Key Features of Airbnb Listings in NYC

What Makes an Airbnb More Popular?

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Preview

Dataset explanation

Limitation of Analysis

- Hosts
- Airbnb
- Guests

Data	Analysis	Limitation	Summary	Recommendation

- Location
- Room Type
- Minimum Nights
- Pricing

Summarise Findings

Dataset Overview
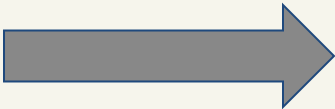
Kaggle → **15 Variables** → **2000+ Rows**
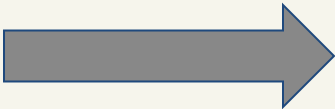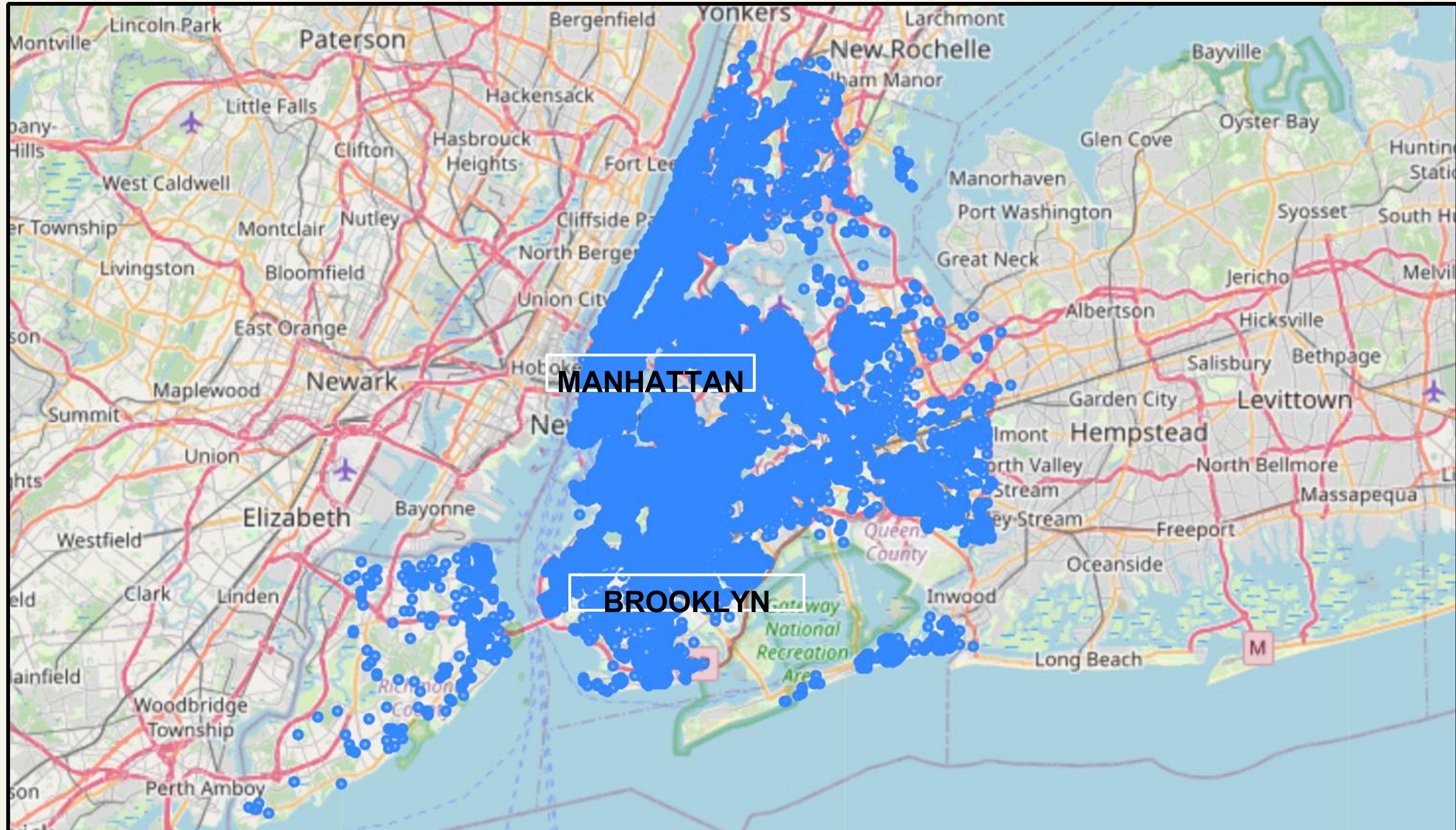
Column	Description
id	Airbnb's unique identifier for the listing
name	Name of the listing
host_id	Airbnb host's unique identifier
host_name	Name of the host
neighbourhood_group	The neighbourhood group as geocoded using the latitude and longitude against neighborhoods as defined by open or public digital shapefiles.
neighbourhood	The neighbourhood as geocoded using the latitude and longitude against neighborhoods as defined by open or public digital shapefiles.
latitude	Latitude in the World Geodetic System (WGS84) projection
longitude	Longitude in the World Geodetic System (WGS84) projection
room_type	Type of room (e.g., entire home, private room, shared room)

