

# Features, and Features and Features, Galore.

A Linear Regression  
Analysis on Home Features  
Predicting Sale Price.

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# Introduction

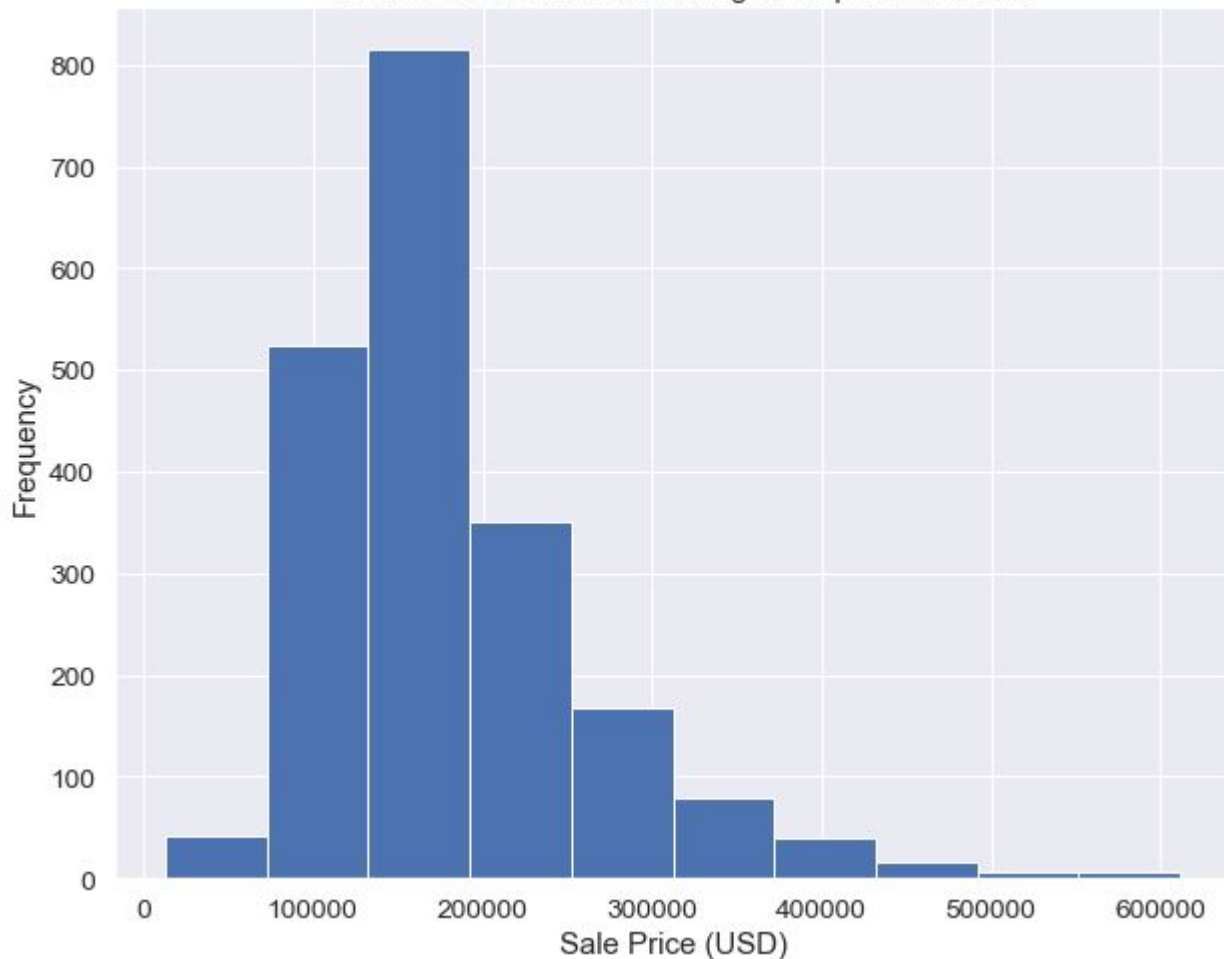


- **Question:** Which home features produce the biggest return on investment? Ames, Iowa housing data will be analyzed and modeled using Linear Regression to help first time home flippers understand where to allocate their resources for optimal ROI
- **Goal:** Provide recommendations on which home features and neighborhoods will most greatly impact home sale price

