



ARCH

A Regional Coalition for Housing

Working to preserve and increase the supply of housing for low and moderate income households in the King County region.



Home Price – Statistical Analysis

Purpose: Build a statistical model that reveals what affects the sale price of a home.

Square Foot Living

Age of Home

Condition

Zip Code

Lot Size



UNDERSTANDING HOME PRICE



DATA TRENDS
and PATTERNS



BASELINE
MODEL



FINAL
STATISTICAL
MODEL

20,000+ Homes
Sold

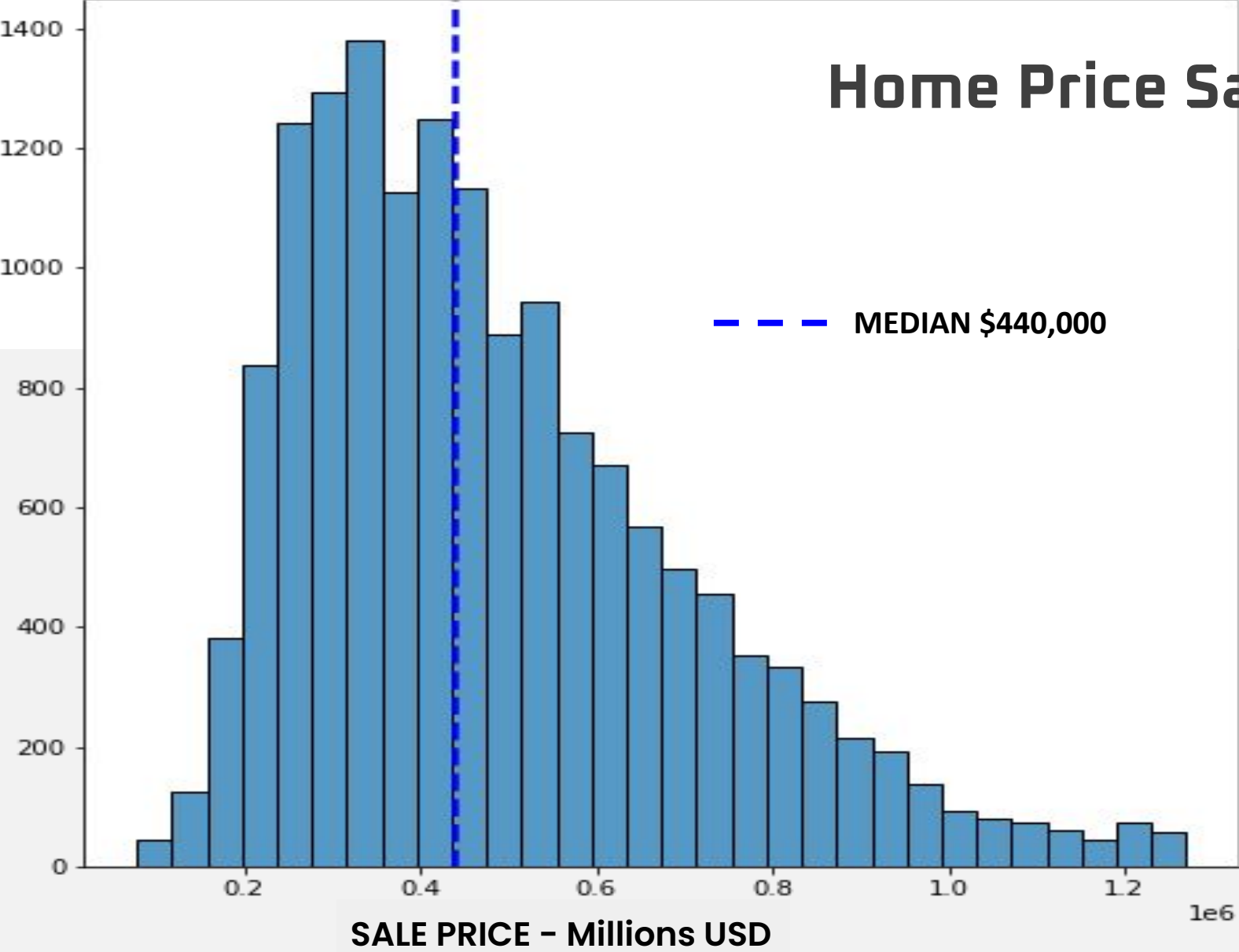
Years 2014 &
2015

Square Foot
Living

Includes Multiple
Relevant Features

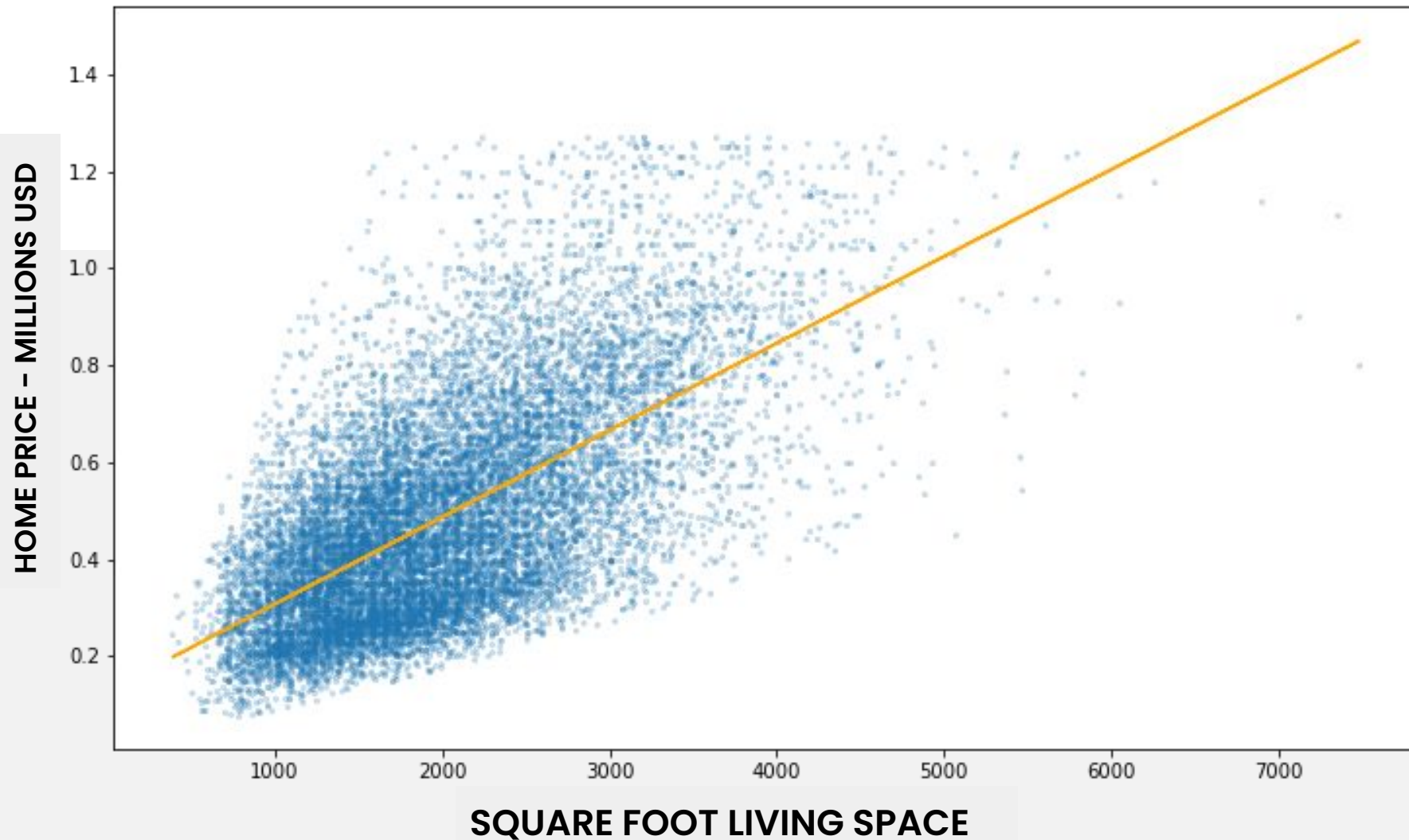
Home Price Sales

NUMBER OF HOMES SOLD



Baseline Model

Square Footage → 40% Variance



Final Statistical Model

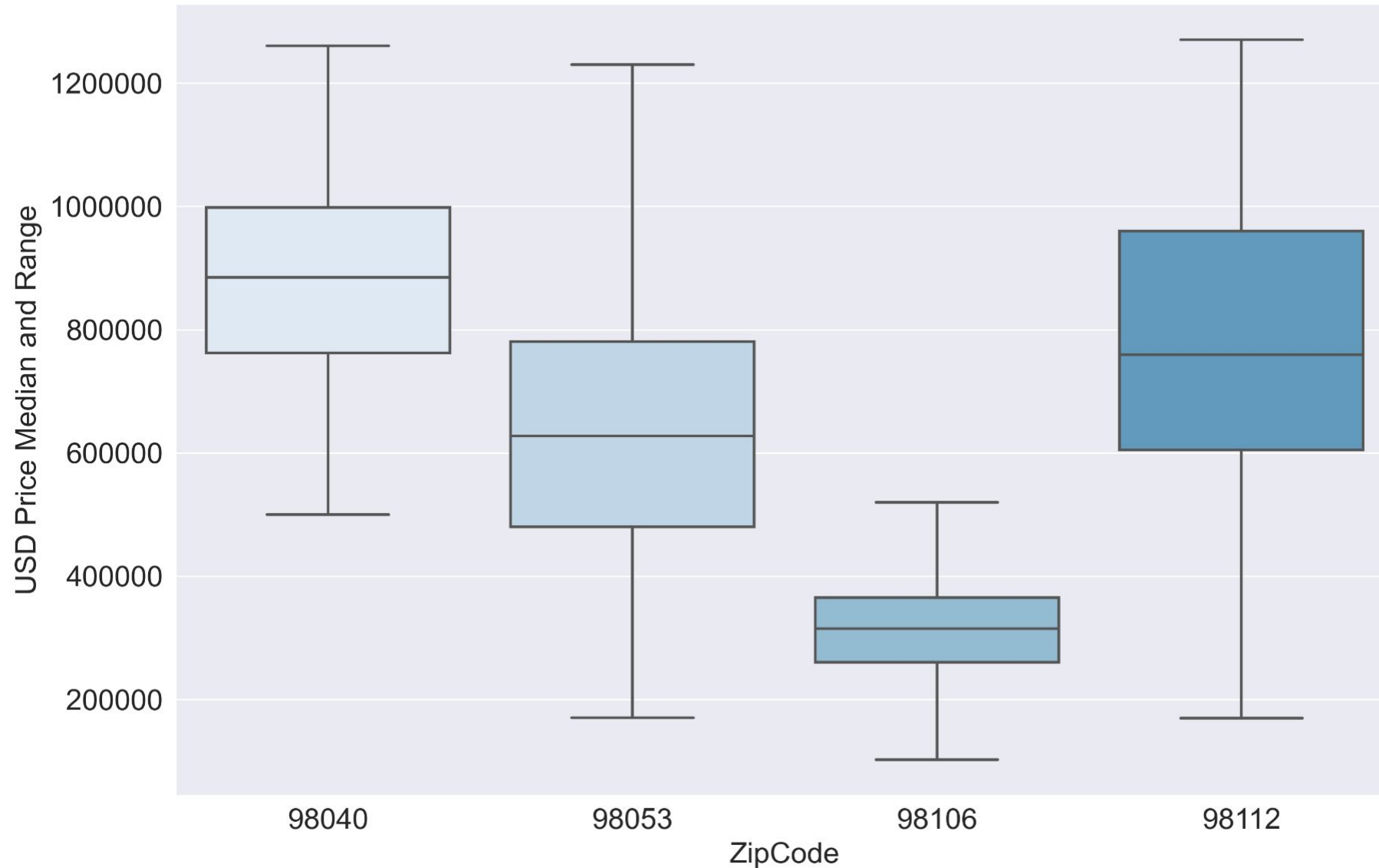
83% Variance of a Home Price

**Square Foot Living =
Increase \$105 per sq ft.**

**Newer Homes =
Decrease \$602 per year**



ZipCode → ~ 10% Home Price



Recommendations

CLIENTS

Homes under 1600 square feet.

ARCH Organization

Policy for new housing supply

Newer homes tend to cost slightly less year by year

Location Recommendation

Further Analysis

ZIPCODES

~ 10% Home Price Variance

- Price Variety Across ZIPCODES
- Price Variety Within ZIPCODES

Predicted Home Price = \$395,000



Average Error

- \$65,000

+ \$65,000



THANK YOU

JACOB Hansen

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