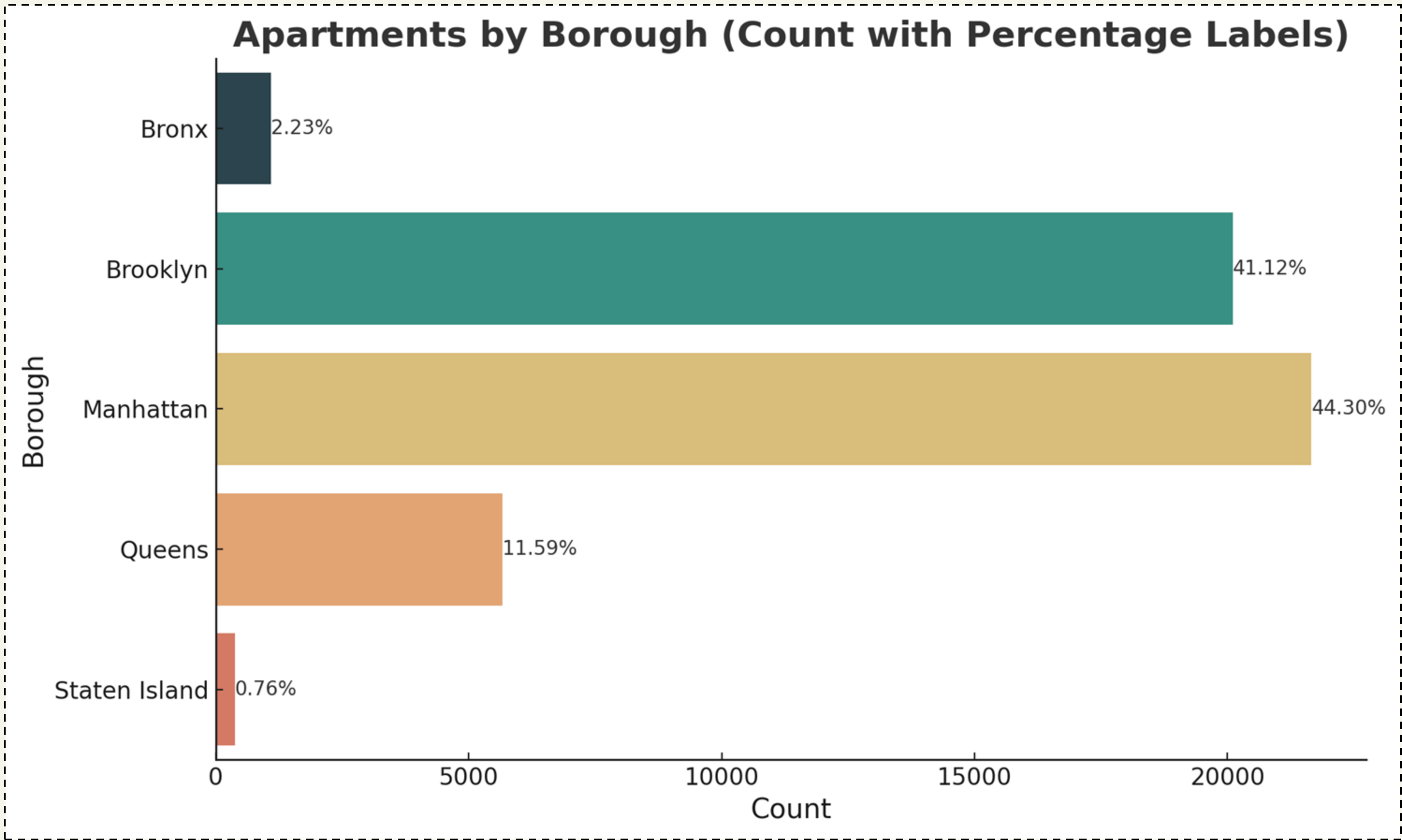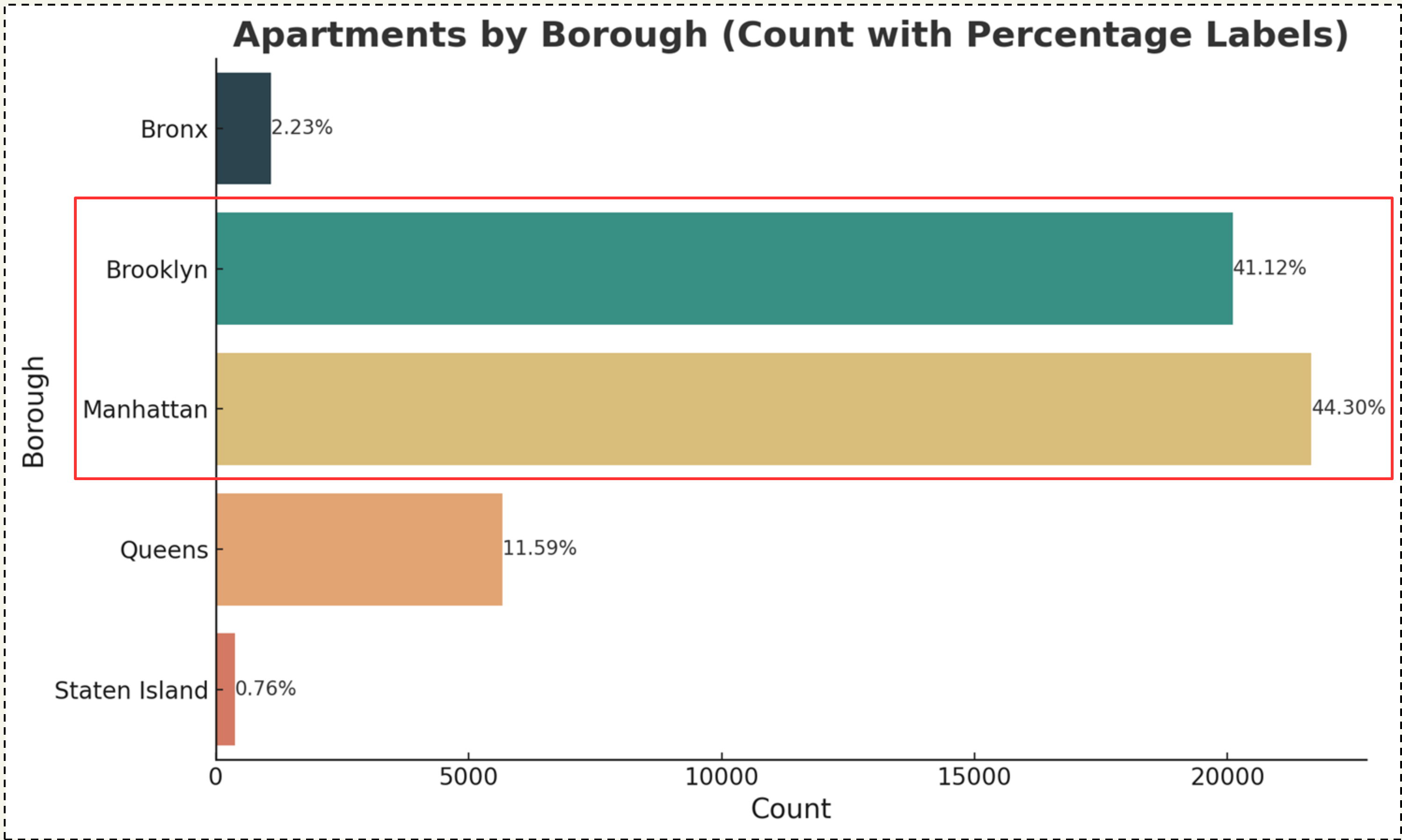|	
price	Daily price in local currency (Note: $ sign may be used regardless of locale)
minimum_nights	Minimum number of nights required for the listing (calendar rules may vary)
number_of_reviews	Total number of reviews the listing has received
last_review	Date of the last/newest review
calculated_host_listings_count	Number of listings the host has in the current scrape, in the city/region geography
availability_365	Availability of the listing x days in the future as determined by the calendar. Note: A listing may be available because it has been booked by a guest or blocked by the host.
number_of_reviews_ltm	Number of reviews the listing has received in the last 12 months

Location

Analysis

Listings Centered in South Central Manhattan and Brooklyn
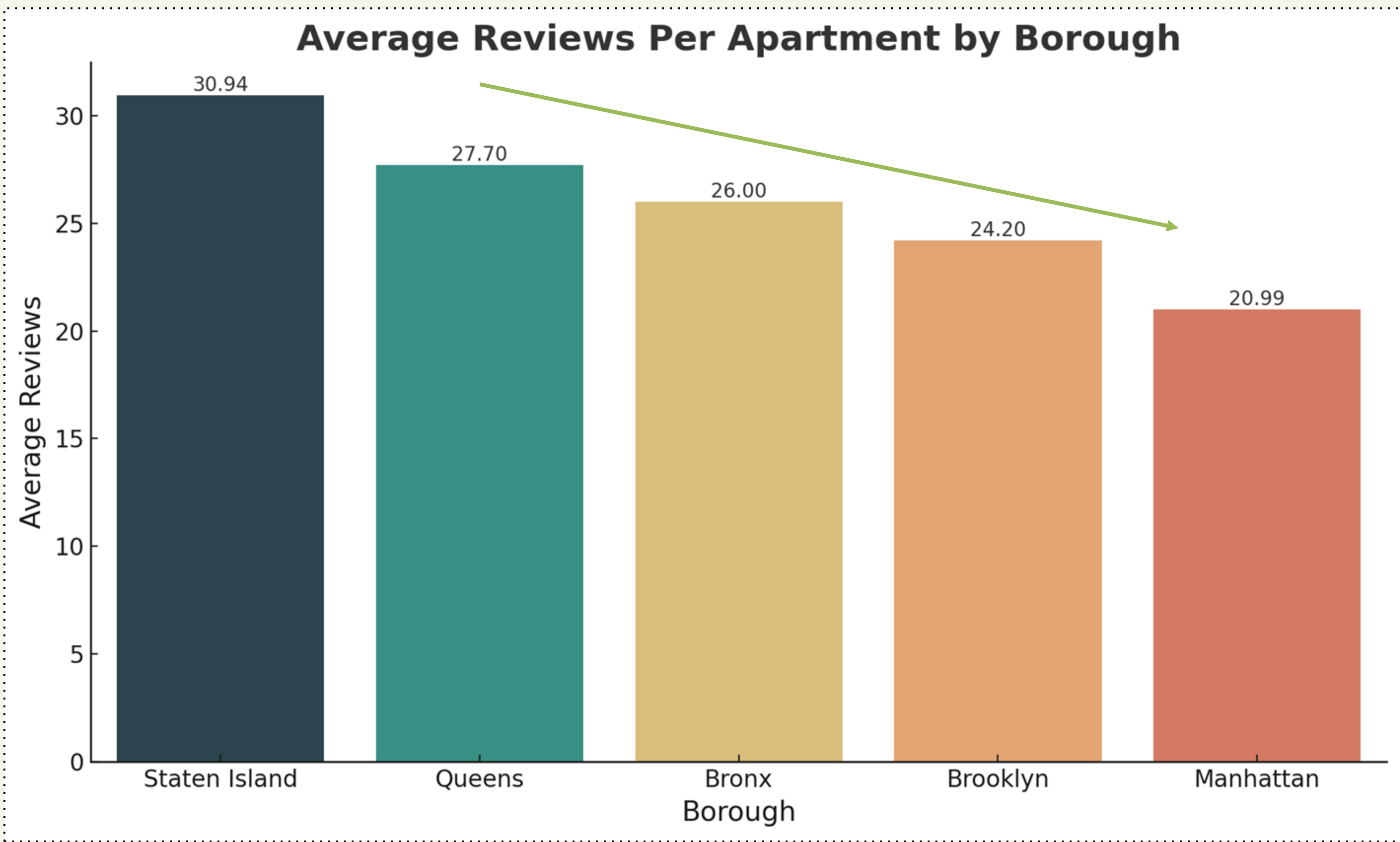
Brooklyn and Manhattan Account for Nearly **90%** of Total Listings

Apartments by Borough (Count with Percentage Labels)

Bronx — 2.23%
Brooklyn — 41.12%
Manhattan — 44.30%
Queens — 11.59%
Staten Island — 0.76%

