



# King County Housing Prices For First-Time Home Buyers

Leana Critchell, Luluva Lakdawala, Amanda Potter

# Today's Goal

**Provide insights that may help  
buyers make informed decisions  
about purchasing their home**



# Method

- Data: Utilised data from King County Department of Assessments
- Process: Used statistics to help drive insights
- Result: Discover features that drive Sales Prices



# Definitions



## Properties in this Analysis:

- Residential Single Family Homes
- Excludes condos

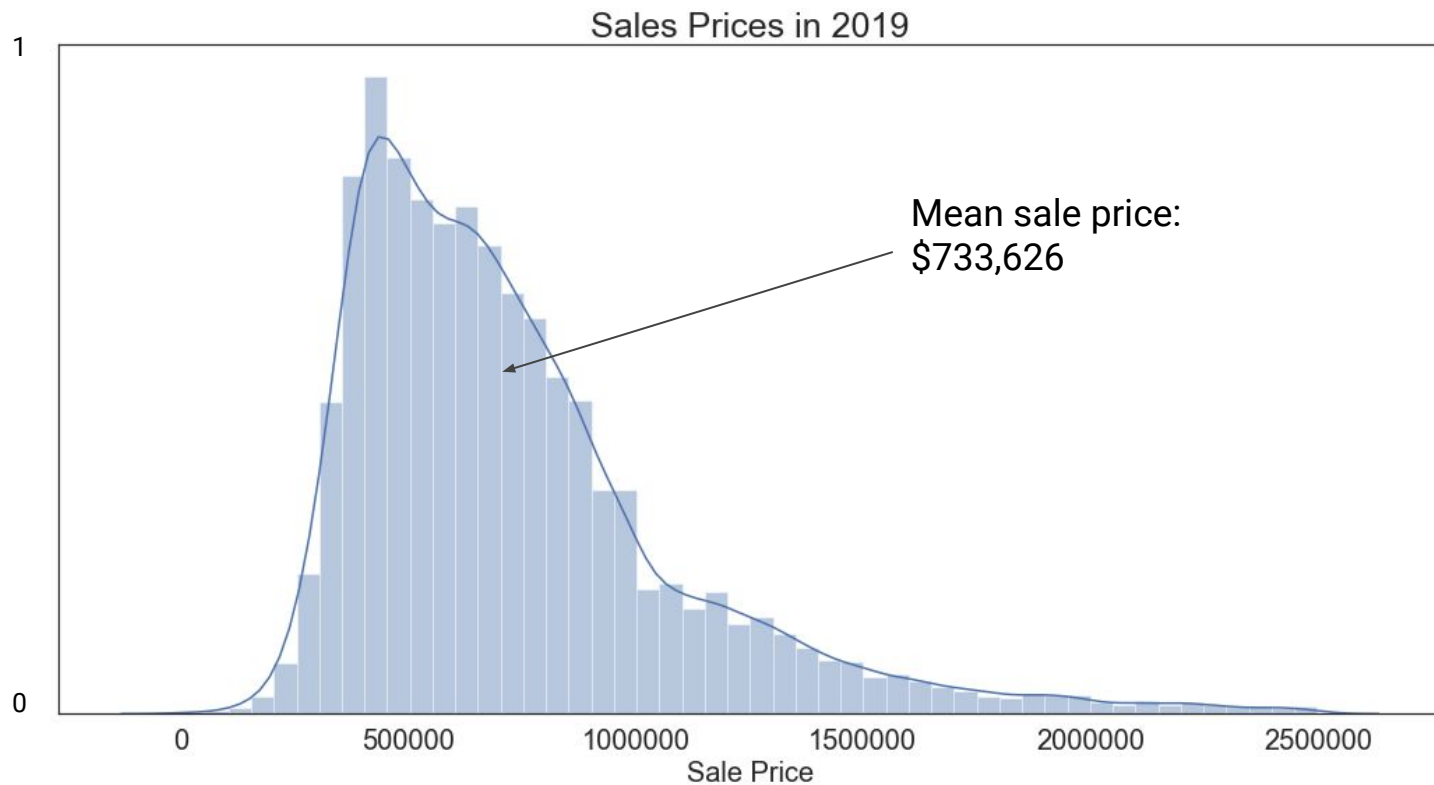
## Geographic Area:

