

# Task 2: Tableau

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2. [Airbnb Market Overview](#)
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10. [Conclusion](#)
11. [Airbnb Story](#)



## Dashboard

## Layout

Default

Phone

Device Preview

## Size

min 720x560 - max 920x8...

## Sheets

- KPI Cards - ...
- Number Of ...
- Top 10 ...
- Room Type ...
- Avg. Price ...
- Price Boxplot ...
- Top 10 Avera

## Objects

- Horizontal Container
- Vertical Container
- Text
- Extension
- Pulse Metric
- Image
- Blank
- Workflow
- Web Page

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# Introduction

This suite of Airbnb dashboards provides a multidimensional analysis of Airbnb's activity, performance, and market dynamics in New York City.

The dashboards focus on four key areas: **Market Overview**, **Pricing Trends**, **Host Activities**, and **Review Insights**.

By examining metrics such as host performance, pricing distribution, review patterns, and listing density, the analysis unveils actionable insights for understanding **guest preferences**, **optimizing pricing strategies**, and **identifying high-performing neighborhoods**.



**KPI Cards - Market Summary**

Neighbourhood Group	Distinct count of Host Id	Count of List Id	Avg. Price	Avg. Minimum Nights
Manhattan	16,578	21,661	197	9
Brooklyn	15,966	20,104	124	6
Queens	3,983	5,666	100	5
Bronx	789	1,091	87	5
Staten Island	256	373	115	5

