

Real Estate Development

A DATA DRIVEN APPROACH TO
FORECASTING AND PREDICTING
REAL ESTATE OPPORTUNITIES



PROBLEM STATEMENT

- Real estate is a very complex, rapidly changing market which makes it difficult for newly starting developers or homeowners identify great opportunities to invest in.

Business value



Maximize profit opportunities for developers who are starting a new business and accelerate their growth.



Identify trends in market data to help young owners target ideal buying conditions.

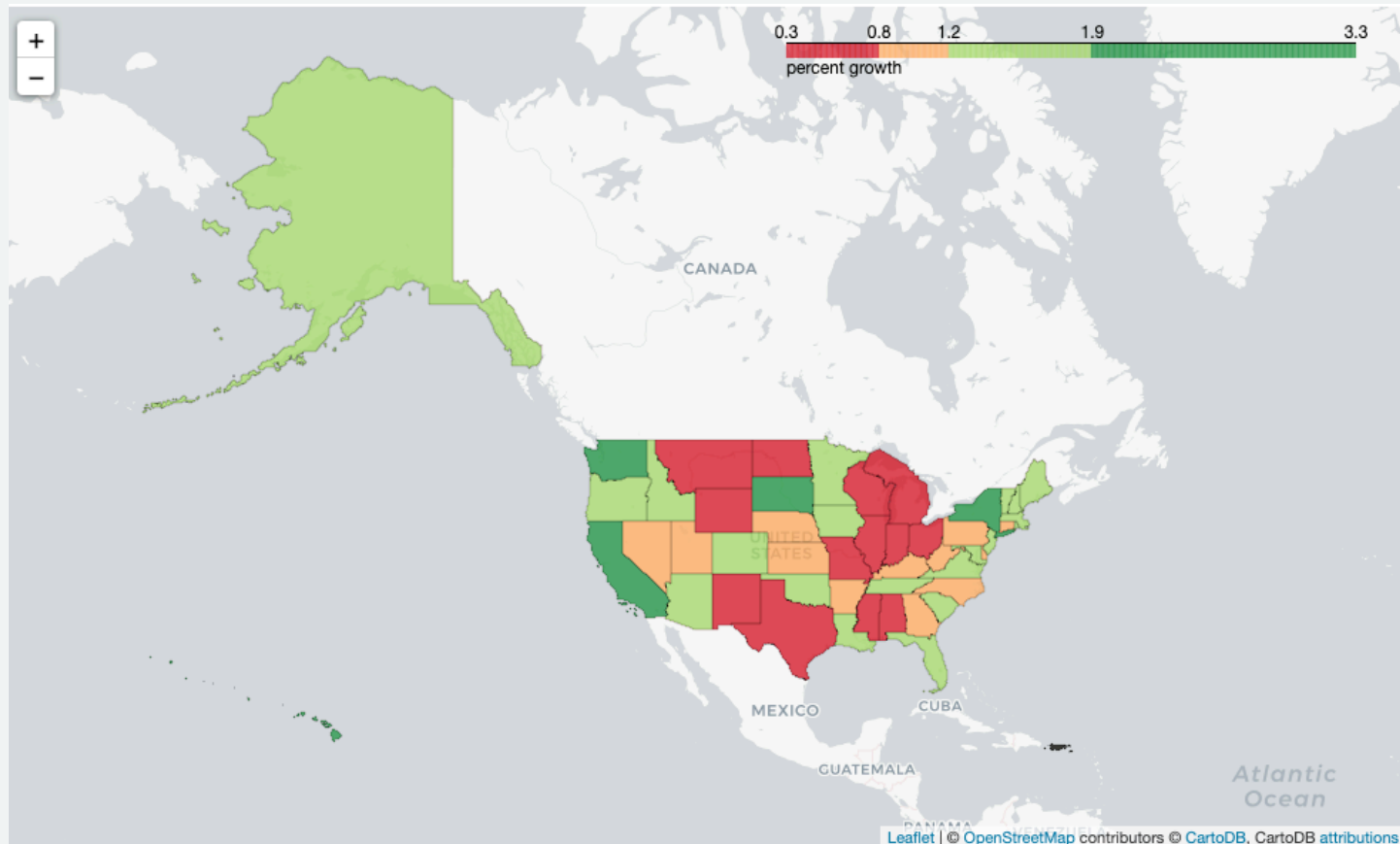
METHODOLOGY

ANALYSIS OF HOUSING MARKET DATA ACROSS
THE UNITED STATES – ZILLOW DATA

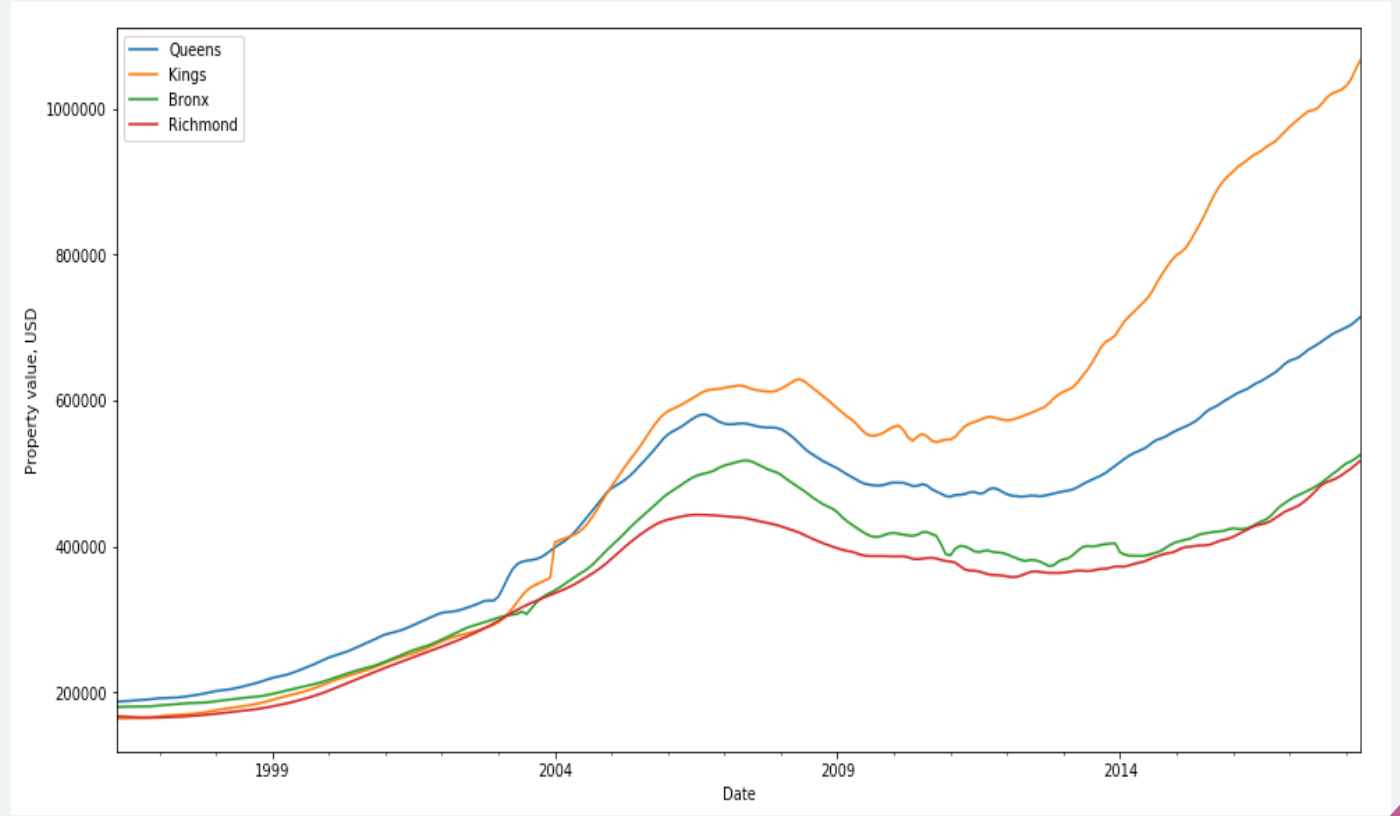
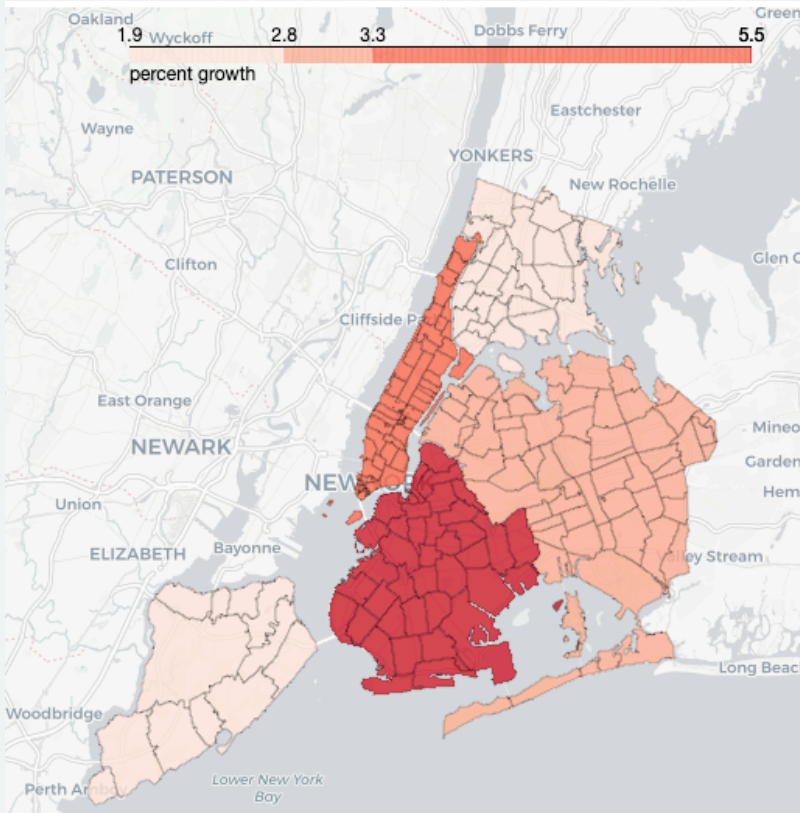
USING TIMESERIES ANALYSIS – ARIMA
MODELING



