EDA Project

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Client: Amy Williams (Seller) who is A Mafiosi, sells several central houses(top10%) over time, needs average outskirt houses over time to hide from the FBI...

1. Insight: How does proximity to specific geographic features, such as waterfronts or central locations, influence house prices in King County?

Geographical Distribution: The scatter plot shows the geographical distribution of houses, with waterfront properties marked distinctly. You can observe that waterfront properties are typically located in specific regions near water bodies, and these tend to have higher prices, as reflected by the larger markers.
These visualizations support the hypothesis that proximity to water significantly influences property prices.
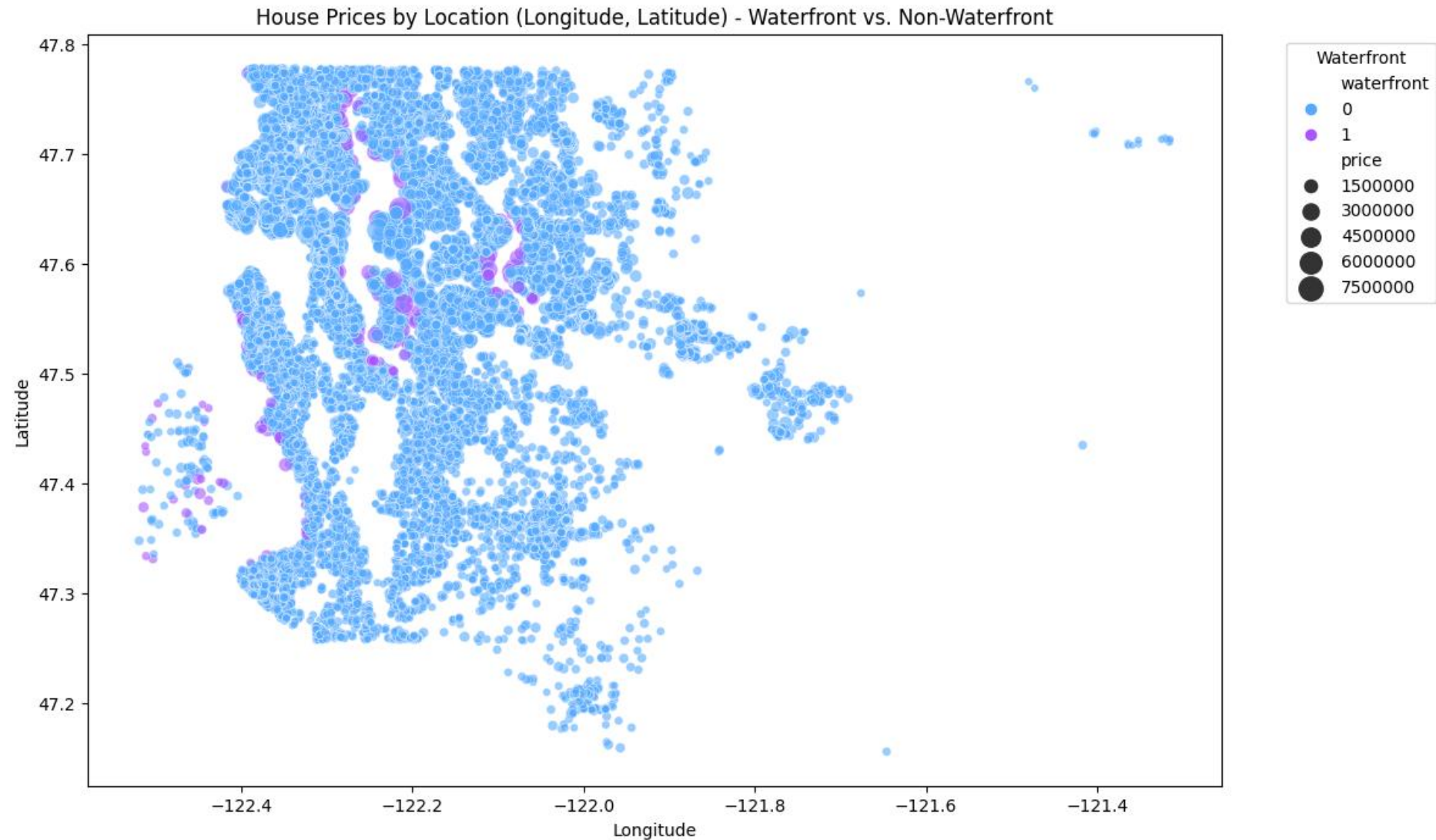
House Prices by Location (Longitude, Latitude) - Waterfront vs. Non-Waterfront

1. Insight: How does proximity to specific geographic features, such as waterfronts or central locations, influence house prices in King County?

