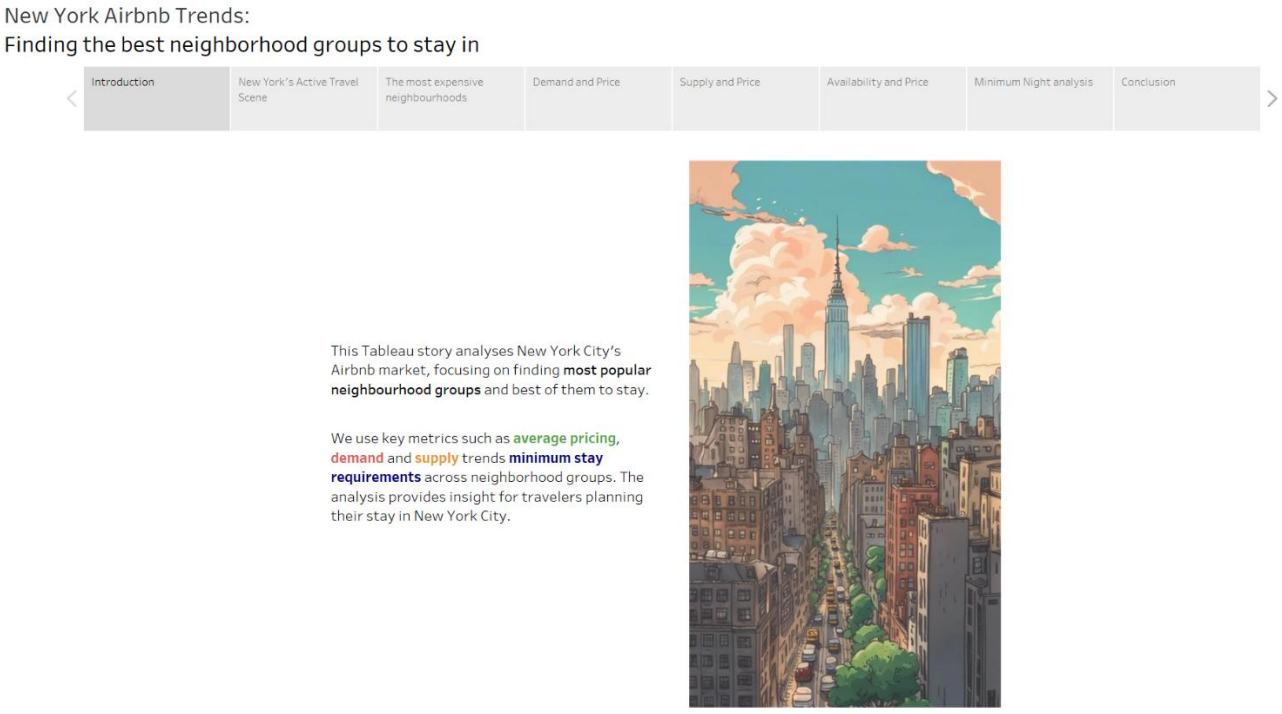
Task 2

Summary of Story: In this tableau story, we try to get an insight about New York Airbnb dataset focusing on finding best neighborhood groups to stay in. At first, we can see that New York City has an active Airbnb scene. Then we find most expensive neighborhood groups which are Manhattan and Brooklyn. Our goal is to find out if these neighborhood groups are two most important and popular too. Supply and Demand are high in these regions too. It means Airbnb is so active in Manhattan and Brooklyn and these are popular among both hosts and travelers. Minimum nights required is another factor that reaffirms popularity and importance of Manhattan and Brooklyn. It means travelers stay more nights to see all attraction of city in those neighborhoods. At the end, we understand that Manhattan and Brooklyn are two most important neighborhood groups (Airbnb-wise) and high demand and high supply is because of this importance.

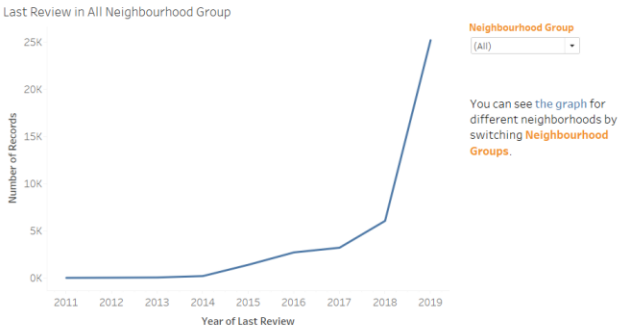
Story:



New York Airbnb Trends:
Finding the best neighborhood groups to stay in

Is Airbnb active in New York?