**Data**   **Analytics**   **Pages**   **Entire View**   **Show Me**

**Filters**

**Marks**

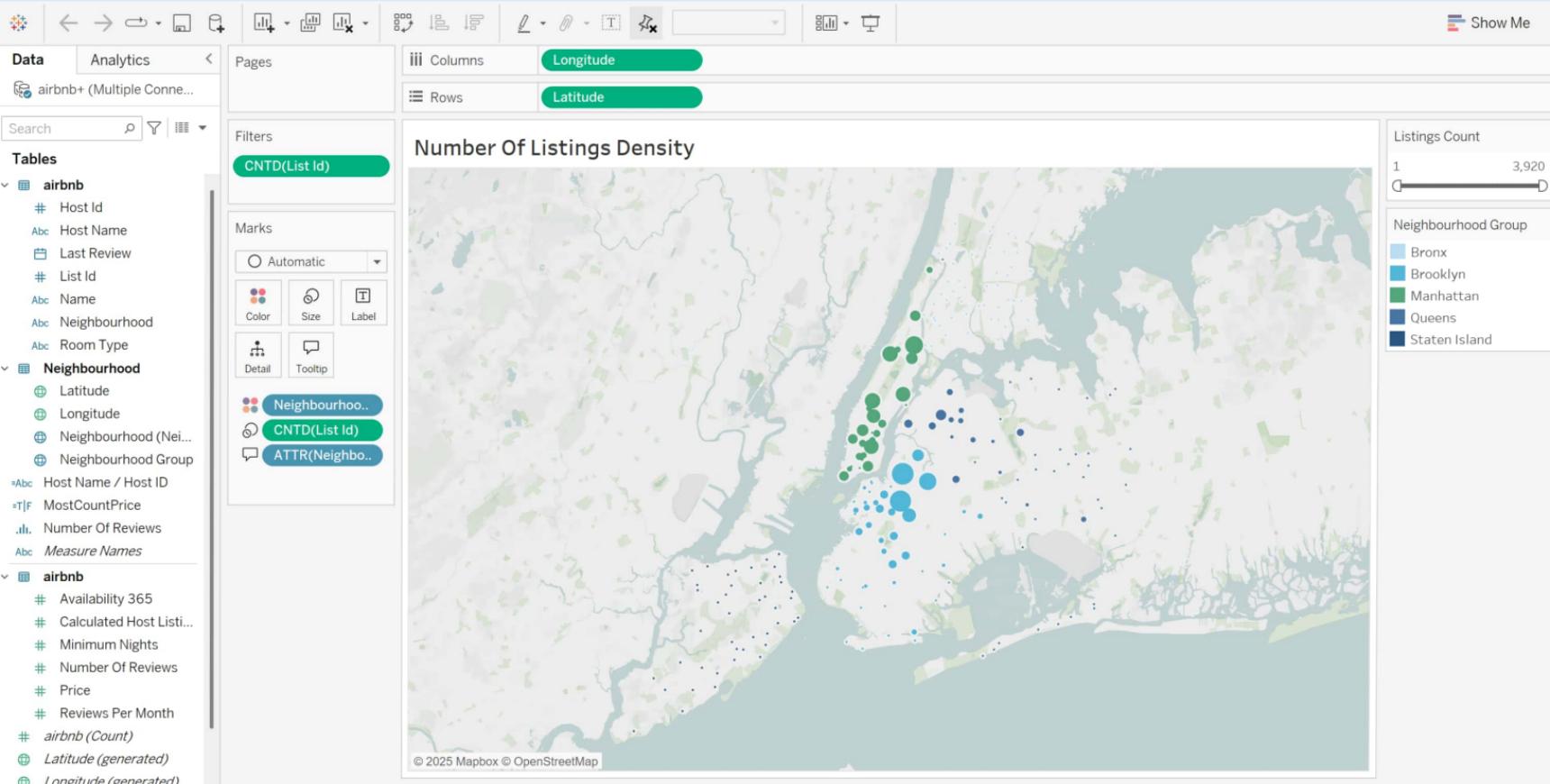
**Measure Values**

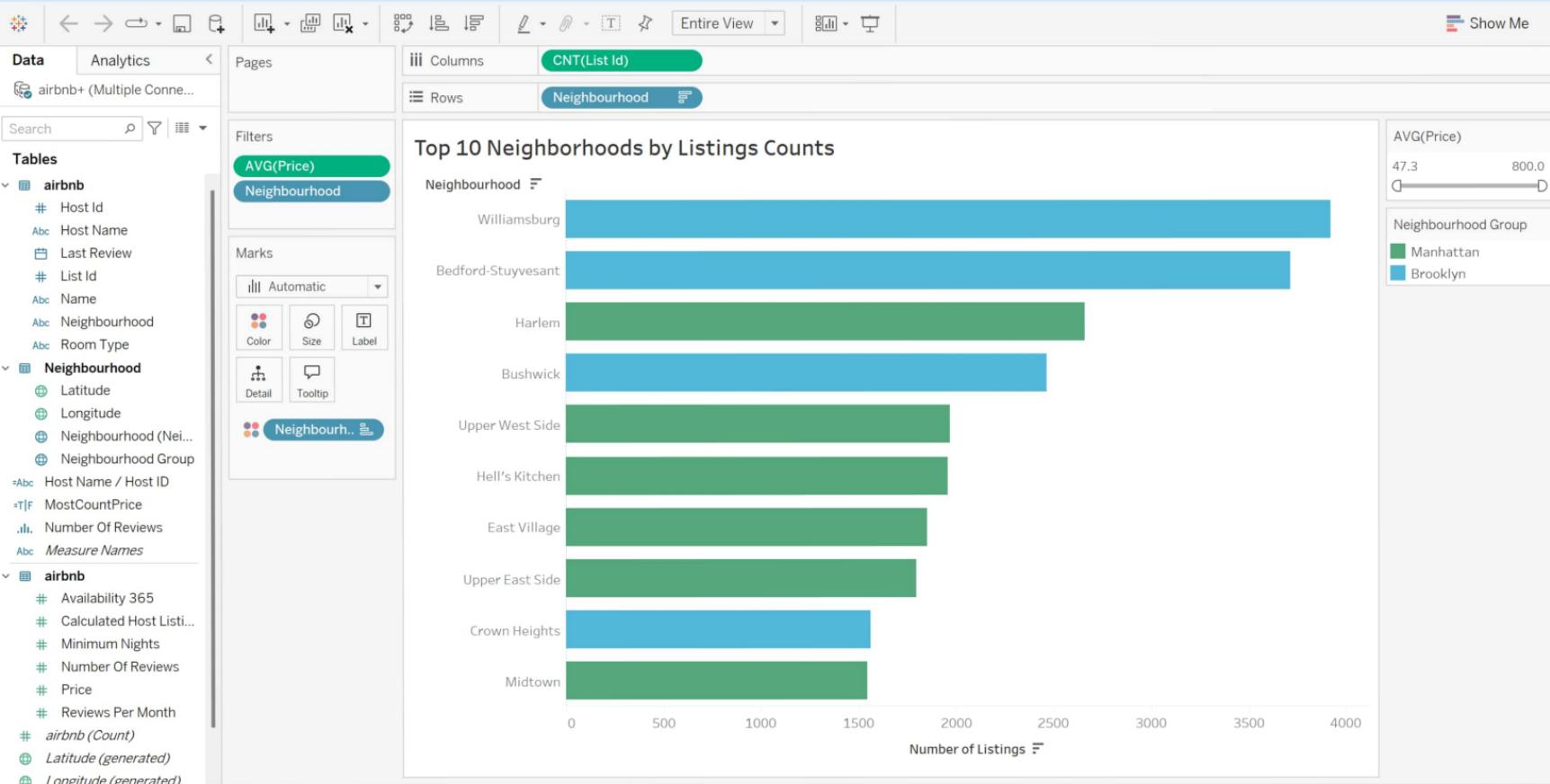
**Tables**

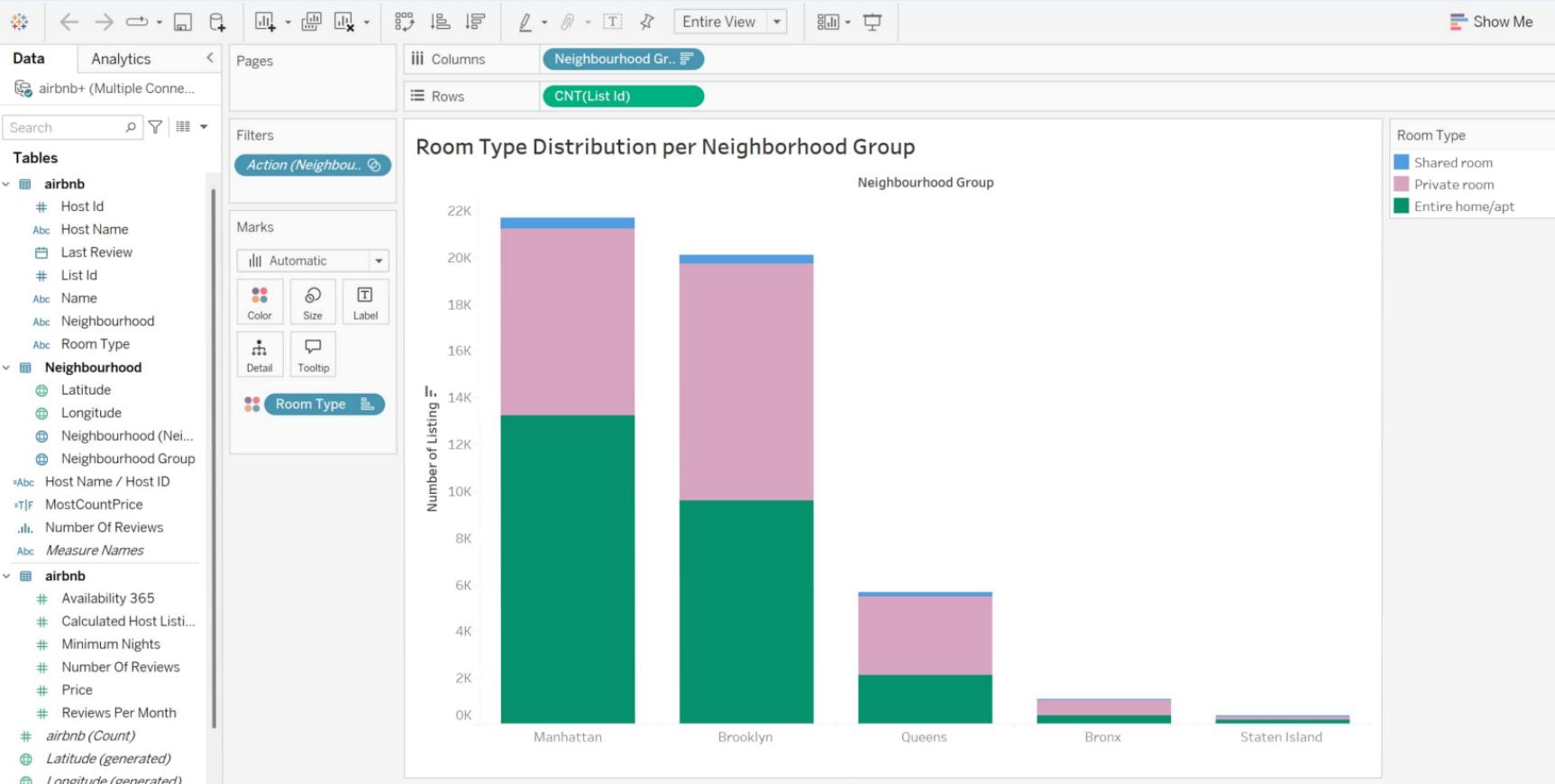
- airbnb**
  - # Host Id
  - Host Name
  - Last Review
  - List Id
  - Name
  - Neighbourhood
  - Room Type
- Neighbourhood**
  - Latitude
  - Longitude
  - Neighbourhood (Nei...)
  - Neighbourhood Group
- airbnb**
  - Availability 365
  - Calculated Host Listi...
  - Minimum Nights
  - Number Of Reviews
  - Price
  - Reviews Per Month

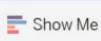
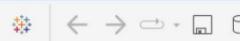
**Data Source**   **Introduction**   **KPI Cards - Market Summary**   **Number Of Listings Density**   **Top 10 Neighborhoods by Listin...**   **Room Type Distribution per Nei...**   **Airbnb Market Overview**   **Airbnb Market Overview Su...**

20 marks   5 rows by 4 columns   SUM of Measure Values: 87,119









Dashboard Layout

Default Phone

Device Preview

Size min 720x360 - max 1220x...

## Sheets

- KPI Cards - Market Summary
- Number Of Listings Density
- Top 10 Neighborhoods by Listings Counts
- Room Type Distribution per Neighborhood Group
- Avg. Price Boxplot
- Price Boxplot
- Top 10 Averages

## Objects

- Horizontal Container
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- Web Page

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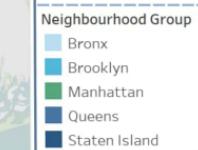
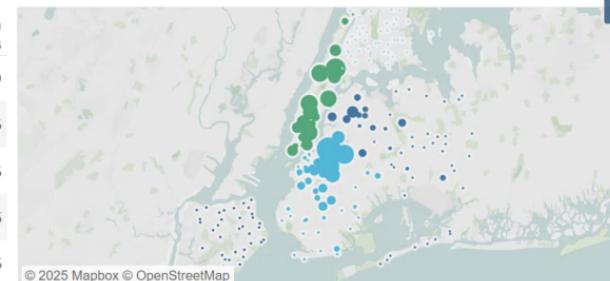
 Show dashboard title

## Airbnb Market Overview

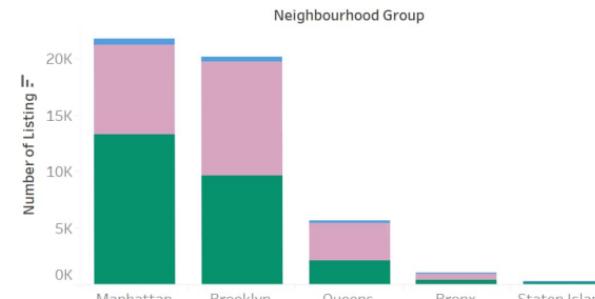
## KPI Cards - Market Summary

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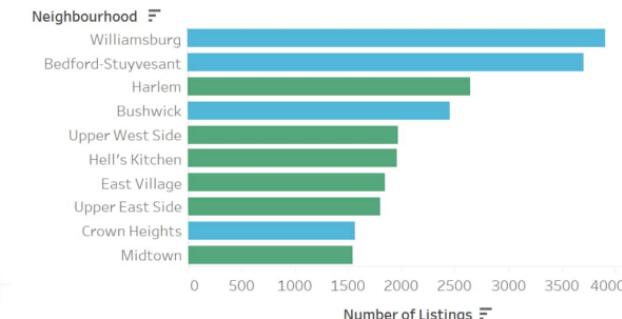
## Number Of Listings Density



## Room Type Distribution per Neighborhood Group



## Top 10 Neighborhoods by Listings Counts





Dashboard Layout &lt;

Device Preview

## Size

min 720x560 - max 920x8...

## Sheets

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- Price Boxplot ...
- Top 10 Avera...
- Avg Price ...
- Hosts with Mo...

## Objects

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# Airbnb Market Overview Summary

## Key Insights and Trends:

### Market Overview (KPIs):

Manhattan has the highest nightly **average price of \$197** and leads in both the **distinct count of hosts (16,578)** and **listings count (21,661)**. Brooklyn follows with **15,966 hosts** and **20,104 listings**, but its average price is lower at **\$124 per night**. Queens, Bronx, and Staten Island have lower listing numbers, with Staten Island hosting the fewest listings (**373**) and hosts (**256**), but it maintains an average price of **\$115**.