- King County Washington

## Date Range of Sales:

- January 1, 2019 - December 31, 2019

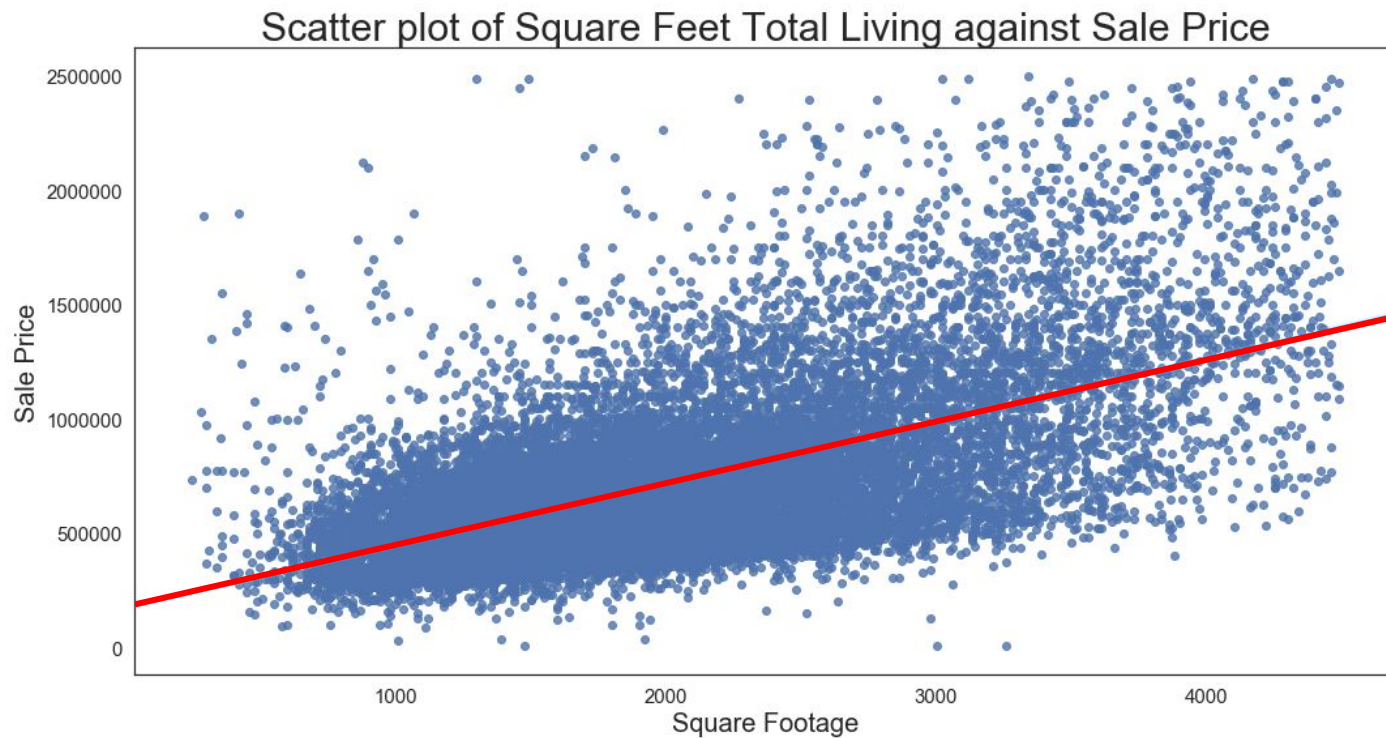
# Sales Prices in King County



Filtered out houses  
unusually far away  
from mean

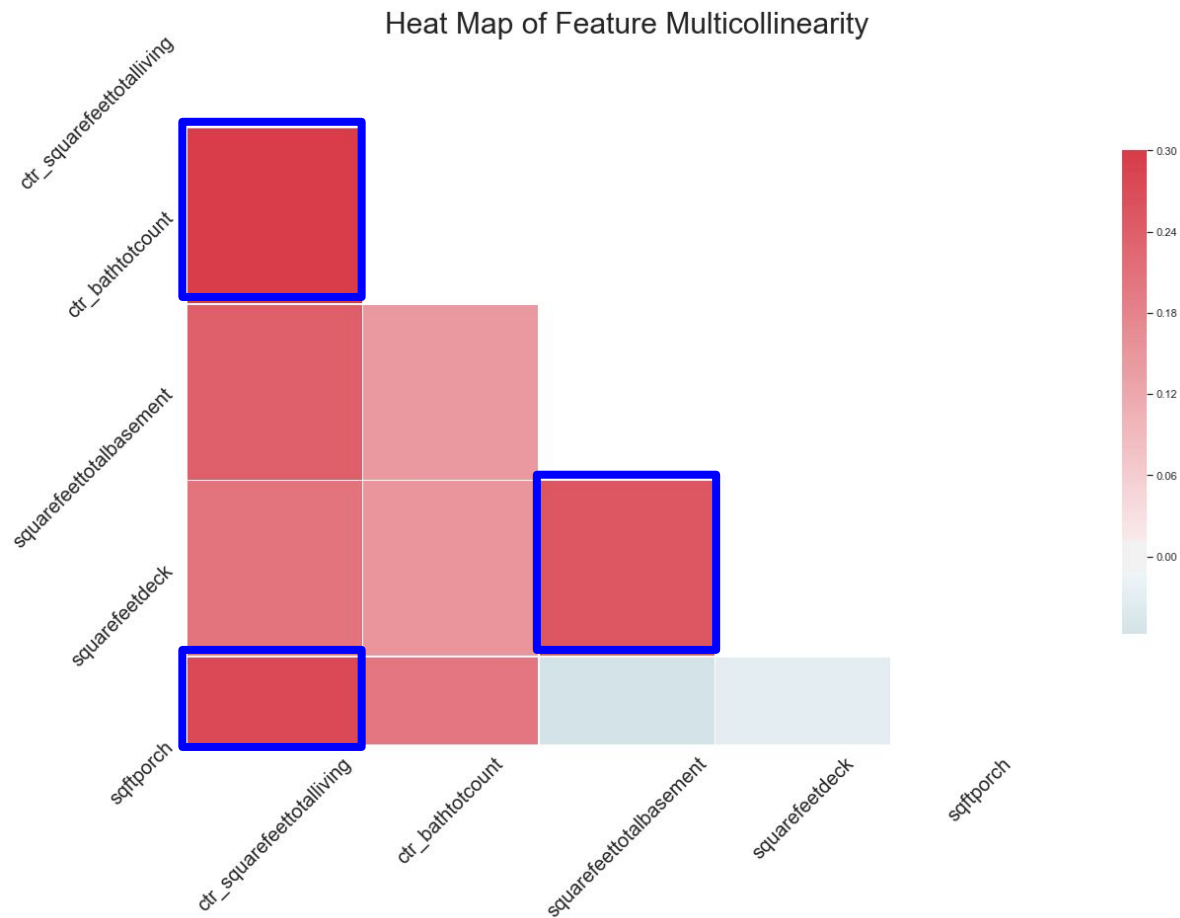
# Findings

# Linear Relationship



# Adding Features

Why is this relationship important for home prices?





# Sale Price Model

## Our model of sale price considered:

- Total square footage of living space
- Number of bathrooms
- Basement size
- Deck size and porch size

