

Objective



WHERE

Which location is more profitable in the neighborhood of New York



WHEN

Which time of the year should you list to gain more bookings



HOW

How should you list? What to include in the description and what not to include?

Improving the Revenues of the Airbnb Host

Outline

Overall Exploratory
Analysis

Sentiment Analysis

Recommendations

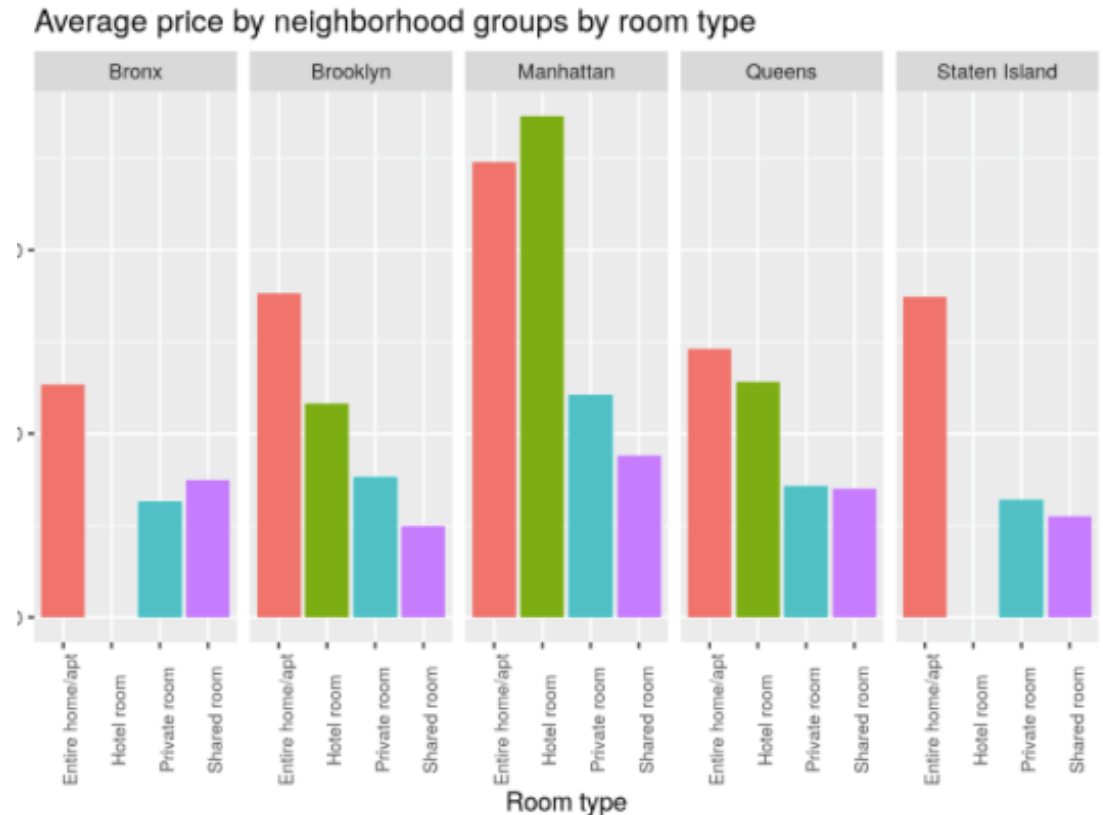
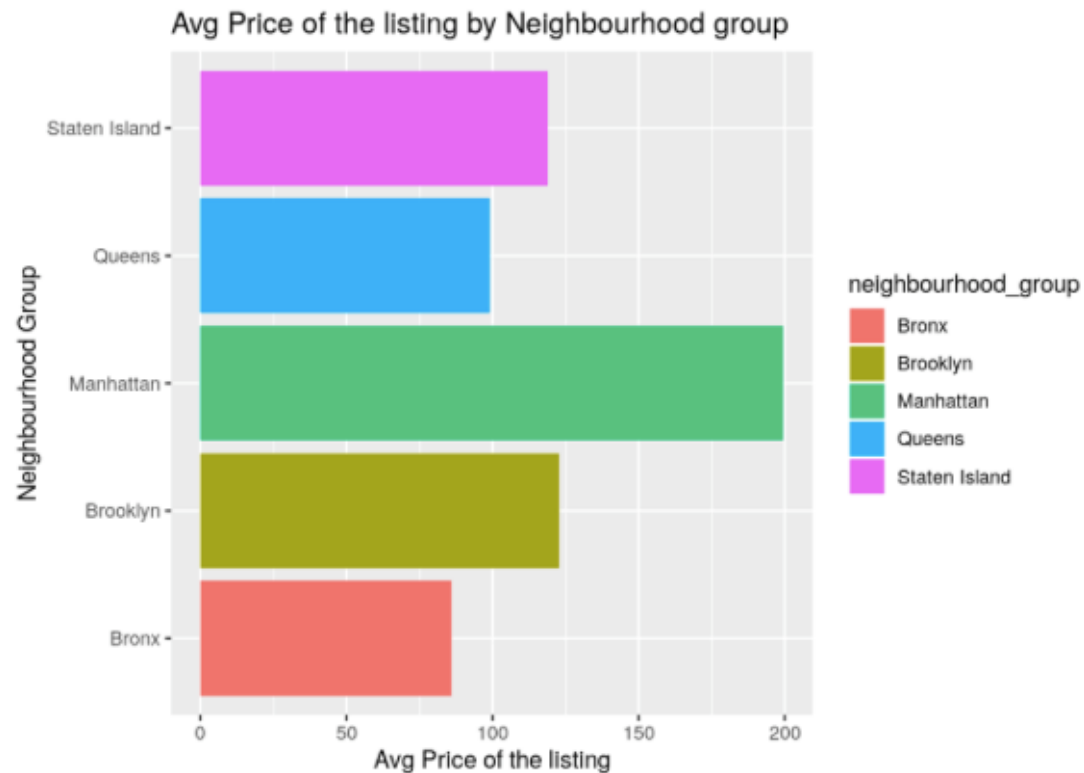


