

# List Price Analysis

Completed for The King County Realty Team

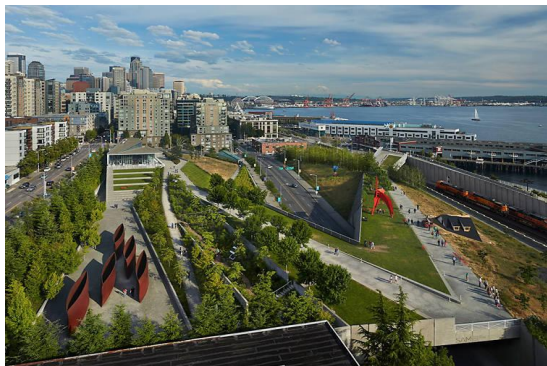
---

By Rachel Fein

# Summary

This analysis was performed with the intent to give recommendations to the King County Realty Team on price adjustments to be made to list price based characteristics of their client's home. Interpretation of the regression model led to the following findings:

- The coefficients for the respective grade, view, living sqft, yr built, and floors of the home can be used to adequately adjust the list price.
- The final model had a relatively low R-square value of 0.615. In response, this model should be strictly used alongside with personal judgment of the agents.



# Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

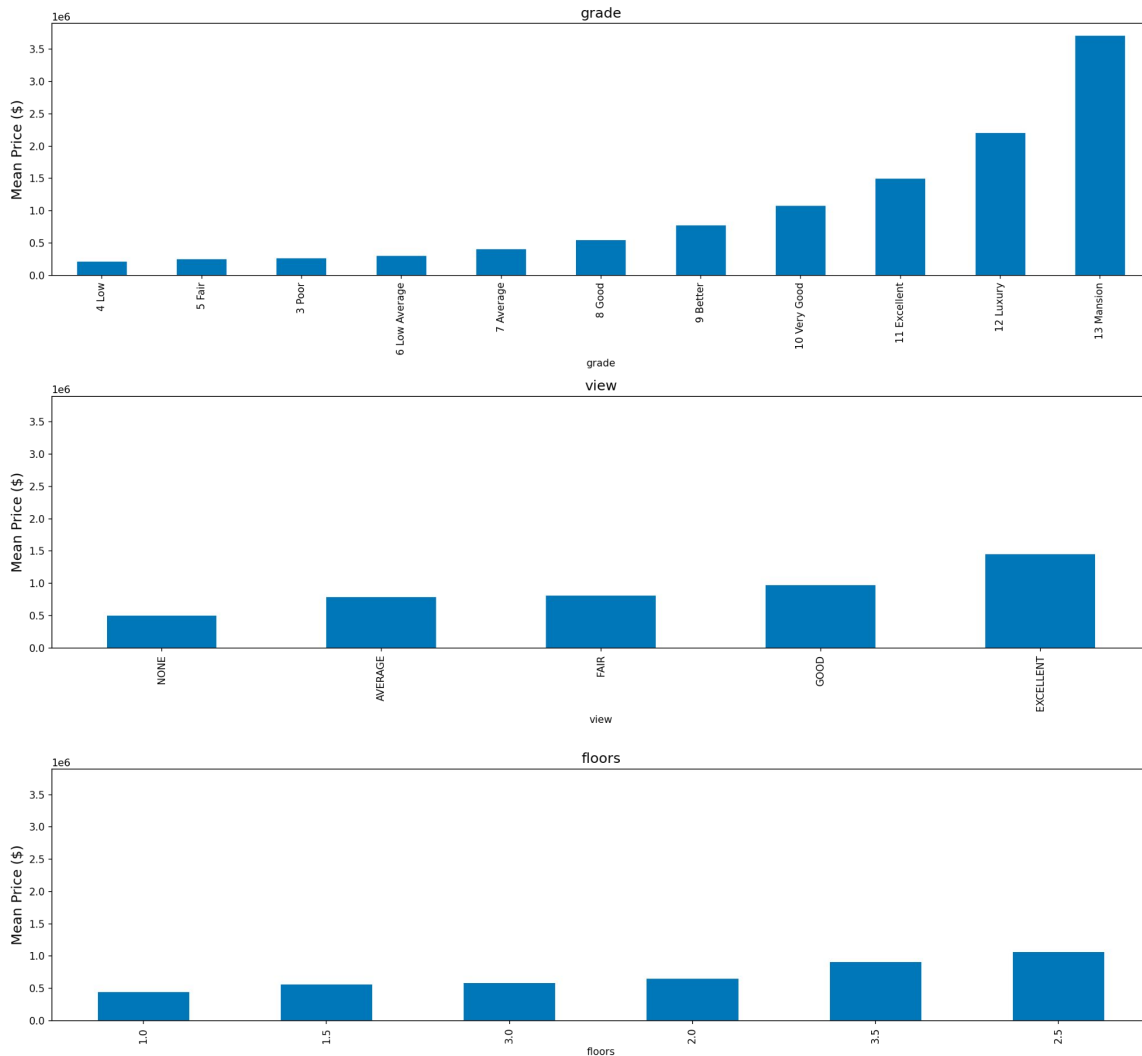
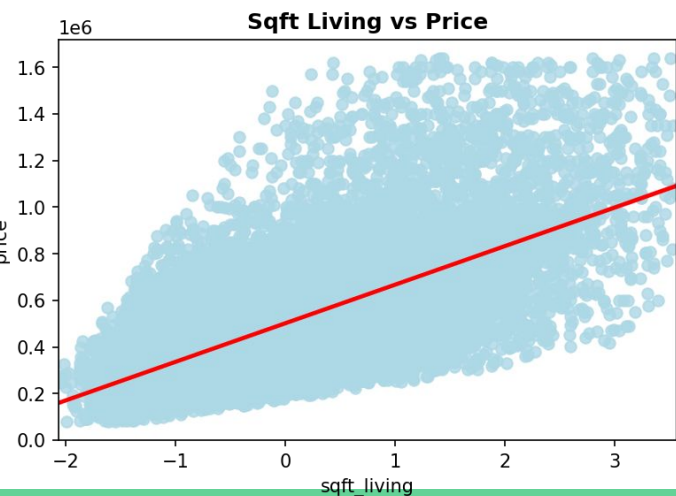
# Business Problem

