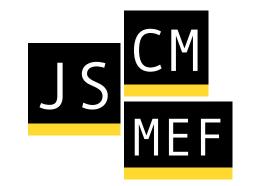
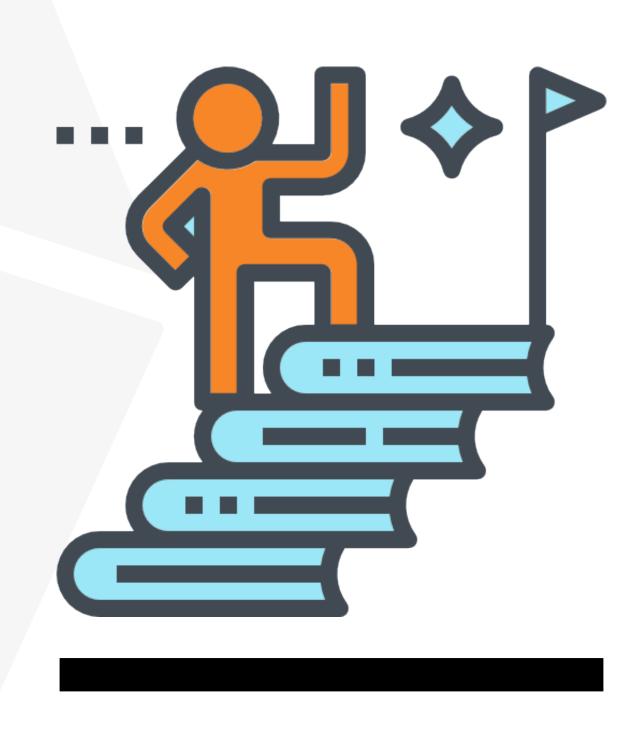
Analysis of Residential Sale Price in King County

MODULE 2 PROJECT



Johnhoy Stephens, Maximillian Esterhammer-Fic, Chum Mapa

Overview

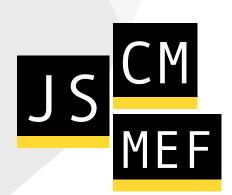


Goal

Interpret Real Estate data from King County and provide insight on factors that influence residential sale prices

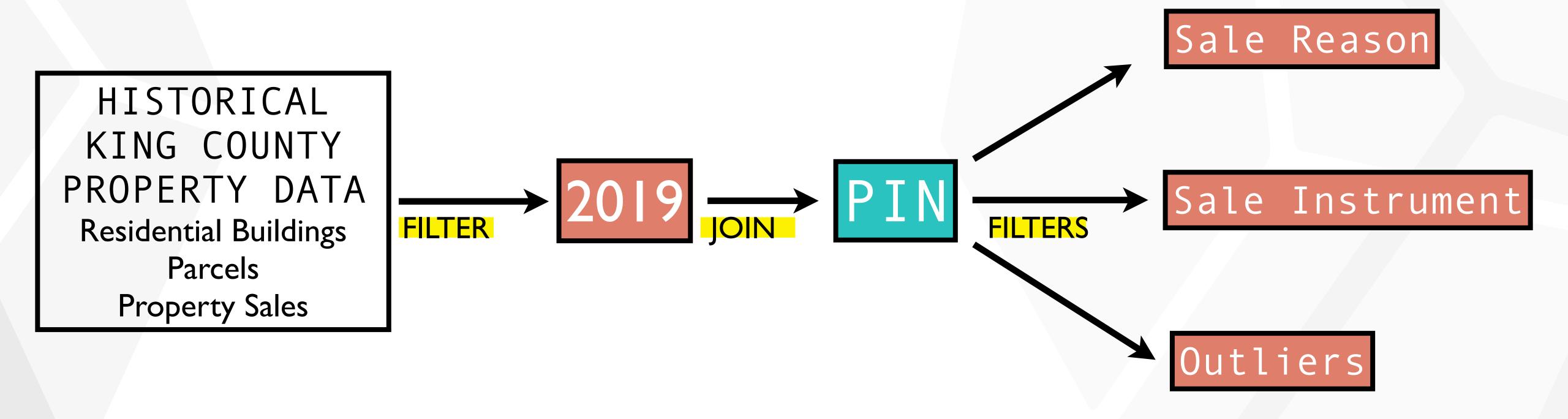
Audience

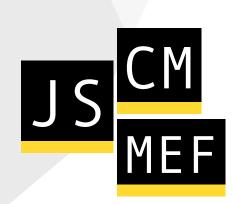
- Homeowners
- Potential Homeowners



Data Exploration

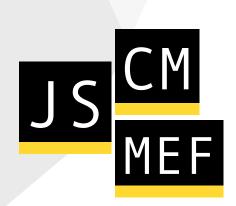
Source: King County Department of Assessments, Property Valuations





