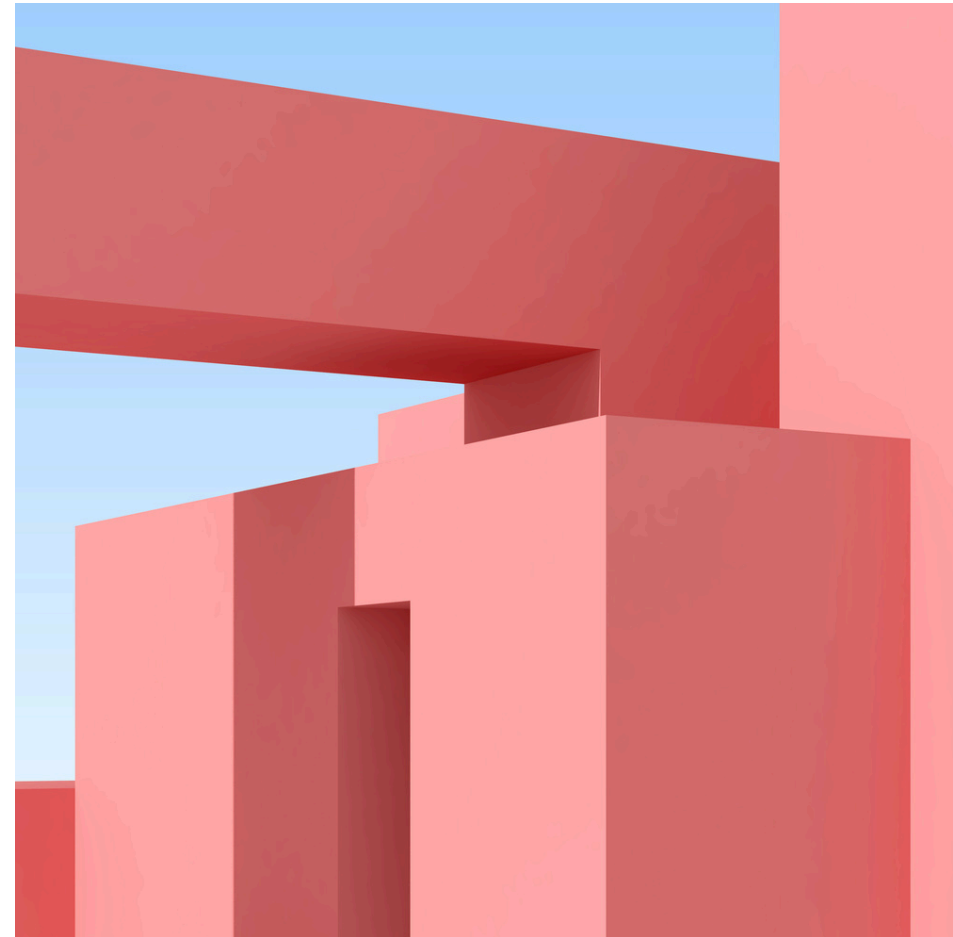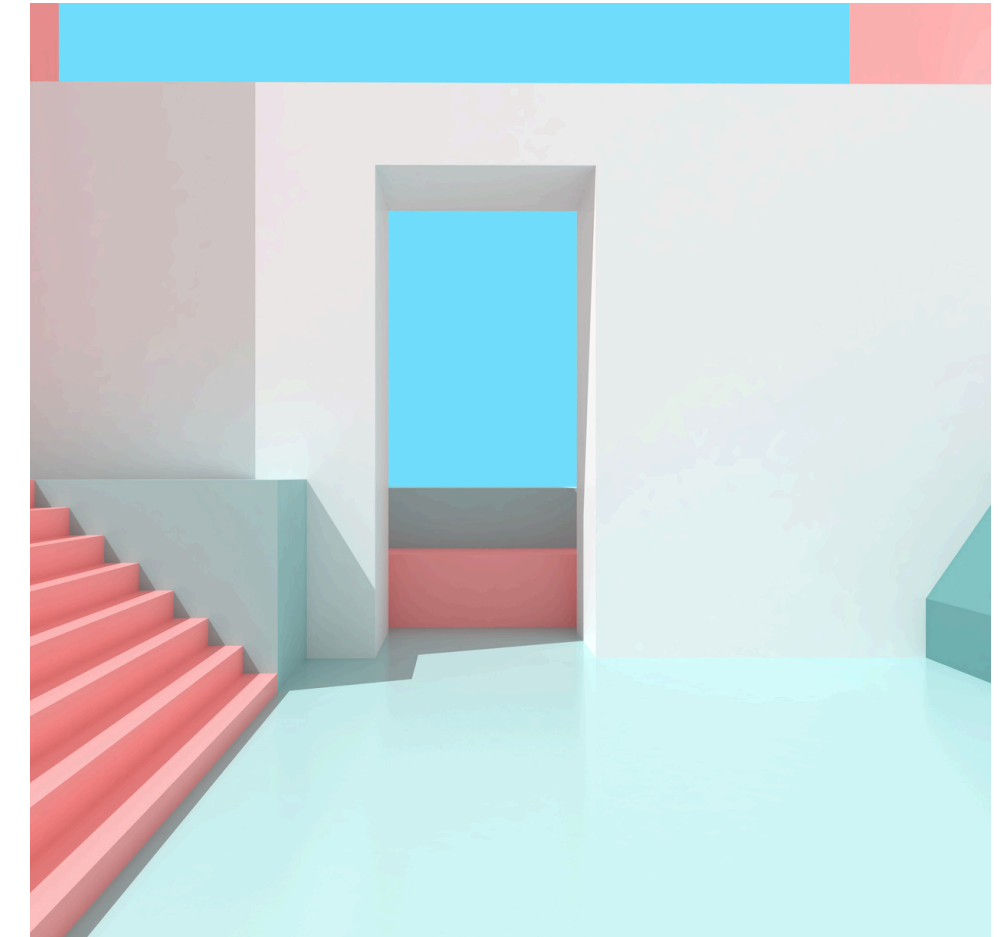# KING COUNTY HOUSING DATA

CLIENT WILLIAM RODRIGUEZ

Buyer | two properties | for himself and his wife:

- City property: centrally located, ready-to-move-in home.
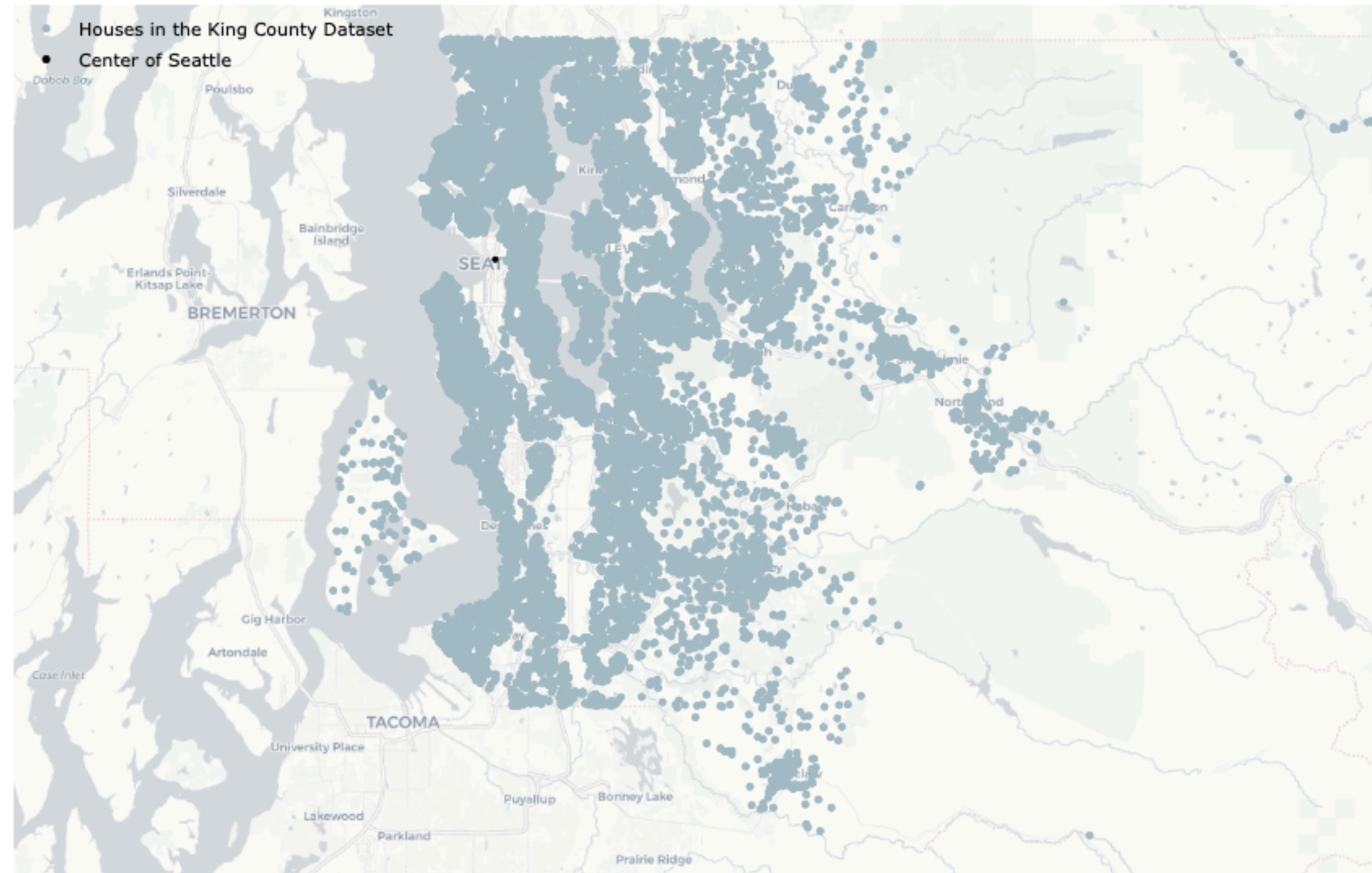- Countryside property: non-renovated home with the goal of purchasing at the optimal time.

