Iowa Development Co.

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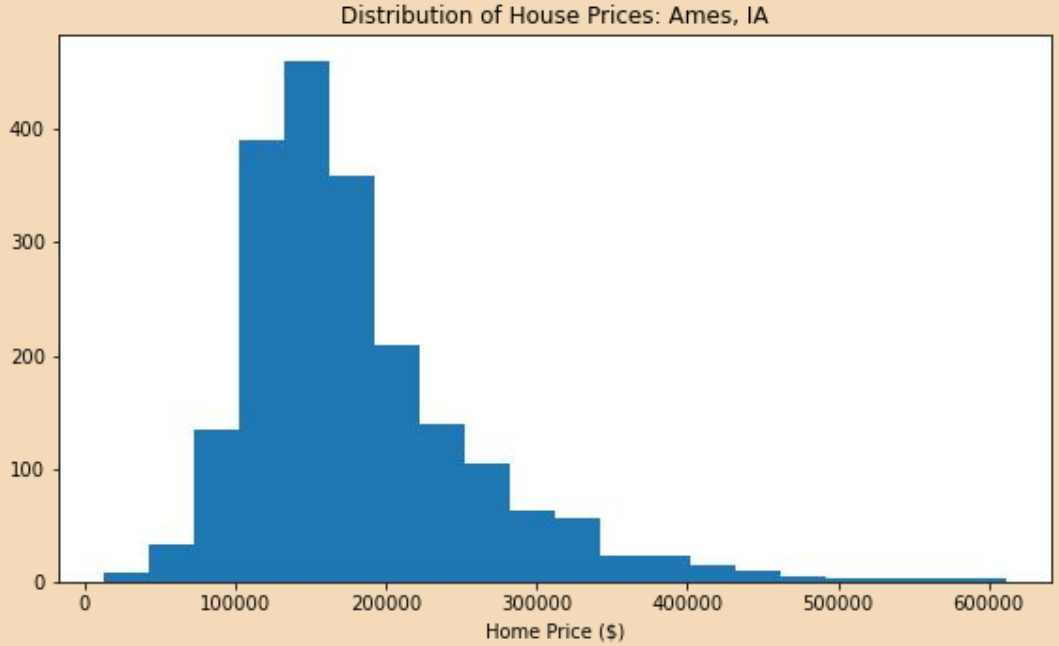
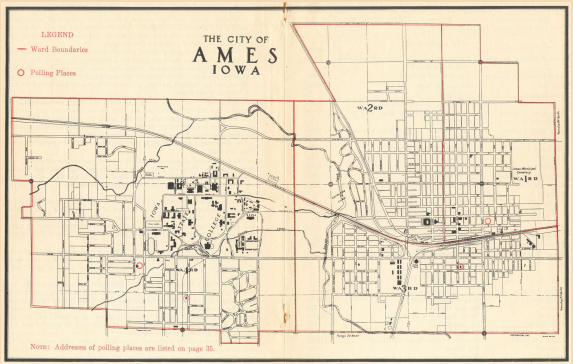
Ames Housing Market



Limited profit potential in our market - how do we buy low and sell high?

Problem Statement

Can data from the Ames Tax Assessor's Office be used to inform the investment process in determining which homes are currently undervalued and which renovations will lead to the greatest profits?