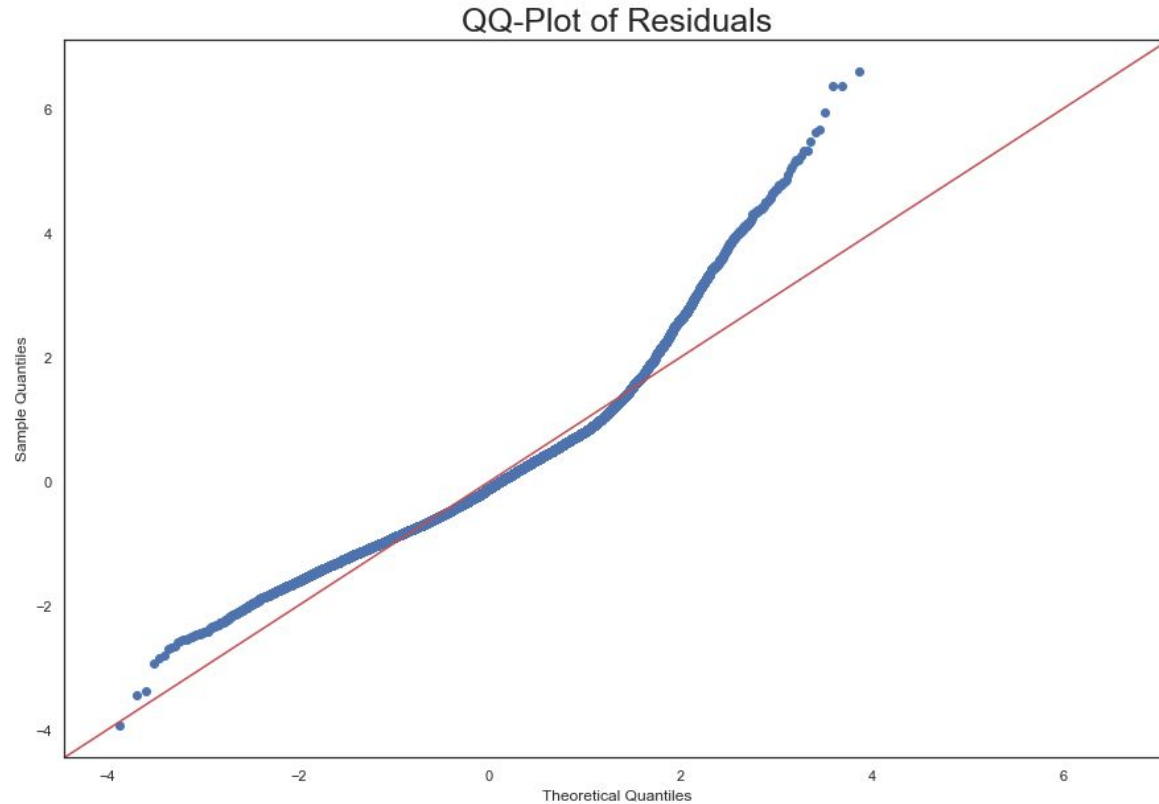
**R-squared:** 0.372

The r-squared value indicates a moderate correlation between the combined features and sale price



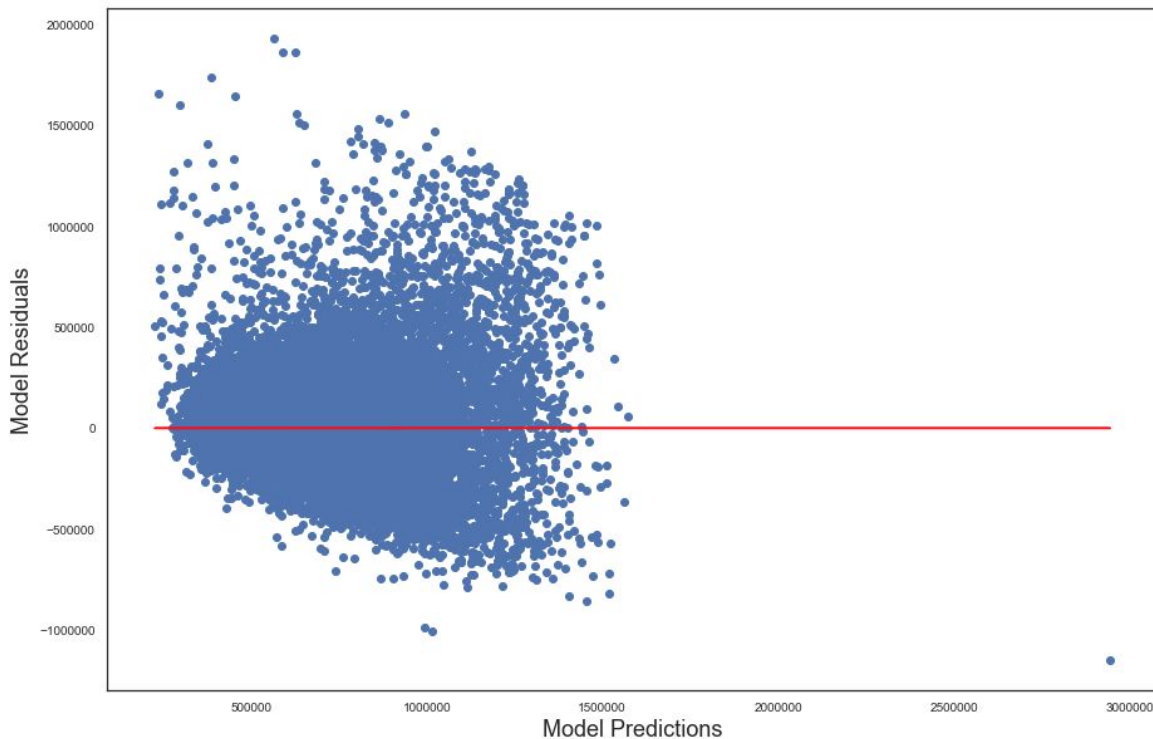
# Assumptions Check


# Assumptions Check - Normality:



# Assumptions Check - Homoscedasticity:

Scatter Plot of Model Predictions vs. Residuals





# Recommendations / Further Questions

# Recommendations

Think about buying smaller and adding extension later

Consider homes without decks/porches and add later to increase value

Bathrooms are expensive - look for homes that already have the number of baths you desire even at the expense of square footage



## Additional Questions to be Explored

Is there a large difference in pricing when looking at condominiums?

What are the drivers of price in the upper bounds of the market?

How to deal with categorical variables more appropriately  
(zip codes, building grades, etc.)

# Contact

Leana Critchell

[leana.critchell@hotmail.com](mailto:leana.critchell@hotmail.com)

Luluva Lakdawala

[luluva.lakdawala@gmail.com](mailto:luluva.lakdawala@gmail.com)

Amanda Potter

[amandaspotter@gmail.com](mailto:amandaspotter@gmail.com)