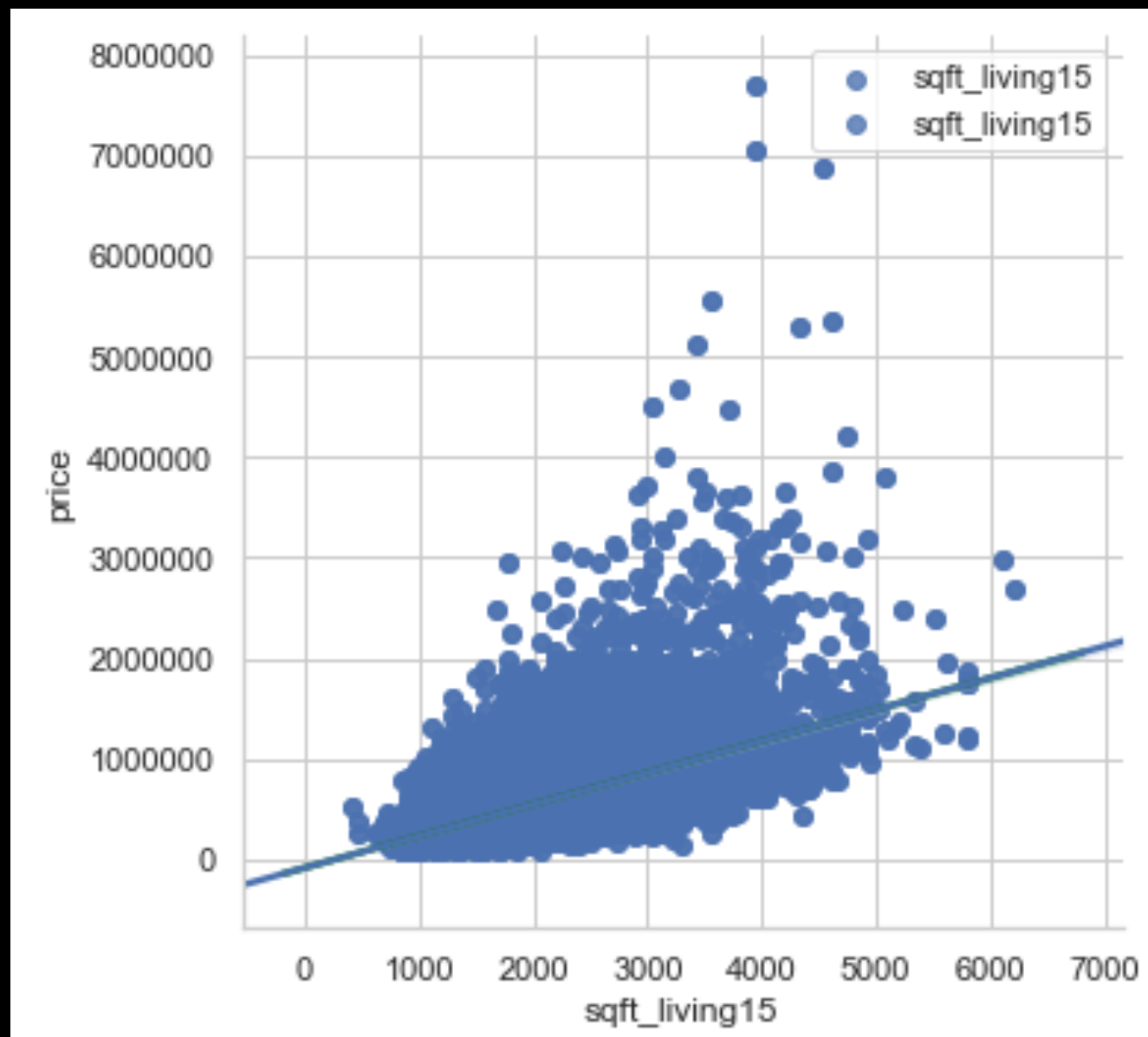
Square Footage of Lot



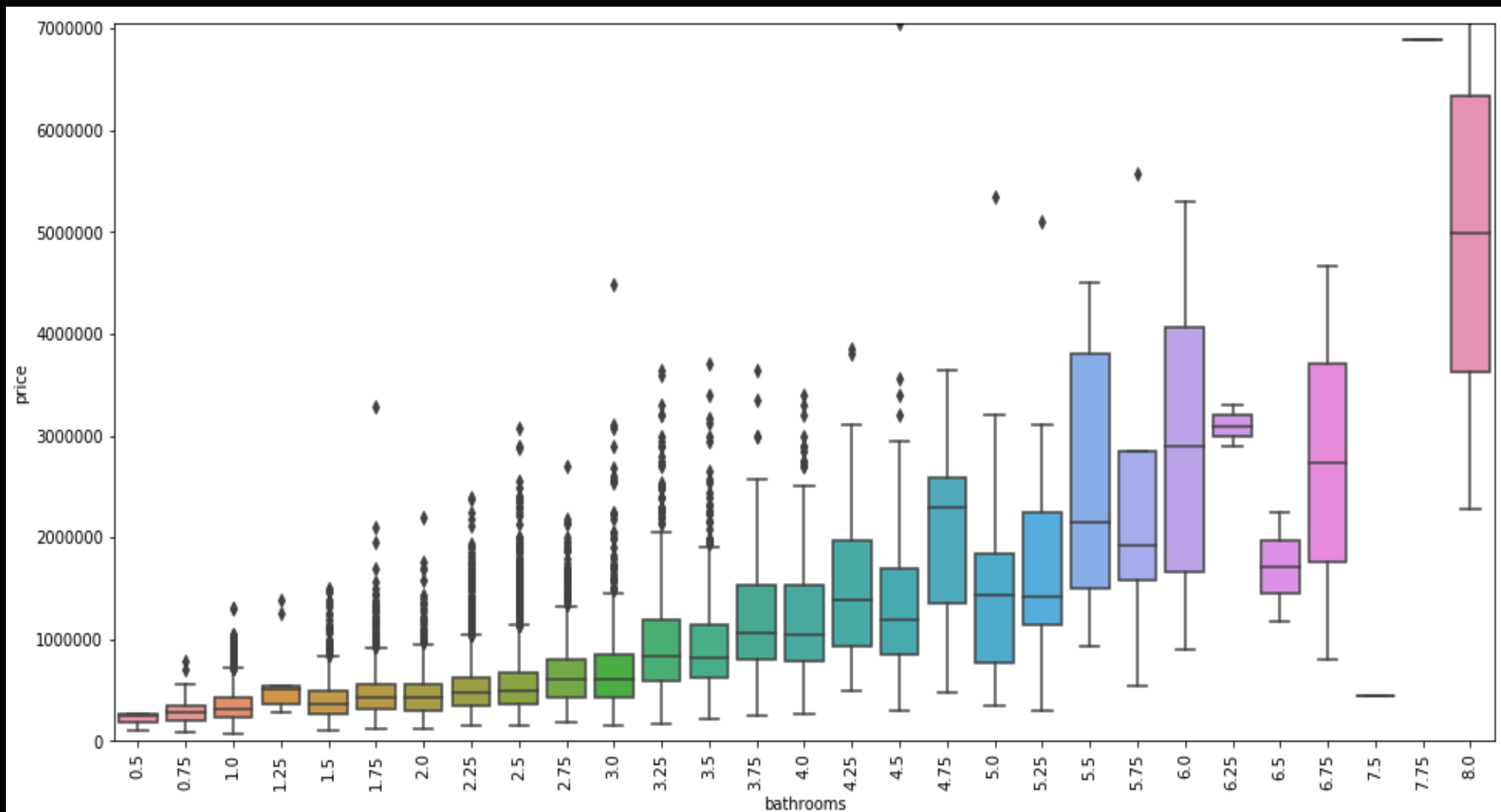
Results: Quality



Results: Neighborhood



Results: Features



Summary & Recommendations:

Most important factors for house price:

1. Size
2. Quality
3. Neighborhood
4. Features, specifically bathrooms

To increase the value of your home:

- Renovate to increase square footage
- Renovate existing and new spaces with high quality materials to increase the grade
- Add a bathroom

Limitations & Future Work

Limitations:

- Most accurate for 2-5 bedrooms & 0.75 – 3.5 bathrooms
- Can't predict the price of waterfront properties

Future work:

- Research 'grade'
- Further investigate location variables – latitude, longitude, & zipcode
- Explore year built and it's relationship to year renovated

Thank you!

- Thank you for your time today
- What questions can I answer?