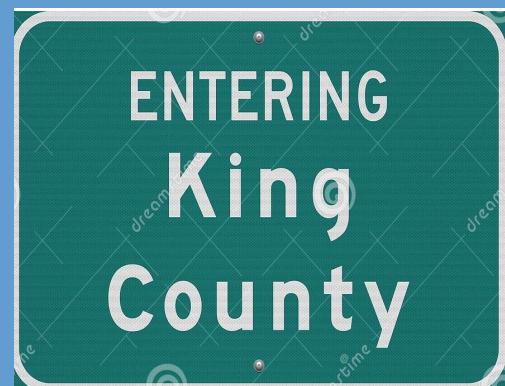




KING COUNTY HOUSING DATA ANALYSIS



EVAN STAFFEN



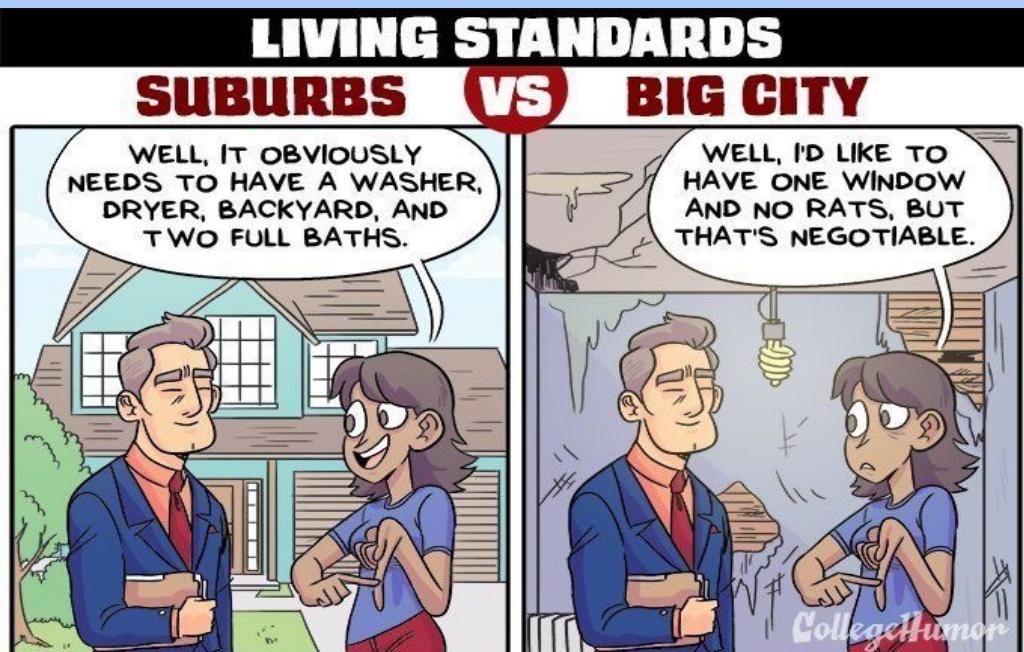
AGENDA

**Stakeholder
Dataset
Modeling
Conclusions + Next Steps**

BUSINESS PROBLEM

The Johnson family recently had their first child. While they have loved living in New York City, they want more space and a relaxed lifestyle for their child. They have decided they want to move to King County, and I have been tasked with finding a house in the area that matches their needs.