01. City House

02. Countryside House

OVERVIEW

The data set for our analysis comprises 214,420 houses located in and around Seattle.

Map of all houses in the dataset

HYPOTHESES

1.

LOCATION IMPACT HYPOTHESIS
City houses command higher prices than country houses.

2.

SIZE HYPOTHESIS
For a two-person household, houses with fewer bedrooms (1-2) are more cost-effective than larger properties.

3.

CONDITION HYPOTHESIS
Newer and better-maintained houses command higher prices than older and less well-maintained ones.
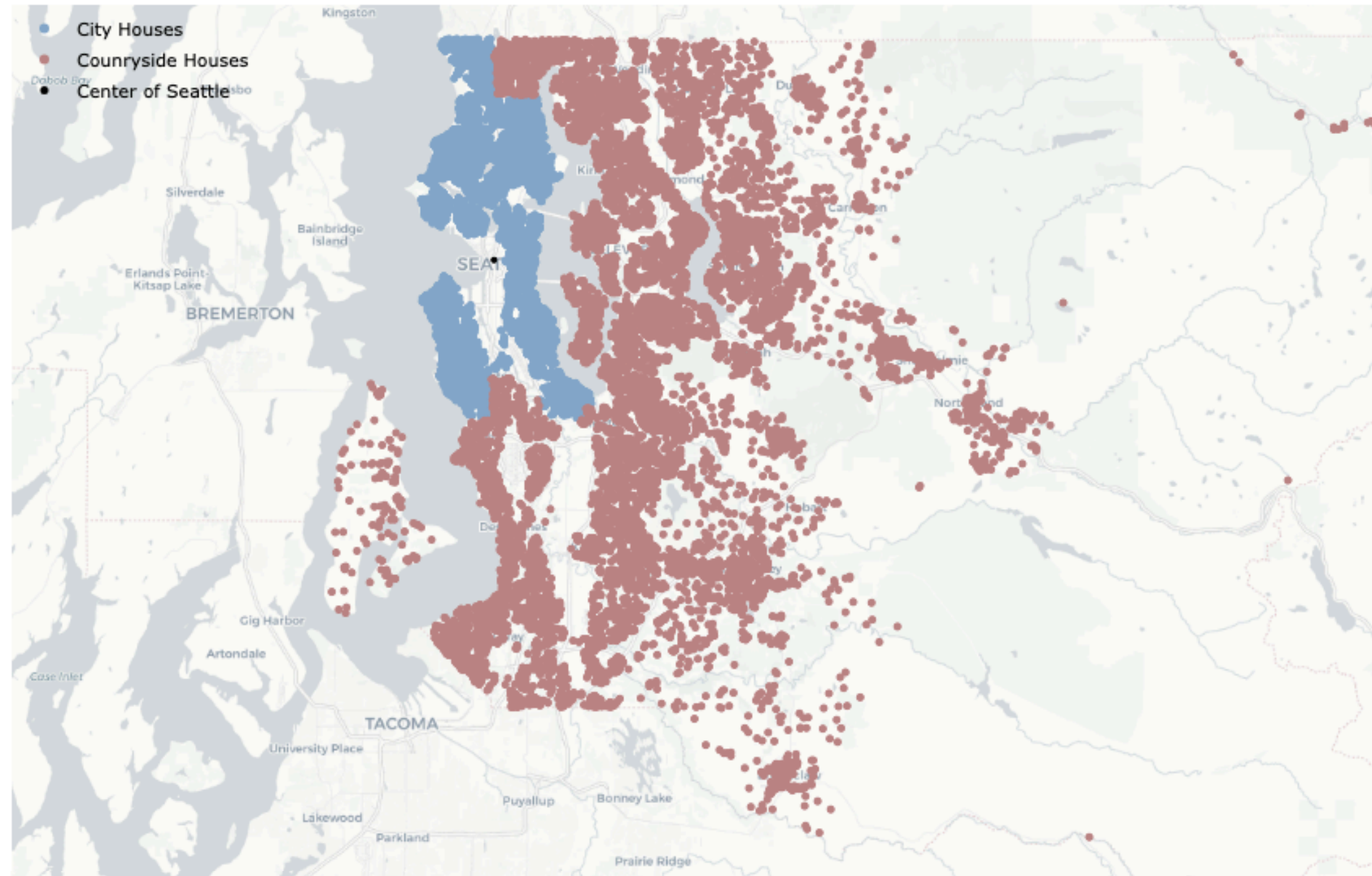
4.

TIMING HYPOTHESIS
Prices for country houses are lower during winter.

LOCATION IMPACT

Each property in the dataset is categorized as either being in the city of Seattle or in the surrounding countryside, using ZIP codes as a geographical identifier

Map of all city and countryside houses in the dataset.

LOCATION IMPACT

This initial analysis suggests that the hypothesis—that city houses command significantly higher prices than countryside houses—is not strongly supported. Within one standard deviation, the prices between city and countryside properties are comparable.
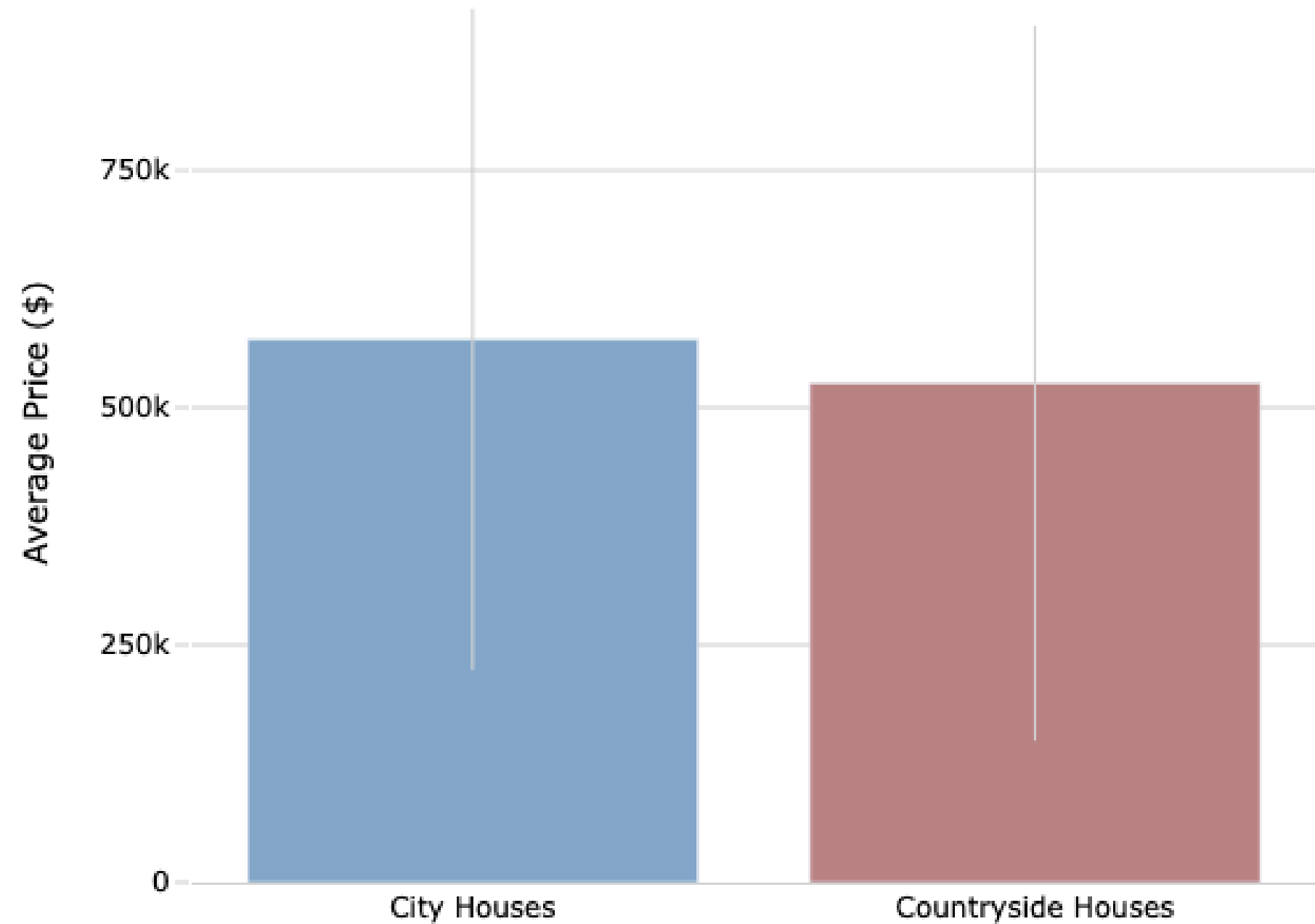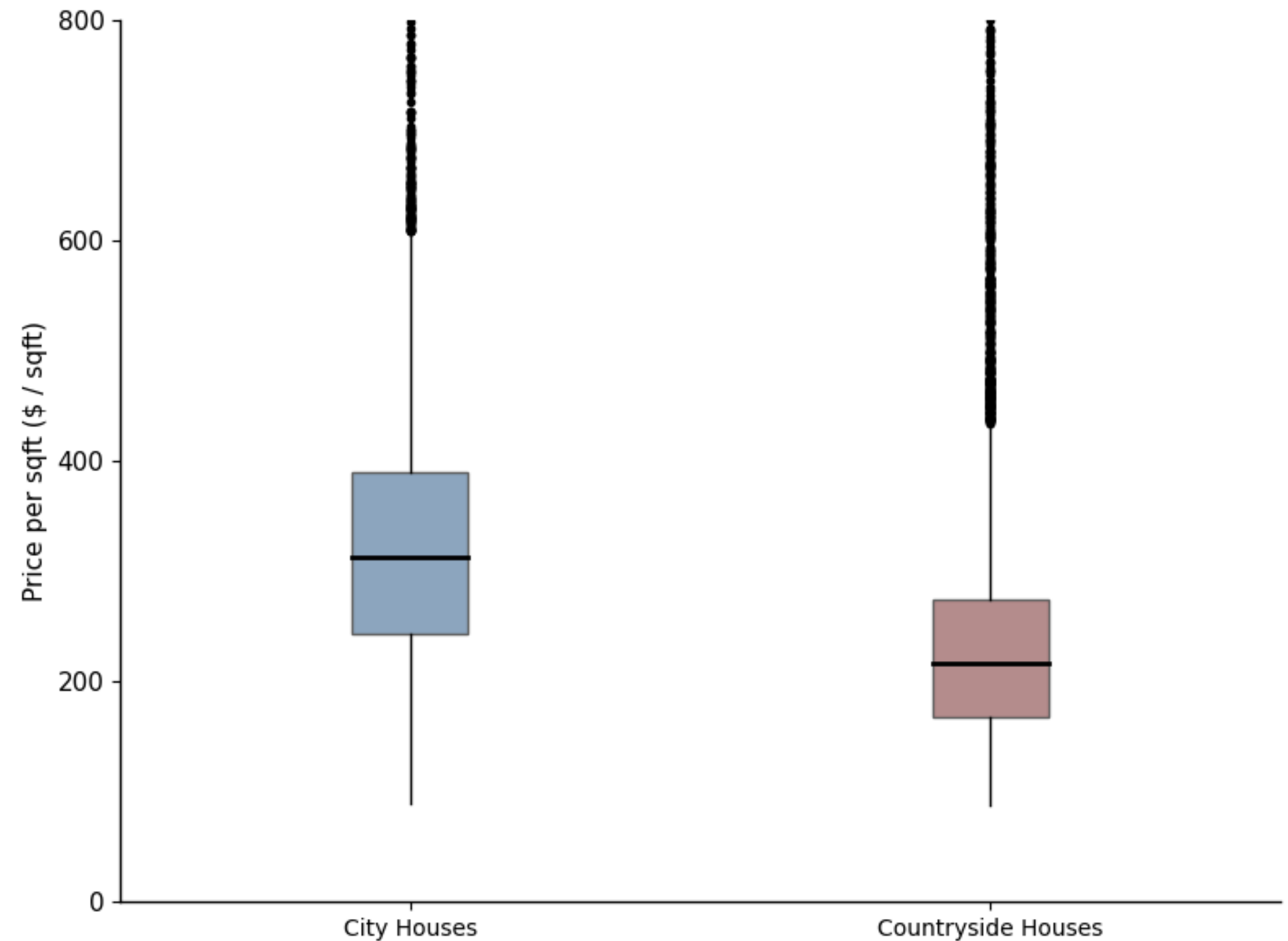
LOCATION IMPACT