Pricing Anlaysis

Quantitative Analysis
of
Customer Satisfaction

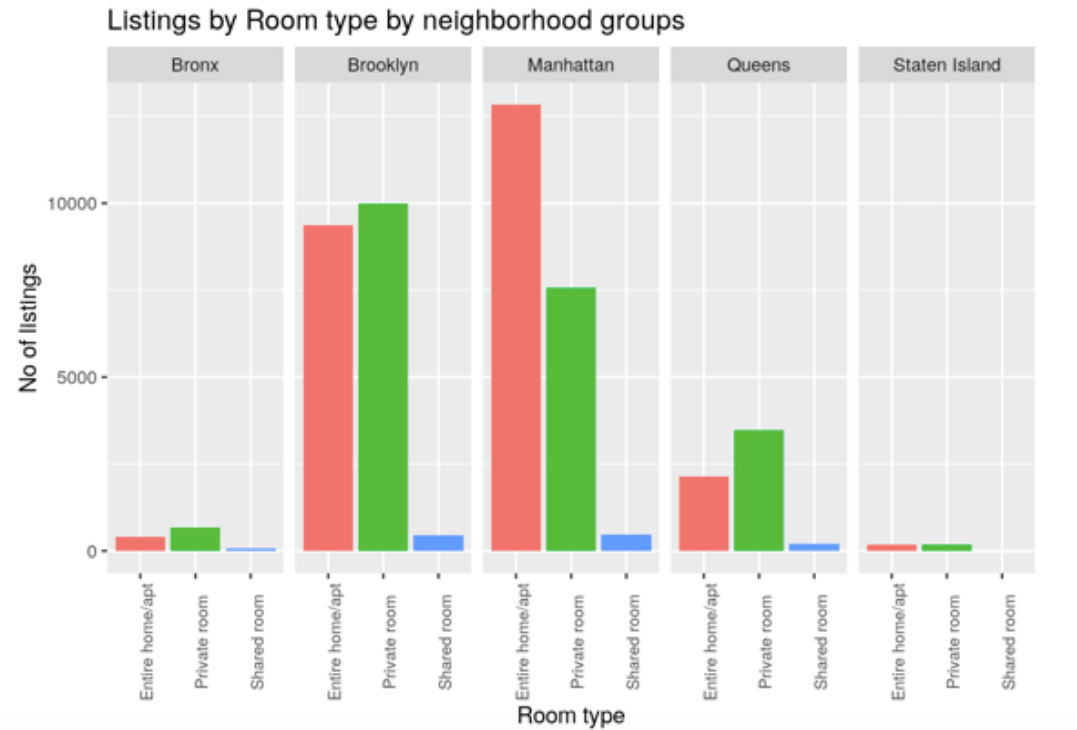
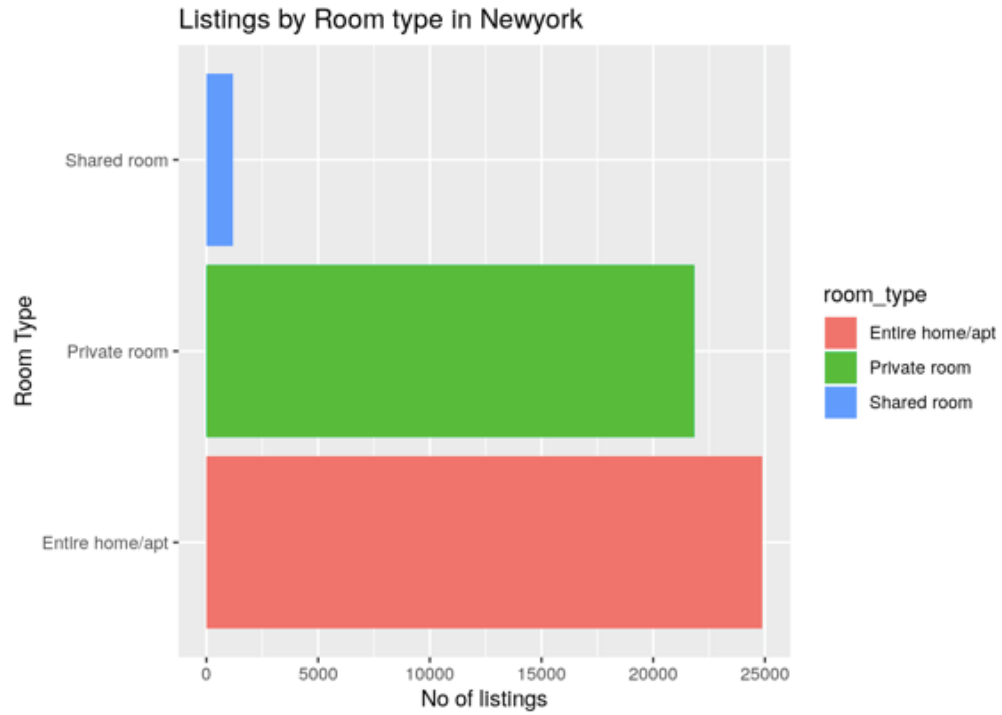
Deep Dive

Manhattan tops average pricing among neighborhood groups across different room types; Hotel rooms followed by entire home or apartment tops the pricing chart



