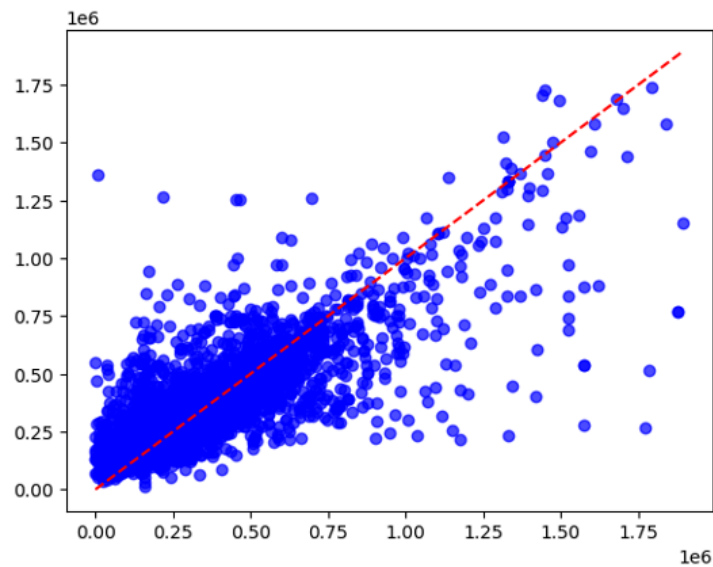
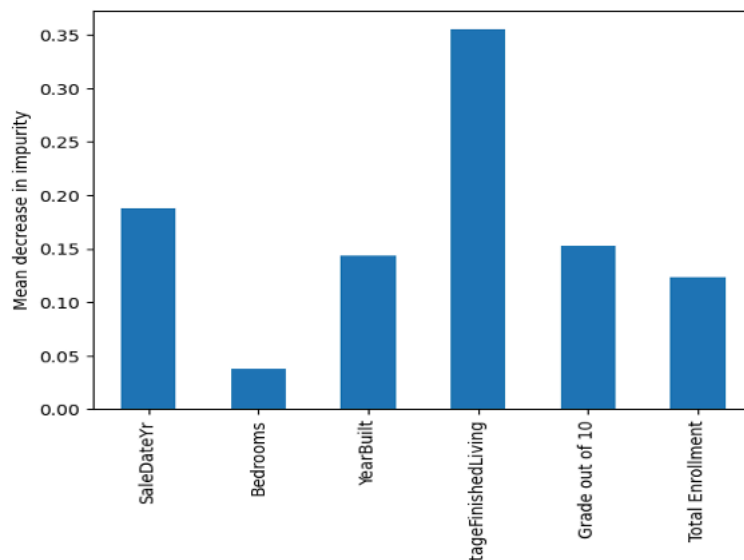


## Prediction vs. Actual value



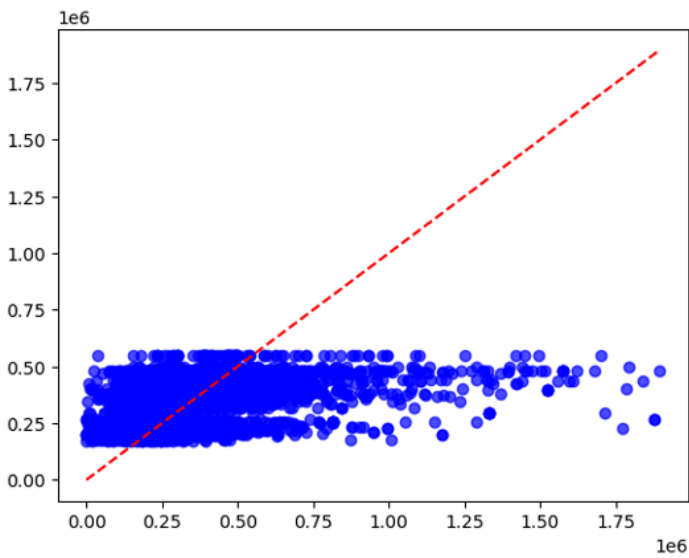
Basing our model on the combination of the sale date, number of bedrooms, year built, real estate grade, and UVA total enrollment data, we built a random forest model that gave us an **r-squared value of 0.66**.

## Mean Decrease in Impurity



We calculated the 'Mean Decrease in Impurity' to understand how important each variable was in predicting the Sale Amount. **Total Enrollment only has a 0.12 predictive power in the model.**

### Prediction vs. Actual – Total Enrollment



The  $r^2$  value was 0.20 for the predictive model using only the Total Enrollment variable to predict the Sale Amount. **These two results show that UVA does not have a large impact on the Sale Amount or the Charlottesville community.**