Data Analysis

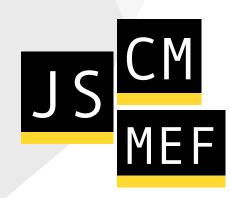
- MODELS: Linear Regression (LR) and Multiple Linear Regression (MLR)
- METHOD: Ordinary Least Squares (OLS)
- ACCURACY: Assumption checks



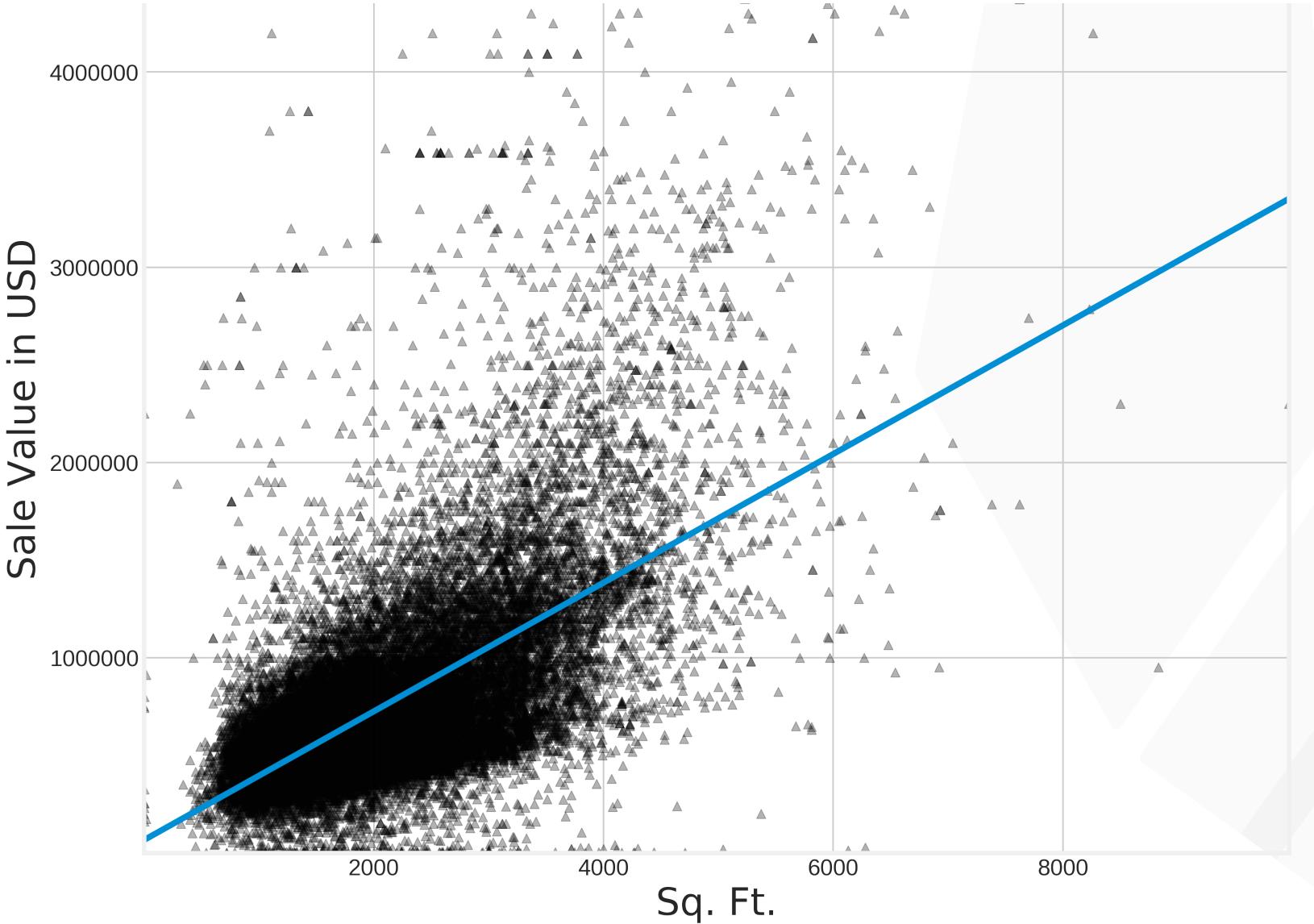


INDUSTRY CLAIM

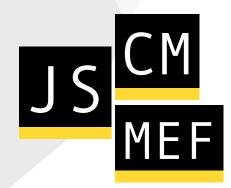
Higher Square Footage Increases Home Sale Price



Relationship Between Sale Value and Total Square Footage For King County Homes in 2019