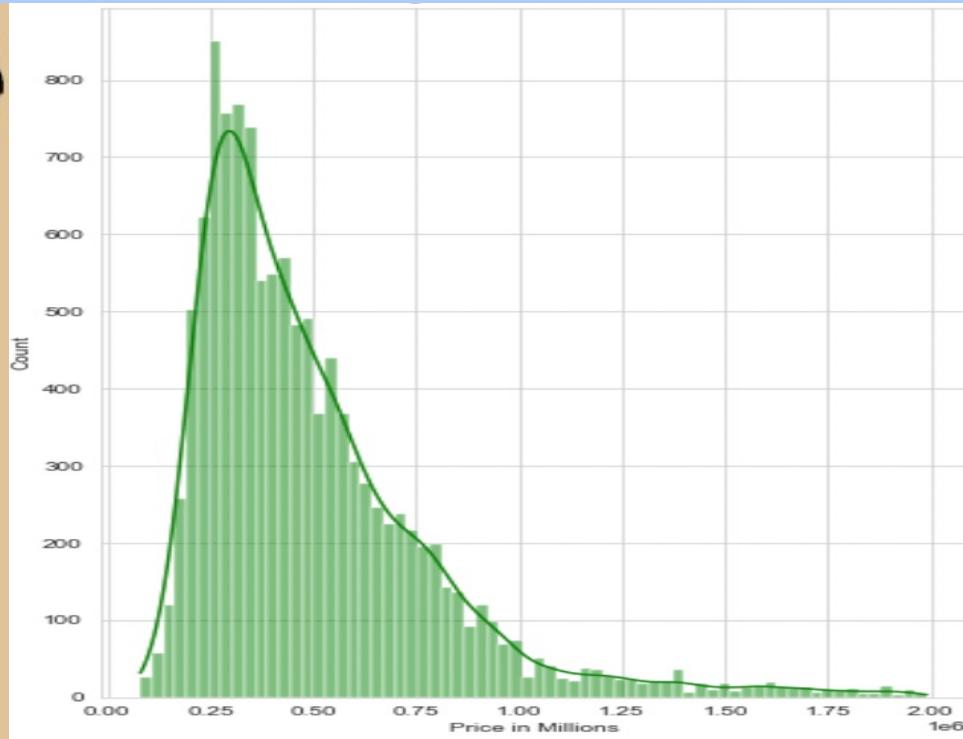
Demands: Cannot spend more than \$500,000, needs 2 bedrooms and not in Seattle