The line graph shows that, over time, most neighborhoods experience an increase in reviews, showing that listings tend to have more recent reviews than older ones. This suggests that Airbnb in New York remains **active**, with frequent usage by guests



New York Airbnb Trends:
Finding the best neighborhood groups to stay in

Manhattan and **Broklyn** have the highest average price among all neighborhood groups ...

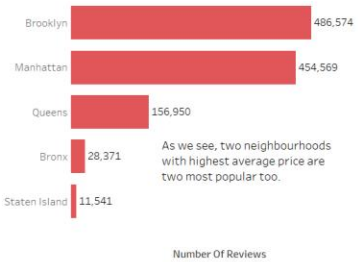
A high average price in a neighborhood can mean several things. It might show that the area is very desirable, possibly due to its location. It could also reflect a strong demand for booking rooms, leading to higher costs.

We want to explore the reasons behind these high prices and how they affect other factors, such as demand and supply. By understanding these dynamics, we can understand more about these Neighbourhoods.

New York Airbnb Trends:
Finding the best neighborhood groups to stay in

here we can see how number of reviews are distributed among city:

The number of reviews can serve as a proxy for the number of people who have used the room, allowing us to analyze the relationship between demand and usage of the room and its price.



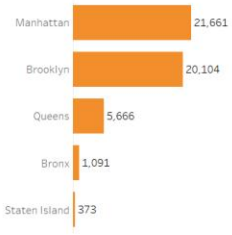
As we see, two neighbourhoods with highest average price are two most popular too.

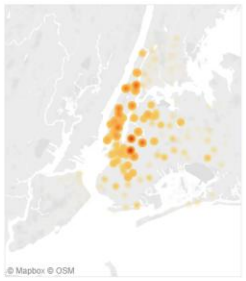
Brooklyn and **Manhattan** are two of the most booked neighborhoods for Airbnb accommodations, likely due to their proximity to popular attractions and landmarks.

High demand in these areas drives up prices, making them more expensive on average compared to other neighborhoods.

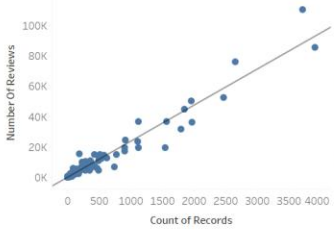
New York Airbnb Trends:
Finding the best neighborhood groups to stay in

number of records among neighbourhoods:



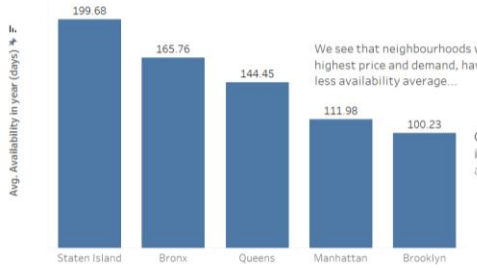


The number of listings in a neighborhood serves as a proxy for supply, showing the amount of accommodation availability in that area.



As observed, the two most popular neighborhoods among customers, also attract the most listings from hosts.
Furthermore, the scatter plot shows a direct relationship between the number of listings and the number of reviews, suggesting that areas with more supply tend to receive more customer engagement.

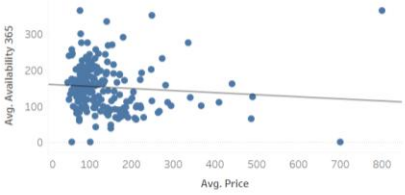
New York Airbnb Trends:
Finding the best neighborhood groups to stay in



We see that neighbourhoods with highest price and demand, have less availability average...

Can we conclude that there is an inverse relationship between average availability and price?

We draw an scatter plot to see if there is a meaningful relation between these two:

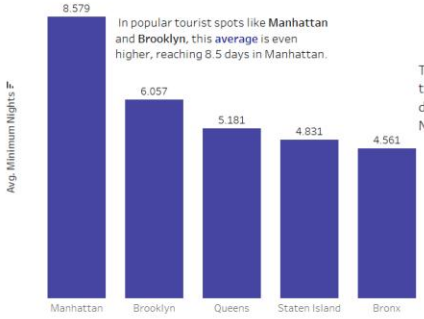


Although a slight inverse relationship can be observed, we cannot conclusively state that there is a strong relationship between average availability and price, or that they significantly influence each other.

