
King County Housing Price Analysis

— Presented by: Helen Pham —

Objectives

- ★ Audience: real estate agents, home buyers, and home sellers to understand features that can affect sale prices of houses under \$1M
 - ★ Develop a model to predict the sale prices of houses in King County (Washington) as accurately as possible
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About Dataset

- ★ 21000 entries
- ★ 21 columns about properties
- ★ King County, Washington

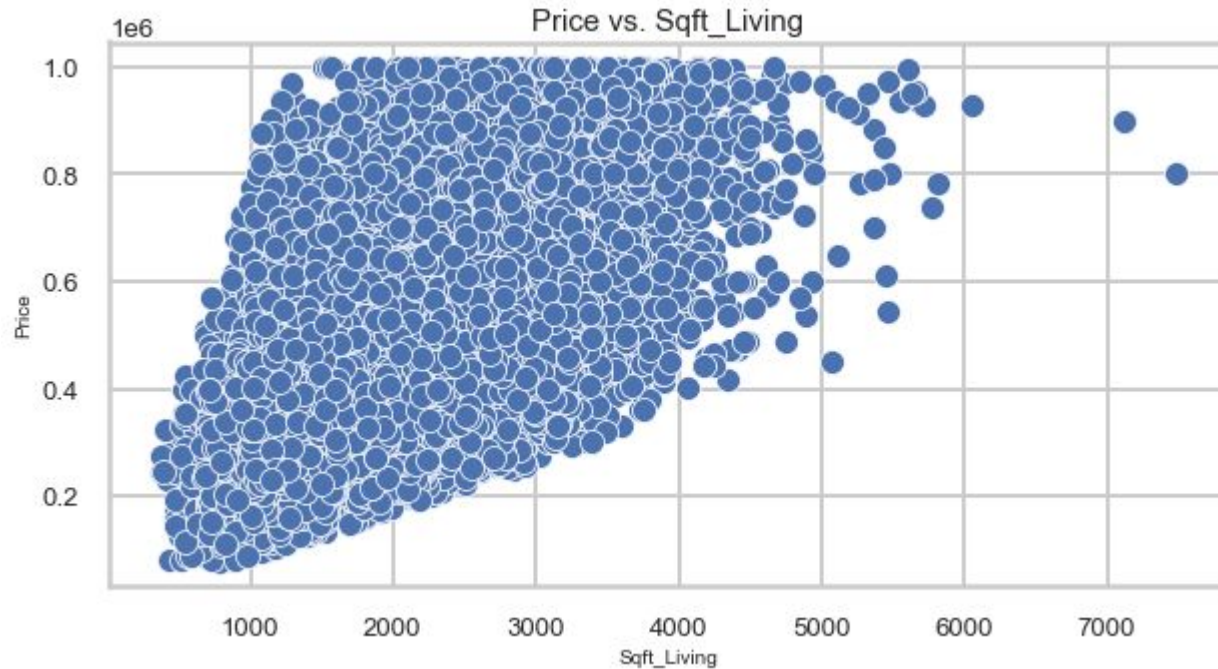
Scrub & Explore

- ★ Fix missing values
- ★ Eliminate outliers
- ★ Change data types
- ★ Find multicollinearity
- ★ Left with ~20,000 entries

Important Features

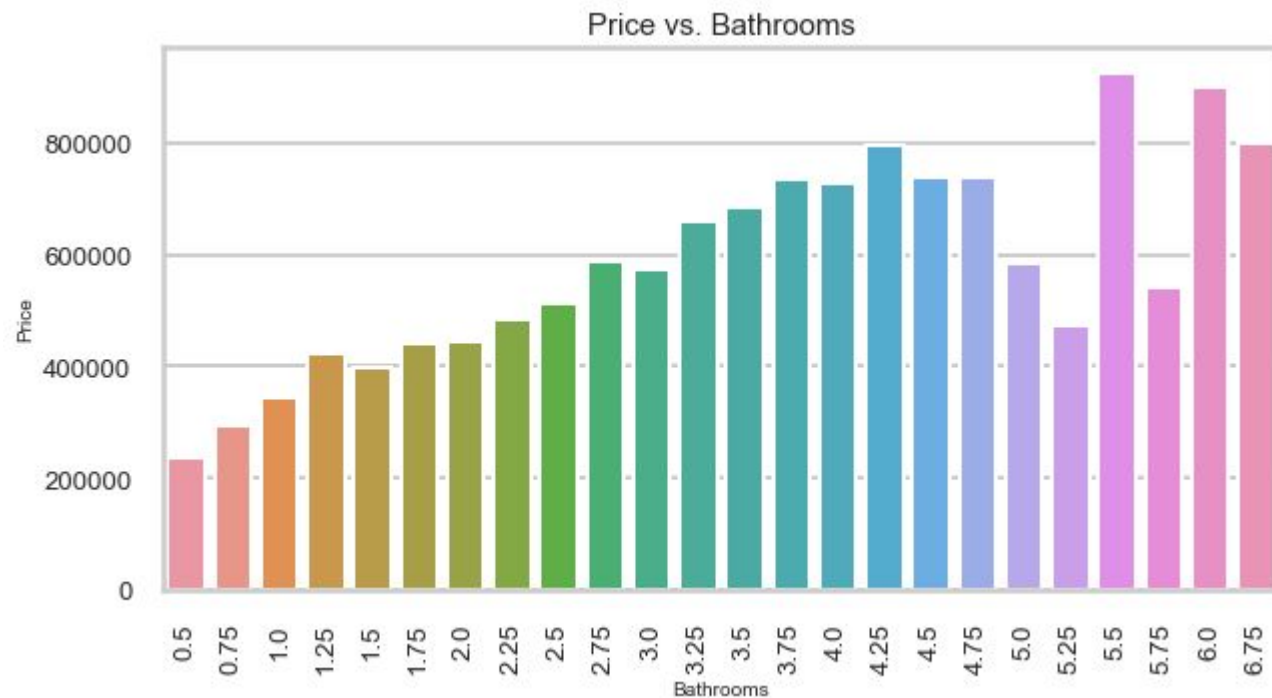
- ★ Living area (sqft)
 - ★ Lot area (sqft)
 - ★ Number of floors
 - ★ Number of bathrooms
 - ★ Location (longitude & latitude)
 - ★ Renovation
 - ★ View
 - ★ Waterfront
 - ★ Selling months
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Living Area