The Models

Baseline

1 feature: Median home price estimate

Root mean square error to beat: **$53, 215**

Predictive

213 features included

Root mean squared error: **$16,761**

Inferential

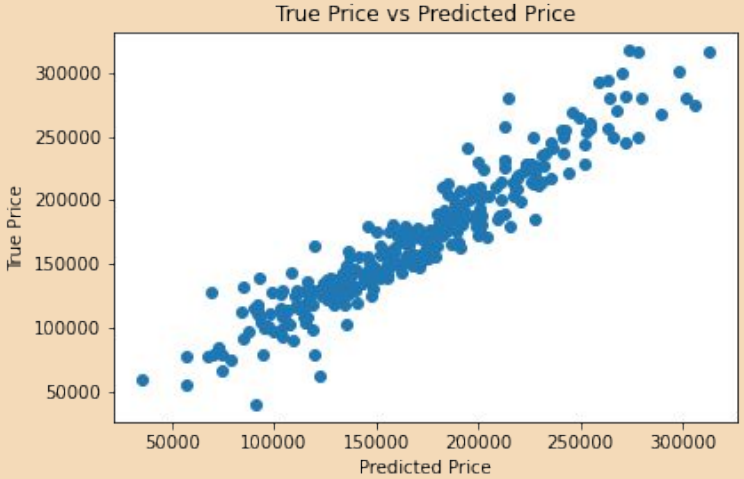
14 features included

Root mean squared error: **$24,185**

Model Evaluation

Add both True Price vs Predicted Price graphs

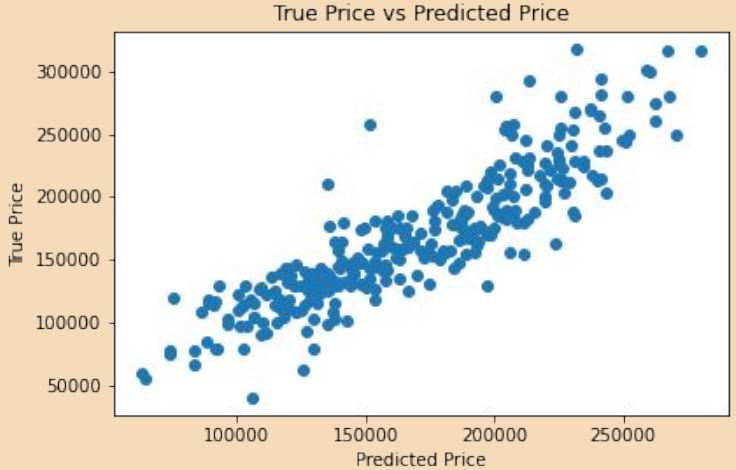
Predictive



Cross-Validated R-Squared: 88.09%

Adjusted R-Squared: 87.04%

Inferential



Cross-validated R_Squared: 84%

Implementing Recommendations

On Purchase (Predictive):

Location, Location, Location

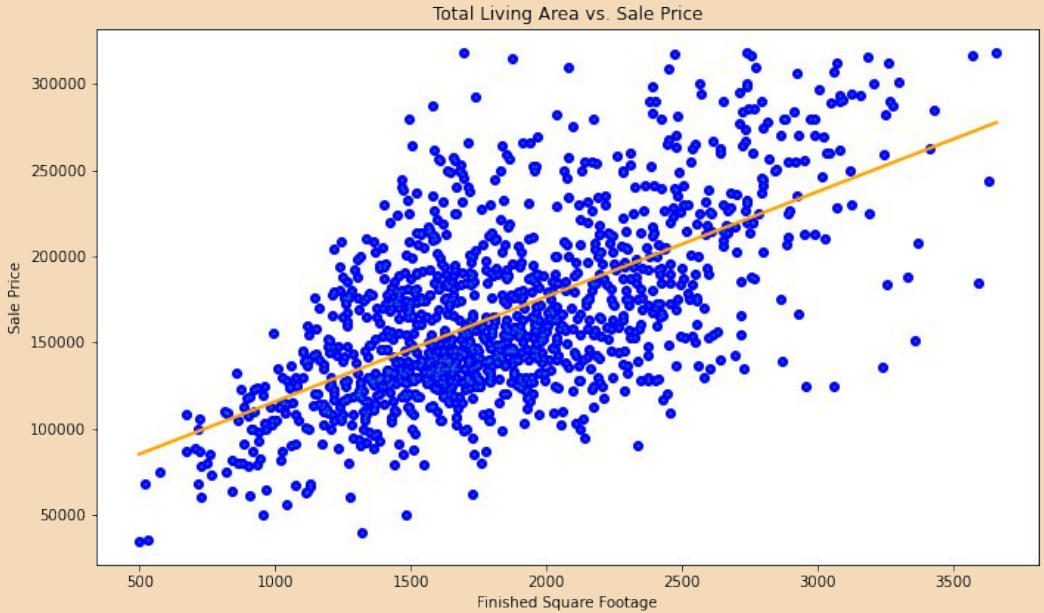
Target neighborhoods: Somerset and Northridge Heights

Avoid: Edwards, Iowa DOT and Rail Road, and Old Town

On Renovations (Inferential):

Features boosting home value:

Additional Square footage ($33 x sq ft)
Kitchens ($27,000 potential)



Conclusions

In order to scale for production:

- Sale condition data
- Expanding data beyond Ames
- Limited time frame

Thanks

Do you have any questions?