

Investing in Your Neighborhood

Presented by Joe Webb

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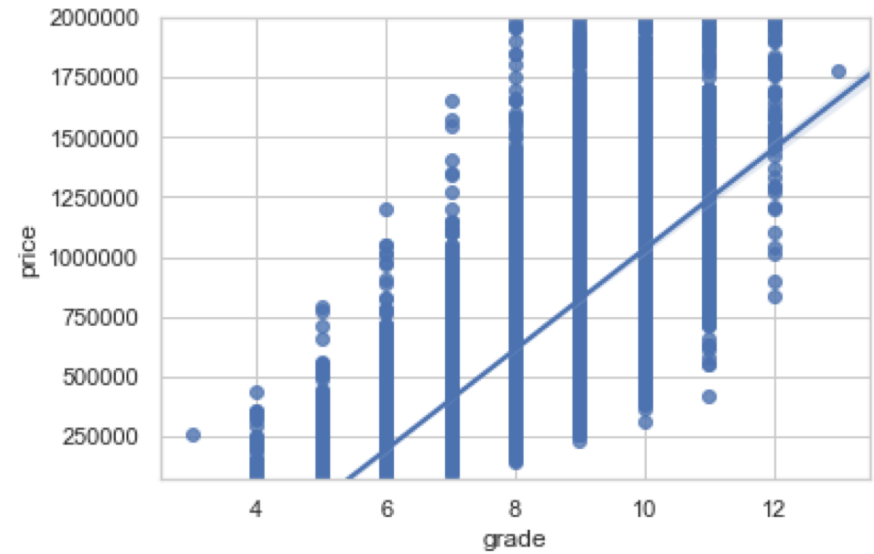
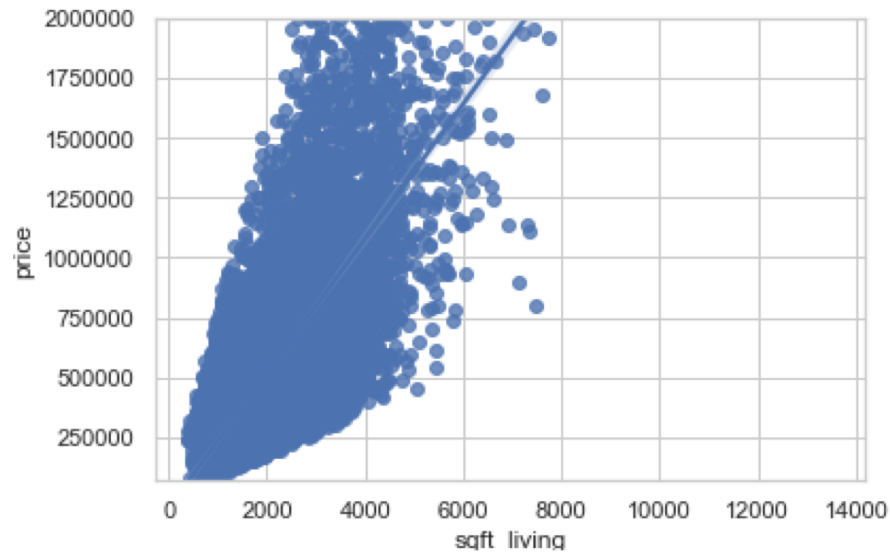
What are the best predictors of Home Sale Prices? (Of the properties in the data)

- Date house was sold
- # of Bedrooms/House
- # of bathrooms/bedrooms
- Square footage of the home
- Lot Size Floors Waterfront
- # of Views (by prospective buyers)
- Condition
- Grade: based on King County grading system
- Square footage above basement
- Basement Size
- Year Built
- Year Renovated
- Zipcode
- House Square footage of the nearest 15 neighbors
- Lot square footage of the nearest 15 neighbors

