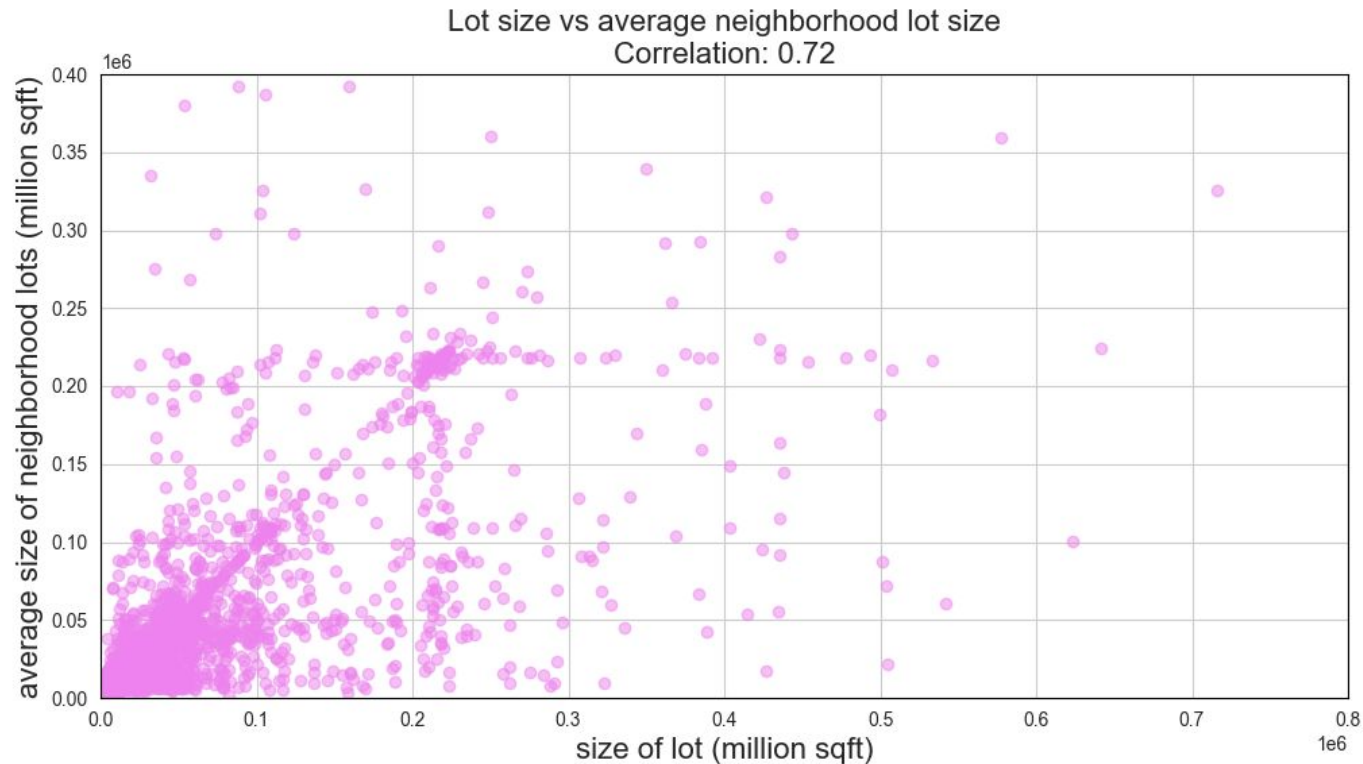
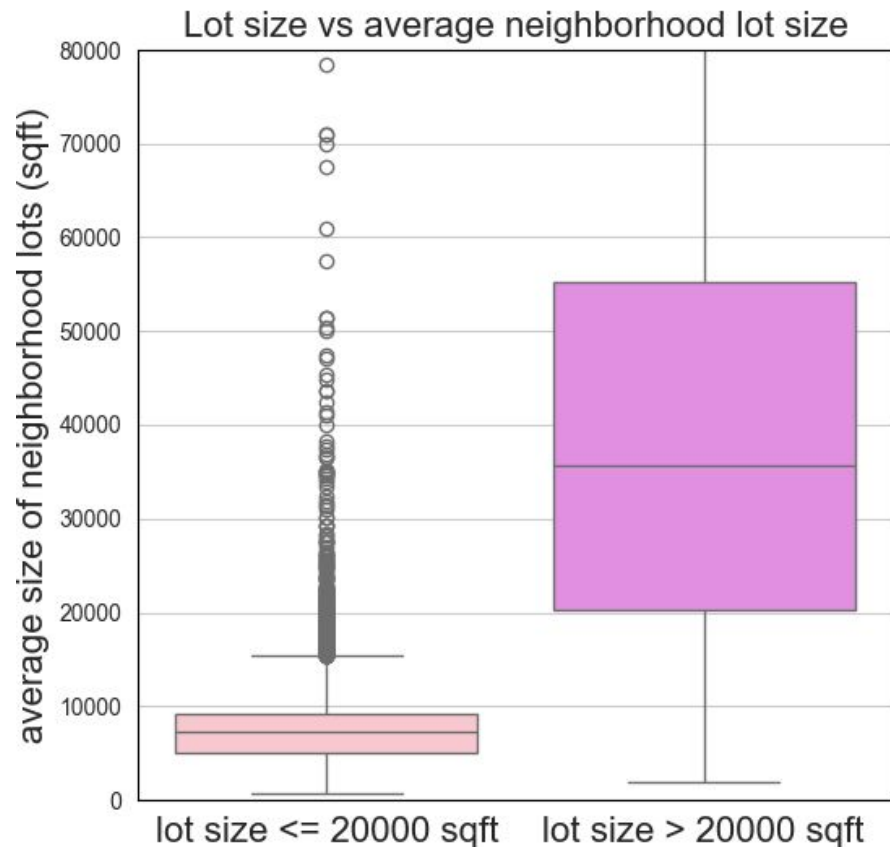