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Count

Staten Island Leads on Average Reviews by Nearly **20%** Across Boroughs

Average Reviews Per Apartment by Borough

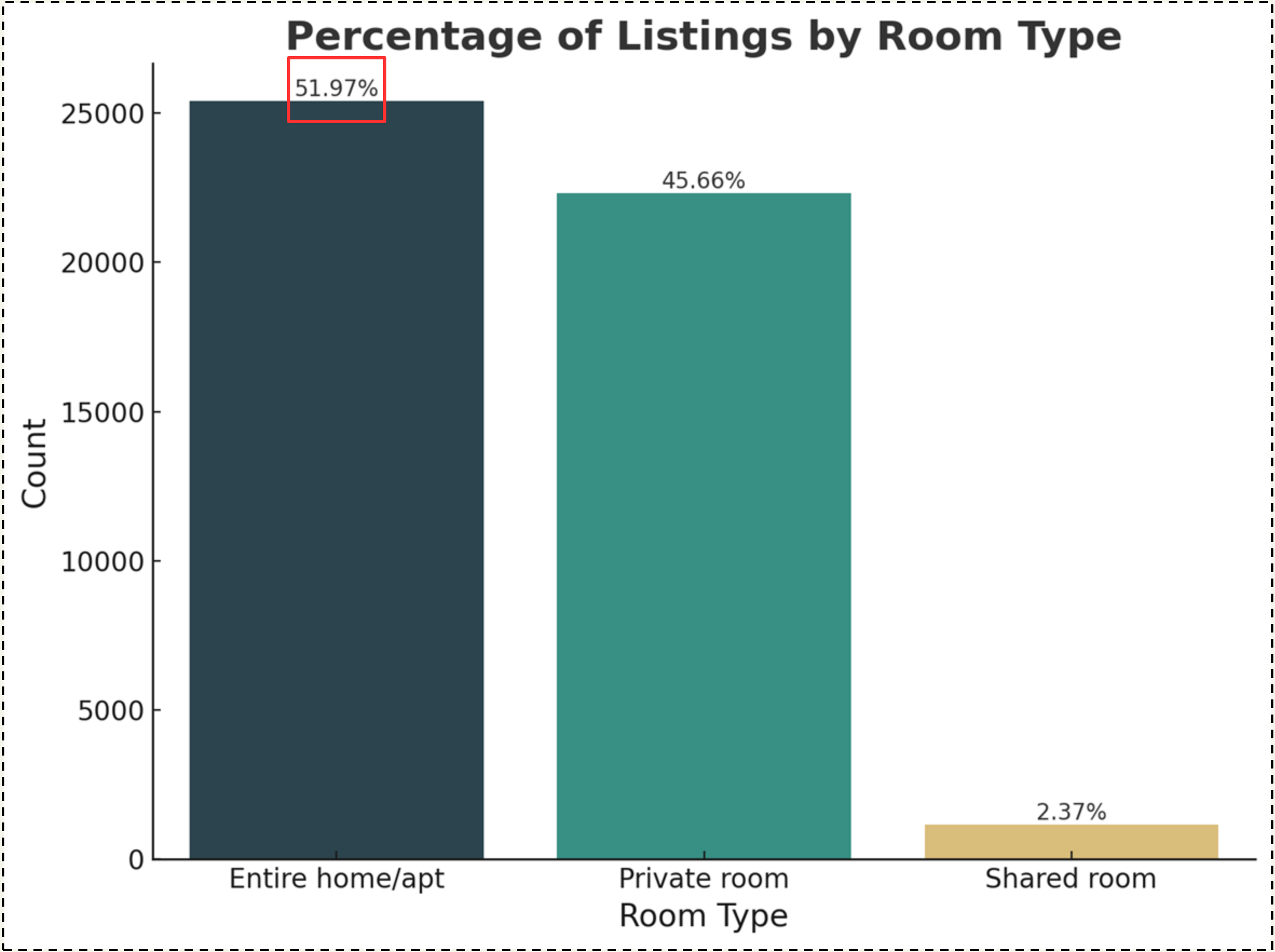# Silver Lake Garnered over **30%** of All Reviews in Staten Island

