
King County Housing Sale Price Analysis

Tim Rabbitt





Overview

Kraken Construction is looking to develop real estate in King County, WA. Before they break ground, they would like some insight as to what features to include in a new home construction that positively influence sale price, and to what extent.

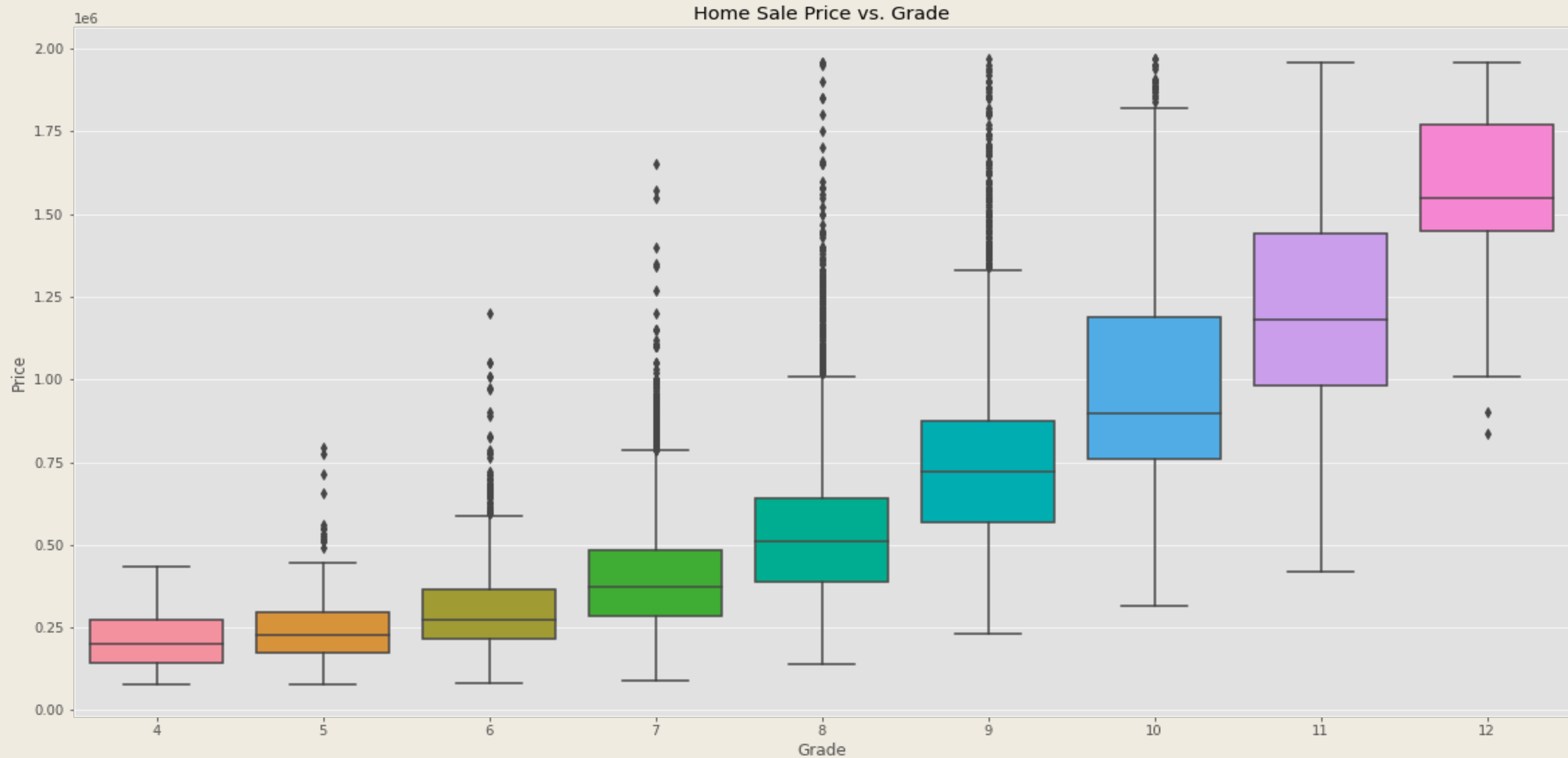
My Job: What features, based on King County home sale prices, should you consider in the construction of a new home?



