

Incentivize Owners To List Their Homes For Long-Term Stays On Airbnb:

Analyzing the LA, NYC and Seattle markets.

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1. Introduction

Airbnb is an online marketplace that has revolutionized the way people travel all over the world by providing extensive accommodations and lodging experiences at varying price points and providing hosts the opportunity to earn income by renting their homes for guests. Increasing the number of property listings on its site has been a big priority of Airbnb for years. Recent changes in global travel and remote work has made long-term stays a popular choice amongst travelers. In addition, more people are seeking ways to generate extra income that are not dependent on traditional employment.

According to a recent (May 24, 2021) media release by Airbnb, people are traveling “anytime, everywhere and staying longer.” Flexible work options during the pandemic (after vaccinations) have encouraged people to travel and stay for longer in their Airbnb lodgings at their destination cities. “People are not just traveling on Airbnb, they are now living on Airbnb.” Airbnb defines long-term stays as those stays which are 28 days or longer.

Nearly a quarter (24%) of all stays booked for the first quarter of 2021 were for long-term stays. The number of long-term bookings in the 3 major cities of Los Angeles, New York and Seattle has significantly increased according to the release. In LA, 43% of bookings are for long-term stays. In NYC, 62% of all bookings

made are for long-term long stays and in Seattle, 40% of all bookings are for long-term stays.

Our purpose is to encourage more people in metro areas to sign up as Airbnb hosts and list their properties for long-term bookings as the demand for them has increased significantly. For the scope of this project, we have focused on LA, NYC and Seattle. We will be analyzing the long-term stay trends in these cities, the median monthly prices, types of properties listed as well as the cancellation policies of the listings.

2. Data Cleaning and Analysis

We sourced our dataset from a large public dataset called Inside Airbnb. Inside Airbnb is an independent, non-commercial set of tools and data that allows you to explore how Airbnb is really being used in cities around the world.

By analyzing publicly available information about a city's Airbnb's listings, Inside Airbnb provides filters and key metrics so you can see how Airbnb is being used to compete with the residential housing market.

The dataset has extensive data on Airbnb listings all over the world with different factors such as the year that the host started being a host, host response rate and time, location, daily price, weekly price, monthly price, cleaning fees, number of reviews, amenities and cancellation policies among many other factors.

From the huge online dataset, we filtered by country for listings in the United States only and downloaded the csv file for US Airbnb listings. The raw US listings dataset consisted of 89 columns and 134545 rows.

In our cleaning process, we removed a lot of columns that were irrelevant to the scope of our project. We finally filtered the initial US Airbnb listings dataset just for the three cities that we decided to focus on (LA, NYC and Seattle). Since we were interested in analyzing listings available for long-term stays, we dropped rows that did not have prices listed in the **monthly price** column. We considered listings that had monthly prices listed as being available for long-term bookings (28 days or longer).

In our analysis, we did a time series plot for host long term listings with the dates ranging from 2008 to 2016.