### Listings Density:

The geographical map emphasizes the **high density of listings** in Manhattan and Brooklyn, showcasing these areas as the hotspots for Airbnb activity. Dense clusters are also visible in popular neighborhoods like **Williamsburg** and **East Village**.

### Top Neighborhoods by Listing Count:

**Williamsburg** leads as the neighborhood with the highest number of listings, followed by **Bedford-Stuyvesant** and **Harlem**. This top 10 list indicates that certain neighborhoods dominate the Airbnb market while others lag behind.

### Room Type Distribution Across Neighborhood Groups:

**Entire homes/apartments** dominate most neighborhood groups, with a balanced presence of **private rooms** in areas like Brooklyn and Queens. **Shared rooms** have a minimal share.

## Parameters, Filters:

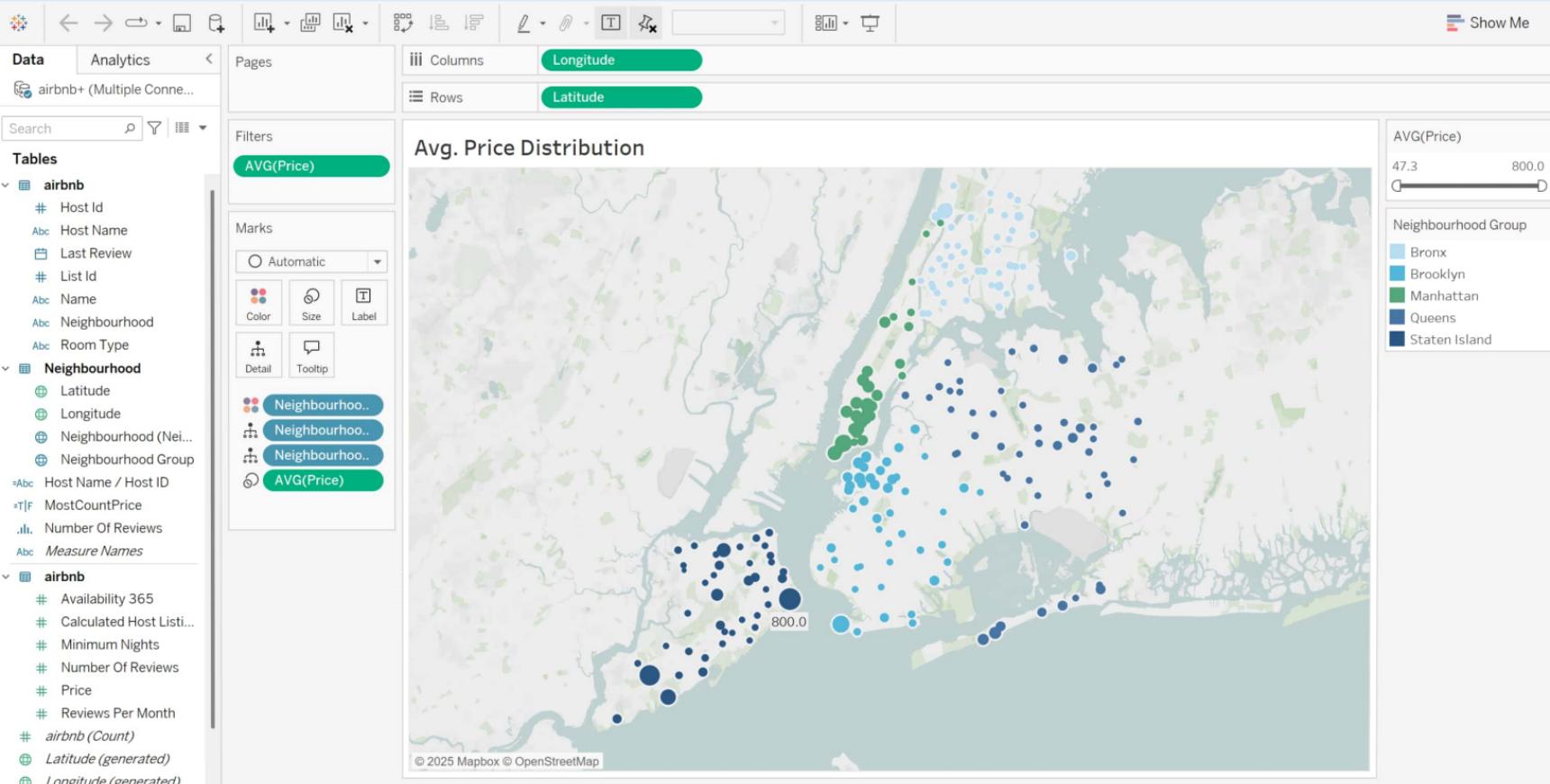
### Parameters:

**Listing Counts:** Adjustable slider to focus on listings with specific counts.  
**Price Range:** Adjustable slider to focus on Avg price with specific amount.

### Filters:

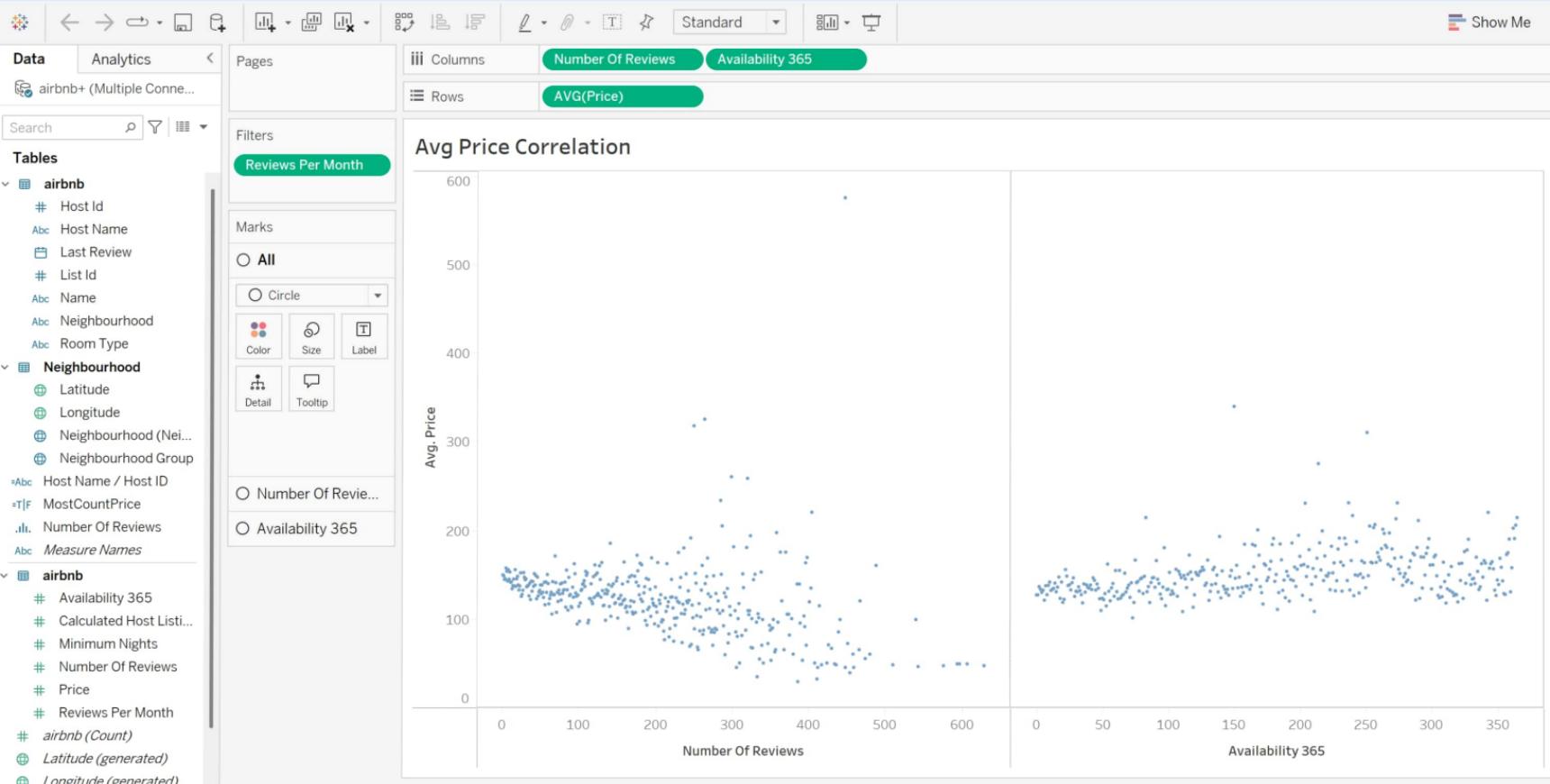
**Neighborhood Group:** Divides New York City into Manhattan, Brooklyn, Queens, Bronx, and Staten Island.  
**Room Type:** Allows selection between Shared Room, Private Room, and Entire Home/Apartment.













