Forecasting Real Estate Prices

Using Time Series Analysis to Predict Future Values

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Overview

San Jose, CA

Predict future values

Highest 3 year ROI



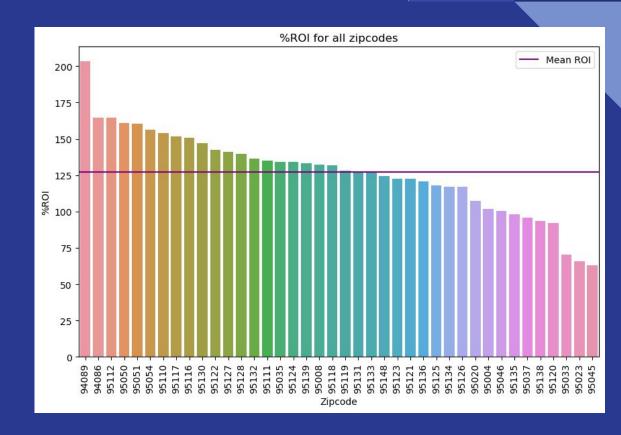
https://proximityone.com/metros/2013/cbsa41940.htm

Business Understanding

- Invest in real estate in the San Jose area.
- Location of many tech startups
- 3 year investments
- Mindful of budget- < \$2 million.

Data

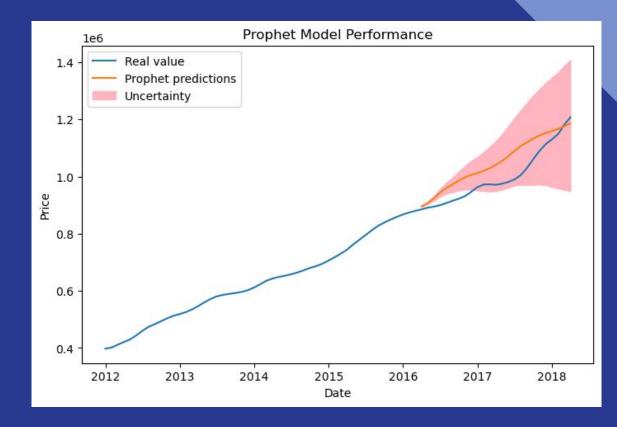
- 40 zipcodes
- 2012-2018
- Mean ROI 127%.
- Average price \$1.16 million



Modeling

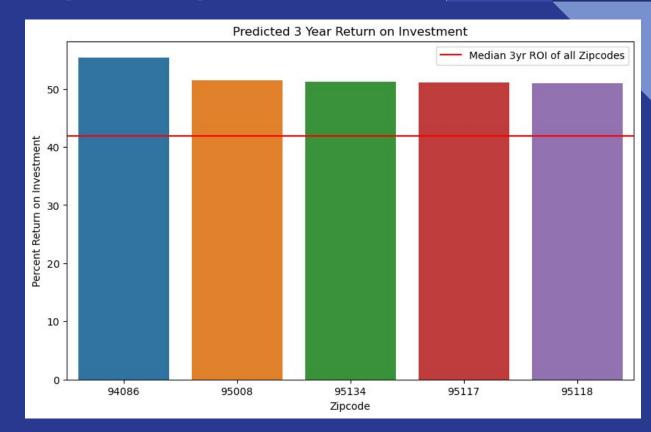
 Zipcode 94089 used to explore models.

Prophet model performed best



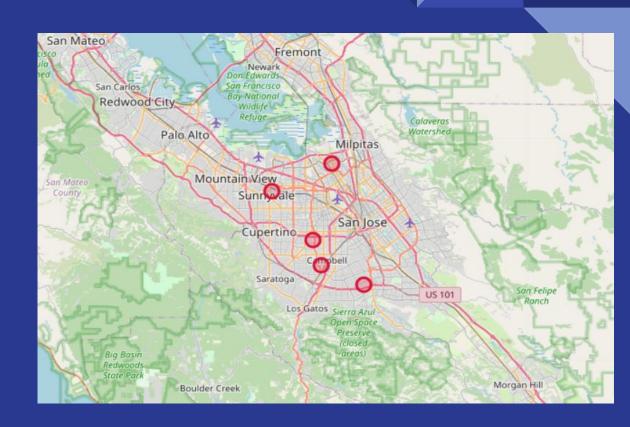
Top 5 zipcodes

- Forecasted 3
 year ROI
 between 51%
 and 55%
- Mean of 40% and median of 42% for all zipcodes



Conclusions

- Mean 2018 price: \$1.5 million
- 29,000-49,000 population
- 6,500-18,500 households



Next Steps and Limitations

Economic recessions

Other factors that contribute to housing demand

Most recent observations from April 2018

Thank You!

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