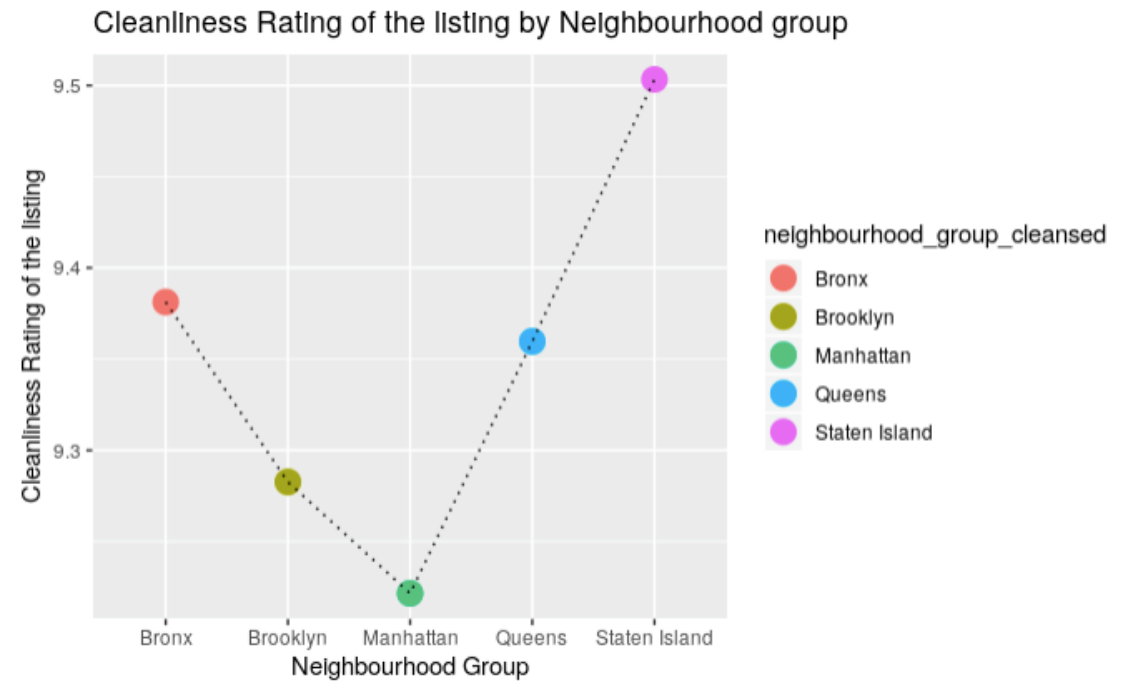
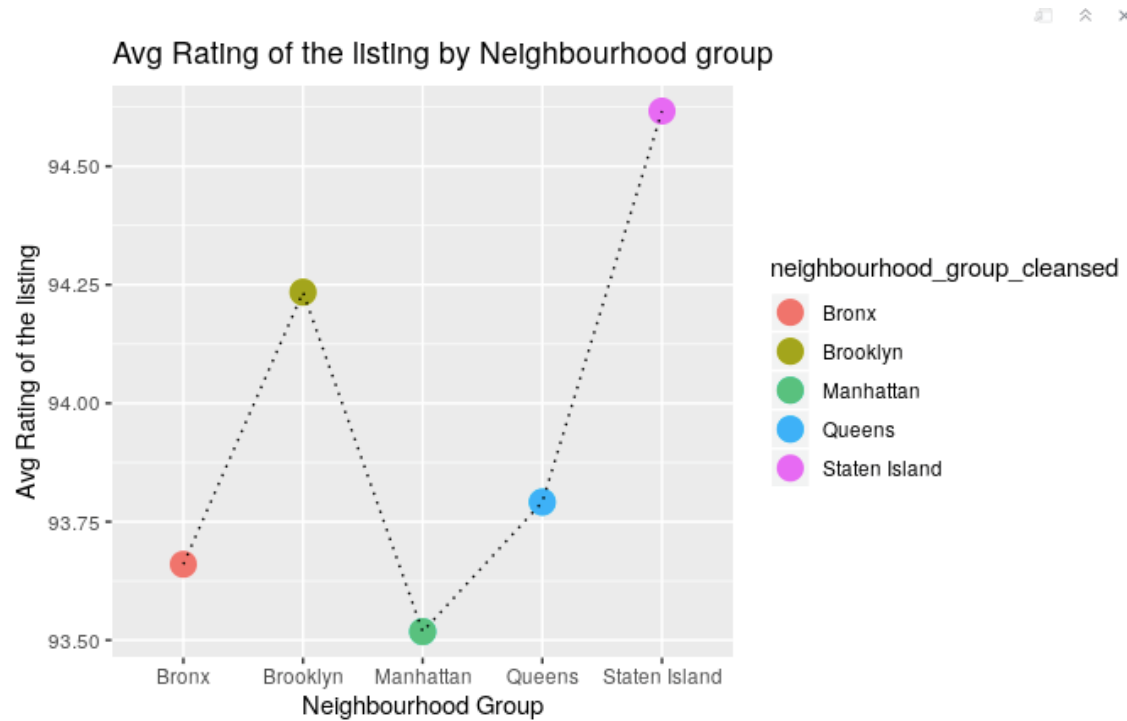
Deep Dive

Manhattan has more number of listings and that too entire houses/apartments are listed



Deep Dive

Staten Island stands out in terms of both Average rating score and cleanliness rating



