# **King County Price Predictions**

Fried White Rice



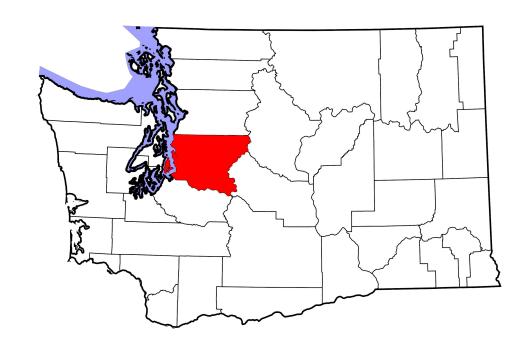
#### **Team**

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# **Overview**

- Linear Modeling
- Predict Price
- Uses House Characteristics
  - Square footage
  - Zip Code
  - Etc.



# **Outline**

- Business Problem
- Data Understanding
- Models
- Recommendations
- Next Steps



#### **Business Problem**

- Greater Seattle area real estate market is on the rise

- Potential for capitalization in this growing market

- Modeling can provide an edge in this competitive market



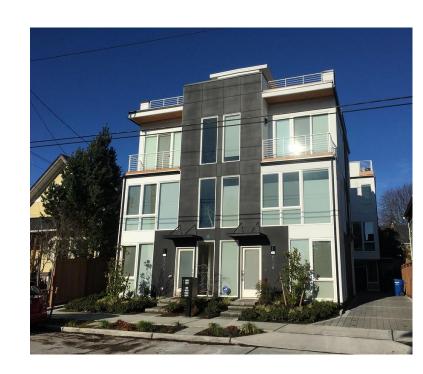
# **Addressing the Problem**

- Existing inventory
- Inventory growth through acquisition
- Inventory growth through new construction



# **Data Understanding**

- King County House Sales Record
  - Provided:
    - Sales Data
    - Sq. ft of homes
    - Bedrooms
    - Baths
    - Etc.

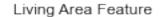


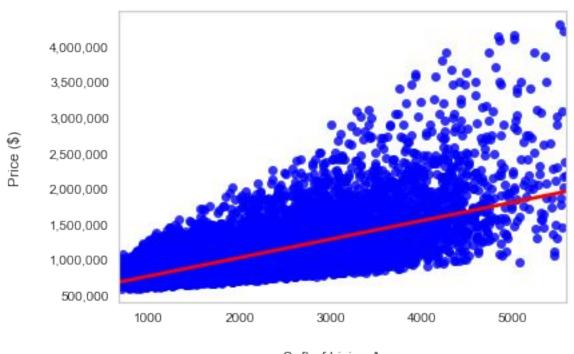
#### **Information**

- King County is 1st in population in the state of Washington
- 2020, Seattle was the fastest growing city in America
  - (Seattle Times)
- One of the fastest growing cities in the 2010's
  - (GeekWire)



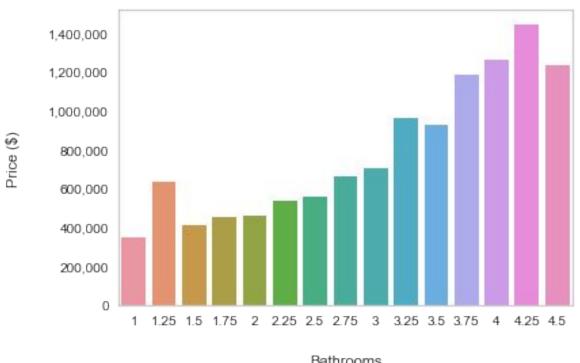
# **Inferential Models**





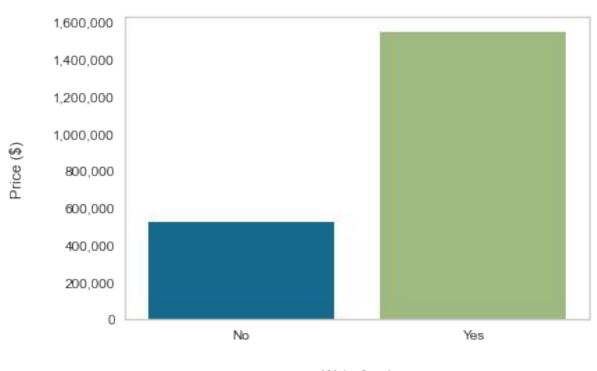
Sqft of Living Area





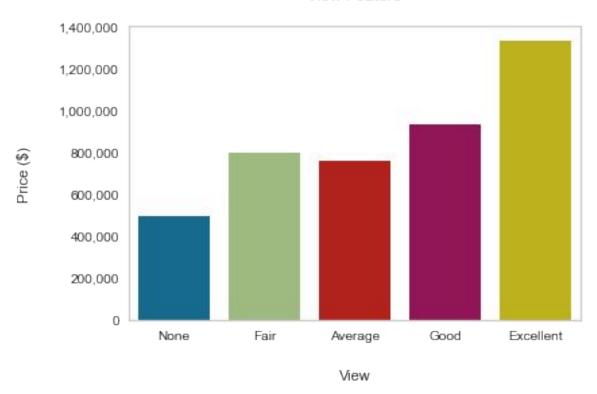
Bathrooms





Waterfront

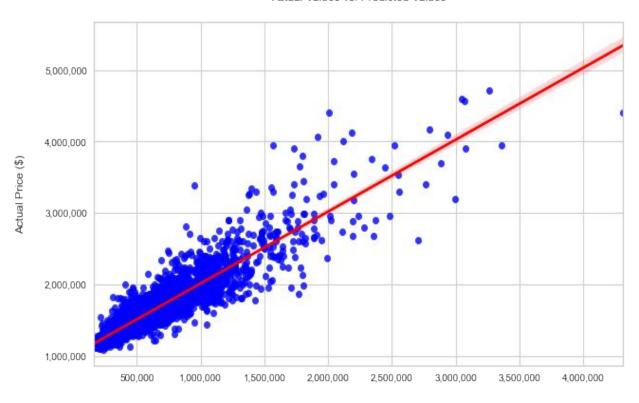




#### Actual Values vs. Predicted Values

#### **Predictive Model**

- Features:
  - Sq. Ft Living
  - Sq. Ft Living 15
  - Bathrooms
  - Views
  - Waterfront
  - Zip Code
  - Qualities
- RMSE: \$131, 810



Predicted Price (\$)

#### Recommendations

- Use model to accurately price current inventory
- Use model to find undervalued houses
- Use model to find the best features to include in new home builds

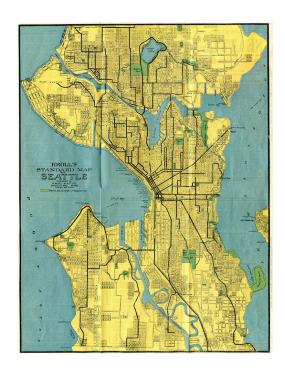


# **Next Steps**

- Implement inflation and market changes.

- Increase granularity of location data
  - Implement cluster data analysis

- Introduce new variables to model



#### **THANK YOU**



# **Sources**

- GeekWire

- <u>Seattle Times</u>

- <u>Github Repo</u>