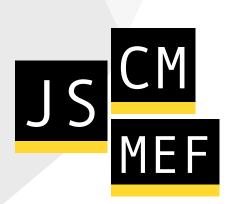




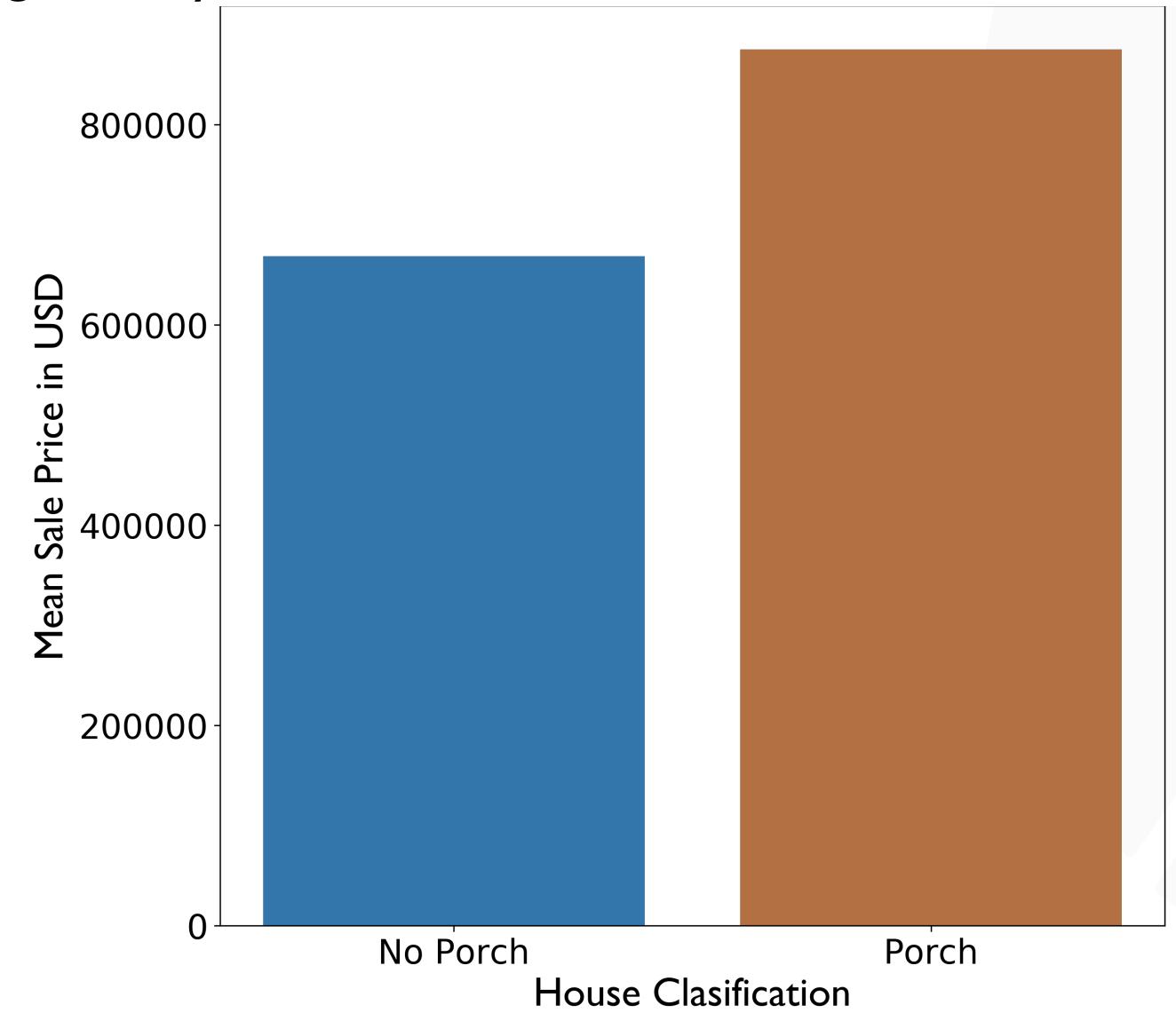


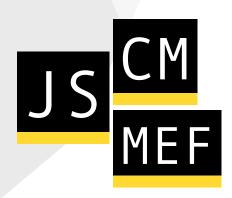
INDUSTRY CLAIM

Having a Porch Increases
Home Sale
Price



