

PREDICTING THE PRICE OF HOMES IN KING COUNTY

USING MULTI LINEAR REGRESSION



UNDERSTANDING THE MARKET'S IMPORTANCE

The cost of housing in King County is 160% higher than the national average



IDENTIFYING UNDER/OVERPRICED PROPERTIES

Determining which properties are beneficial and non-beneficial for investment



MAXIMIZING PROPERTY VALUES

Understanding which variables can increase or decrease the value of the property



UNDERSTANDING GEOGRAPHIC/LOCATIONAL VALUES OF BUYERS

Understanding what buyers want based on the location of the property

\$315,566
Y- Intercept

+ **\$0.46**
Per outdoor square
foot

+ **\$201**
Per indoor square
foot

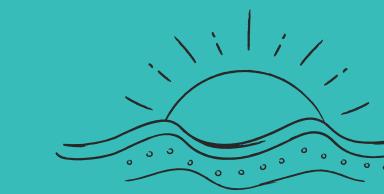
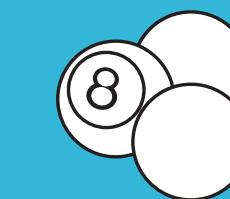
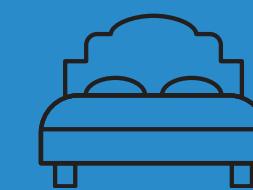
- **\$21,478**
Per bedroom

- **\$31,145**
Basement included

+ **\$200,190**
Property is waterfront

- **\$13,942**
Each mile further
from the city center

 + \$0.46



KING COUNTY HOUSING PRICE MODEL

A black silhouette of the CN Tower and the Toronto skyline against a white background.

the Model in Action:



#1. SCENIC & SUNNY

A spacious single family home & a natural
getaway. Only a hop, skip, & a jump from
Downtown Seattle!



**2,490 INDOOR
SQUARE FEET**

+ \$500,490

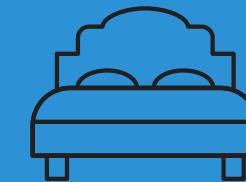


**11,117 OUTDOOR
SQUARE FEET**

+ \$5,113

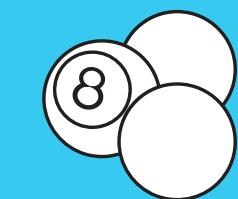
**ESTIMATED
PROPERTY
TOTAL VALUE**

\$678,085



3 BEDROOMS

-\$64,434



NO BASEMENT

\$0



**PROPERTY IS
WATERFRONT**

+\$200,190



**20 MILES FROM
DOWNTOWN**

-\$278,840

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ESTIMATED PROPERTY TOTAL VALUE

\$678,085

\$680,000

3 bd | 3 ba | 2,490 sqft

25812 76th Ave SW, Vashon, WA 98070

● For sale | Zestimate®: \$684,444

Est. payment: \$3,046/mo [Get pre-qualified](#)



Advice for the Seller?



Finishing Spaces

In Washington, unfinished spaces do not count toward home's square footage

This unfinished space looks to be at least 200 square feet.
Finishing this space could add \$40,200 to the home's value!



A modest Condo in Downtown Seattle provides ample space for an individual or couple

#2. Downtown Dream Den

**650 INDOOR
SQUARE FEET**

+\$130,650

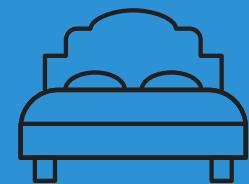


**0 OUTDOOR
SQUARE FEET**

+\$0

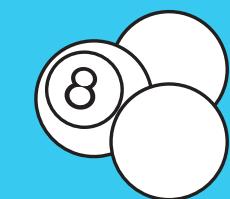
**ESTIMATED
PROPERTY
TOTAL VALUE**

\$403,825



1 BEDROOM

-\$21,478



NO BASEMENT

\$0



**PROPERTY IS NOT
WATERFRONT**

+\$0



**1.5 MILES FROM
DOWNTOWN**

-\$20,913

ESTIMATED PROPERTY TOTAL VALUE

\$403,825

\$409,000 1 bd | 1 ba | 650 sqft

275 W Roy St APT 408, Seattle, WA 98119

● For sale | Zestimate®: **\$479,445**

Est. payment: \$2,213/mo  [Get pre-qualified](#)



Advice for the seller?

For the variables at hand and the property circumstances, the seller has maximized their profit.



a Downtown Oasis!