Top 5 Neighborhoods by Average Review Count in Staten Island
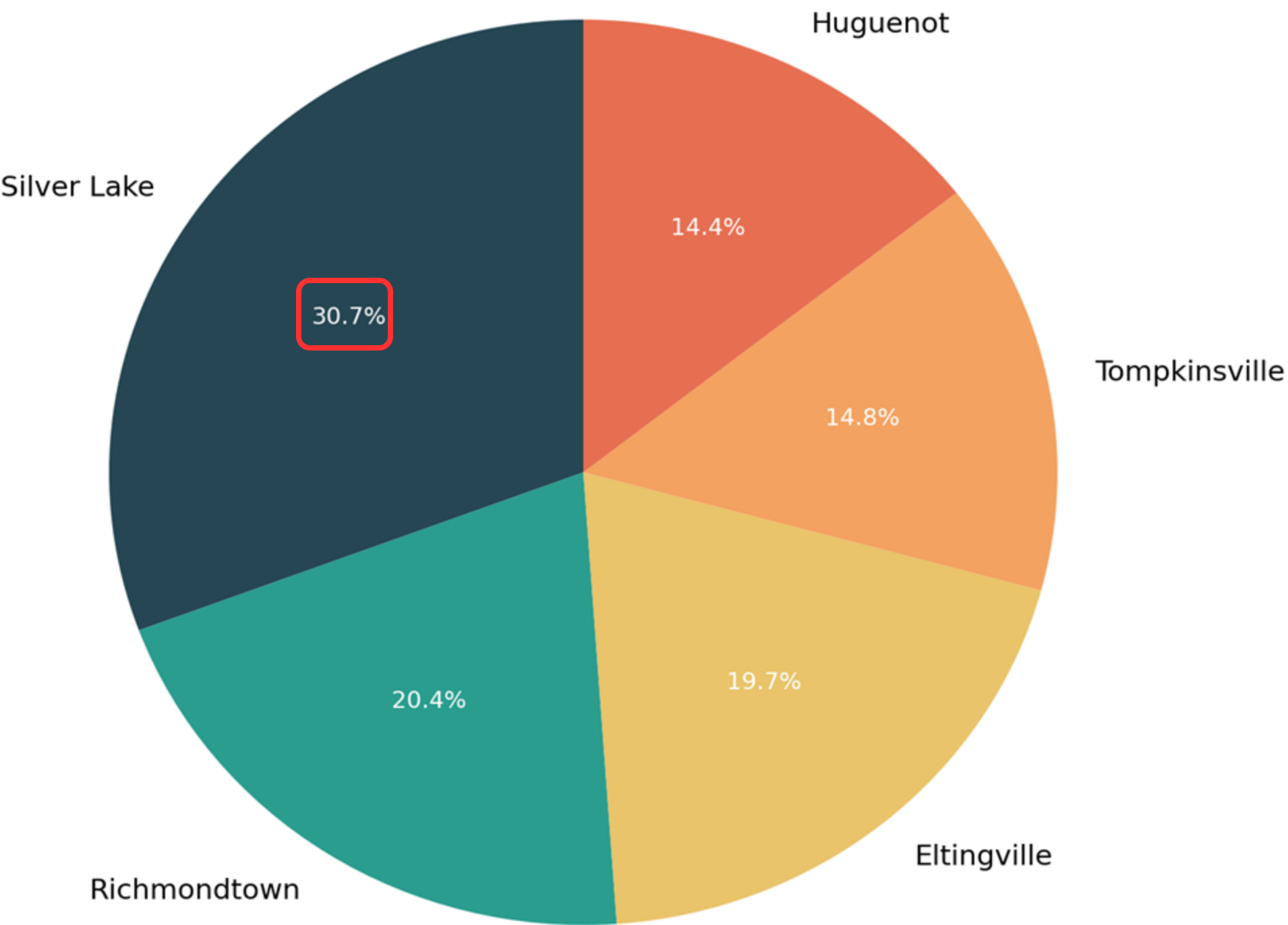
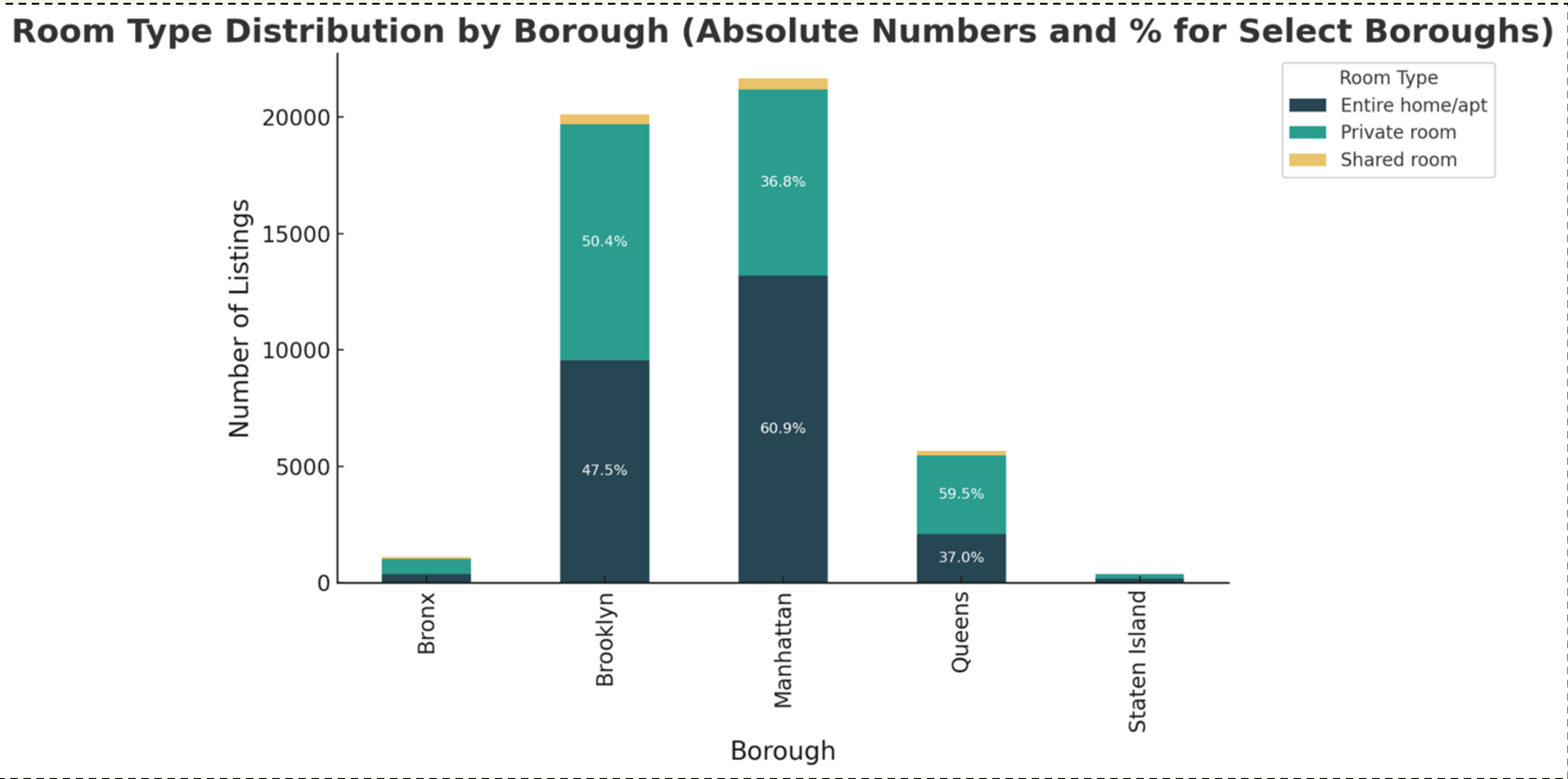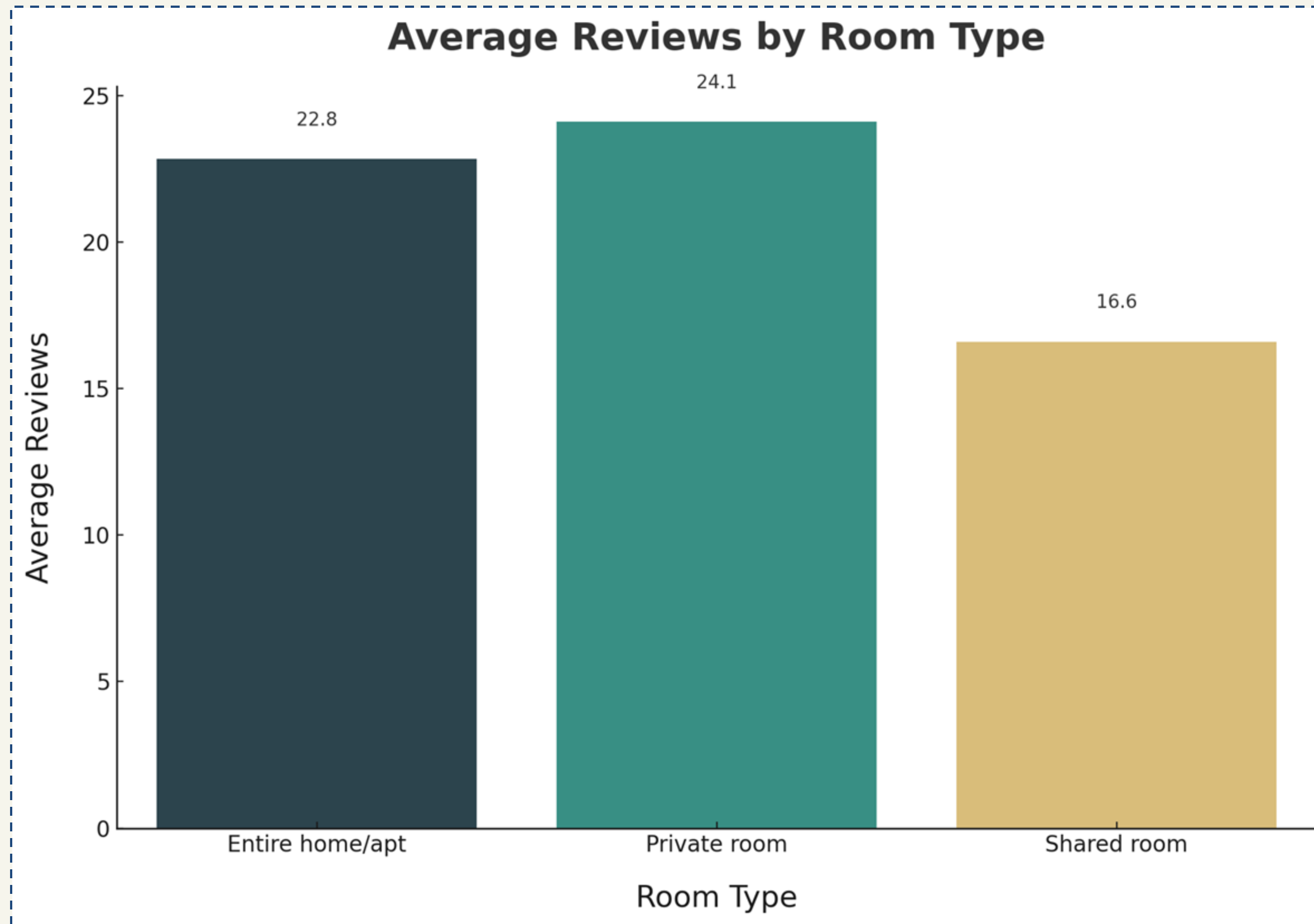# Room Type

Analysis

Entire Homes/Apartments Account for Majority Share at **51.97%**

Percentage of Listings by Room Type

Private and Entire Room Types are Prevalent Across **5** Boroughs

Room Type Distribution by Borough (Absolute Numbers and % for Select Boroughs)

Room Type:
- Entire home/apt
- Private room
- Shared room

Brooklyn: 50.4% (Private room), 47.5% (Entire home/apt)
Manhattan: 36.8% (Private room), 60.9% (Entire home/apt)
Queens: 59.5% (Private room), 37.0% (Entire home/apt)

