



King County Housing Prices

Linear Regression Analysis
Savannah McAmis



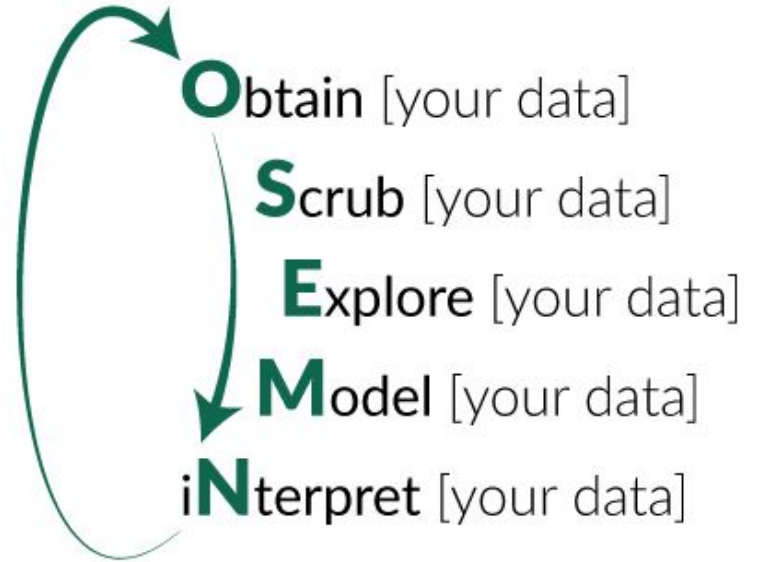
Objectives

- Use exploratory data analysis to gain insight into the KC housing market
- Determine the features of a home that best predict the sale price
- Build a model to predict home prices with the optimal predictors

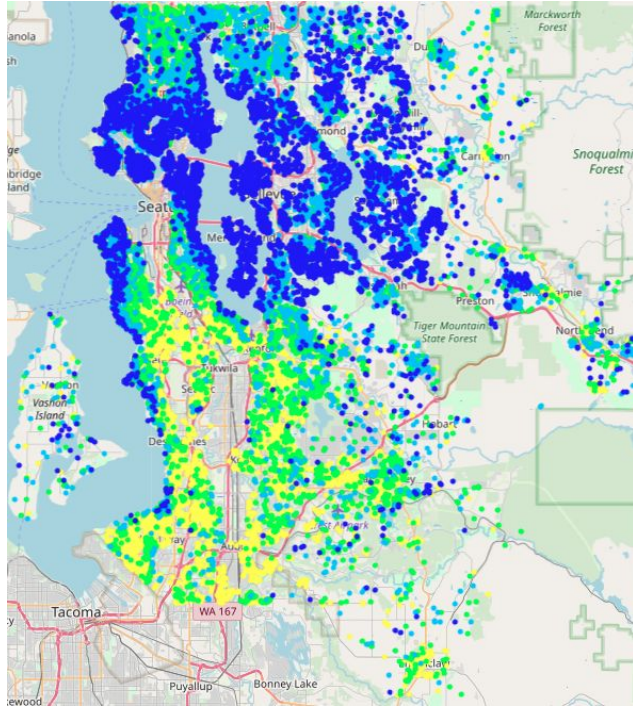


Methodology

- Obtain and clean the data
- Explore the data through visualizations
- Build and test the regression model
- Analyze the results