# Data Gathering/Cleaning

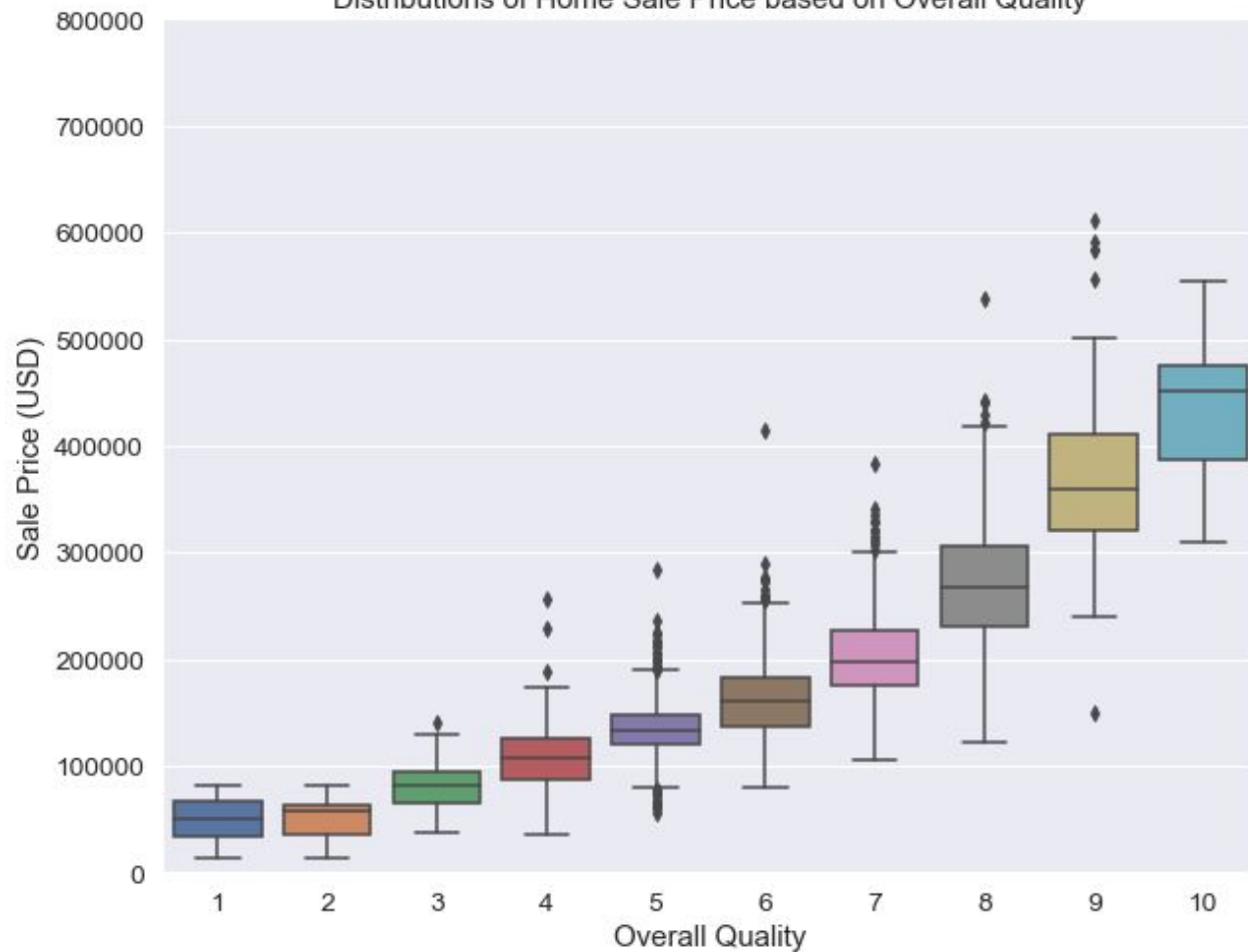
- Ames, Iowa Housing Dataset
- Messy data

