Predicting Home Prices

Linear Regression Model of King's County Home Prices

What did we do?

Use King's County Home data

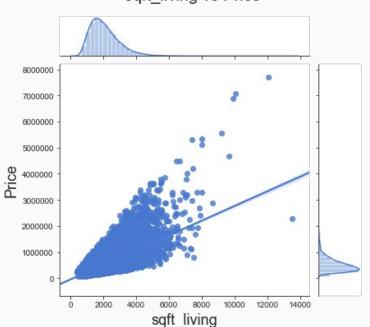
- Asked 3 key questions
- Created a model
- Give home sellers actionable insights

Key Questions

- 1. What are the most salient features of a house that can be changed in order to impact sale price?
- 2. Which unchangeable features of the house (location, year built) will most dramatically impact sale price?
- 3. Will investment in the aspects of the house that are changible be cost effective?

What we found...



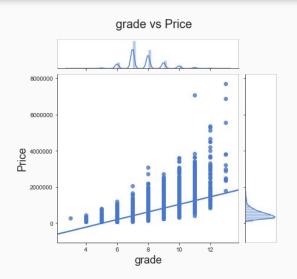


The most impactful feature of house price that is changeable is ...

Square Footage of Living Space

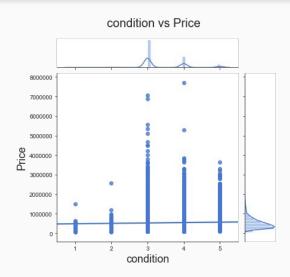
On average an increase of 900 square feet equated to an increase of \$9000!

Other factors...



Home Grade and Condition were also influential features:

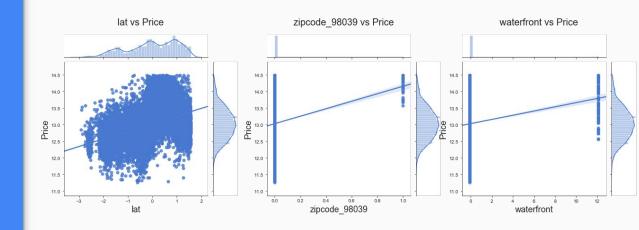
Restoring houses and using high quality labor and materials yields even more sale price.



What about things we can't change?

- Location
- Location
- Location

- Our Analysis showed specific zip codes and waterfront property to be extremely impactful!
- Even though we can't change location, our model lets us know how much the location changes our sales price



Is changing a feature worth it?



sqft living

10000

12000

- Increasing square footage is the most direct way to increase home price
 - + 100 square feet = + \$1000 dollars
- Grade and Condition factor in quality of work and overall house quality
- Some of the most influential features of a house can't be changed

Conclusion:

Square footage and build quality are the best things to change about a house... BUT



"The three most important aspects of selling a home are: Location, Location, Location"

- unknown

Future Steps...

- Make specific models for different home price categories
- See if predicted sale prices hold for future home sales
- Make area specific models to remove location from the equation

Thanks for your time!

Contact me any time

Stephen Turk
Data Scientist in Training

stephen.turk@gmail.com

