

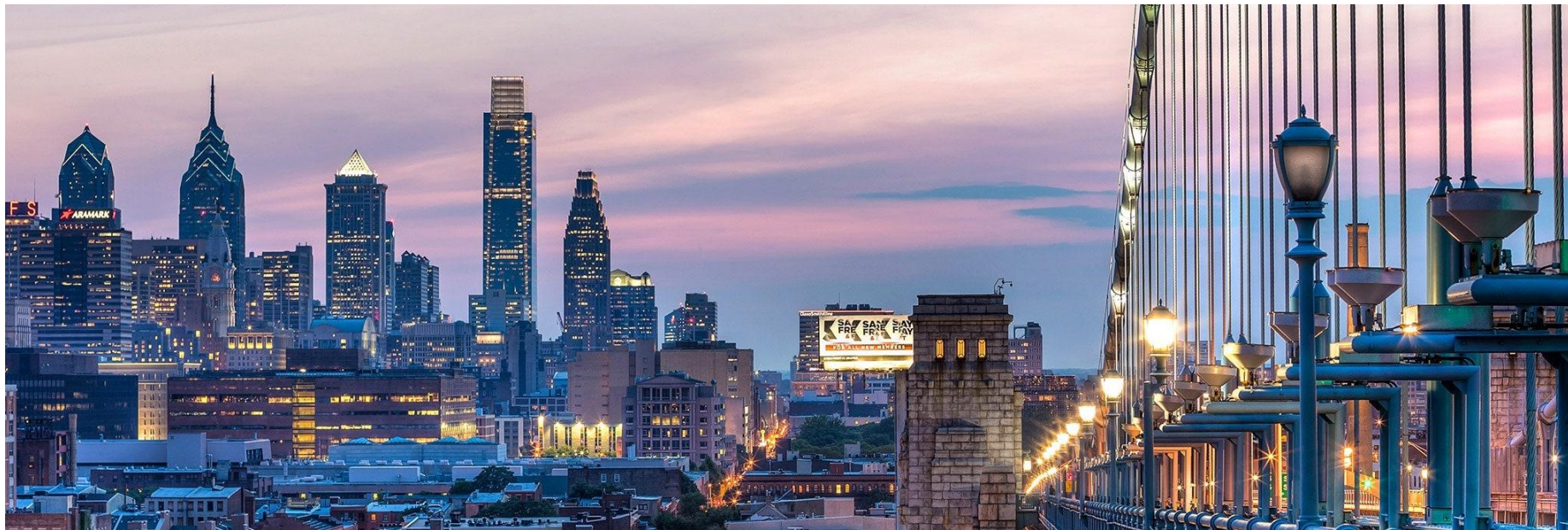
Philadelphia Real Estate:

Finding The 5 Best Zip Codes To Invest In

Rachel Sanderlin
March 13th, 2023

Introduction and Goals

- **Philadelphia** based real estate investment firm
- What are the **5 best zip codes** to invest in?



Data: Zillow Research



- **Dataset:**
 - April, 1996 - April, 2018.
 - **Monthly median sales** value per zip code.
 - Includes 14,723 zip codes
 - **281** relevant to the **Philadelphia metro area**
-

Found the **ROI** for all
Philadelphia zip codes
(after 2008 crash);
then picked the **top 10**
for **further analysis**.

Initial Visualization

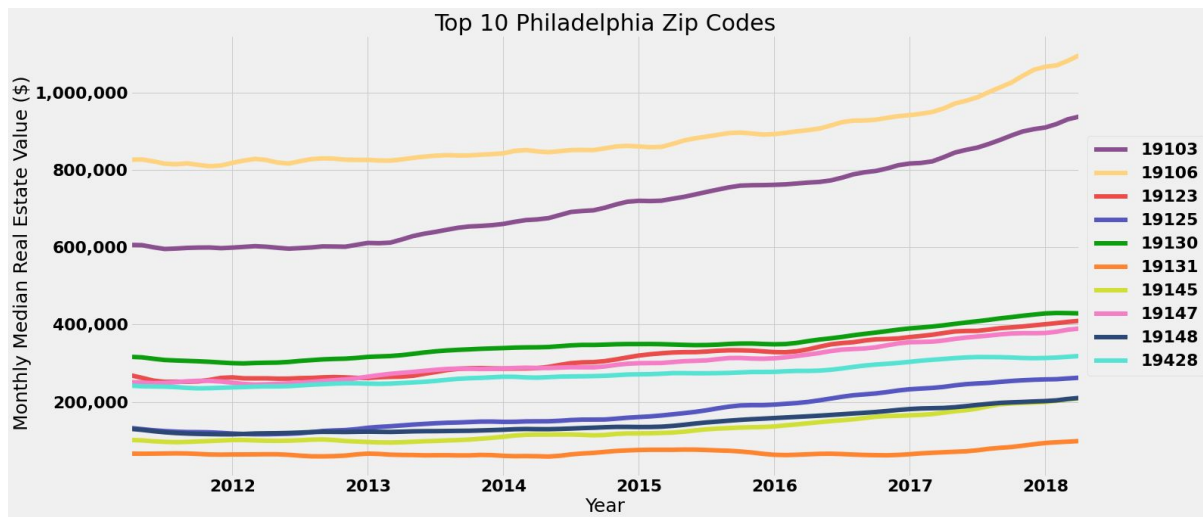
Most Zip Codes:

2011: 100,000 to 300,000

2018: 200,000 to 400,000

Outliers:

- 19103, 19106, 19131



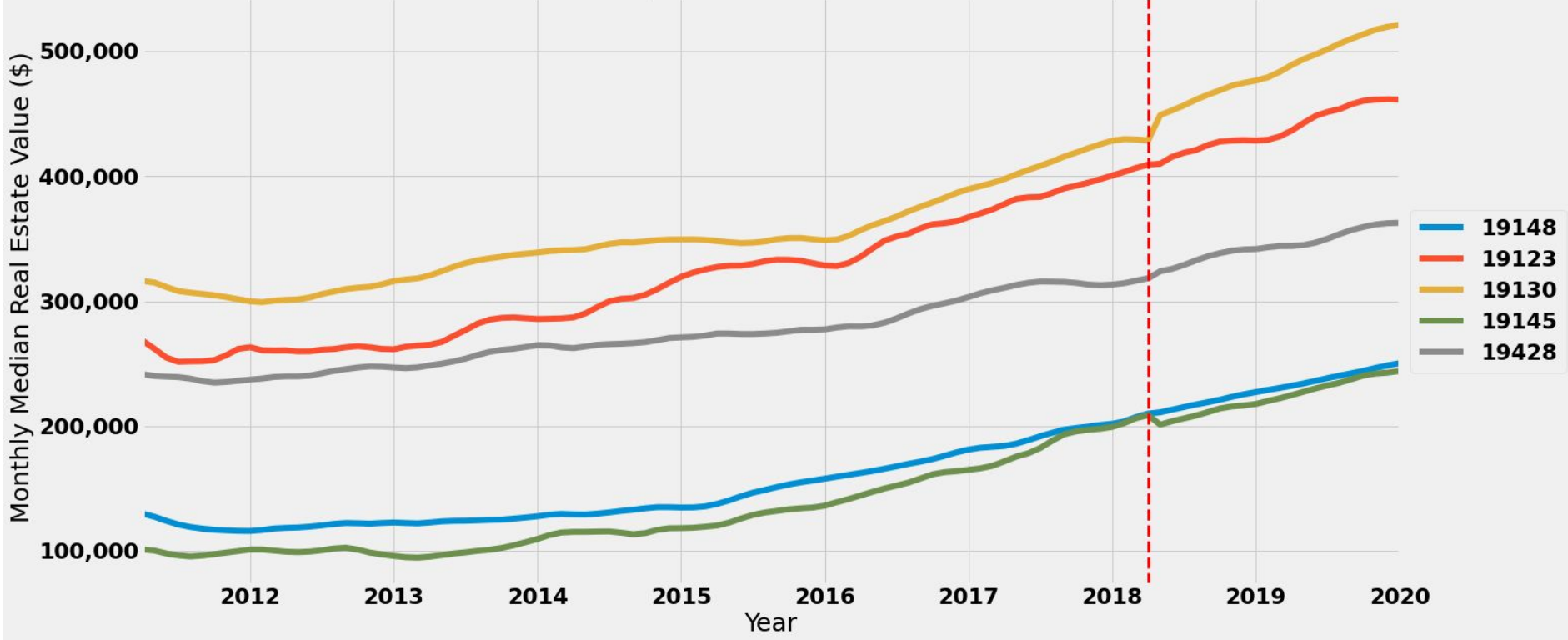
Modeling the Data



- Final models used **SARIMA** to forecast real estate values up to Jan, 2020.
 - Allowed us to **remove trends and seasonality** from data
 - Then found the **RMSE** by comparing our forecasted data to holdout data.
-