Boroughs: Bronx, Brooklyn, Manhattan, Queens, Staten Island

The Average Reviews of Private Room Type is Nearly **25**

Silver Lake Neighborhood Has Nearly Equal Distribution

Room Distribution in Top 5 Neighbourhoods of Staten Island
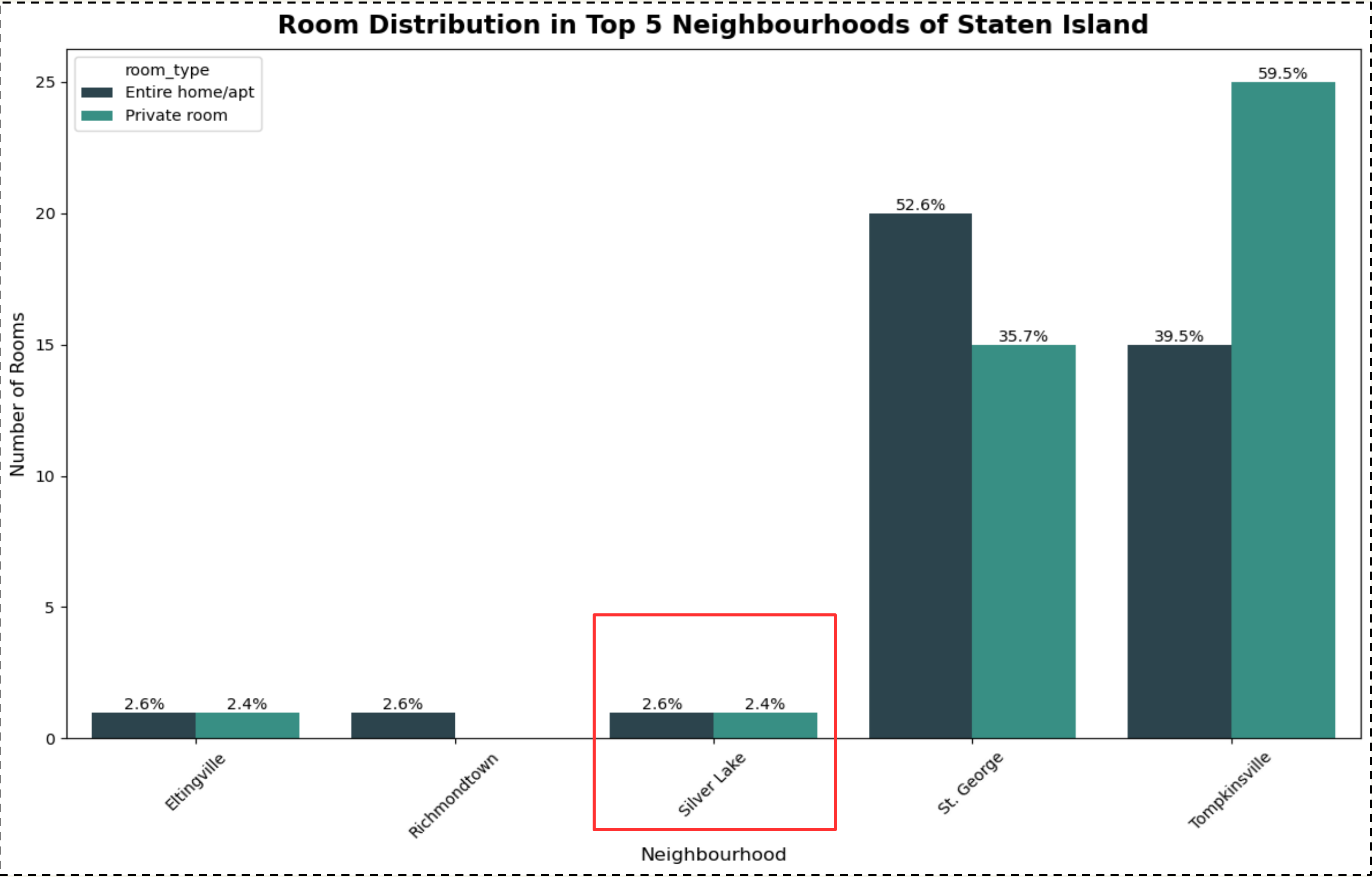
Pricing

Analysis

Manhattan Listings Command Close to **$200** Average Price

Average Price by Borough

$196.88

$124.38

$114.81

$99.52

$87.50

29%

Average Price ($)

Bronx   Brooklyn   Manhattan   Queens   Staten Island
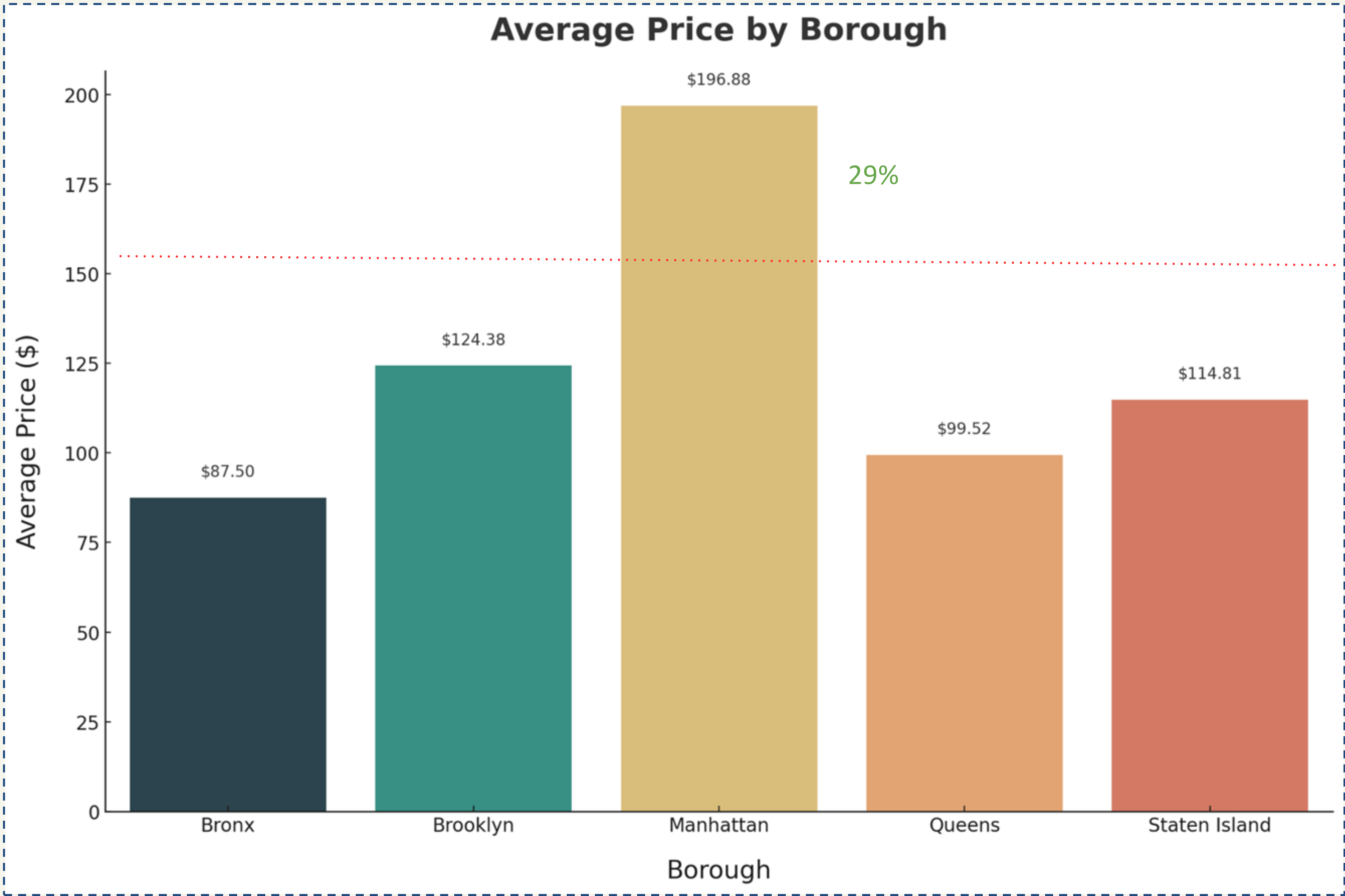
Borough