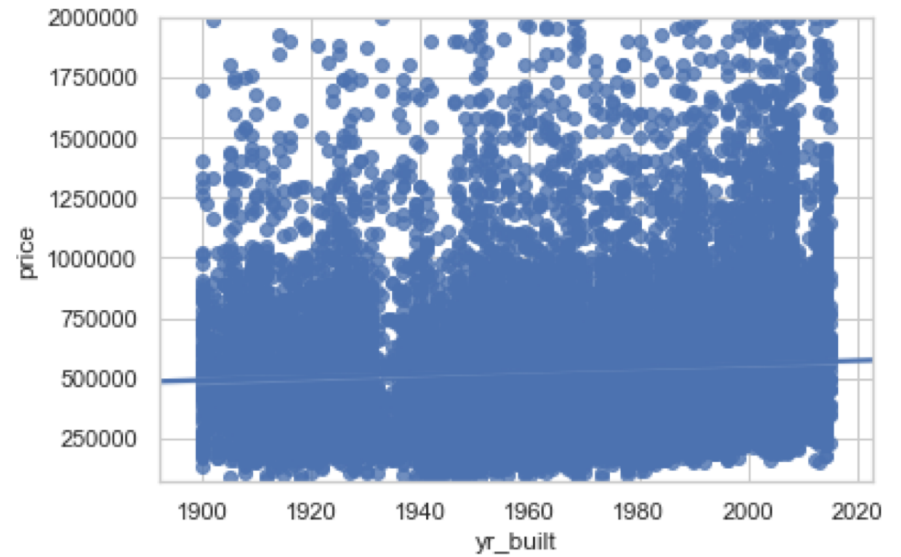
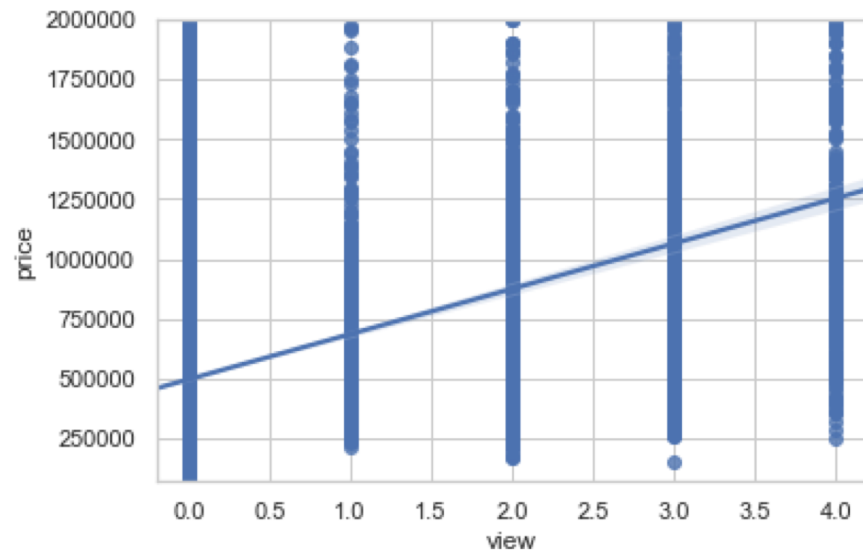
81% Accuracy

- 60% of the variation is explained by the model.
- Best predictors: Square Foot Living Space, Grade (Condition), Year Built, & Views
- Assumptions to Invest? We will invest at a level of 80% of the Predicted Sale Price
- model is Not meant to predict houses >\$1,614,000, > 5,900 sq ft and Grade > 11
- How is accuracy defined? 81% of Home Sales will be “GOOD” Investments

Predictor Visualizations



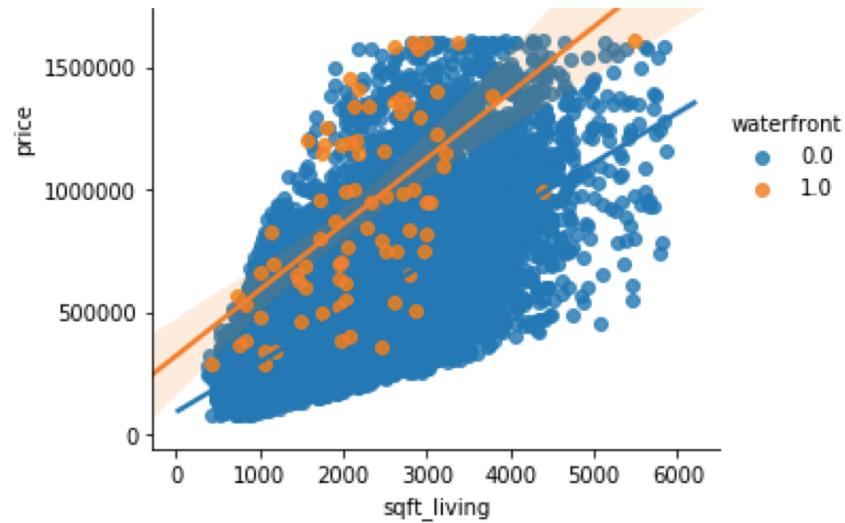
Predictor Visualizations



Model Summary

- Square Foot: Sale Price increases \$108 for each square foot
- Grade (based King County grading system): Price increase \$124,400 with each increase in Grade number up to 11
- Viewed by Prospect Buyers: adds ~\$44,200 up to 4 viewings.
- The age of the home increases the Sale Price by ~ \$2,671 per year.

Question: Waterfront properties v. Not



model WATERFRONT homes separately

- Waterfront: Having a Waterfront View adds \$370,000 to the Price
- Assumed that Sqft Living, Grade, View, & Year Built are kept constant (relatively)
- 78% of the variation is explained by the model. (v. 60%)
- Predictor: Square Foot Living Space is only predictor needed
- Assumptions to Invest? We will invest at a level of 80% of the Predicted Sale Price
- How is accuracy defined? 76% of Home Sales will be “GOOD” Investments (v. 81%)

Question: Year Built has a negative coef in the model. Why?