New York Airbnb Trends:
Finding the best neighborhood groups to stay in

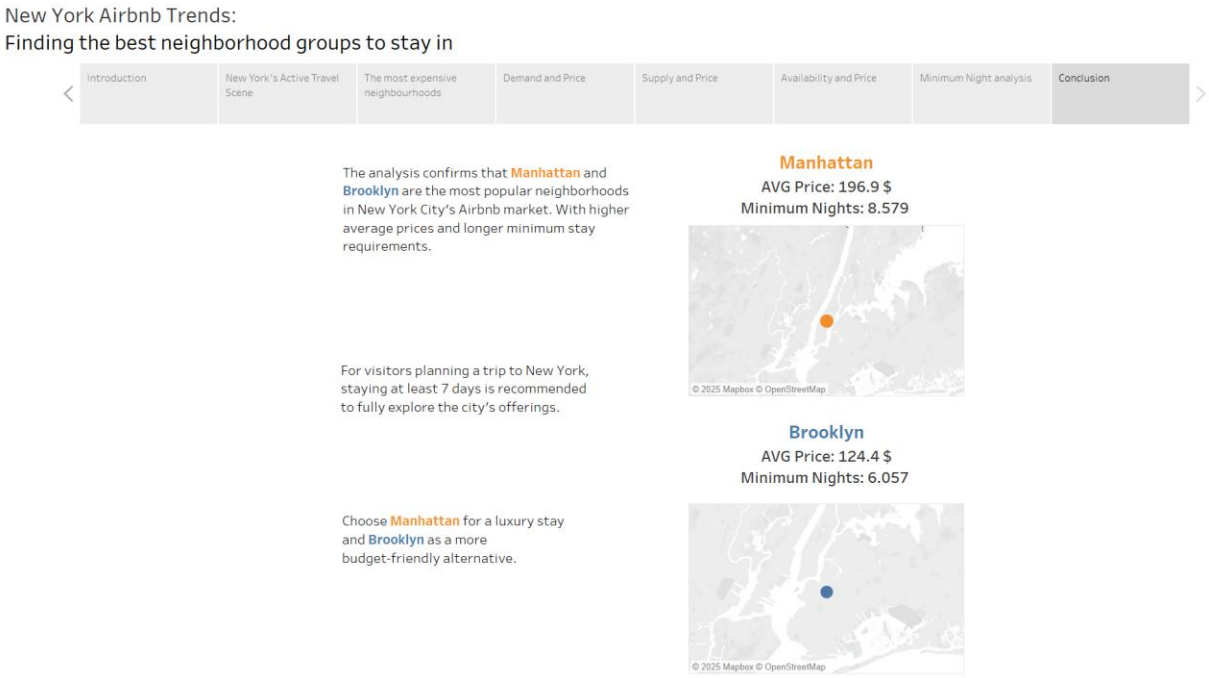
The average **minimum night** requirement of 4.5 days for booking in neighborhood groups suggests that visitors typically stay in New York for 4 to 5 days or more!

This could be attributed to the city's vast size and numerous attractions.



In popular tourist spots like **Manhattan** and **Brooklyn**, this **average** is even higher, reaching 8.5 days in Manhattan.

This trend reaffirms the notion that these neighborhoods are key destinations for visitors exploring New York City.



List of Parameters:

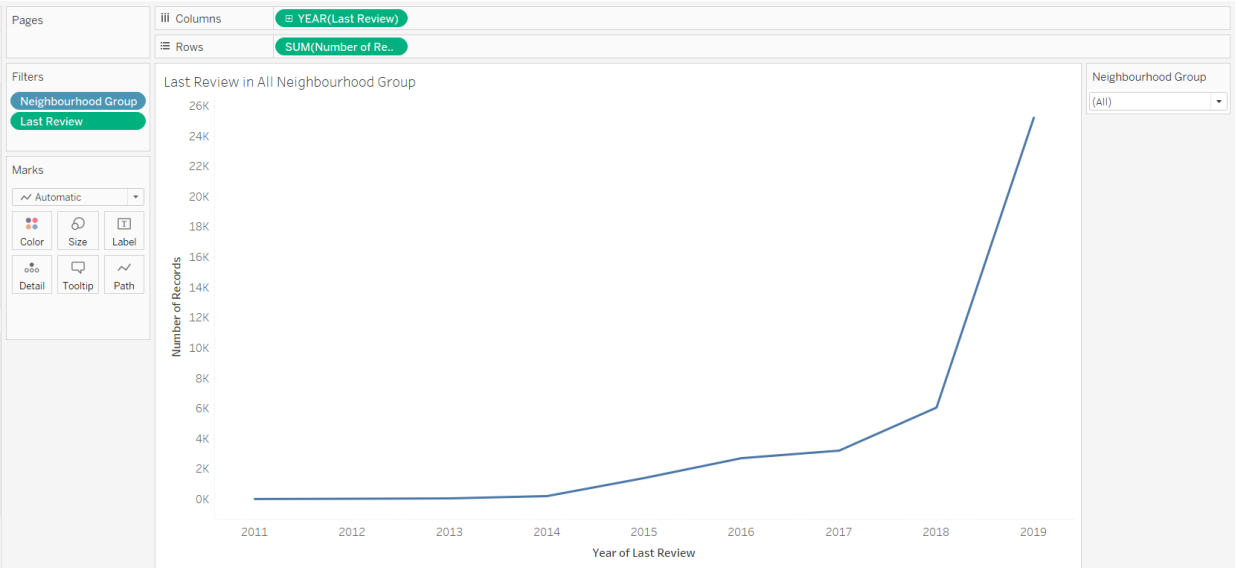
Parameter	Usage
Price	Finding most expensive neighborhood groups
Longitude & Latitude	Geographical analysis and plot maps
Last Review Date	Showing that New York Airbnb scene is active (line graph)
Count of Records	Analyzing count of records based on their last review dates, Records distribution among neighborhood groups (Supply proxy)
Number of Reviews	Reviews distribution among neighborhood groups (Demand proxy)
Average Availability	A proxy for supply (more availability could mean higher supply)
Minimum Nights	Used for analyzing the amount of landmarks and attractions of neighborhood