Where

Top 3 Queens Neighborhoods

High Average Price Private Rooms

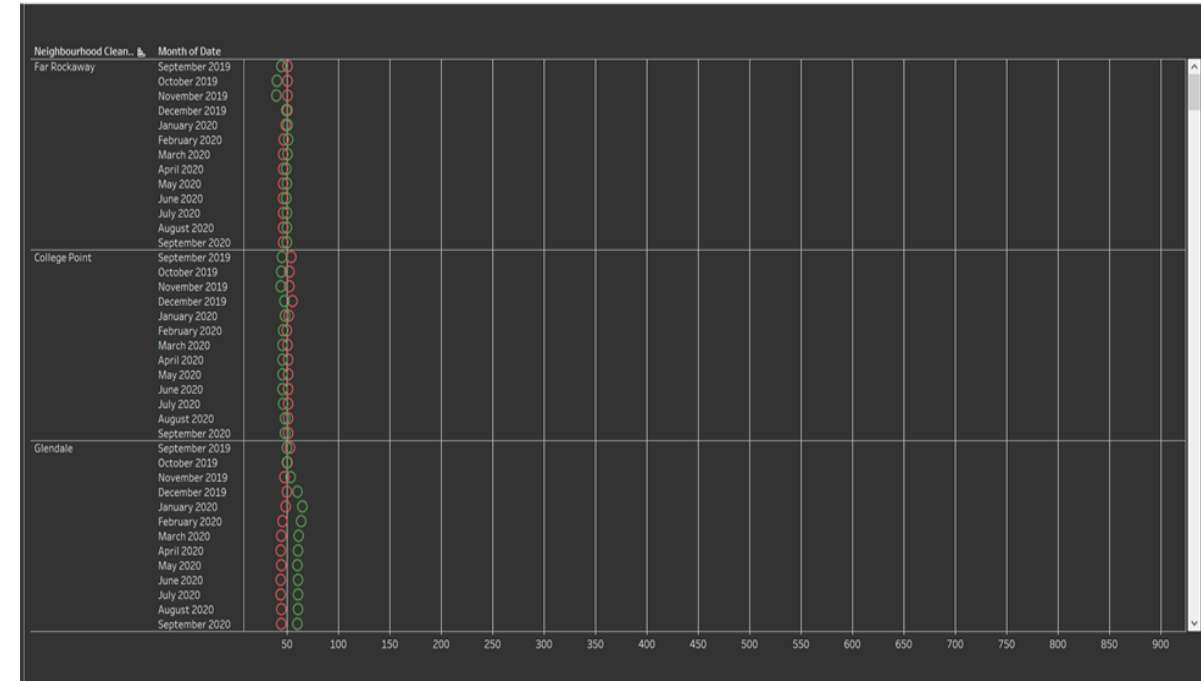
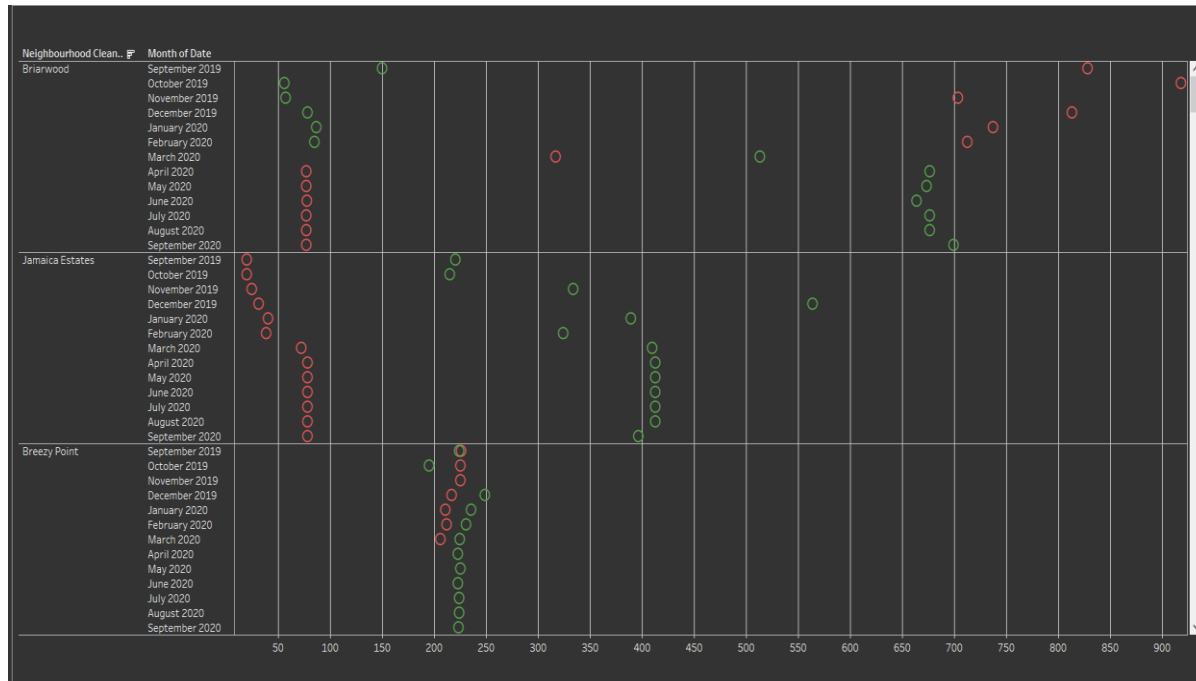


- Briarwood (\$680 in summer and \$100 in winter)
- Jamaica Estates (\$400)
- Breezy Point (\$225)

Low Average Price Private Rooms



- Far Rockaway (\$50)
- College Point (\$50)
- Glendale (\$50)