KING COUNTY DATASET

Housing data from King County, Washington
2014-2015

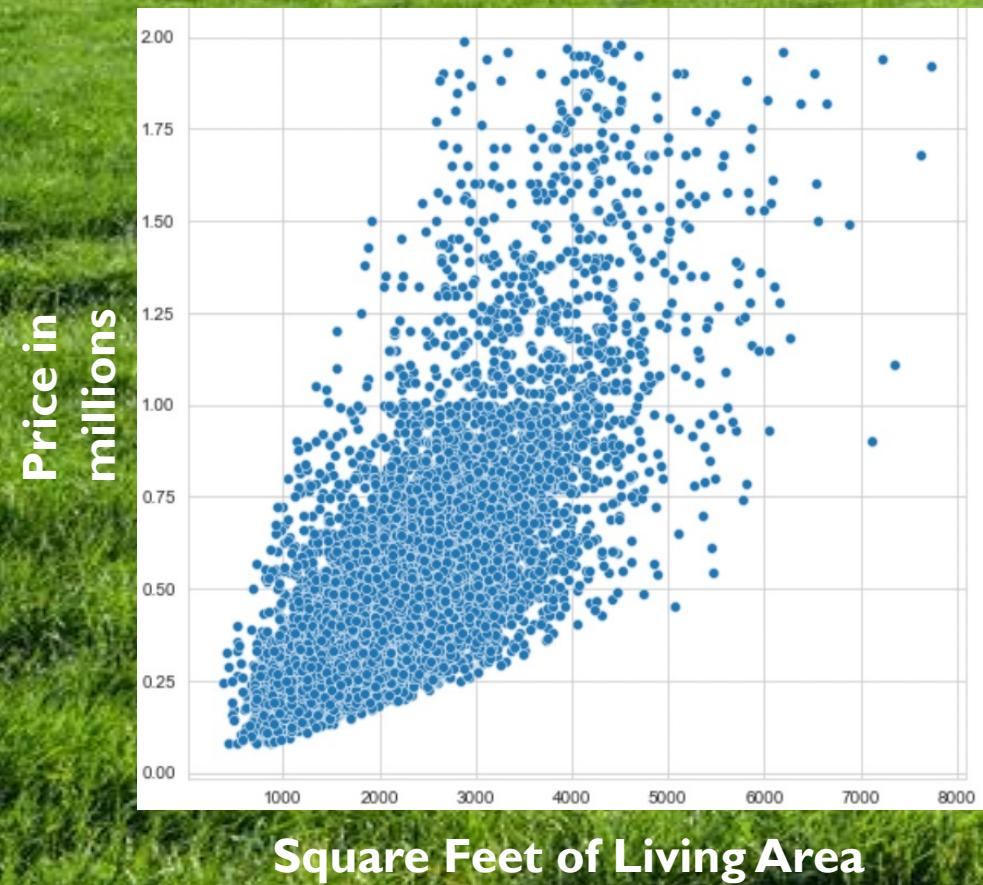
Housing Price Distribution



BASELINE MODEL

Model I R^2 (accuracy) = 0.553

Square Feet of Living Area vs Price



MORE MODELING

Five models created to predict price of houses

Model 2: R^2 (accuracy) = 0.667

