



# King County Housing Market

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# Business Problem

A Real Estate Firm in Seattle needs a quick and easy house price predictor for their website so users can get an instant estimation on the value of the type of home they are looking to buy so they know what to expect.

# Bathroom to Bedroom Ratio and Sale Price

Houses with more bathrooms than bedrooms cost significantly more than houses with as many or fewer bathrooms than bedrooms. However, as you near a ratio of 2 to 1 (ie 4 beds, 2 baths) you are in outlier territory.

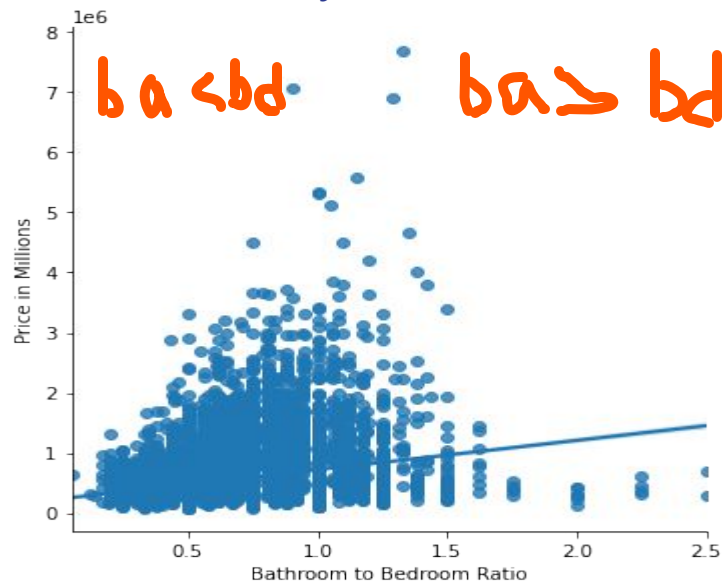
Here's the formula We got...

$$\text{Price} = 488537 \times \text{Ratio} + 227679$$

Note: This formula alone isn't very accurate

It is just to get a rough understanding of how

This variable alone would correlate to price

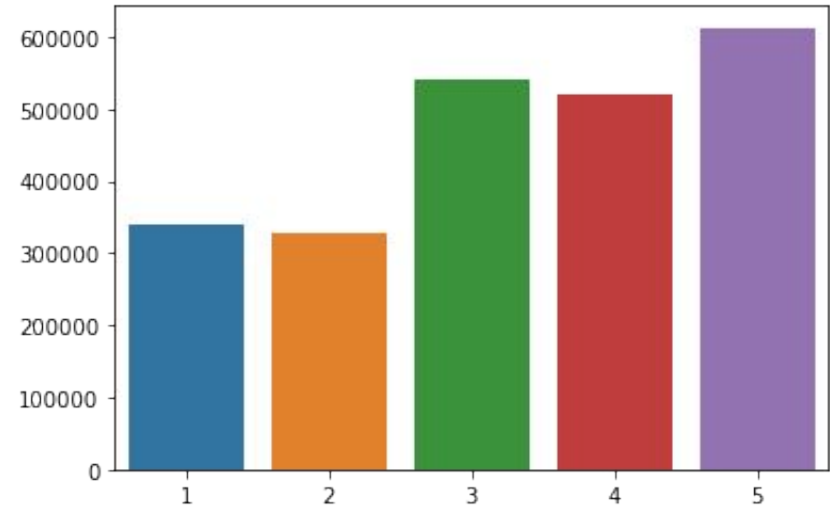


# Housing Condition and Sale Price

For most houses better condition results in higher prices. We see the biggest jumps going from 2 to 3 and 4 to 5.

King county building condition standards...

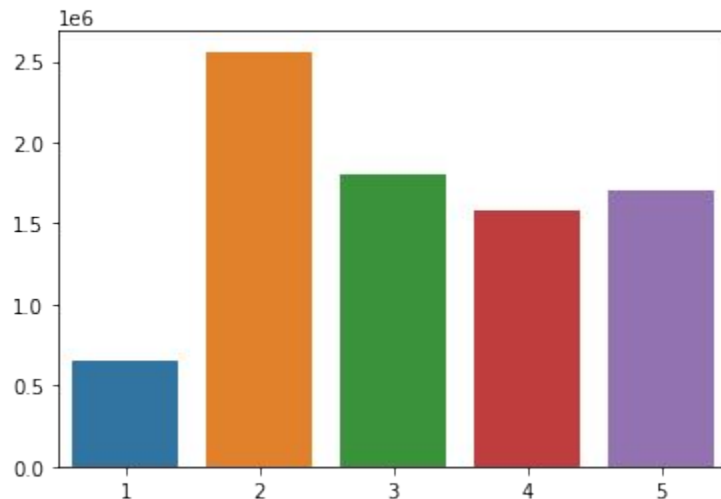
- 1 = Poor- Worn out
- 2 = Fair- Badly worn
- 3 = Average
- 4 = Good
- 5 = Very Good