EDA Project

Sara Shankar

Hypothesis 1: Lot sizes and average neighboring lot sizes are similar

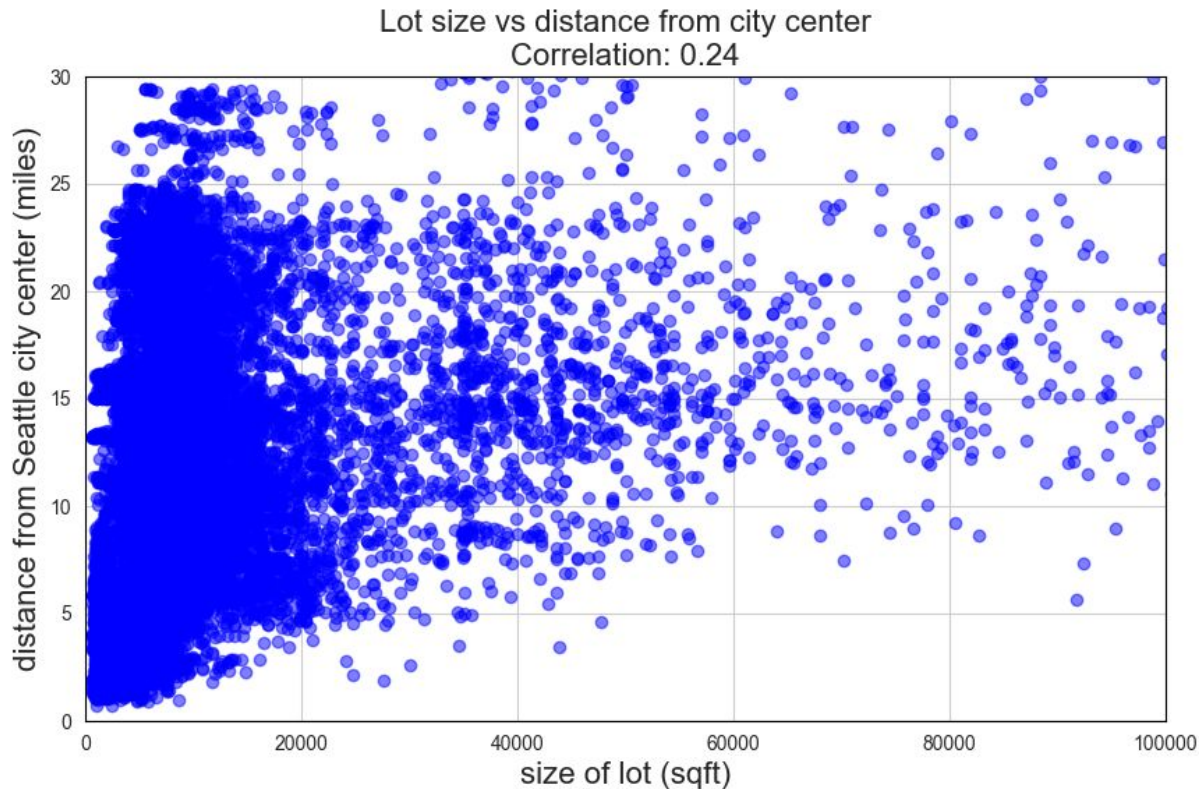




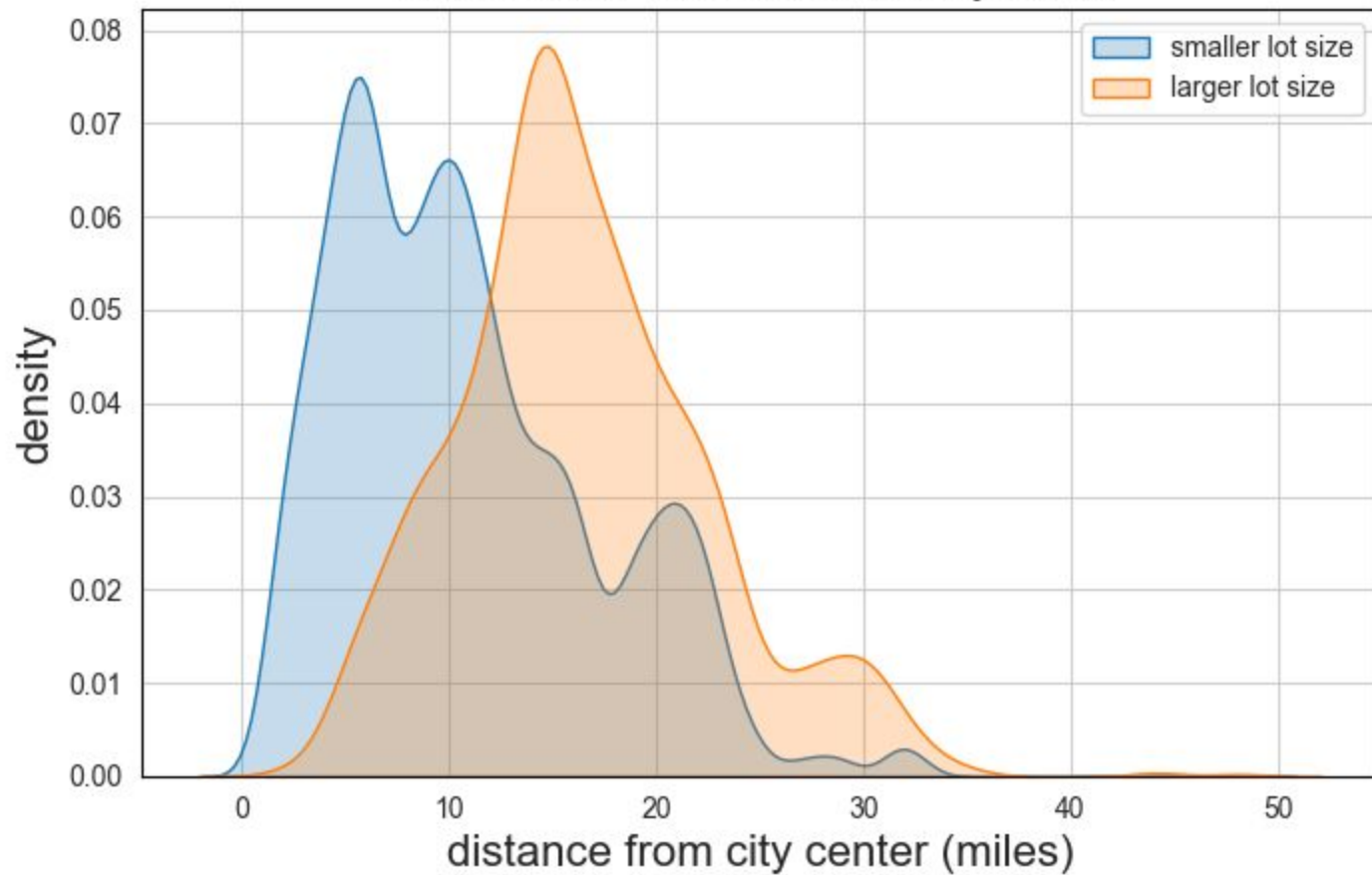
Hypothesis testing results:

