

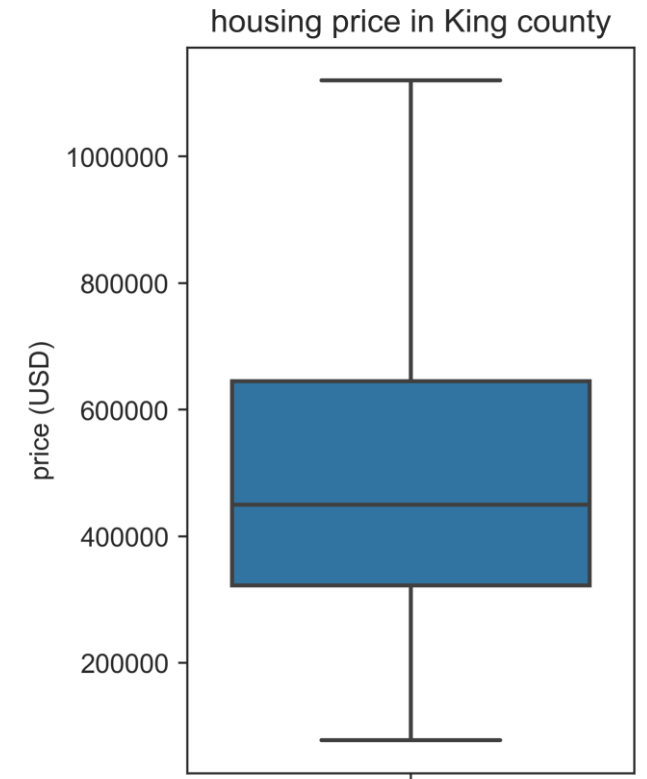
Critical features that affect Housing Prices in King County, WA

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About Data Set

- Dataset collected from May 2014 to May 2015
- 21,597 observations
- This data set contains:
 - Home price (prediction target): house sale prices for King County, Washington
 - 21 features that may influence housing price (predictors)
 - ✓ 10 features are used in the model



Mean: \$540,297

Median: \$450,000

25th perc.: \$322,000

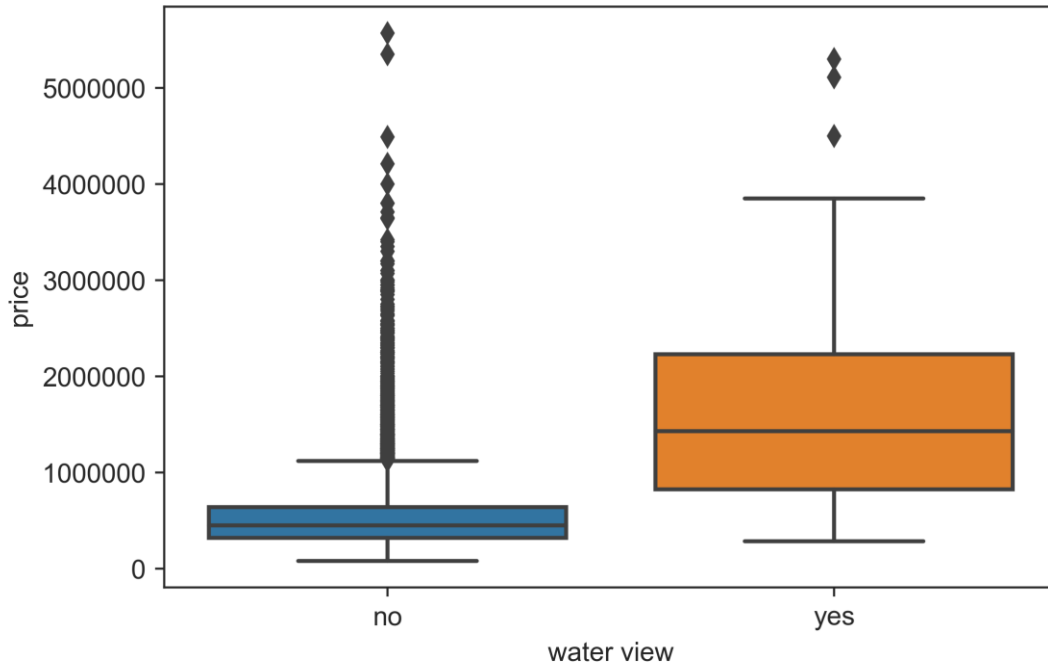
75th perc.: \$645,000

Modeling Results

Multilinear regression:
Trying to find linear relationship between predicting variables and the target variable.

	Variable names	Description	Strongly correlated variables (+, -)
1	water_1 (+)	A view of waterfront	
2	floors (+)	Floors in the home	
3	bathrooms (+)	Number of bathrooms	ssqft_living (+): ft^2 of the home
4	condition (+)	Condition (overall)	
5	sqft_above (+)	ft^2 of the home above basement	sqft_living(+) grade (+) sqft_living15(+) : ft^2 of the home for nearest 15 neighbors
6	zipcode (+)	Zipcode	
7	sqft_basement (+)	ft^2 of the basement	
8	sqft_basement_renov1 (+)	ft^2 of the basement given that the home was renovated	
9	Yr_built (-)	Built year	
10	bedrooms (-)	Number of bedrooms	

Modeling Results- Waterfront view



For median featured home,

- ☐ 3 bedrooms
- ☐ 2.25 bathrooms
- ☐ No basement
- ☐ 1.5 floors

- Without the view: \$380,810
- With the view: \$653,224

➤ 72 % increase (+\$272,414)

➤ Not limited to a specific area (zip code)

Waterfront view	Number of observations
Yes	144
No	21438

Floors and Bathrooms

For median featured home that has :

❑ 3 bedrooms, 2.25 bathrooms, No basement, 1.5 floors

- 1 story home: \$356,816

- 2 story home: \$406,418

➤ 14 % increase (+\$49,603)

- 2 bathrooms: \$369,706

- 3 bathrooms: \$416,165

➤ 13 % increase (+\$46,459)

❑ The interior housing living space in ft^2 would have similar tendency.

Suggestions from this model to increase the value of a home in King County

- Pick a land that has a waterfront view
- Build a higher story house
- Increase number of bathrooms and the living space

Thank you!!