# The Exception of Waterfront Properties

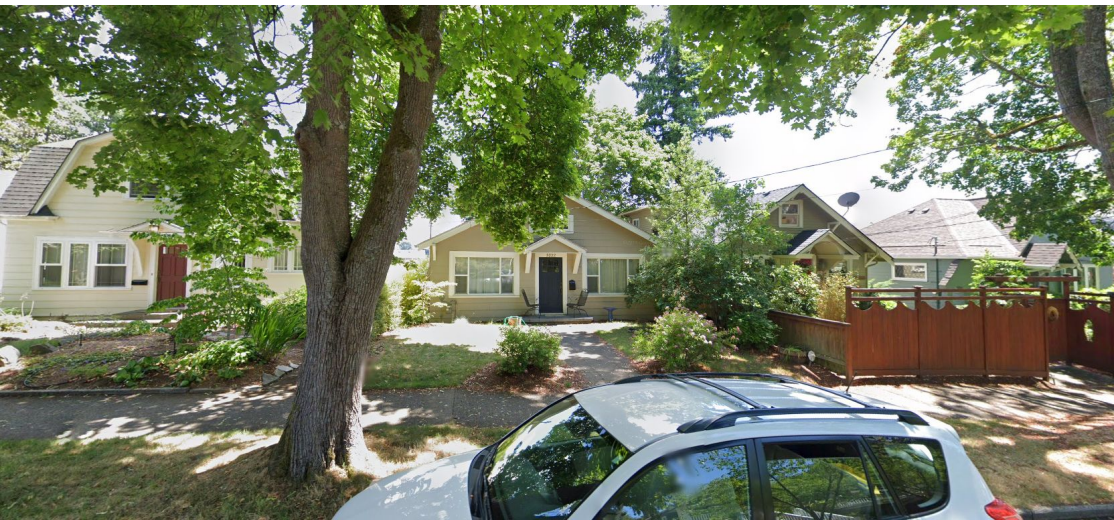
However this is not the case with waterfront properties! As shown on the bottom right.

The jump from 1 to 2 indicates that fixer uppers with waterfront may be a Great investment opportunity.



# Oldest Zip Code in King County

The 98105 zip code has the oldest houses on average, the mean house was built in 1940. The area mostly consists of the Laurelhurst neighborhood and the University of Washington. With a mean home price of \$863,299 the zip code is 59% more expensive than King County as a whole.





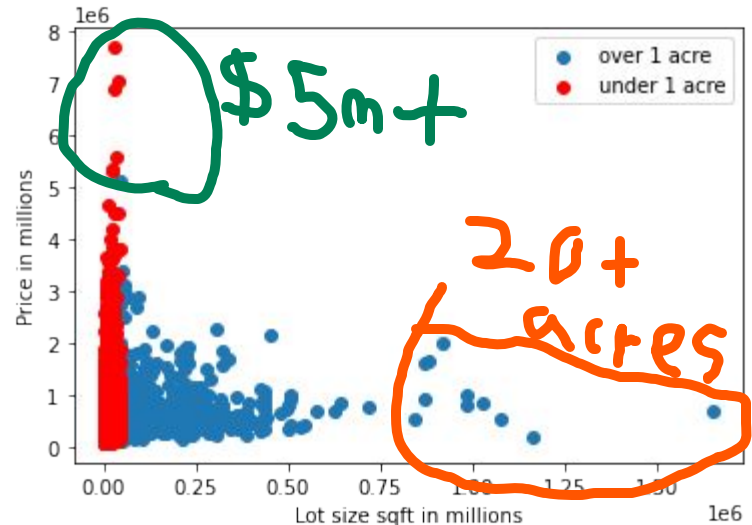
# What About the Newest?