Average Price Comparison: The average price of waterfront properties is significantly higher 1,717,214 compared to non-waterfront properties 532,286.
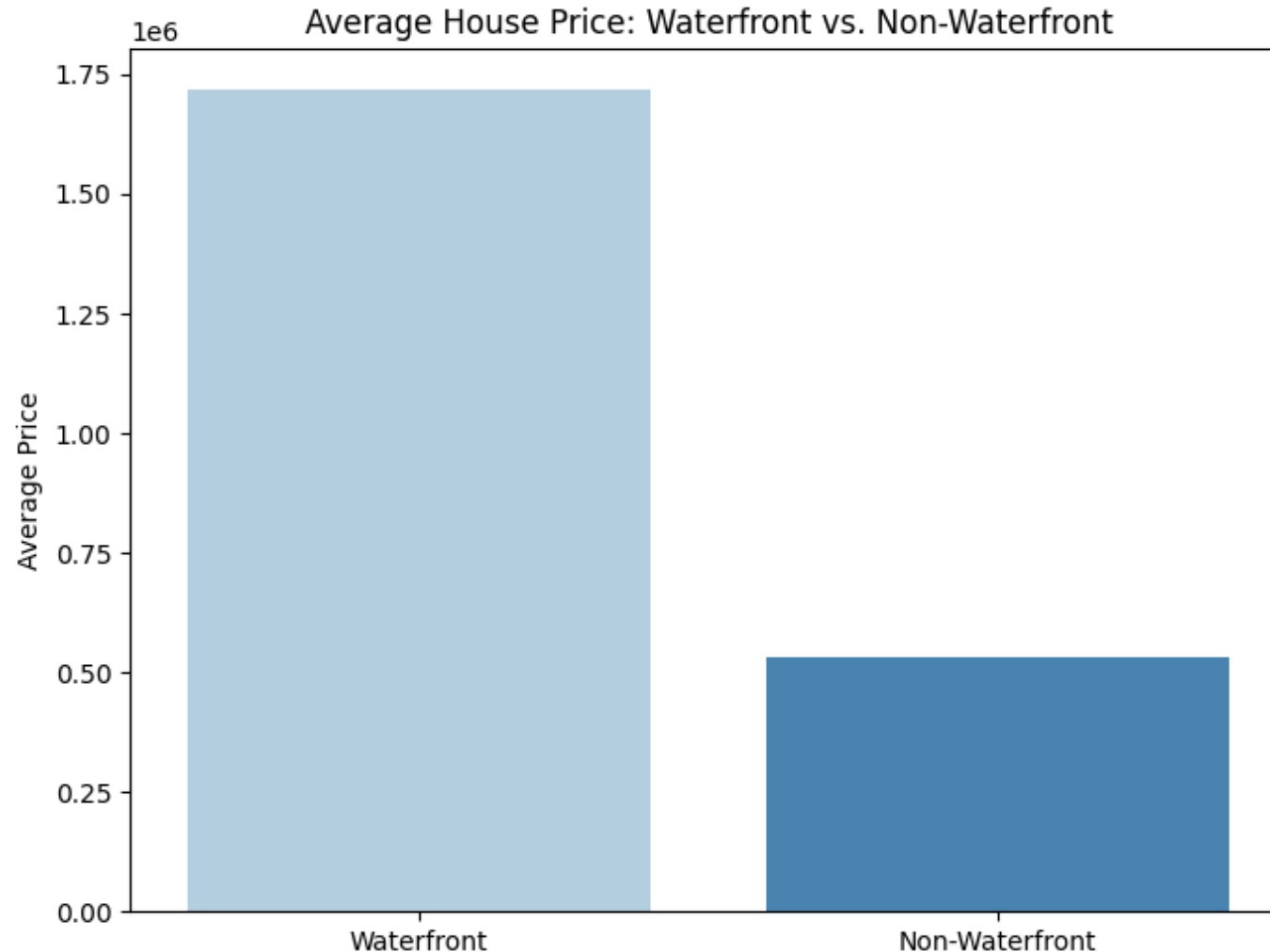
2. Insight: Renovations are very impactful across all grades but particularly beneficial for medium and high-grade properties.

