

Analysis of Idaho housing market

By: Steven Kyle

AIM

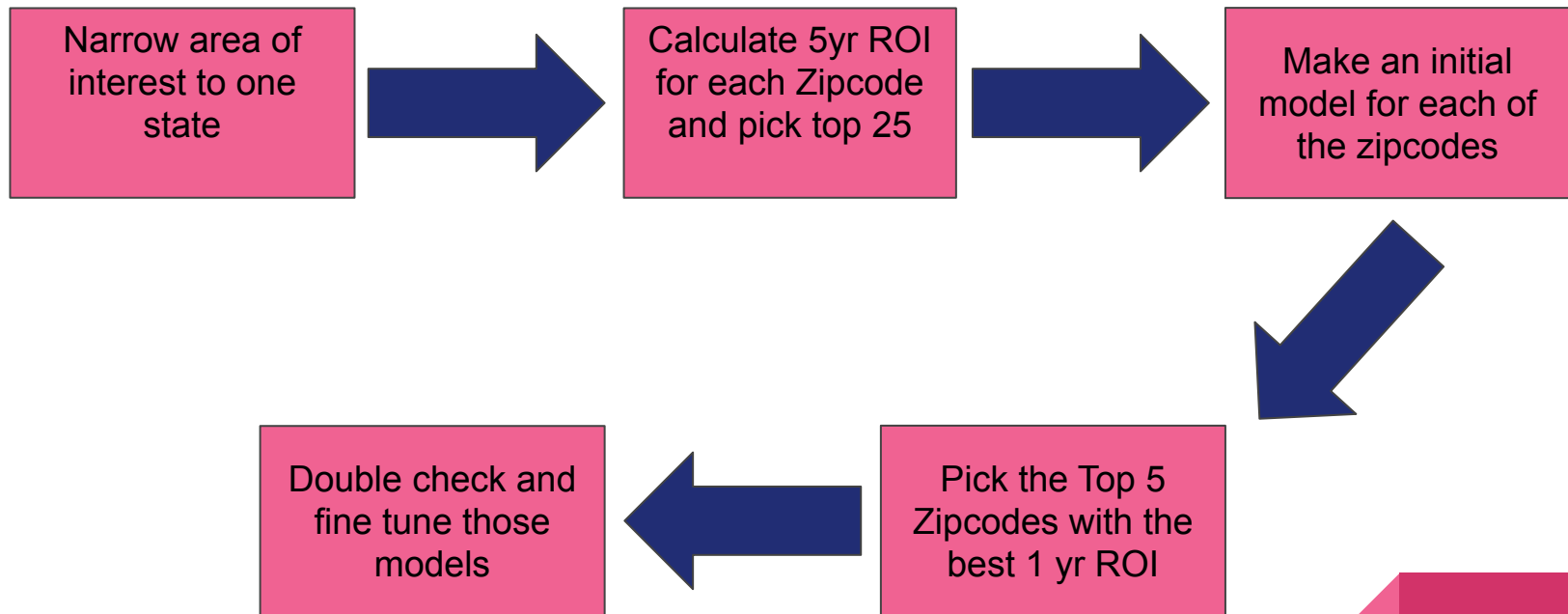
The purpose of this analysis is to find the top 5 zipcodes to invest properties in.

The data:

- Provided by Zillow
- 14,723 zip codes
- Spans 51 “States” (Includes D.C.)
- Provides median housing prices per month from April 1996 - April 2018



Workflow

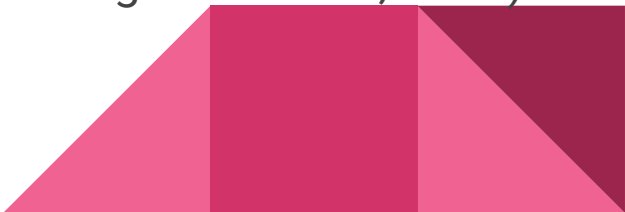


Where is everyone moving to?

Narrowed down the state to Idaho. Idaho reportedly has had the biggest growth as well as an influx of people moving to the state.