Show Me

Dashboard

Layout

Default

Phone

Device Preview

Size

min 1020x560 - max 1220...

Sheets

KPI Cards - ...

Number Of ...

Top 10 ...

Room Type ...

Avg. Price ...

Price Boxplot ...

Top 10 Avera

Objects

Horizontal Container

Vertical Container

Text

Extension

Pulse Metric

Image

Blank

Workflow

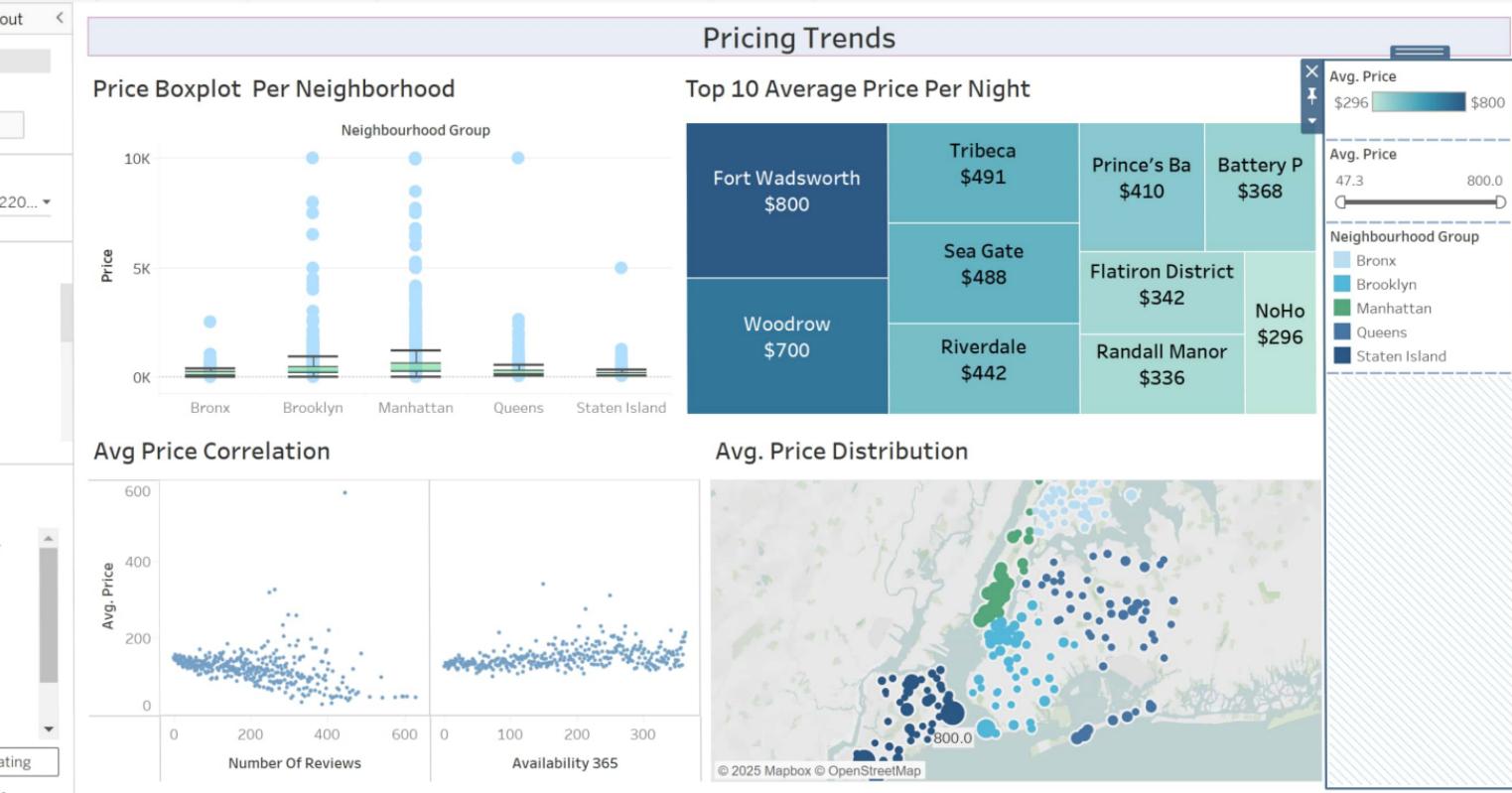
Web Page

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 Show dashboard title

Data Source



Avg Price Correlation

Pricing Trends

Pricing Trends Summary

Hosts with Most Reviews

Hosts with Most Listings Count

Host Numbers Over Time

Host Concentration

Host Activities



**Dashboard** **Layout** <

**Device Preview**

**Size**  
min 720x560 - max 920x8...

**Sheets**

- KPI Cards – ...
- Number Of ...
- Top 10 ...
- Room Type ...
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- Price Boxplot ...
- Top 10 Avera...
- Avg Price ...
- Hosts with Mo...

**Objects**

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- Extension
- Pulse Metric
- Image
- Blank
- Workflow
- Web Page

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Show dashboard title

## Pricing Trends Summary

### Key Insights and Trends:

**Price Boxplot Per Neighborhood Group:**  
The scatter plot reveals that **Manhattan** exhibits the widest price range, with listings going as high as **\$10,000 per night**. This suggests Manhattan has listings catering to both luxury and budget travelers. Other neighborhood groups like **Brooklyn** and **Queens** display narrower price ranges, indicating more consistent pricing.

**Top 10 Neighborhoods by Average Price:**  
Neighborhoods such as **Fort Wadsworth** (\$800) and **Woodrow** (\$700) stand out with the highest average nightly prices. These areas likely cater to upscale stays or unique accommodations. Both these neighborhoods belong to **Staten Island**.

**Correlation of Average Price with Reviews and Availability:**  
The scatter plot shows **no strong correlation** between average price and the number of reviews or availability. This suggests that pricing strategies may not depend on demand as measured by reviews or calendar availability.

**Average Price Distribution Across Locations:**  
The map visualization demonstrates that high-priced listings are concentrated in select areas, with darker colors representing premium locations. The average price per night ranges from **\$296 to \$800**, with hotspots in Manhattan and affluent parts of Brooklyn.

### Parameters, Filters:

**Parameters:**  
**Neighborhood Group:** Filters data to focus on specific neighborhood groups like Manhattan, Brooklyn, Queens, Bronx, and Staten Island.

**Filters:**  
**Price Range:** A dynamic slider lets users explore listings within selected price ranges .

**Data Source** Avg Price Correlation Pricing Trends **Pricing Trends Summary** Hosts with Most Reviews Hosts with Most Listings Count Host Numbers Over Time Host Concentration Host Activities



## Data

airbnb+ (Multiple Connections)

Search  Y grid

## Tables

### airbnb

- # Host Id
- Abc Host Name
- Last Review
- # List Id
- Abc Name
- Abc Neighbourhood
- Abc Room Type

### Neighbourhood

- Latitude
- Longitude
- Neighbourhood (Nei...)
- Neighbourhood Group

=Abc Host Name / Host ID

=T|F MostCountPrice

.ii. Number Of Reviews

Abc Measure Names

### airbnb

- # Availability 365
- # Calculated Host Listi...
- # Minimum Nights
- # Number Of Reviews
- # Price
- # Reviews Per Month

# airbnb (Count)

(Latitude (generated))

(Longitude (generated))

## Analytics

### Pages

## Columns

Host Name / Host ID

## Rows

SUM(Number Of Rev...

