Tomas Santos Yciano

BUA 610: Data Visualization Apps

Professor Alvarado

28 April 2025

# Power BI Project Business Questions

## Page 1: Neighborhood Overview

### 1. What types of properties are most commonly listed in each neighborhood?

The most common property types across neighborhoods are "Entire rental unit" and "Entire home." "Private room in home" is also frequent, but to a lesser extent.

### 2. Which neighborhoods generate the highest estimated annual revenue?

Based on the map visualization, the areas around downtown Dallas (Districts 2 and 14) show the highest estimated annual revenue concentrations.

### 3. How does the availability of listings over the next year vary by neighborhood?

District 8 has the highest average availability (close to 250 days/year), while Districts 9 and 12 have lower availability, around 200 days/year.

## 4. Which neighborhoods have the most listings that allow for instant booking?

District 2 and District 14 have the highest number of instant-bookable listings, indicating higher traveler flexibility.

# Page 2: Reviews and Guest Experience

# 5. Is there a relationship between the number of reviews a listing receives and its overall review rating?

Listings with many reviews generally maintain high review ratings (4.5+), showing consistency between popularity and guest satisfaction. Overall, there's a positive trend but not a strong linear correlation.

### 6. How do average review scores differ between property types?

Earthen homes, private rooms, and Campers/RVs have slightly higher average reviews than hotel rooms and entire villas. The differences, however, are relatively small.

# 7. How has review activity changed over time for Airbnb listings?

Review activity has sharply increased around 2023–2025, with a significant rise starting post-2022. This suggests a strong recovery or expansion in listing activity after the COVID-19 Pandemic.

# Page 3: Listing Details and Host Activity

# 8. How do prices vary across different room types?

Private room prices are generally between \$100–\$300, consistent with typical Airbnb market rates in major US cities. One significant outlier (~\$30,000) was detected, likely due to a data error or unusual listing behavior.

#### 9. Who are the most active hosts, and how many listings do they manage?

The most active host (ID 108514926) manages just over 100 listings. Other top hosts manage between 40 and 80 listings. This suggests that some hosts are professional property managers operating at a mid-sized scale, managing multiple rental units across different neighborhoods.

### 10. What are the most frequently offered amenities across all listings?

Wi-Fi, Kitchen, Heating, and Air Conditioning are among the most common amenities offered across all listings.