The Data

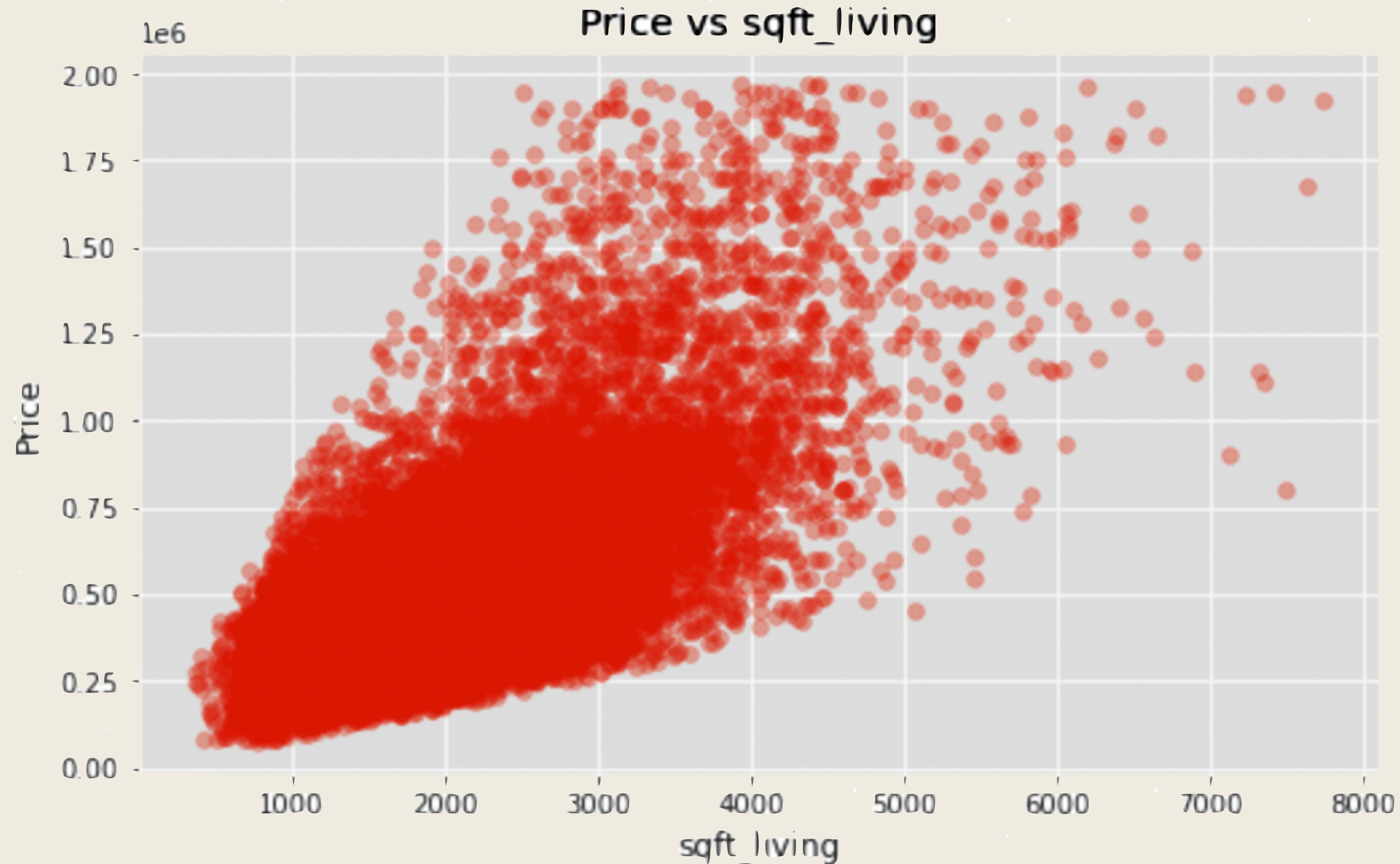
- Home sales information in King County, WA
 - 2014 to 2015
 - 21,597 homes
 - 20 features
-

