Where should families buy in Seattle?

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Red Blazer Realty
FOR SALE
OPEN HOUSE
MARGE, I DON'T WANT TO BUY THIS HOUSE.

1. Overview & Business Problem
2. The Data
3. The Method
4. The Model
5. Findings
6. Recommendations
7. Next Steps

Overview & Business Problem

A family is looking for a house in King County, Washington.

They want a house that's good value while also maximizing the quality of the schools in the area.

Determine **which zip code** our family should purchase a house in.

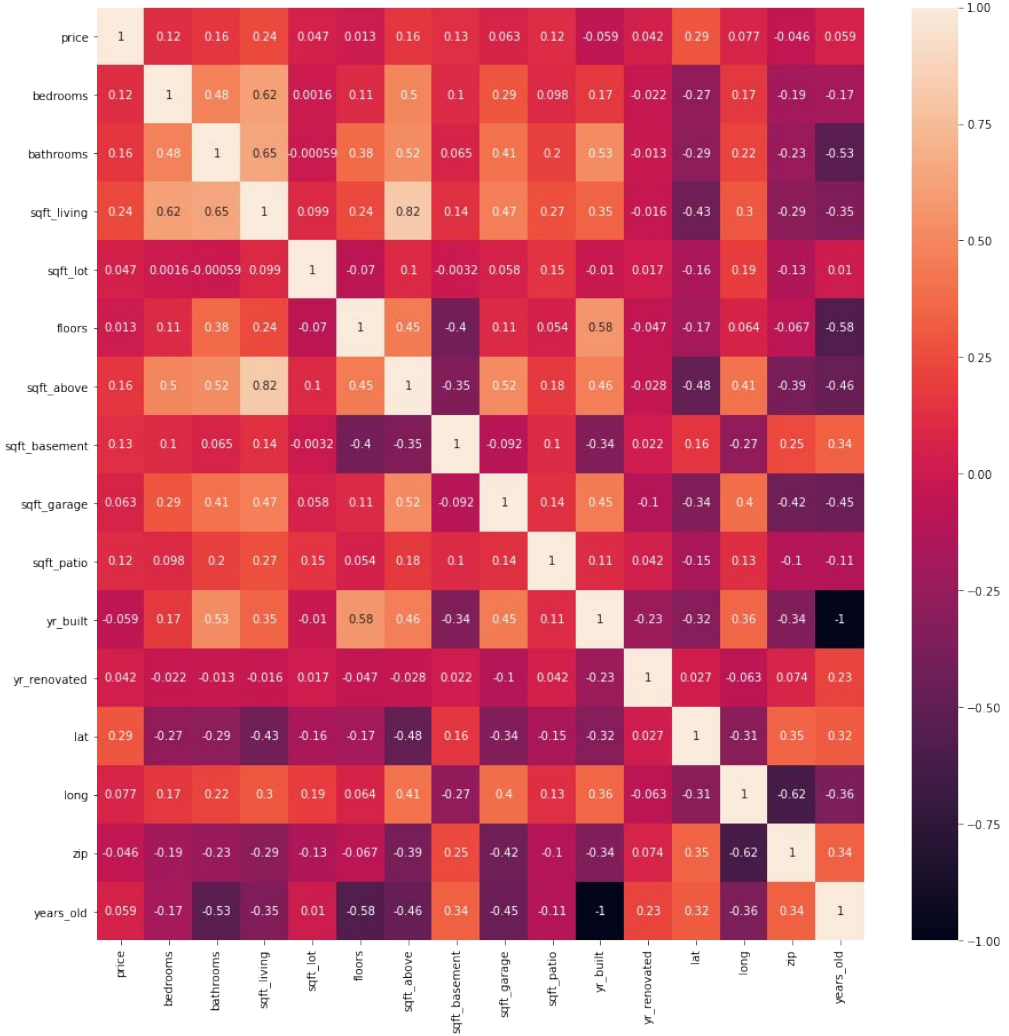
The Data

1. House sale data from the **King County House Sales dataset**
2. Student test score data from **Washington State's open data portal**
3. School address information from **Washington School Directory**

What Drives Sale Price?