King County Mean Sale Price of Houses with a Porch vs Without



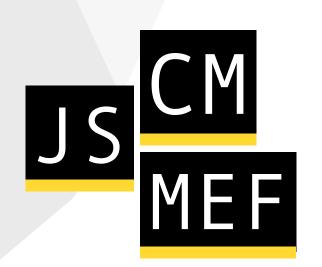


OVERVIEW DATA DIVE | CLAIM 1 | CLAIM 2 | CLAIM 3 | MODEL | NEXT STEPS | CONTACT

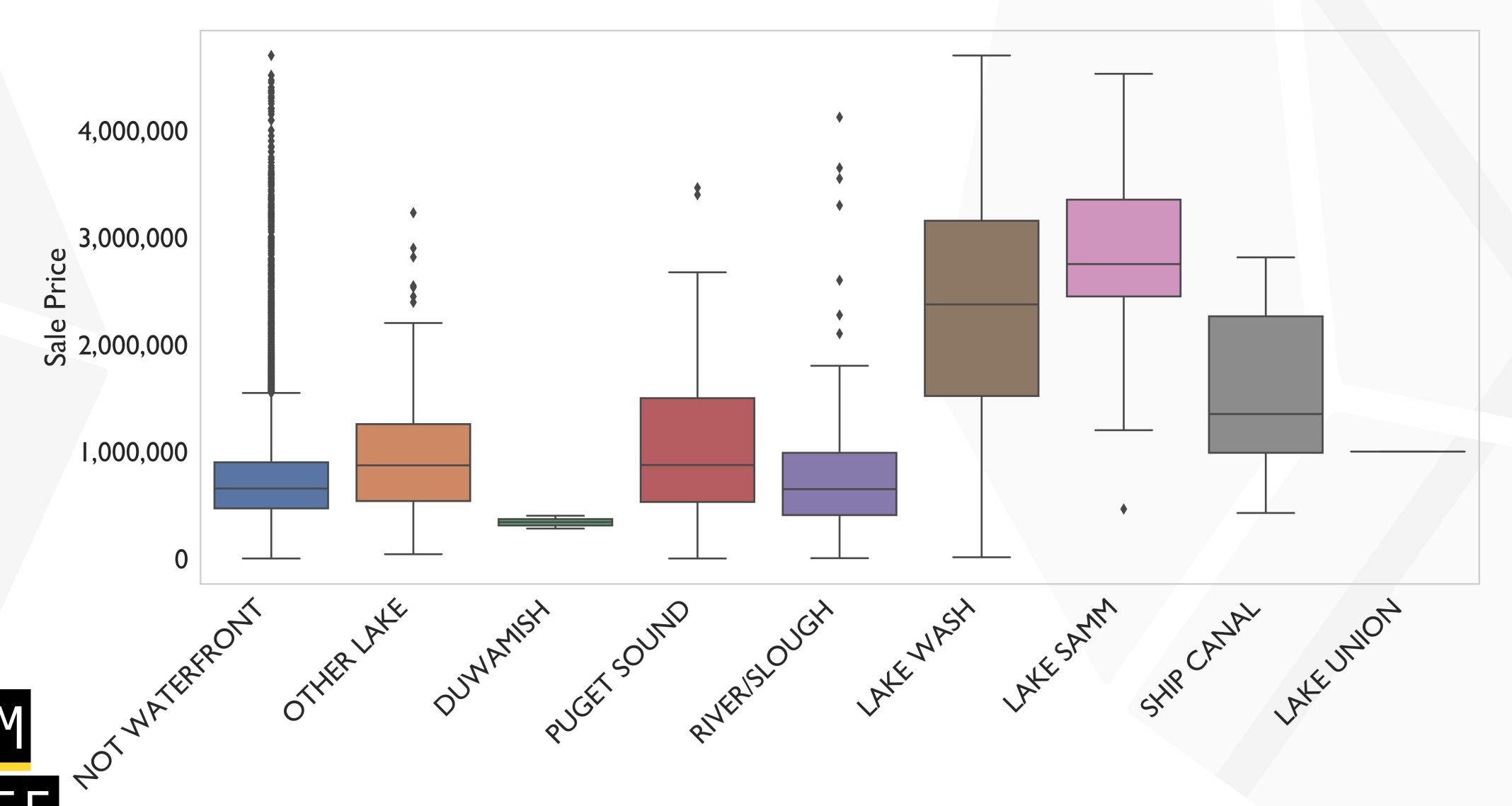


INDUSTRY CLAIM

