Group Name's Group Project

Invalid Date

Declaration of Authorship

We, [five guys], pledge our honour that the work presented in this assessment is our own. Where information has been derived from other sources, we confirm that this has been indicated in the work. Where a Large Language Model such as ChatGPT has been used we confirm that we have made its contribution to the final submission clear.

Date:12/13/2025

Student Numbers:

Priorities for Feedback

Are there any areas on which you would appreciate more detailed feedback if we're able to offer it?

Remove this page (up to the next pagebreak) prior to submission!

Code Examples

This page has example code to show you can include outputs while hiding code in Quarto, as well as some tools for interpolating data in the text.

See the raw file for examples of how to hide computational output as there is code hidden here.

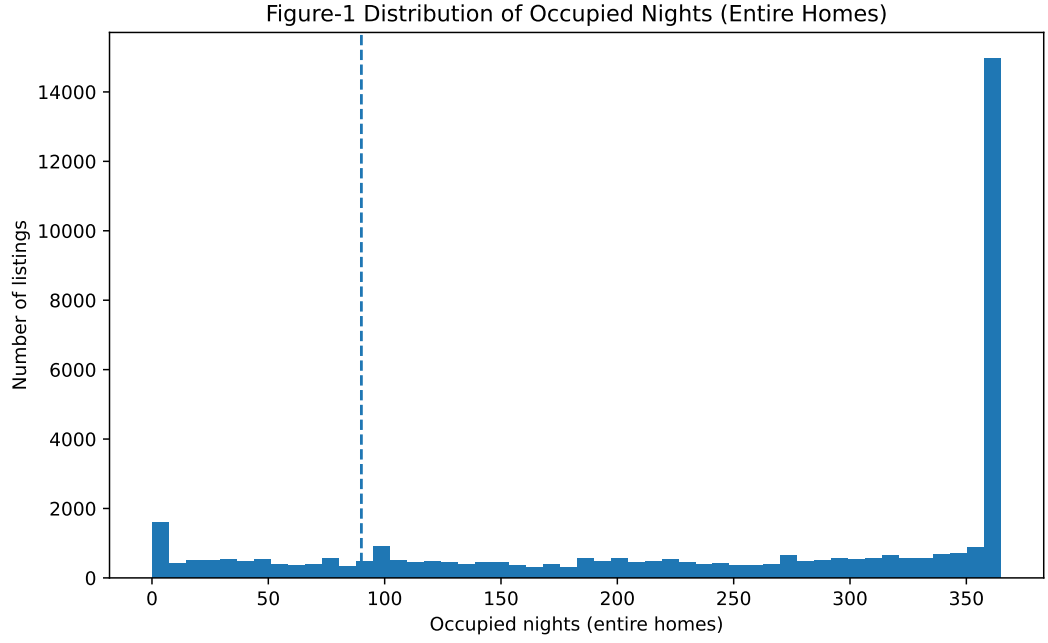
```
+ cached: data/raw/20250615-London-listings.csv.gz
+ cached: data/raw/20240614-London-calendar.csv.gz
+ cached: data/geo/Boroughs.gpkg

=== Loading calendar (streaming) ===
calendar summary: (93480, 5)
=== Loading listings ===
listings: (96651, 10)
=== Merging + flags ===
merged: (93480, 18)
```