Based off of:

- U.S. News (Population growth of 2.12%, based off of 2020 census data)
 - <https://www.usnews.com/news/best-states/slideshows/these-are-the-10-fastest-growing-states-in-america>
- United Van Lines 2020 Study (70% inbound migration)
 - <https://www.unitedvanlines.com/newsroom/movers-study-2020>
- Hire a Helper Migration Report (Twice as many people moving in than out, 2020)
 - <https://www.hireahelper.com/moving-statistics/migration-report/>



Idaho

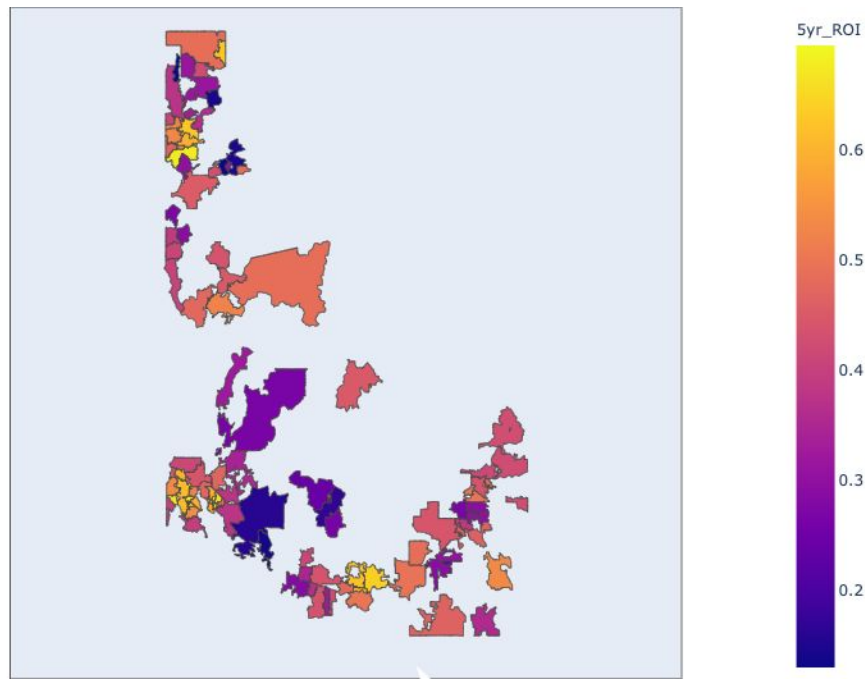
Requirement:

- Had to have 10 years worth of data (More established communities.)

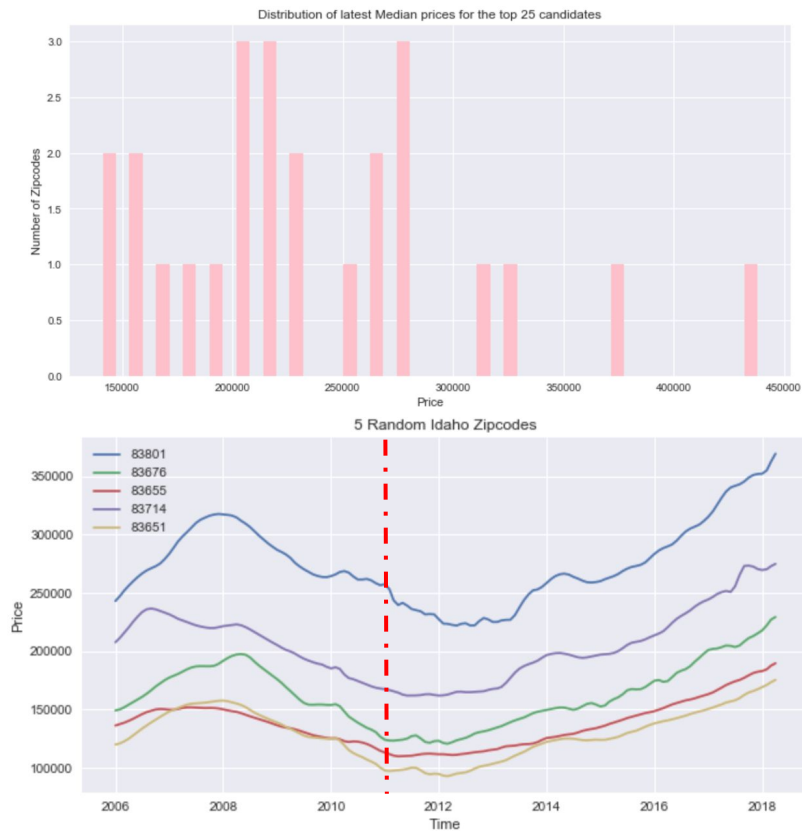
Data:

- Original: 110 Zip Codes
- Meeting Requirements: 108 Zip Codes
- Used latest historic 5 year ROI to narrow down Zip Codes to 25