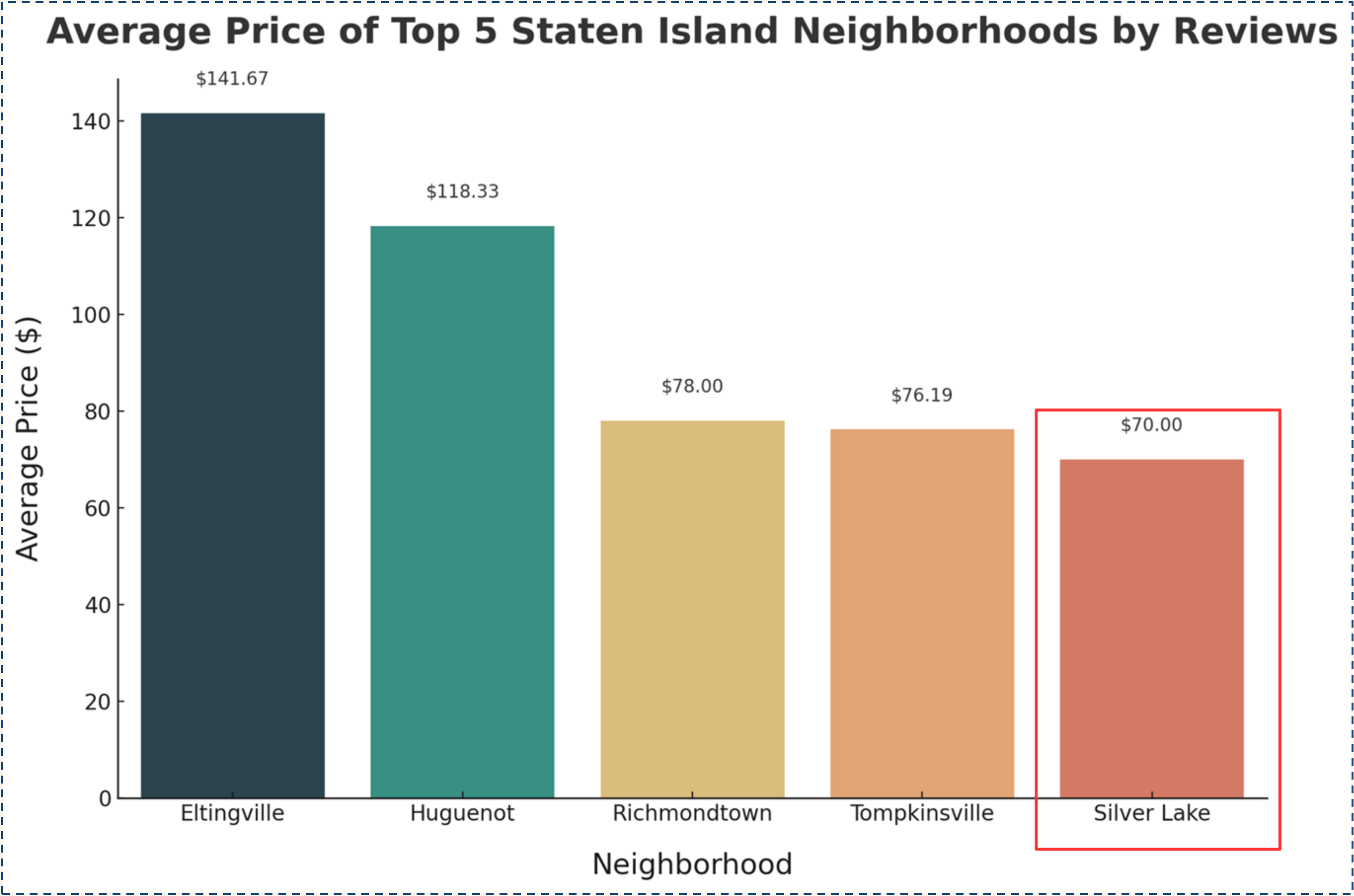# Mid-range Priced Apartments **($0–$300)** Dominate Listings
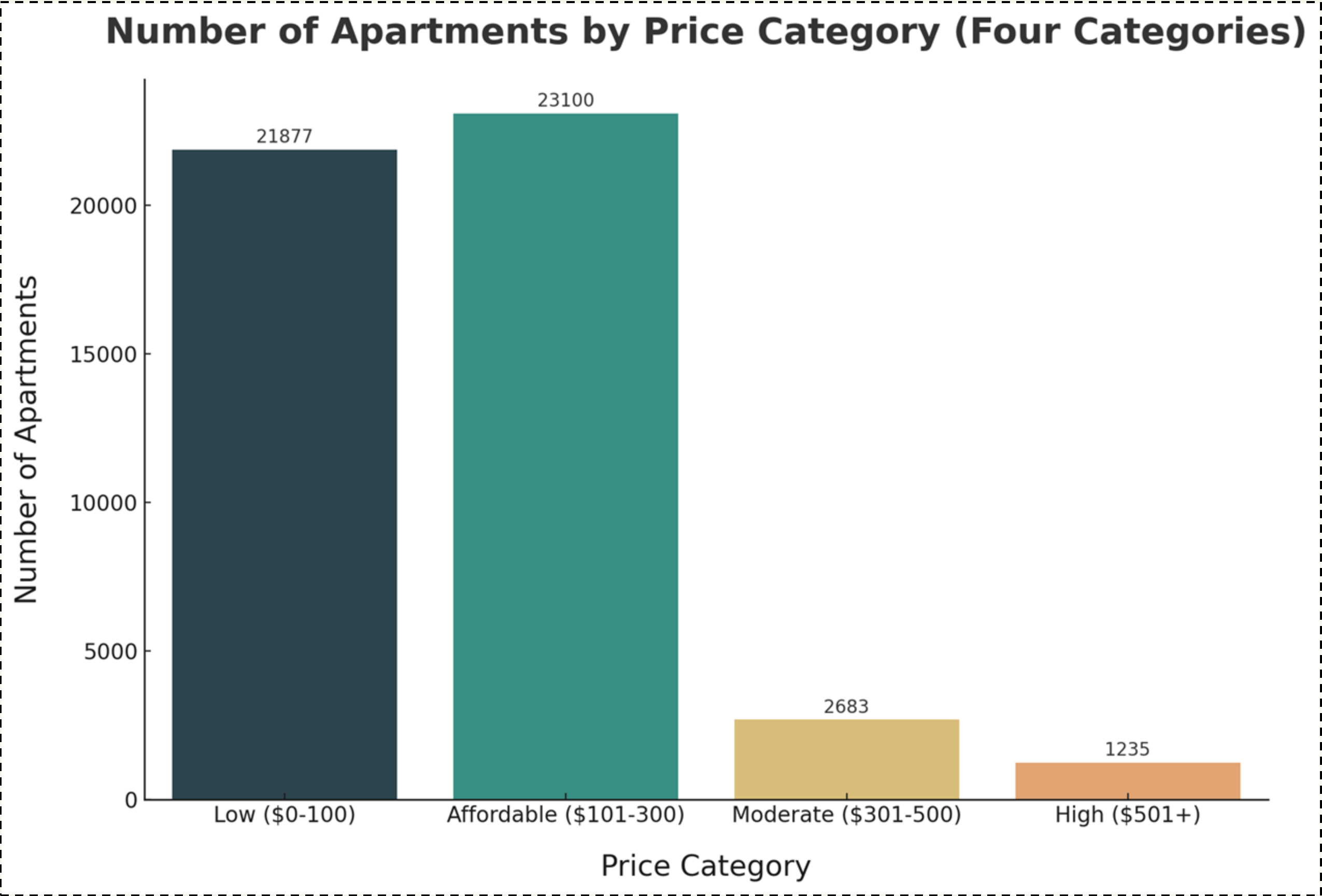
Lower-priced Listings Have Most Reviews Across Boroughs