Having a Waterfront Increases Home Sale Price

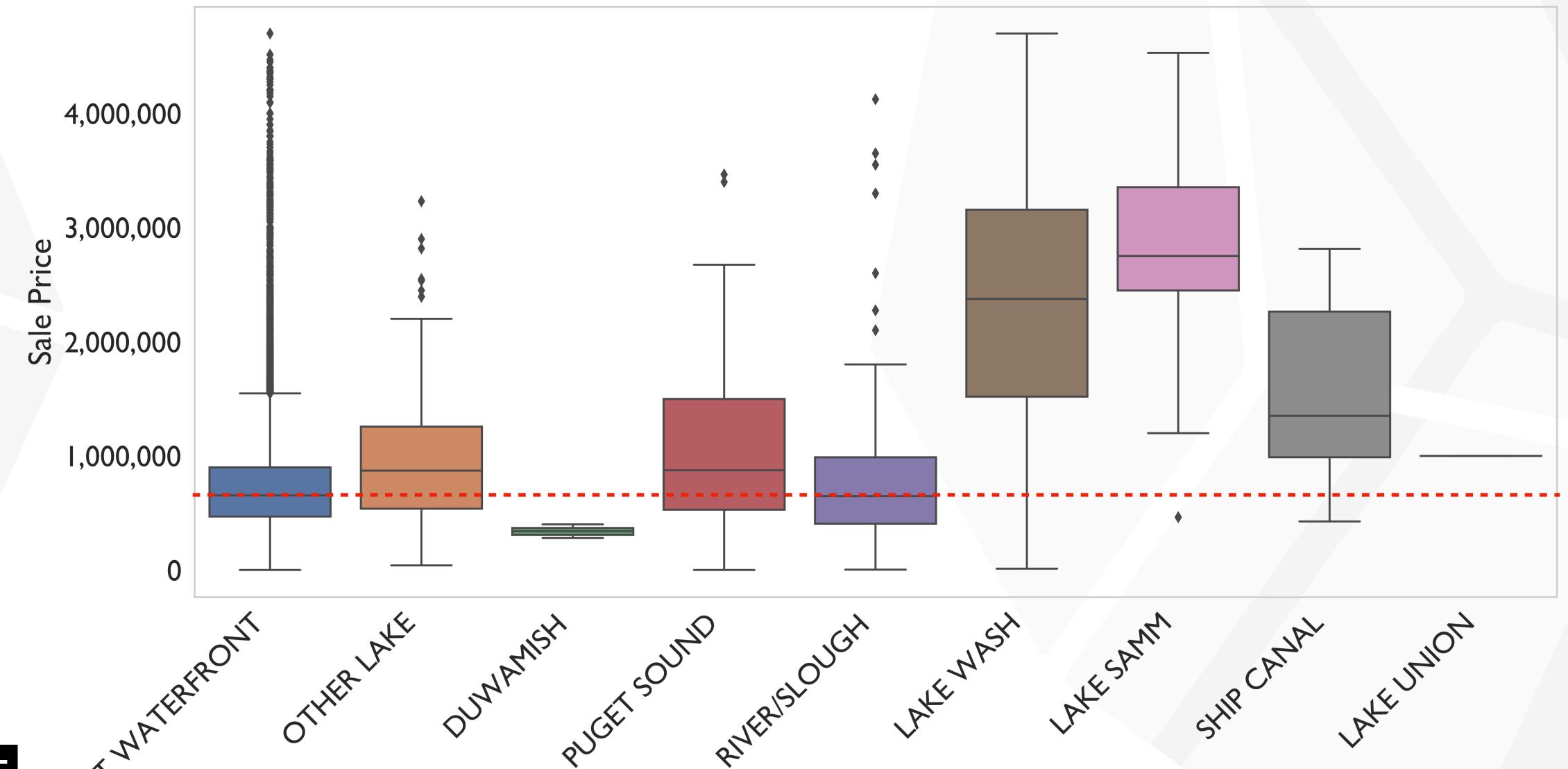


2019 Waterfront Residential Housing Sale Price (by Location)

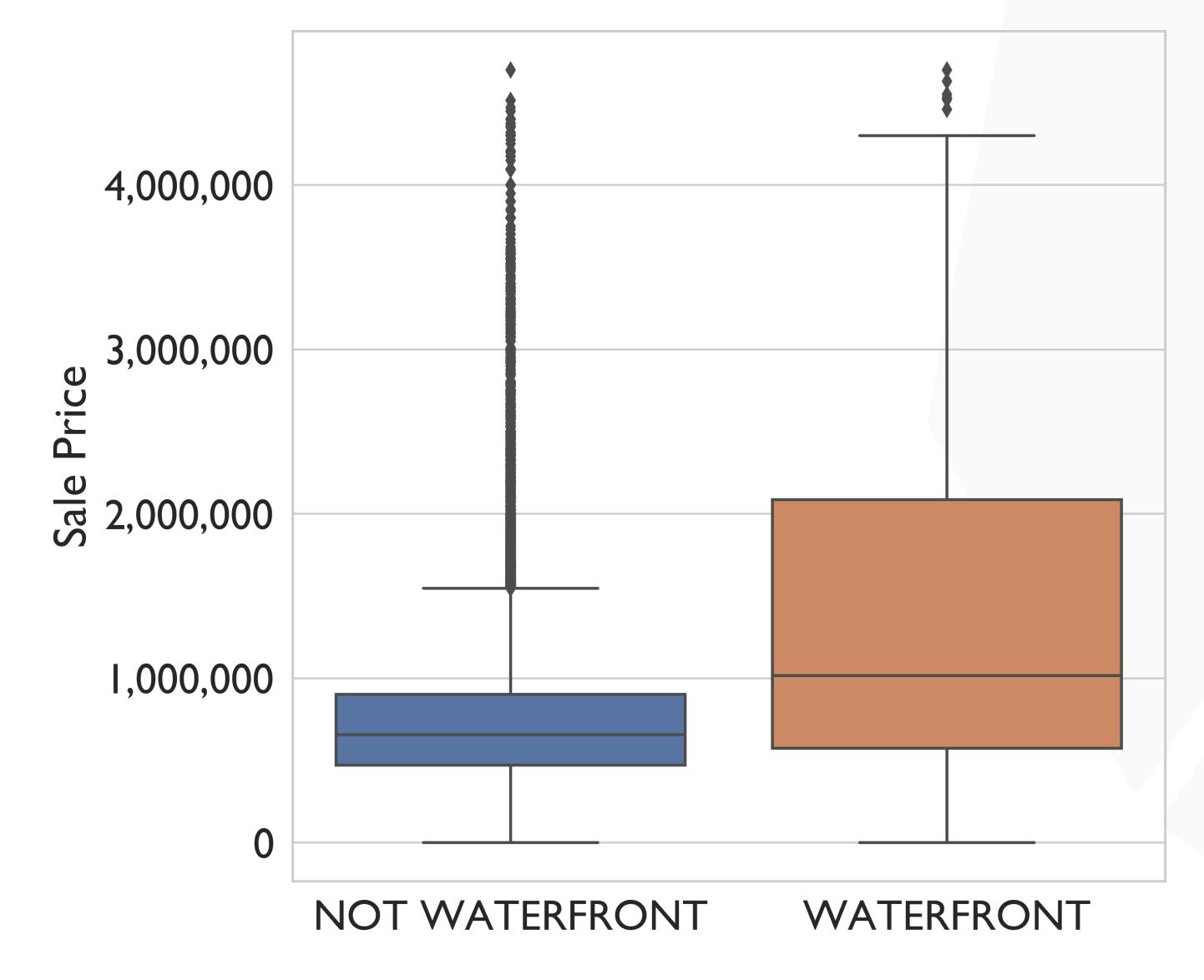


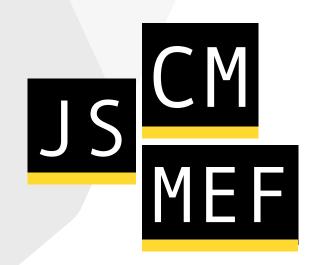
MEF

2019 Waterfront Residential Housing Sale Price (by Location)

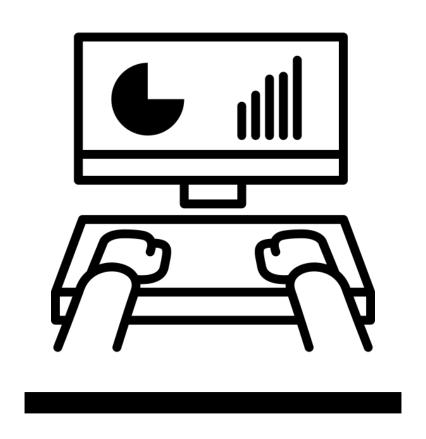


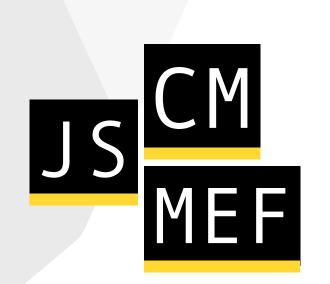
2019 Waterfront Residential Housing Sale Price