Feature Exploration



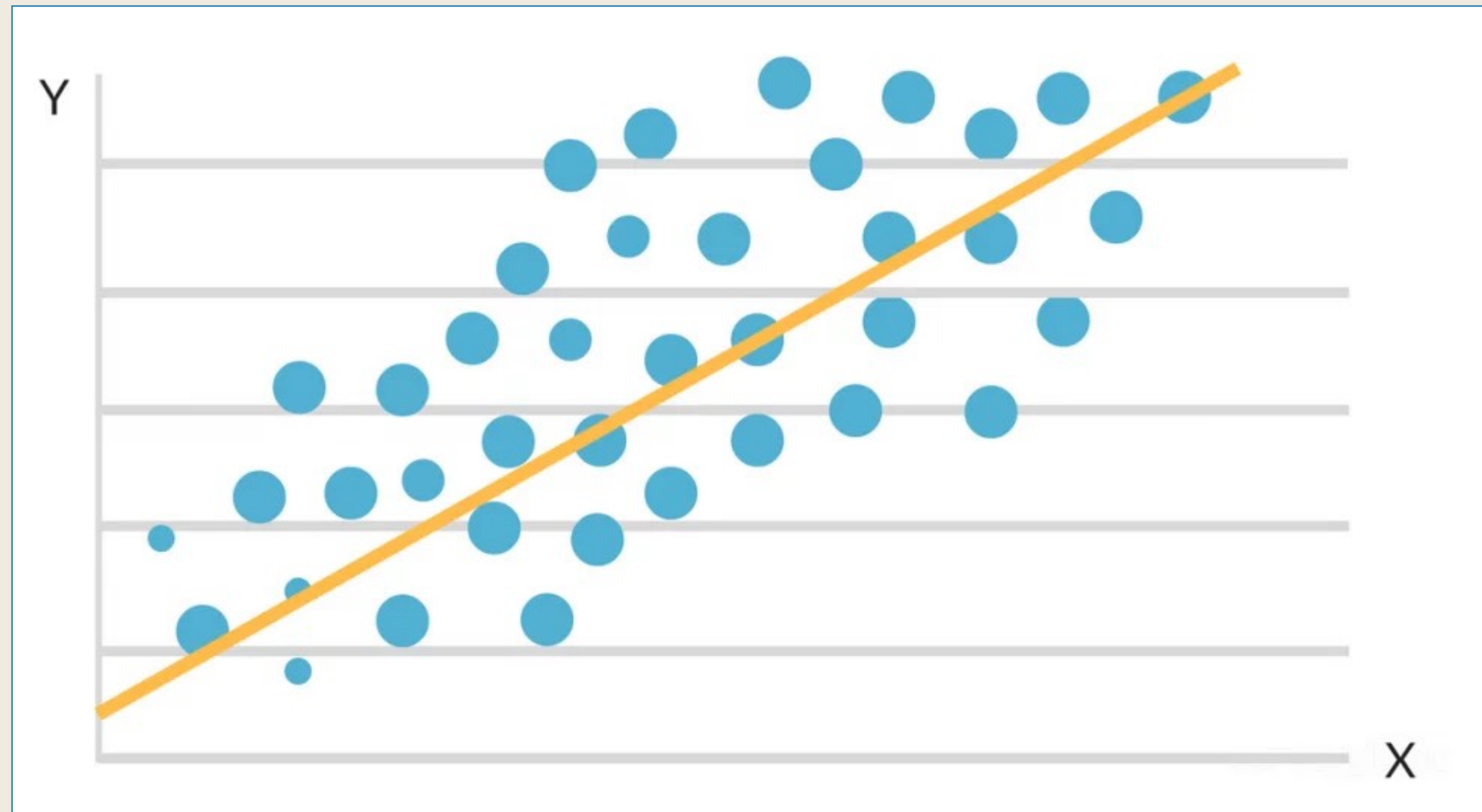
- Building grade and square footage of living space had the strongest positive correlations with home sale price.

Feature Exploration



- Building grade and square footage of living space had the strongest positive correlations with home sale price.