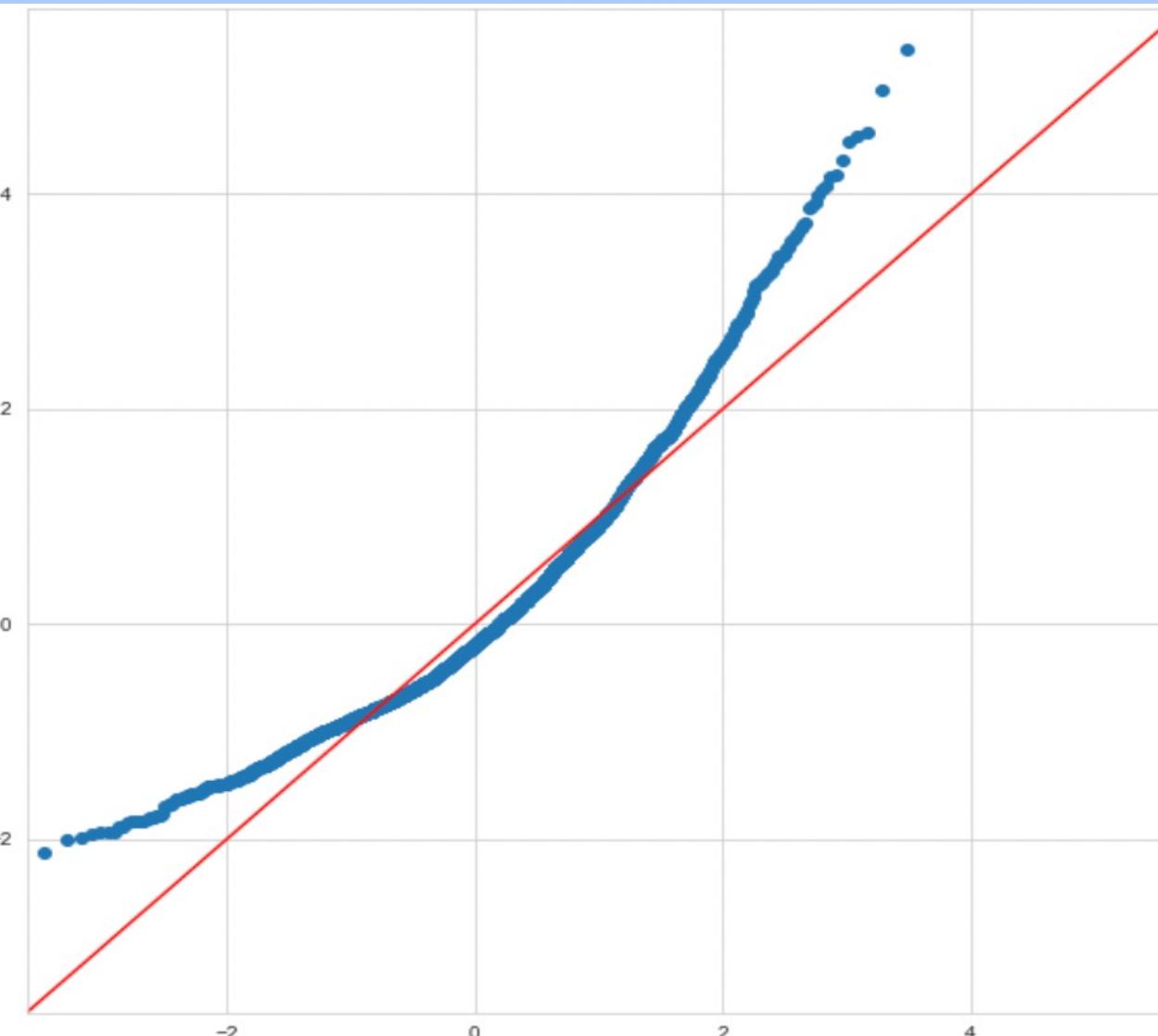


Model 5: R^2 (accuracy) = 0.882



Second model QQ Plot

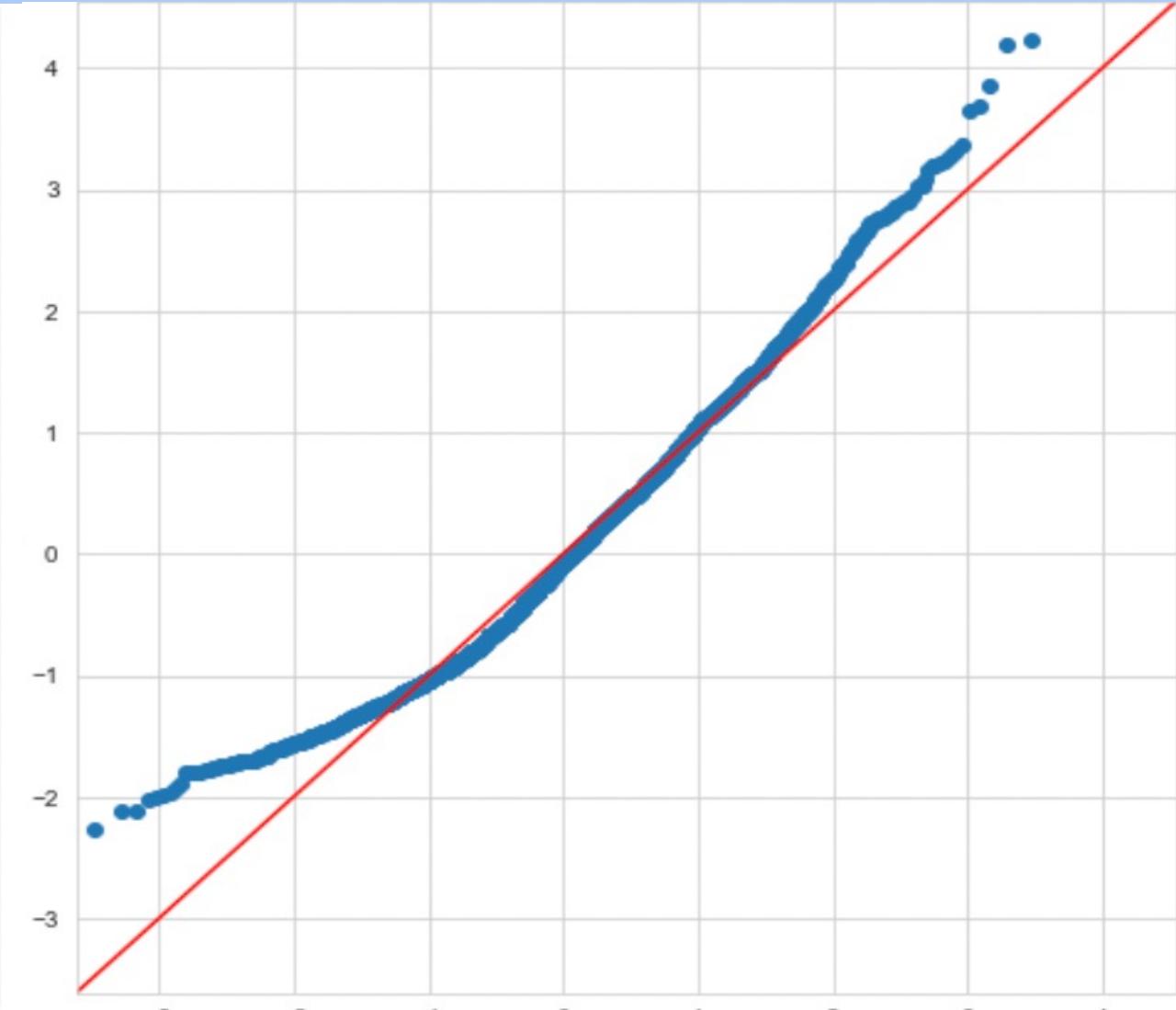
Model 2: R^2 (accuracy) = 0.667



Error = $\pm \$116,395.59$

Fifth model QQ Plot

Model 5: R^2 (accuracy) = 0.882



Error = $\pm \$63,776.51$

FINAL MODEL (88.2% ACCURACY)

