

King County Real Estate

Housing Analysis



Summary

Descriptive analysis and modeling reveal which factors contribute most to housing prices:

- Living Area(in square feet)
- Location (47.55 15°N to 47.7 15°N)
- House Quality(grade)



Business Problem

Kings County Real Estate has hired us to investigate which features of a home have the greatest effect on price.

- They would like us to make a model to predict housing prices.
- From that model, they would like to know which factors have the largest effect on price.



Data and Methods

Data:

King County House Sales Data
from 2014 to 2015.

The dataset "kc_house_data.csv"
was obtained from the link below.
<https://osf.io/twq9p/>

Methods:

Linear regression models and
descriptive analysis



Results

Prediction Accuracy

- Average home price: \$476,985
- The price prediction was +/- \$140,227 off the real price.

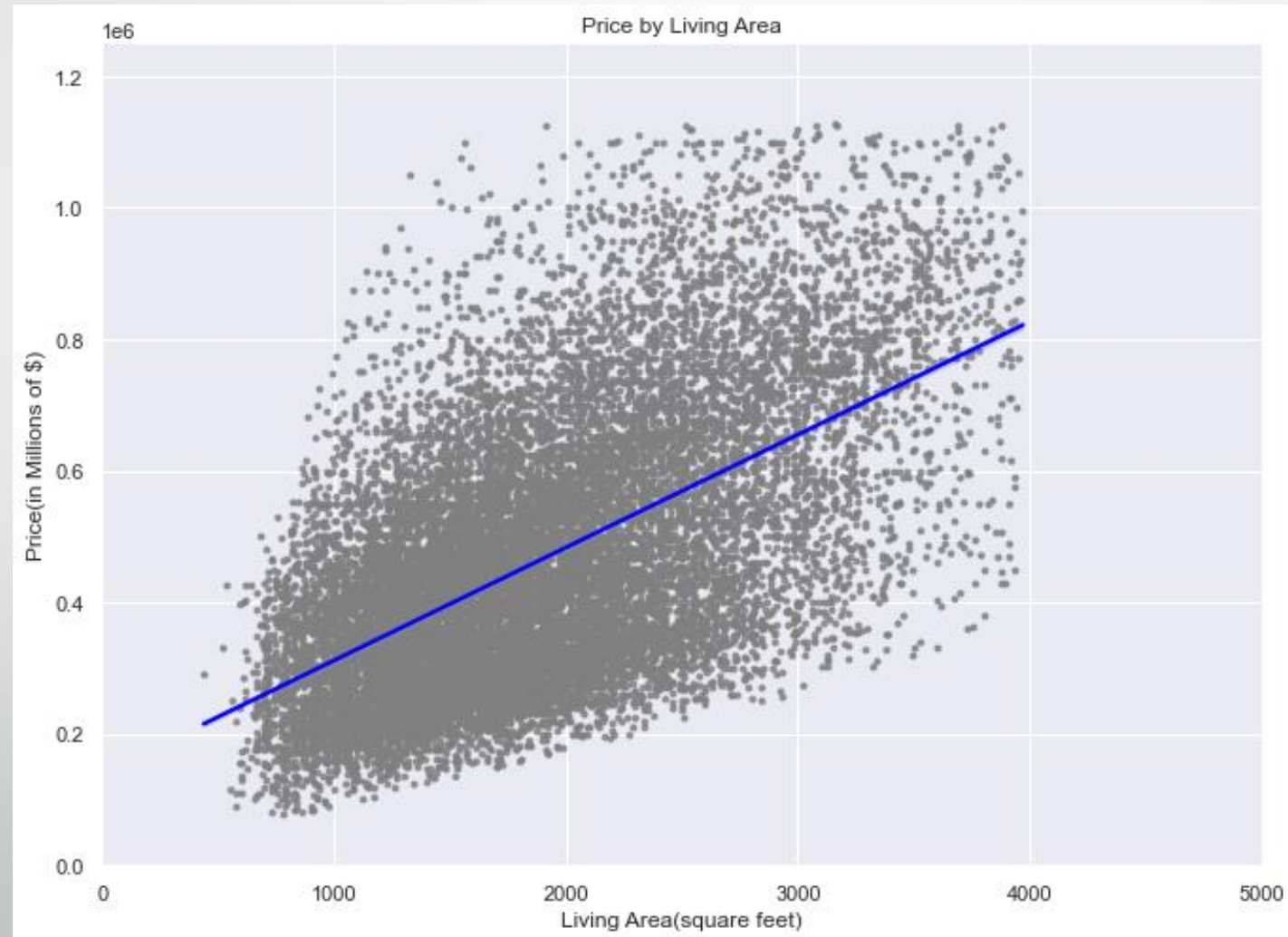
Margin of Error

29.4%



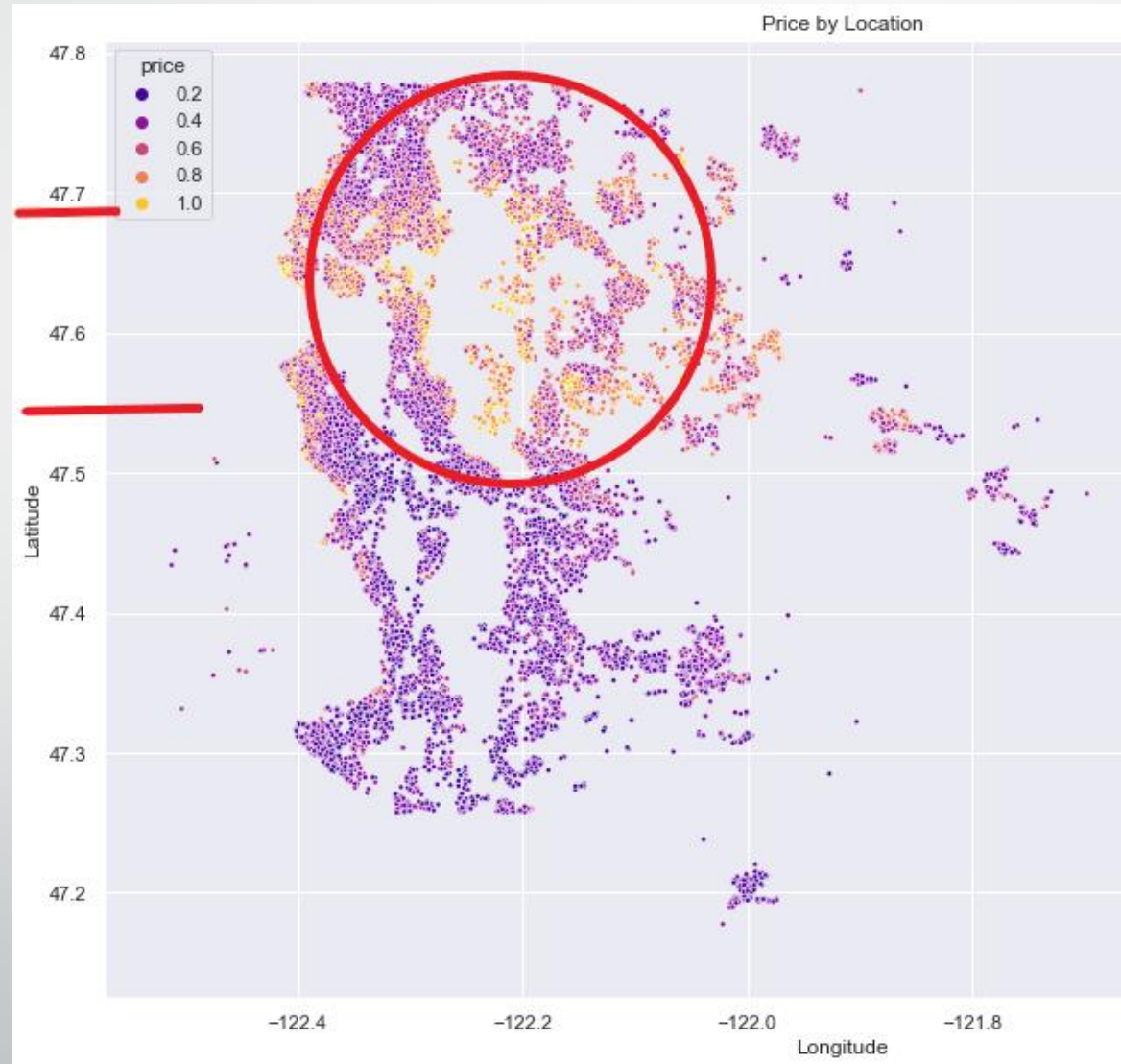
Results

Price increases with increased living area (sqft).



Results

Location: Most expensive homes are here.