## Filters

### Host Id

## Marks

### Automatic

### Color

### Size

### Label

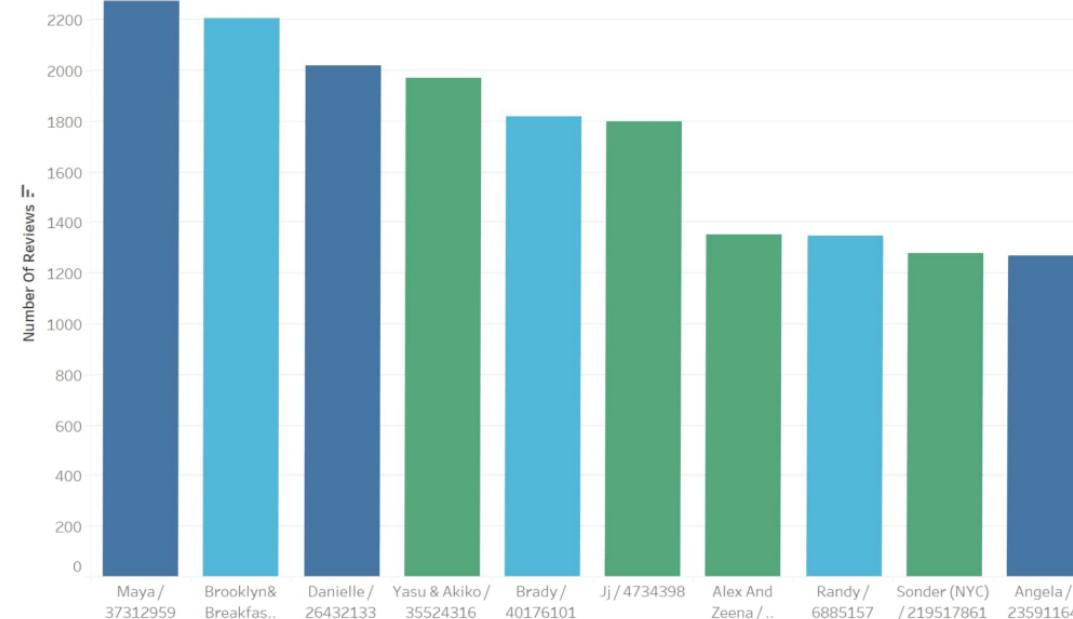
### Detail

### Tooltip

### Neighbourhood

## Hosts with Most Reviews

Host Name / Host ID



## Neighbourhood Group

Brooklyn

Manhattan

Queens



Data

Analytics

Pages

Columns Host Name / Host ...

Rows

CNT(Calculated Host...)

Search

Tables

airbnb

# Host Id

Abc Host Name

Last Review

# List Id

Abc Name

Abc Neighbourhood

Abc Room Type

Neighbourhood

Latitude

Longitude

Neighbourhood (Nei...)

Neighbourhood Group

&lt;Abc Host Name / Host ID

=Tf MostCountPrice

Number Of Reviews

Measure Names

airbnb

# Availability 365

# Calculated Host List...

# Minimum Nights

# Number Of Reviews

# Price

# Reviews Per Month

# airbnb (Count)

@ Latitude (generated)

@ Longitude (generated)