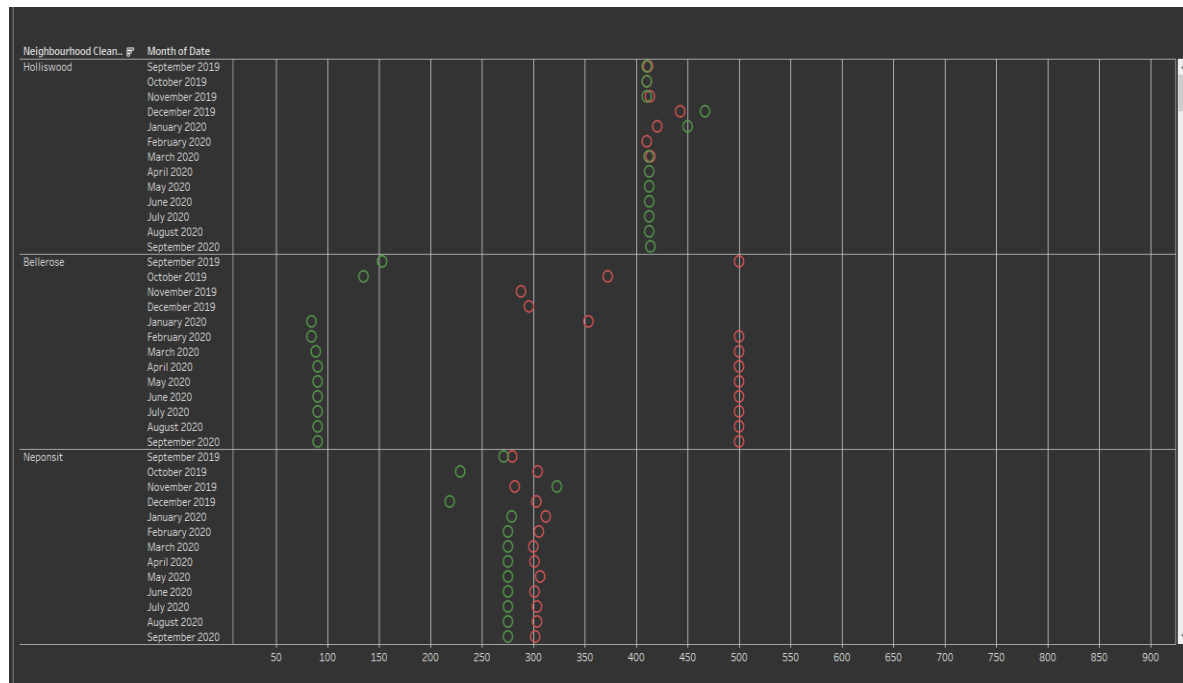
Where

Top 3 Queens Neighborhoods

High Average Price Entire Place



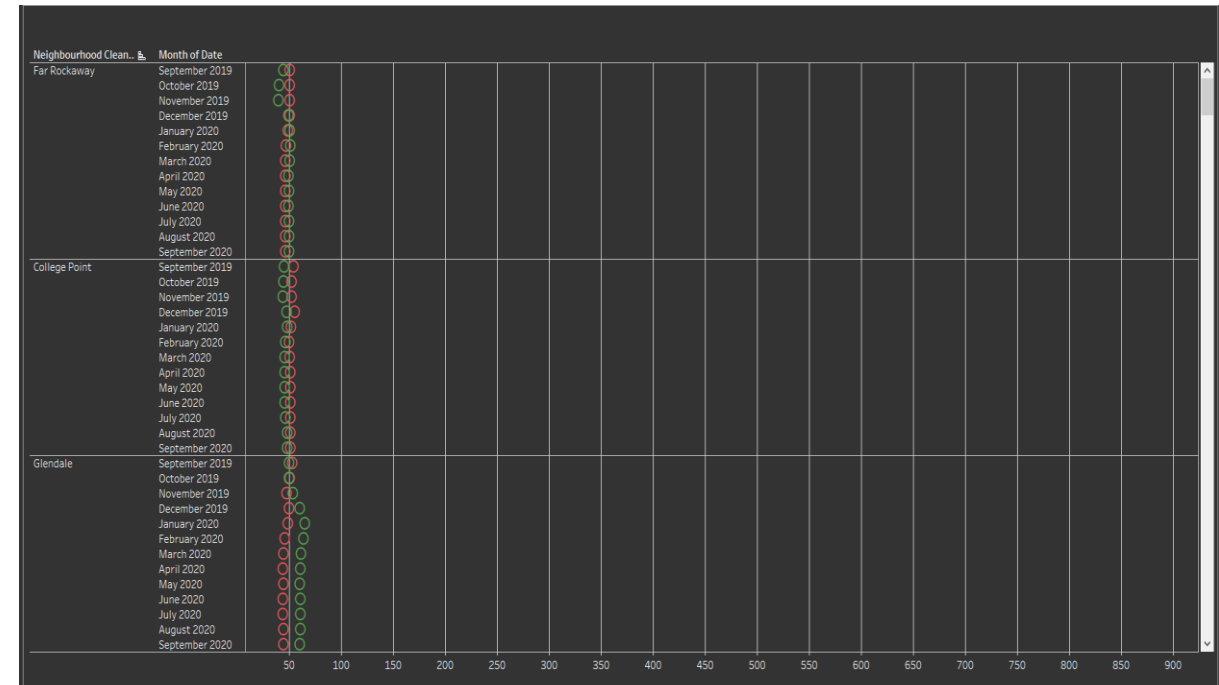
- Holliswood (\$410)
- Bellerose (\$100, \$500 high non-booked prices)
- Neponsit (\$280)



Low Average Price Entire Place



- Far Rockaway (\$50)
- College Point (\$50)
- Glendale (\$50)