The living spaces are also similar. This indicates that larger houses in the countryside do not necessarily compensate for the price difference between city and countryside properties.
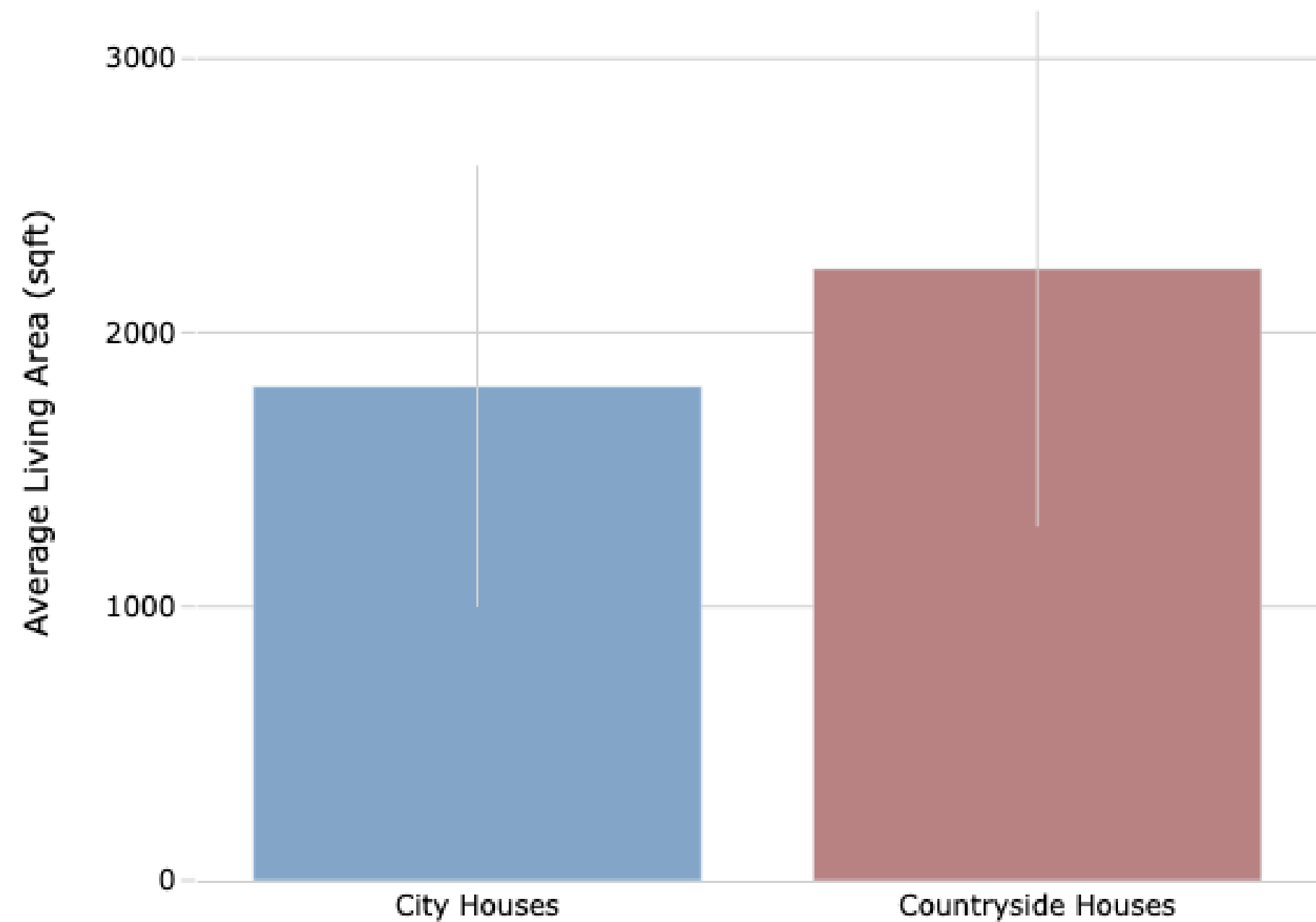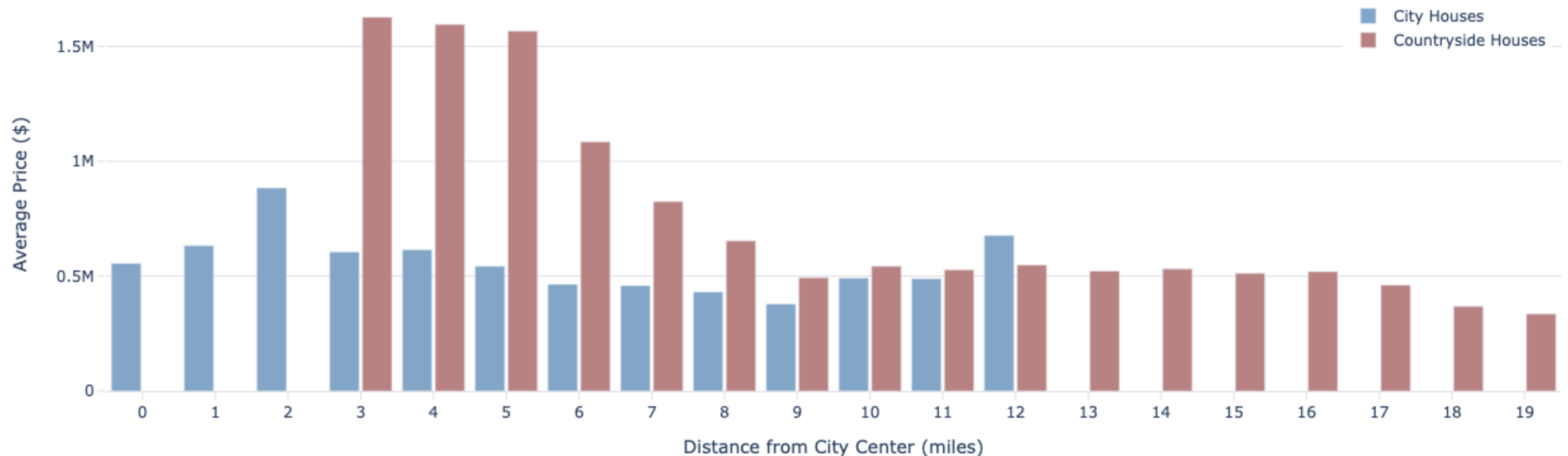
LOCATION IMPACT

