A Look into King County's Real Estate Market

By: Sergio Rodriguez

Summary

Homes R' Us is one of the top online marketplaces for real estate in the west coast and is expanding their territory into Washington.

In order for their platform to be successful their listing prices need to be accurate and reflect the local market.

They have tasked our team to create a predictive model to provide them with a baseline price of which they can expect to buy or sell homes within the King County Area, as well as what are the largest drivers in home price
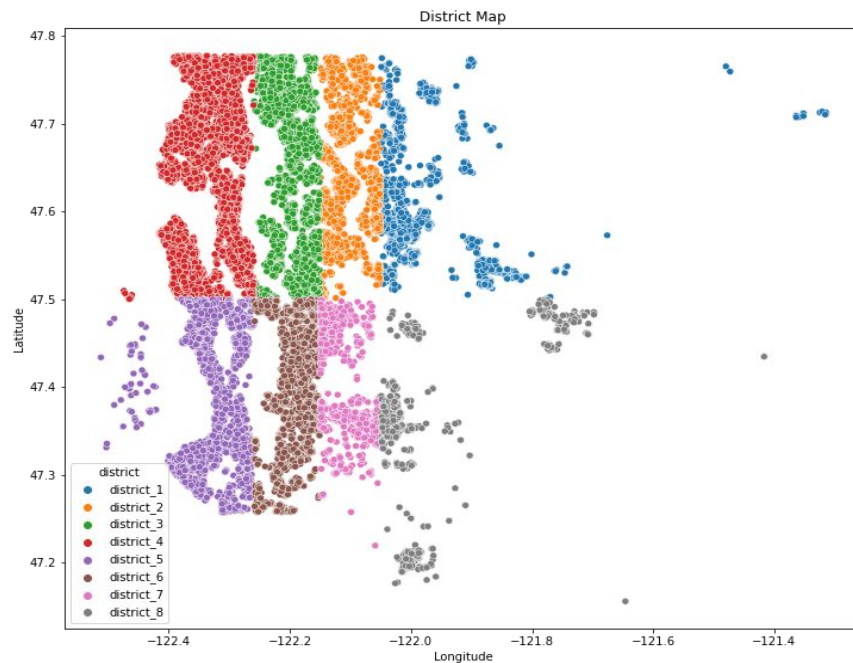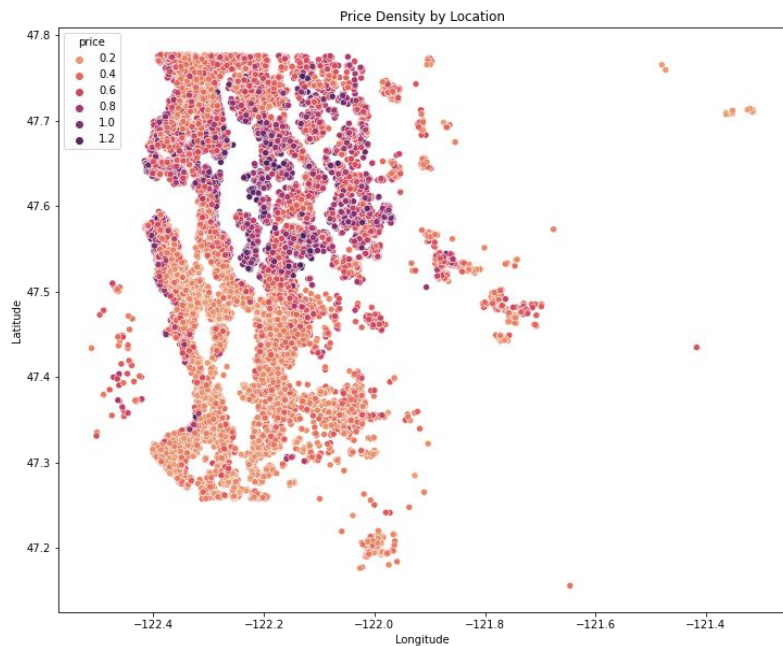
Data

Data used in this project comes from King County's open source housing data from 2014 - 2015

Some of the relevant variables are:

- Sqft_living
- District
- Grade
- View
- Condition
- waterfront

1. Location Location Location

Price Density by Location

District Map

1. Location Location Location

Depending on the district of the home prices can either be +30 to 40k or -120 to 160k.

Districts in the north (1-4) are the more expensive districts for homes while districts 5-8 below 47.5 latitude are negatively affected

Average Price by District
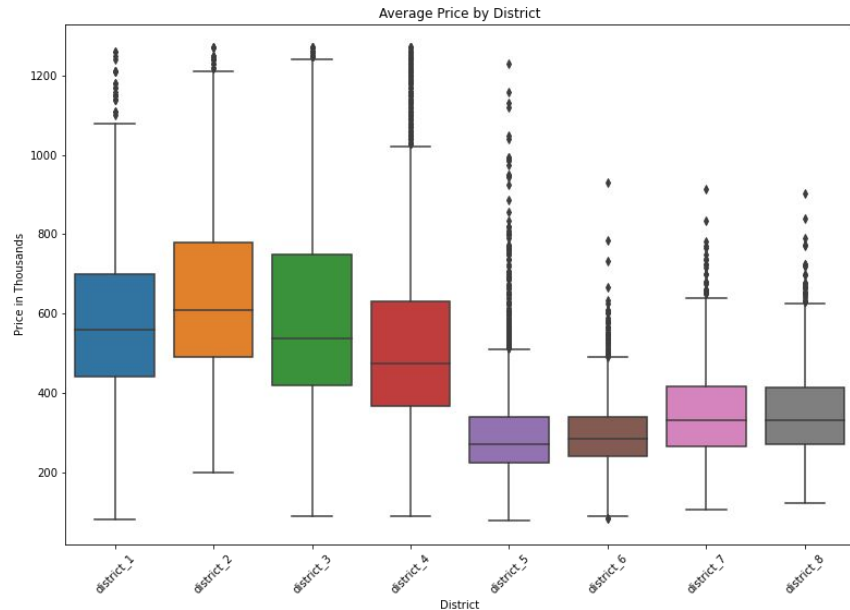
2. Grade of the Home

