### House Price Prediction Non-Technical Report

Stat 2360

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Introduction

A statistical model is a mathematical representation of a real-world phenomenon, process, or system that uses statistical methods to analyze and make predictions about the data. It is widely used in various industries including finance, manufacture, health care etc. It is also very useful in predicting house price due to its high accuracy, transparency, data-driven and cost-effective. Thus, I created a statistical model to predict house price in Pittsburgh and some key finds are shared below.

Key Findings

By using several models to evaluate the data, I found that the mean price is around 30,0000 dollars with a standard deviation of 362895 which indicates that the variability is very high among the price of all the houses. After making some simple correlation graph it indicates that square feet, numbers of bathrooms, and lot areas are three features that have the most importance when evaluating house prices. Especially square feet which in two models I built show nearly 100 percent importance. On the other hand, among all the features, we found that roof type and exterior finish are least important when deciding the house price.

Conclusion

In conclusion, in the future if realtors want to decide if the house is overpriced or underprice, the features stated in the above section may be helpful in doing the evaluation. If people also want to do prediction, the statistical model can also achieve that in high accuracy.