While the average price per square foot in the countryside is lower, the substantial standard deviation indicates that prices between city and countryside homes can be relatively comparable. To gain further insights, we will analyze how proximity to key city center landmarks impacts property prices in the city.
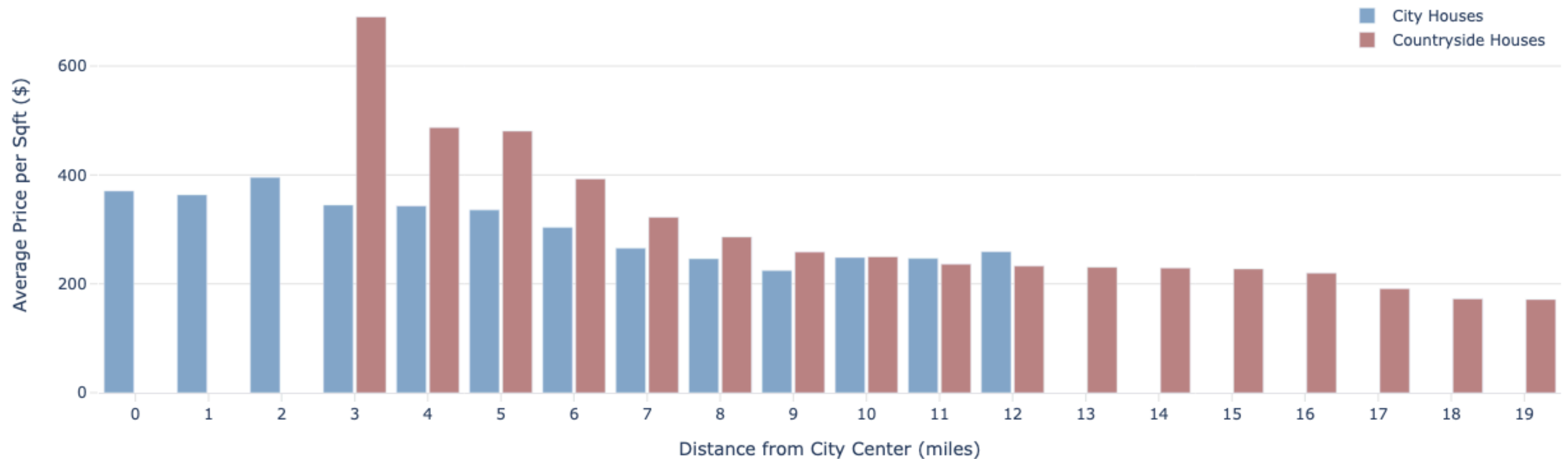
LOCATION IMPACT

The proximity evaluation reveals an interesting trend: there is a middle range where countryside house prices significantly exceed those in the city.
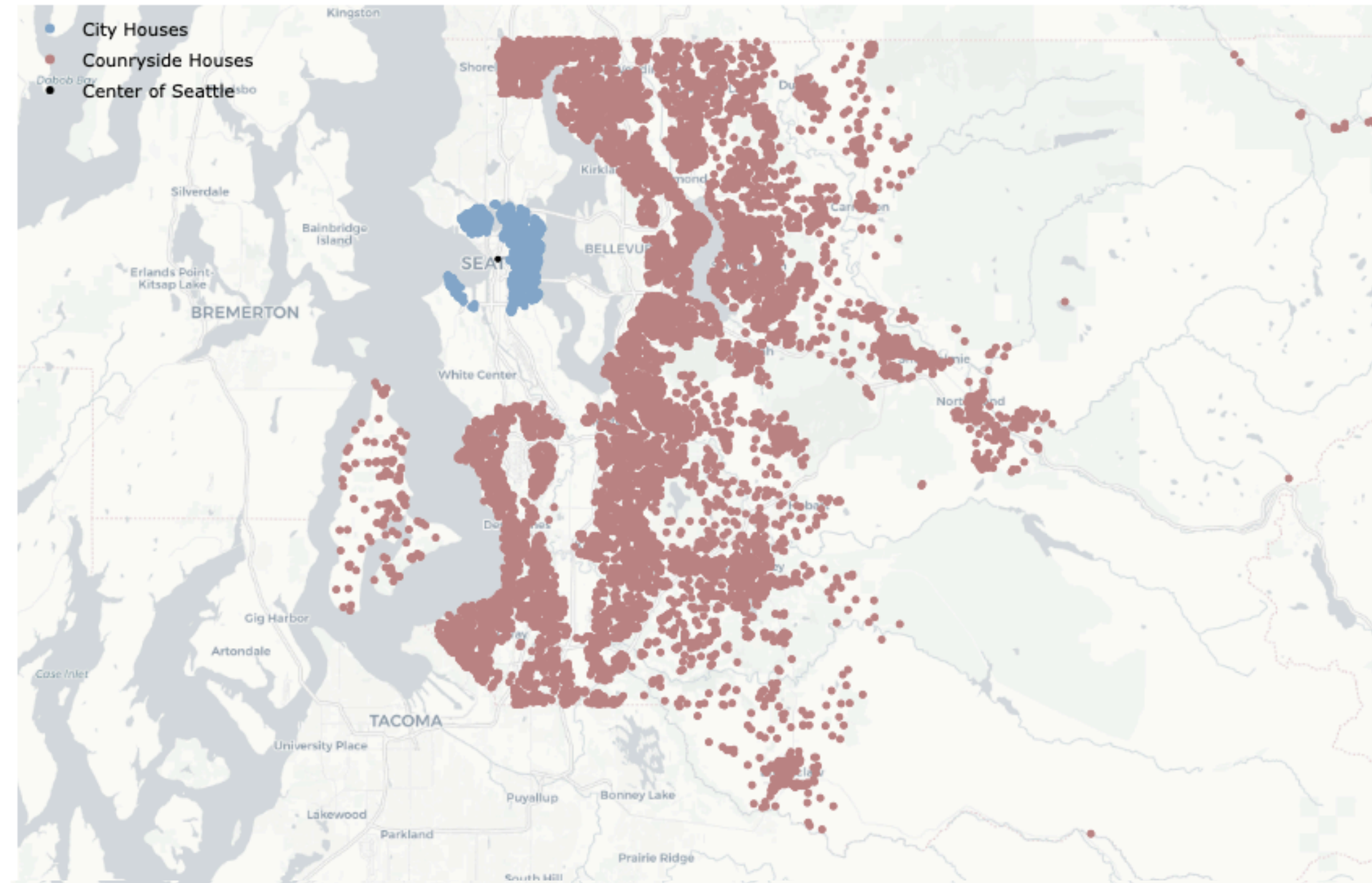
LOCATION IMPACT

Within the 0-3 mile range in the city, prices are indeed slightly higher than those located 8 or more miles from the city center. Larger lots in suburban areas do not influence this trend.

LOCATION IMPACT

There's an intermediate range where properties combine the appeal of countryside living with proximity to the city center, resulting in the highest house prices. Therefore it seems more advantageous for our client to buy his city house within 0-3 miles from the center and his country house more than 8 miles away fromthe center.

Map of city houses < 3 miles and of country houses > 8 miles from the city center.
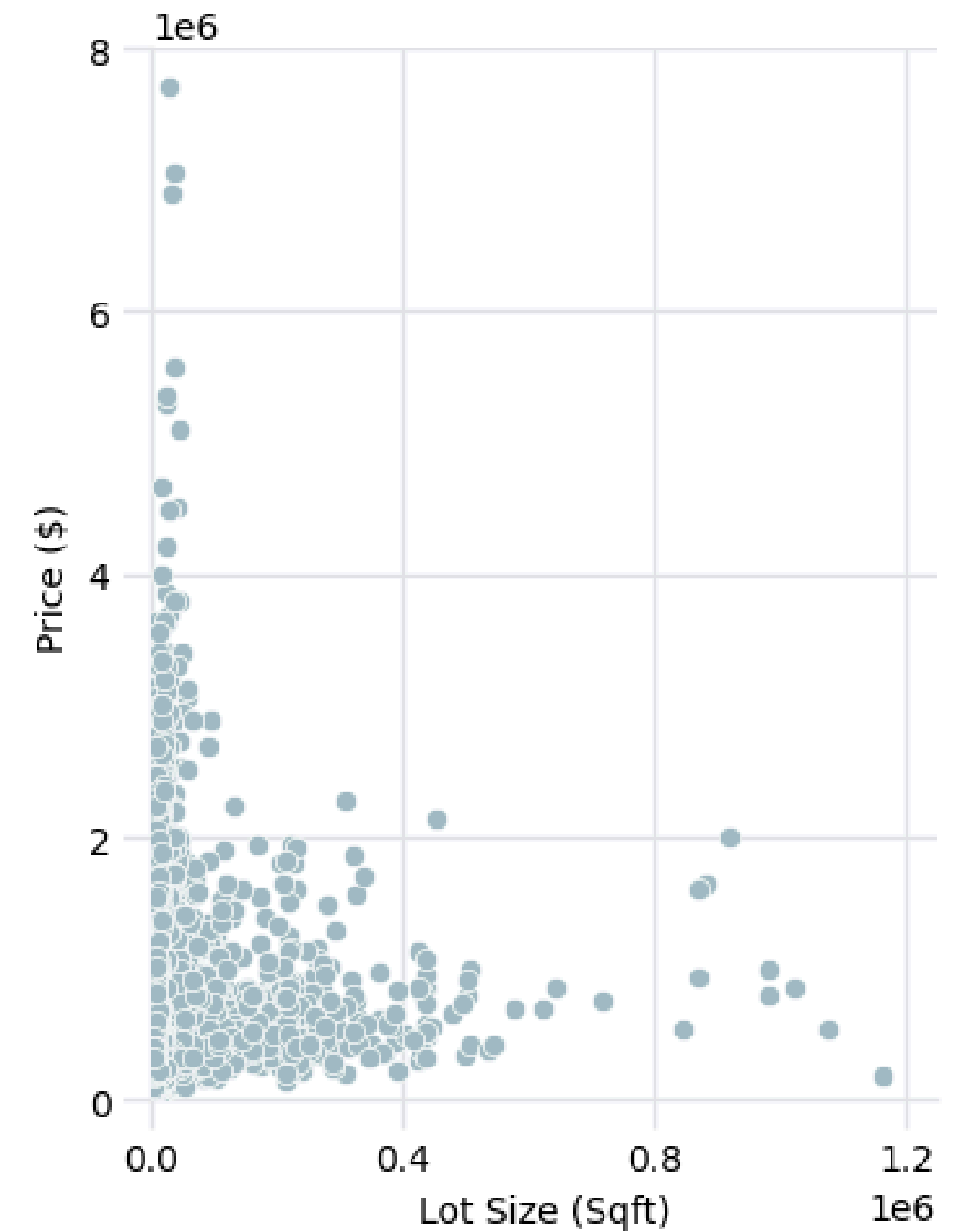
HYPOTHESES

1.

LOCATION IMPACT HYPOTHESIS
Within 3 miles to the city center,
prices are indeed slightly higher than
those located 8 or more miles from
the city center. This hypothesis holds
true.

SIZE

Homes with smaller living spaces are generally less expensive than larger homes. For lot size, this trend is not as clear and likely depends on the specific area.