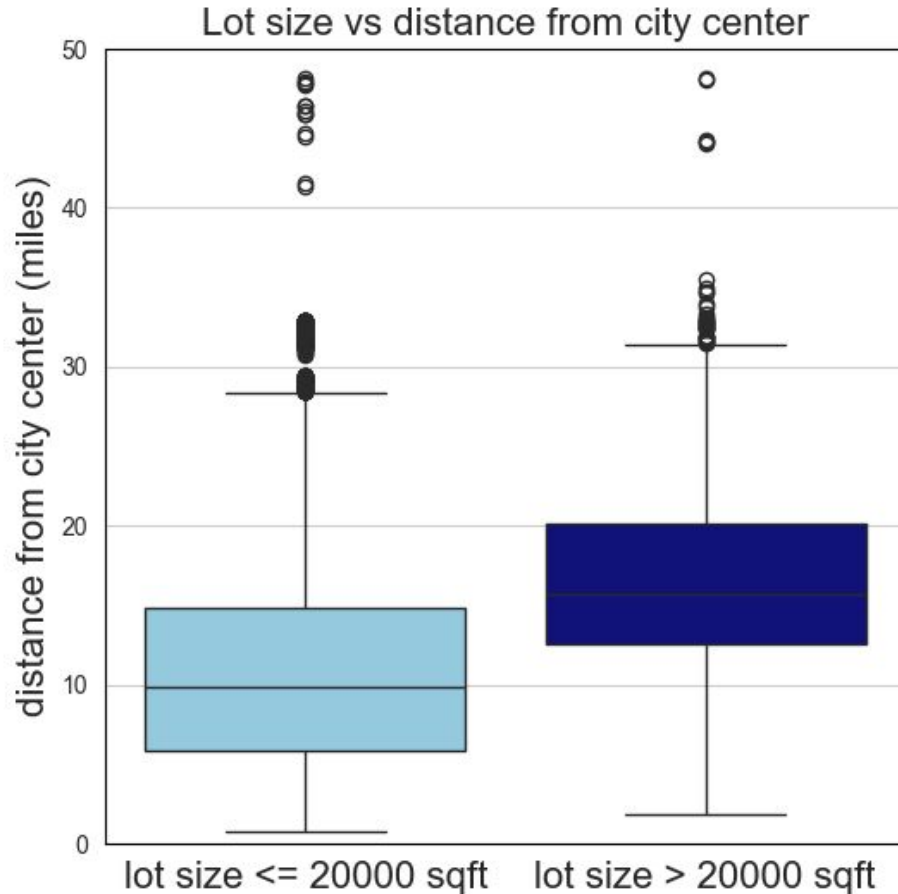
- **pearsonr test:** there is a linear correlation between lot size and average neighborhood lot size
- **levene test:** variances of two distributions are significantly different
- **ttest_ind:** means of two distributions are significantly different

