Chicago Airbnb Case Study

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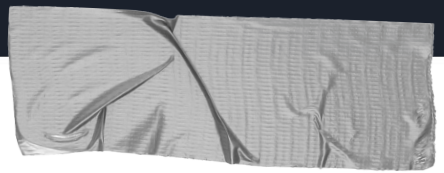
airbnb



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OBJECTIVE

Identify key factors that make an airbnb listing in Chicago, Illinois successful (success is measured here by the percentage booked x cost = annual revenue)

This data will be used to help our client decide what type of home to buy to rent out on Airbnb.

THE DATA

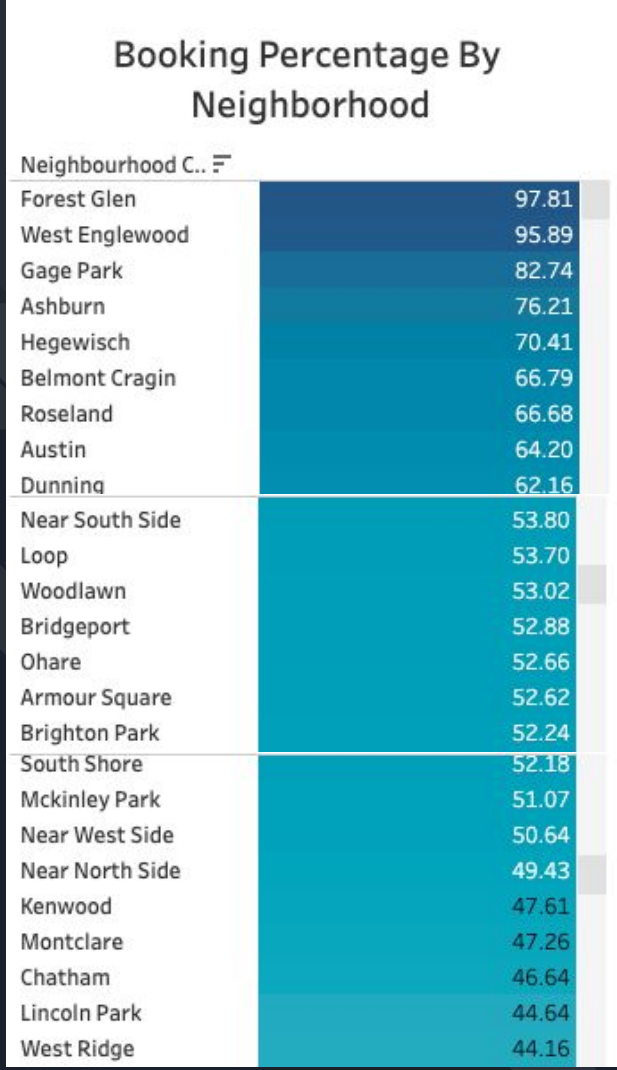
I used Inside Airbnb data specifically from Chicago June 2022-March 2023 . To download this data please use this link. This data is licensed under a Creative Commons Attribution 4.0 International License.

Findings

Neighborhood

Found booking percentage for each neighborhood

```
SELECT
 lis.neighbourhood_cleansed,
 COUNT(*) AS rental_count,
 COUNT(CASE WHEN cal.available = true THEN 1 END) AS true_count,
 (COUNT(CASE WHEN cal.available = true THEN 1 END) / COUNT(*)) * 100 AS
true_percentage
FROM `chicagoairbnb-389814.airbnb.lis`AS lis
JOIN `chicagoairbnb-389814.airbnb.cal` AS cal
 ON lis.id = cal.listing_id
GROUP BY lis.neighbourhood_cleansed
ORDER BY true_percentage DESC
```



Number of Bedrooms

Found number of listings by bedroom. Most common type was a 1 bedroom

```
SELECT COUNT(*)
FROM `chicagoairbnb-389814.airbnb.lis`
GROUP BY bedrooms
```

