NYC REAL ESTATE MARKET ANALYSIS

Purpose: Predict future real estate prices in NYC by analyzing existing trends.

Trends analyzed & findings
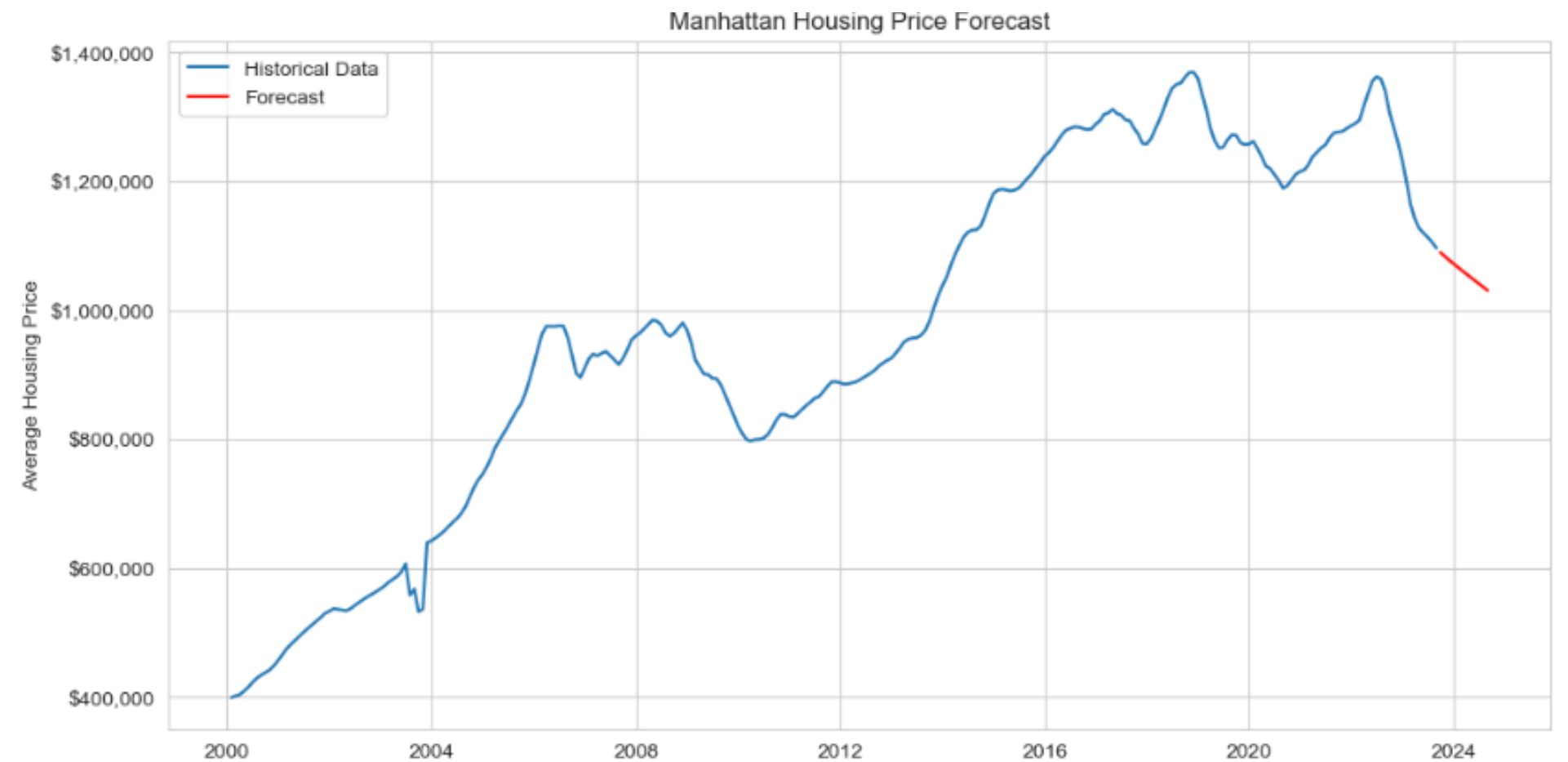
1 Volatility & price evolution
Manhattan is the most volatile out of the 5 boroughs. The Bronx showed the least price evolution out of the 5 boroughs in NYC.

2 Recency of a neighborhood
Newer neighborhoods tend to have higher real estate values compared to older ones.
Correlation cooeficient: **-0.20**

3 Air pollution Index
Slight tendency for housing prices to decrease as air quality worsens, the effect is minimal.

4 Demographics vs Housing Prices
Positive correlation between the percentage of the White population and the Asian population.
Negative correlations with other groups such as Hispanic, Indian, Island, Multi and Black.

Important: Correlation doesn't mean causation.

Manhattan Housing Price Forecast

ARIMA FORECAST MODEL RESULT

ARIMA: AutoRegressive (AR) Integrated (I) Moving Average (MA) Model, a time series forecasting model, to provide investors with actionable insights.

- Predicts a gradual decrease in the average housing prices in Manhattan, Queens, and Brooklyn over 2024.
- Brooklyn will be the least volatile housing market with the rate of decrease being the slowest.
- By mid-2024, the prices could stabilize, with very slight decreases. https://www.youtube.com/watch?v=-480Twomrvk

https://www.youtube.com/watch?v=-480Twomrvk

By Yash Bhatia & Khadija Bouzekri