

King County House Analysis

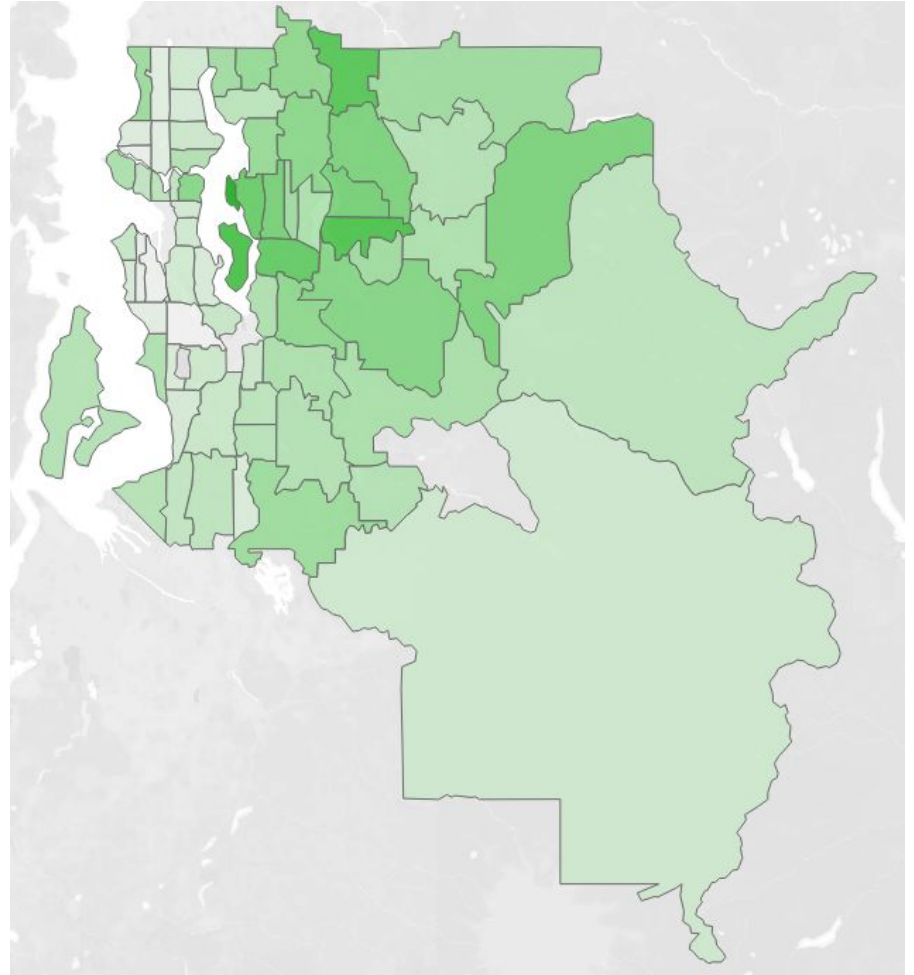
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Business Problem

- Client wants to ensure a fair price when buying a home
- Interested in average homes
- Wants a tool to predict a fair price