Number of Listings by Bedroom

Bedrooms	
1	2,746
2	1,558
3	793
4	270
5	80
6	34
7	17
8	7
9	3
10	2
11	1
12	3

Price

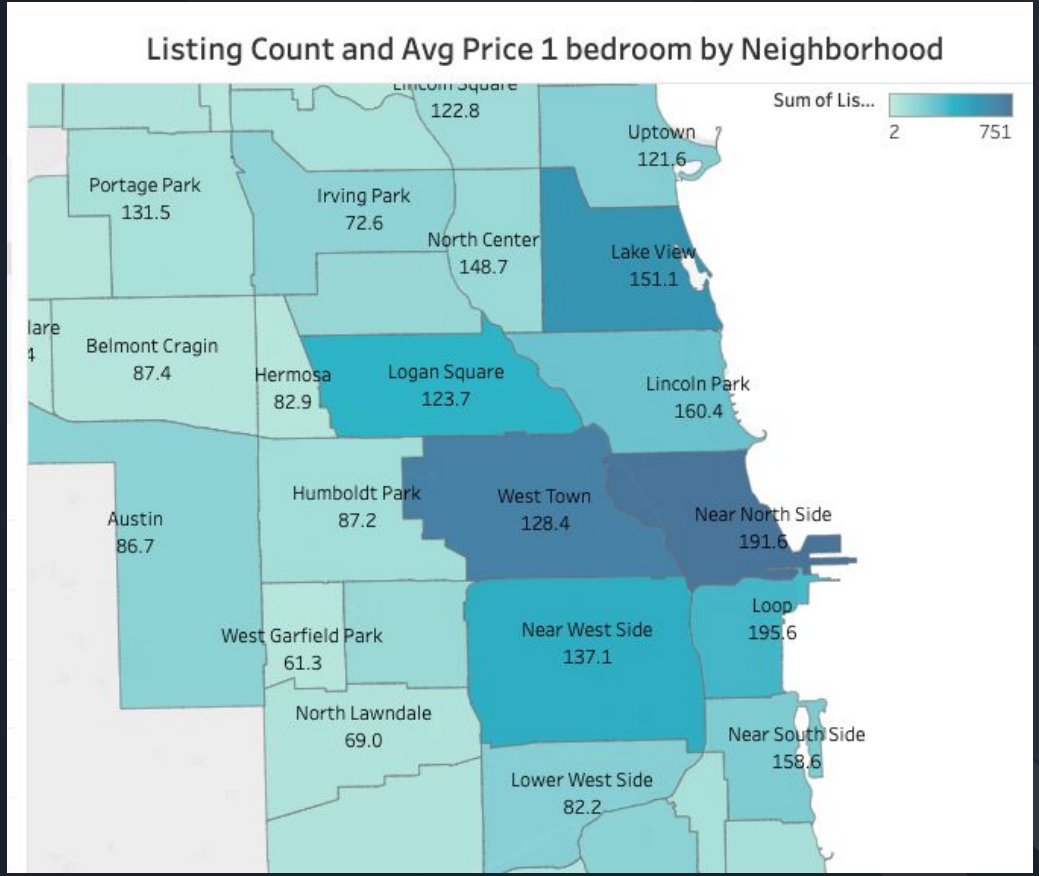
```
SELECT
 latitude, longitude, neighbourhood_cleansed,
 AVG(price) AS average_price
FROM `chicagoairbnb-389814.airbnb.lis`
WHERE bedrooms = 1 OR bedrooms =2
GROUP BY neighbourhood_cleansed, latitude, longitude
ORDER BY average_price DESC
```

Also found that Avondale, Hyde Park, Near North Side, West Town, and Austin were charging the most for 1 bedrooms

Listing Count

Found which neighborhoods had most listings

```
SELECT
 lis.neighbourhood_cleansed,
 COUNT(*) AS listing_count
FROM `chicagoairbnb-389814.airbnb.lis` AS lis
GROUP BY lis.neighbourhood_cleansed
ORDER BY listing_count DESC
```



Conclusion

-1 bedrooms are a good investment because there is a high need

-Instead of purchasing an Airbnb in the hot spots like Near North Side and West Town, picking a nearby neighborhood with a higher booking percentage would be a better investment and less competition.

For example, Near North Side is charging $191.60 on average and is booked 49.43% of the year. That would be $34,568 revenue annually. Whereas Loop is charging $195.60 on average and is booked 53.70% of the year. That would be $38,338 revenue annually.

Link to Dashboard

Next Steps

To continue this analysis, I would explore:

-Entire place vs. bedroom rental
-Offering extended stays vs. short term stays
-Looking deeper into images and the way hosts present themselves on their profile
-See which amenities users seem to prioritize
-How many units hosts have and if that correlates to them being a higher/lower rated host
-Dataset from precovid that includes entire year scope