Data Source

Avg Price Correlation

Pricing Trends

Pricing Trends Summary

Hosts with Most Reviews

Hosts with Most Listings Count

Host Numbers Over Time

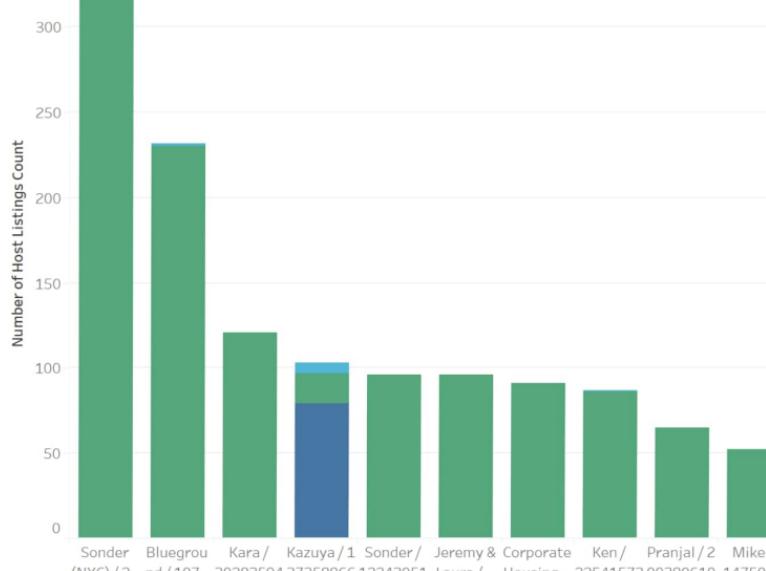
Host Concentration

Host Activities

Host Locations

## Hosts with Most Listings Count

Host Name / Host ID

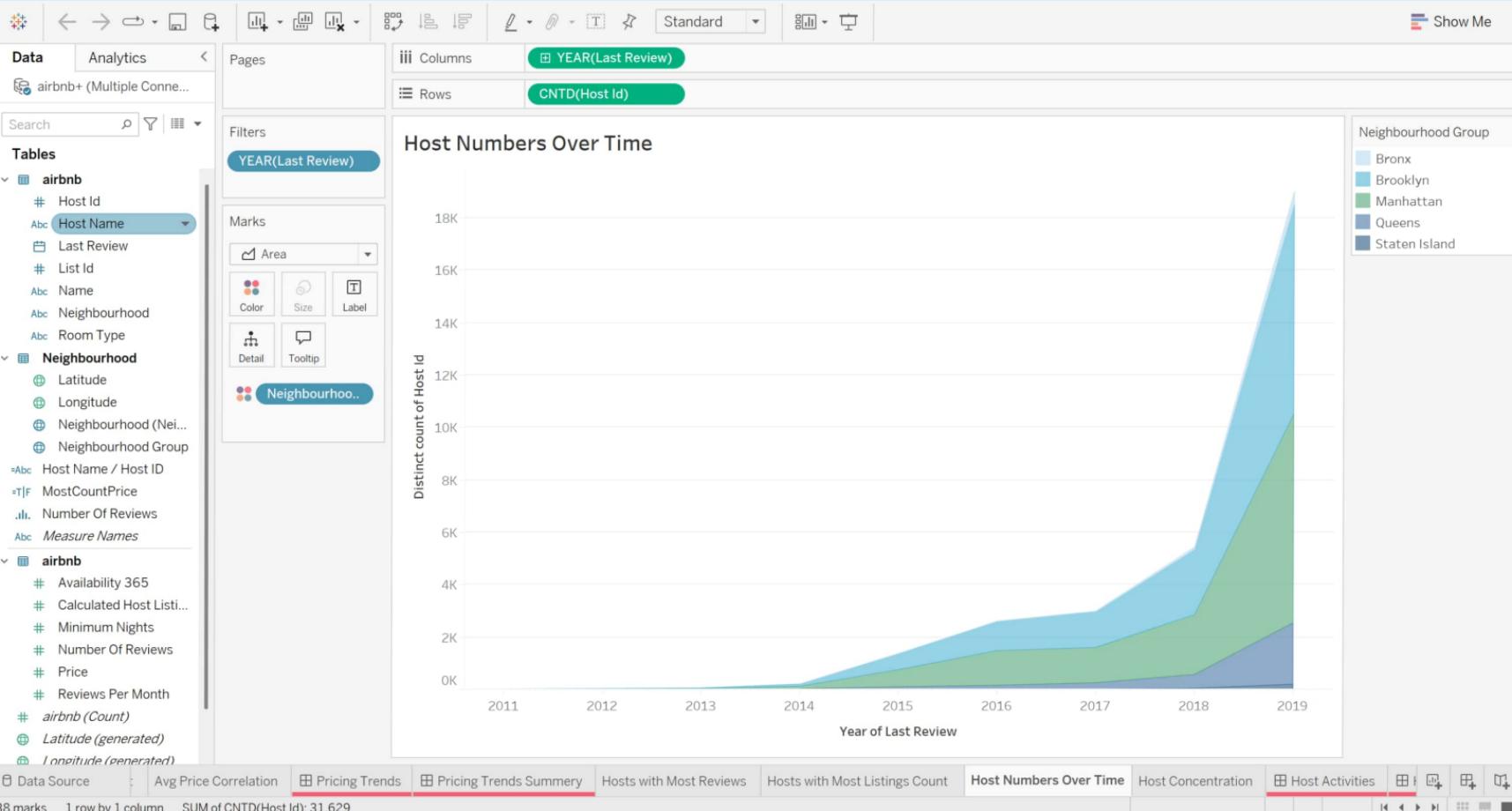


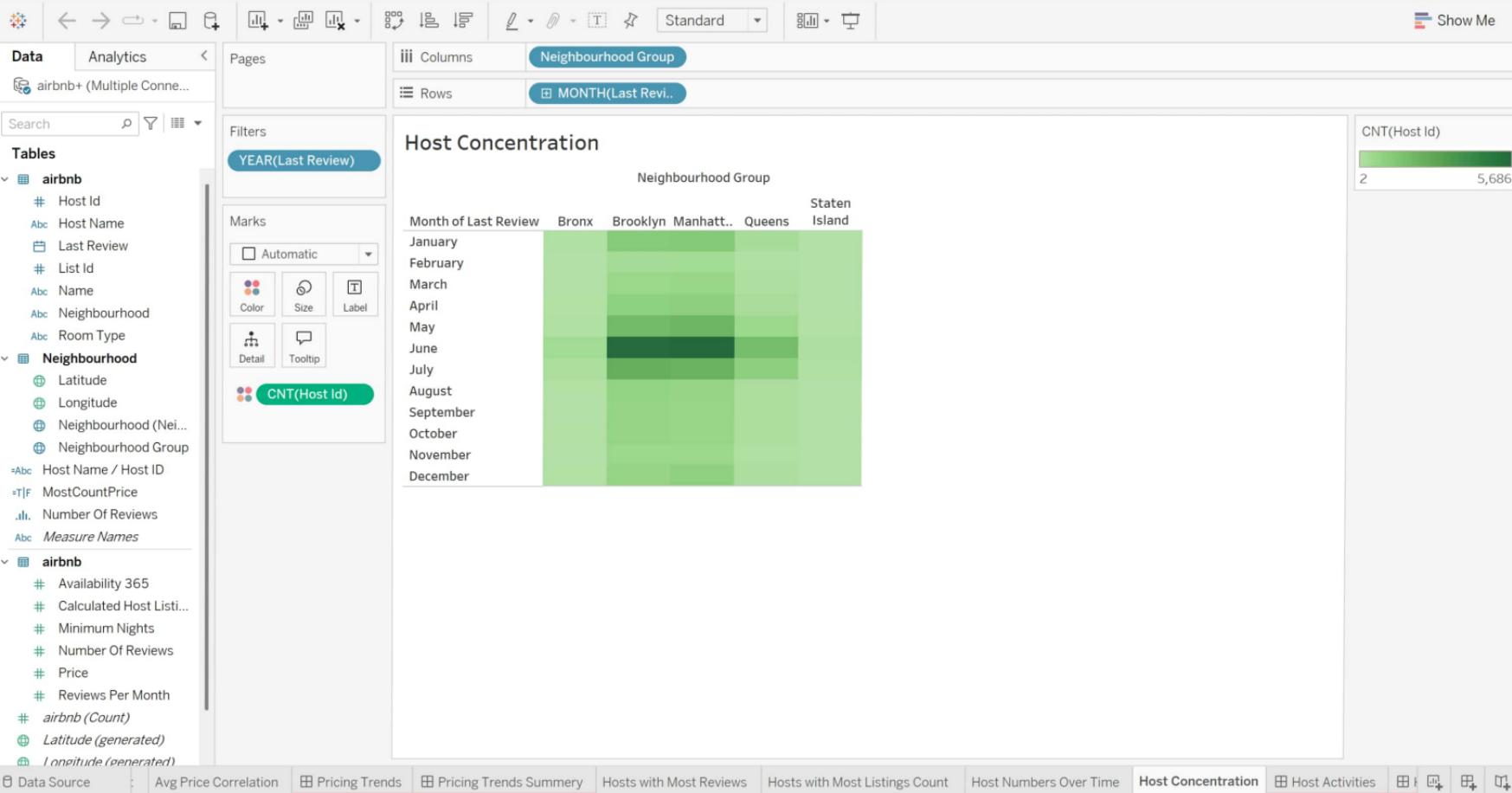
Neighbourhood Group

Brooklyn

Manhattan

Queens







## Dashboard

## Layout

Default

Phone

Device Preview

Size

min 1120x560 - max 1220x600

Sheets

KPI Cards - ...

Number Of ...

Top 10 ...

Room Type ...

Avg. Price ...

Price Boxplot ...

Top 10 Avera...

Objects

Horizontal Container

Vertical Container

Text

Extension

Pulse Metric

Image

Blank

Workflow

Web Data

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Show dashboard title

Data Source

Avg Price Correlation

Pricing Trends

Pricing Trends Summary

Hosts with Most Reviews

Hosts with Most Listings Count

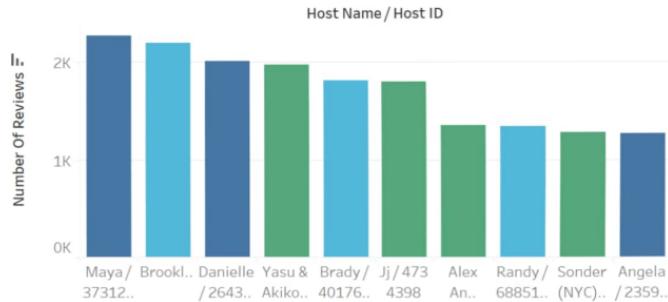
Host Numbers Over Time

Host Concentration

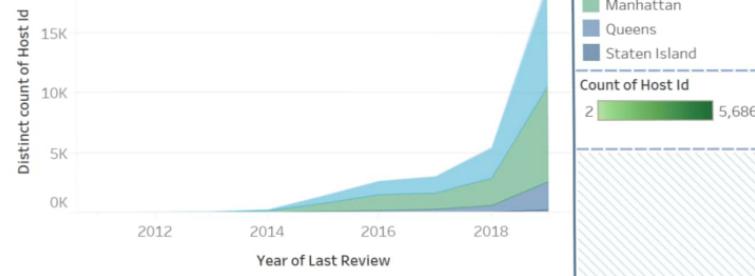
Host Activities

## Host Activities

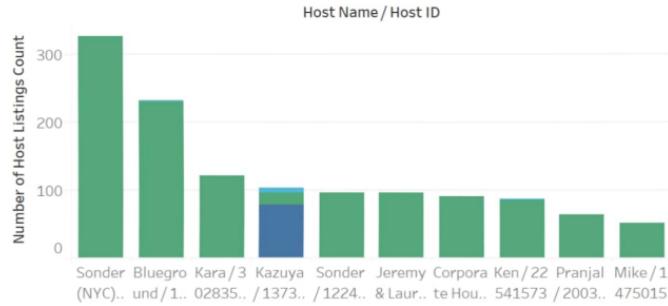
## Hosts with Most Reviews



## Host Numbers Over Time



## Hosts with Most Listings Count



## Host Concentration





Dashboard Layout &lt;

Default  
Phone

Device Preview

Size  
min 720x560 - max 920x8... ▾

Sheets

- KPI Cards - ...
- Number Of ...
- Top 10 ...
- Room Type ...
- Avg. Price ...
- Price Boxplot ...
- Top 10 Avera

Objects

- Horizontal Container
- Vertical Container
- Text
- Extension
- Pulse Metric
- Image
- Blank
- Workflow
- Web Page

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 Show dashboard title

Show Me

## Host Activities Summary

### Key Insights and Trends :

#### Top Hosts by Reviews:

Hosts like **Maya** (Host ID: 37312959) and **Brooklyn& Breakfast** (Host ID: 344035) lead with the highest number of reviews, exceeding **2,000 reviews each**. Such hosts are likely trusted or popular among guests.

#### Growth in Host Numbers:

A steady rise in the **distinct count of Host IDs** is evident from **2014 to 2018**, with a noticeable peak in **2018**. This growth is color-coded by neighborhood groups, showing a balanced rise across areas, but **Manhattan** and **Brooklyn** exhibit slightly higher growth rates.