#3. Stunning, Spacious, and Suburban



This single family home's plenty of bedrooms and quiet neighborhood create an appealing dwelling for a large or growing family

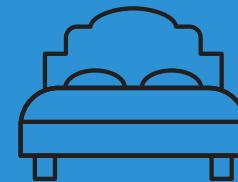
**3,370 INDOOR
SQUARE FEET**

+\$677,370



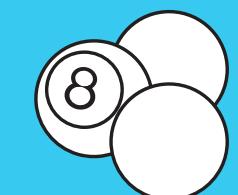
**5,000 OUTDOOR
SQUARE FEET**

+\$2,300



5 BEDROOMS

-\$107,390



NO BASEMENT

\$0

**ESTIMATED
PROPERTY
TOTAL VALUE**

\$567,180



**PROPERTY IS NOT
WATERFRONT**

+\$0



**23 MILES FROM
DOWNTOWN**

-\$320,666

ESTIMATED PROPERTY TOTAL VALUE

\$567,180

\$569,950

5 bd | 3 ba | 3,370 sqft

26023 167th Pl SE, Covington, WA 98042

Est. payment: \$2,556/mo  [Get pre-qualified](#)



Advice for the Seller?



This home boasts an enormous amount of space



For the variables at hand and the circumstances of the property, the seller has maximized the profit of this home

Applying the Model as a Buyer

Identifying Under-valued Property



- 3 Bedrooms
- 1,848 Square Feet
- No Basement
- Not Waterfront
- 26 miles from downtown