Distribution of Sale Price Among All Reported Houses

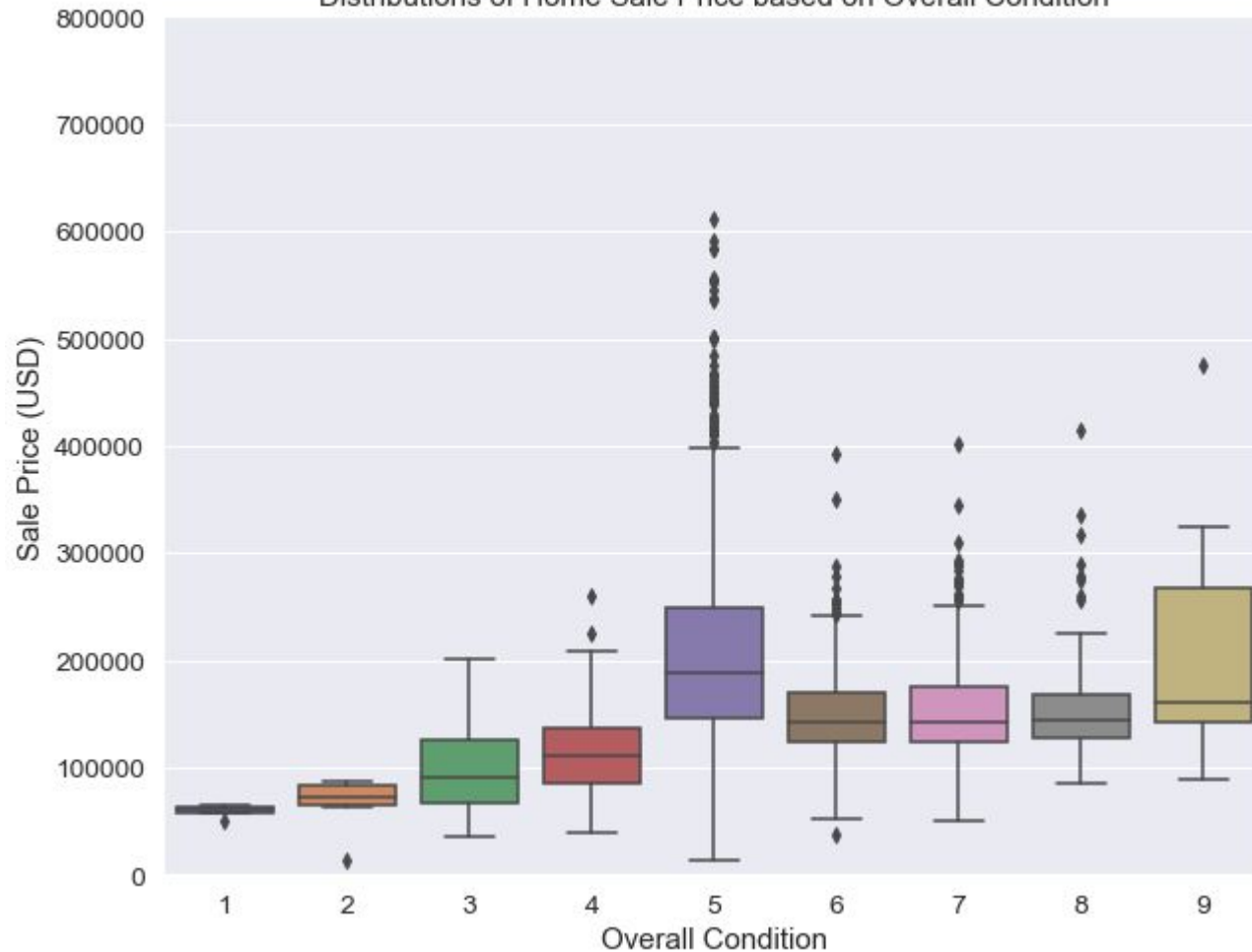


- Average home in Ames, Iowa sells for \$181,535
