



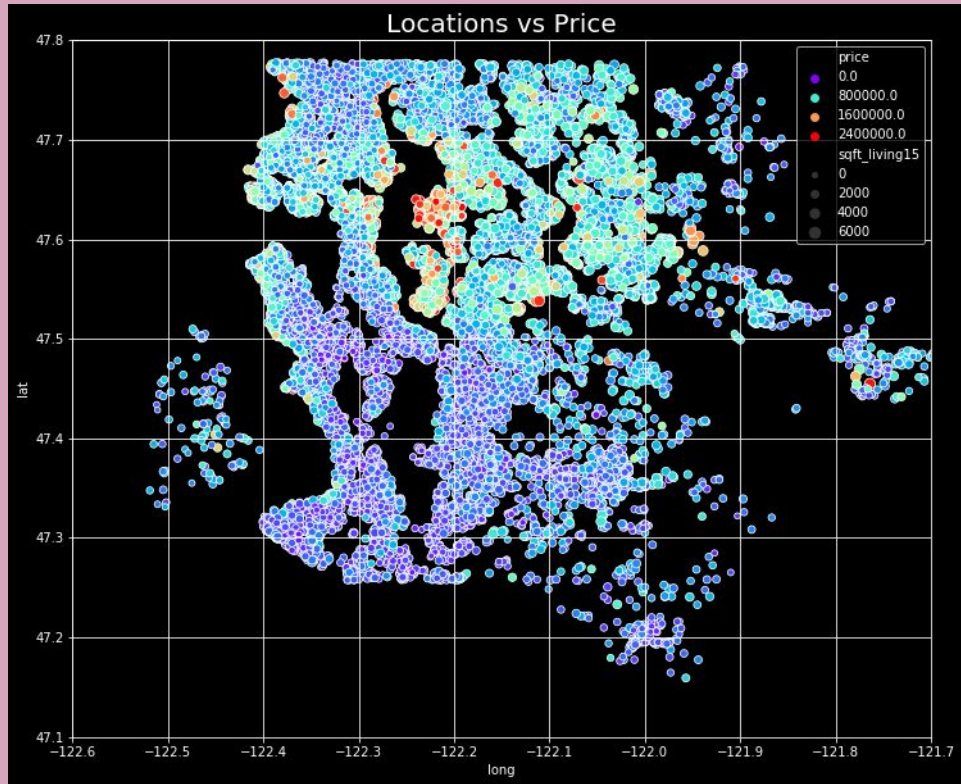
Selling your house in King County

What data science can teach us about
maximizing home value

What we did:

We took a long look at the data related to home sales in King County to find out what makes the market tick, and how sellers could seek to maximize the sale value of their homes in the area.

Using linear regression, our model was able to account for 87.5% of the variance in sale prices throughout the county.





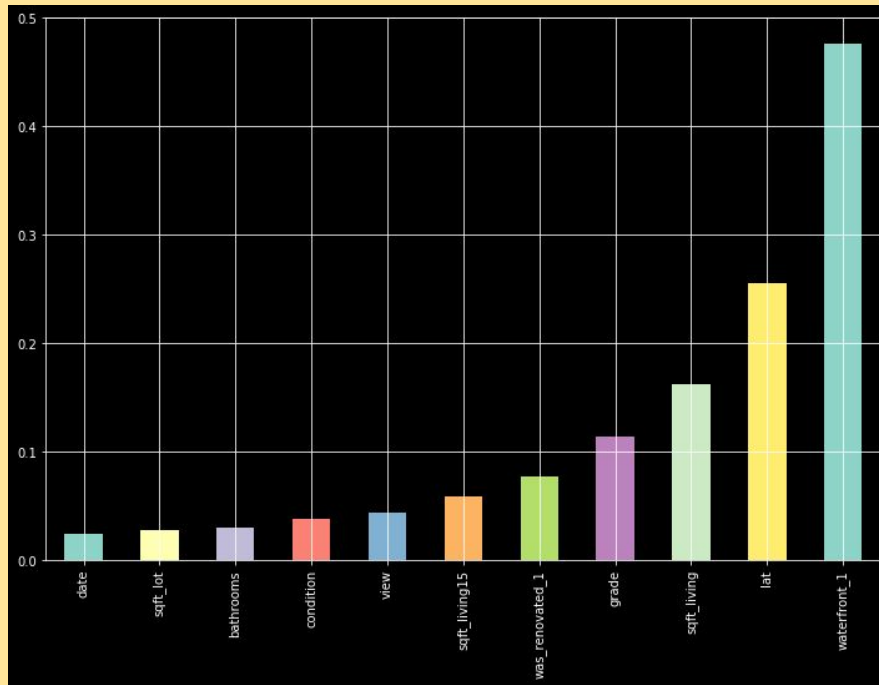
Can you guess which of these factors is most important in a home's sale price?

