California Investment Recommendation

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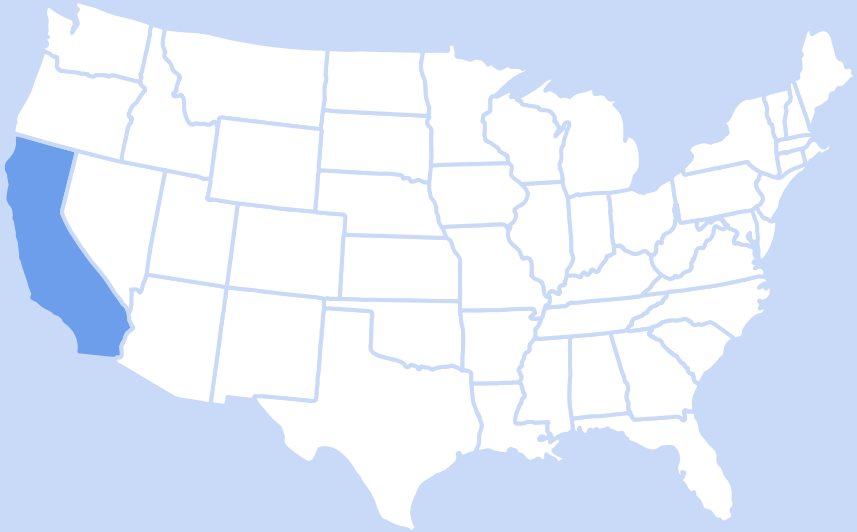
Business Problem



The goal of this analysis is to build time series models to predict **top 5 zipcodes** in California with highest ROI.

Data

14,723

Total # of zipcodes in the dataset

April 1994 - April 2018

Contains ~20 years of mean housing value data

Methods

Quartile

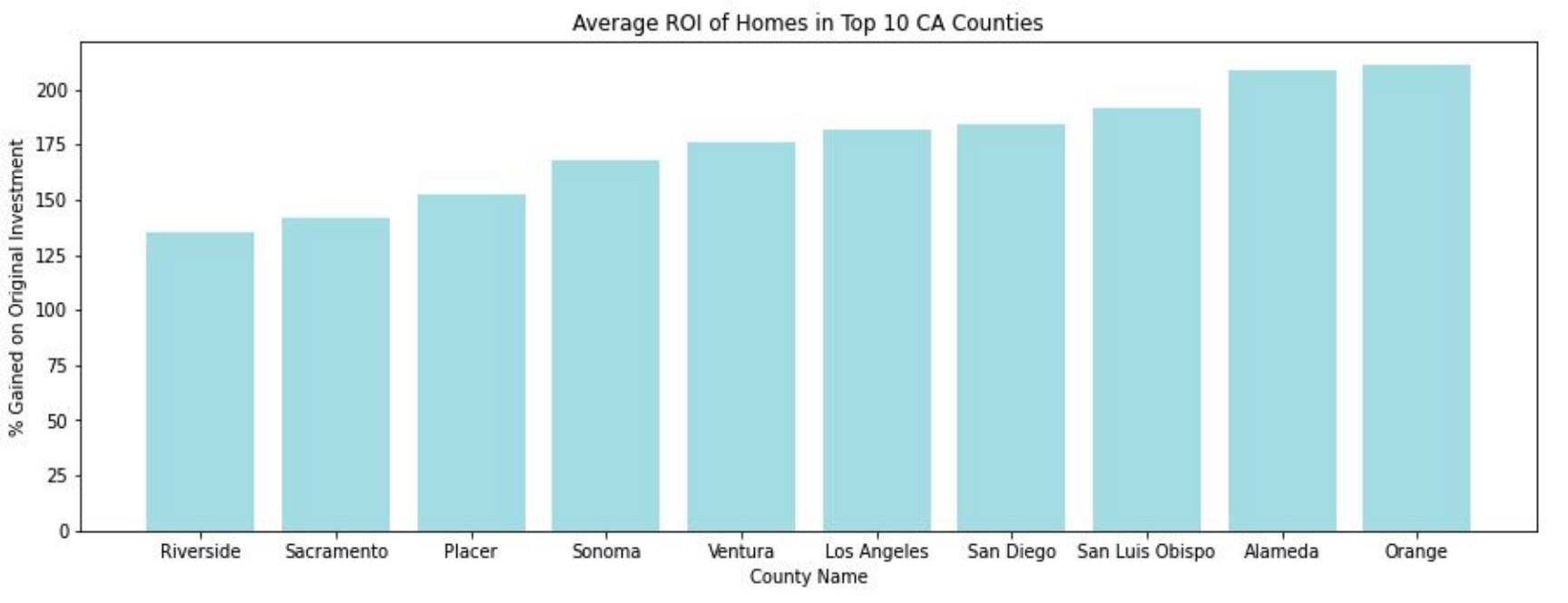
Between 30% - 70%

Risk Profile

Coefficient of Variation and built risk profile (~ <60%)