- Common range: \$100-\$250k

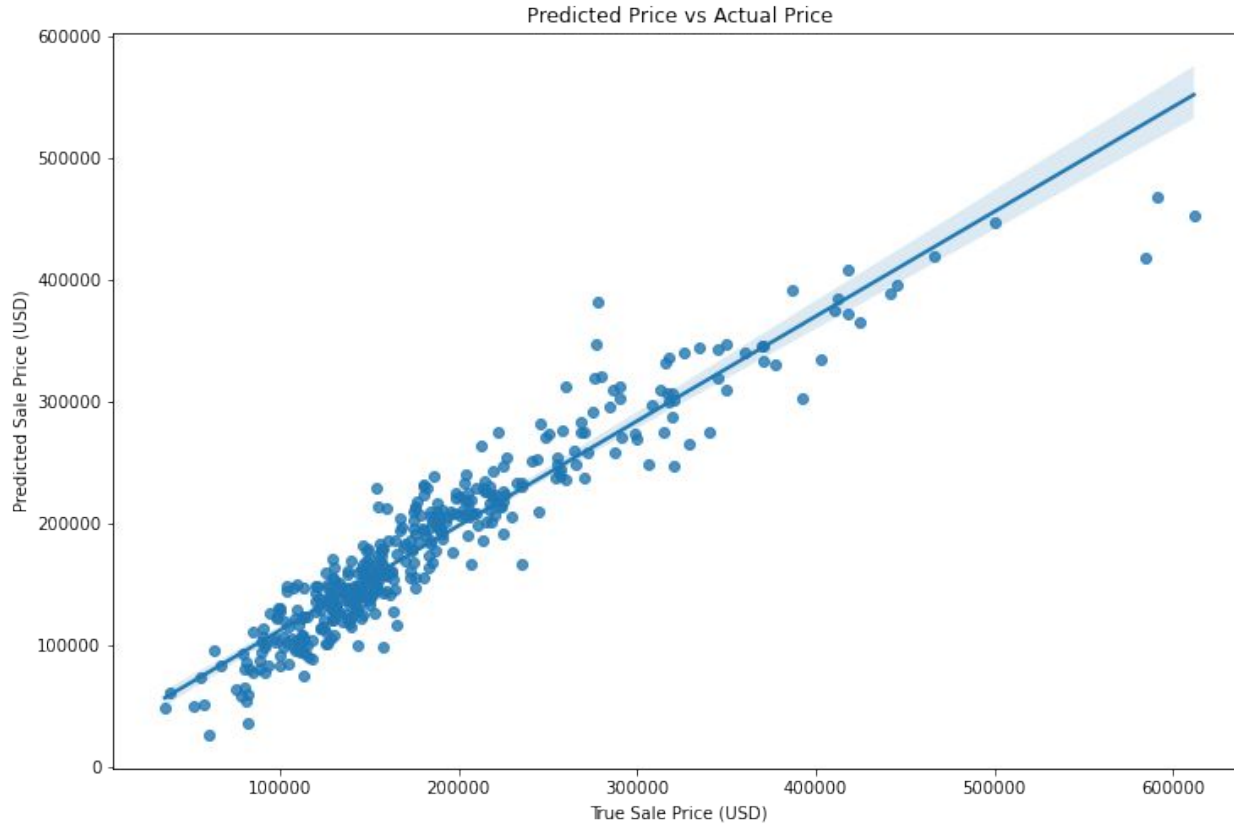
Distributions of Home Sale Price based on Overall Quality