#### Hosts with Maximum Listings:

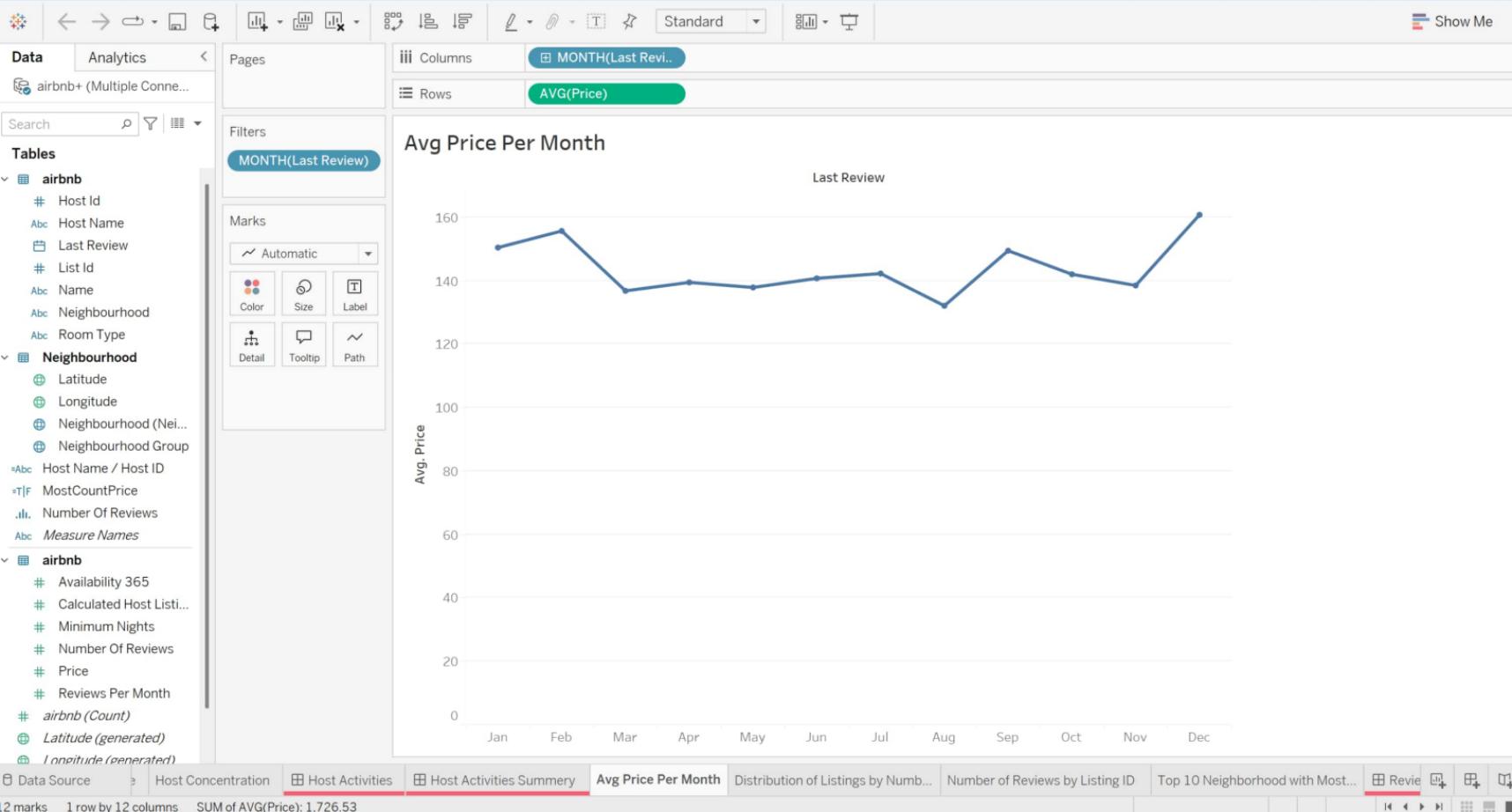
**Sonder (NYC)** (Host ID: 219517861) stands out with **over 300 listings**, far surpassing other hosts. This suggests the presence of professional or corporate operators in Airbnb's ecosystem. Other top hosts, such as **Blueground** (Host ID: 107434423) and **Kara** (Host ID: 30283594), also maintain a significant count of listings.

#### Host Concentration Across Neighborhoods and Time:

The heatmap reveals **Manhattan** as the dominant neighborhood group with the highest concentration of hosts, particularly active in **May and June**. This trend implies seasonality, possibly linked to tourist demand during warmer months.

### Filters

**Neighborhood Group:** Filters data to focus on specific neighborhood groups like Manhattan, Brooklyn, Queens, Bronx, and Staten Island.





Data

Analytics

Pages

Columns

Number Of Reviews

Rows

CNT(List Id)

Search

## Tables

airbnb

# Host Id

Abc Host Name

Last Review

# List Id

Abc Name

Abc Neighbourhood

Abc Room Type

Neighbourhood

Latitude

Longitude

Neighbourhood (Nei...)

Neighbourhood Group

Abc Host Name / Host ID

Tf MostCountPrice

.ii. Number Of Reviews

Abc Measure Names

airbnb

# Availability 365

# Calculated Host Listi...

# Minimum Nights

# Number Of Reviews

# Price

# Reviews Per Month

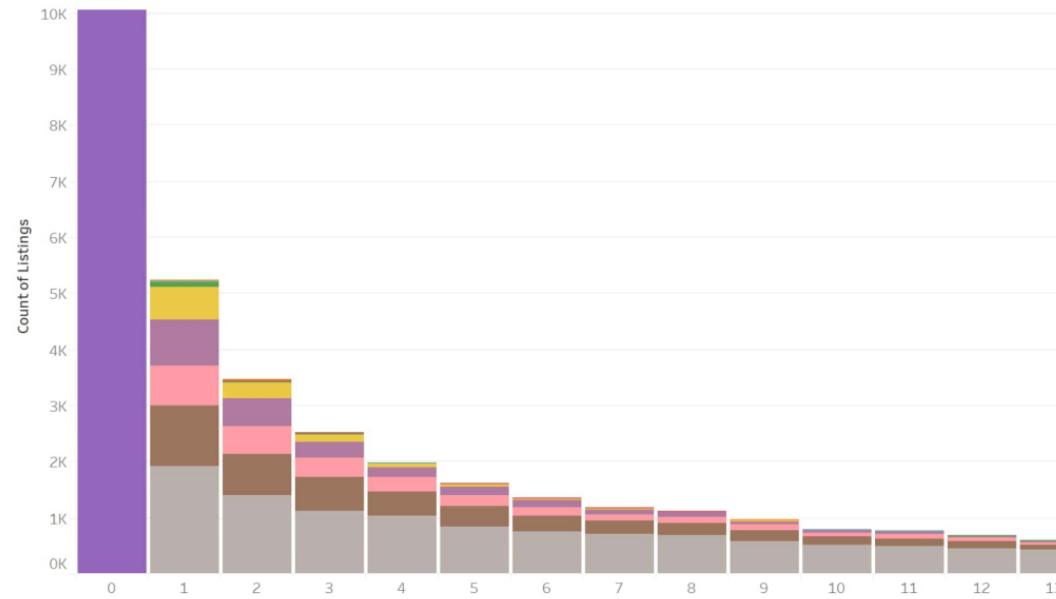
# airbnb (Count)

(Latitude (generated))

(Longitude (generated))