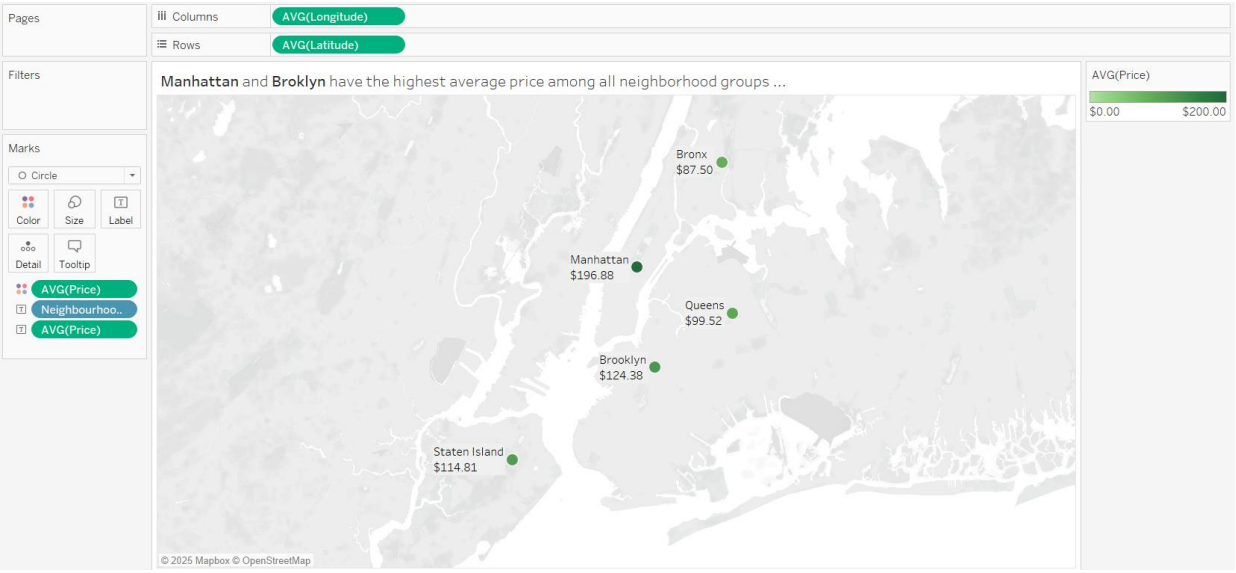
Filters: In most of dashboards, neighborhood group is used as a filter. This may be helpful because we are analyzing different aspects of data based on their neighborhood groups. So, if you scroll through the dashboards, you can see plots filtered by neighborhood groups with using interactivity of that dashboard.