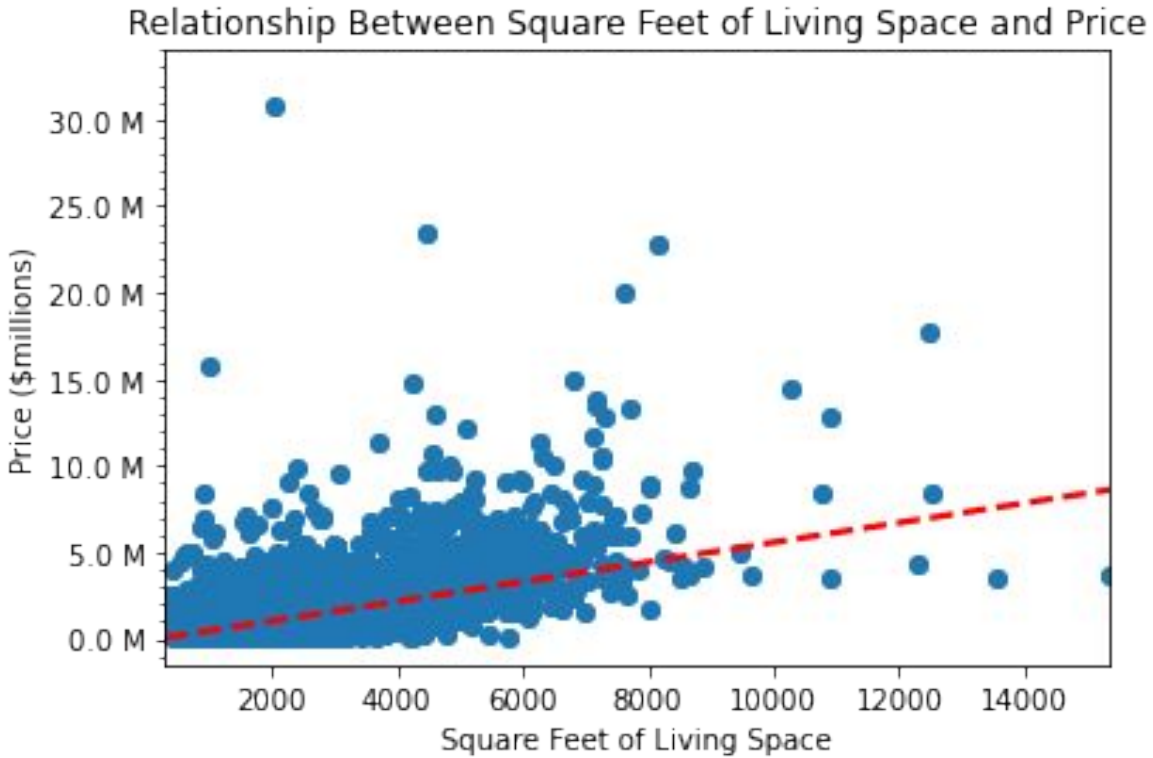
- **Square feet of living space** and **latitude** are closely related to sale price

- **Relationship exists** between variables like square feet of living space and bedrooms and bathrooms



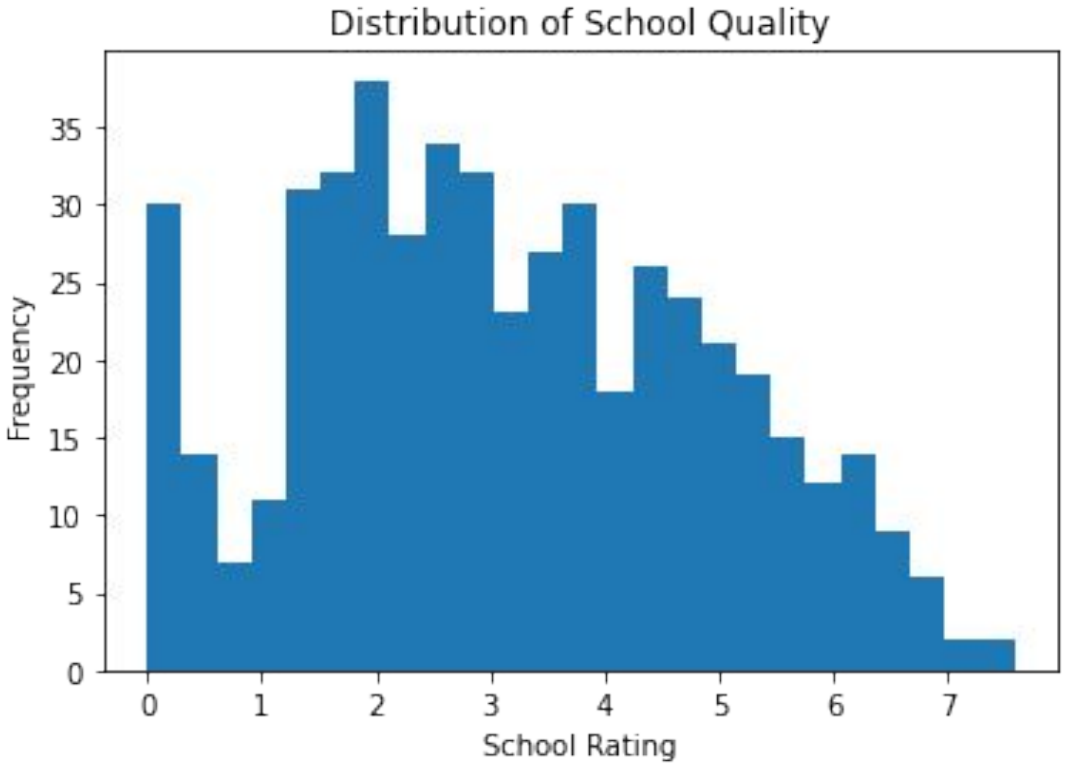
SQFT Living vs. Sale Price

- Strong **positive relationship**
- Clustering around 2000 sq. ft.



