King County Housing

Data Analysis and Model

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

- Living Area(in square feet)
- Location
- Waterfront Property
- House Quality(grade)

OUTLINE

- Business Problem
- Data and Methods
- Results
- Conclusions



BUSINESS PROBLEM

- Microsoft would like to to help new hires find housing.
- Create model to predict house prices
- Identify factors which most affect housing price

DATA & METHODS

Data

- King County housing sales data in 2014 and 2015
- Median household incomes by Zipcode

Methods

Linear Regression

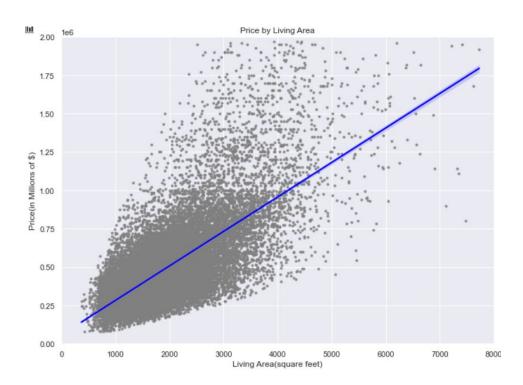
Prediction Accuracy

- On average, our predictions were off from the real price by +/- \$81,500
- The average home price in the area is \$518,500

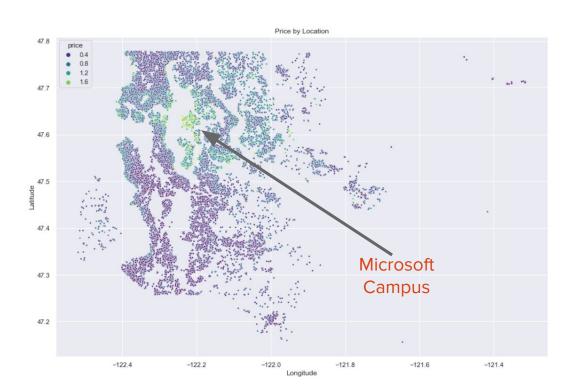
Margin of Error

15.7%

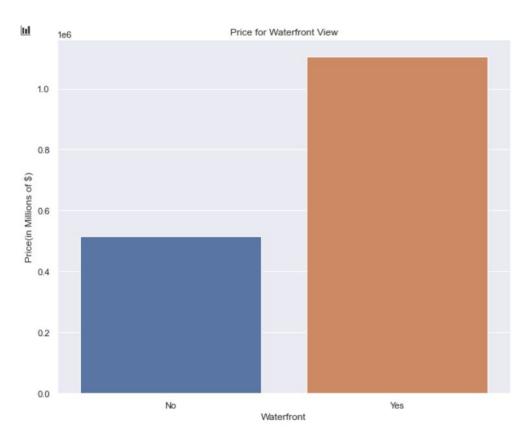
 Price increases proportionally with living area.



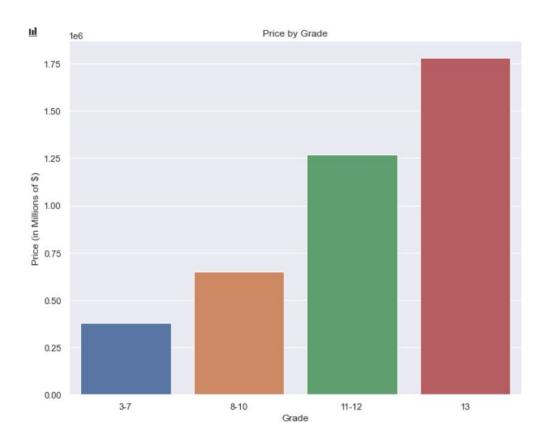
- Most expensive houses are in the same general area.
- Proximity to Microsoft campus plays a big factor



 Having a waterfront view has a substantial increase in price.



- Quality of the house(grade) has a significant impact on price.
- This is most apparent in the grades 11 and higher



CONCLUSION

FACTORS AFFECTING HOUSE PRICE

- Living Area(in square feet)
- Location(proximity to Microsoft Campus)
- Waterfront View
- House Quality(grade)

NEXT STEPS

- Find more recent data
- Better system for quantifying effect of location
- Use models more robust than Linear Regression

Thank You

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