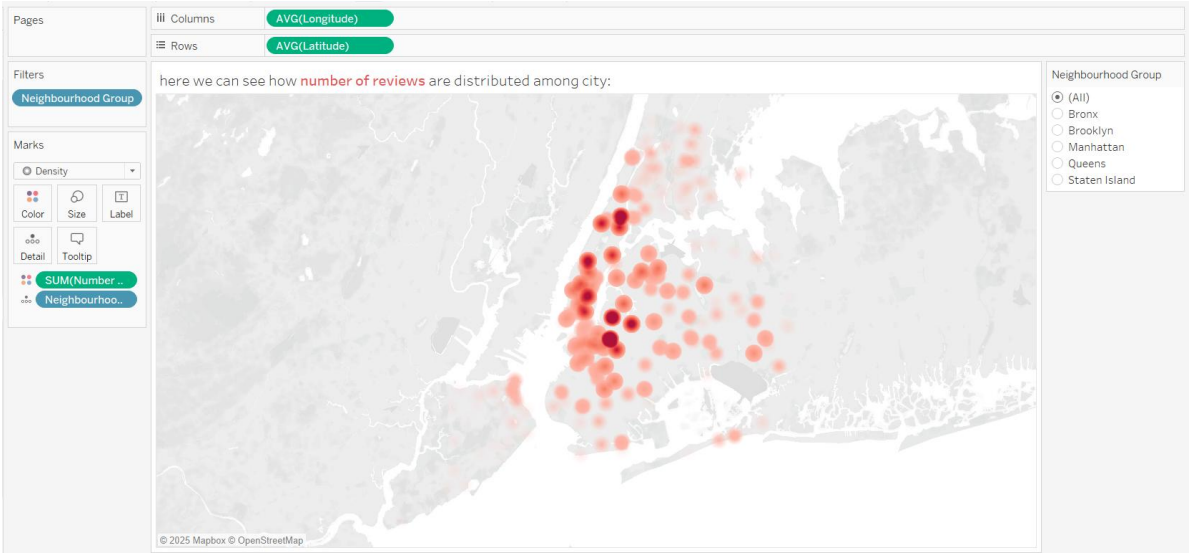
In some worksheets, null values are filtered. For instance, in last review date analysis, items with null dates are excluded because they are not useful in this case.

KPI: key performance indicator helps highlighting and summarizing important facts and values. We have used KPI for two most important neighborhood groups, Manhattan and Brooklyn, at the conclusion dashboard. Highlighting two important factors, average price and minimum nights, speaks for importance of these two neighborhoods and also guides the audience about an accommodation in Manhattan and Brooklyn.

Sheets used in the story:



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here we can see how number of reviews are distributed among city:
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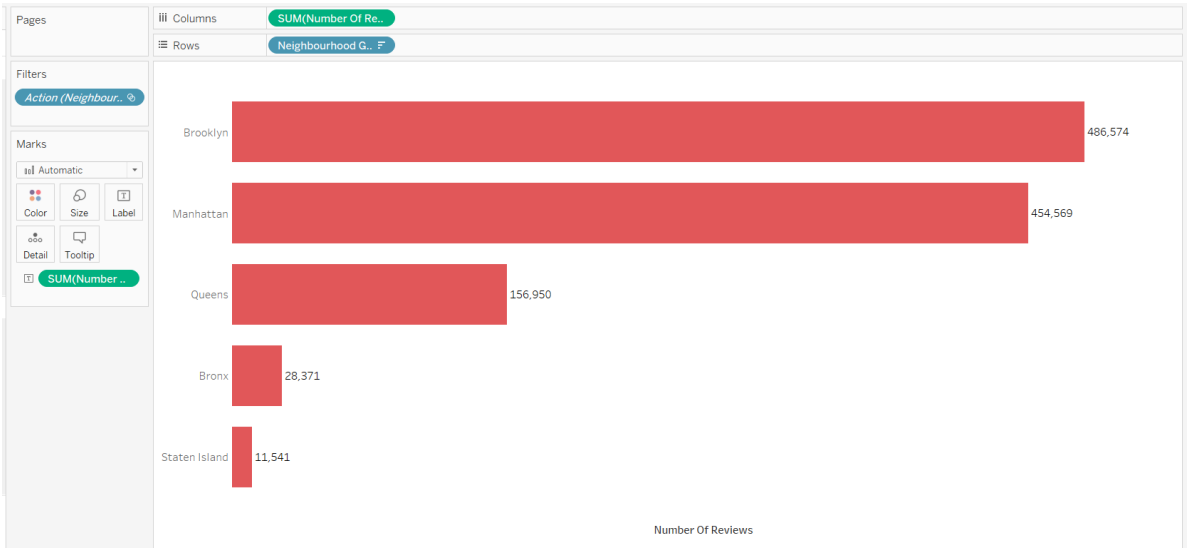
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Bronx
28,371
Staten Island
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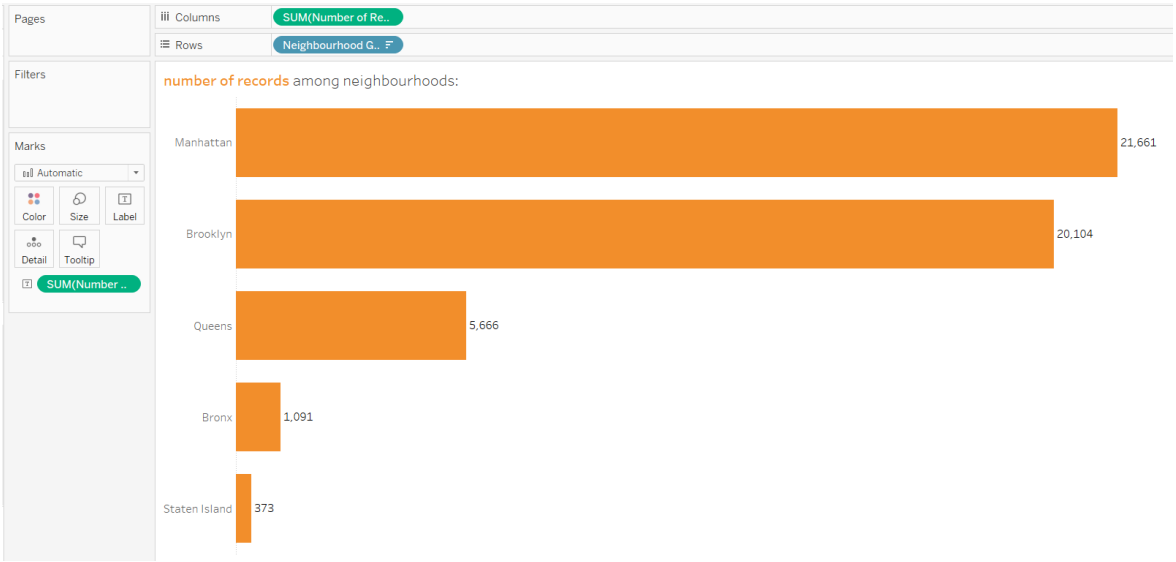
Number Of Reviews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Brooklyn