Distributions of Home Sale Price based on Overall Condition

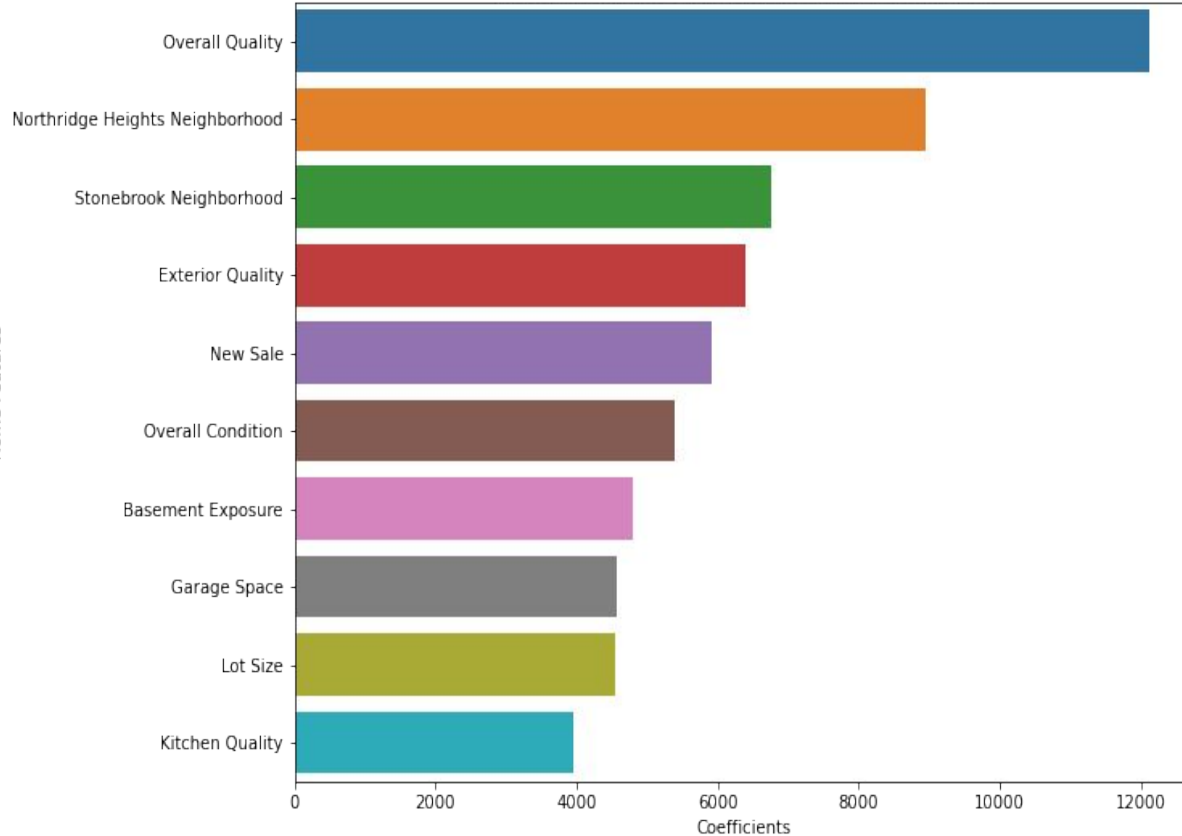


# Linear Regression Model Predictions



- Model limitations?