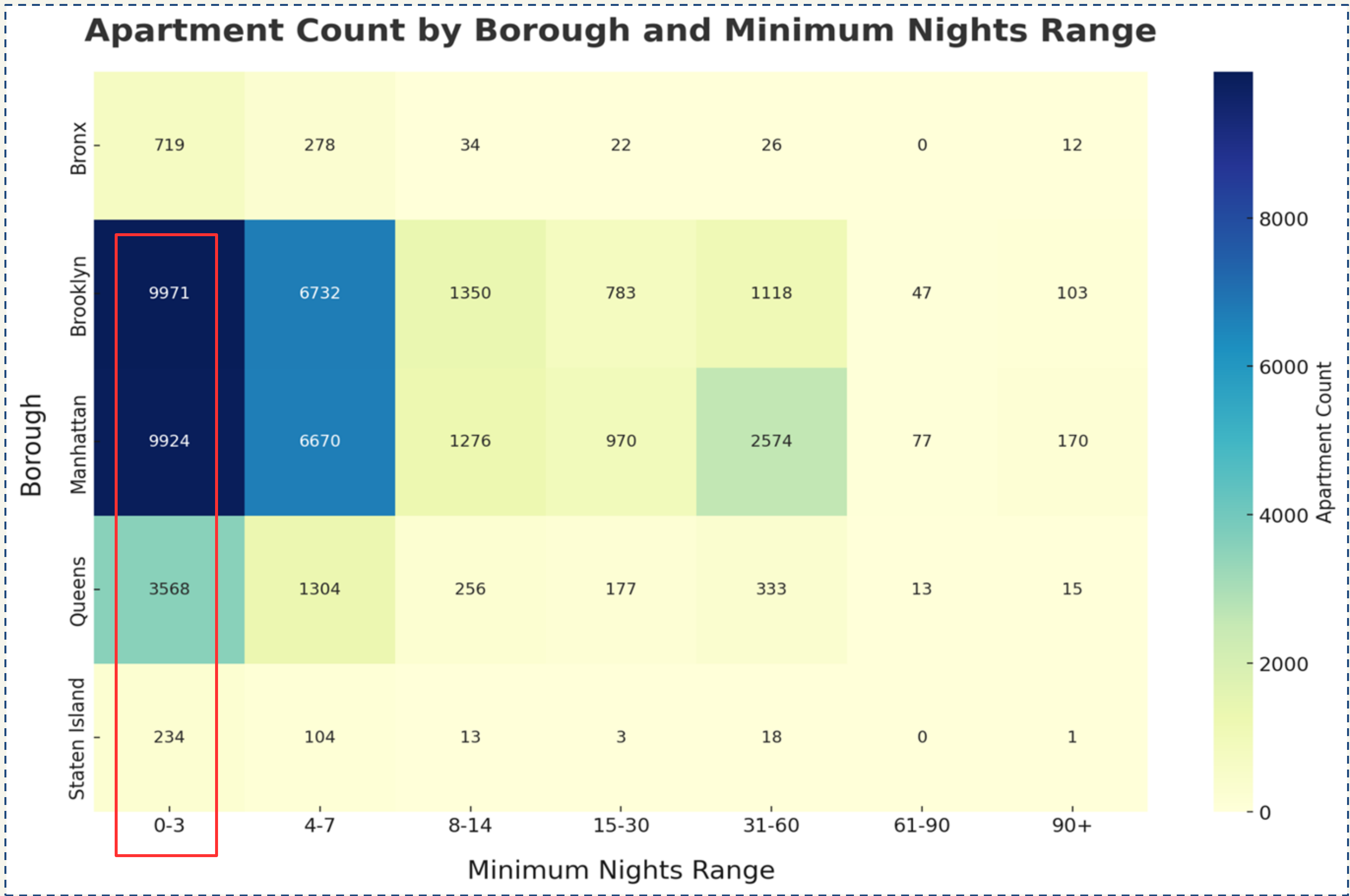Average Reviews by Price Range and Borough
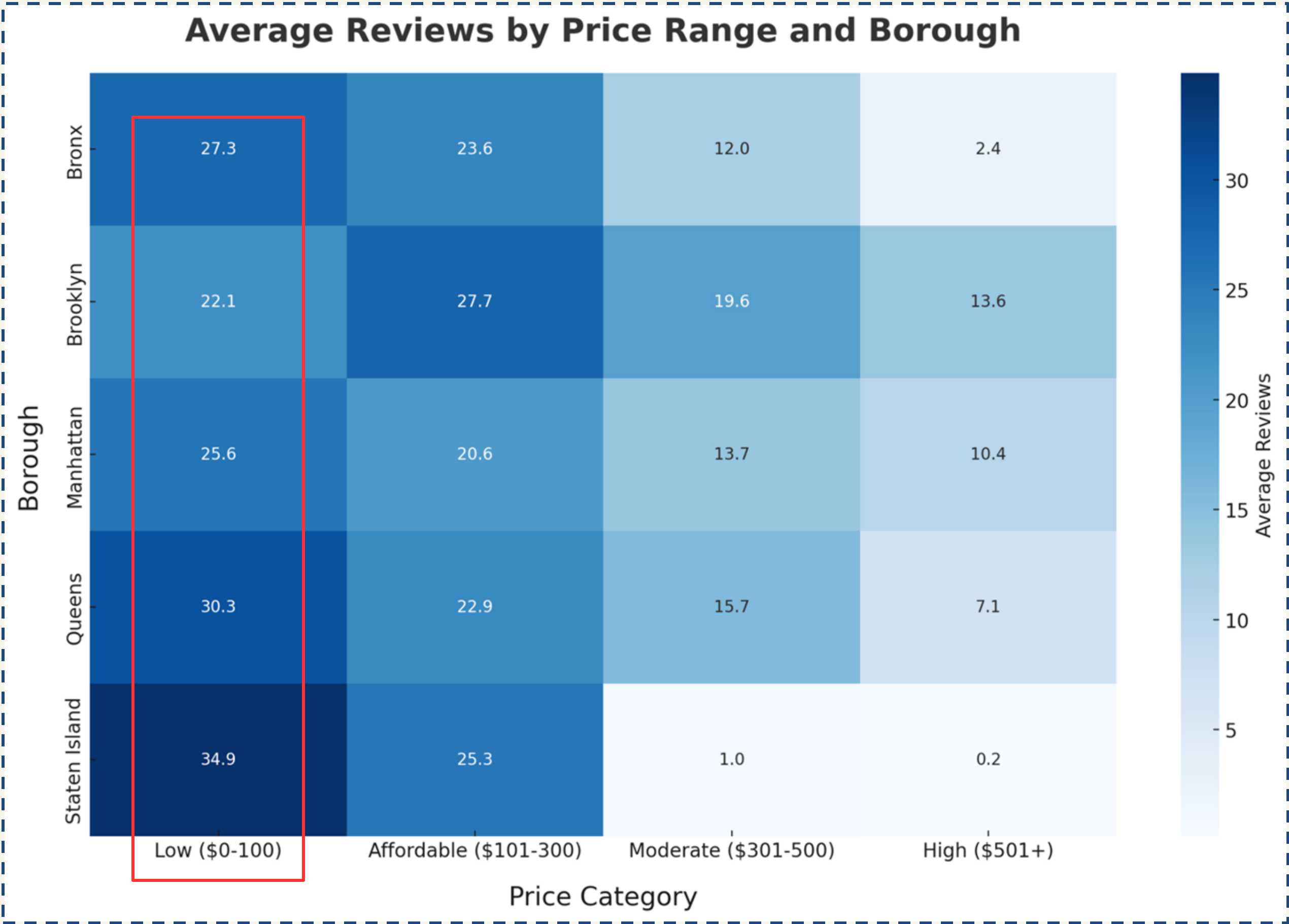
Silver Lake Listings Have the Least Average Price in Staten Island at **$70**

Average Price of Top 5 Staten Island Neighborhoods by Reviews

Minimum Nights

Analysis

Brooklyn and Manhattan Dominate Short-Term Apartment Listings

Apartment Count by Borough and Minimum Nights Range

Borough	0-3	4-7	8-14	15-30	31-60	61-90	90+
Bronx	719	278	34	22	26	0	12
Brooklyn	9971	6732	1350	783	1118	47	103
Manhattan	9924	6670	1276	970	2574	77	170
Queens	3568	1304	256	177	333	13	15
Staten Island	234	104	13	3	18	0	1

Silver Lake Falls Within **(0-3)** Average Minimum Nights
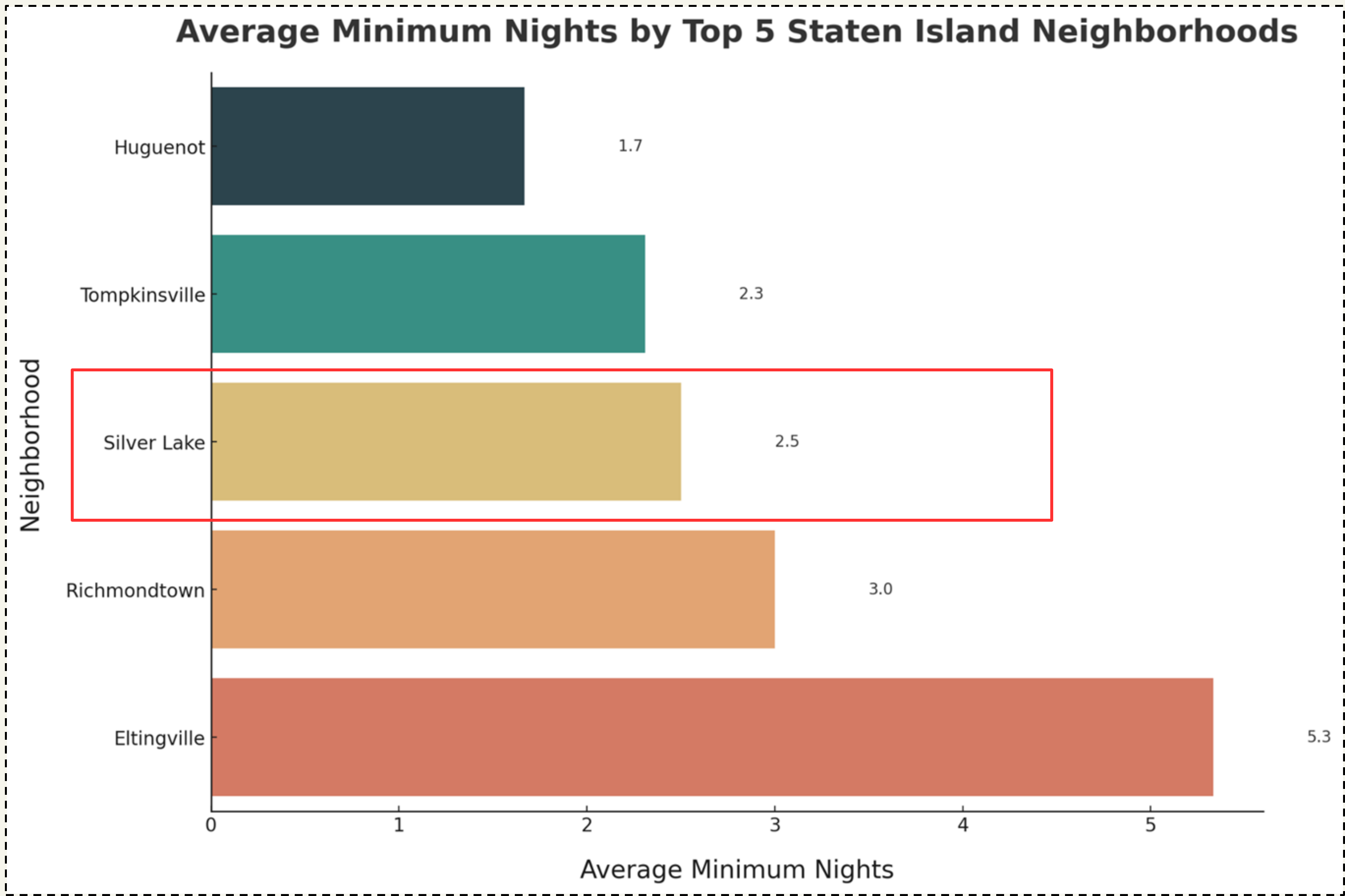
Shorter Stays **(0-3 days)** Drive Higher Review Engagement