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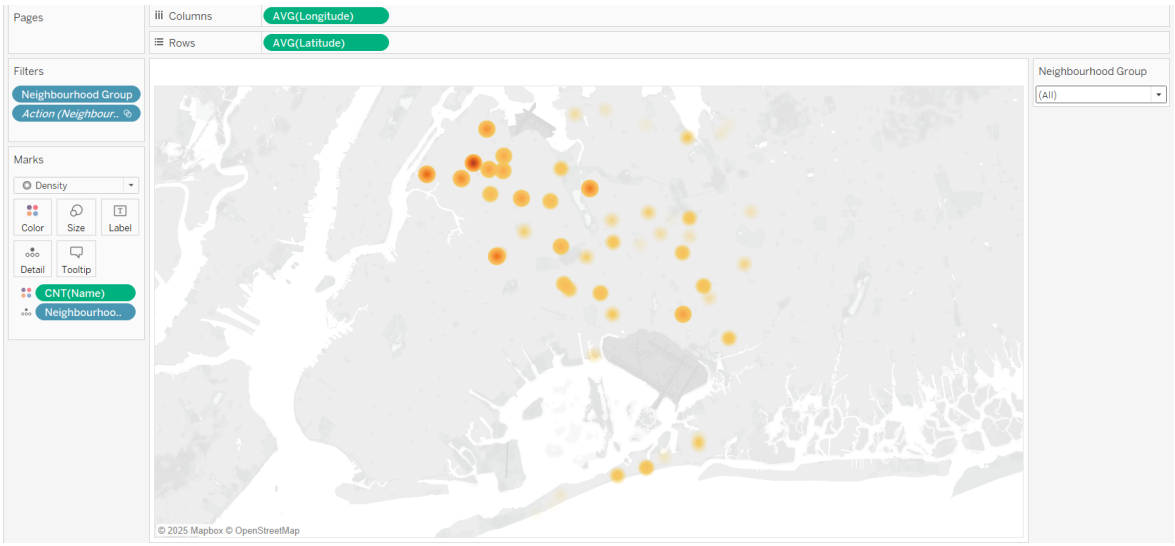
Queens
5,666
Bronx
1,091
Staten Island
373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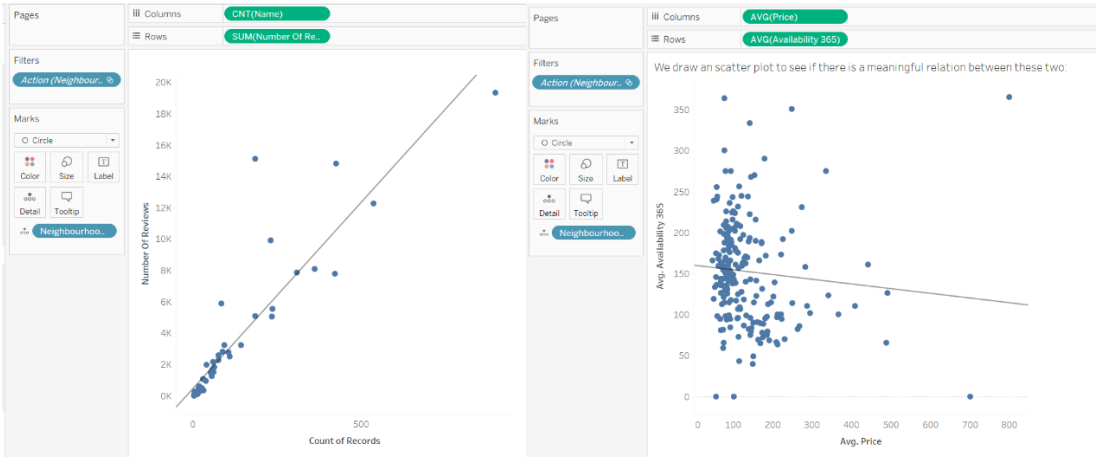
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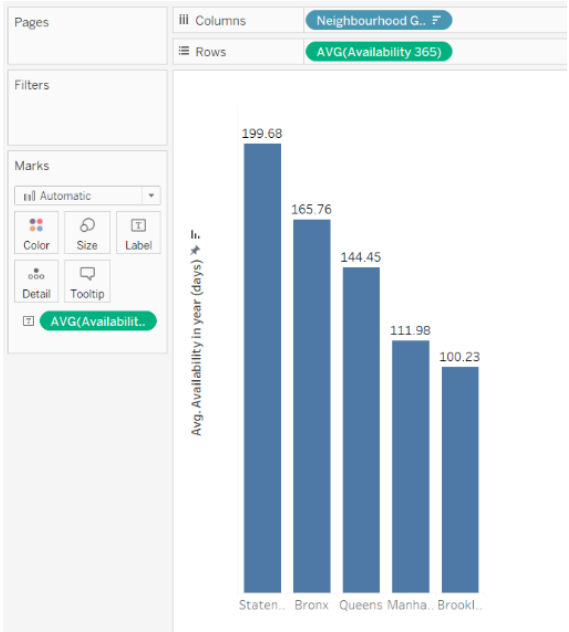
Avg. Price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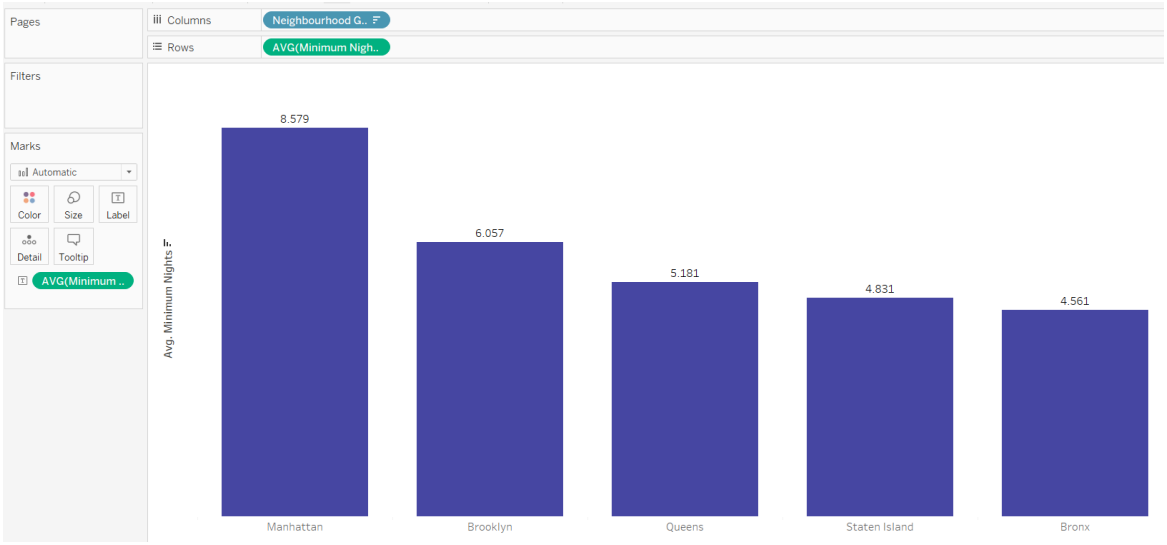
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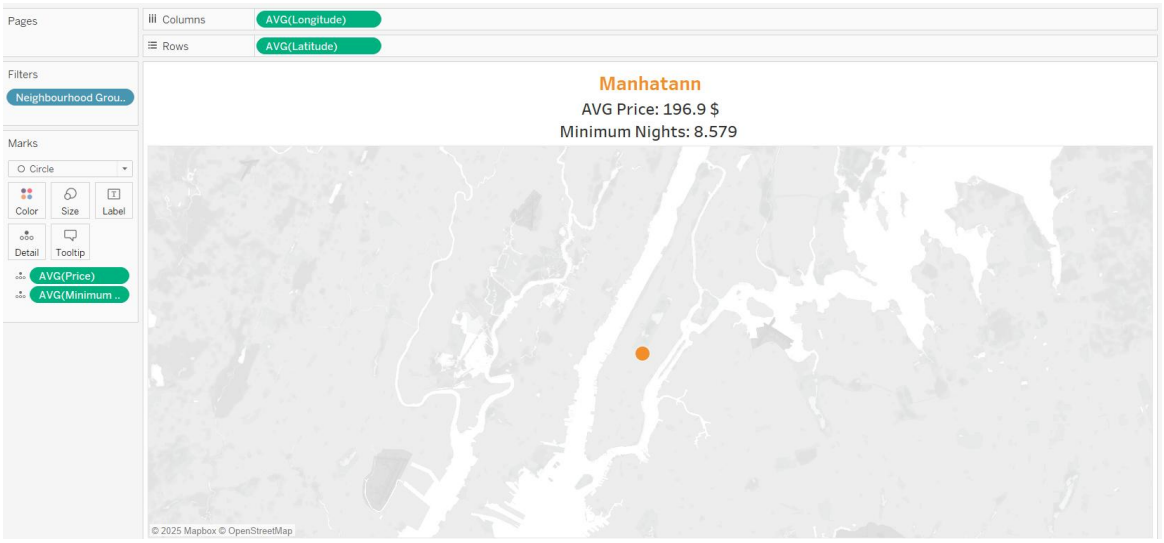
