**Problem Areas to Explore:**

1. **Popular Neighbourhoods**:
   * Identify neighbourhoods with the most reviews and their average prices.
2. **Room/Property Type Share**:
   * Understand the distribution of different room and property types.
3. **Price Variation**:
   * Analyse how price changes based on:
     + Location
     + Property type
     + Reviews
4. **Correlations Between Hosts and Factors**:
   * Examine relationships between host behaviours and features like:
     + Review count
     + Price

**📊 Visualization Categories:**

* **Overview of Airbnb**
* **Property Analysis**
* **Pricing Analysis**
* **Host Analysis**

**Column Name Definitions**

1. **id**  
   A unique identifier for each listing.
2. **name**  
   The title of the Airbnb listing, as created by the host.
3. **host\_id**  
   Unique identifier for the host who created the listing.
4. **host\_name**  
   The name of the host.
5. **neighbourhood**  
   Specific neighborhood where the property is located.
6. **latitude/longitude**  
   Geographic coordinates of the listing.
7. **room\_type**  
   Type of room offered, such as:
   * Entire home/apt
   * Private room
   * Shared room
   * Hotel room
8. **price**  
   Nightly cost of staying at the listing.
9. **minimum\_nights**  
   The least number of nights a guest must book.
10. **number\_of\_reviews**  
    Total number of reviews submitted for the listing.
11. **last\_review**  
    Date when the most recent review was posted.
12. **number\_of\_reviews\_ltm** = Number of Reviews in the Last 12 Months
13. **reviews\_per\_month**  
    Average number of reviews received each month.
14. **calculated\_host\_listings\_count**  
    Number of listings currently managed by the same host.
15. **availability\_365**  
    Number of days the listing is available over a 365-day year.
16. **license** *(if present)*  
    Legal registration/license number (may be required by city law).

Why is the Chicago average listing price much lower than New Orleans?

**1. Supply and Competition**

* **Chicago** has **more listings**, creating **high competition** among hosts.
  + Hosts are likely pricing competitively to attract bookings.
* **New Orleans**, a popular tourist destination, has **fewer listings**, allowing hosts to maintain **higher prices** due to limited supply.

**2. Property Type Distribution**

* **New Orleans has a higher share of entire homes/apartments**, especially in central tourist zones.
* In contrast, **Chicago has more private rooms**, which brings down the average price.

**3. Price spreads show high variation: certain room types in both cities can reach $1500–$3500+, indicating luxury listings or outliers.**

Top 3 popular neighbourhoods based on ‘Number of reviews in last 12 months’

Chicago (Average Price - $200-$300)

* West Town
* Lake view
* Near North Side

New Orleans (Average Price - $250-$400)

* Central Business District
* Central City
* Mid-City

|  |  |  |
| --- | --- | --- |
| **Room Type** | **Chicago** | **New Orleans** |
| Entire home/apartment | 72% | 84% |
| Private room | 26% | 14% |
| Shared room | 1% | 1% |
| Hotel room | 1% | 1% |

**Entire home/apartment dominates in both cities, but:**

* **New Orleans has a higher share** (84%) → This indicates a strong preference by hosts and guests for full-property rentals, likely due to group travel and tourism-heavy demand.
* **Chicago’s share is lower** (72%), with a slightly higher share of **private rooms**, possibly due to more flexible housing or more hosts renting out part of their home.

**Shared rooms and hotel rooms are negligible in both markets:**

* Airbnb is used primarily for **residential-style stays**, not dormitory-style or traditional hotel offerings.

Geographic Spread

* Chicago has denser coverage across a wider area.
* New Orleans listings cluster near tourist-heavy zones (e.g., French Quarter).

Pricing and Reviews Relationship

As listing prices exceed **$3,500**, a noticeable decline in the number of reviews is observed. This suggests that **ultra-premium properties attract fewer bookings or less frequent guests**, possibly due to exclusivity or reduced accessibility.

On the other hand, properties priced in the **$100 to $1,500 range** consistently receive a **higher volume of recent reviews**, indicating they are more **popular and competitively priced** for the typical Airbnb guest in both **Chicago and New Orleans**.

Listings in the $100–$1,500 range strike a **balance between affordability and quality**, attracting more bookings.

Higher price points may not guarantee engagement, highlighting the need for **strategic pricing** based on target audience and location.