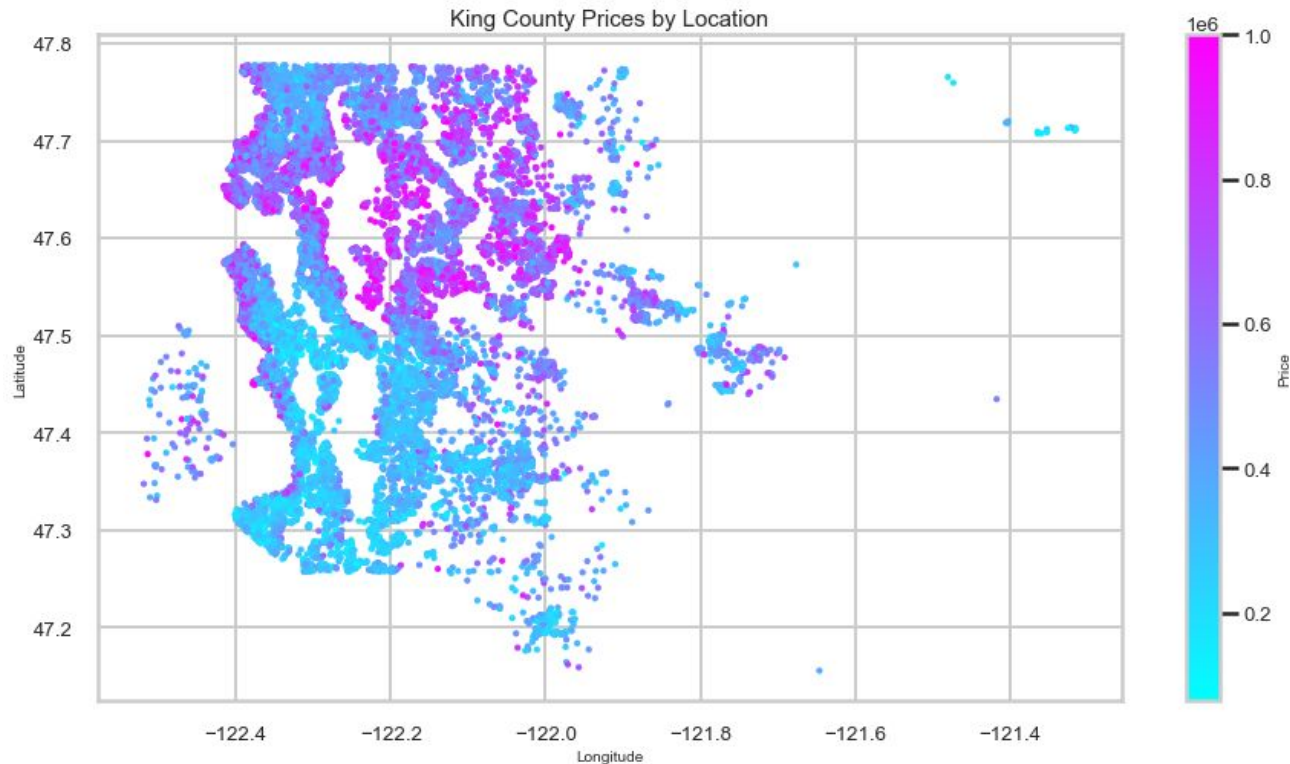
One unit increase in square footage of living space increases the sale price by \$149.10

Bathrooms



One additional bathroom increases the sale price by \$6257.71

Location



Houses that have longitude and latitude coordinates closer to big cities (Seattle or Bellevue) have higher prices

Other Features

- ★ Number of floors/levels:
 - \$13,206.07 increase per level
- ★ Renovation: 8401.14
 - \$8401.14 increase if a property has been built or renovated within the past 10 years
- ★ View:
 - \$108,465.11 increase if a property has been viewed by other people
- ★ Waterfront:
 - \$167,259.81 increase if a property has a view of waterfront
- ★ Selling months:
 - March: \$18,292.34
 - April: \$26,345.48
 - May: \$7,512.91

Recommendations

- ★ To sell houses for higher price - sell during early spring.
- ★ To buy low-priced properties - move further away from big cities like Seattle and Bellevue
- ★ Agents and sellers should let potential buyers view/visit the property as many times as possible. It shows that many potential buyers are interested in the property which leads to _____ higher selling price

Future Work

- ★ Do more research on school district as it could be an important variable in choosing a house
 - ★ More research on the local economic indicators and housing market
 - ★ Build a regression model to predict prices of homes over 1 million for high income families
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THANK YOU