School Quality

- Test scores as proxy to determine quality rating
- Most schools around 2-3 in rating
- Nothing is higher than 8 out of 10



School Quality vs. Sale Price

- Strong **positive relationship** between average school quality and average home price by zip code

The Method

- **Regression modeling** to figure out which elements drive house sale prices in King County.
- Focused on houses with **2-5 bedrooms** and sold between **$650k-1.3 million.**
- **Maximized school quality** and looked at **houses sold near or under predicted value.**

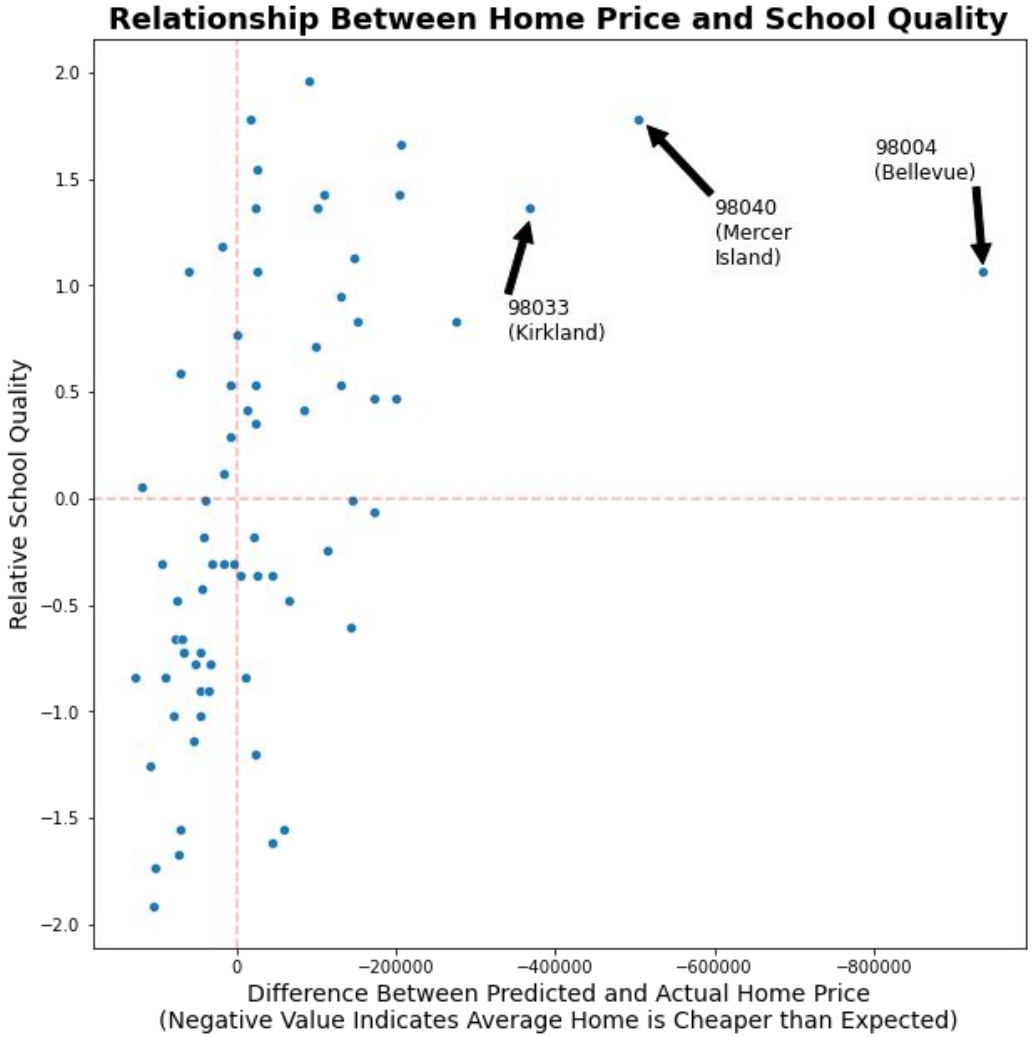
The Model

- Incorporates key features such as number of bedrooms and bathrooms
- Where necessary, adjusts for characteristics of local market to minimize impact of outliers
- Location, location, location! Made ZIP codes a key feature

Quadrant Analysis

Our goal is to minimize inflated value of the house and maximize school quality.