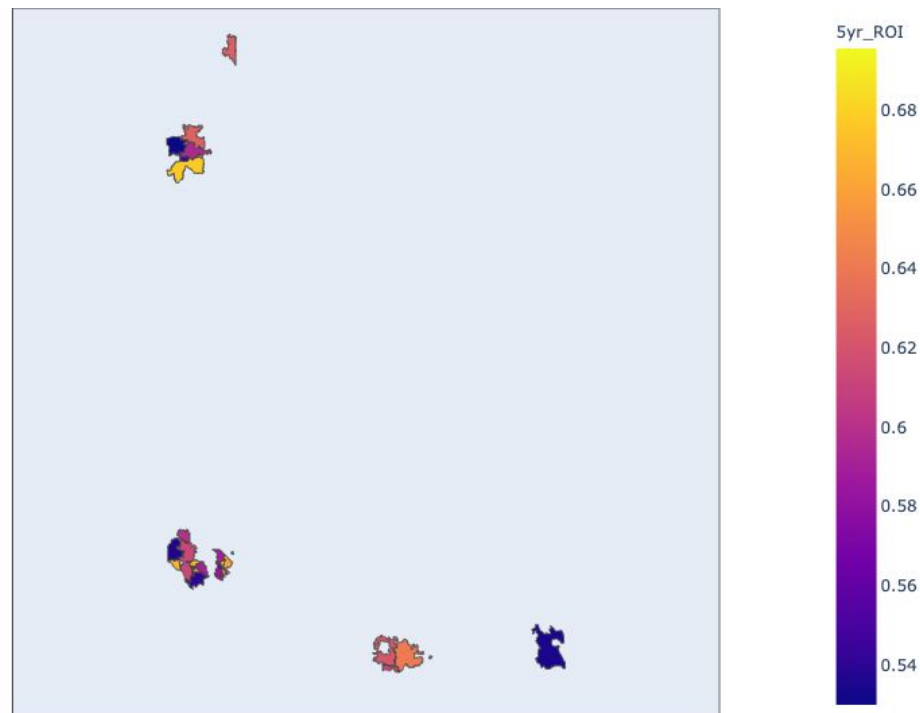
All 110 Zip Codes in Idaho



EDA for the 25 zipcodes



Top 25 Zip Codes based on 5yr ROI

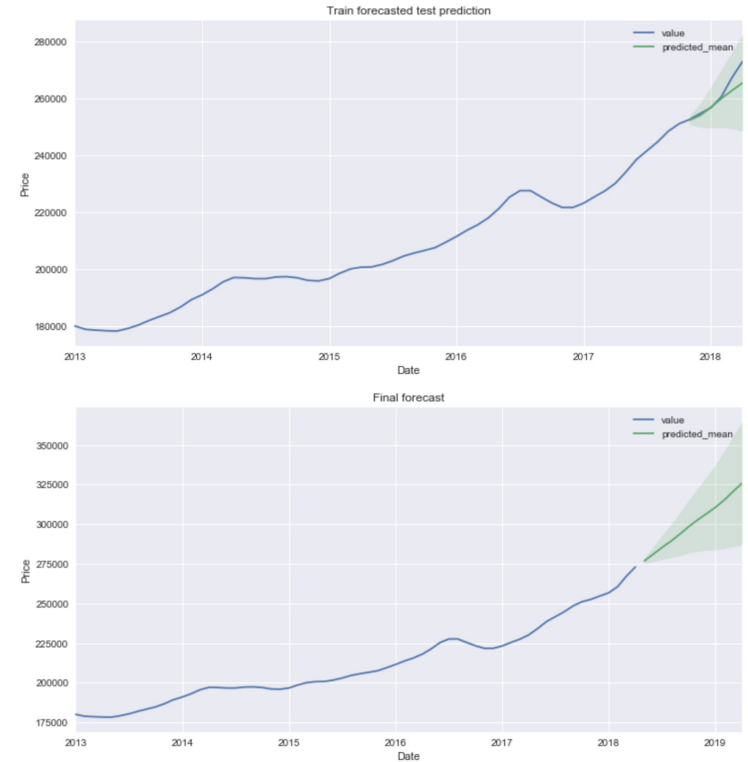


Zipcode: 83858



- County: Kootenai
- City: Rathdrum
- Metro: Coeur d'Alene
- Population: 15,885

Train RMSE: \$3,602.4



last_known_price 1_year_forecast 1_year_forecast_low 1_year_forecast_high 1_year_forecast_ROI 1_year_forecast_low_ROI 1_year_forecast_high_ROI