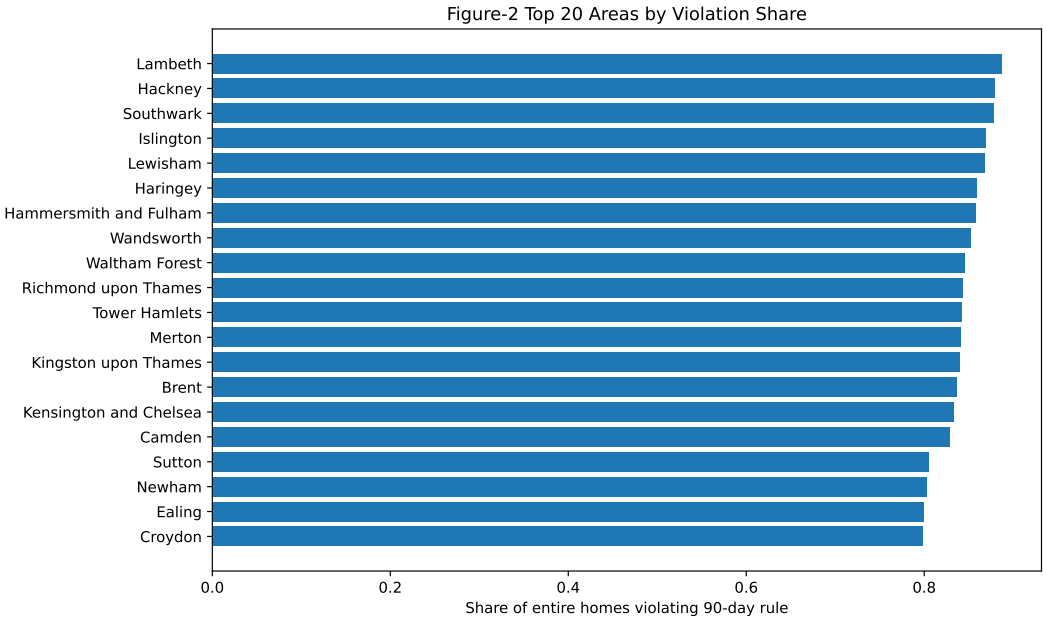
	listing_id	occupied_nights	total_nights	available_nights	occupancy_rate	id	host
0	13913	34	364	330	0.093407	13913.0	5473
1	15400	202	364	162	0.554945	15400.0	6030
2	17402	100	363	263	0.275482	17402.0	6756
3	24328	363	363	0	1.000000	24328.0	4175
4	33332	0	365	365	0.000000	NaN	NaN

```
=== Citywide 90-day rule stats ===
{'total_entire_homes': 40112, 'n_violations': 33375, 'share_violations': 0.832045273234
```

Figure-1 Distribution of Occupied Nights (Entire Homes)



```
=== Neighbourhood (borough) violation table (top 10 by share) ===
                  borough  n_entire  n_violations  share_violations
21                Lambeth      2131          1891          0.887377
11                Hackney      3019          2654          0.879099
27              Southwark      2195          1928          0.878360
18              Islington      2440          2122          0.869672
22               Lewisham      1041           904          0.868396
13               Haringey       961           826          0.859521
12  Hammersmith and Fulham      1880          1612          0.857447
31             Wandsworth      2148          1832          0.852886
30         Waltham Forest       779           659          0.845956
26   Richmond upon Thames       637           537          0.843014
```




```
=== Policy Figure 3: Commercial STR vs 90-day violations ===
```