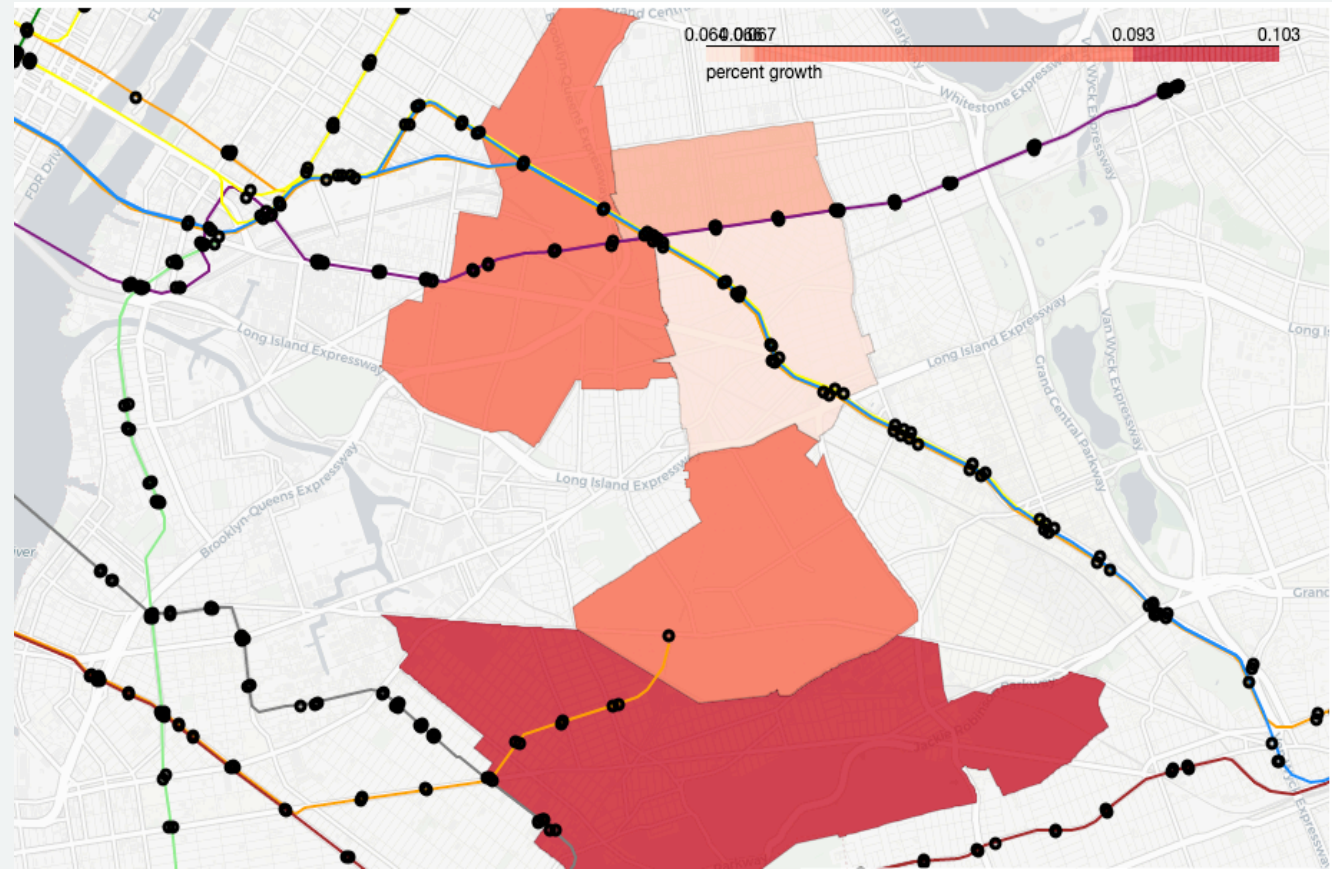
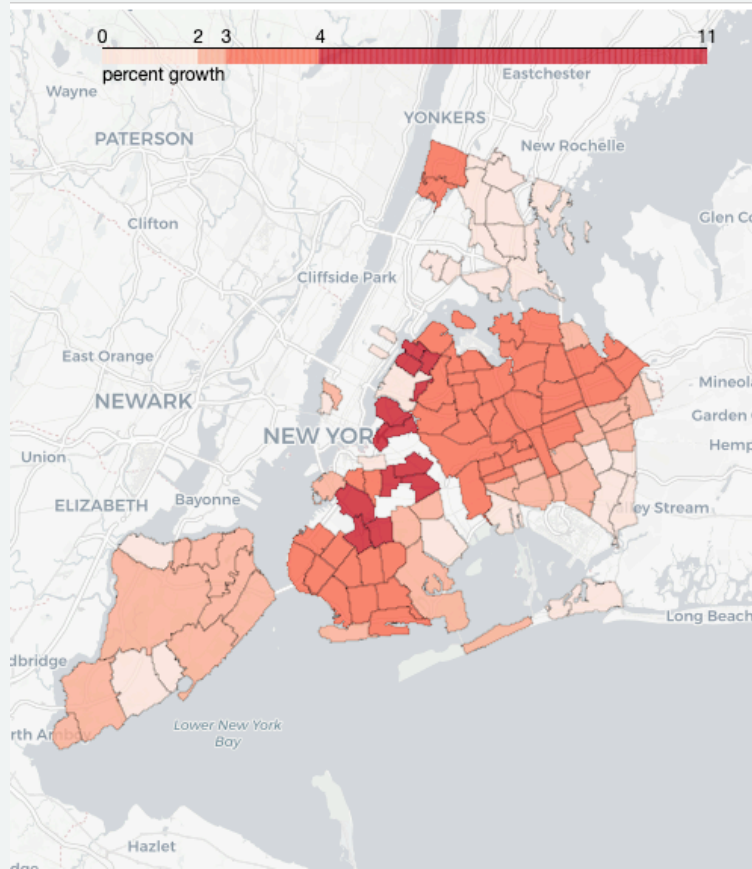
Property value growth across the United States