Where

Top 3 Queens Neighborhoods

High Average Price Hotel Room

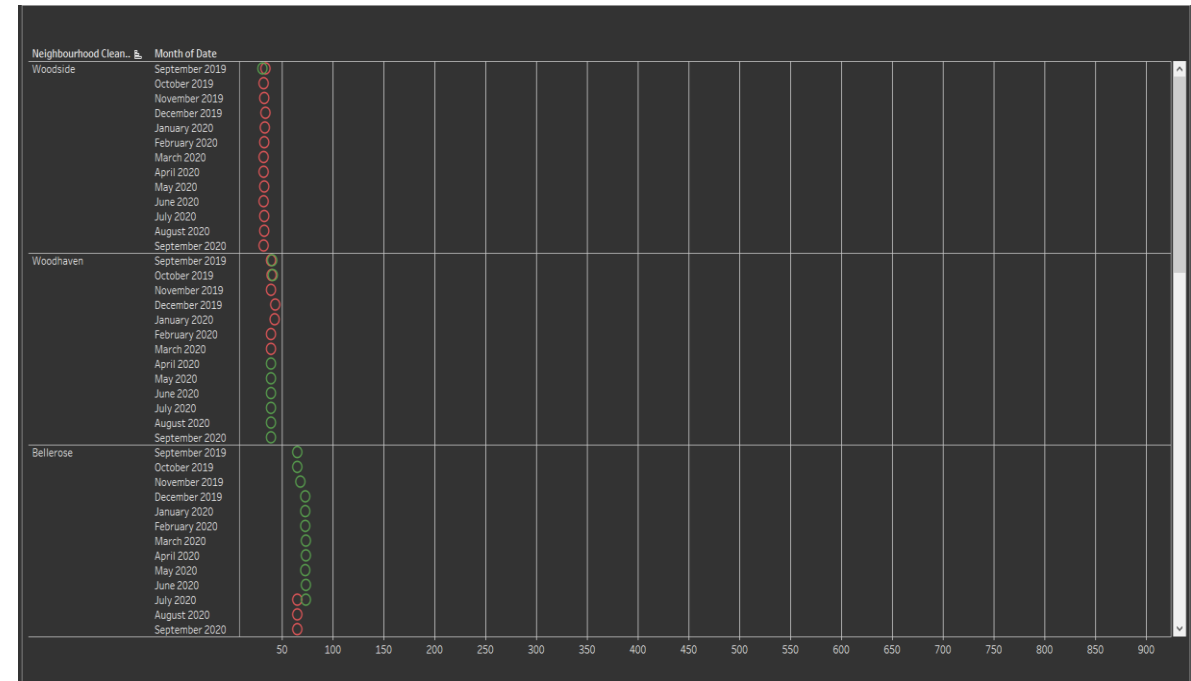
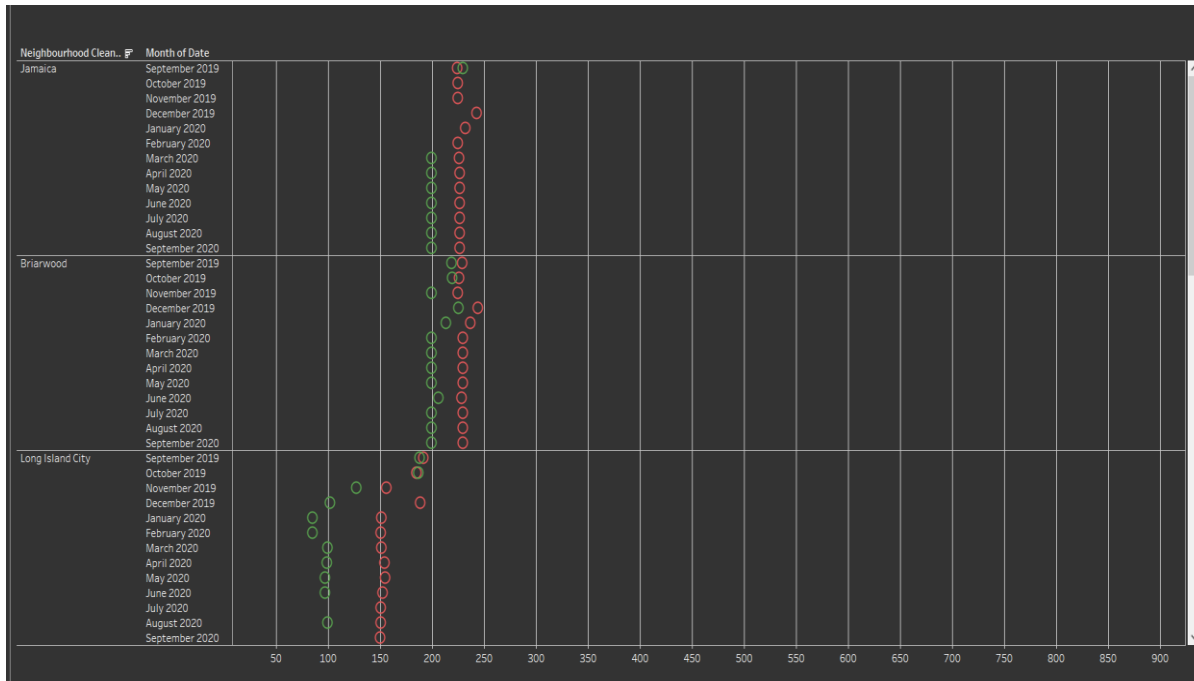


- Jamaica (\$200)
- Briarwood (\$200)
- Long Island City (\$100)

Low Average Price Hotel Room



- Woodside (\$30)
- Woodhaven (\$50)
- Bellerose (\$70)



