

# New York City Airbnb

Mennatallah EL-Khateeb

# Overview of the Dataset

This dataset comes from the "New York City Airbnb " project, which documents Airbnb listing activity in NYC for 2019. It offers a detailed snapshot of the short-term rental landscape, covering host information, location data, pricing, availability, and guest interaction. This analysis aims to understand rental trends, pricing patterns, popular neighborhoods, and the most profitable room types in New York City.

## Dataset Contents:

- Contains Airbnb listing data for New York City in 2019.
- Includes information on hosts, room types, locations, price, availability, number of reviews, and more.

[Link Dataset](#)

# Data Cleaning Steps (Performed using Excel and Power BI)

1. Removed duplicate rows to ensure data uniqueness.
2. Handled dirty data by correcting inconsistent or incorrect entries (e.g., malformed prices, missing values).
3. Filtered nulls and blanks, especially in critical columns like price, room\_type, and neighbourhood\_group.
4. Converted columns to appropriate data types for numerical analysis and visualization.



# Key Insights (with Simple Explanations)

- Average listing price is \$152.76
- NYC Airbnb rentals tend to be on the pricier side. It reflects the city's high demand and cost of living.
- Total Hosts are 37.3 K
- Individual hosts manage a large portion of the listings. Indicates a decentralized hosting model.
- Total listings are 48,620
- Strong supply of Airbnb rentals in NYC. Suggests Airbnb plays a big role in the local accommodation market.
- Total reviews exceed 1 million
- High engagement from guests. Reviews are essential in shaping trust and future bookings.

# Key Insights (with Simple Explanations)

- **Average monthly reviews: 52,850**

→ Indicates high guest engagement. Reflects NYC's popularity as a travel destination.

- **Average minimum nights per stay: 7**

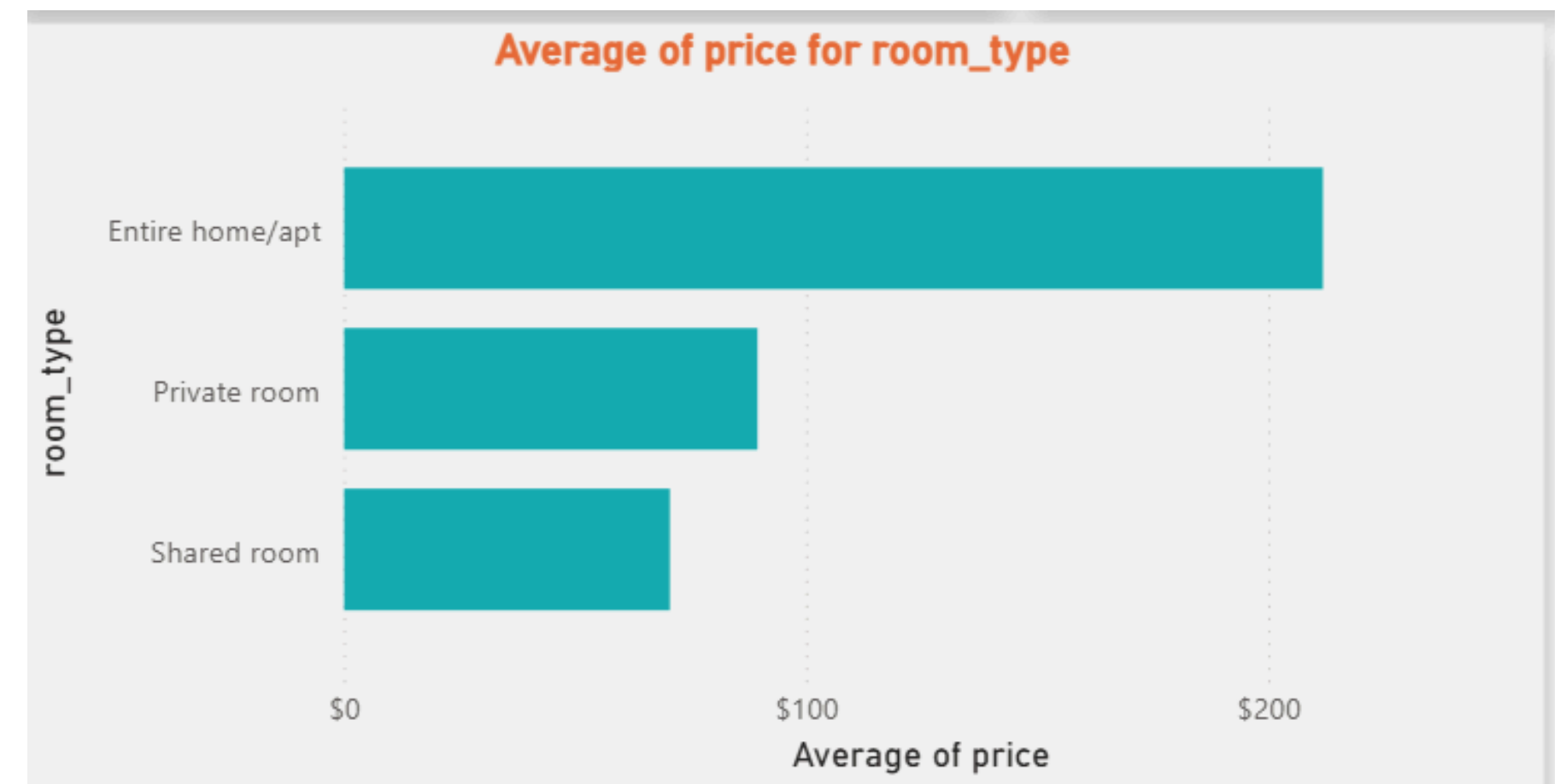
→ Many listings support short-to-medium stays. Aligns with the needs of tourists and short-term visitors.

