

GA Data Science 1116

Dec. 14, 2020



Photo by:

https://unsplash.com/photos/1ddol8rgUH8?utm_source=unsplash&utm_medium=referral&utm_content=creditShareLink

Ames, Iowa

Home Pricing Analysis



Problem Statement



Ames, IA

- Home to Iowa State University (33,000 students)

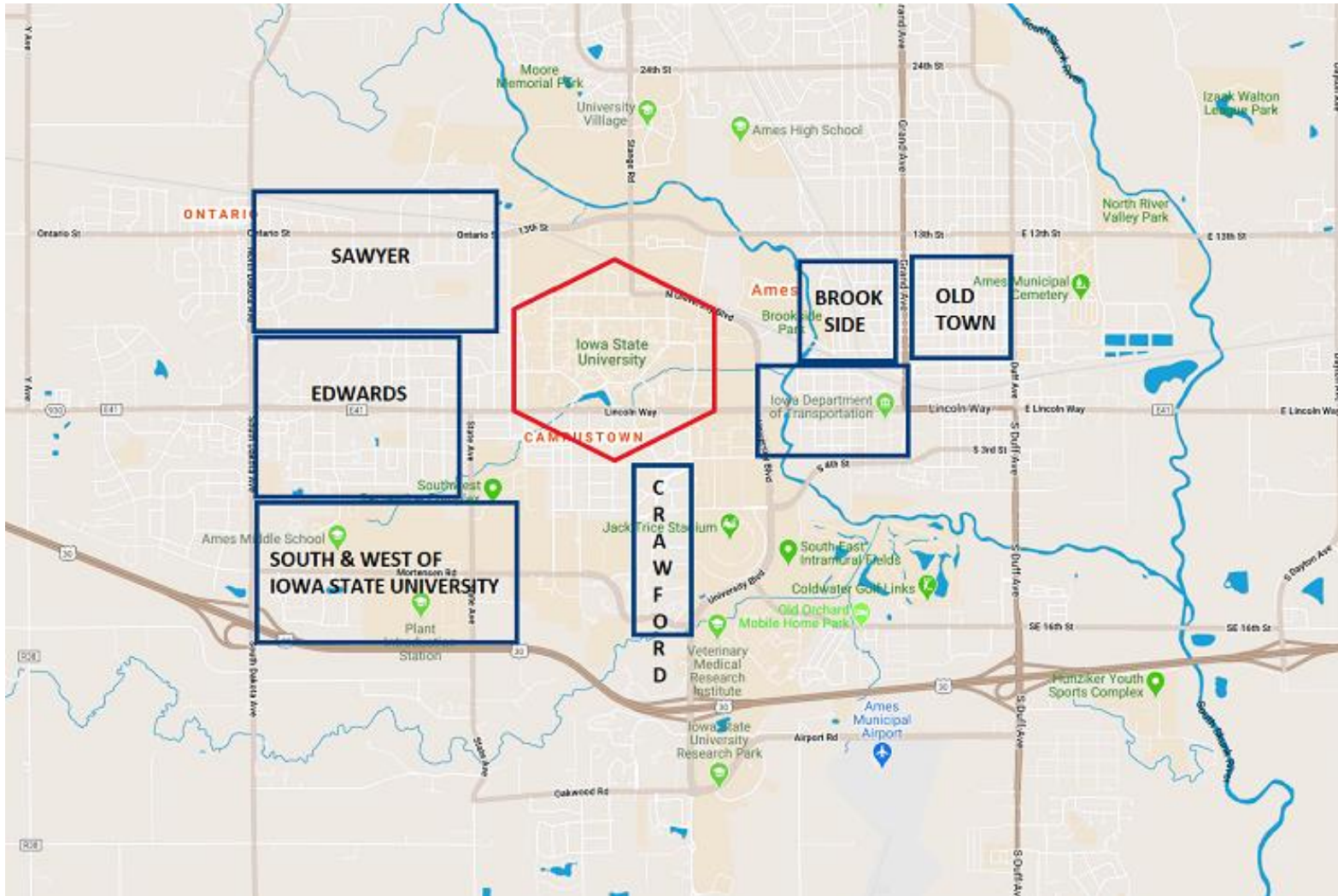


Congratulations on your new job!