SIZE

Homes with fewer bedrooms and bathrooms may offer better value for smaller households.
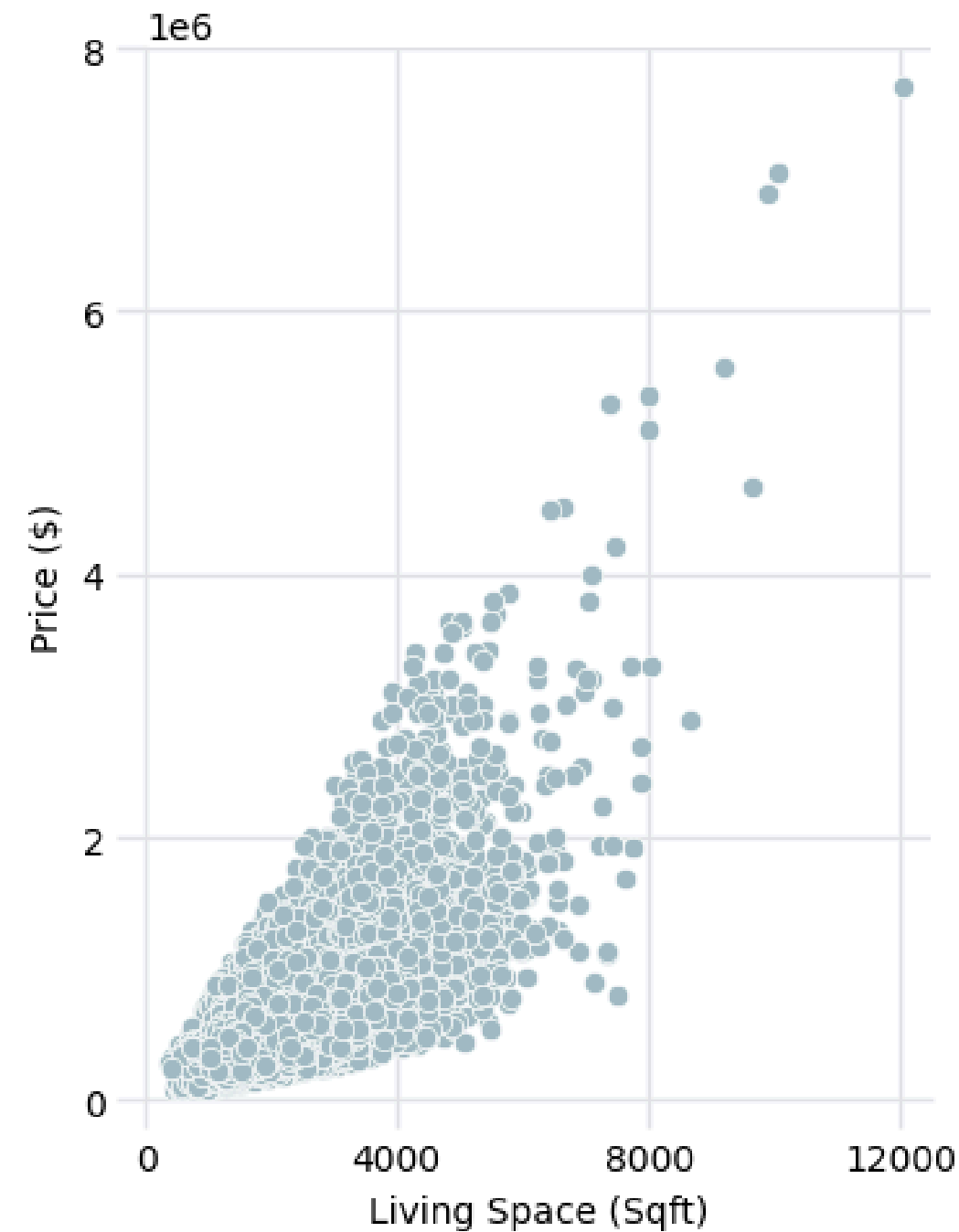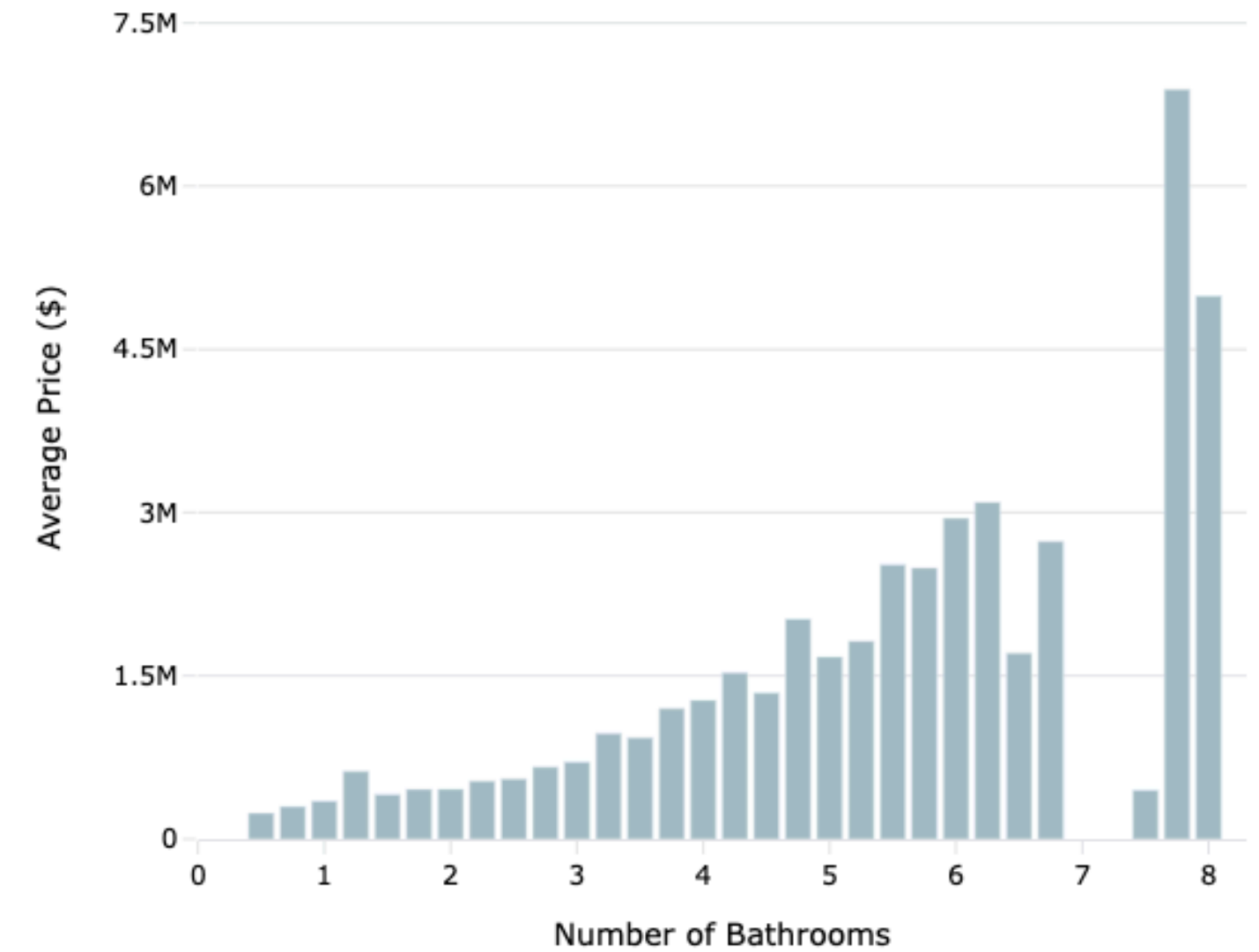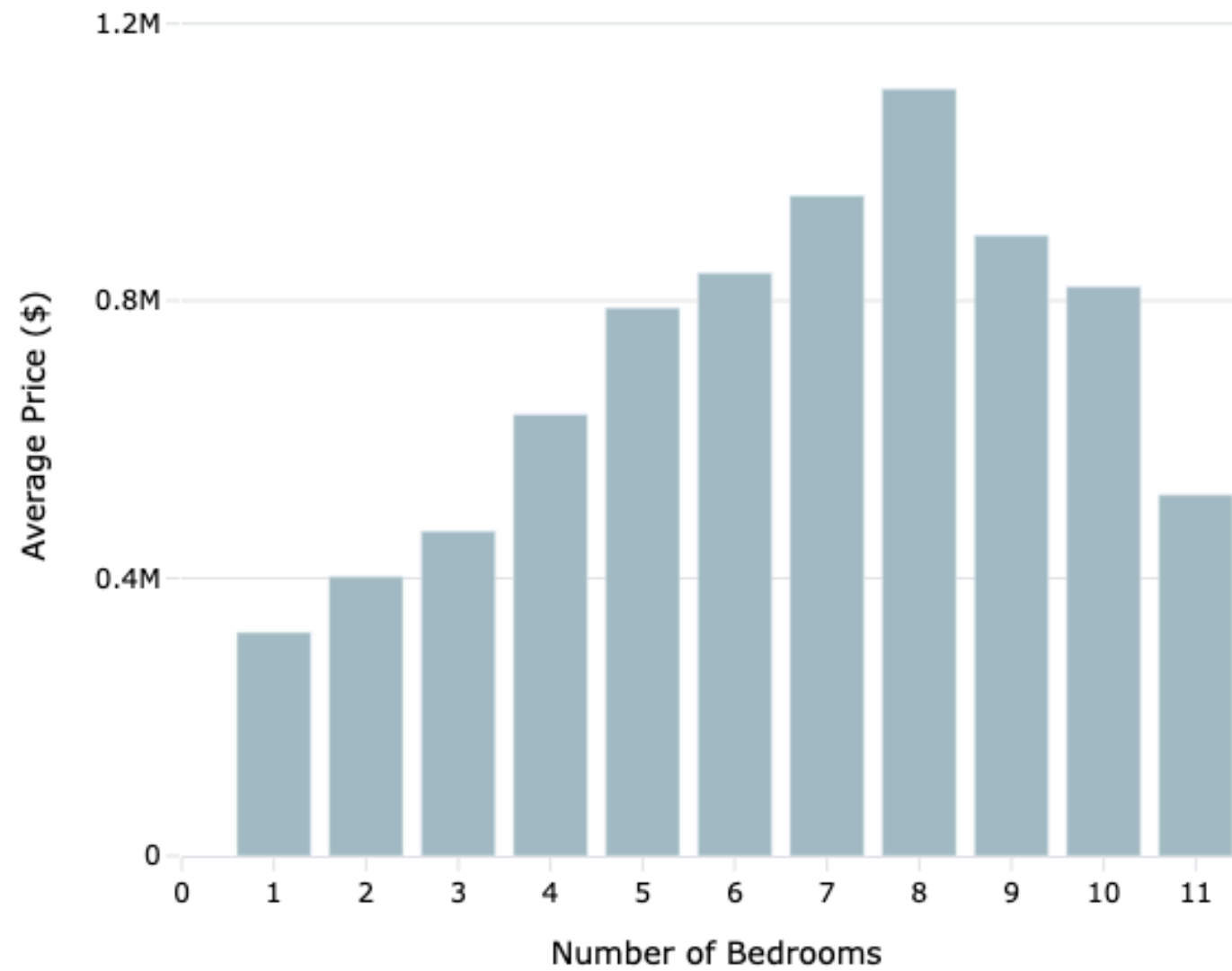
HYPOTHESES

