

Exploratory Data Analysis: MTA Turnstile Trends in the Upper West Side



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Data Selection

“[The Upper West Side] wasn’t the most popular destination over the past decade. It did, however, manage to land the top 10 neighborhoods on our list ... Here, 5,375 home sales closed from 2010 through 2019, for a combined dollar volume of over \$15 billion.”

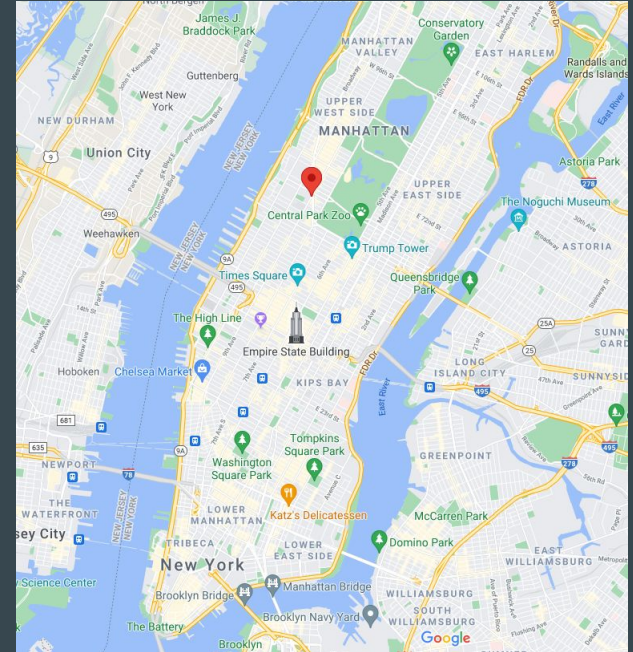
- PropertyClub, 2020



New York City is one of the most expensive cities in the world to live in, but it's also one of the most desirable. Even with home prices on the rise, there are still eager homebuyers out there who are willing to invest in property in the city. We looked at a decade's worth of home sales in NYC, to see which parts of the city are the most appealing to homebuyers.

Upper West Side Characteristics

- Largely residential - effective when evaluating rush hour data
- Higher than average homeownership rates
- Few tourist attractions



Data Used

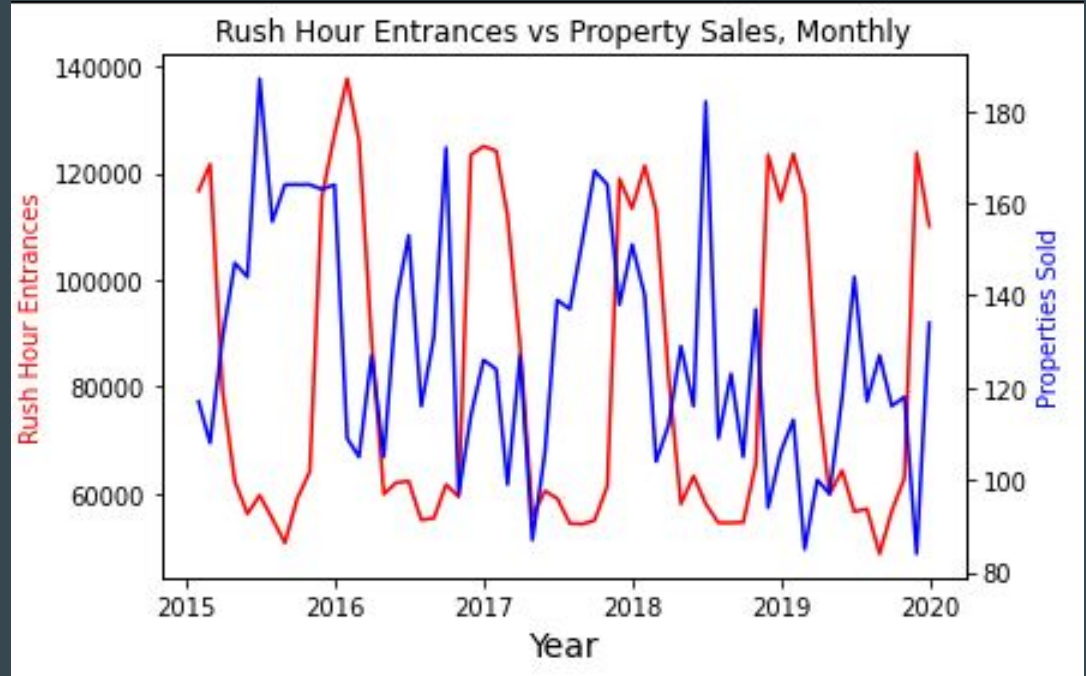
- MTA turnstile data from January 1, 2015 to December 31, 2019 using the 66th St-Lincoln Center Station
- Detailed Property Sales Data by Borough, 2015 - 2019