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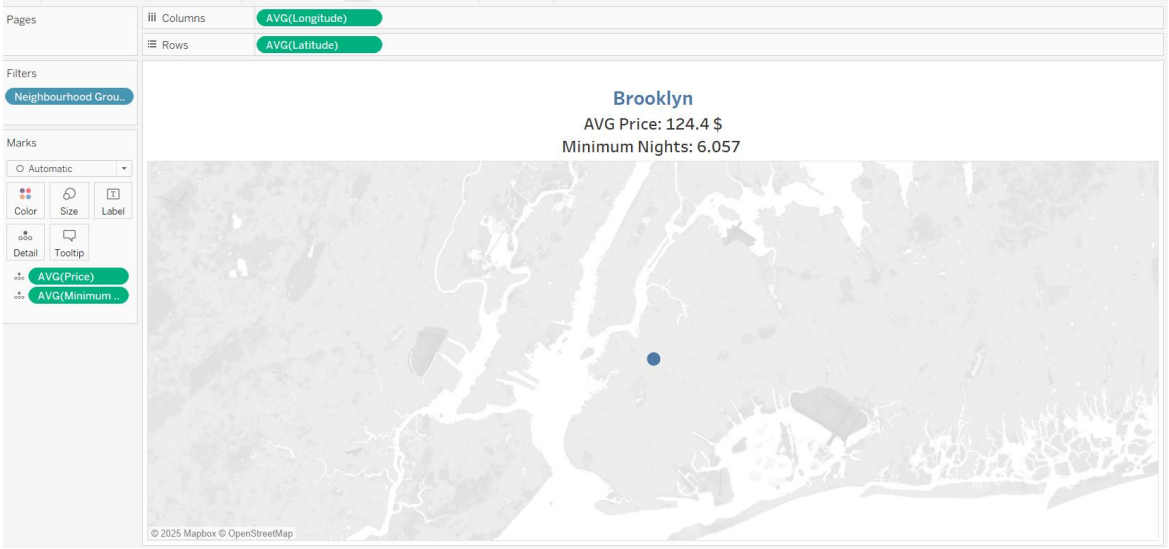
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There are also other worksheets and dashboards that have not been used in story. These plots have been used to collect insight of dataset and find some stories to tell. I decided not to delete those sheets to save the work flow and finding story thinking path. These sheets are available in the shared workbook.