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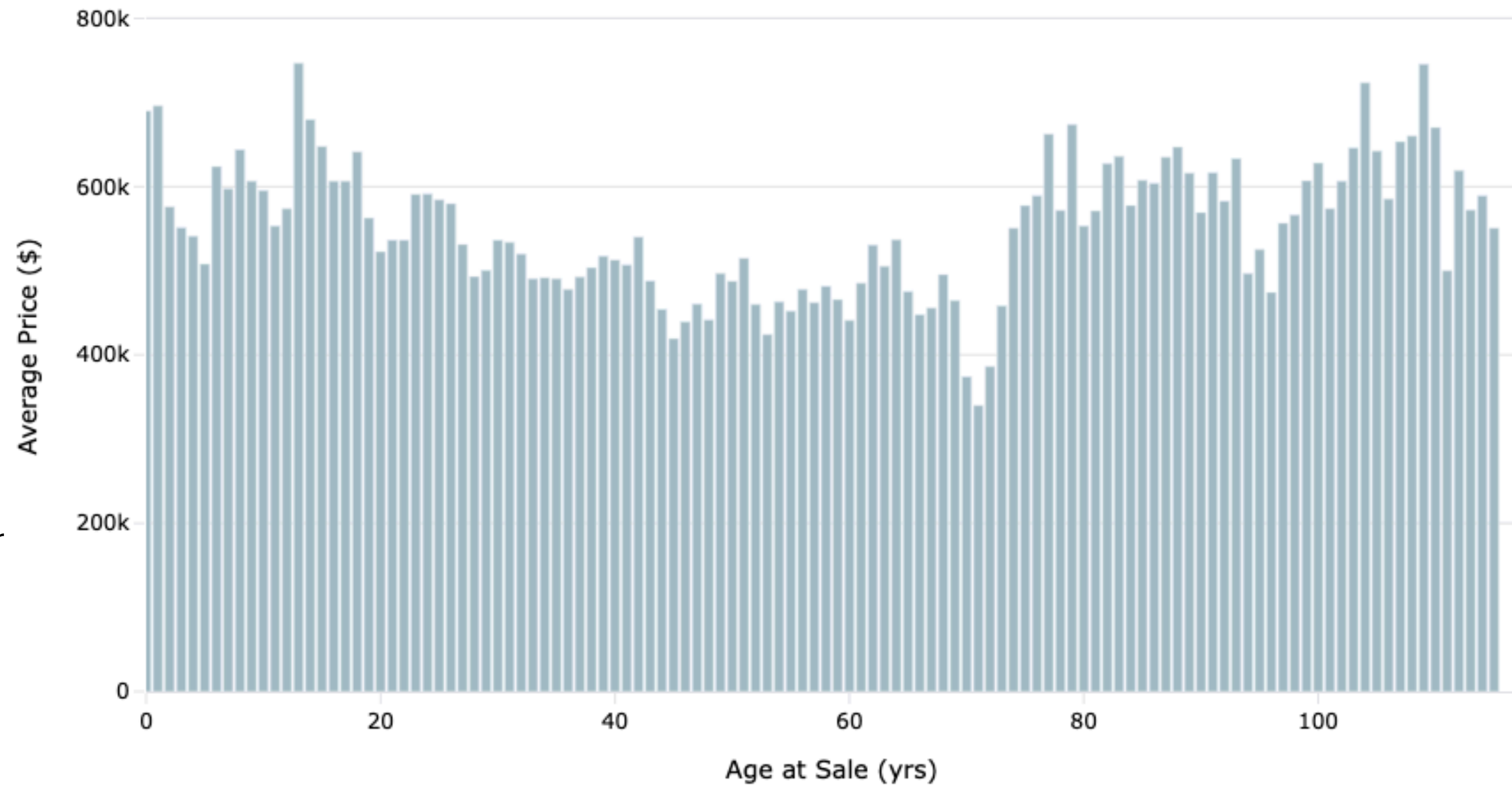
2.

SIZE HYPOTHESIS
The price of a house increases with the increasing living space and with the number of bedrooms and bathrooms. Particularly for properties with 1-2 bedrooms, this hypothesis holds true.
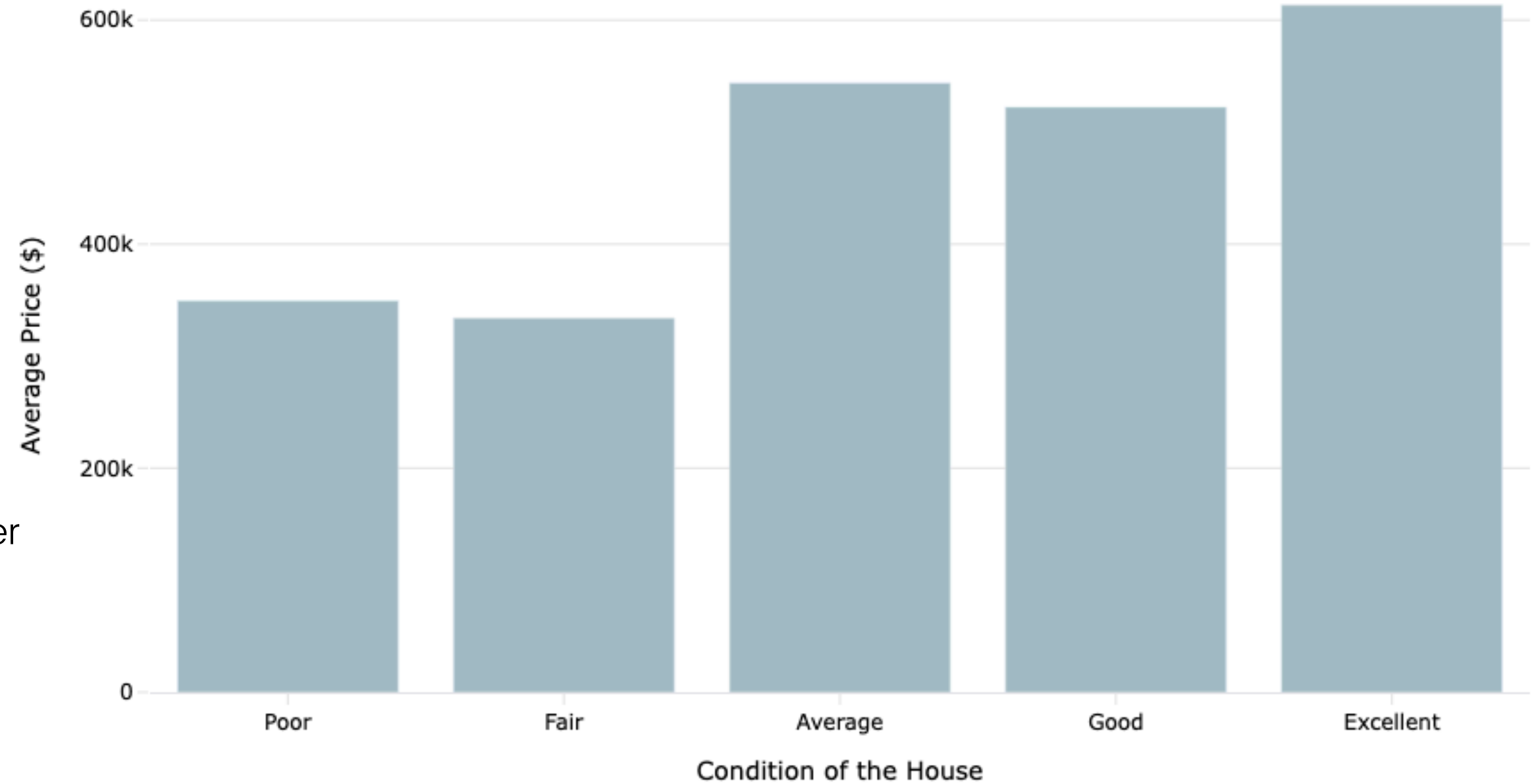
CONDITION