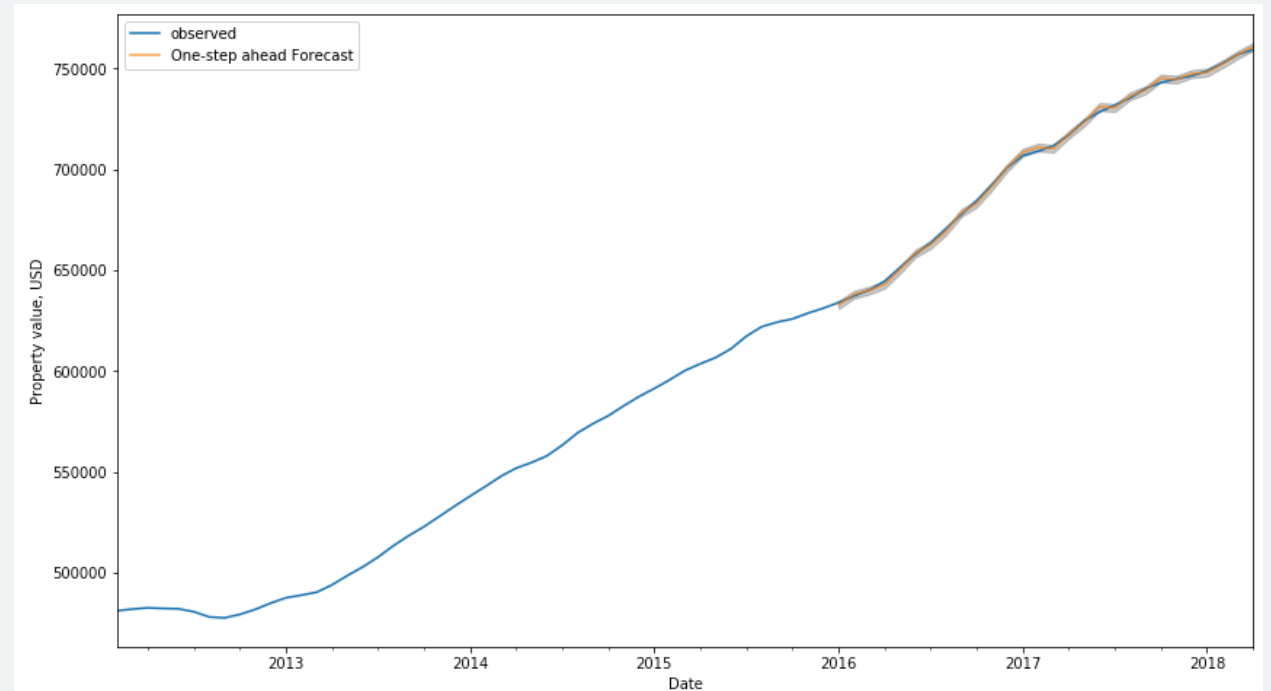
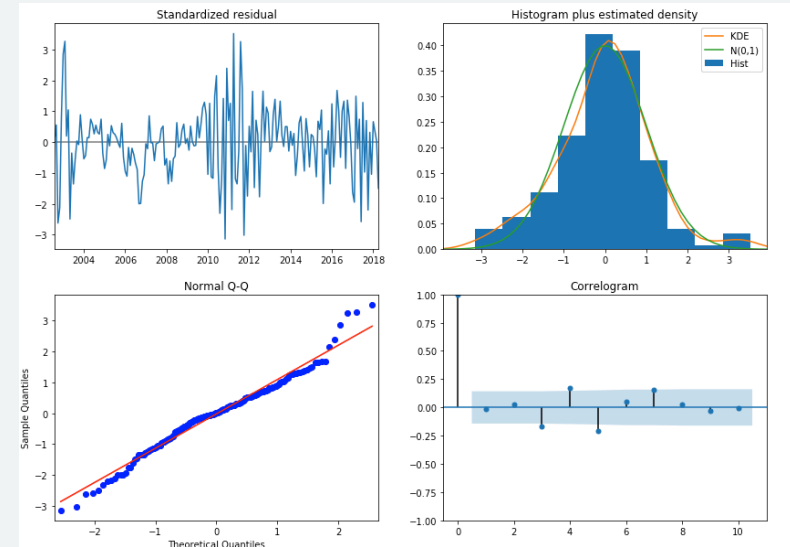
Property value growth for NYC – by borough