Results

House Quality(grade):



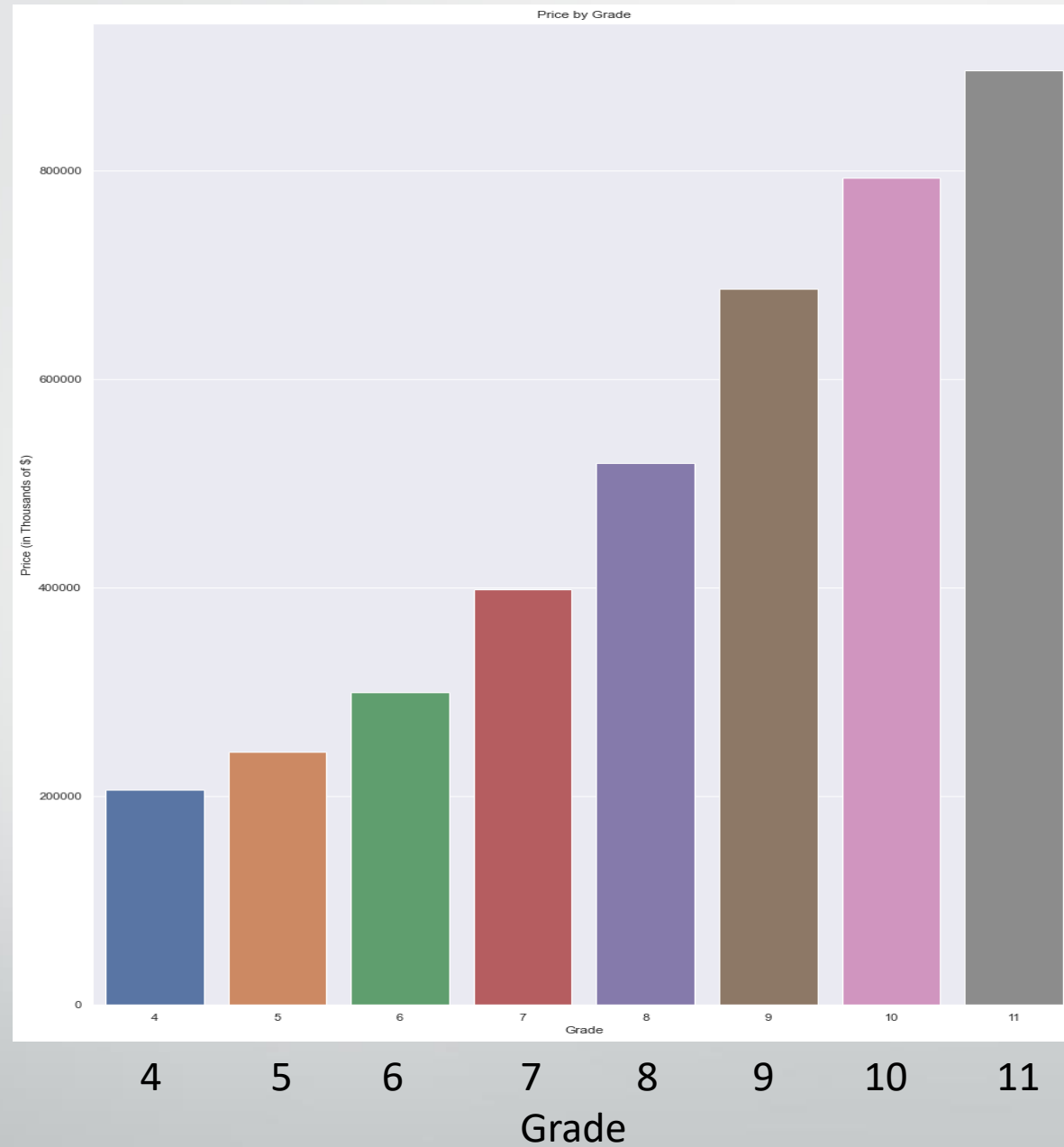
Price in \$Thousands USD

\$800,000

\$600,000

\$400,000

\$200,000



Conclusion

Descriptive analysis and modeling reveal which factors contribute most to housing prices:

- Increase Living Area(in square feet)
- Flexible price point buy homes
- Upgrade the quality of your home



Future Research

- Outdated Data
- More from location data, incorporating zipcode
- Streamlining, better model
- New modeling techniques e.g. Polynomial Regression and Weighted Least Squares



Thank you!

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