Younger houses show no trend towards higher prices. Therefore, the actual impact needs to be viewed in conjunction with condition and renovations.
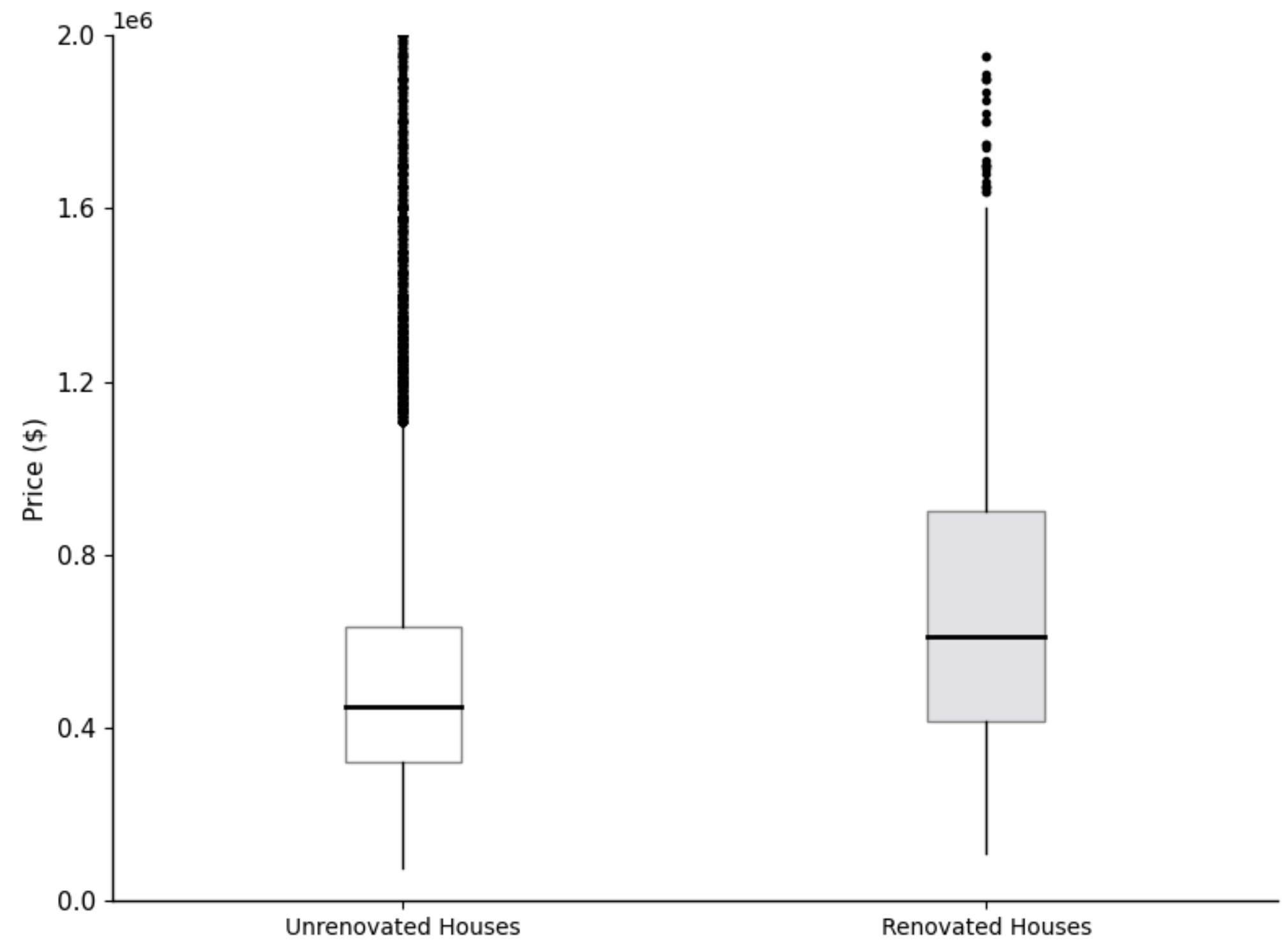
CONDITION

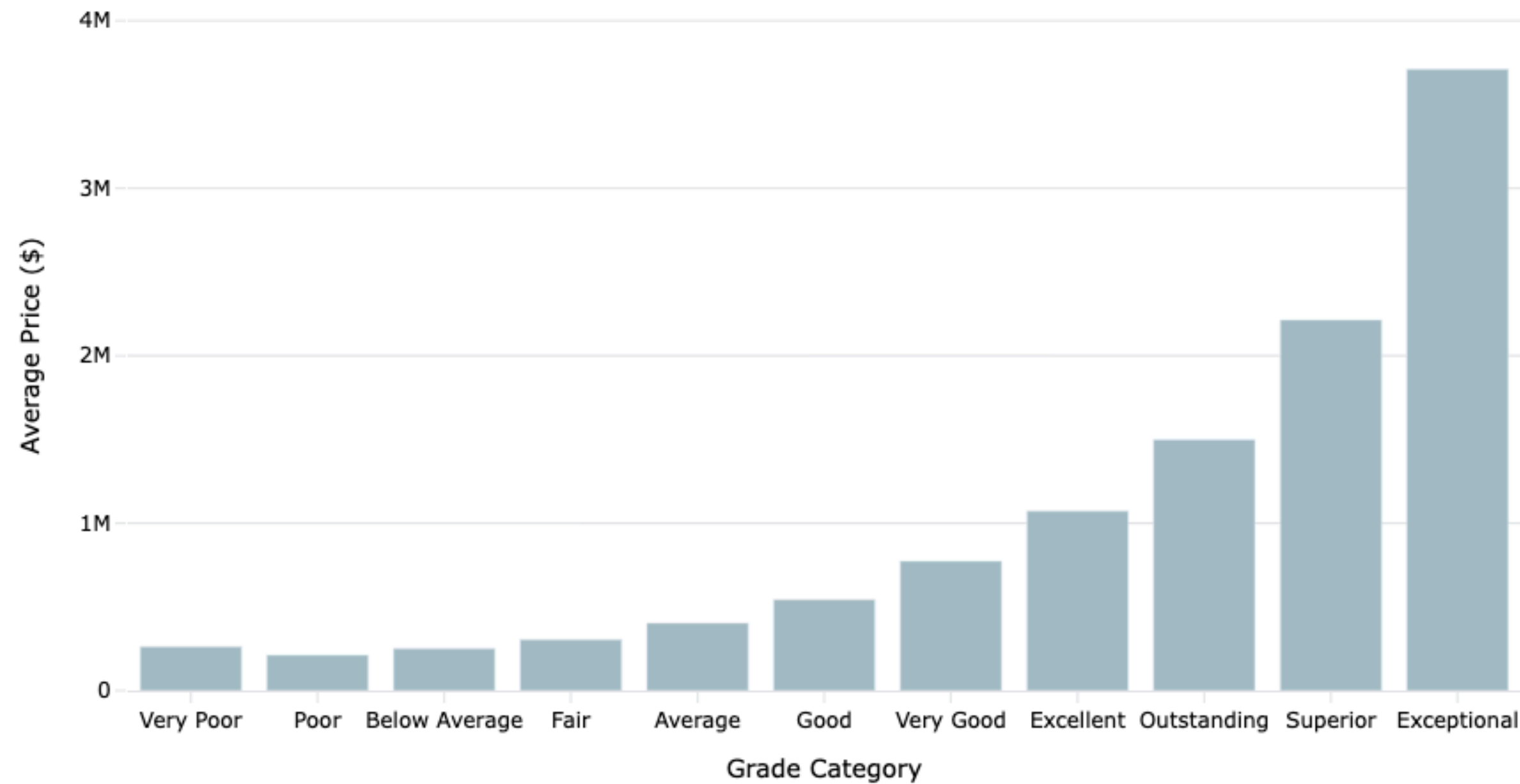Higher condition ratings correlate with higher prices.

CONDITION

Renovated houses tend to have higher prices.

CONDITION

Higher grade ratings correlate with higher prices.

HYPOTHESES

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LOCATION IMPACT HYPOTHESIS
Within 3 miles to the city center, prices are indeed slightly higher than those located 8 or more miles from the city center. This hypothesis holds true.

2.

SIZE HYPOTHESIS
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3.

CONDITION HYPOTHESIS
Newer and better-maintained houses command higher prices than older and less well-maintained ones. This hypothesis holds true.

OPTIMAL TIMING

Purchasing during the winter months appears to be optimal.

OPTIMAL TIMING

Purchasing during the winter seems indeed to be optimal.