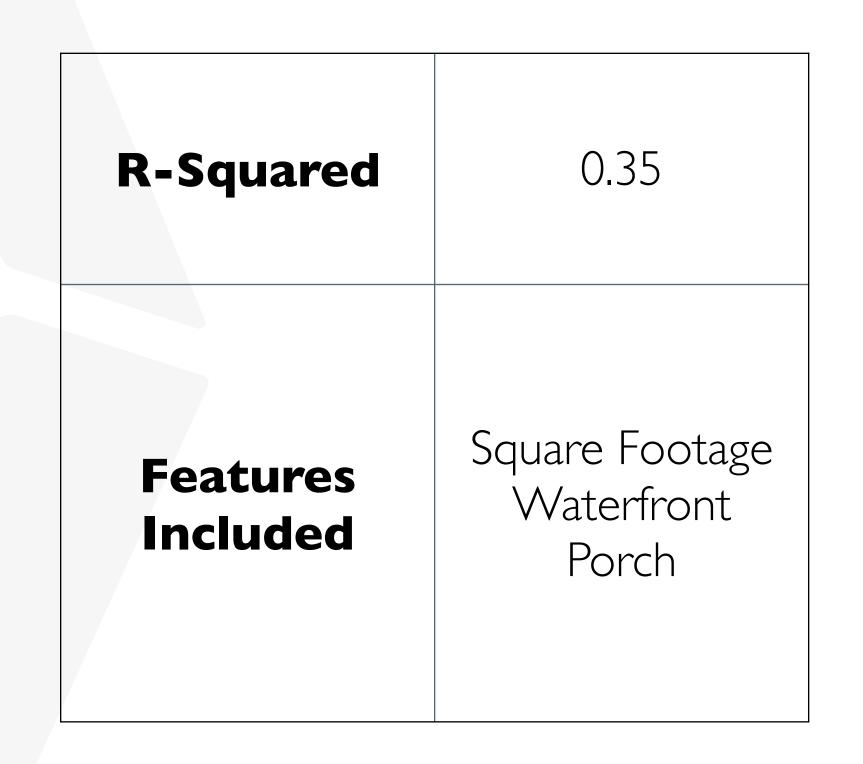


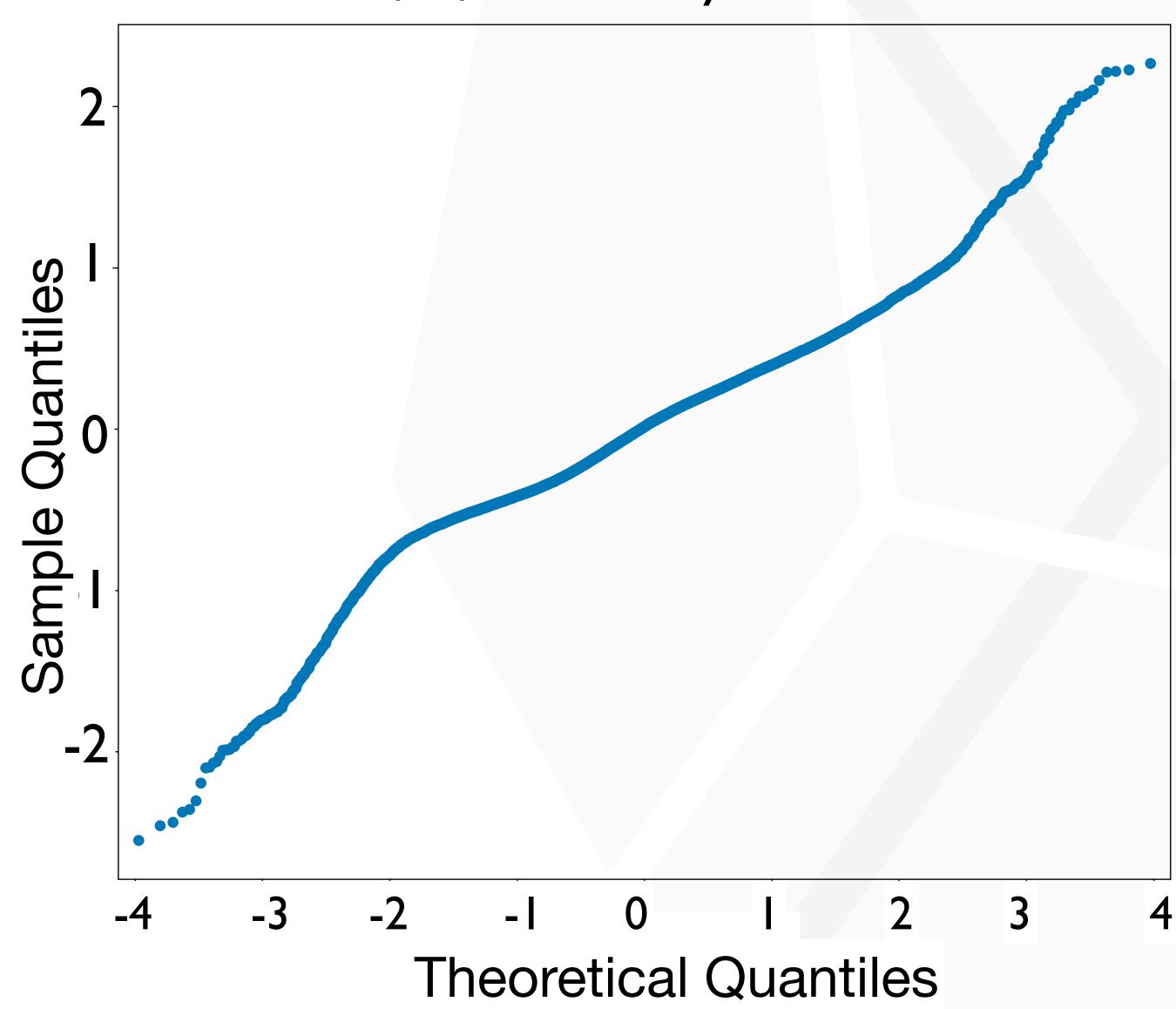
Is there a statistical model that accurately represents the housing prices in King County?