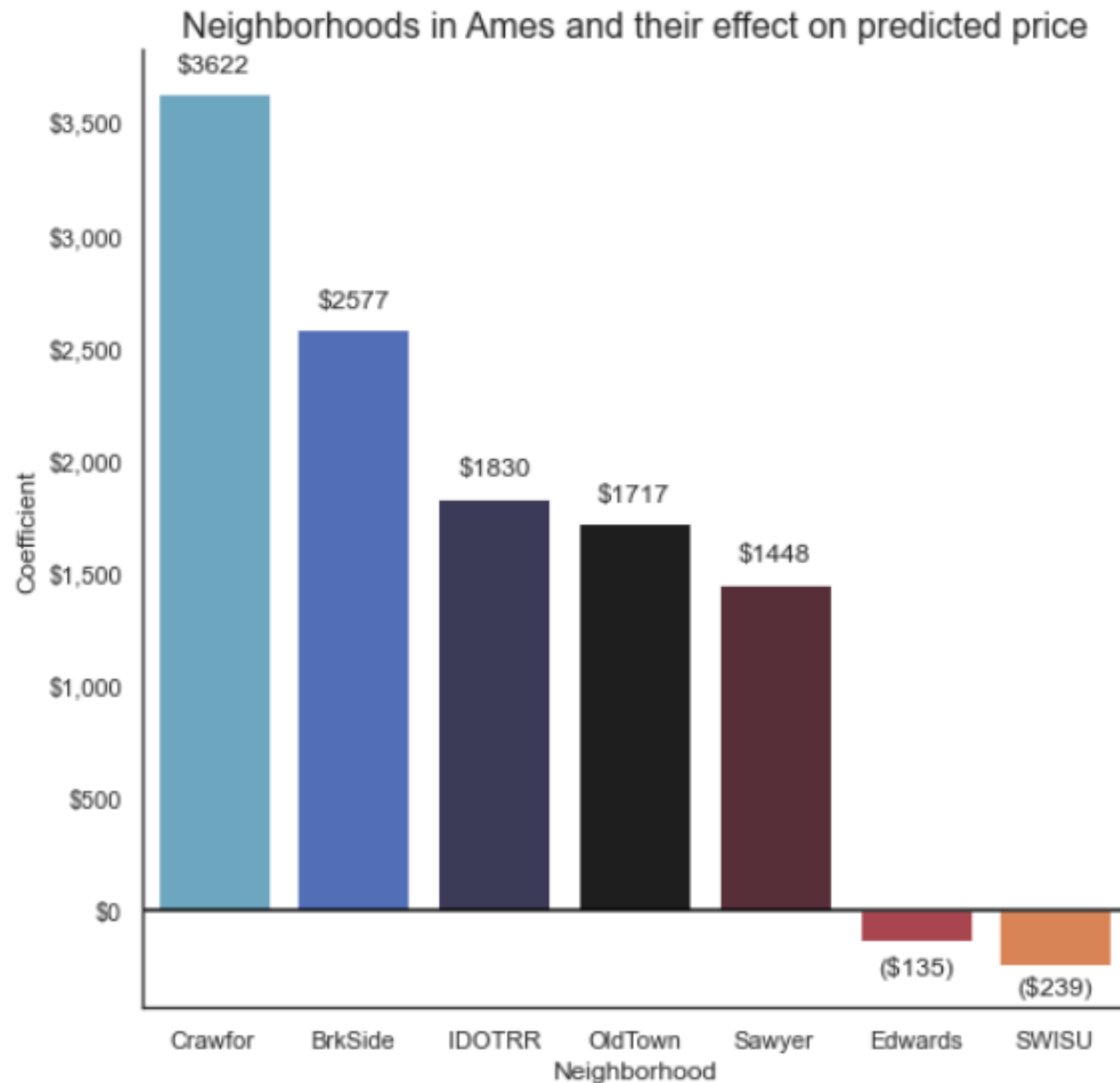


Null hypothesis H_0 :

There is a 5% or more premium to home prices in the seven neighborhoods closest to the Iowa State campus



