

Ames, Iowa Housing:

Data Driven Investment Opportunities

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Project 2

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01 PROBLEM



PROBLEM STATEMENTS

NEIGHBORHOODS:

Are there specific Neighborhoods that have high potential for house “flipping”?

FEATURES:

What features correlate to the higher priced homes?



02

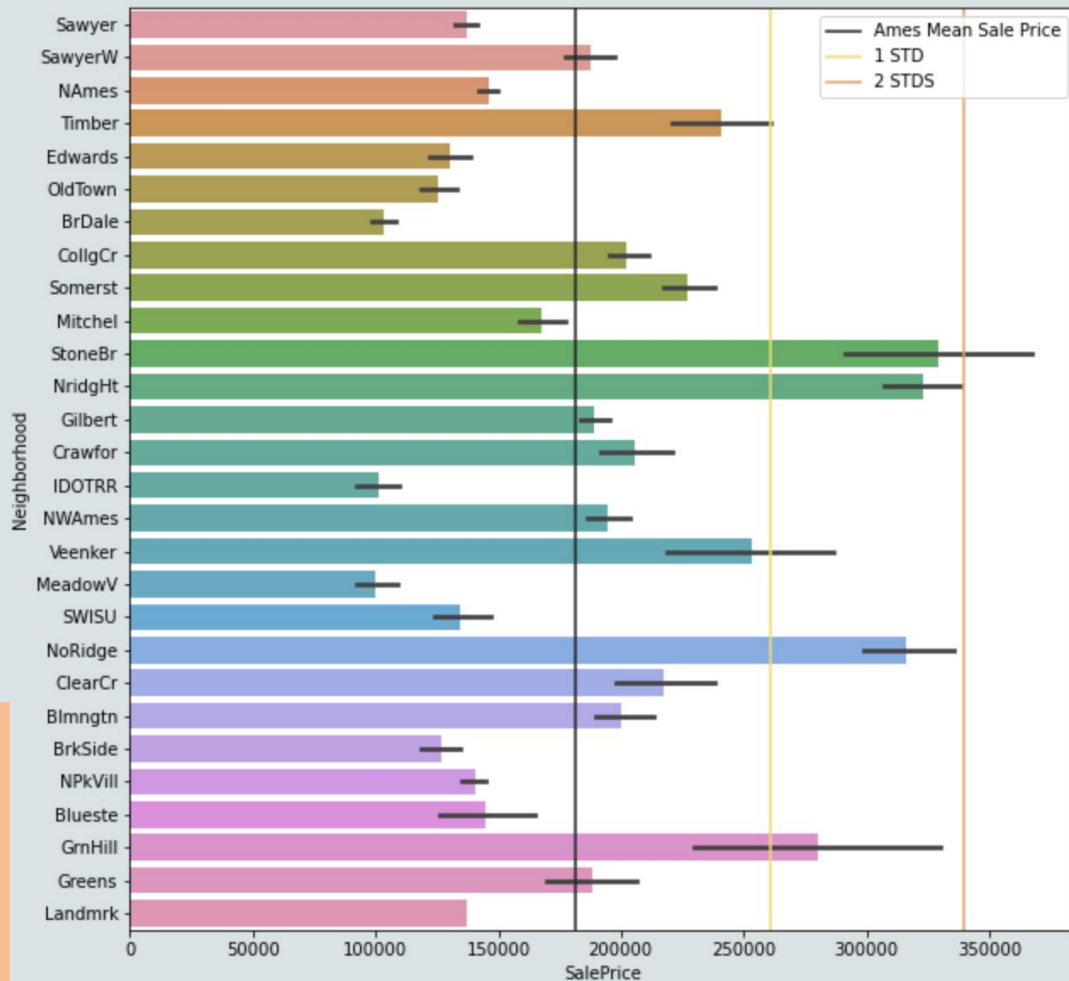
EXPLORATION



EXPLORATION

NEIGHBORHOODS:

