# Predicting Home Sale Prices King County, WA

Jonah Flateman 4/5/21

### Goals

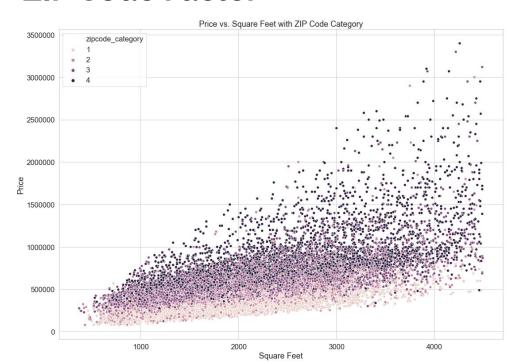
- Which factors contribute to sale price?
- What are some of the most common traits of these contributing factors?
- How does our model maximize use of the data provided in its predictions?

# **Interior Square Footage**



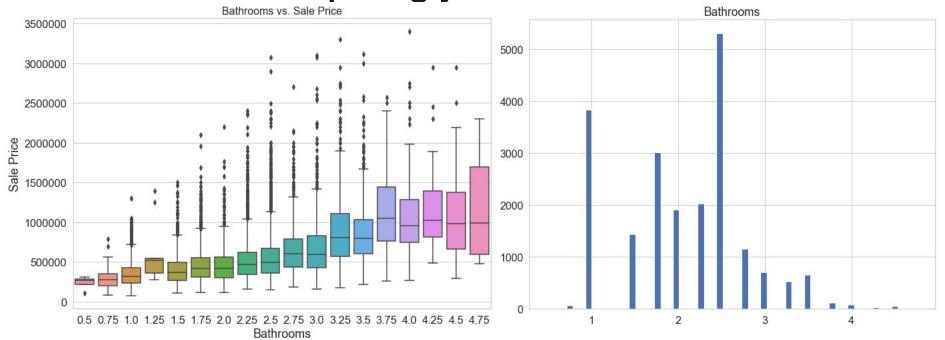
- Interior vs. Lot Footage
- Correlation to Price
  - Reliance of model

## **ZIP Code Factor**

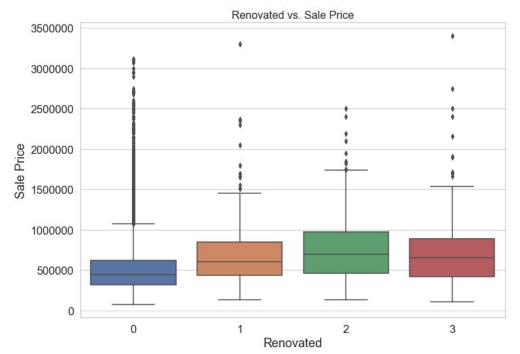


- Mean sale price per ZIP Code, separated into four quantiles
- Too much reliance on square footage?
- Highest mean sale prices in ZIP Code 98199

**Bathrooms - Surprisingly Predictable** 



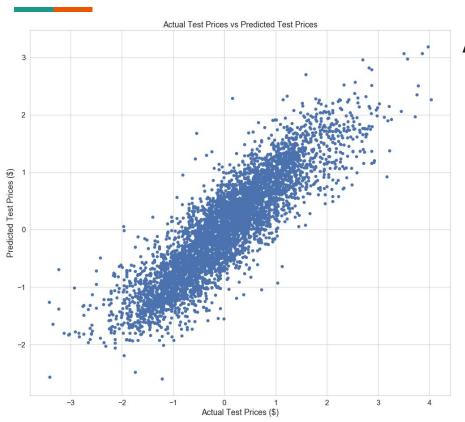
# **Renovation - Separated by Group**



0 indicates homes renovated pre-1985 or never renovated 1 - 3 indicates each subsequent decade after 1985 When it comes to renovation: **not when, but if** 

## **Feature Selection and Modeling**

- Using stepwise selection to filter our data and select only the most accurate predictors
- Scaling data so that our predictors are "working together"
- Multiple run-throughs of our model
- Testing using real data



#### **Actual vs. Predicted Prices**

- Scaled results
- Linear relationship

#### **Future Work**

- Analysis of areas by ZIP Code Landmarks, Developments
- Date of Sale Trends over 5, 10, 20 years
- Interior Living Space Size of living Room, bedroom, bathroom and effects on sale price

## **Thank You**

jonahflateman@gmail.com