% change between renovated and not renovated grade categories: Low Grade: 18.20 - Medium Grade: 44.27 - High Grade: 52.66

Average House Price by Grade Category and Renovation Status

3. Insight: Does the number of floors in a property influence its sale price, and how does this effect vary across different property grades?

Properties with more floors generally have a higher average price.
High-grade properties consistently have a higher average price regardless of the number of floors.
For low and medium-grade properties, the average price increases with the number of floors, but at a slower rate compared to high-grade properties.

Average House Price by Number of Floors and Grade Category
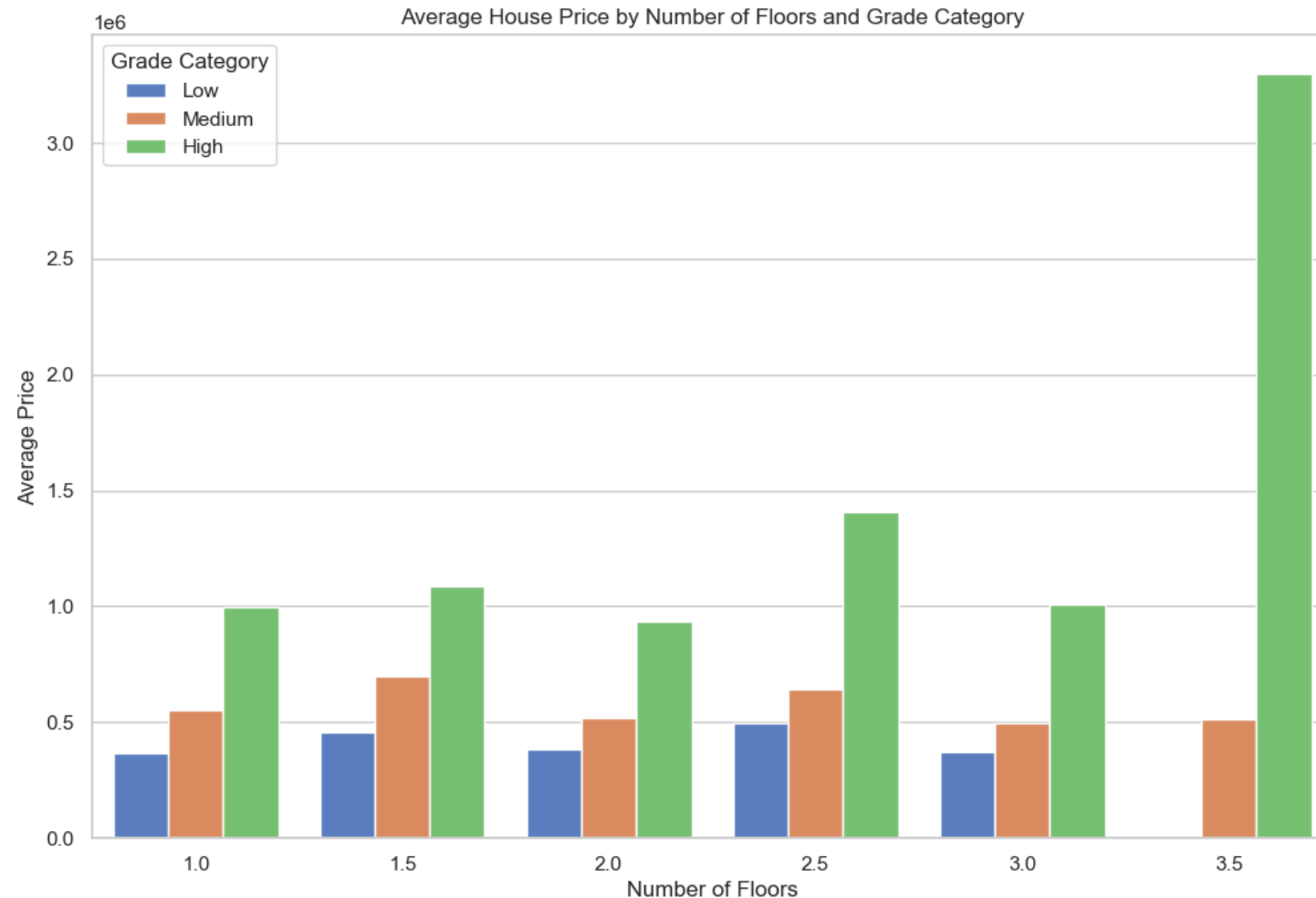
1. Recommendation for a Home Seller Client

Top 10% Central Houses: These houses are in the highest price bracket, typically large with higher numbers of bedrooms and bathrooms.
Average-Priced Houses: These properties fall into a more average price range, suitable for **discreet** purchases.

