Rise Realty: Maximize Profits

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Rise Realty: Background Info

-Small-Medium sized brokerage office, 10-12 agents working for them

-Has a fairly extensive client database

-Looking to maximize profit

Problem Statement and Project Goals

-Correlation between Neighborhoods and sale price

-Provide data driven insights to recommend profit maximizing strategy

-Keep in mind Rise's specific situation (10-12 person team)

Methodology

-Create price predicting model

-Feature Engineering

-Test this model, make sure it's sensible

-Tune it up!

```
====== OLS =======
OLS Train R^2: 0.8856622329661409
OLS Test R^2: 0.8730381752388426


===== Ridge ======
Ridge Train R^2: 0.880295755778137
Ridge Test R^2: 0.8740939363389679


==== RidgeCV =====
Ridge CV Train R^2: 0.884494335529826
Ridge CV Test R^2: 0.8747035258407142


===== Lasso ======
Lasso Train R^2: 0.884761258693641
Lasso Test R^2: 0.8737239646184335


==== LassoCV =====
LassoCV Train R^2: 0.8837194745796506
LassoCV Test R^2: 0.8743268401178566
```

Apply that Model!

-After arrived at best model, apply to unseen, client data

-Analyze predicted sale price relationships with neighborhood

Recommendation Drivers...vroom, vroom.

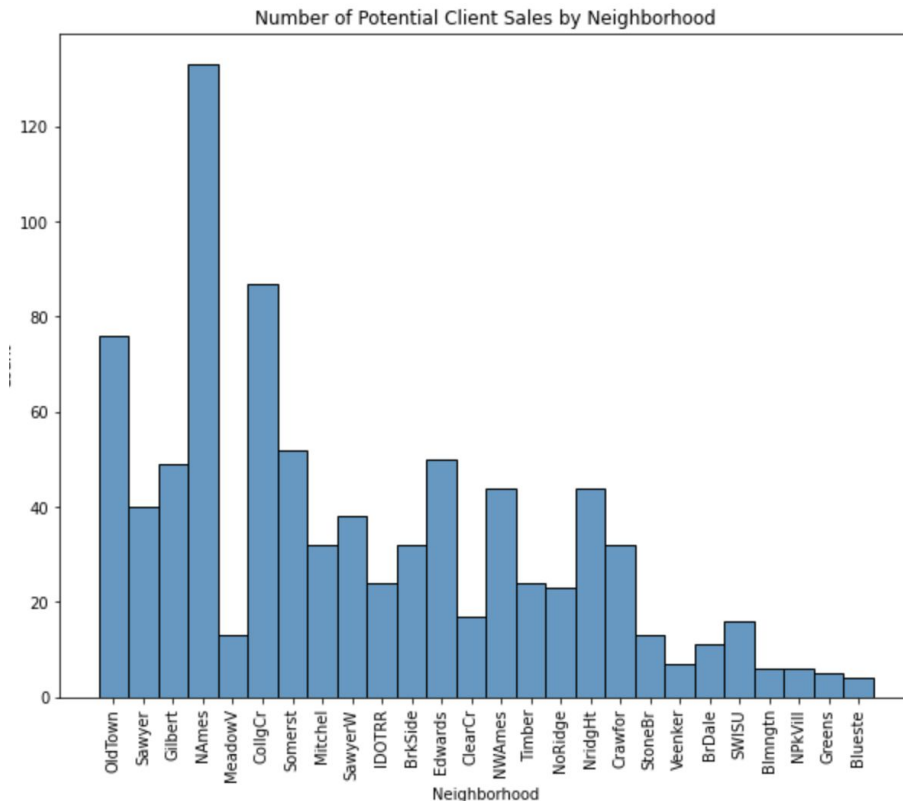Top 5 Avg Pred. Sale Price by Neighborhood

Neighborhood	
NoRidge	336044.518129
NridgHt	322216.092809
StoneBr	318233.123718
Timber	254569.660451
Somerst	229531.643310

Number of Potential Client Sales by Neighborhood

Total Sales per Hood

-Determined by sum of all predicted sales price per neighborhood

-Incorporate with previous slide for final analysis

```
Neighborhood
NAmes          1.956560e+07
CollgCr        1.750374e+07
NridgHt        1.417751e+07
Somerst        1.193565e+07
OldTown        9.407672e+06
Gilbert        9.387417e+06
NWAmes         7.886061e+06
NoRidge        7.729024e+06
Crawfor        6.934263e+06
SawyerW        6.697182e+06
Timber         6.109672e+06
Edwards        6.049426e+06
Sawyer         5.514471e+06
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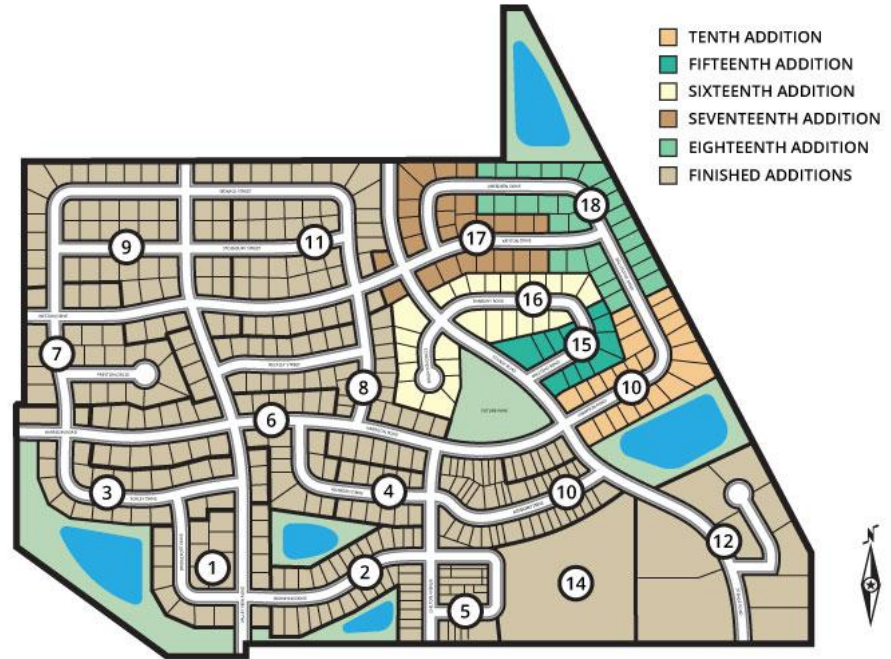
Recommendations

-Combo of average price and sales opps

-Best neighborhood for Rise to focus on: Northridge Heights

Northridge Heights

TENTH ADDITION
FIFTEENTH ADDITION
SIXTEENTH ADDITION
SEVENTEENTH ADDITION
EIGHTEENTH ADDITION
FINISHED ADDITIONS

Questions?

-Slack me

-Email me

-Text me

-MySpace me

-Carrier Pigeon me

-Smoke signal me (outdoors only)