273000

325746

287023

364470

0.19321

0.0513658

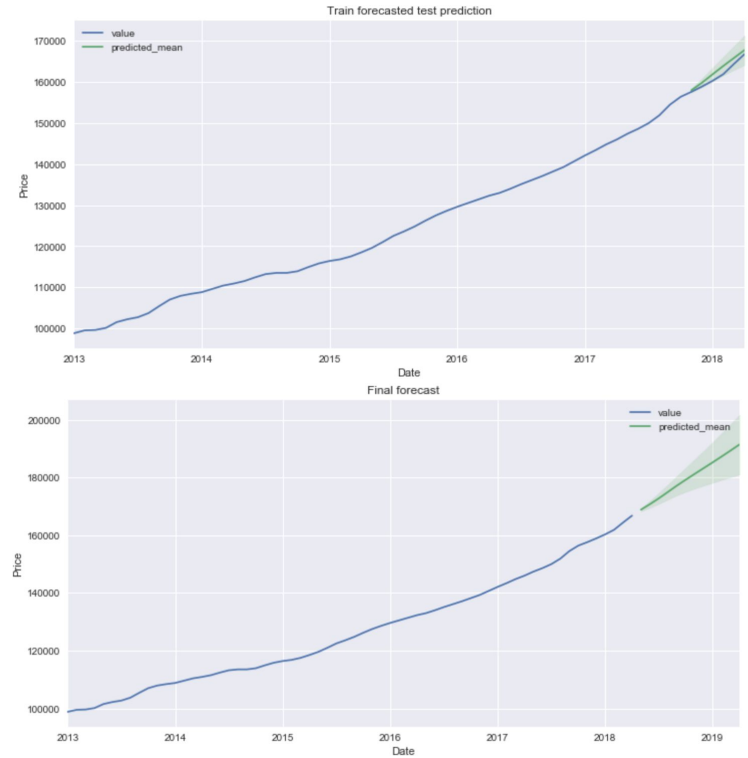
0.335054

Zipcode: 83605



- County: Canyon
- City: Caldwell
- Metro: Boise City
- Population: 39,649

Train RMSE: \$1,330.62



last_known_price 1_year_forecast 1_year_forecast_low 1_year_forecast_high 1_year_forecast_ROI 1_year_forecast_low_ROI 1_year_forecast_high_ROI

