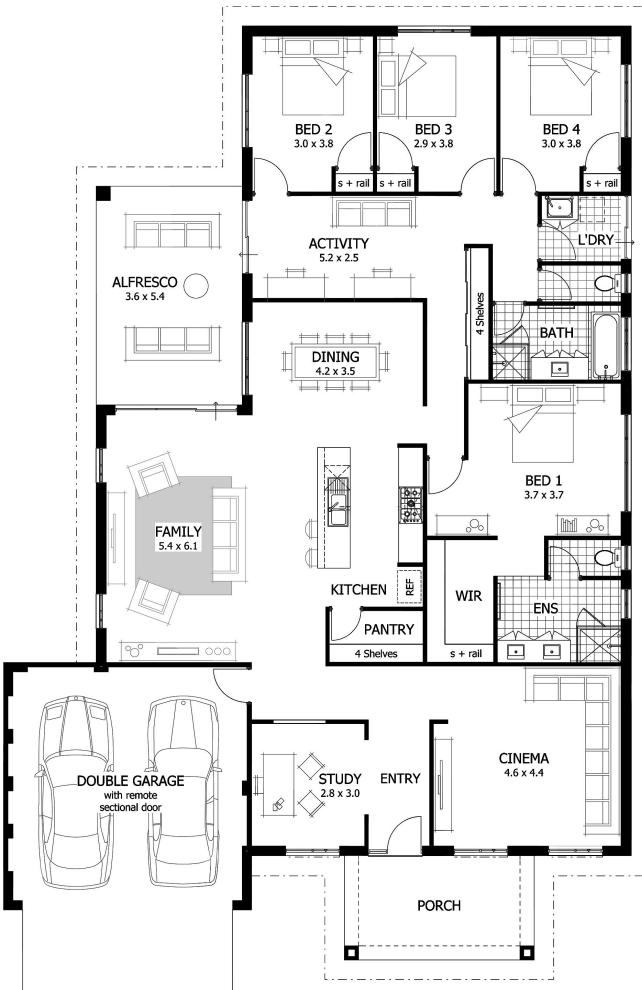




Housing Price Prediction

Kings County, Washington

Bobby Williams & Clair Marie Wholean



Key Questions

Which features predict the price of a home, and by how much?

Does density, as defined by the ratio of living area to lot area, affect house price?

What is the difference in price between urban and non-urban homes?



Data & Assumptions

- King County Washington Housing Data Set
- Single-family only
- Location has a major impact on price, this study looks at other features.
- 18,000 houses

Variables Considered





Waterfront Homes

A waterfront home is worth \$814,000 more than a non-waterfront home.



Recently Renovated

A recently renovated home is worth \$153,000 more than a non-renovated home.

Recent defined as renovated after 2000.



Overall Condition

Homes in good condition worth \$36,700 more than homes needing repairs.



Lot Density

The ratio of total SF / lot SF.

- Low density - baseline
- Mid-density + \$18,000
- High Density + \$119,000

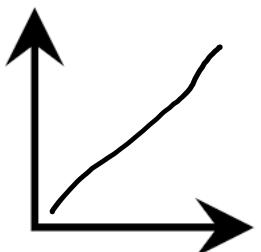


Urban vs. Non-urban

An urban home is worth \$144,000 more than a non-urban home.

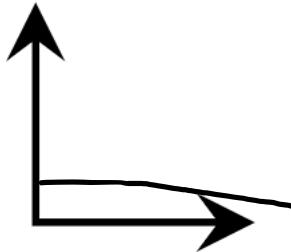
Overall SF

For each additional 100 SF, the house price goes up by \$25,000.



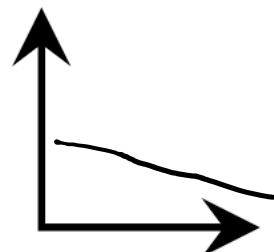
Lot SF

For each 1,000 SF added to the lot, the price goes down \$263



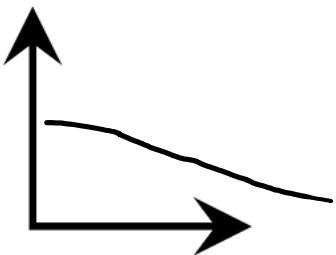
Basement SF

For each 1,000 SF of basement, the price goes down by \$19,450.



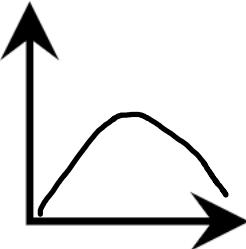
Floors

For each additional floor, the house price goes down by \$42,000.



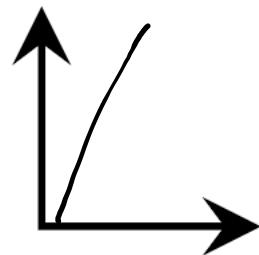
Bedrooms

2-3 bedrooms is ideal. The price goes down with 3+ bedrooms.



Bathrooms

For each additional bathroom, the house price goes up by 17,600



Predictions

Scenario 1:

1.75 bath, 1880 sf, 48787 sf lot, 2 floors, not waterfront, no basement, good condition, not renovated, rural, low density, 4+ beds.

\$333,000

Scenario 2:

3.25 bath, 3030 sf, 9273 sf lot, 2 floors, not waterfront, no basement, good condition, not renovated, rural, low-density, 4+ beds.

\$762,340



The background of the slide is a high-angle aerial photograph of a residential area. The scene is filled with numerous single-family homes of various sizes and colors, interspersed with lush green trees and bushes. The streets are a network of paved roads winding through the neighborhood. In the foreground, there's a mix of older, more traditional houses and some modern, multi-story buildings, likely townhouses or apartments.

Further Study

- Suburban homes
- Predictions by zip code
- Housing Affordability