Grade is determined by King County grading system

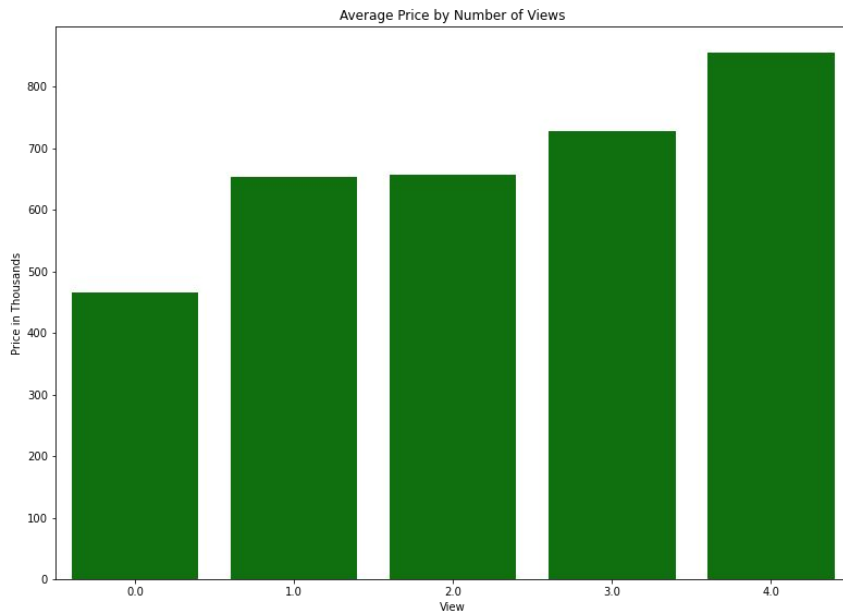Each grade level is an additional $71k in home price

Average Price by Grade
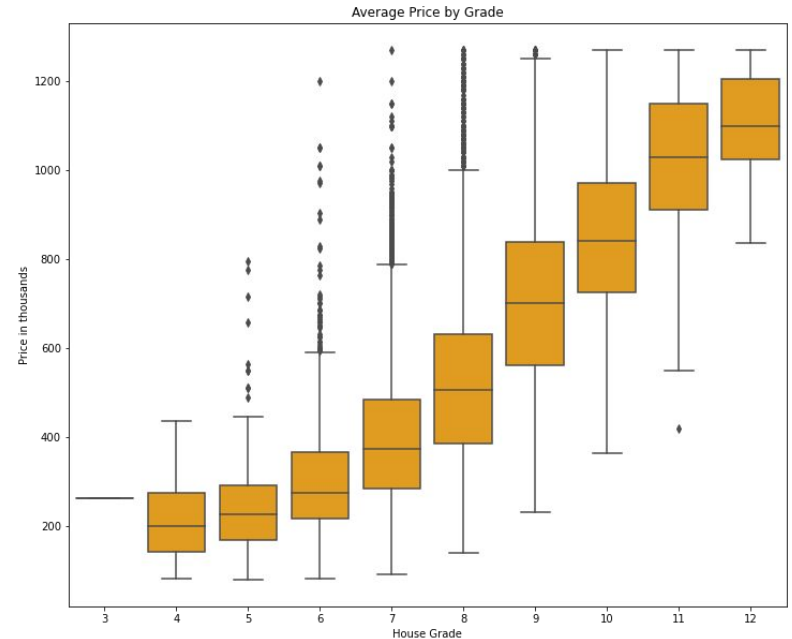
3. Number of Views

Views are the number of views the home has had

Depending on number of views:

- 1 view= +$62k
- 2 views = +$52k
- 3 views = +$82k
- 4 views = +$172k

Average Price by Number of Views

Results

- By impact size grade has the largest influence on home prices as the average grade is 7, which corresponds to a $537k in home price (avg home price is $483k)
- Location has second largest impact size with a range of +40k to -160k in home price depending on location
- Number of views varies in its effect on home prices but ranges from $62k - $172k

Conclusions

Homes R' Us can use our model to compare against there listing prices of homes on their platform to better provide accurate prices for the new territory the are expanding into.

Notably, they should be aware of the differences in prices for the different districts of which they are selling/buying homes.

All else equal, the same home in districts 5-8 could be cost anywhere from 120-162k less than in districts 1-4.

Additionally, home grade level should help indicate what price range a home should be in.

Future Work

- If it were possible to get 2+ years of housing data as well as home appreciation or sale price data would be insightful for investment opportunities
- Rental level data would also be interesting to investigate as most online real estate platforms offer rentals as well as purchases/sales

Thank You!

Email: srodriguez2742@gmail.com
GitHub: @srodriguez2742