166800

191461

181089

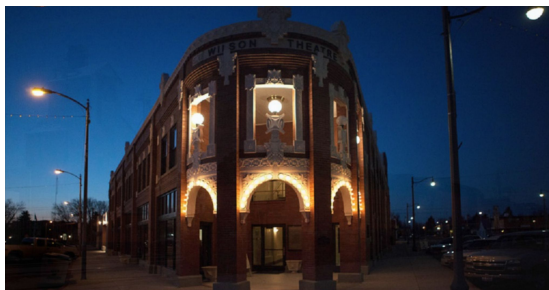
201833

0.147849

0.0856669

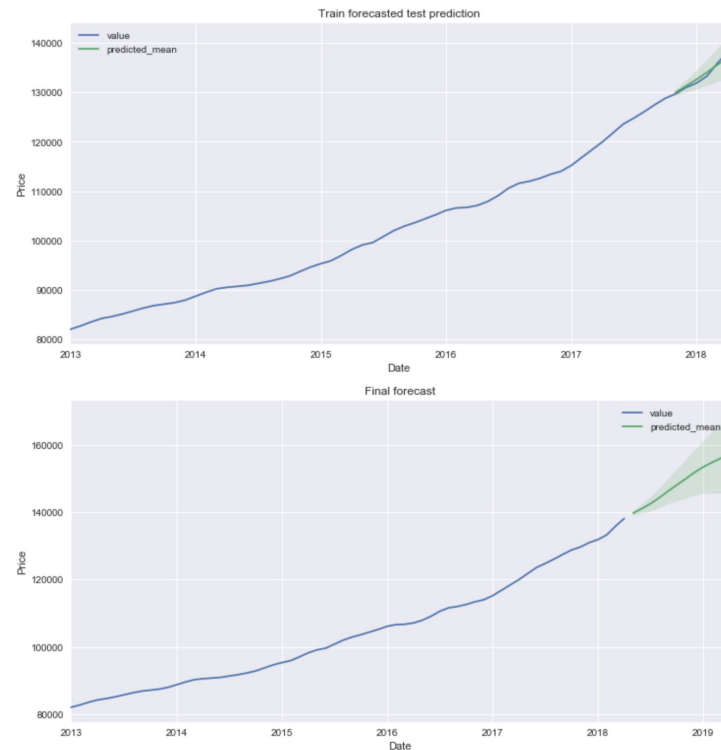
0.21003

Zipcode: 83350



- County: Minidoka
- City: Rupert
- Metro: Burley
- Population: 12,268

Train RMSE: \$677.70



last_known_price	1_year_forecast	1_year_forecast_low	1_year_forecast_high	1_year_forecast_ROI	1_year_forecast_low_ROI	1_year_forecast_high_ROI
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138200	157404	145833	168974	0.138955	0.0552312	0.222678
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Zipcode: 83845



- County: Boundary
- City: Moyie Springs
- Metro: None
- Population: 1,592

Train RMSE: \$5,944.2



last_known_price	1_year_forecast	1_year_forecast_low	1_year_forecast_high	1_year_forecast_ROI	1_year_forecast_low_ROI	1_year_forecast_high_ROI
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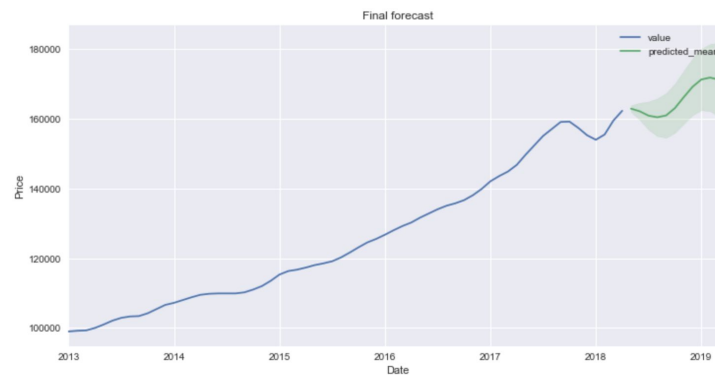
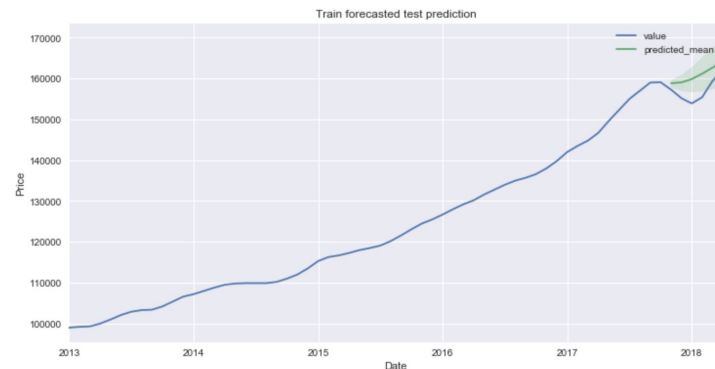
232000	261392	234439	288345	0.126689	0.0105125	0.242866
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Zipcode: 83347



- County: Minidoka
- City: Paul
- Metro: Burley
- Population: 3,197

Train RMSE: \$4,092.51



last_known_price 1_year_forecast 1_year_forecast_low 1_year_forecast_high 1_year_forecast_ROI 1_year_forecast_low_ROI 1_year_forecast_high_ROI

162200

171097

159576

182618

0.0548518

-0.016179

0.125883

Conclusion and Recommendations

Conclusion:

Out of the 110 Idaho Zipcodes that we have data on the best Zipcodes to invest in are: 83858, 83605, 83850, 83845, and 83347. The predicted 1yr ROI spans from 5.48%-19.32%. Investment in Zipcode 83347 warrants caution since the low 1 yr prediction shows that there is a possibility that we would lose money on the investment.

Recommendation:

- Smaller cities seem to be experiencing more growth in price
- Areas where the median housing price is less than 300,000 seem to have better ROI



Future Work and Thank you

Future Work:

- Make a final model for all top 25 Zipcodes that had best 5yr ROI
- Make 3 different investment portfolios that take risk into account (Aggressive, Hybrid, Conservative)
- Make a final model for all 110 Zipcodes if we want to do a complete analysis

Thank you:

- Amber Yandow
- James Irving
- Dave Brown, Eric Romano, Michael Tiernan