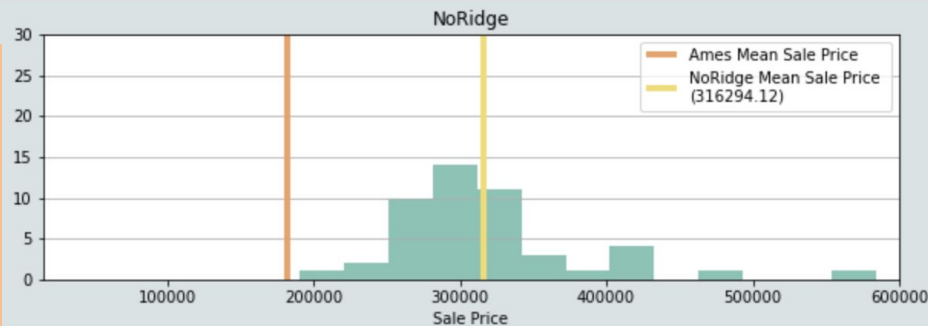
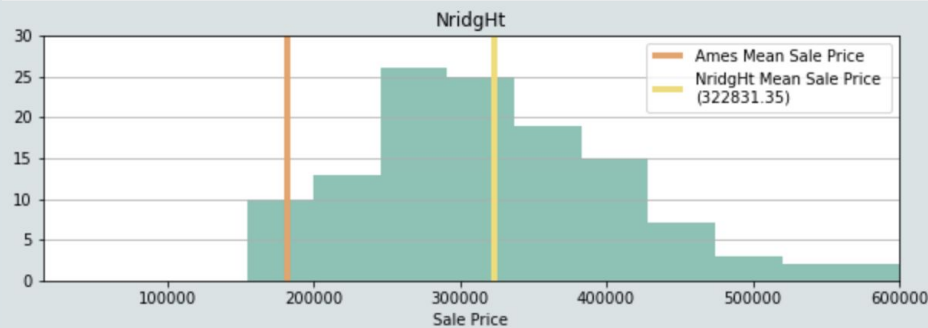
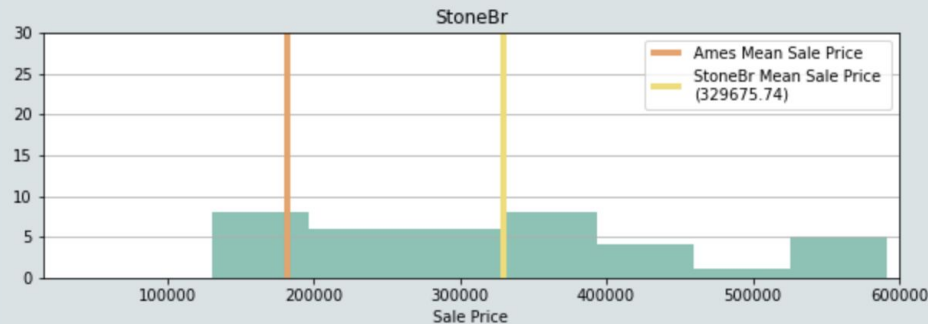
- Looking at highest priced homes: 3 neighborhoods are within 1 standard deviation away from the mean
- NridgHt , StoneBr, NoRidge***