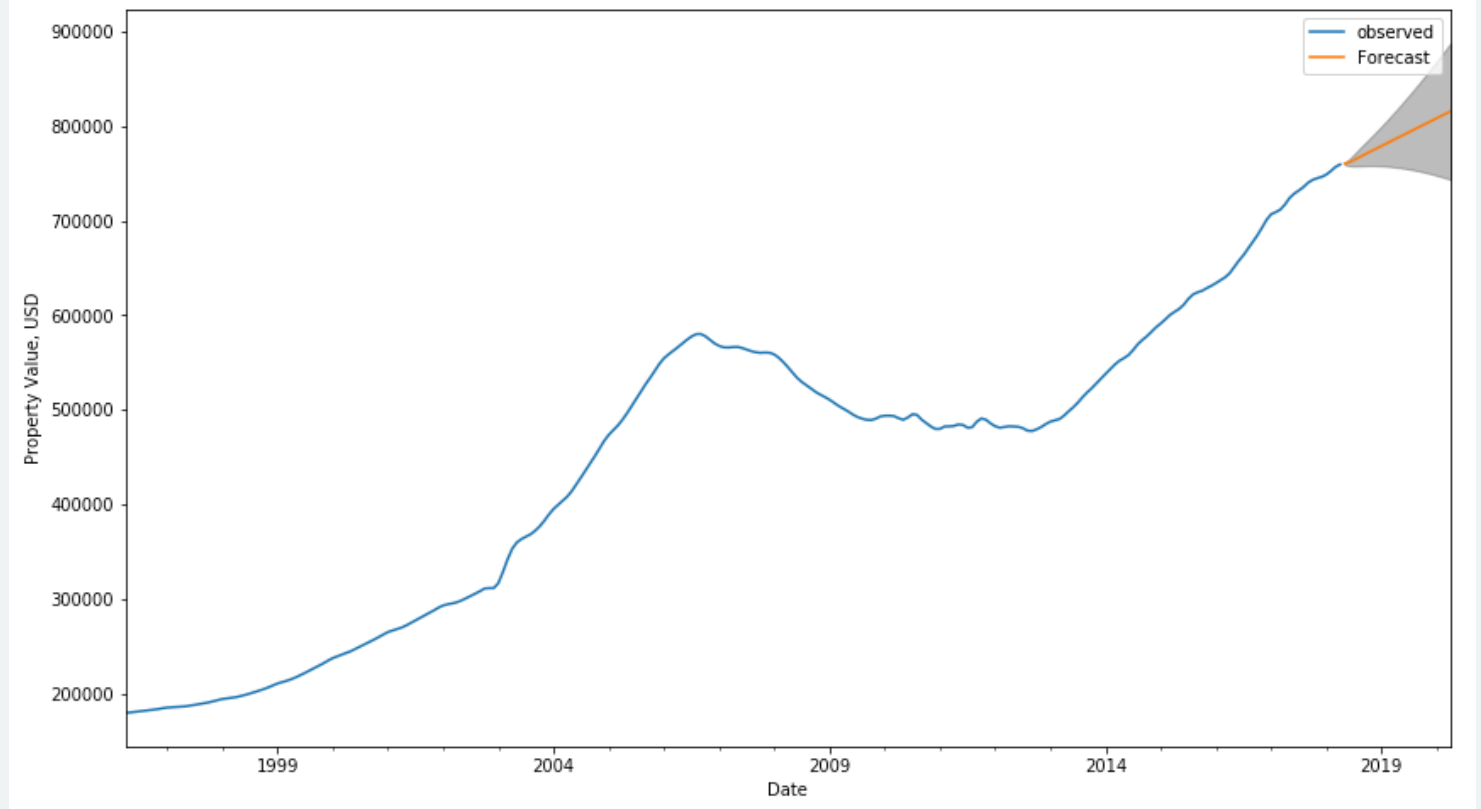
Property value growth for NYC – by zip code