King Country Realty Team wants to use data to help assist their agents in determining the list price for their clients' homes. The team needs an understandable and user friendly way to account data into their decisions.

In response, this model uses data to give specific home characteristics a price value and add or subtract that value from a baseline price.

# Data

The data used for this project was from the King Country Dataset, a dataset of real real-estate data from King County Washington on past home sales.



# Methods

This project used the King County housing data to make a regression model. The model was used to find a base price for a home and find the associated dollar amount for the features.

To be properly modeled the data was cleaned and scaled. A baseline model was made and then improved upon until we were left the final variables grade, view, sqft living, floors, and year built.

# Results

The model calculated a value for the respective grade, view, floors, and sqft of living space for the houses in King County, this can be used to adequately adjust the list price.

61.5% of the variations in the dependent variable 'price' are explained by the independent variables in our model.

Used strictly along side personal judgement.

<b>Numerical Feature</b>	<b>Price to be multiple by feature value</b>
Sqft living	x \$111
Year built	x -\$2,929

<b>Categorical Feature</b>	<b>Price to add/subtract from price</b>
Grade: Luxury	+ \$282,335
Grade: Excellent	+ \$121,463
Grade: Better	- \$127,518
Grade: Good	- \$281,321
Grade: Average	- \$391,789
Grade: Low Average	- \$495,571
Grade: Fair	- \$541,347
Grade: Low	- \$534,136
Grade: Poor	- \$517,795

# Conclusions

- The coefficients for the respective grade, view, living sqft, yr built, and floors of the home can be used to adjust the list price.
- The final model had a relatively low R-square value of 0.615. In response, this model should be strictly used alongside with personal judgment of the agents.

## Next steps:

- Adjust methods:
  - Normalize/transforming data differently
  - Assigning blank data in categorical variables differently
  - Detect outliers differently
  - Use location data



# Thank You!

**Email:** [rachellfein@gmail.com](mailto:rachellfein@gmail.com)

**GitHub:** @rachelfein

**LinkedIn:** [linkedin.com/in/rachellfein/](https://www.linkedin.com/in/rachellfein/)