Predicting Home Prices in King County Washington
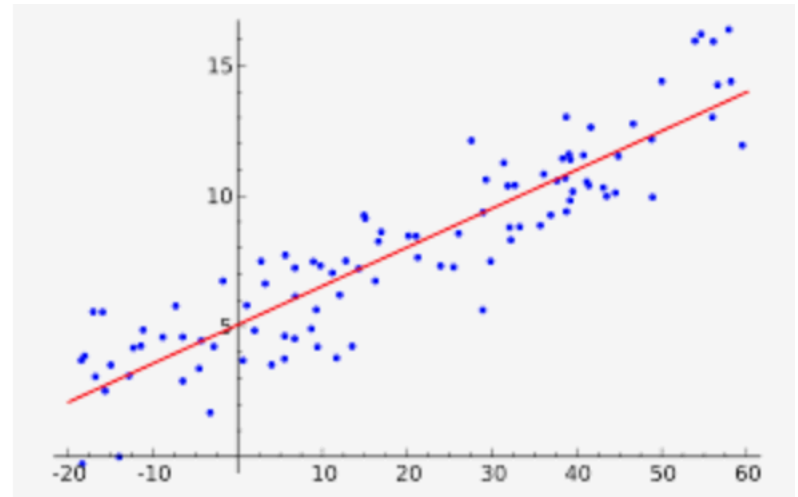
Presented by Steve Newman

Overview

- Over 21,000 homes
- Average Price = $540,000
- Average Size = 2,080 sqft
- Hypothesis
  - Location
  - Size
  - Quality

Methodology

1. Understand and Prepare Data
2. Find Patterns and Insight into Data
3. Model the Data using Linear Regression
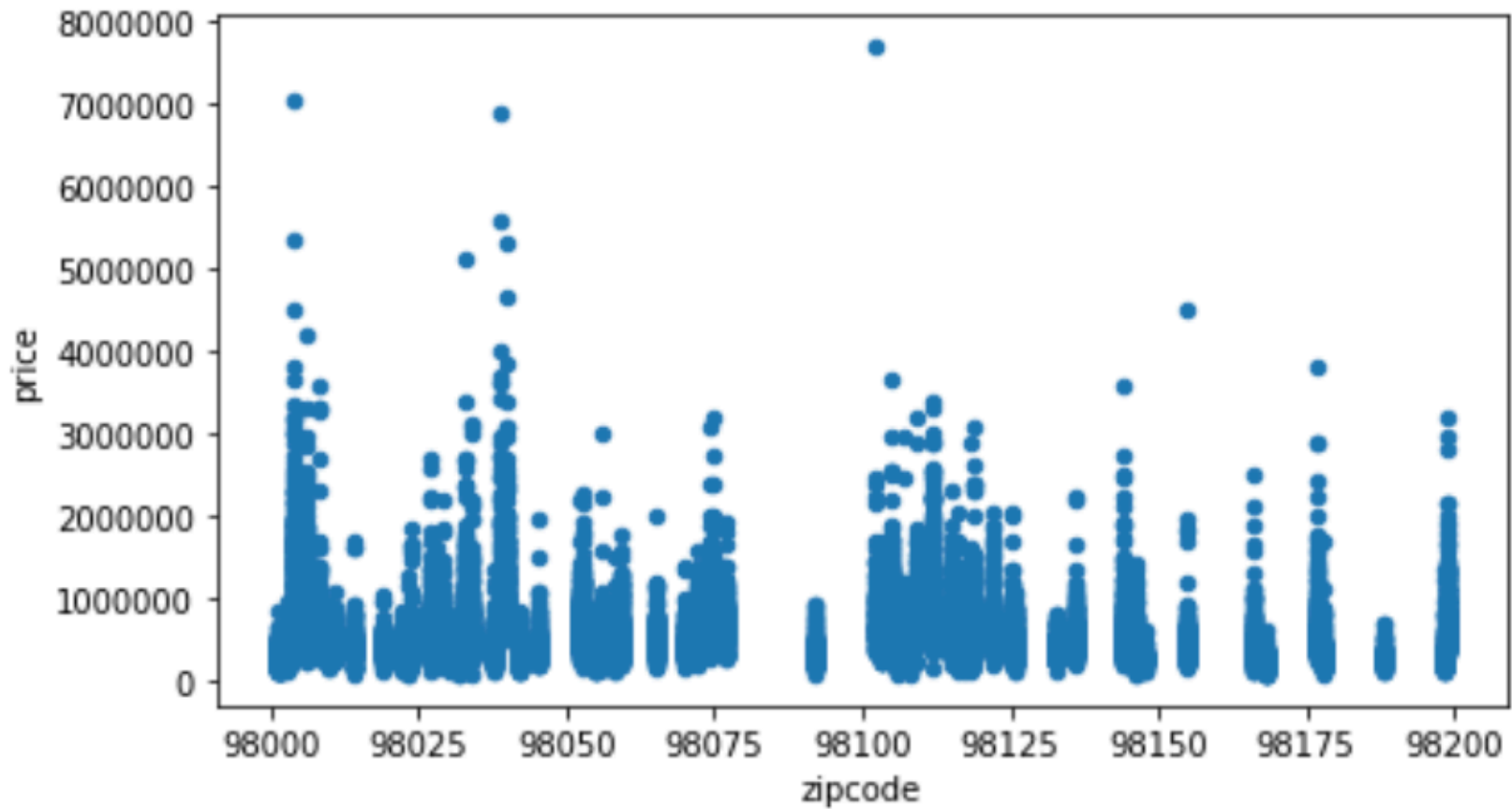4. Interpret Results