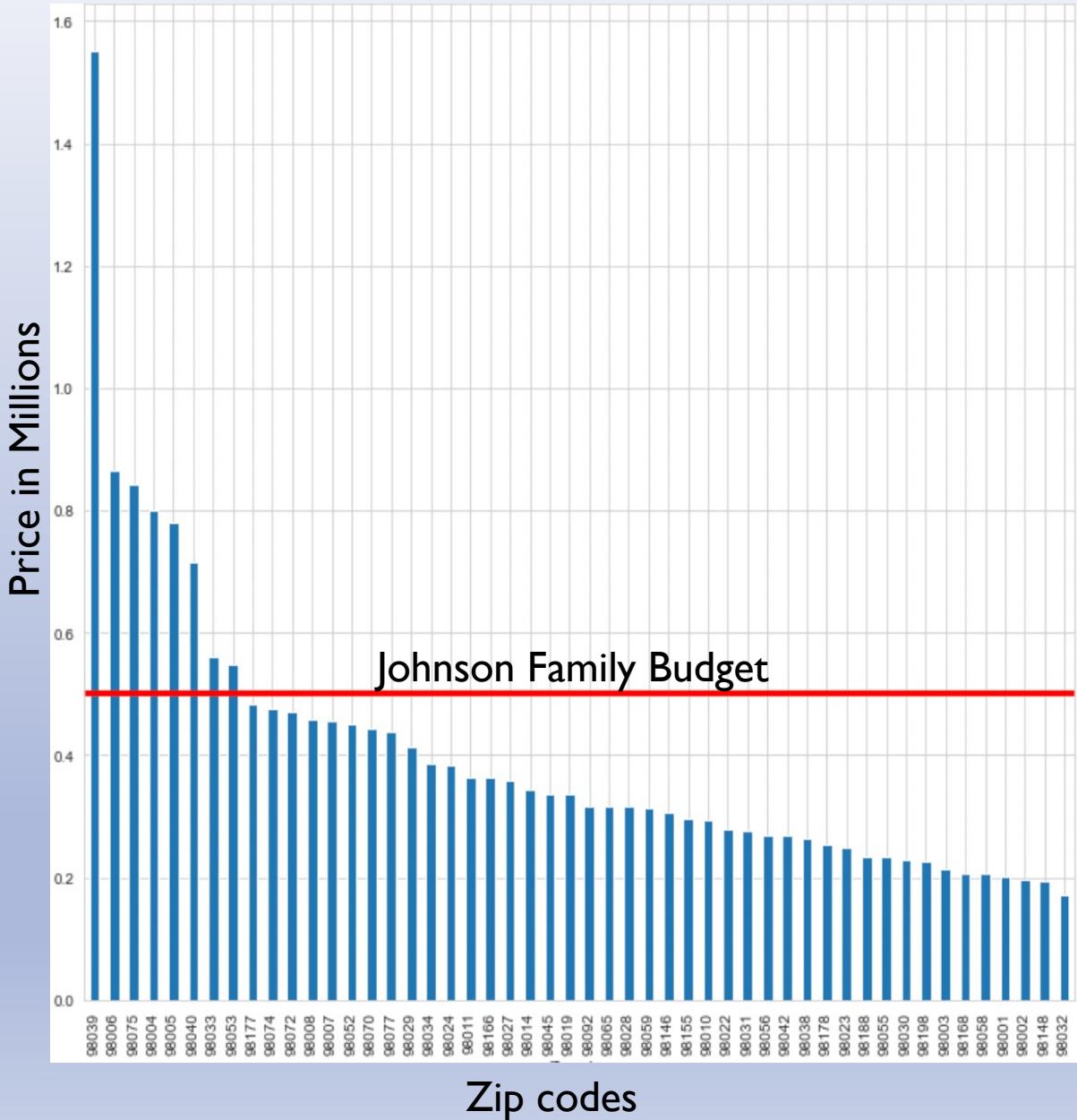
Predictors

- Waterfront (Y/N)
- Bedrooms
- Bathrooms
- Sqft_living
- Sqft_lot
- Floors
- Yr_built
- Condition (1-9)
- View (1-4)



Average Price of a 2 Bedroom House

Outside of Seattle



Just 8 zip codes have an average price outside of their range!



CONCLUSIONS AND NEXT STEPS

- King County has plenty of affordable, suburban options for the Johnson's that match their needs.
 - In fact, the Johnson's likely could spend much less than their budget in many zip codes
 - Data more recent than 2014-2015
 - Data on the nearest towns, schools and hospitals in these specific zip codes





QUESTIONS?



CONTACT

- Github
 - <https://github.com/evanstaffen/Housing-Dataset-Analysis>
- LinkedIn
 - <https://www.linkedin.com/in/evan-staffen-a74045207/>
- Email
 - evan.staffen@gmail.com

