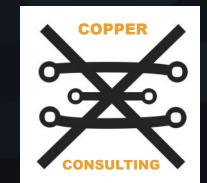
# KING COUNTY HOUSING PRICE ANALYSIS

COPPER CONSULTING

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BUSINESS PROBLEM Provide modeling by using single family house features for King County

Predict sales price using Linear Regression Modeling

### KEY TAKEAWAYS

- Bigger is better!
- ... but more isn't necessarily better!
- Location! Location!
- Grades count!



#### DATA CHARACTERISTICS

- > 21,500 sales records from Kings County
- 2014 & 2015 house sales
- 20 separate property features recorded for each sale
  Additional features engineered by Copper
  Consulting
- Additional location data from <u>King County GIS Open</u> <u>Data</u>

Police stations

Medical centers

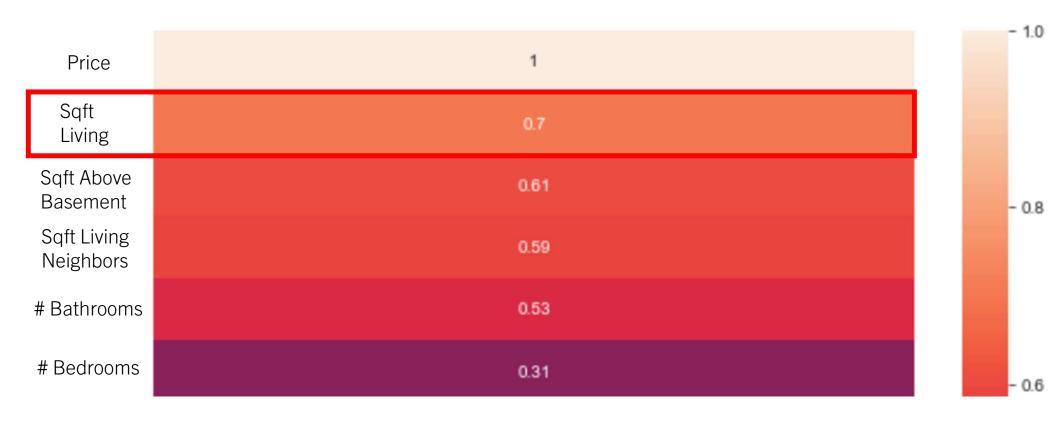
Schools

**Farmers Markets** 

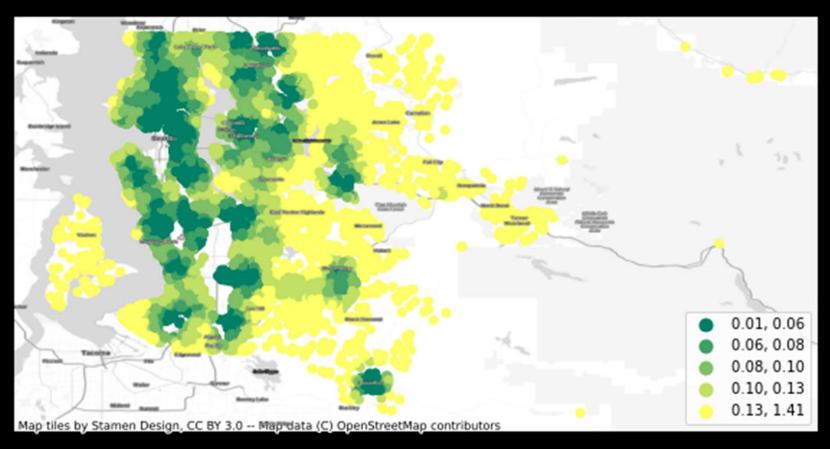


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• Examined correlation between price and other features



### DATA ANALYSIS - GEODATA FEATURES

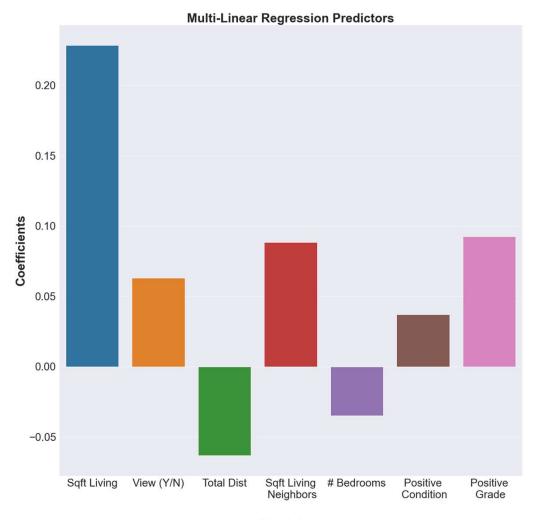


## DATA ANALYSIS — FEATURE ENGINEERING

- View Data
- Grade & Condition
- Bedrooms



### RESULTS



**Predictors** 

#### RESULTS

Model explains 52% of the variance in sales prices for homes in King County

Square footage : 23% increase in sales price

Square footage of 15 closest neighbors: 9% increase in sales price

High Grade: 9% increase in sales price

## NEXT STEPS & IMPROVEMENTS

- Add location data
- Further feature engineering with Condition and Grade
- Leverage zip code data
- Examine properties with multiple sales records







https://github.com/Shoemaker703/home\_sales\_analysis\_project