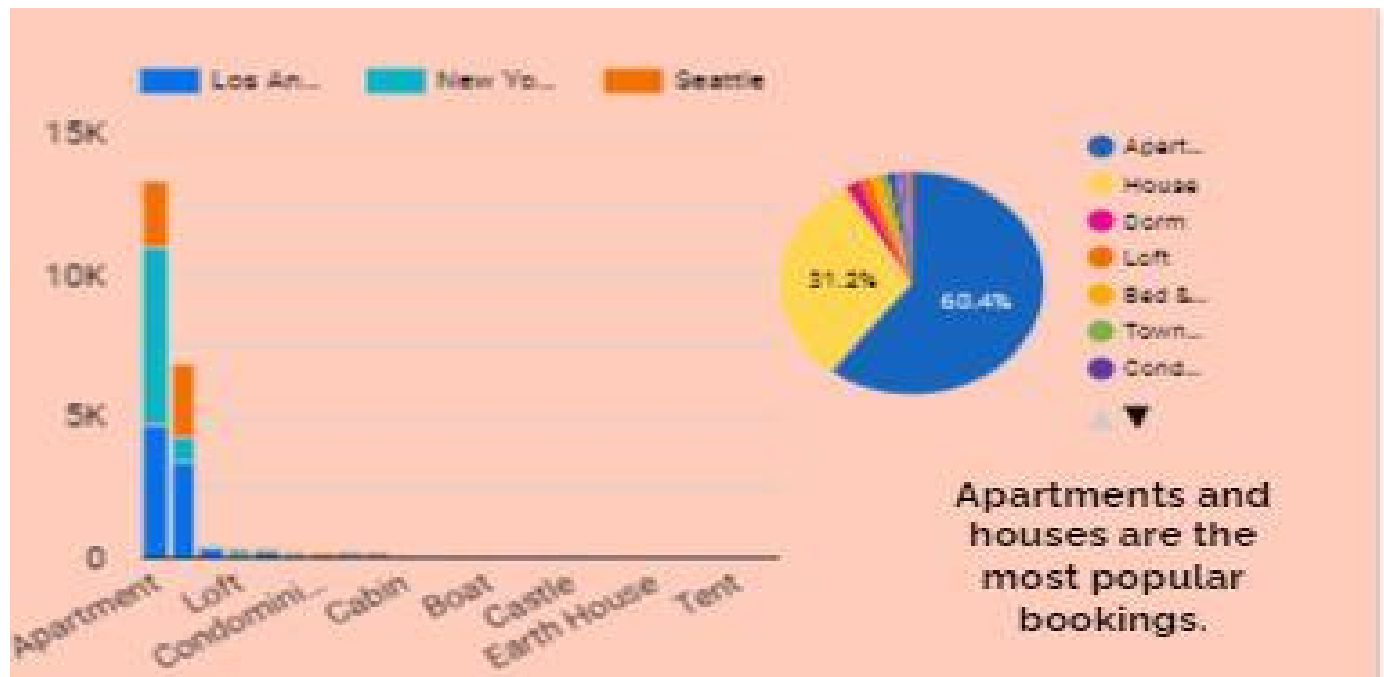


We also calculated the minimum, median, and maximum monthly prices for these three cities. We also saw the type of property listings available for each city as well as the cancellation policies by using bar charts, pie charts and donut charts.

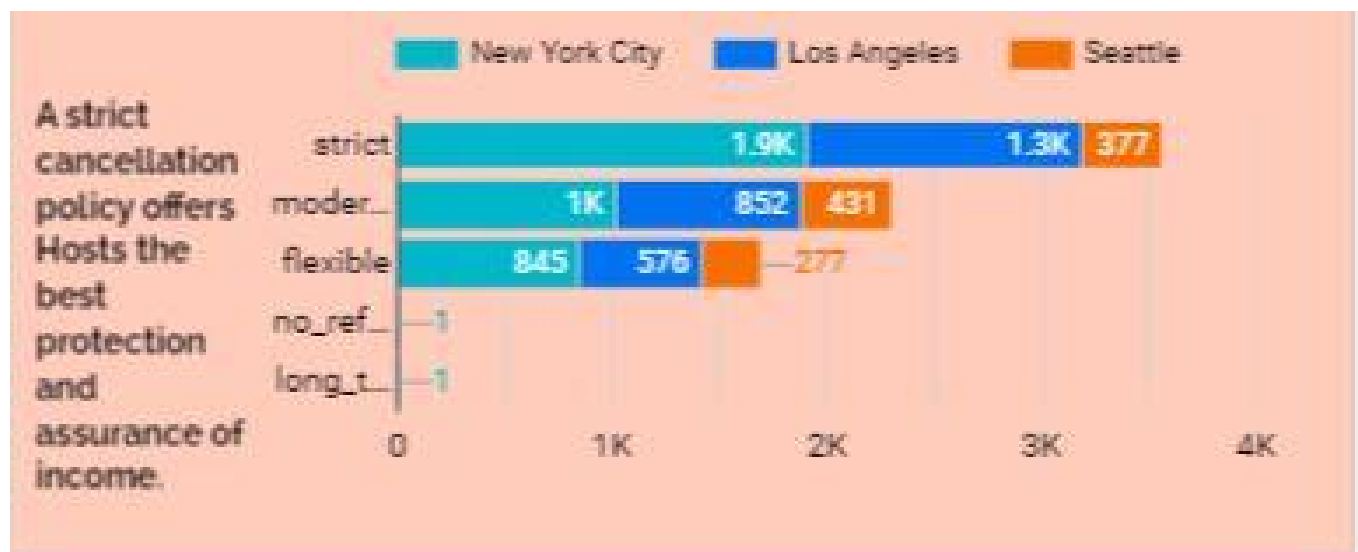
Median Monthly Prices and Maximum Prices For Long-Term Stays