Where

Top 3 Queens Neighborhoods

High Average Price Shared Rooms

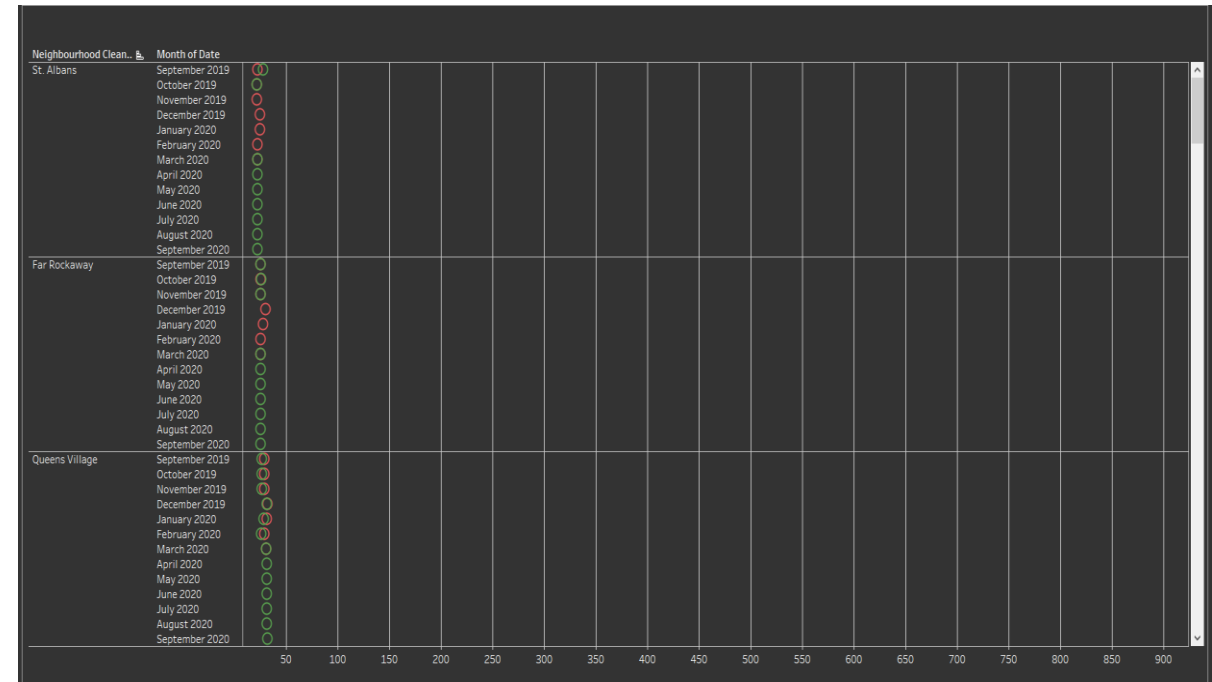
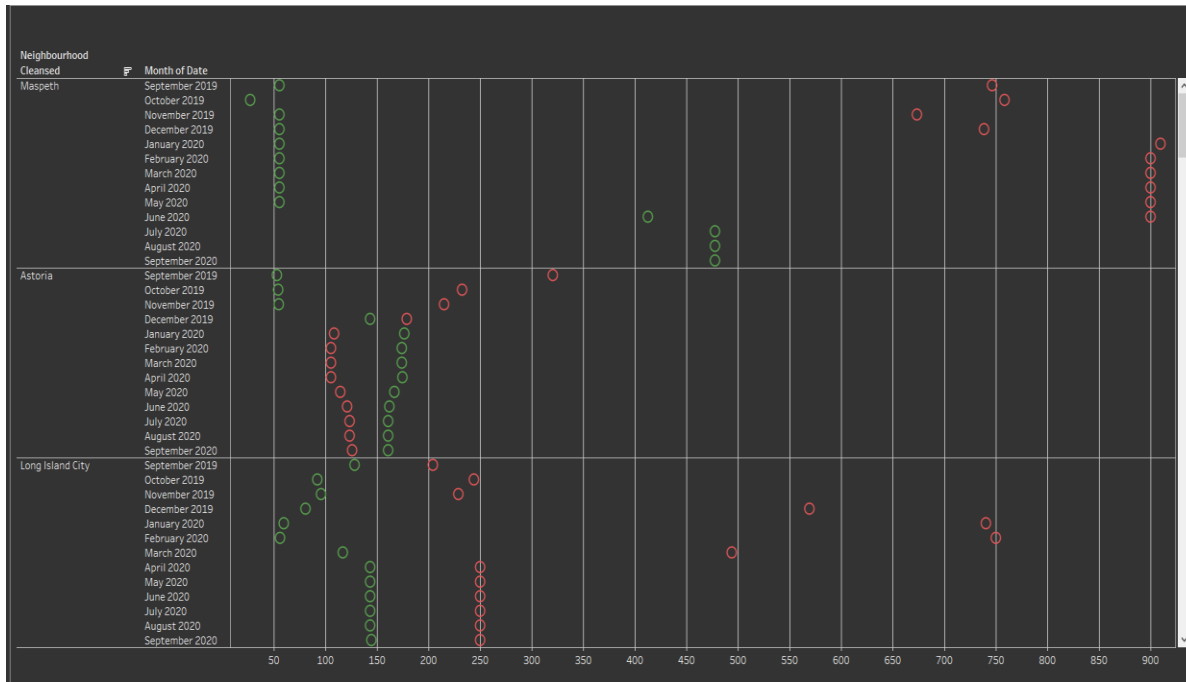


- Maspeth (\$55, \$900 high non-booked prices)
- Astoria (\$170)
- Long Island City (\$150)

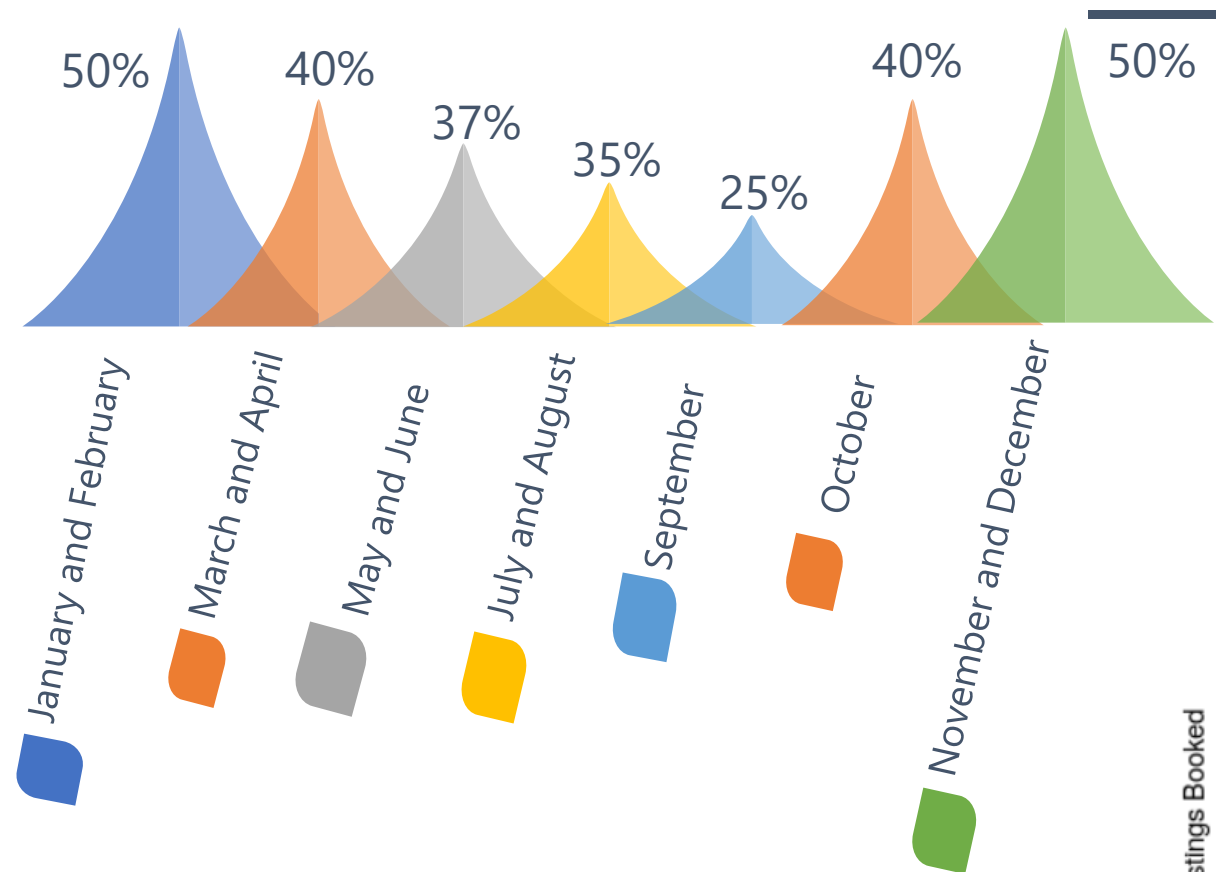
Low Average Price Shared Rooms



- St Albans (\$22)
- Far Rockaway (\$25)
- Queens Village (\$30)