- **Average annual availability: 112.57 days**

→ Listings are available roughly 1/3 of the year. Many hosts possibly rent part-time.

- **Most expensive room type: Entire home/apartment**

→ Full properties command the highest prices. Followed by private rooms, with shared rooms being the cheapest.



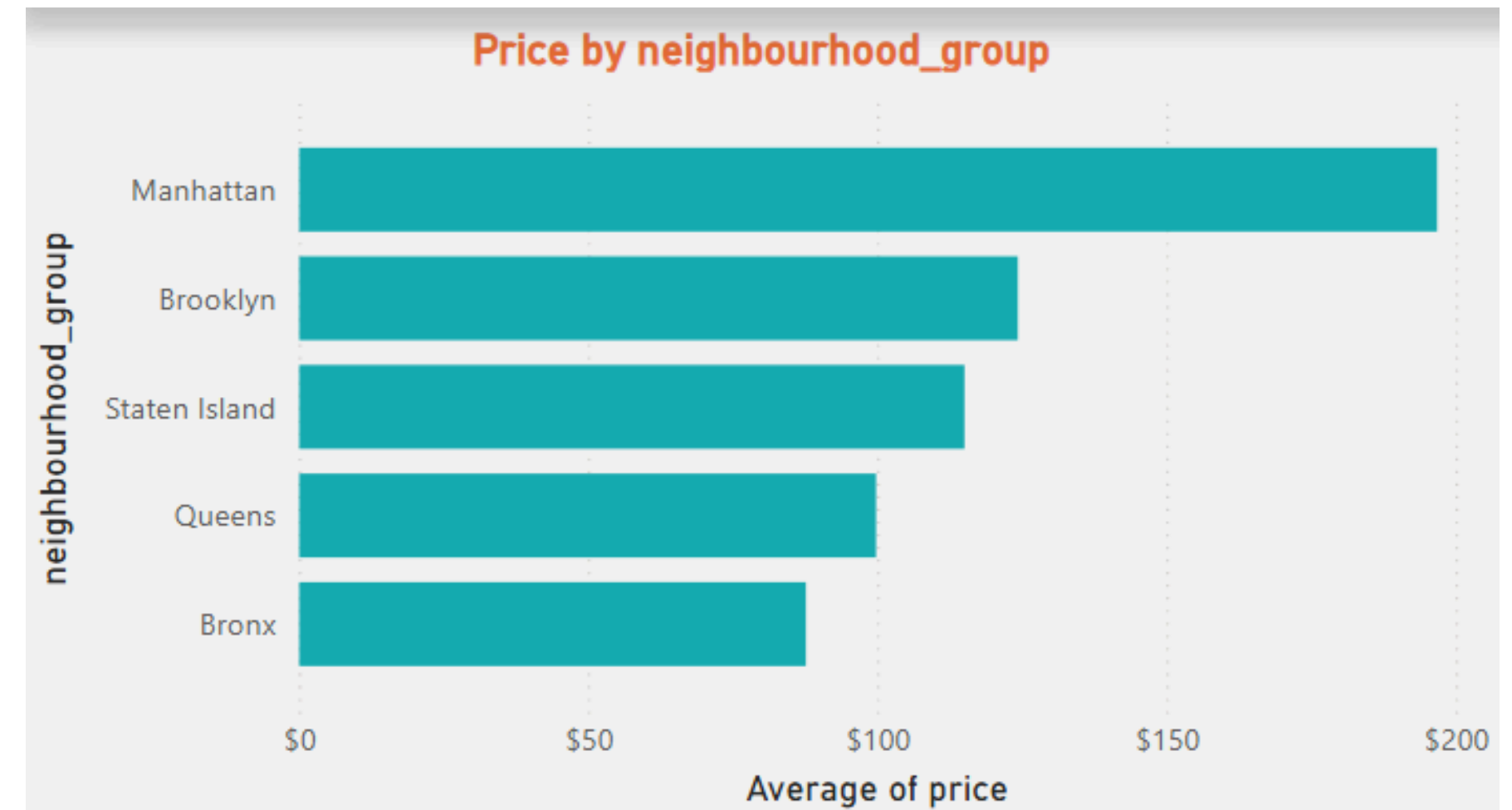
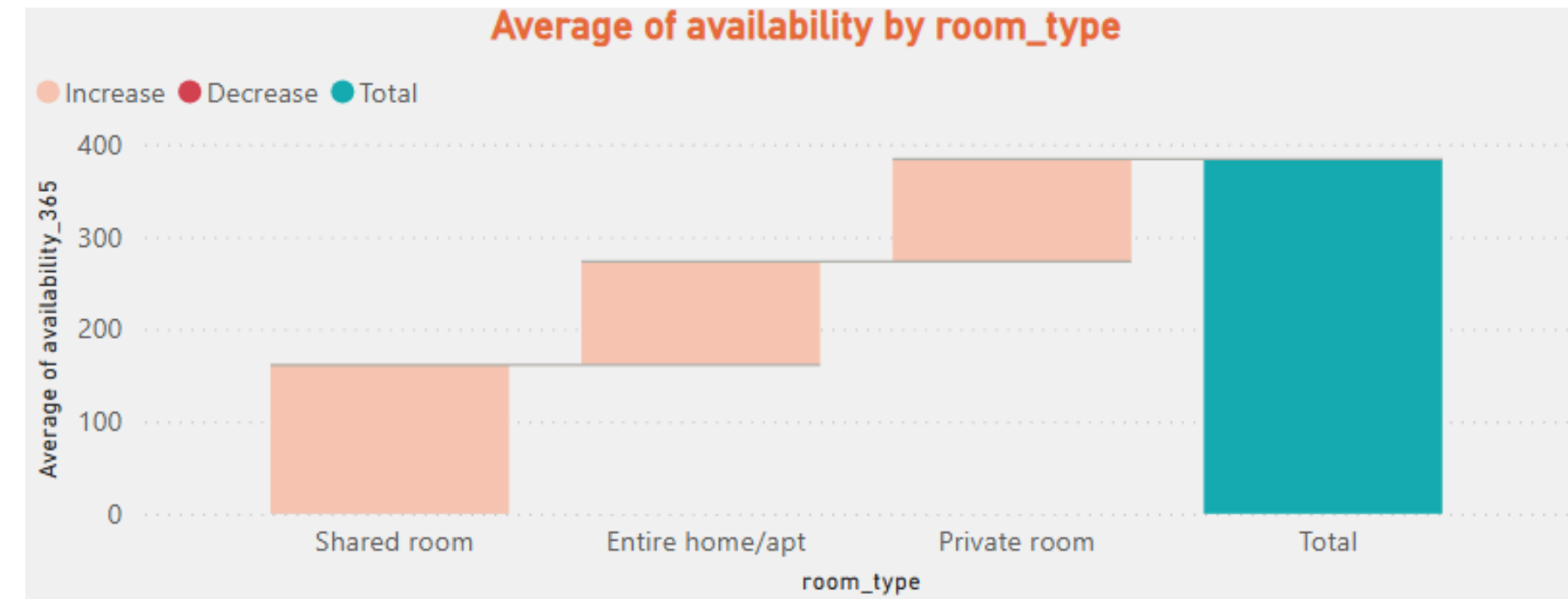
# Key Insights (with Simple Explanations)

- **Most available room type: Shared room**

→ Shared rooms are frequently available year round. Possibly due to lower demand, leaving more open dates.

- **Highest-priced areas: Manhattan, then Brooklyn**

→ Manhattan dominates in pricing due to central location. Brooklyn follows as a trendy but slightly more affordable alternative.