RESULTS



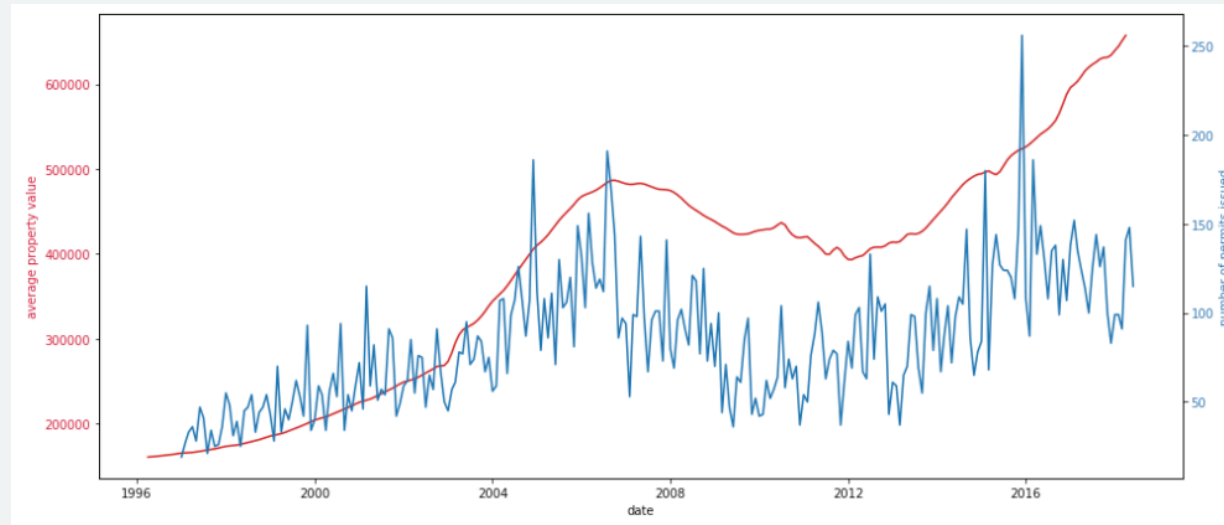
SUMMARY



- The forecasted results yield an 80% confidence shows an increasing property value over the course of the next 2 years.
- Endorse investing in these targeted zip codes.

FUTURE CONSIDERATIONS

- Incorporating future construction project into the model to predict how large-scale investments into an area can affect housing prices.
- Current dataset does not include how the COVID-19 has impacted the market, extend dataset to more recent timeframes for analysis.
- Adding additional external data to the model, ie number of permits issued by NYC DoB



A wide-angle photograph of the New York City skyline at sunset. The sky is a mix of orange, pink, and blue. The Freedom Tower is the central focus, with its spire reaching into the sky. Other skyscrapers like the One World Trade Center and the Citicorp Building are visible. The lower part of the image is covered by a semi-transparent purple overlay.

THANK YOU