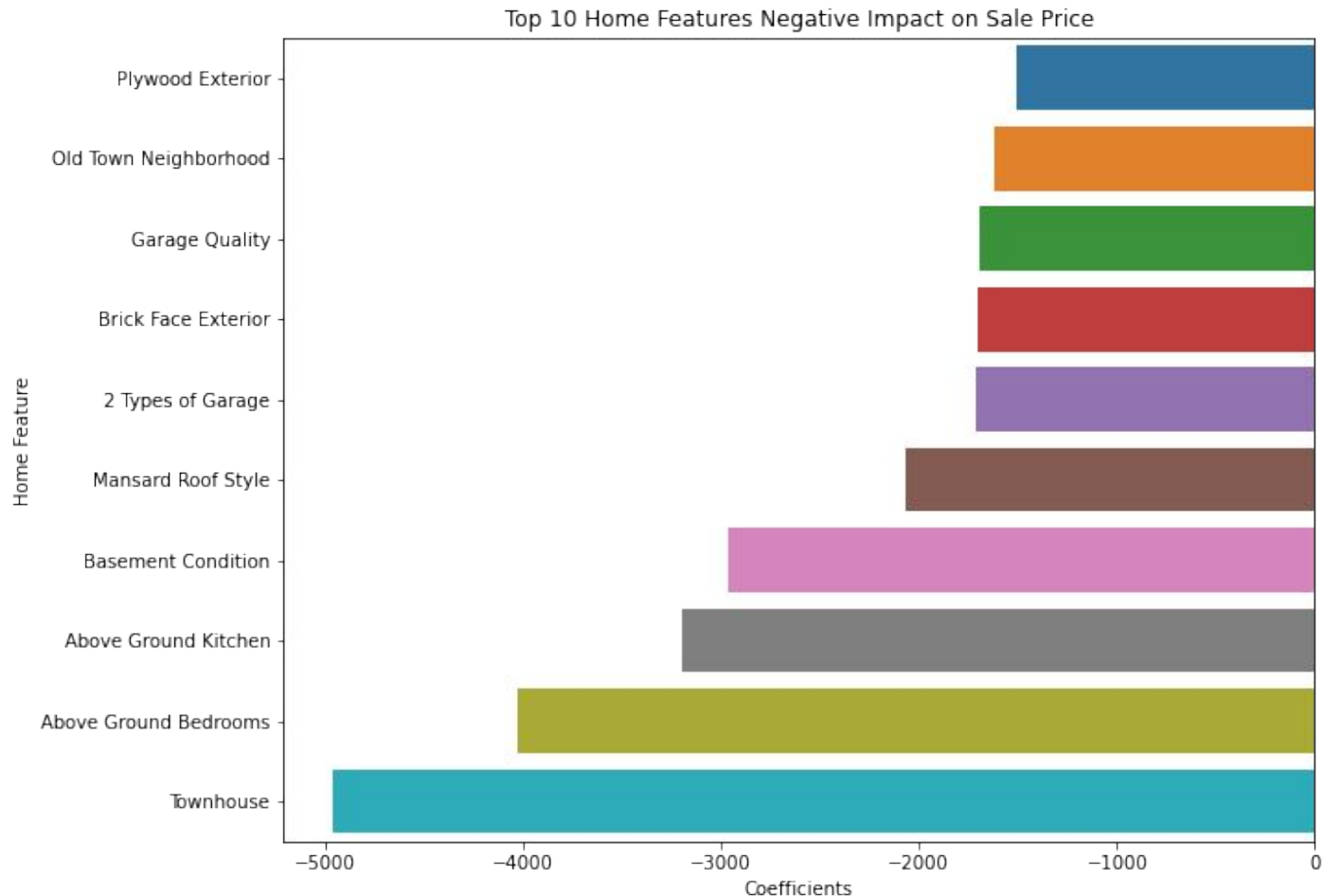
Top 10 Home Features Positive Impact on Sale Price