Hypothesis 2: Larger lot sizes are further away from the city center



KDE Plot for distance from city center

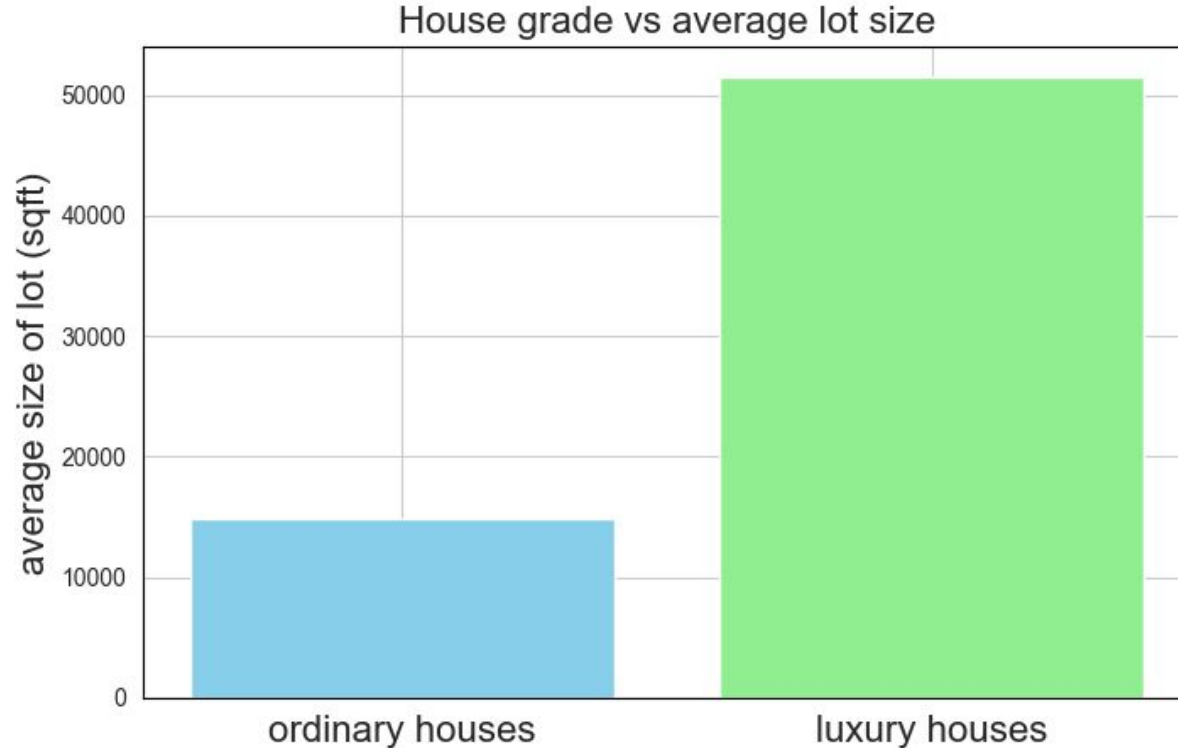




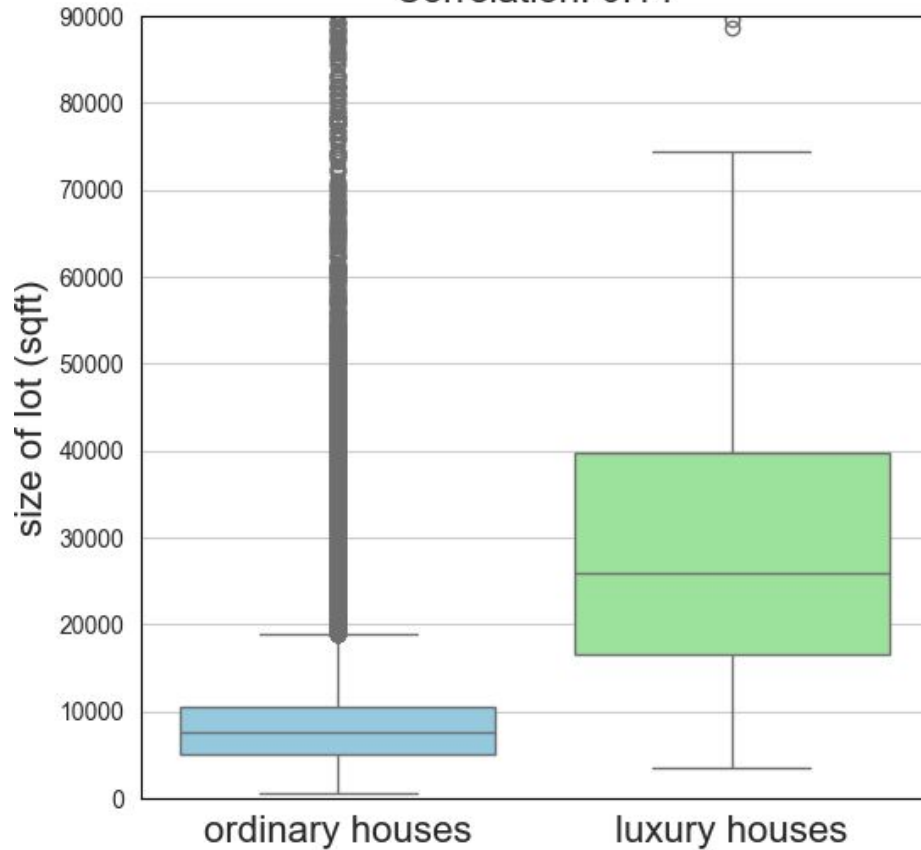
Hypothesis testing results:

