



DATA ANALYSIS ON KING COUNTY HOUSING MARKET

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OVERVIEW

- The pandemic ignited a housing boom.
- More people are reaching out to real estate agencies for advice on selling or buying houses.
- Our team is charged with data analysis on King County housing market.
- Review period: May 2014 - May 2015

OBJECTIVE

- Help local real estate agents to answer various questions from homeowners (potential sellers)
- Find out what are the key features determine the sale price, and by what amount

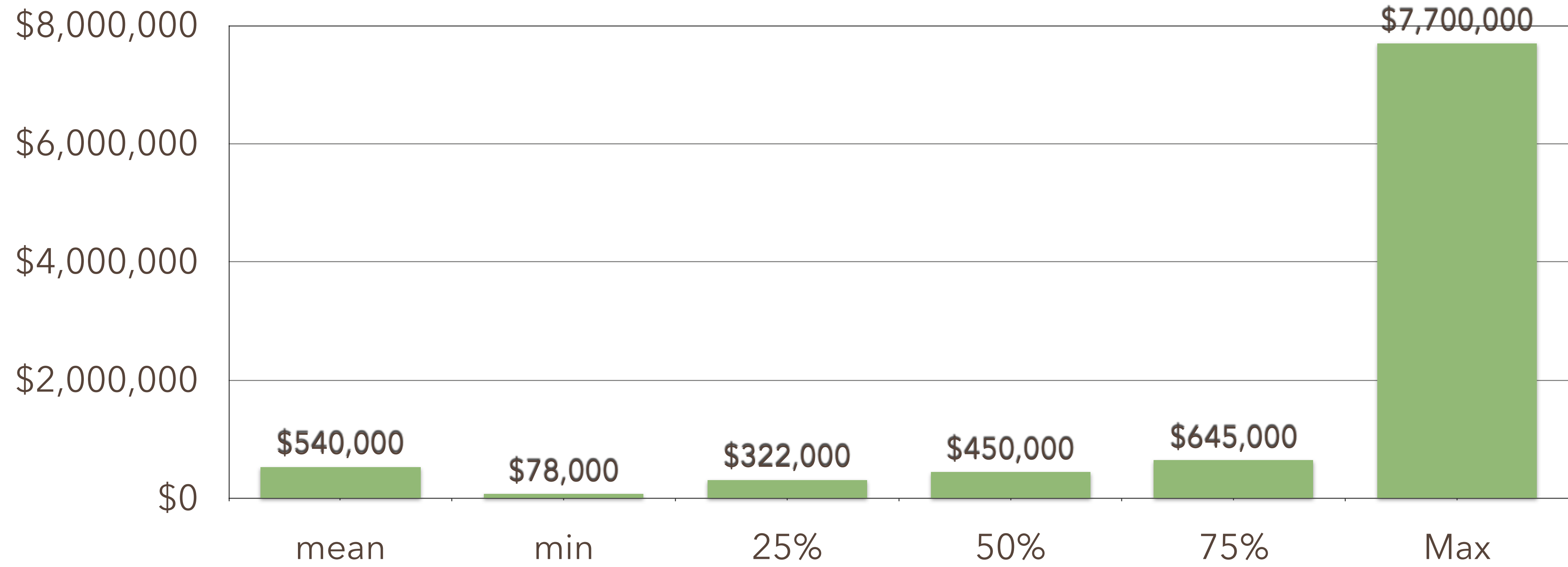
METHODOLOGY

- Data Science Process: Cross-Industry Standard Process for Data Mining (CRISP-DM)
- Exploratory Data Analysis
- Multi Linear Regression Models