Comparing Total Property Sale Count in the Upper West Side (59th-79th Subsector)

Correlation Coefficient

| | x | y |
|---|---------|---------|
| x | 1 | -0.2936 |
| y | -0.2936 | 1 |

Calculated using `numpy.corrcoef`

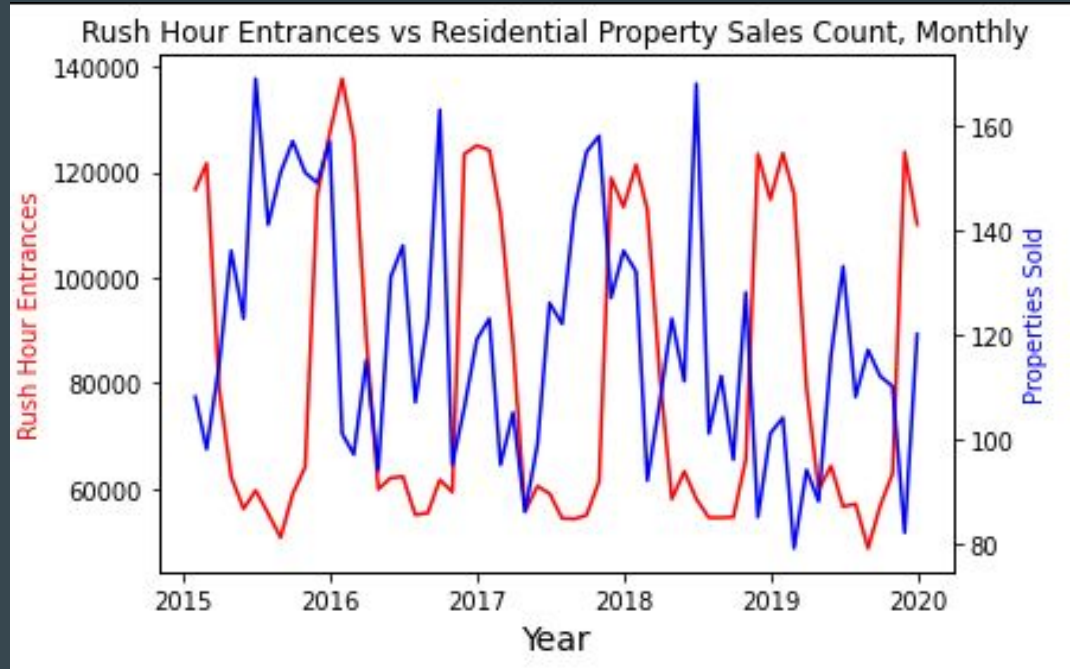


Comparing Residential Property Sales Count in the Upper West Side (59th-79th Subsector)

Correlation Coefficient

| | x | y |
|---|---------|---------|
| x | 1 | -0.2892 |
| y | -0.2892 | 1 |

Calculated using `numpy.corrcoef`



Takeaways

At the end of 2019, Manhattan properties for sale were on the market an average of 123 days¹. With increasing foot traffic and decreasing sales in the Upper West Side, property owners may be uninterested in selling properties when there is a perception of growing interest in the area.

[1] Inhabit Corcoran: New York City Real Estate Market Quarterly Reports: Q4 2019

