**Data Quality Insights:**

1. *Zip code in Listings data frame*: The listings data frame consists of values like NaN, Floating Numbers, Numbers with Hyphens which are not found in Zillow data frame. Notice the datatype for Zip code is different in both datasets & we must decide a common ground for further analysis
2. *State in Listings data frame:* The State field in listings data frame consists of values which are not unique & are more than 2 characters long in comparison with Zillow data frame
3. *City in Listings data frame:* The City field in listings data frame is really a bad representation of City Names with inconsistent spaces, capitalization & numbers to name a few.

**Metadata:**

**Column Level Metadata**

|  |  |
| --- | --- |
| **Field** | **Description** |
| Cost | Indicates the historical median price within that area. |
| Avg Cost | Indicates the average of historical median price by Zip code |
| Avg Price | Indicates the average price hosts are charging to stay per night by Zip code |
| Number of Listings | Total Number of properties host has ever listed on Airbnb by Zip code |
| Avg Number of Reviews | Average number of reviews received for the property for its entire existence within Airbnb by Zip code |
| Avg Review Rating | Average of overall score given based on accuracy, cleanliness, check-in, communication, location, and value by Zip code |
| Frequency of Tenants | It is the ratio of Avg Price by Avg Number of Reviews & denotes the total number of people visiting the property & writing reviews after their stay |
| Frequency of Tenants by review rating | It is the ratio of Avg Price by Avg Review Rating & denotes the total number of people visiting the property & giving ratings after their stay |
| Sum of Cost | Indicates the sum of historical median price by Zip code |
| Sum of Price | Indicates the sum of price hosts are charging to stay per night by Zip code |
| Ideal ROI | It is the ratio of Sum of Price (Calculated Yearly i.e. multiply by 365 days) to the Sum of Cost assuming 100% occupancy rate |
| Actual ROI | It is the ratio of Sum of Price (Calculated Yearly i.e. multiply by 365 days) to the Sum of Cost assuming 75% occupancy rate |