Results

- The following results are based on a model with 81.8% confidence.

- The most important variable is location or zipcode.
  - This attribute accounts for up to a 90% increase in value, specifically for homes located close to Seattle.
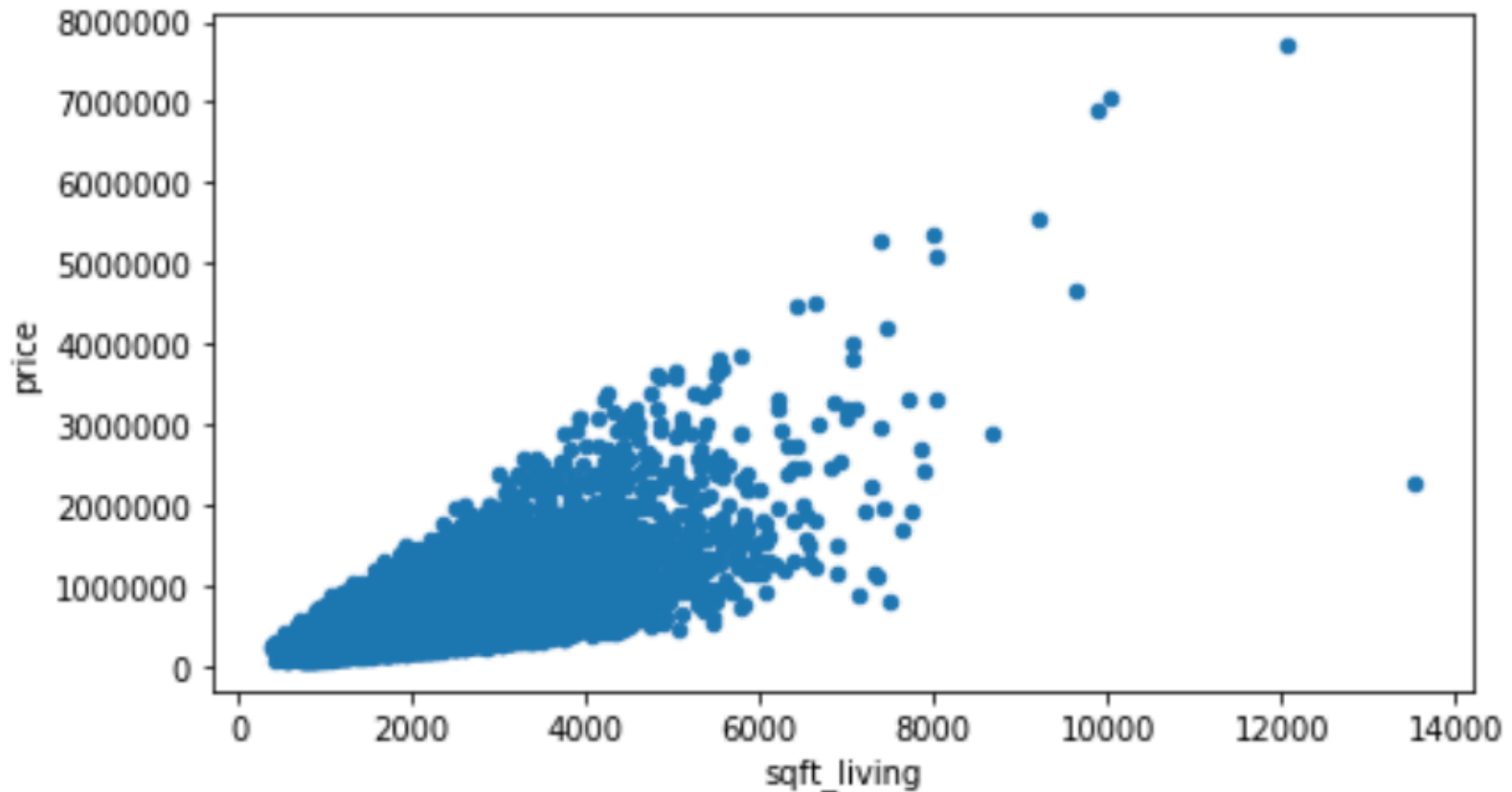
Zip Codes and Home Values