EXPLORATION

NEIGHBORHOODS

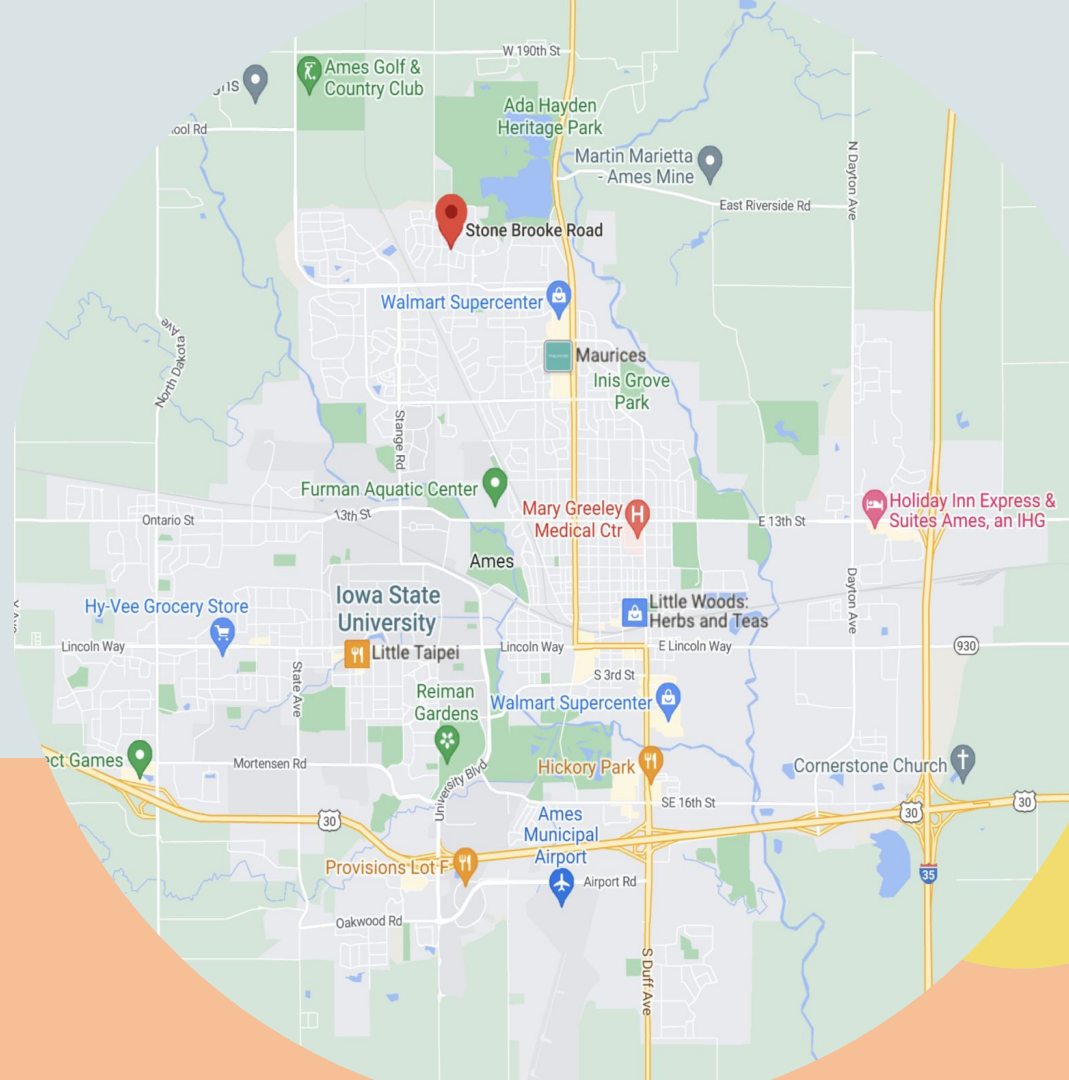
- **STONE BROOKE**
 - No outliers
 - Highest max values
 - Largest standard deviation
- **NORTHRIDGE HEIGHTS**
 - Most homes sold
- **NORTH RIDGE**
 - No homes below mean
 - Many outliers



EXPLORATION

STONE BROOKE

- Highest potential growth
- 52% of homes below neighborhood mean
- 10% of homes below citywide mean