Data

- Houses based in King County, WA.
- Data from 2014 - 2015
- 21597 house sales



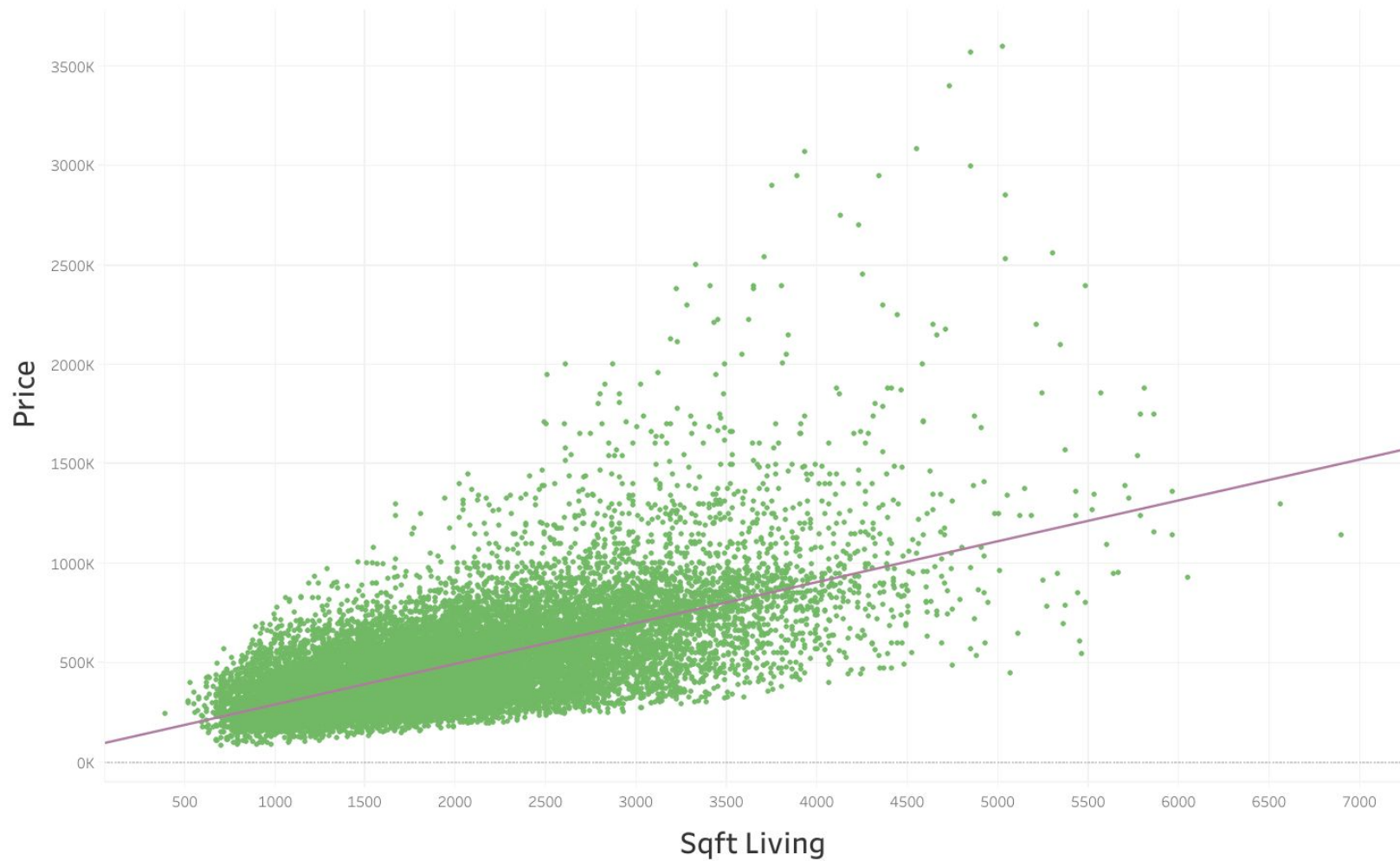
Approach

- Made sure only average houses were accounted for
 - Filtered out houses that are not “average”
- Create a regression model and a predictor tool

Results

- This model accounts for 57% of the variance of price
- Model has an average error of \$116,000
- Living Area and House Grade were two of the most important metrics

Squarefoot vs Price



- Higher grade gives us higher price
- Average to Good houses are ideal



Example Predictions

Predicted Price	Sold Price	Difference
- 608,000	- 700,000	- 92,000
- 306,000	- 228,000	- 78,000
- 416,000	- 522,000	- 106,000

Limitations

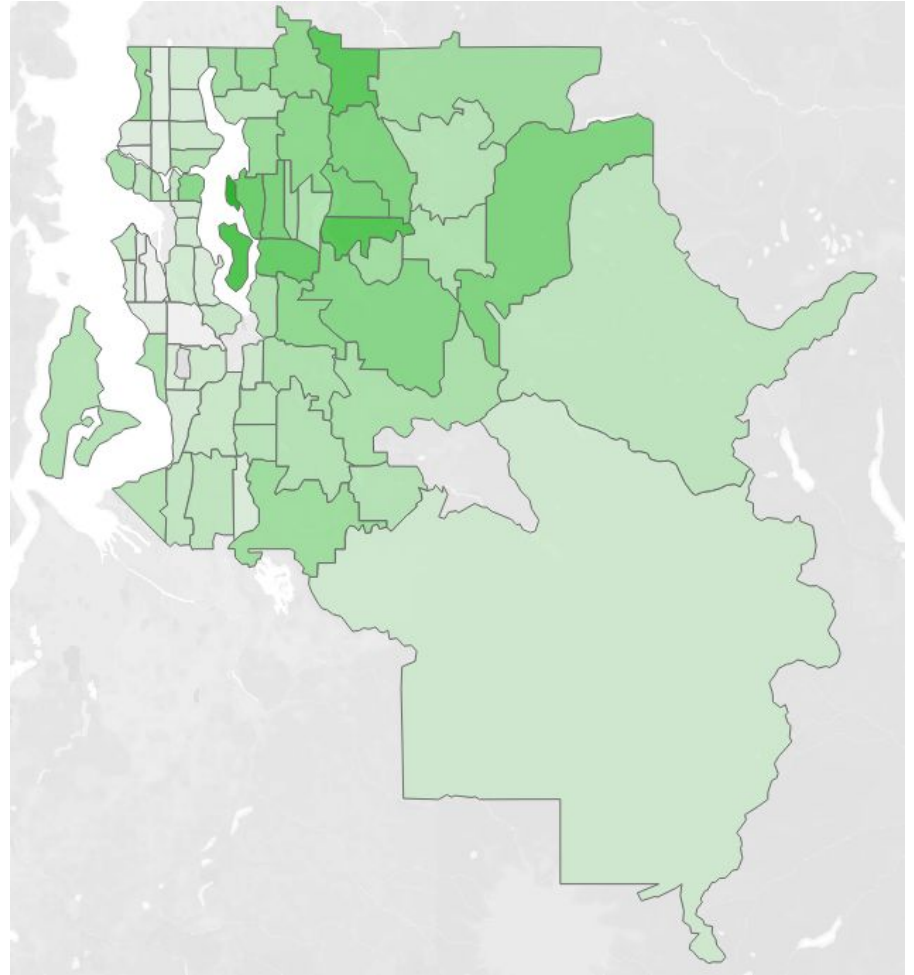
- Model works better with average houses based on our filtering
- Houses with no basement are difficult to predict
- Newer houses may be undervalued
- An inaccurate grade can skew prediction

Recommendations

- If the listed price is more than \$116k higher than the predicted one, don't buy it
- Consider model limitations; older houses with basements will be most accurate
- Condition of a house and living area has great significance

Future Steps

- Explore promising regression model
- Look at more features



Thank You!

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