Location, location, location

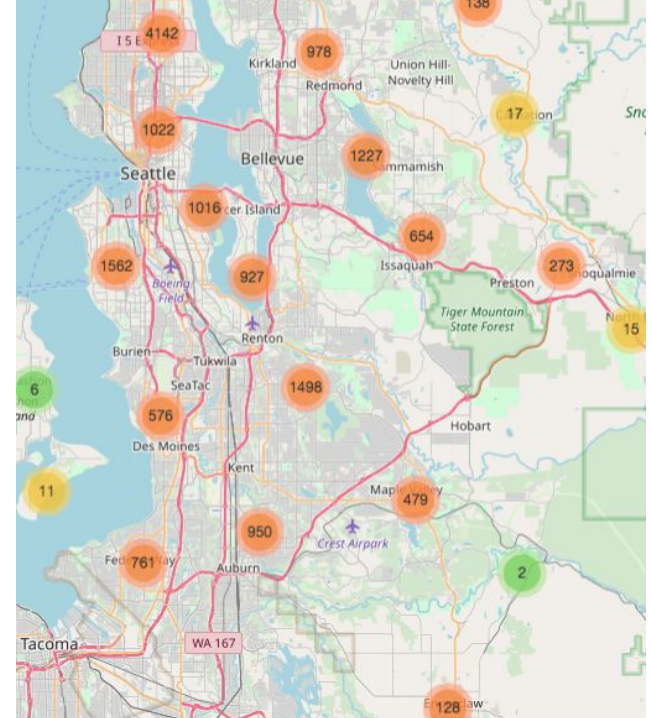


Left map

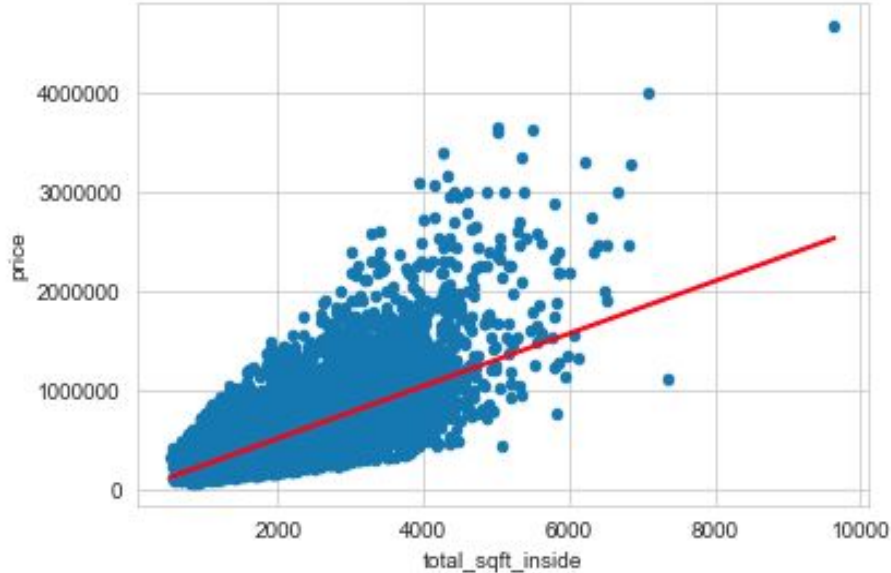
- Price distribution by location
- Blue = most expensive quartile
- Yellow = least expensive quartile

Right map

- Geographic distribution of house sales



Effect of house size on price

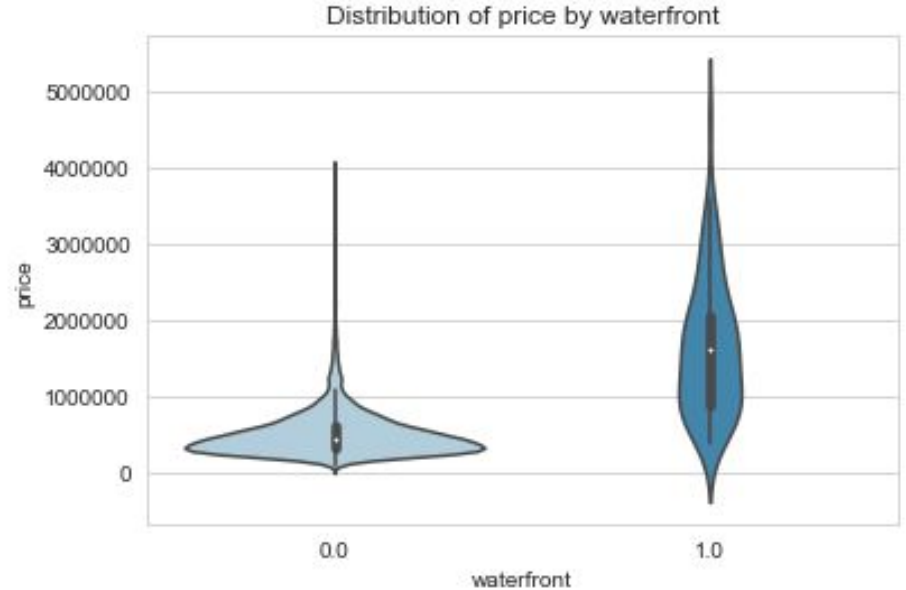


- Overall positive relationship
- Size of home affects price more than size of lot
- The larger the home, the harder it is to predict price with linear regression

Results of Modeling

Best predictors of price

- Total square footage of the home
- Location (especially waterfront)
- Age of home



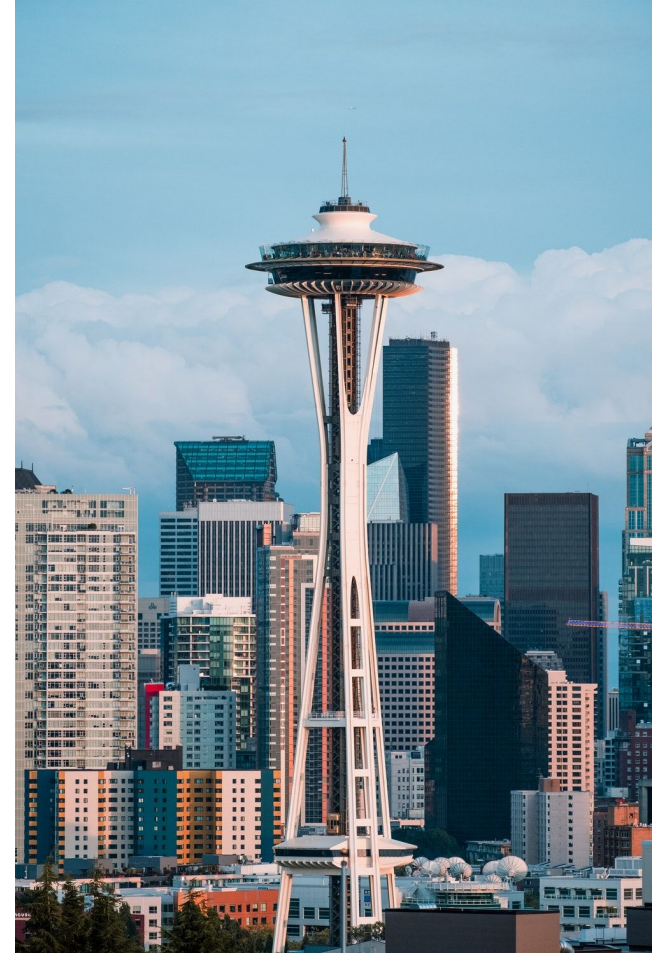
Future Investigations

- Analyze location by zip code
- Incorporate grade or condition of home
- Use feature selection methods

Image sources:

https://www.racialequityalliance.org/wp-content/uploads/2016/10/assessors_social-1.jpg

<https://images.unsplash.com/photo-1542223616-9de9adb5e3e8?ixlib=rb-1.2.1&ixid=eyJhcnBfaWQiOiE5MDd9&w=1000&q=80>



Thank you

Are there any questions?