Q-Q Probability Plot

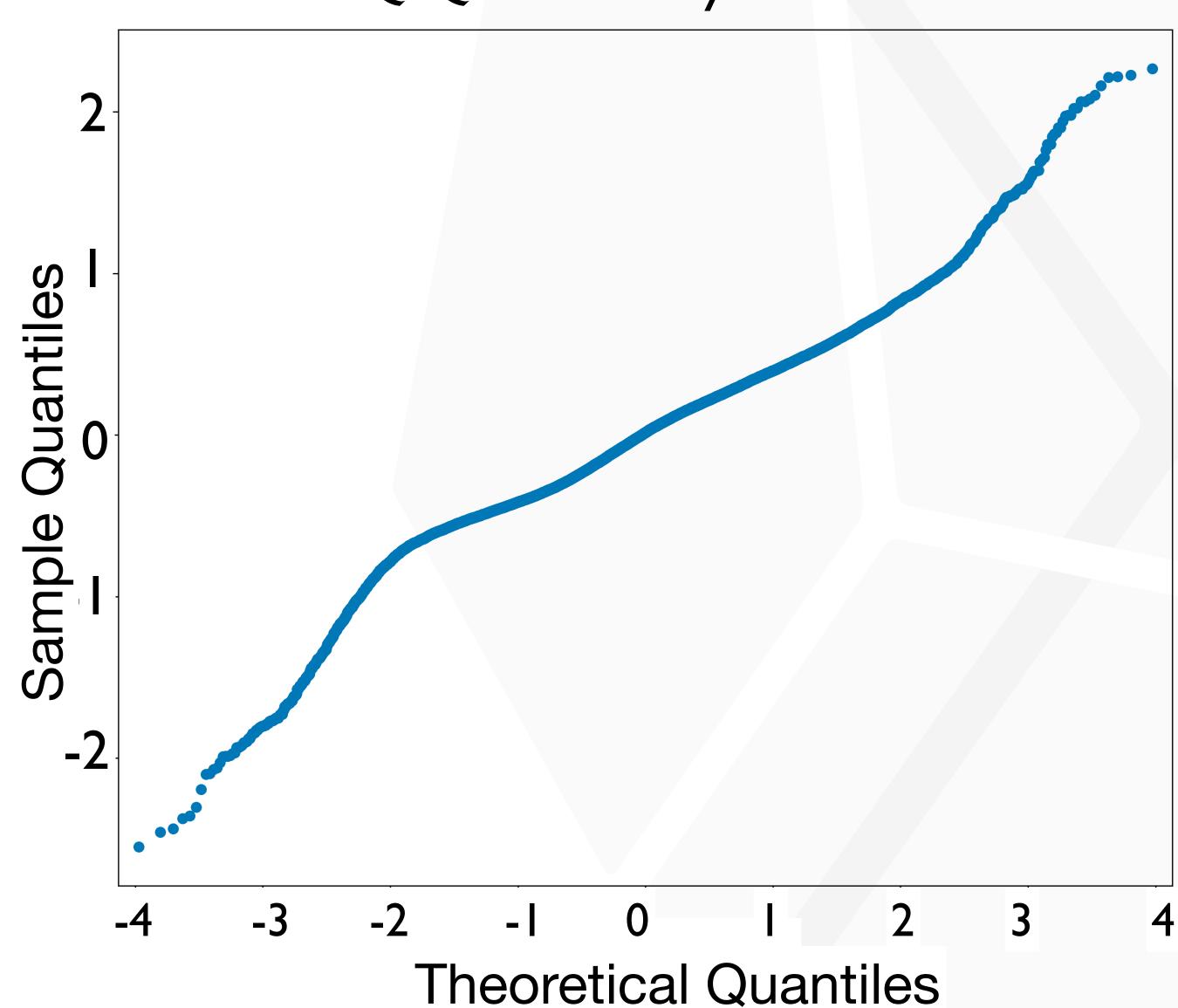




Q-Q Probability Plot

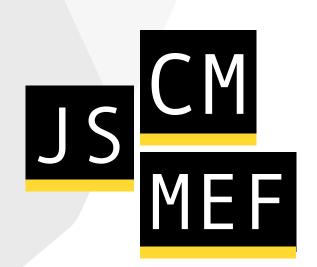
Assumptions Were Met

R-Squared	0.35
Features Included	Square Footage Waterfront Porch



Recommendations

- Assess key features of the home
- Use the model to get a theoretical Sale Price
- Compare that to the listed price



OVERVIEW DATA DIVE | CLAIM 1 | CLAIM 2 | CLAIM 3 | MODEL | NEXT STEPS | CONTACT

Next Steps

- Continue to optimize the model Zip Code
- Look into proving/disproving additional claims
- Bring in additional data from Dept of Assessment



Contact Information

- Chum Mapa: chaminda.mapa@gmail.com
- Maximillian Esterhammer-Fic: mesterhammerfic@gmail.com
- Johnhoy Stephens: Jstephens@carthage.edu