Average Reviews by Minimum Nights Range (Descending Order)

Minimum Nights Range	Average Reviews
0-3	29.5
4-7	22.5
8-14	9.6
15-30	9.0
31-60	8.2
61-90	7.9
90+	6.4 / 11.2
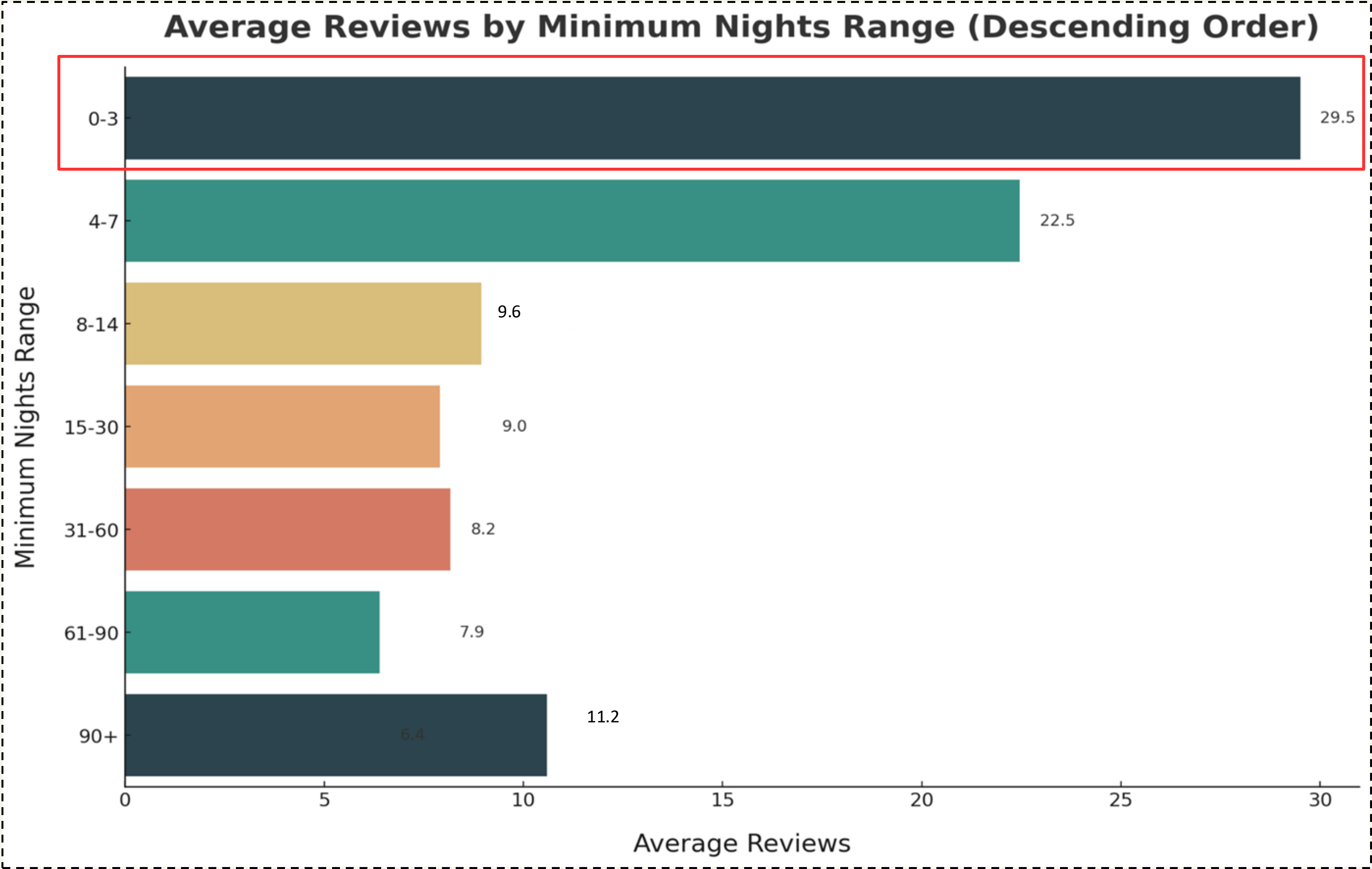
Limitations

Limitations

- NYC-Specific Data

- Static Dataset

- Review Bias

- Price Vs. Popularity

Summary

Summary

What Makes an Airbnb Popular?

Data Set	Location	Room Type	Minimum Nights	Price
Kaggle	Manhattan Brooklyn	Entire/Private/ Shared	9 Thresholds	4 Thresholds
2000+ Rows	Staten Island	Entire/Private	0-3	$0-100
15 Variables	Silver Lake			
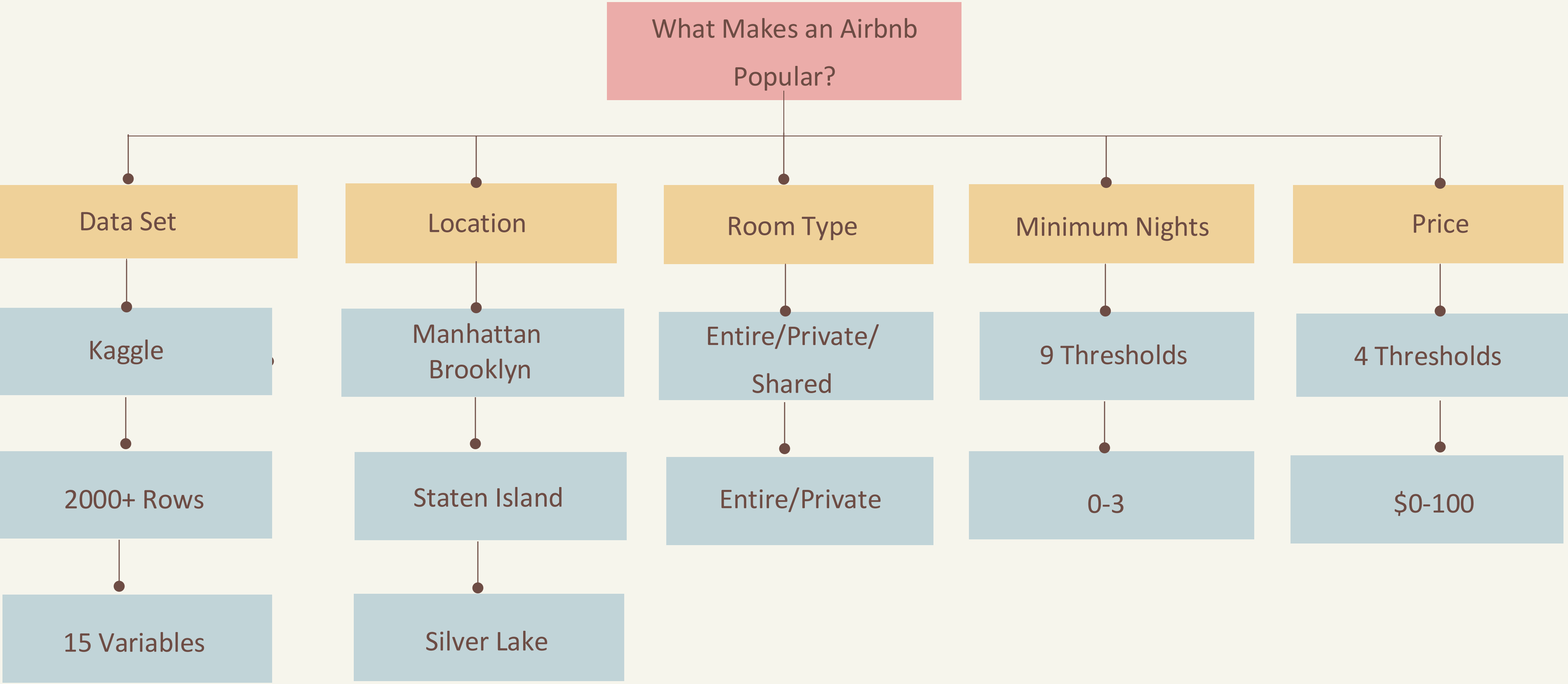
Recommendations

RECOMMENDATIONS

Hosts

Airbnb

Guests

Target Silver Lake

Enhance visibility of low cost areas

Lookout for areas with high reviews

CODE

The following google drive contains the .ipynb file for this project (Accessible to all with link)

https://drive.google.com/drive/folders/1ILHJF4su-pUGVQKGP7gdnxP2FS3Be-J-?usp=drive_link