Took the zip codes
with the *lowest*
RMSE as our **5 Best**
Zip Codes

5 Best Zip Codes Forecasted Values



Then found the
expected ROI for
our 5 Best Zip
Codes

Predicted Returns: 5 Best Zip Codes

Zip Codes	Final Observed Value	Predicted Increase (ROI)	Final Expected 2020 Value
19145	\$ 208,800 +	\$ 45,100.8 (21.6%) =	\$ 253,900.8
19123	\$ 409,300 +	\$ 78,585.6 (19.2%) =	\$ 487,885.6
19148	\$ 210,100 +	\$ 35,506.9 (16.9%) =	\$ 245,606.9
19428	\$ 318,400 +	\$ 44,257.6 (13.9%) =	\$ 362, 657.6
19130	\$ 428,700 +	\$ 55,302.3 (12.8%) =	\$ 484,002.3

An Important Note...

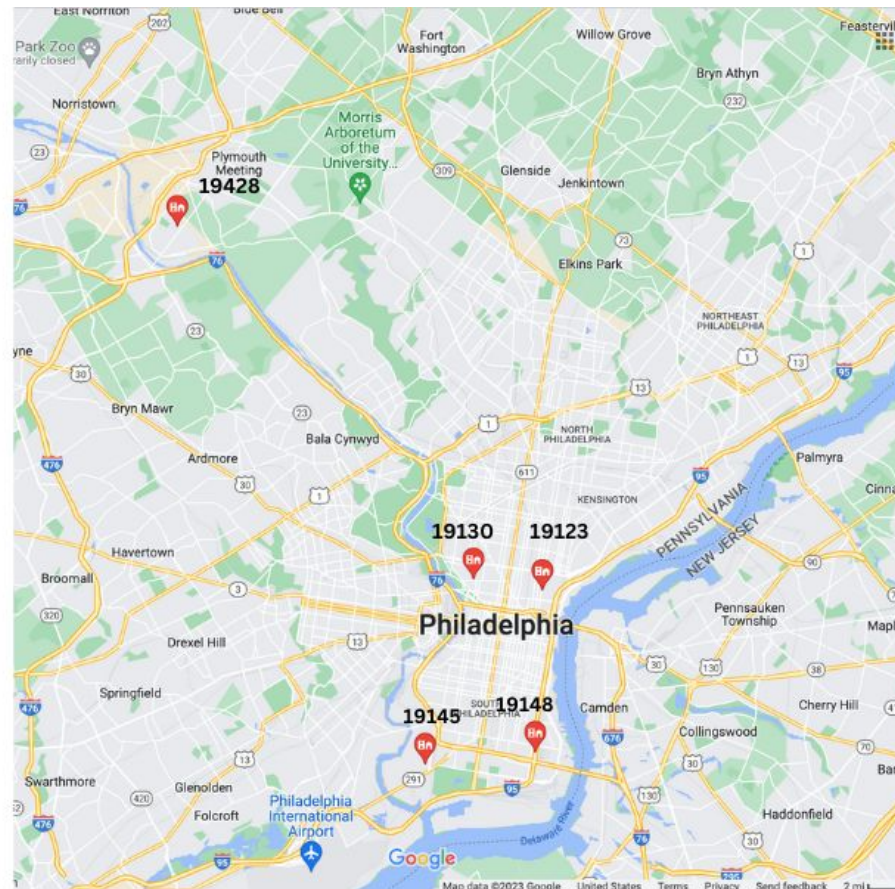


- In **19103** (Rittenhouse Square) and **19106** (Historic District) models predictions *were lower* than the actual home prices.
 - Indicates hot real estate, but volatile investment.
 - Buy-in costs are high.
 - **19131** (Fairmount) also outperformed the model.
 - Low buy-in costs.
-

Conclusion

5 Recommended Zip Codes to Invest In:

- 19145
- 19123
- 19148
- 19428
- 19130



Possible Next Steps



- Further investigate **19145**
 - Keep an eye on:
 - **South Philly** (including 19145 and 19148)
 - Neighborhoods **north of center city** (19123 and 19130).
 - Further investigate **19131** - it's current value is low, but seems to be rapidly growing.
-

Thank you!

Email: sanderlin2013@gmail.com

Github: github.com/sanderlin2013

LinkedIn: [linkedin.com/in/rachel-sanderlin](https://www.linkedin.com/in/rachel-sanderlin)