Model's Valuation: \$263,589
List Valuation: \$125,000

Invest 

Identifying Over-Valued Property

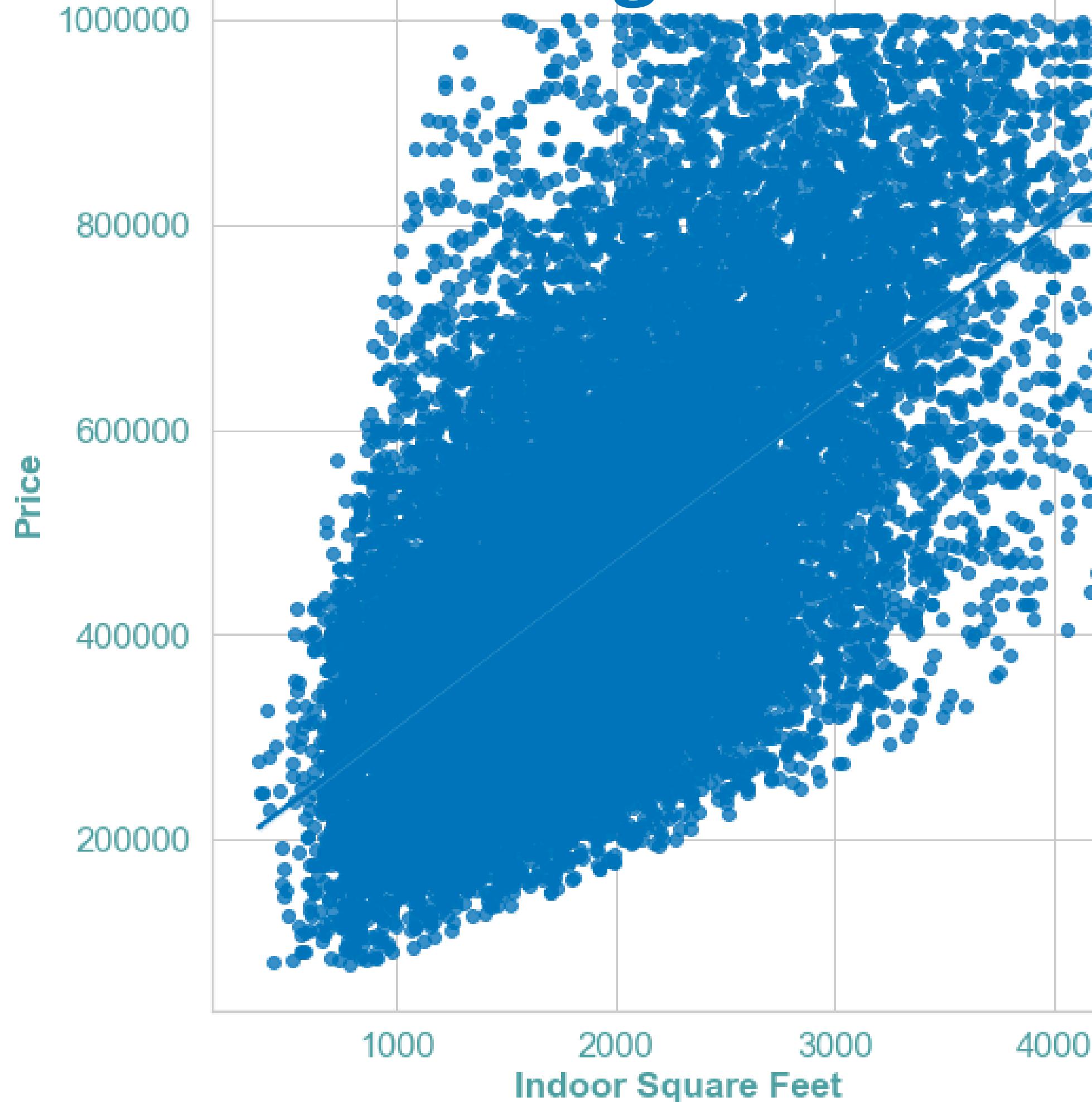


- 1 Bedrooms
- 540 Square Feet
- No Basement
- Waterfront
- 5 Miles from Downtown