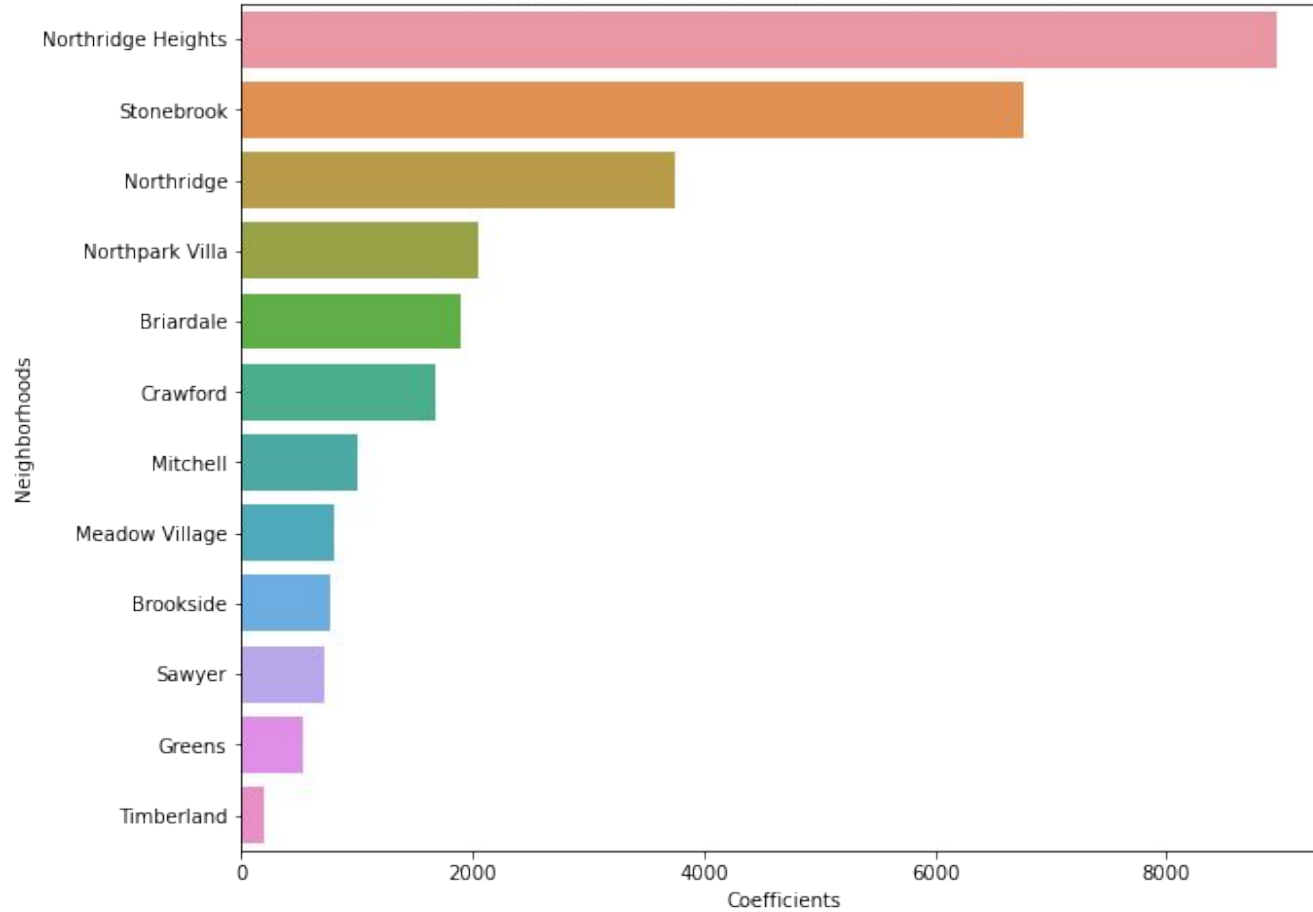
- **Overall Quality**
  - +\$12,128
- **Overall Condition**
  - +\$5,399.92
- **Basement Exposure**
  - +\$4,794.86
- **Garage Space**
  - +\$4,571.73
- **Kitchen Quality**
  - +\$3,960.26
- **Screened Porch**
  - +\$3142.21



- **Garage Quality**
  - -\$1698.70
- **Basement Condition**
  - -\$2968.68



Neighborhoods with a Positive Impact on Sale Price



- Northridge
- Northpark Villa
- Briardale
- Crawford
- Mitchell

# Conclusions and Recommendations:

- House with “good-bones” is more important than features
- Focus on overall quality with fit and finish, condition matters but secondary to quality
- Focus on the kitchen remodel
- Look for houses with a basement/garage space. No need to spend money improving these spaces
- Screened in Porch
- Neighborhoods: Northridge, Northpark Villa, Briardale, Crawford and Mitchell

Thank you!