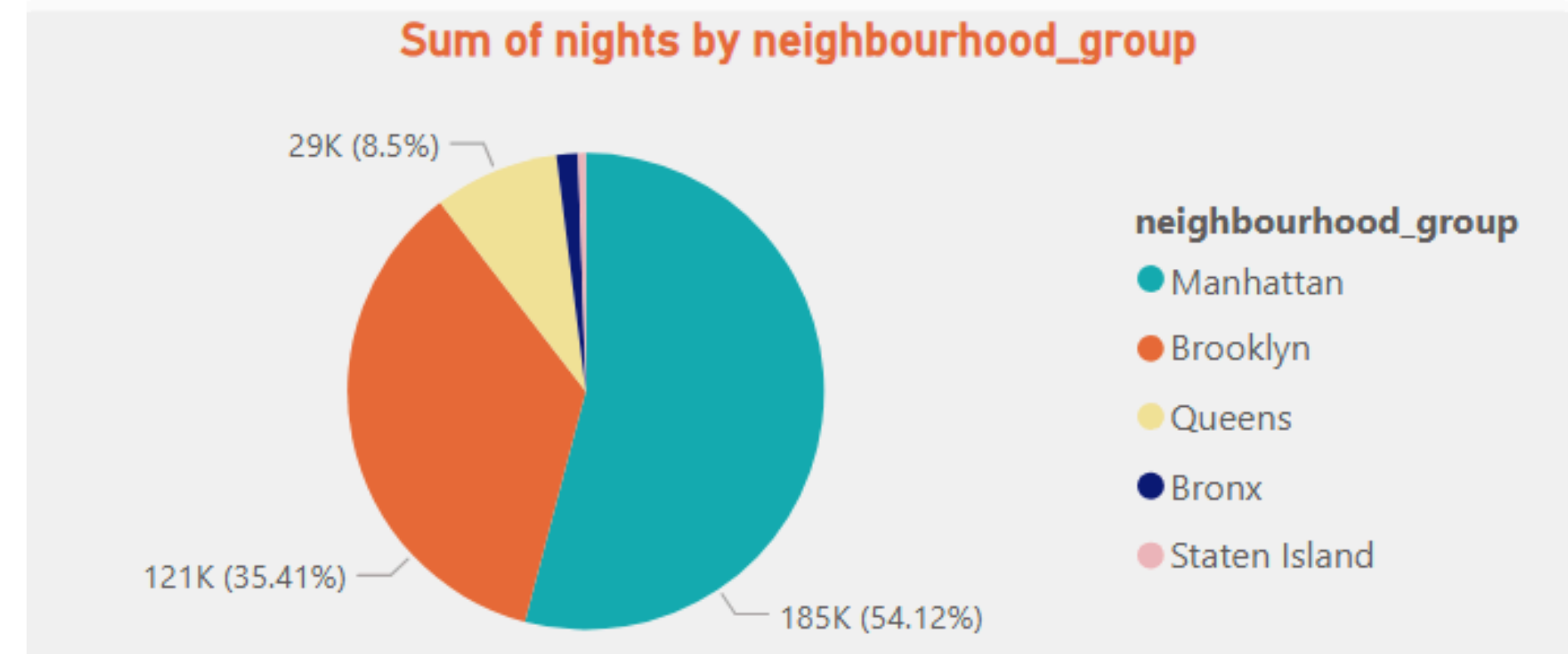
# Key Insights (with Simple Explanations)

- **Most available areas: Manhattan, then Brooklyn**

→ These areas dominate both in pricing and availability. They are hotspots for tourism and travel.

- **Price trend (2011–2019): Declining with a spike in 2013**

→ Overall prices have been going down over time. But 2013 saw a noticeable jump, likely due to market shifts or regulation changes.