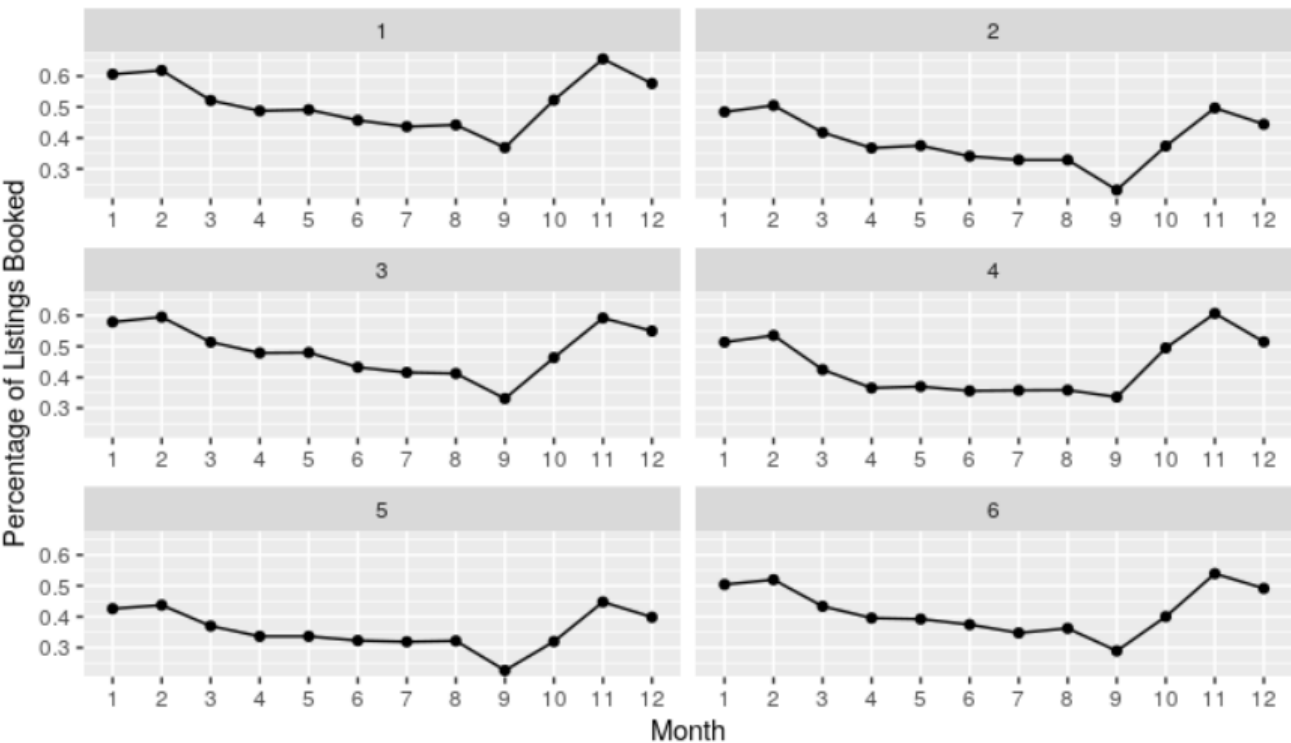
When Percentage of Listings Per Month



Queens Neighborhood in Group 6 and Group 1

# A tibble: 7 x 3			# A tibble: 8 x 3		
Neighbourhood	Avg_mean	group	Neighbourhood	Avg_mean	group
<chr>	<dbl>	<int>	<chr>	<dbl>	<int>
1 Briarwood	406.	6	1 Jackson Heights	74.8	1
2 Holliswood	269.	6	2 South Ozone Park	72.8	1
3 Bay Terrace	175.	6	3 College Point	69.6	1
4 Jamaica Estates	158.	6	4 Bellerose	66.7	1
5 Howard Beach	136.	6	5 Bushwick	64.1	1
6 Kew Gardens Hills	132.	6	6 Woodhaven	63.8	1
7 Forest Hills	131.	6	7 Rosedale	62.5	1
			8 Douglaston	60.3	1

Percentage of Listings Per Queens Neighbourhood



Model

Pricing Model

Linear Regression:

Log-price = **4.650** - **0.185**(room_type|Hotel) - **0.738**(room_type|Private) - **1.116**(room_type|Shared) - **0.0117**(reviews per month) + **0.000496**(availability) - **0.0004213**(number of reviews) - **0.00322**(minimum nights) + **0.0967**(group2) + **0.0722**(group3) + **0.171**(group4) + **0.258**(group5) + **0.184**(group6)

Call:

```
lm(formula = log_price ~ room_type + reviews_per_month + availability_365 +  
    number_of_reviews + minimum_nights.x + group, data = group_airbnb)
```

Coefficients:

(Intercept)	room_typeHotel room	room_typePrivate room	room_typeShared room
4.6502369	-0.1846444	-0.7380736	-1.1161215
reviews_per_month	availability_365	number_of_reviews	minimum_nights.x
-0.0117231	0.0004962	-0.0004213	-0.0032282
group2	group3	group4	group5
0.0966762	0.0722159	0.1711891	0.2579731
group6			
0.1836875			

[1] "The R-squared is 0.5134"

* Relative to Entire Place Room Type and Group 1



Revenue Gained in Group 1 and Group 6

<u>Features</u>	<u>group 1</u>	<u>group 6</u>
1 room_type	Private room	Private room
2 reviews_per_month	1	1
3 availability_365	365	365
4 number_of_reviews	20	20
5 minimum_nights.x	2	2
6 pred.price	58.36	70.13
7 pred.rev	56.61	68.03

*Host earns 97% of listing price