The 98053 zip code has the newest houses on average, the mean house was built in 1998. The area is in Redmond, WA, a suburb east of Seattle near the mountains. With a mean home price of \$677,215 the zip code is 25% more expensive than King County as a whole.



# Lot Size and Sale Price

For the record, the average house in the dataset is \$540,297 has 3 beds and 2 baths, and is on  $\frac{1}{3}$  acre. Price does tend to go up as lot size increases, but not that much. The average 2+ acre house only costs 25% more on average than the homes on average sized lots. If you like big yards and have a little extra cash you're in luck!





# Year Built and Sale Price

With the exception of a few outliers, zip codes where the average house is built after 1960, within the past 60 years, tend to be cheaper. It would be advised for those with lower budgets to avoid historic neighborhoods.



Historic  
neighborhoods  
near downtown

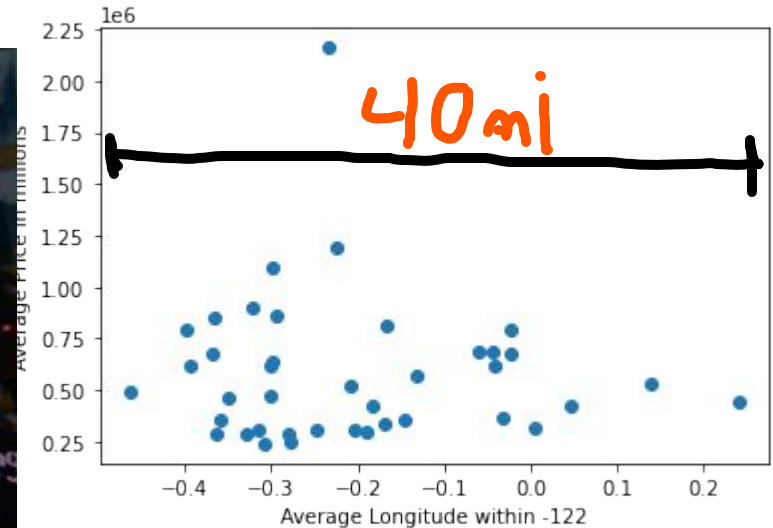
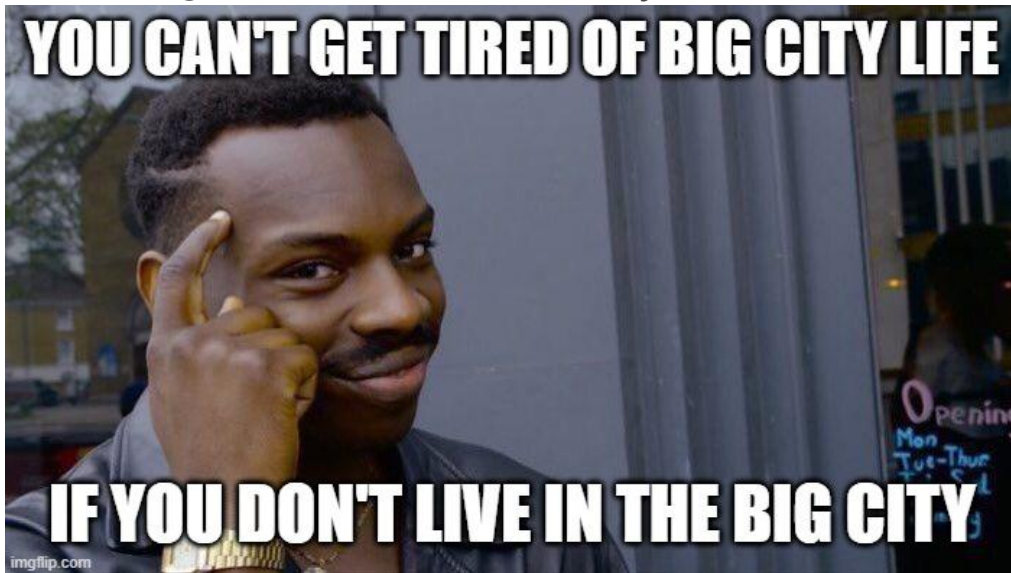


Newly  
developed  
suburbs



# Average Sale Price & Longitude

Homes tend to get cheaper as you go further east, as you go inland. These areas are generally thought of as less desirable but if you like the outdoors and living near the mountains you're in luck.



# Future Work

If I had an extra week to work on this project I would build a recommendation system to help people moving to the Seattle area find the best zipcode to move to.