Results

- Top 10 Counties with highest average ROI between 1994-2018 before modeling



Methods (Modeling)

Model 1

Random Walk model

Model 2

ARIMA model

Model 3

ARIMA model with manual hyperparameter selection

Model 4

ARIMA model with AUTO-ARIMA

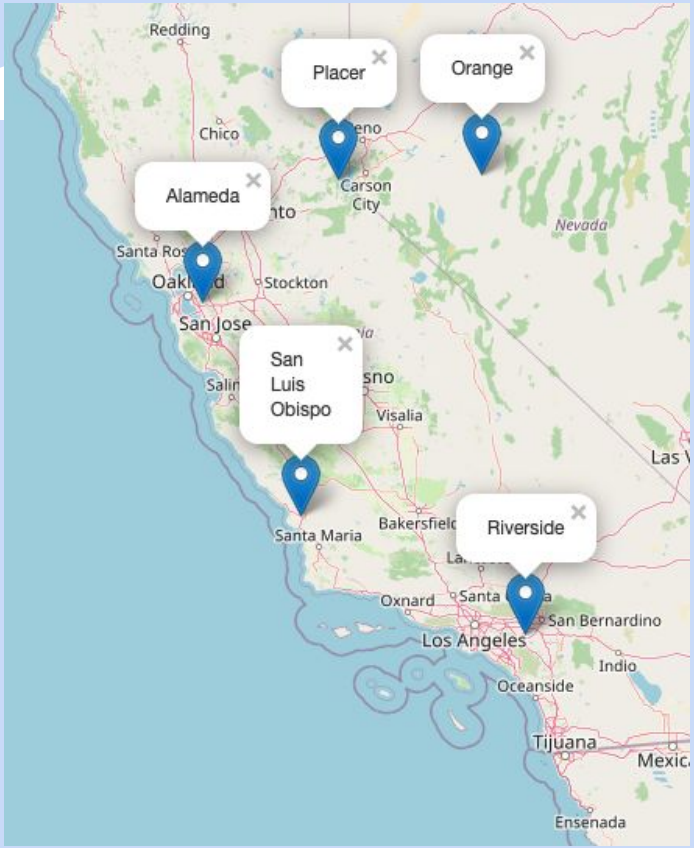
Model 5

SARIMAX model

Results

	1 year	3 years	5 years	10 years
91754 (Orange)	2.94%	8.74%	14.42%	27.90%
92860 (Riverside)	2.81%	4.25%	4.45%	4.49%
96141 (Placer)	9.06%	26.99%	44.99%	89.22%
93405 (San Luis Obispo)	2.01%	3.55%	3.95%	4.08%
94546 (Alameda)	3.19%	9.50%	15.72%	30.62%

Recommendation

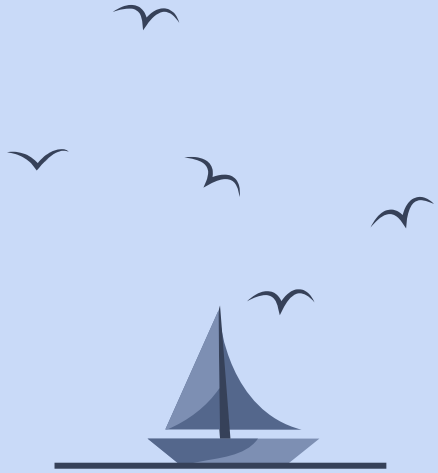


- **91754 (Orange)**
  Buy and hold for at least 10 years.
- **92860 (Riverside)**
  Buy and hold for at least 3 years.
- **96141 (Placer)**
  Buy and hold for at least 10 years.
- **93405 (San Luis Obispo)**
  Buy and hold for at least 3-5 years.
- **94546 (Alameda)**
  Buy and hold for at least 10 years.

Next Steps

1. **Updated Data**
   Add more recent data to increase the effectiveness of the model

2. **Additional Contributing Factors**
   Population, tax rate, school ranking, and property size



THANKS

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