The quadrant we want to look at is the **top right** – houses that sold for close to or under our predicted value and schools with the highest test scores.



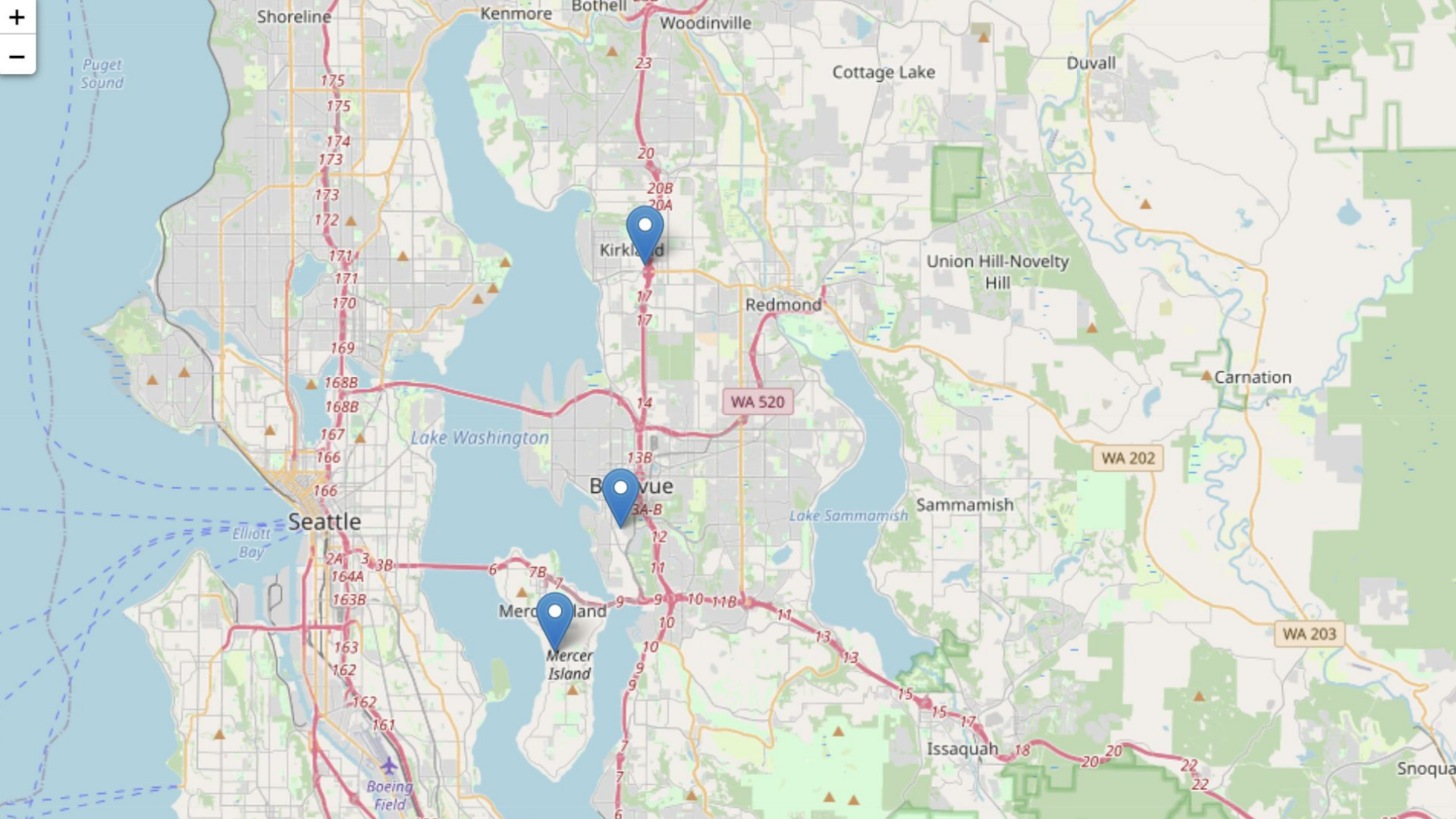
Recommendations

The winning zip codes are...

98040

98004

98033


Shoreline
Kenmore
Bothell
Woodinville
Cottage Lake
Duvall
Puget Sound
Kirkland
Union Hill-Novelty Hill
Redmond
Carnation
WA 520
Lake Washington
WA 202
Seattle
Sammamish
Lake Sammamish
Elliott Bay
Mercer Island
WA 203
Issaquah
Boeing Field

Next Steps

1. **Look at trends in house sales.**

2. **Dig deeper into school quality.**

THANK YOU

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