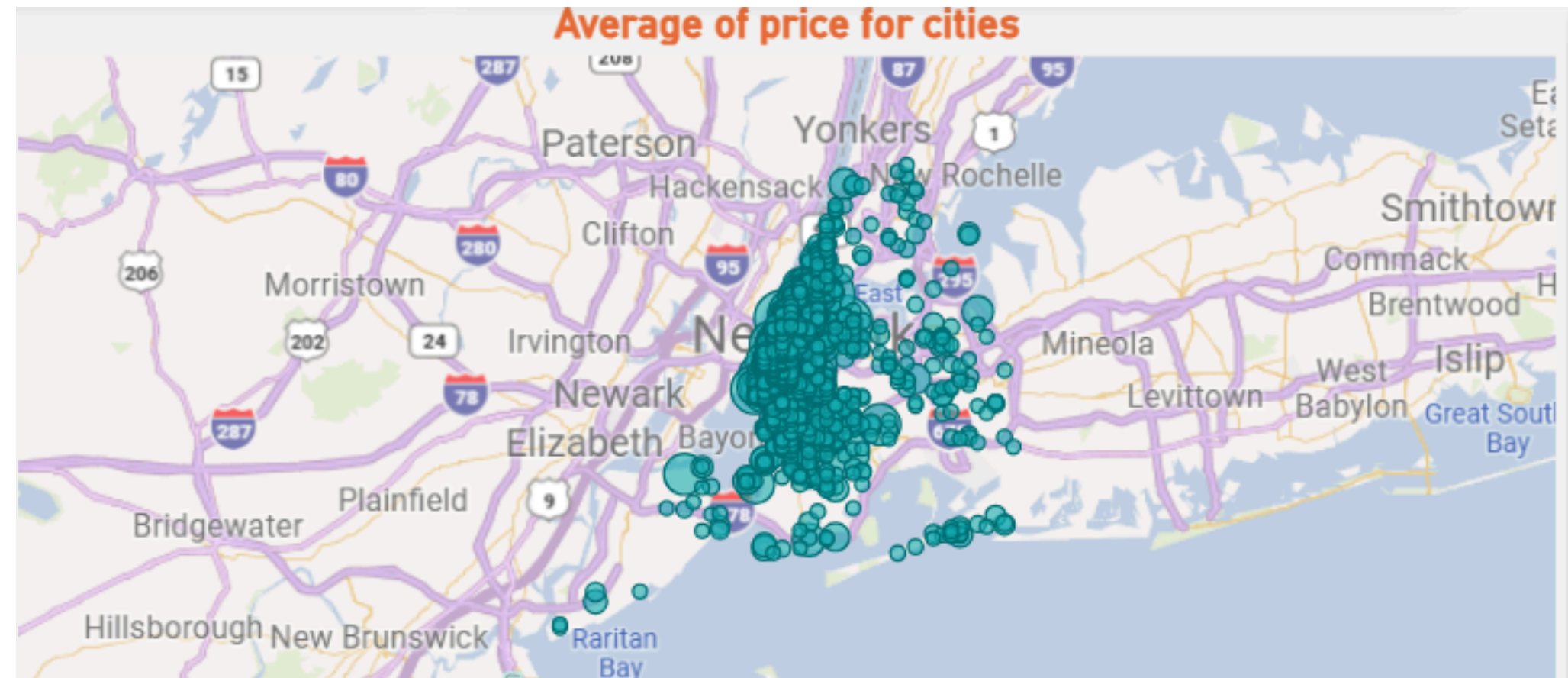




# Key Insights (with Simple Explanations)

- **Highest prices and listing density are concentrated in West NYC**

→ The western side of NYC shows a high concentration of listings with premium pricing. Likely due to desirable neighborhoods, attractions, and accessibility



Menna El-Khateeb

Link Dashboard   Power BI



# Conclusion

- The NYC Airbnb market is large and diverse, with a clear preference for full properties and key hotspots like Manhattan. Listings are moderately priced but skew high due to premium locations. With strong monthly engagement and steady availability, hosts can benefit by adjusting their pricing strategies, targeting week-long stays, and increasing listing visibility year-round. While the overall trend in pricing is slightly downward, strategic listing management, such as increasing availability, targeting profitable room types, and leveraging positive guest feedback can significantly enhance a host's success.
- Western NYC, with its concentration of high-value listings, represents a premium opportunity for new and experienced hosts alike looking to maximize return on investment.



# Recommendations

- **Target long-term guests:** Given the solid availability and week-long minimum stays, targeting short-to-medium-term guests can attract more consistent bookings.
- **Focus on Entire Homes:** They yield the highest income. New hosts should consider offering full apartments if possible.
- **Use Manhattan and Brooklyn as top target locations:** These areas have both high demand and high returns.
- **Improve availability strategy:** Since many listings are only available for a portion of the year, increasing availability may boost visibility and revenue.
- **Capitalize on high monthly review activity:** Listings with strong guest engagement should highlight positive reviews and maintain high service quality.
- **Use dynamic pricing:** Especially during peak travel seasons or events to maximize revenue.
- **Consider investing in Western NYC neighborhoods:** Since they host high-priced and high-density listings, they present good opportunities for premium returns.

# Thank you

I wait your opinion



**Mennatallah EL-Khateeb**

Data Analyst

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