## Distribution of Listings by Number of Reviews

Number Of Reviews



YEAR&gt;Last Review

Null

2011

2012

2013

2014

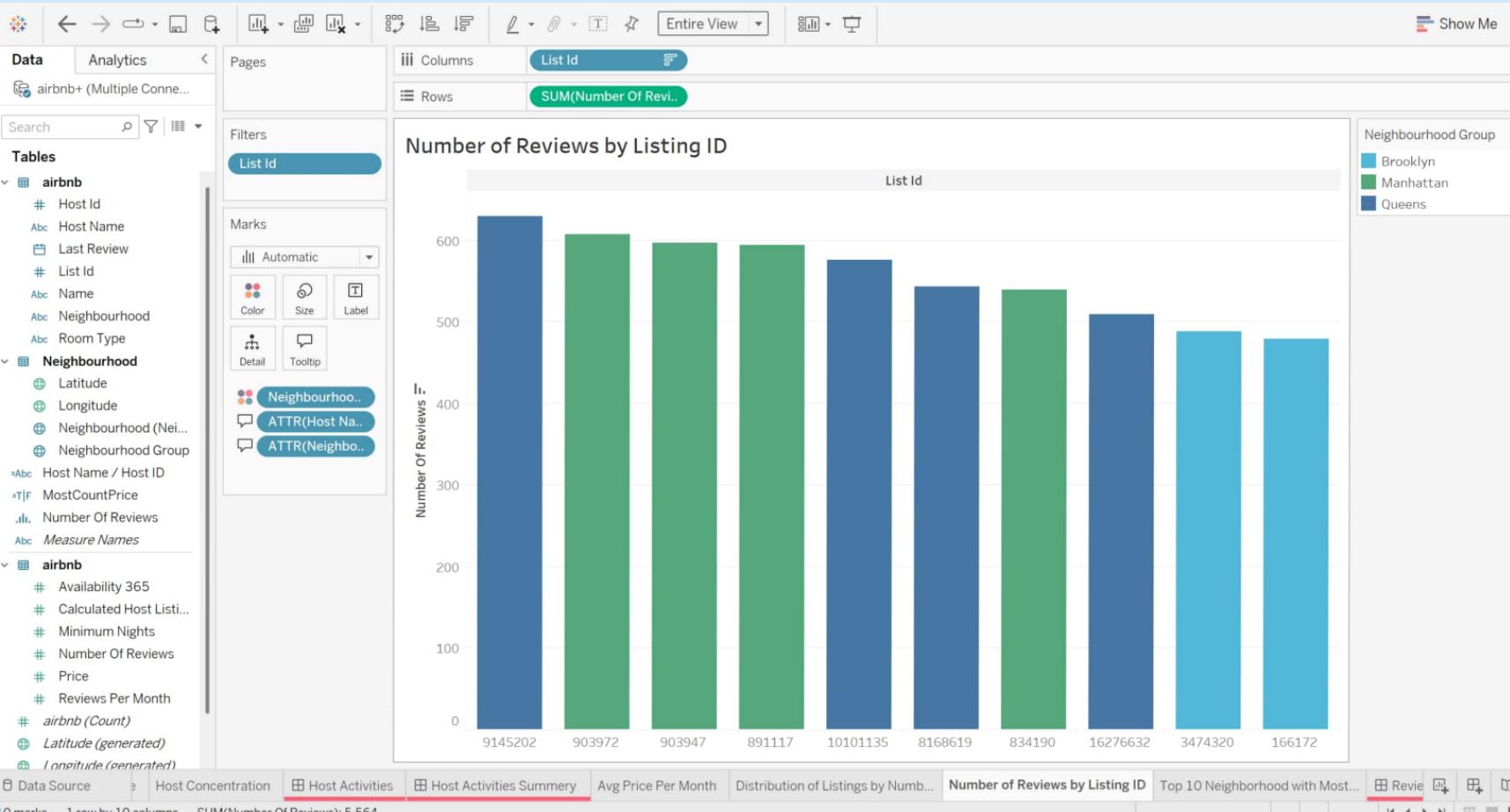
2015

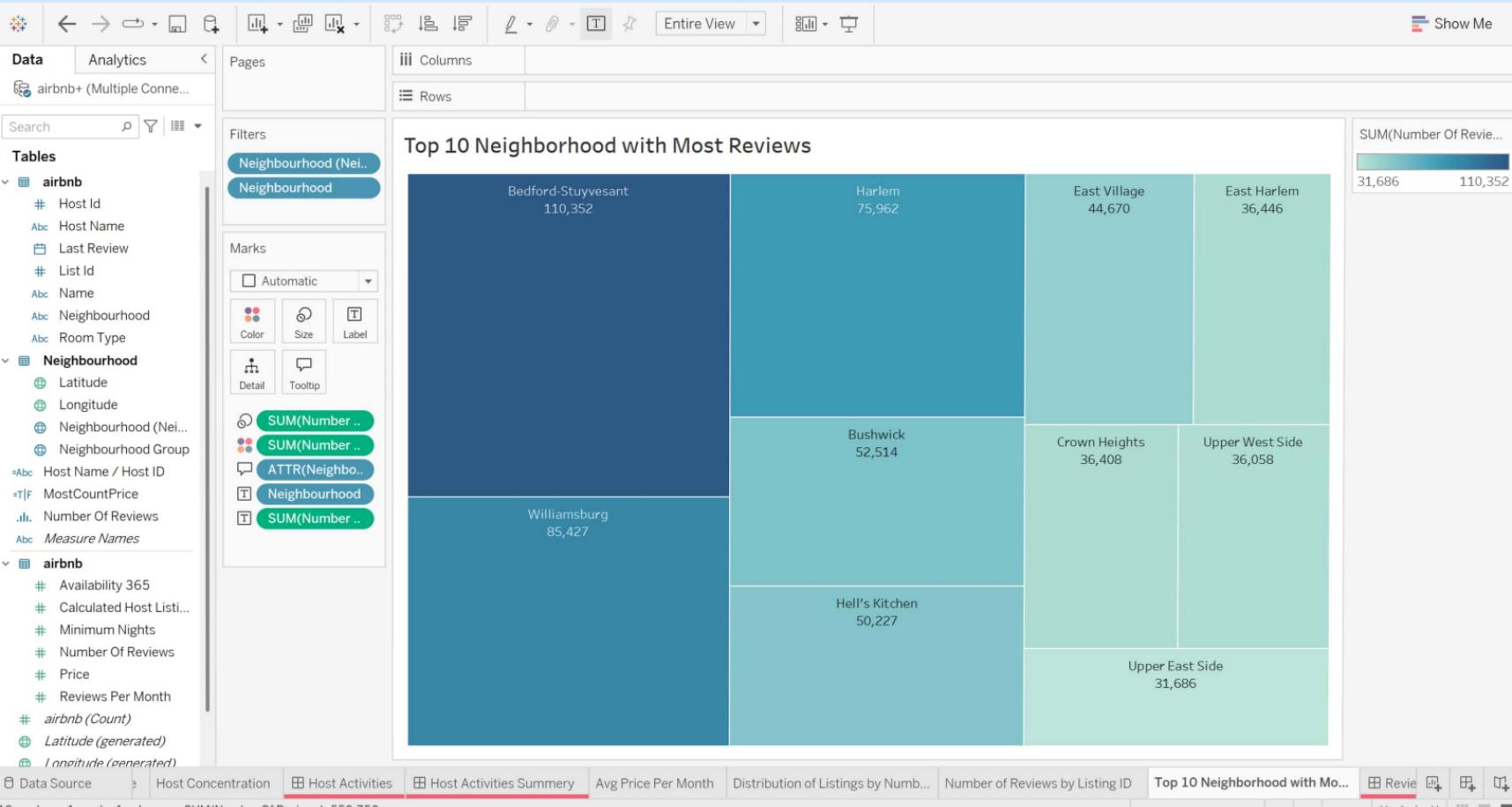
2016

2017

2018

2019





**Dashboard Layout**

**Default Phone Device Preview**

**Size min 1120x560 - max 1220...**

**Sheets**

- KPI Cards – ...
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**Objects**

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## Review Insights

**Distribution of Listings by Number of Reviews**

Number Of Reviews

Number Of Reviews	Count of Listings
0	~9,500
1	~4,500
2	~2,500
3	~1,800
4	~1,500
5	~1,200
6	~1,000
7	~800
8	~700
9	~600
10	~500
11	~400
12	~350
13	~300
14	~250
15	~200
16	~180
17	~160
18	~150
19	~140
20	~130

**Avg Price Per Month**

Last Review

Month	Avg. Price
Jan	~148
Feb	~152
Mar	~142
Apr	~140
May	~142
Jun	~144
Jul	~144
Aug	~135
Sep	~148
Oct	~142
Nov	~140
Dec	~152

**Year of Last Review**

- Null
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019

**Top 10 Neighborhood with Most Reviews**

Neighborhood	Reviews
Bedford-Stuyvesant	110,352
Williamsburg	85,427
Harlem	75,962
Bushwick	52,514
East Village	44,670
East Harlem	36,446
Crown	31,686
Upper West Side	36,058
Hell's Kitchen	50,227
Upper East Side	31,686

**Number of Reviews by Listing ID**

List Id

List Id	Number Of Reviews
9145..9039..	~600
9039..8911..	~600
8911..1010..	~600
1010..8168..	~580
8168..8341..	~550
8341..1627..	~520
1627..3474..	~500
3474..1661..	~480
1661..	~450

**Number Of Reviews**

- 31,686
- 110,352

**Data Source**

**Host Activities**

**Host Activities Summary**

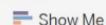
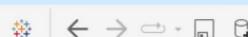
**Avg Price Per Month**

**Distribution of Listings by Num...**

**Number of Reviews by Listing ID**

**Top 10 Neighborhood with Most...**

**Review Insights**



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### Key Insights and Trends:

#### Distribution of Listings by Number of Reviews:

The majority of listings have 0 review, with fewer listings as the number of reviews increases. Many reviews were added in **2018** and **2019** for the lists with reviews.

#### Average Price Per Month:

The line chart reveals that pricing trends fluctuate across the year, with average prices being lowest in **February** and peaking in **December**. This variation aligns with seasonal demand, where December sees increased prices due to **holiday travel**.

#### Top 10 Neighborhoods with Most Reviews:

**Bedford-Stuyvesant** leads with the highest number of reviews (**110,352**), followed by **Williamsburg** (**85,427**) and **Harlem** (**75,962**). These neighborhoods dominate due to their popularity among guests and possibly their proximity to attractions or transport hubs.

#### Number of Reviews by Listing ID:

Listings with IDs like **9145202**, **903972**, and **903947** show exceptionally high review counts (between 400 and 600 reviews).

### Filters:

**Year of Last Review:** Filters to isolate data based on the year in which the last review was written (e.g., 2011 to 2019).

**Neighborhood Group:** Filters data to focus on specific neighborhood groups like Manhattan, Brooklyn, Queens, Bronx, and Staten Island.

The dashboard title is **Conclusion**.

**Sheets:**

- KPI Cards – ...
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- Top 10 Avera

**Objects:**

- Horizontal Container
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- Workflow
- Web Data

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Show dashboard title

**Conclusion**

The dashboards highlight critical insights about **New York City's** market dynamics. **Manhattan** and **Brooklyn** dominate with the highest density of listings, distinct host numbers, and pricing range, while **Staten Island** has fewer listings but retains premium pricing in some neighborhoods.

**Pricing trends** reveal seasonal fluctuations, with **December** being the most expensive month, and a **weak correlation** between price and reviews or availability.

Hosts like **Sonder** and **Blueground** stand out with corporate-level operations, while popular neighborhoods such as **Bedford-Stuyvesant** and **Williamsburg** lead in review counts.

The dashboards showcase actionable insights into **pricing strategies**, **host activities**, **guest preferences**, and **market opportunities** for growth.