King County Housing Market Analysis

Data-driven recommendations for a buyer

Client: Jennifer Montgomery

Business Problem

Question:

- What drives house prices in King County?

- How can data support a short-term investment decision?

Data Overview

- King County housing sales data

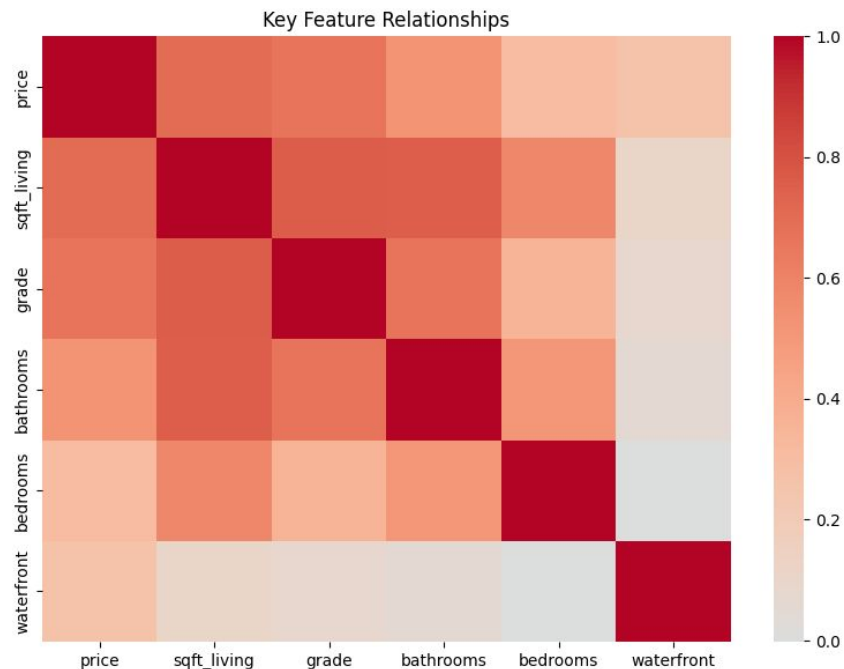- ~21,000 houses

- Property characteristics + prices

Methodology

- Data cleaning & validation

- Exploratory data analysis

- Hypothesis-driven analysis

- Client-specific filtering

Which features move together?

- House price moves strongly with size and quality

- Living area and grade show the strongest relationships

- Not all features influence price equally

Key Feature Relationships

Key Insight
House size and quality drive price

Findings:

- Larger living area → higher prices

- Higher construction grade → higher prices
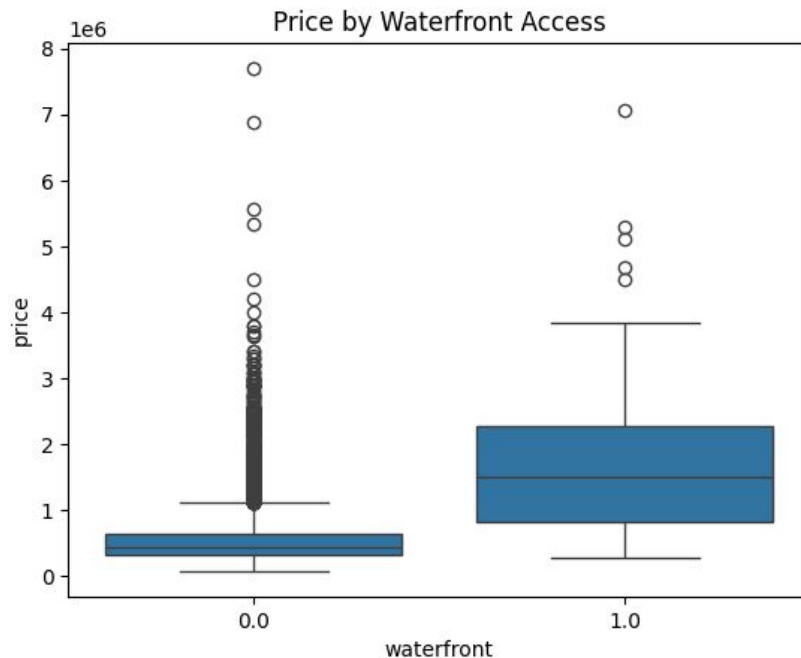

Price vs Living Area

Key Insight #2
Waterfront significantly increases value

Findings:

- Waterfront houses are rare

- But much more expensive

- Strong premium segment
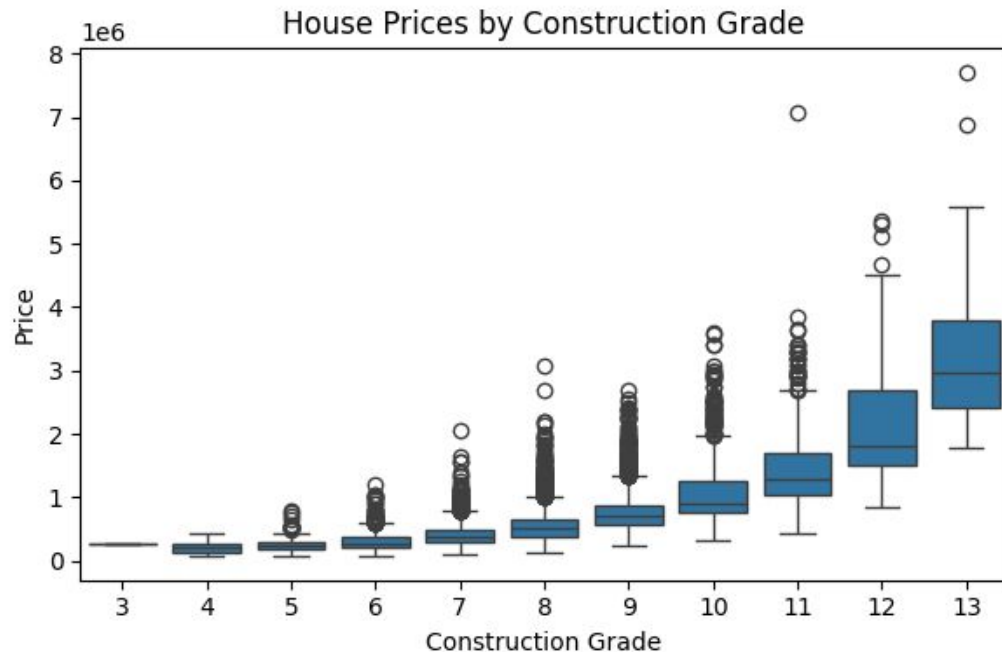

Price by Waterfront Access

Key Insight #3
Construction quality strongly impacts price

Findings:

- Higher construction grades achieve higher prices

- Clear price differences across quality levels

- Important for short-term resale potential

House Prices by Construction Grade

Client Recommendation
Recommendation for Jennifer Montgomery

We recommend:

- Waterfront properties

- High construction grade (10+)

- Recently renovated

- Top 10% neighborhoods

- Avoid long renovation projects

Why?

- Strong price drivers

- Fits short resale timeline

- Lower operational risk

Risks & Limitations

Considerations:

- Based on historical data

- Market timing not guaranteed

- Short resale window increases risk

Mitigation:

- Focus on premium, liquid segments

Conclusion

Summary:

- Clear price drivers identified

- Data supports premium strategy

- Waterfront + quality + renovation = best fit