Results Continued

- The second most important feature is sqft. of living space.
  - Increases in living space can account for up to an 80% increase in price.
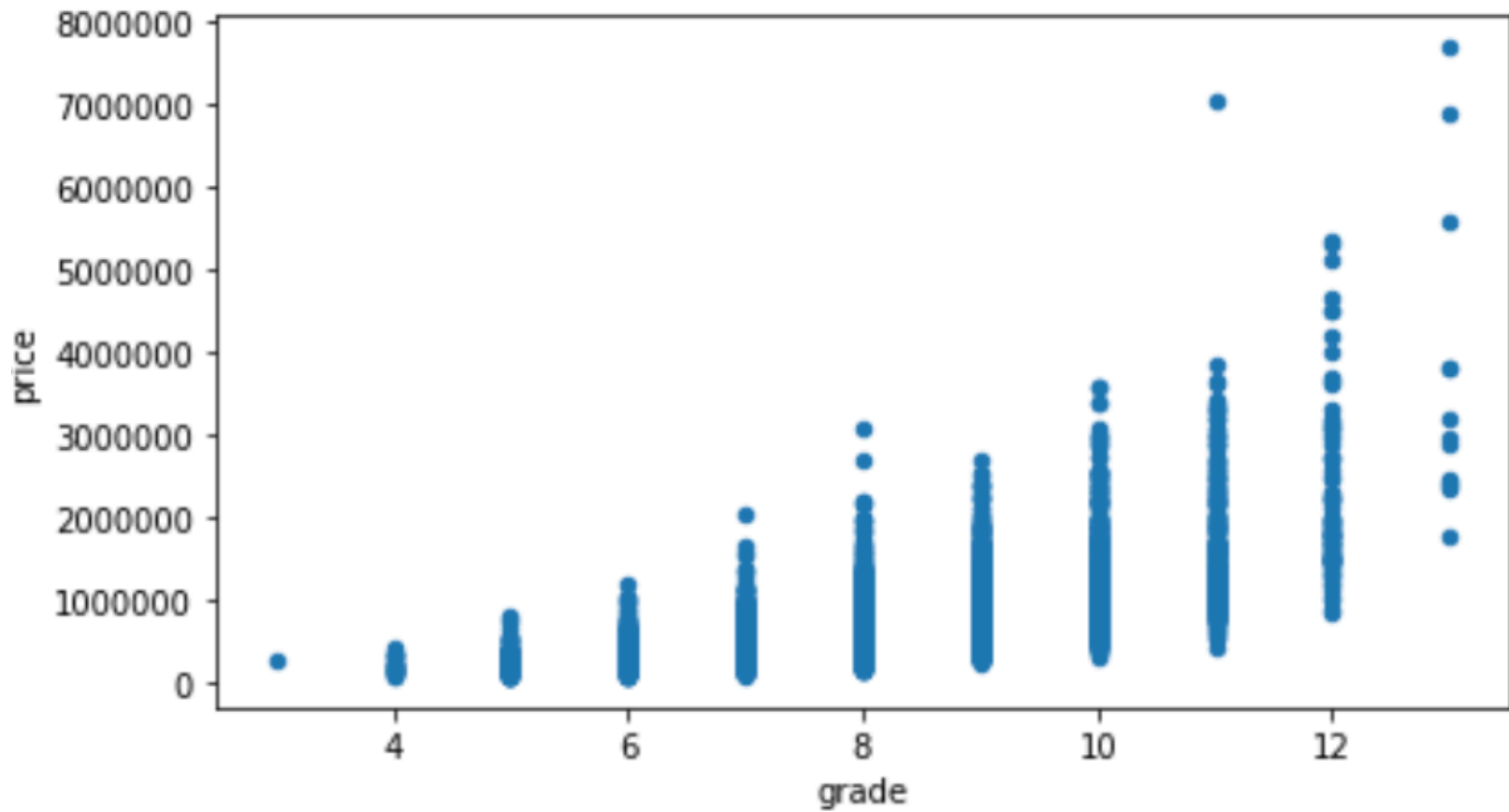
Sqft of Living Space / Price