HYPOTHESES

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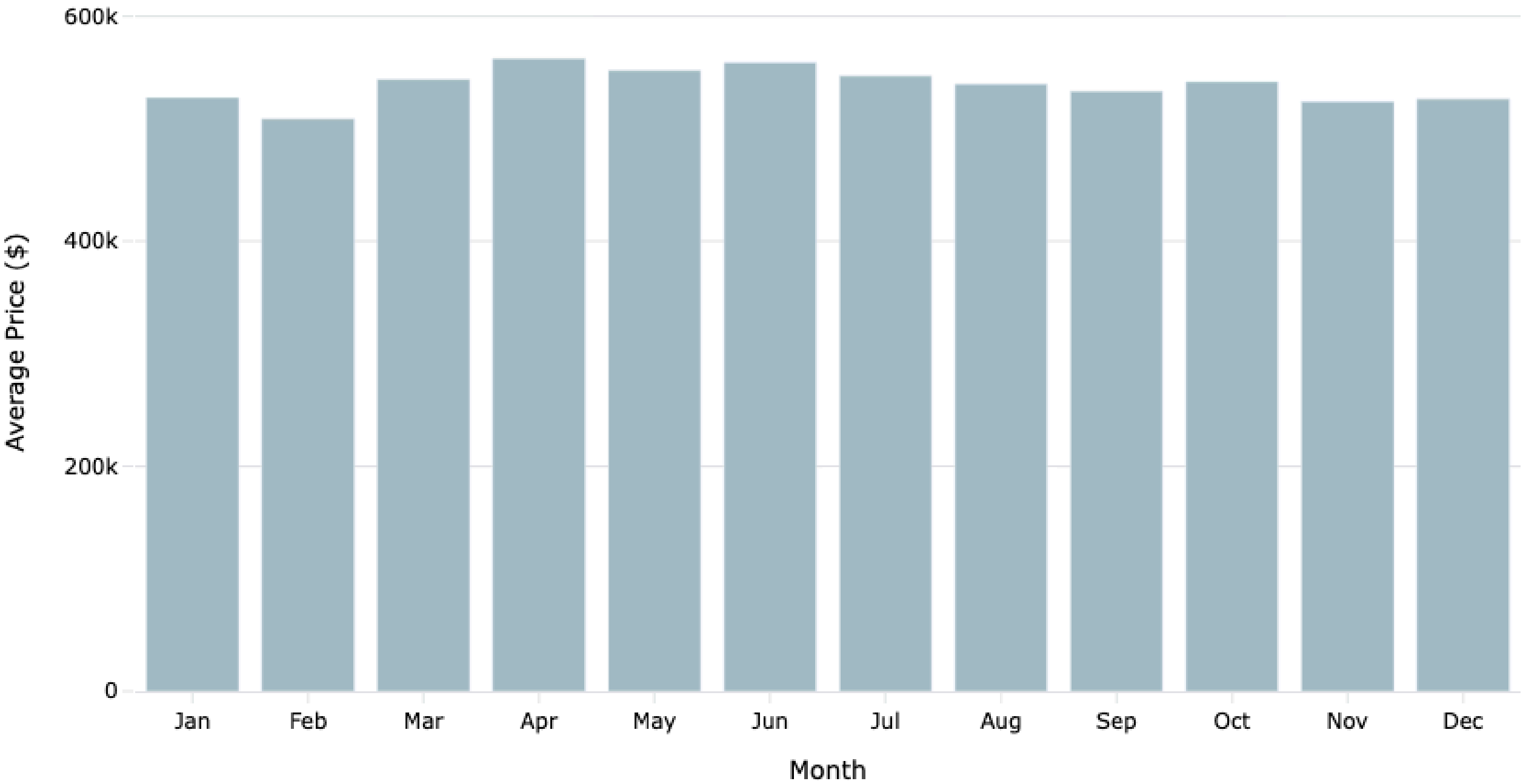
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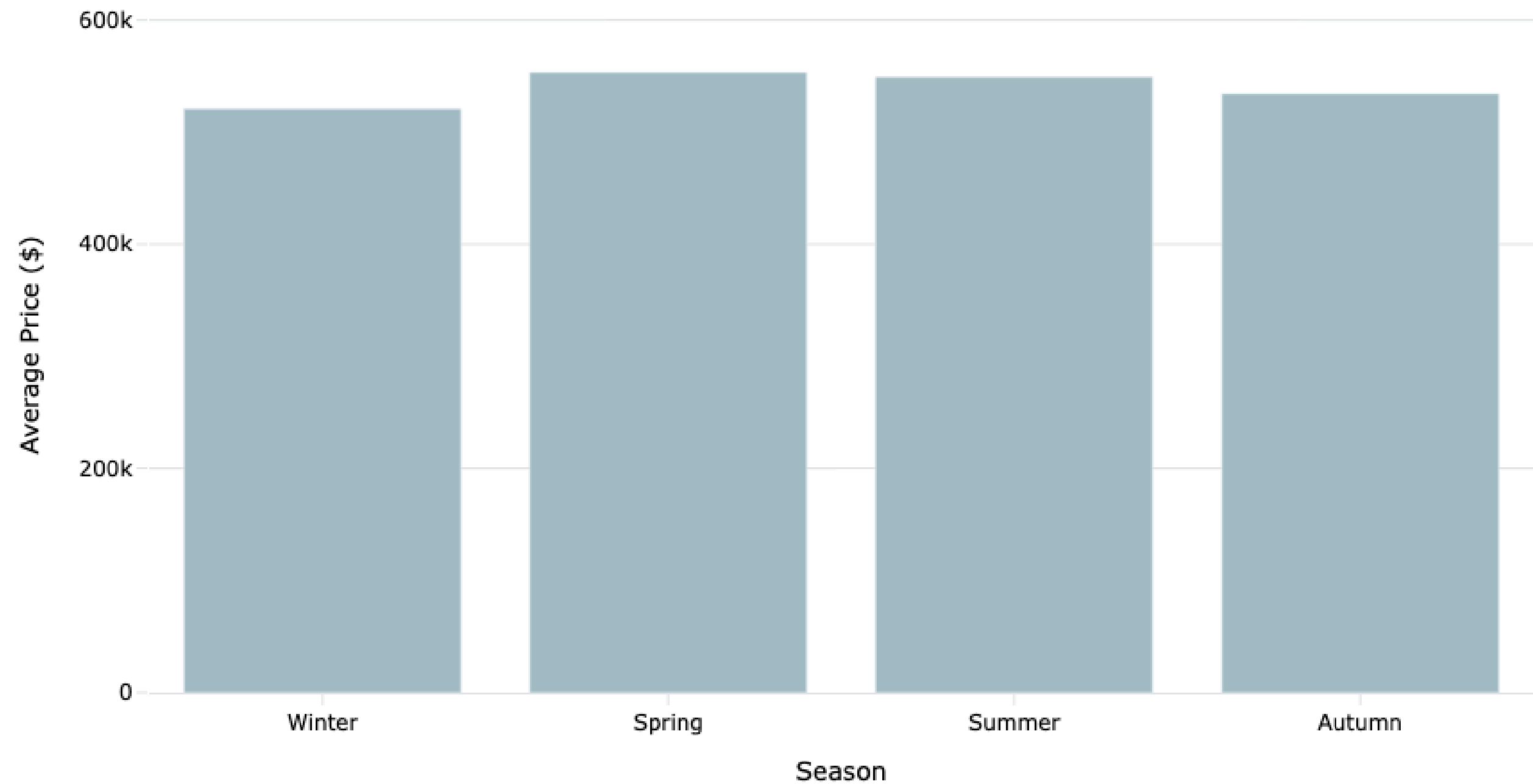
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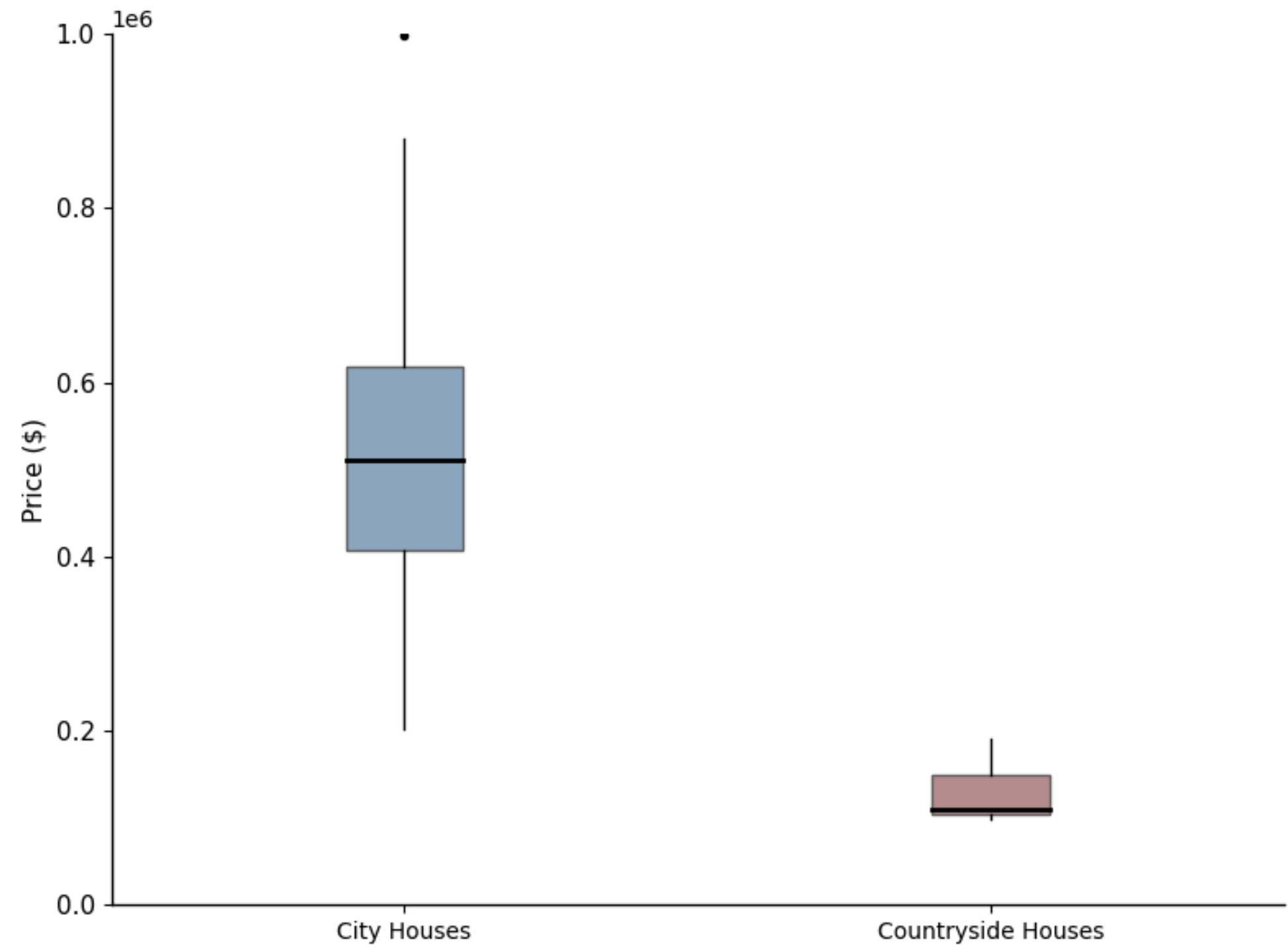
4.

TIMING HYPOTHESIS
Prices for houses are lower during winter. This hypothesis holds true.

FINAL OUTCOME

Average house prices applying the insights from our analysis:
- City house: $532,000 (7 % savings)
- Country house: $133,000 (75 % savings)

CONCLUSION

01 For optimal investment in a move-in-ready property, focus on 1-2 bedroom houses located within 2 miles of the city center. Allocating a budget of $532,000 is advisable, which provides a savings of approximately 7% compared to the average house price in the city.

02 The optimal time to purchase a non-renovated countryside house is during the winter season, focusing on properties with 1-2 bedrooms located more than 8 miles from the city. Allocating a budget of $133,000 is advisable, which provides a savings of approximately 75% compared to the average price of countryside houses.

03 Allocate a total budget of $665,000, plus additional funds for renovation costs for the countryside house. This approach yields an approximate total savings of 39% compared to purchasing both a city and a countryside house at average market prices.