- When the house was built
- Number of bedrooms
- Number of bathrooms
- Renovations
- How many times it's been viewed
- The condition it is in
- What time of year the house was sold

The Answer: Renovations

Although factors like condition and the number of bathrooms were important to predicting the sale price of houses in King County, it turns out that whether or not a house had been renovated turned out to be an even stronger feature!

Renovations can also raise the grade given to a house, another powerful factor in sales price.



What about the strongest features?

You may have noticed from the previous graphic that waterfront, lat, sqft_living, and grade features were actually the most important predictors of price. We've all heard the saying "location, location, location."

The bad news is that you can't change the location of your house, or conveniently place it on a body of water...

The good news is that you CAN improve the grade and square footage of your house. How? It turns out you this can be done through renovations!



Waterfront homes fetch the highest prices in King County, but increasing the grade and square footage of your house will increase its value regardless of location.



How to raise the grade of your house through renovations

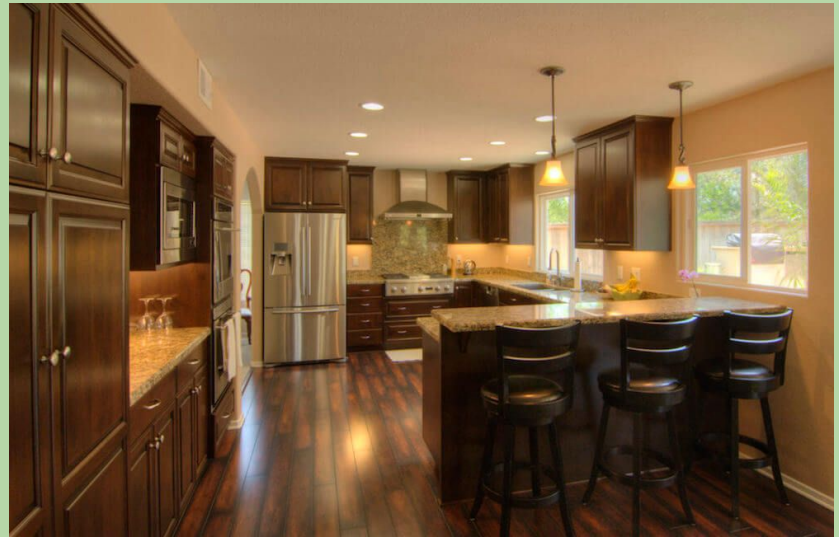
According to a publication released by King County concerning their appraisals of properties, the grade assigned to a house is based off of a few factors, including: size, architecture, building materials, and workmanship.

The vast majority of houses are Grade 7, and this really only means that they are up to code and considered of average building quality. This can be boosted through high quality renovation work.

An important feature of houses which receive high grades, as described in the publication, is the quality of the finish work, of the bathroom/kitchen fixtures, and the building materials, such as having solid wood construction. Custom finishing work is always considered higher grade.

What to offer:

- Additions
 - Increasing the interior square footage of the house will increase its value
- Bathroom upgrades
 - Shower, toilet, sink, and tile upgrades.
- Kitchen upgrades
 - Cabinets, counters, sink, and tile upgrades.
- Custom Molding
 - Many people don't realize how much value can be added from custom solid wood molding around the floorboards and doorways of their house.
- Flooring
 - Nothing makes a house shine like brand new carpets or wooden floors





Further Considerations:

One interesting trend that the data revealed was found in the differences in sales price of houses in the dataset which sold more than once. On average, these houses which sold twice saw a 39% increase in value from the first sale to the second sale, though there was nothing in the dataset which gave any insight as to why this was occurring. We checked to see if renovations had been done in the interim period, however, none of the houses on the list had been renovated more recently than 1990. Clearly, something was at play in increasing the values of these houses in a short period of time, and it may well be that improvements were made but not reported as renovations to the dataset. Also, there may be other factors at play such as home buyers who allow the sellers to leave the house uncleaned and without any freshening of paint/carpets when they depart, which would give them an edge in negotiating a lower price, allowing them profit after they put some work into the property. Whatever the means, there is successful house “flipping” happening in King County.