Model's Valuation: \$530,647
List Valuation: \$915,000

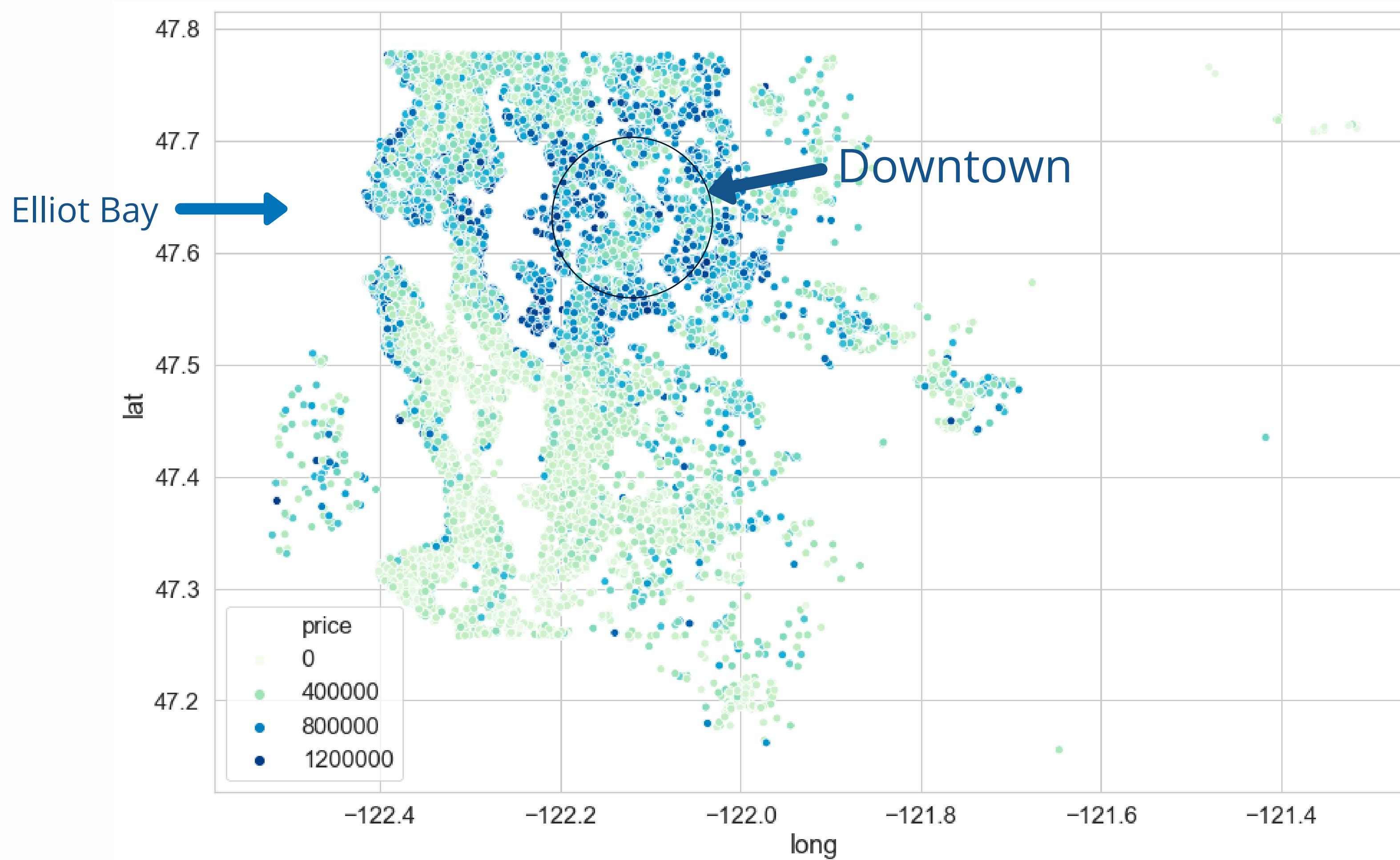
Do Not Invest 

Understanding Possible Variables to Increase Profit

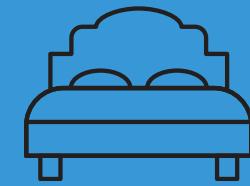


Increasing square footage =
increase in price

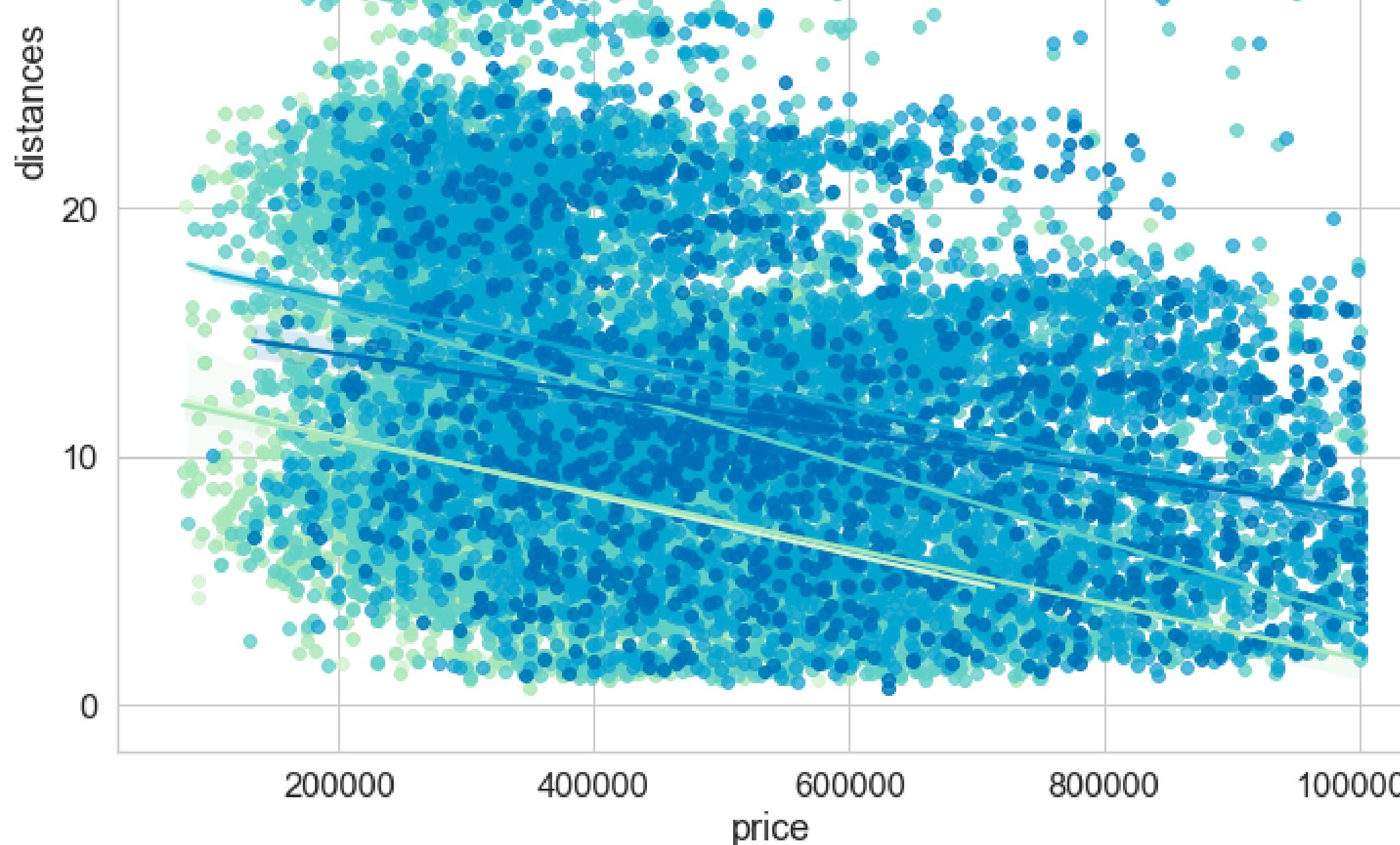
Understanding Geographic Influence of Property Values



Understanding Locational Desires



Does each addition of a bedroom decrease the value of the home?



