

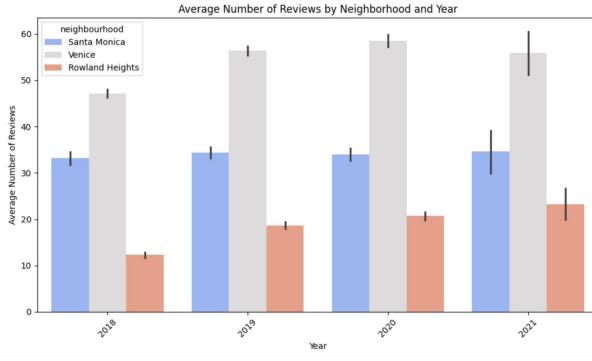
Airbnb in LA: Pre- and Post-COVID Trends and Insights

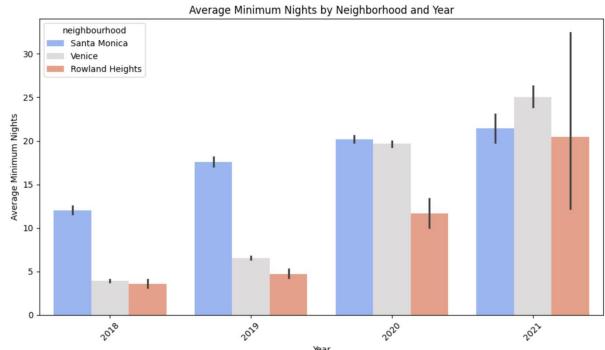
Team HS²

Key Questions We Address:

- 1. How did pricing, number of reviews, minimum nights requirement, and availability of the Airbnb Market in LA changed after COVID-19?
- 2. Which neighborhood group or neighborhood were most affected, and how did room type preferences shift?

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The Impact of COVID-19 on Different Neighborhoods (Comparison of Tourist Cities)

Selected Areas for Comparison (Selected Areas represent different market segments as well-known tourist destinations)

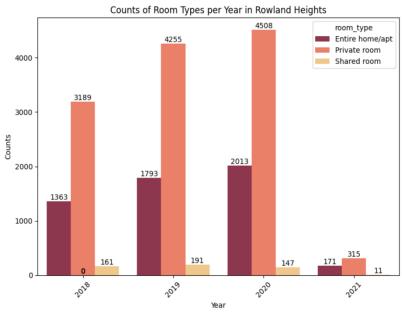
- Venice (City of Los Angeles)
- Santa Monica (Other Cities)
- Rowland Heights (Unincorporated Areas)

Key Findings

- Average Minimum Nights: Inflation and declining demand during the
 pandemic prompted Airbnb hosts to increase minimum stay requirements,
 encouraging longer bookings to offset lower occupancy rates. This trend
 became evident in 2020 and persisted into 2021, with Rowland Heights
 experiencing the most significant increase, suggesting a shift toward midterm rentals.
- Average Number of Reviews: Pre-COVID, Venice led in reviews, followed by Santa Monica and Rowland Heights. In 2020, reviews dropped due to reduced travel demand. While 2021 saw some recovery, slow growth reflects a sluggish Airbnb market, with demand still below pre-pandemic levels.

Conclusion

- Airbnb market faced challenges due to inflation and reduced consumer spending.
- Slow recovery in reviews highlights the long-lasting impact of COVID-19 on short-term rentals.



Rowland Heights—Unincorporated Areas

2018 & 2019

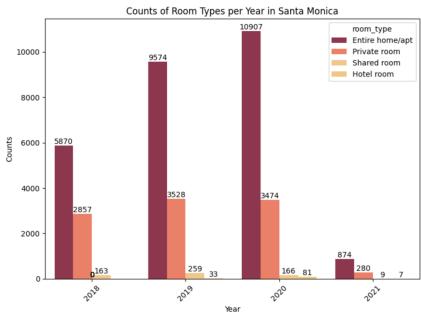
 Entire homes/apartments and private rooms increased, with private rooms being the most common listing type.

2020

 Entire homes/apartments and private rooms grew further, while shared rooms declined (191 to 147).

Potential Reasons:

- Less reliant on tourism; listings often served as alternative housing for students, temporary workers, or locals needing mid-term rentals.
- Health concerns likely drove renters toward private accommodations over shared spaces.



