Airbnb Tableau Project

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Project Structure

1. Gather information on Airbnb host data
2. Import dataset in Tableau to investigate information
3. Analyze categories and data types through inspection and data visualization
4. Identify trends, patterns and outliers
5. Generate hypothesis, potential question and points of interest
6. Create visualizations including maps, tables and graphs to present findings to potential audiences
7. Construct dashboards consisting sheets created in previous step
8. Draw conclusions

What Factors are Impacting Airbnb Price in NYC?

Supply Side

1. How have the # of available listings changed from 2008 to 2015
2. Do hosts typically own one or multiple listings?
3. For hosts who own multiple properties, do they typically invest in a single borough or different ones?

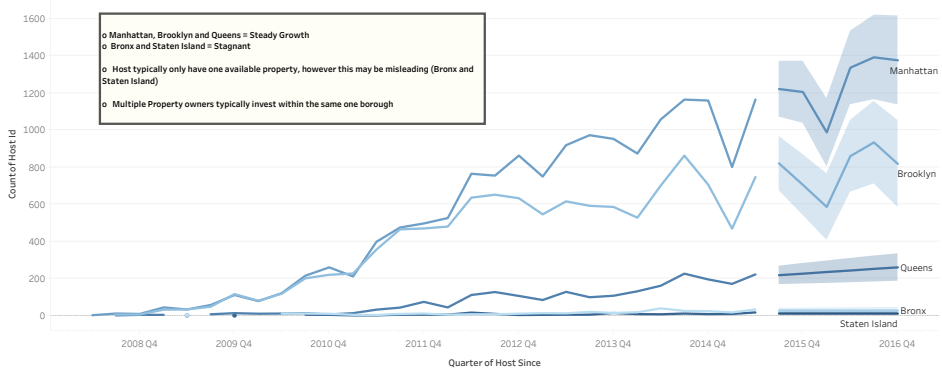
Demand Side

4. From the listings, what does the distribution of room types across different boroughs look like?
5. Which type of property is most popular amongst consumers?
6. What is the most popular price range amongst consumers in NYC?

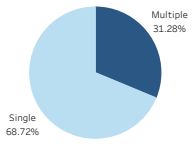
Average Price Per Neighbourhood :

Bronx | Brooklyn | Manhattan | Queens | Staten Island

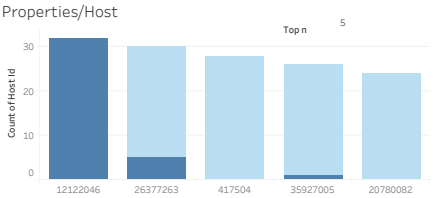
Number of New Hosts (Annually)



M/S Listings per Host



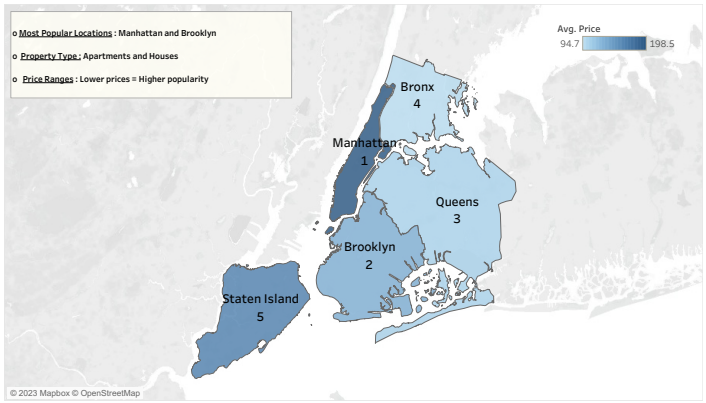
Properties/Host



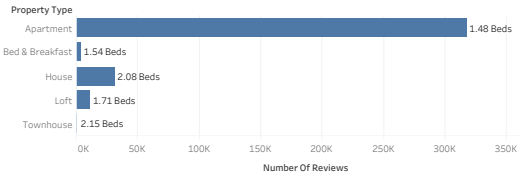
Demand Overview : (All)

Total # of Listings	Avg. Price	Number Of Reviews	Avg. Review Scores Rating

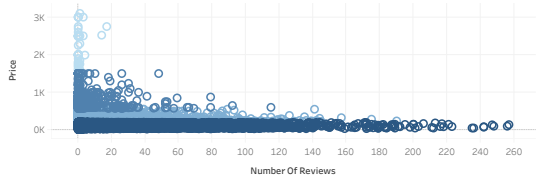
Map Ranked by Number of Listings



Popularity of Property w/beds



Prices vs Popularity (Cluster)



Listings by Property Type:

Property Type	
Apartment	27,102
House	2,090
Loft	753
Bed & Breakfast	180
Townhouse	136
Condominium	94
Other	47
Dorm	31
Villa	8
Boat	8
Camper/RV	7
Treehouse	4
Tent	4
Bungalow	4
Hut	2
Cabin	2
Lighthouse	1
Chalet	1
Castle	1
Null	0

Price (Cluster)
10 to 3194

Price Ranges
- Cluster 1
- Cluster 3
- Cluster 2
- Cluster 4

Final Results

+ USA Housing Market Prices = + Market Power of Airbnb Hosts

- Location is Key
  - Manhattan vs Staten Island
- Property Types depend on boroughs
  - Beds are subject to PT restrictions
- Something is only worth as much as someone else is willing to pay for it
  - High popularity in lower price clusters

Challenges

- Lack of NYC map functionality within Tableau
  - Additional spatial files
- Organizing of visuals

Future Goals

- Investigate relationship with time series data instead of cross sectional
- Look at other potential variables such as seasonality
- Create regression models to test strength explanatory variables