bedrooms

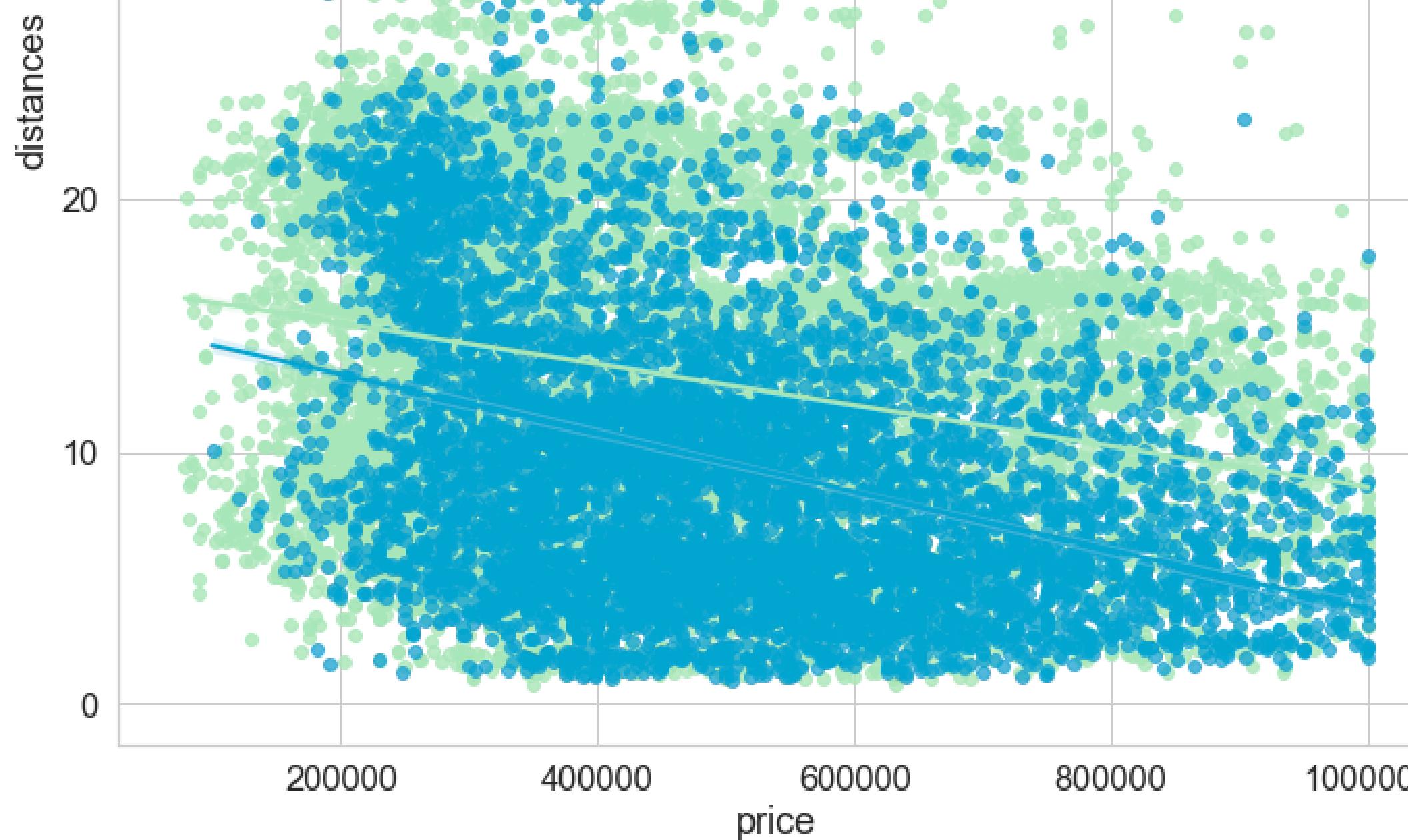
- 1
- 2
- 3
- 4
- 5

-\$21,478
Per bedroom

No. Higher value properties are found closest to Downtown Seattle, and often have fewer bedrooms. This is a testament to the locational values held by buyers.

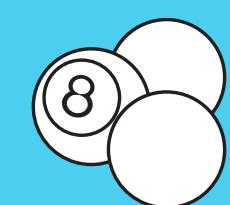
Understanding Locational Desires

Does the addition of basement decrease the value of the home?



basement
0
1

No. Higher value properties are found closest to Downtown Seattle, and often have no basement. Again, This is a testament to the locational values held by buyers.



- \$31,145
Basement included

Conclusion: How is the Model Useful?

- Understanding market value of your own home
- Maximizing property value of your own home
- Identifying underpriced properties
- Identifying overpriced properties
- Identifying geographic influences of property values
- Understanding locational desires of buyers