Santa Monica——Other Cities

2018 & 2019

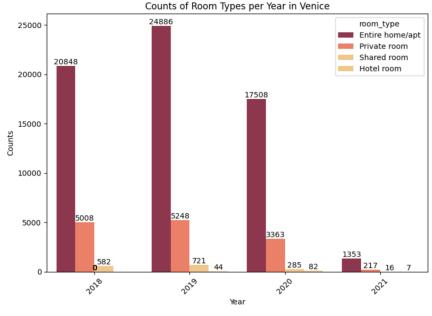
 Entire home/apartment and private room increased; Shared room and hotel room listings remained low

2020

 Entire homes/apartments grew to 10,907 despite the pandemic, while shared rooms declined due to health concerns.

Potential Reasons:

- Remote work increased demand for entire homes as temporary housing.
- Health concerns made entire homes the safest option, reducing demand for shared and hotel rooms as travelers prioritized minimal contact.



Venice——City of Los Angeles

2018 & 2019

 Entire home/apartment listings reached the highest count among all regions; Shared room and private room saw small increase

2020

A massive decline across all categories except hotel

Potential Reasons:

- Venice's reliance on short-term visitors led to a decline in Airbnb tourism as travel bans caused hosts to exit
- High density increased COVID-19 health risks, further deterring short-term stays.
- Increasing restrictions on short-term rentals contributed to the decline in Airbnb activity.

Appendix 1

Dataset Focus

data_focus.head()

| | Year | Month | name | ${\tt neighbourhood_group}$ | neighbourhood | room_type | price | minimum_nights | number_of_reviews | availability_365 |
|--------|------|-------|--|------------------------------|---------------|--------------------|-------|----------------|-------------------|------------------|
| 244104 | 2018 | 3 | Amazing bright elegant condo park front *UPGRA | NaN | Culver City | Entire home/apt | 122 | 7 | 2 | 344.0 |
| 244105 | 2018 | 3 | Family perfect;Pool;Near Studios! | NaN | Burbank | Entire home/apt | 168 | 1 | 1 | 0.0 |
| 244106 | 2018 | 3 | deleted | NaN | Del Rey | Shared room | 85 | 1 | 0 | 365.0 |
| 244107 | 2018 | 3 | Zen Life at the Beach | NaN | Santa Monica | Private room | 155 | 1 | 17 | 313.0 |
| 244108 | 2018 | 3 | *Upscale Professional Home with Beautiful Studio* | NaN | Bellflower | Entire home/apt | 80 | 2 | 0 | 0.0 |

Appendix 2

Neighborhood Selection

| | | count |
|----------------------|----------------------|-------|
| neighbourhood | neighbourhood_group | |
| Hollywood | City of Los Angeles | 78631 |
| Venice | City of Los Angeles | 77713 |
| Long Beach | Other Cities | 53943 |
| Downtown | City of Los Angeles | 49504 |
| Santa Monica | Other Cities | 37022 |
| Hollywood Hills | City of Los Angeles | 31923 |
| Westlake | City of Los Angeles | 27015 |
| West Hollywood | Other Cities | 26824 |
| Mid-Wilshire | City of Los Angeles | 25523 |
| Koreatown | City of Los Angeles | 24752 |
| Silver Lake | City of Los Angeles | 23870 |
| Hollywood Hills West | City of Los Angeles | 22137 |
| East Hollywood | City of Los Angeles | 21563 |
| Sawtelle | City of Los Angeles | 20461 |
| Echo Park | City of Los Angeles | 20393 |
| Beverly Grove | City of Los Angeles | 19804 |
| Beverly Hills | Other Cities | 19694 |
| Westwood | City of Los Angeles | 19621 |
| Pasadena | Other Cities | 18207 |
| Glendale | Other Cities | 17650 |
| Rowland Heights | Unincorporated Areas | 17640 |
| North Hollywood | City of Los Angeles | 17498 |
| Mid-City | City of Los Angeles | 17273 |
| Los Feliz | City of Los Angeles | 16233 |
| Sherman Oaks | City of Los Angeles | 15251 |
| Mar Vista | City of Los Angeles | 14602 |
| Studio City | City of Los Angeles | 14600 |