- **pearsonr test:** there is a linear correlation between lot size and distance from the city center
- **levene test:** variances of two distributions are significantly different
- **ttest_ind:** means of two distributions are significantly different

Hypothesis 3: Luxury houses (grade 12 and 13) have larger lot sizes



House grade vs lot size
Correlation: 0.14



Hypothesis testing results:

- **levene test:** variances of two distributions are significantly different
- **ttest_ind:** means of two distributions are significantly different

Client: Nicole Johnson

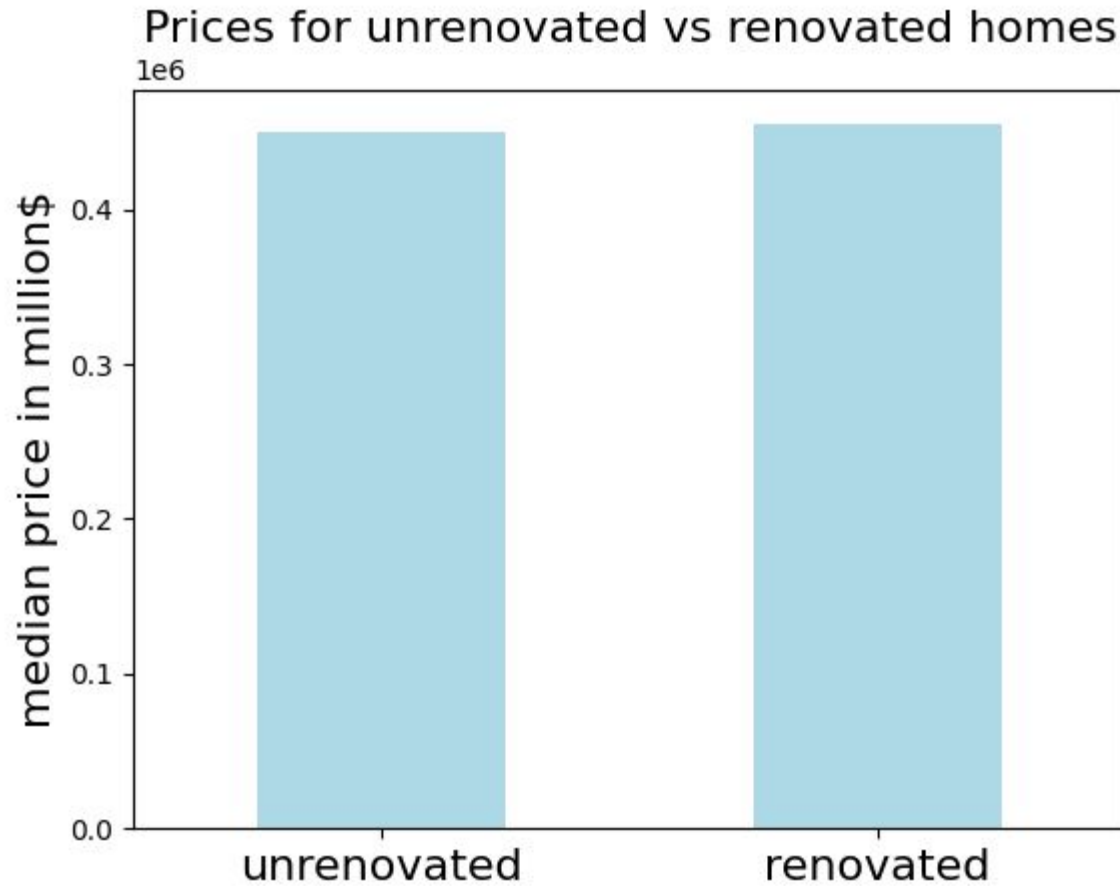
- Lively and central neighborhood
- Middle price range
- Wants to buy within a year
- Willing to renovate home if needed