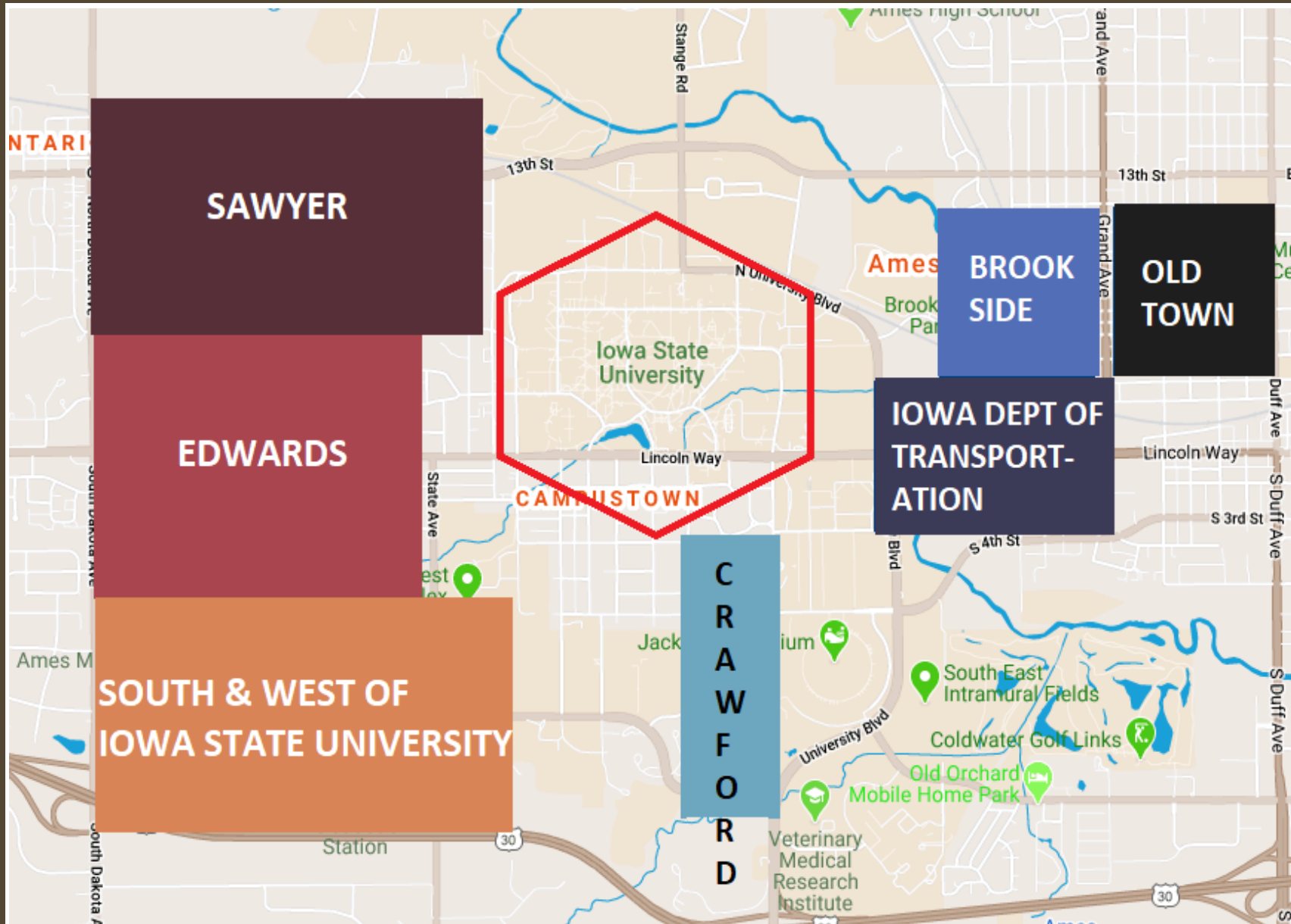
The three most
important
factors in
real estate



Modeling Results

**Combined coefficient
value for all seven
neighborhoods:**

\$3,122



Coefficients:

- ❑ Crawford - \$3,622
- ❑ Brook Side - \$2,577
- ❑ Iowa DOT - \$1,830
- ❑ Old Town - \$1,717
- ❑ Sawyer - \$1,448
- ❑ Edwards - (\$135)
- ❑ South & West - (\$239)

Combined: \$3,122

Conclusion

Null hypothesis H_0 :

There is a 5% or more premium to home prices in the six neighborhoods closest to the Iowa State campus

 Average Sale Price (All houses in training set) : \$180,995.11

5% = \$9,049.76

 Seven closest neighborhoods premium: \$3,122

Reject the null hypothesis

Thank You!



Paul Miller

Questions or comments?



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