Types of property listings available



Cancellation Policies

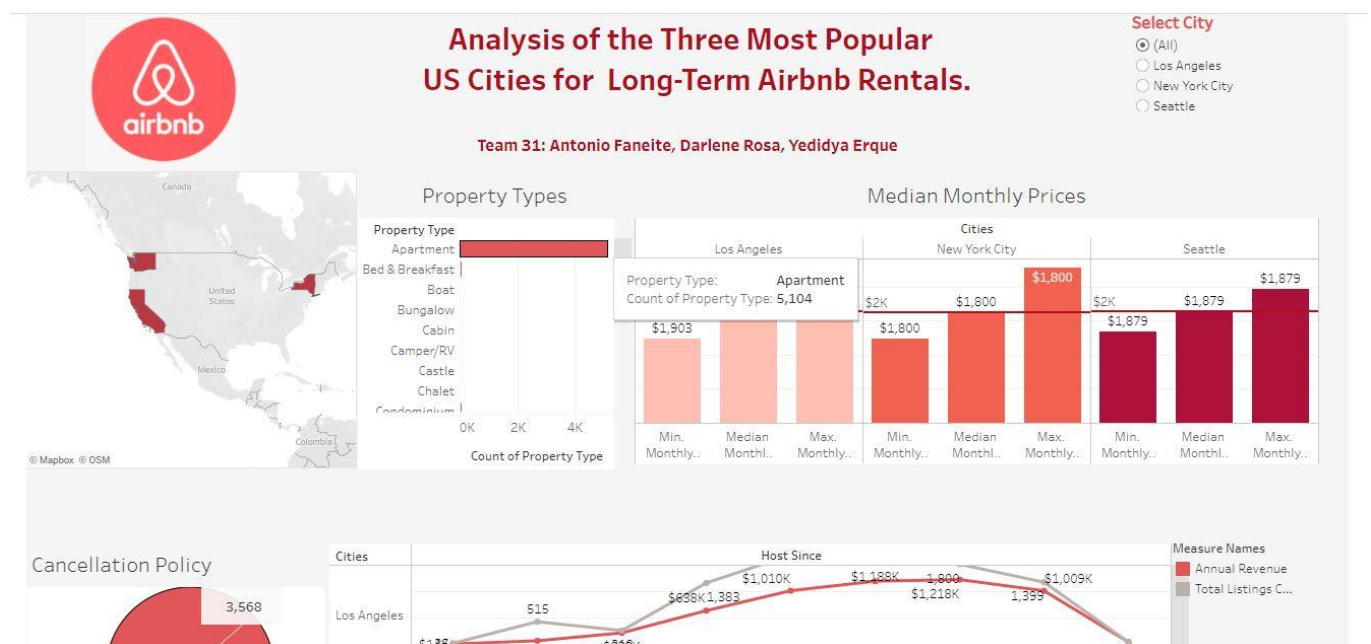


3. Results

Hosts in popular metro cities such as LA, NYC and Seattle who list their apartments and/or houses for long-term stays can expect their homes to be in high demand and can earn thousands in annual revenue. Increasing the number of long-term listings on Airbnb is extremely beneficial for hosts, for guests and Airbnb as a business. It provides an extensive set of options for travelers wherever their next trip takes them and lets hosts earn considerable income all-year round from making their homes available for long-term bookings on the Airbnb site.

4. Dashboard

We created a simple interactive dashboard to display our results. Users can look at the overall trend in these cities and can also click on each city to see the minimum, median and maximum monthly prices, the most popular property types, the cancellation policies, total number of listings and calculated annual revenues from 2008 to 2016.



Link to Dashboard:

<https://public.tableau.com/app/profile/yedidya.erque/viz/AirbnbLong-TermListings/AirbnbListings>

5. Conclusion, Limitations and Future Work

A big limitation of our dataset is that it only goes up to 2016. We did not have access to a more recent compiled dataset from Inside Airbnb. Like many in the travel industry, Airbnb had experienced a huge number of cancellations and lost revenue during the initial waves of the pandemic. However, currently with many people getting vaccinated and travel restrictions lifted, it's the perfect timing to increase listings available for long-term stays on the site.

Future work could look at correlational relationships between different factors and incorporate more recent data. Airbnb has also made a lot of changes to their features and policies following the lifting of travel restrictions. It would be interesting to study how the implementing these changes will affect long-term stays and listings.

References

Link to actual table for the US listings we used in our project:

https://public.opendatasoft.com/explore/dataset/airbnb-listings/table/?disjunctive.host_verifications&disjunctive.amenities&disjunctive.features&dataChart=eyJxdWVyaWVzIjpbeyJjaGFydHMiOlt7InR5cGUiOiJjb2x1bW4iLCJmdW5jIjoiQ09VTlQiLCJ5QXhpcyI6Imhvc3RfbGlzdGluZ3NfY291bnQiLCJzY2llbnRpZmljRGlzcGxheSI6dHJ1ZSwiY29sb3IiOiJyYW5nZS1jdXN0b20ifV0sInhBeGlzIjoiY2l0eSIsIm1heHBvaW50cyI6IiIsInRpbWVzY2FsZSI6IiIsInNvcnQiOiIiLCJzZXJpZXNCcmVha2Rvd24iOiJyb29tX3R5cGUiLCJjb25maWciOnsiZGF0YXNldCI6ImFpcmJuYiIsaXN0aW5ncyIsIm9wdGlvbnMiOnsiZGlzanVuY3RpdmUuaG9zdF92ZXJpZmljYXRpb25zIjpb0cnVlLCJkaXNqdW5jdGltZS5hbWVuaXRpZXMiOnRydWUsImRpc2p1bmN0aXZlImZlYXR1cmVzIjpb0cnVlX19XSwidGltZXNjYWx1IjoiIiwiaGlzcGxheUx1Z2VuZCI6dHJ1ZSwiYWxpZ25Nb250aCI6dHJ1ZX0%3D&refine.country=United+States

Media Release:

<https://www.airbnb.com/resources/hosting-homes/a/what-hosts-need-to-know-about-airbnbs-announcement-381>

www.insideairbnb.com