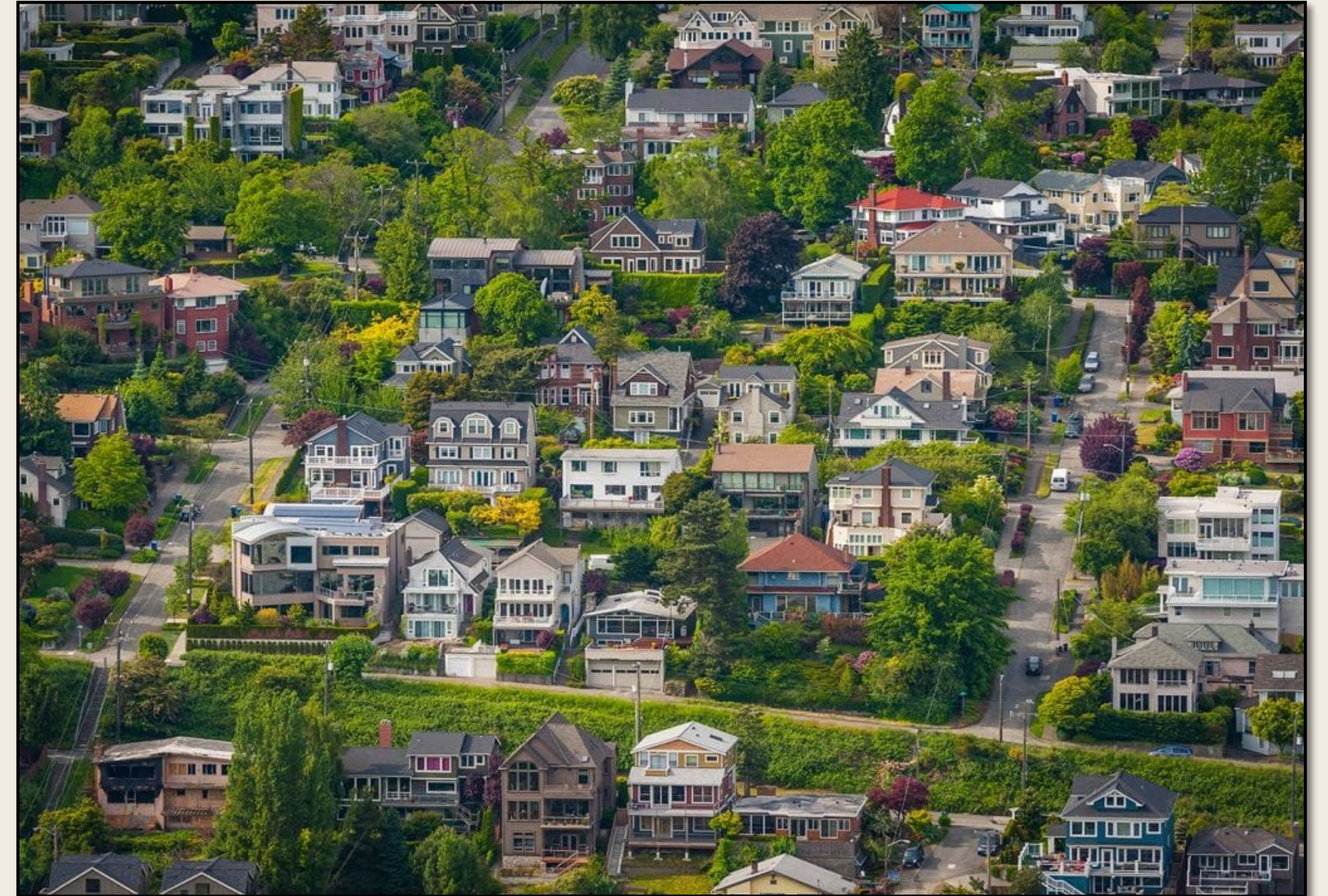
Regression



- Allows you to identify which features matter most, which features can be ignored, and how these features influence each other.
 - Measures the impact independent variables (features) have on a dependent variable (sale price)
 - Widely used practice that helps businesses understand their data and use it to make better decisions
-

Results

- All of our selected features had a statistically significant linear relationship with home sale price.
- Our model accurately explains 57.4% of the variation in sale price.
- Some observations:
 - With each additional bedroom added you can increase the home sale price by ~\$11,000.
 - With each additional floor added you can increase the home sale price by ~\$32,000
- **My recommendations are....**



1. Find an area to develop that has at least what is considered a 'fair' view. Homes built on these lots see an increase in home sale price of:

~126K

2. Homes with a waterfront see the biggest increase in home sale price compared to most other features. Building a house on a waterfront sees an increase in sale price of:

~268K

3. Do not cut costs on building materials, building grade is highly correlated to sale price. Most houses are built with an “average” grade, to increase sale price begin building with a grade of:

9-“Better”

Limitations and Future Analysis

- Our model accurately explains only 57.4 percent of the variation in sale price, conclusions should be approached with caution.
 - One assumption for linear regression was not fulfilled in the modeling process.
 - Future analysis and modeling might want to consider a couple of items:
 1. Find more recent home sales data to get a more accurate picture of today's market. Finding home sale information before 2014 would also help to create a more in-depth analysis.
 2. Include additional features in future models.
-

Thank You