Results Continued

- The third most important attribute is grade.
  - Grade is defined by types of material used and quality of craftsmanship.
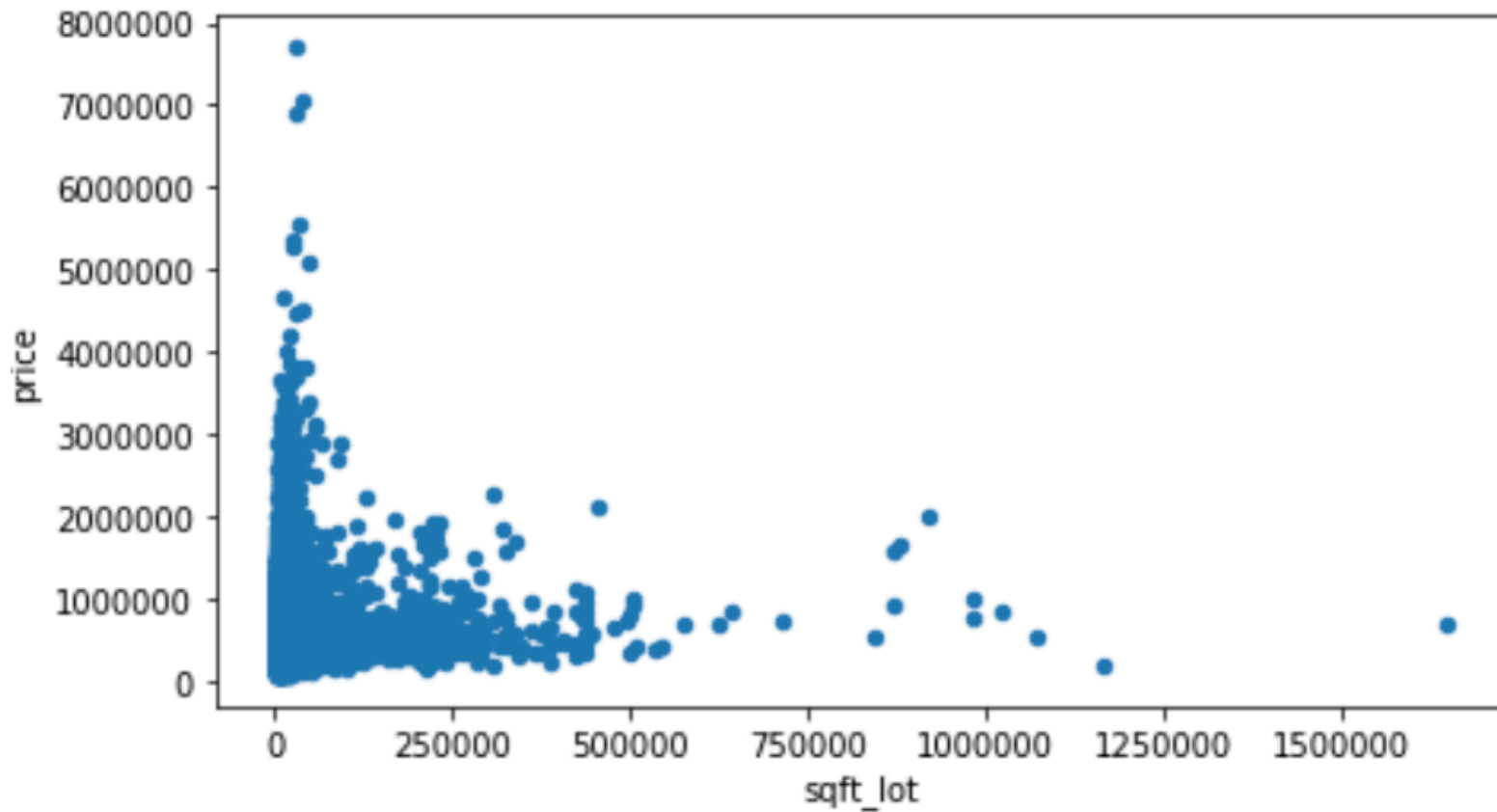
Grade / Price

Results Continued

- The fourth most important attribute is square footage of lot.
  - Expanding the size of you lot by acquiring neighboring properties will increase the value of your home.

Square Feet of Lot / Price

Recommendations

- Understand a home near Seattle is worth more

- Renovate to improve square footage of living space.

- Find contractors that use the highest quality materials and are skilled craftsmen.

- Acquire adjacent property to increase square footage of lot.

Future Work

- See how school district influences home values.

- See how economic cycles influence when and how much people are willing to pay for a home.

Thank You!

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