03

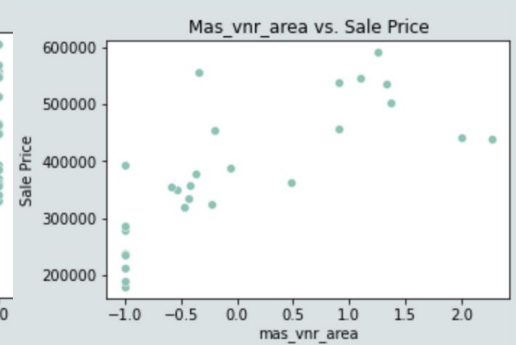
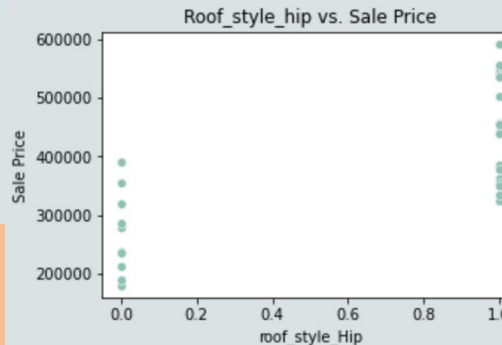
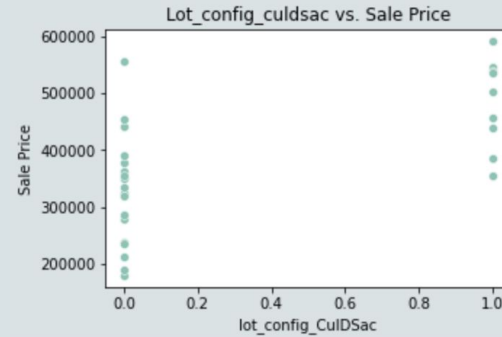
FEATURES

FEATURES

- Normalities
 - All homes in this neighborhood did not have pools, fences, or alley access
 - All homes had standard utility connections

FEATURES

- What features correlate with highest selling homes?
 - Garage Area, Year Built
 - Above Ground Living Space
 - Location in neighborhood
 - Hip roof style
 - Masonry exterior



04

MODELING



MODEL

- Does our Lasso model corroborate the select features?
- Positive Effects for the selected features is seen with the coefficients:
 -
 - Masonry exterior
 - Screened porch > enclosed
 - Fireplaces, garage
 - Recent Remodeling

	Coef
lot_area	6997.247757
total_bsmt_sf	5147.699827
screen_porch	5016.856131
1st_flr_sf	4966.263220
garage_area	4882.510740
gr_liv_area	4811.607285
totrms_abvgrd	4341.160005
fireplaces	3950.350291
half_bath	3856.764573
garage_cars	3612.144007
mas_vnr_area	3477.641255
full_bath	3442.991288
year_remod/add	3262.798045
year_built	3160.982223

wood_deck_sf	3122.497278
garage_yr_blt	3013.625494
bedroom_abvgr	2803.616063
bsmt_unf_sf	2319.836198
lot_config_CulDSac	1930.412980
bsmtfin_sf_1	1875.051671
roof_style_Hip	1674.602007
fireplace_qu	1645.851999
2nd_flr_sf	1573.323635
garage_finish	1529.789390
exter_qual	1311.273161
heating_qc	1308.565871
overall_qual	1304.728770
bsmtfin_type_1	1248.636570

05

CONCLUSIONS

CONCLUSIONS

- If looking to flip a home as an invest, look to purchase in the **Ridge Brooke** area.
 - **Northridge Heights** has potential that can be further examined.
- Total **living area** and **lot size** have large factor in resale value though expensive to change.
- External house material has a large impact: use **masonry** siding for maximum returns
- Adding a **garage** and **fireplace** and converting a covered **porch** to a screen porch will increase value

RESEARCH

- Refine model over different neighborhoods
- Proximity to important features, like a university or major hospital, may increase value
- Research HOA regulations to additional costs and renovation regulations
- Check other areas for large range in differences of home prices for other investment opportunities.



THANK YOU

ANY QUESTIONS?