Price Distribution: Top 10% Central Houses vs. Average Outskirt Houses
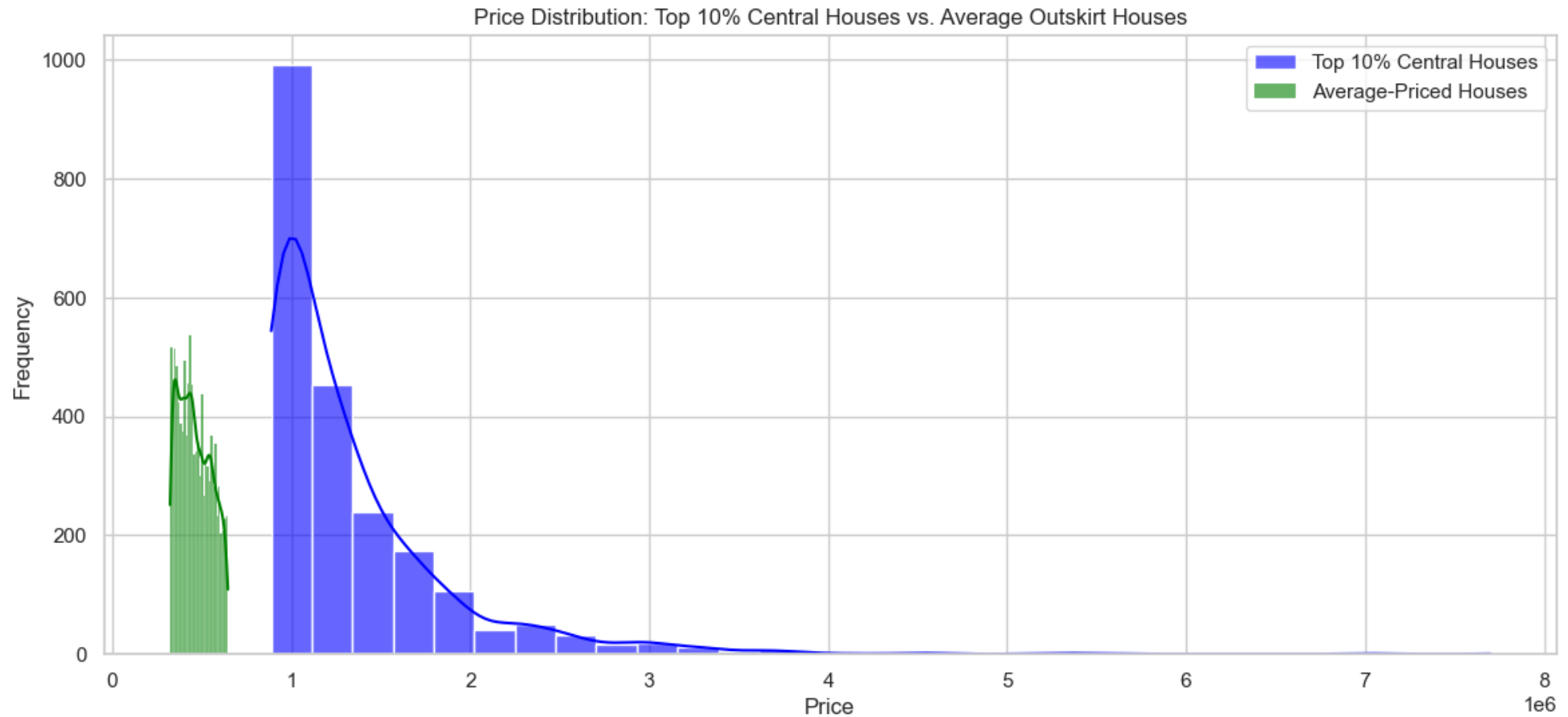
2. Recommendation for a Home Seller Client

Top 10% Central Houses tend to have slightly better condition on average compared to the average-priced houses in the outskirts. This might *imply less need for repairs or renovations* for top-value properties.

Average Condition (Top 10% Central Houses): 3.46

Average Condition (Average-Priced Outskirt Houses): 3.38

3. Recommendation for a Home Seller Client

Number of Bathrooms in Top 10% Central Houses vs. Average Outskirt Houses: Top 10% Central Houses generally have more bathrooms compared to average-priced outskirt houses.

- Average Number of Bathrooms (Top 10% Central Houses): 3.02
- Average Number of Bathrooms (Average-Priced Outskirt Houses): 2.06