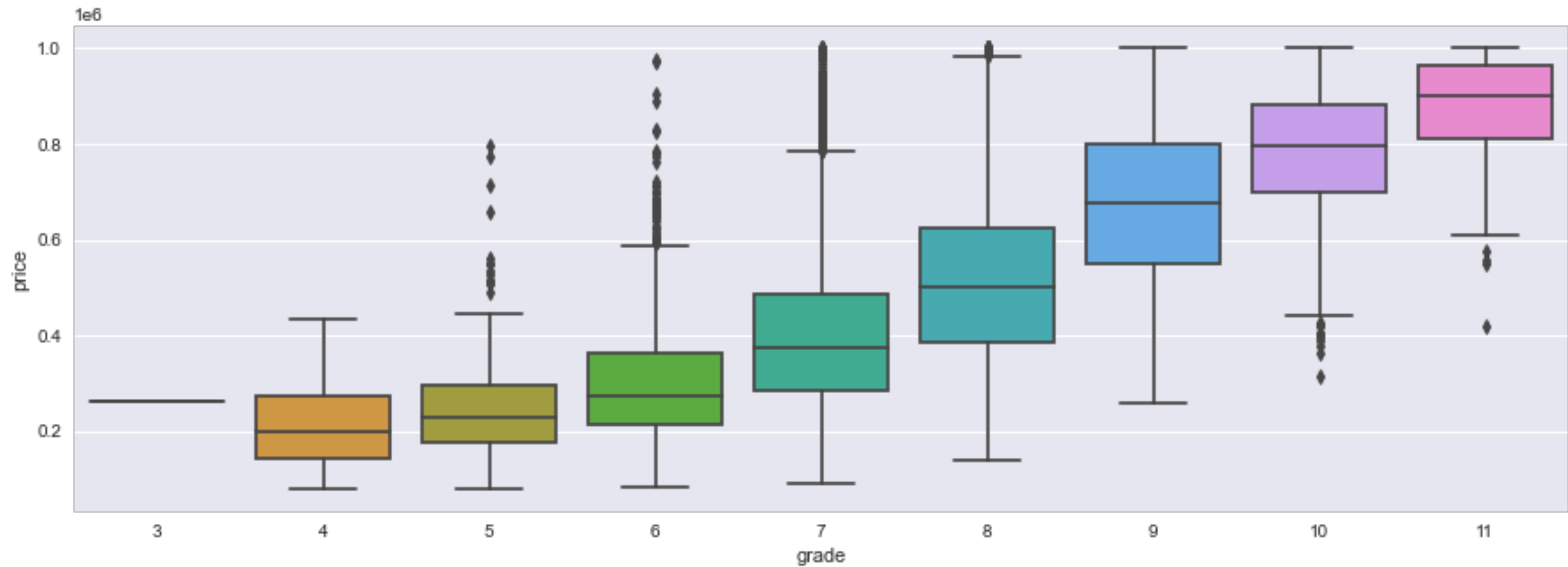
SALE PRICE

HOUSE SALE PRICE (05/2014 - 05/2015)



Distribution of the Sale Price

GRADE

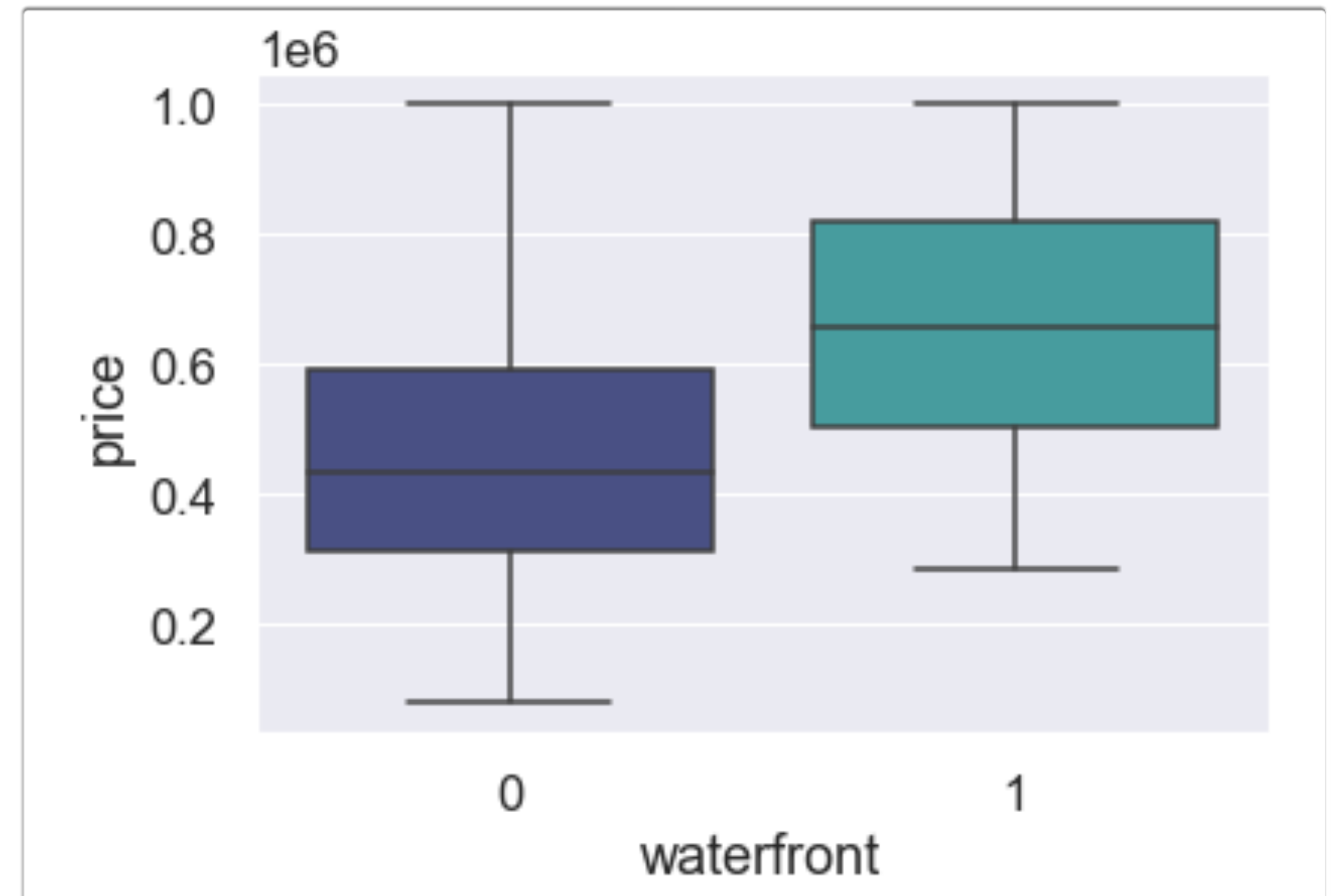


SQUARE FOOTAGE OF LIVING AND LOT

- The more space of living area, the **higher** the sale price
- The larger size of lot, the **higher** the sale price
- The more living space of neighbors, the **higher** the sale price
- The larger size of lot in neighbors, the **lower** the sale price

WATERFRONT VIEW

- Only 0.7% of the houses with waterfront view
- \$183,000 added-value
- Waterfront property sold fast on the market



CONCLUSION

TOP FEATURES DETERMINING THE VALUE OF HOUSES BY WHAT AMOUNT:

- Grade: + \$85,000/grade
- Square footage of living space: + \$62/sqft
- Square footage of living space for the neighbors: + \$57/sqft
- Square footage of lot: + \$13/100 sqft
- Waterfront view: + \$183,000

NEXT STEP...

- More data: longer review period including current sales
- More insights on antique houses (i.e. older age of the houses)
- Further analysis on renovation
- Consideration of location (i.e. cities or suburbs)

THANK YOU!