Median sales prices for each month

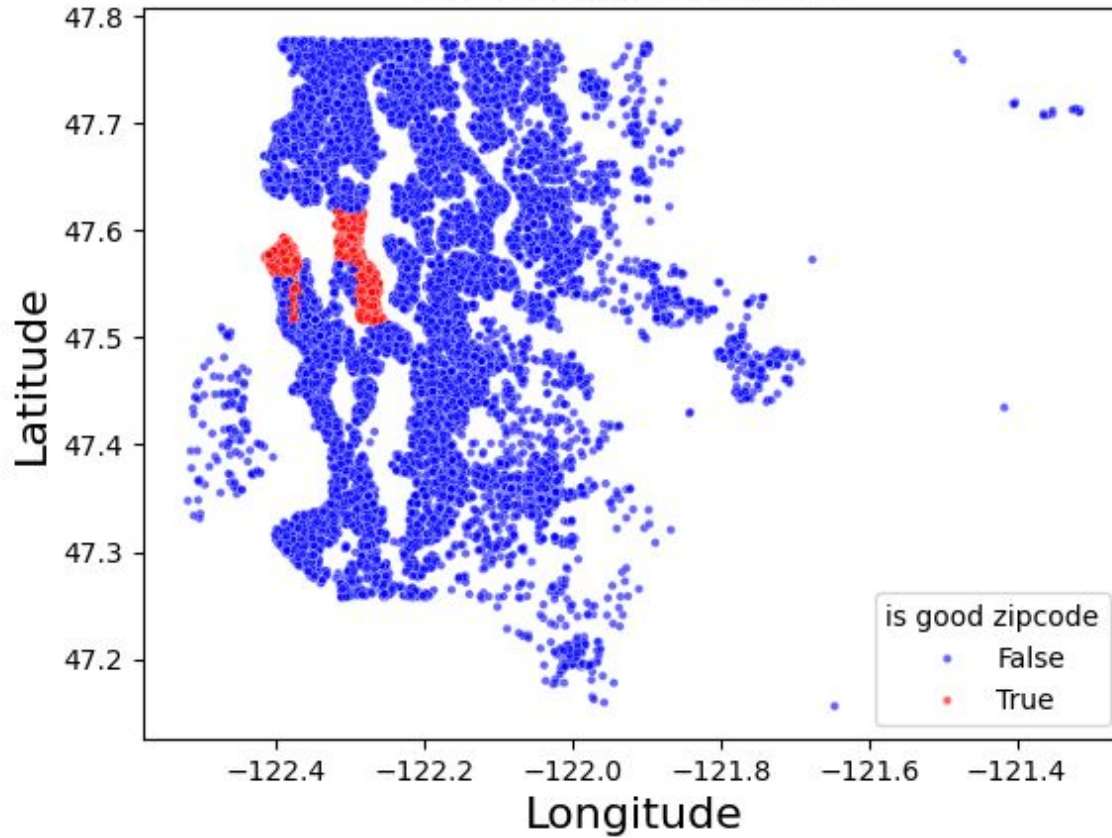


Recommend her to buy the house during the month of december



Recommend her to purchase a renovated home, rather than renovating after purchasing.

Best neighborhoods



Recommended zipcodes to look:

98144

98118

98116

98122

98126