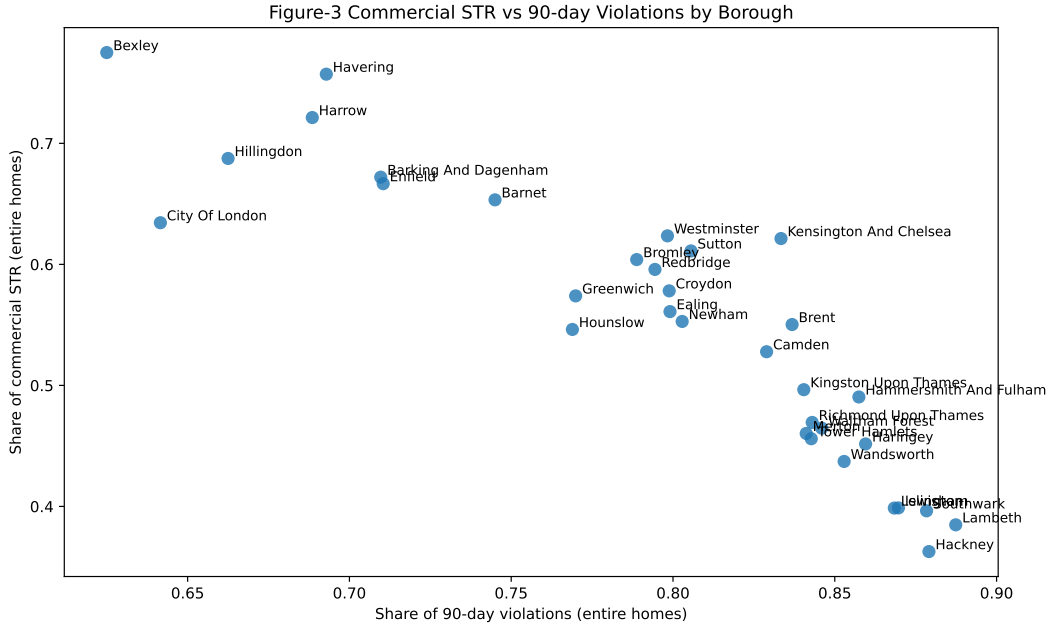


Figure-3 Commercial STR vs 90-day Violations by Borough
Bexley
Havering
Harrow
Hillingdon
Barking And Dagenham
Enfield
Barnet
City Of London
Westminster
Kensington And Chelsea
Sutton
Bromley
Redbridge
Greenwich
Croydon
Ealing
Newham
Hounslow
Brent
Camden
Kingston Upon Thames
Hammersmith And Fulham
Richmond Upon Thames
Waltham Forest
Tower Hamlets
Haringey
Wandsworth
Lambeth
Hackney
Share of commercial STR (entire homes)
Share of 90-day violations (entire homes)
0.4
0.5
0.6
0.7
0.65
0.70
0.75
0.80
0.85
0.90

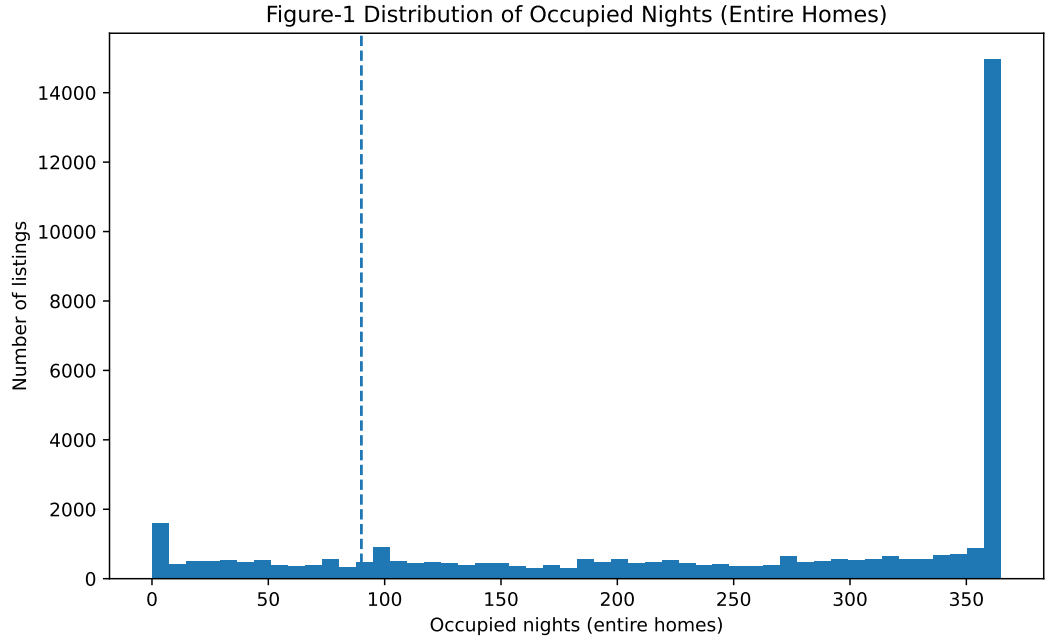


Figure-1 Distribution of Occupied Nights (Entire Homes)
Number of listings
Occupied nights (entire homes)
0
2000
4000
6000
8000
10000
12000
14000
0
50
100
150
200
250
300
350

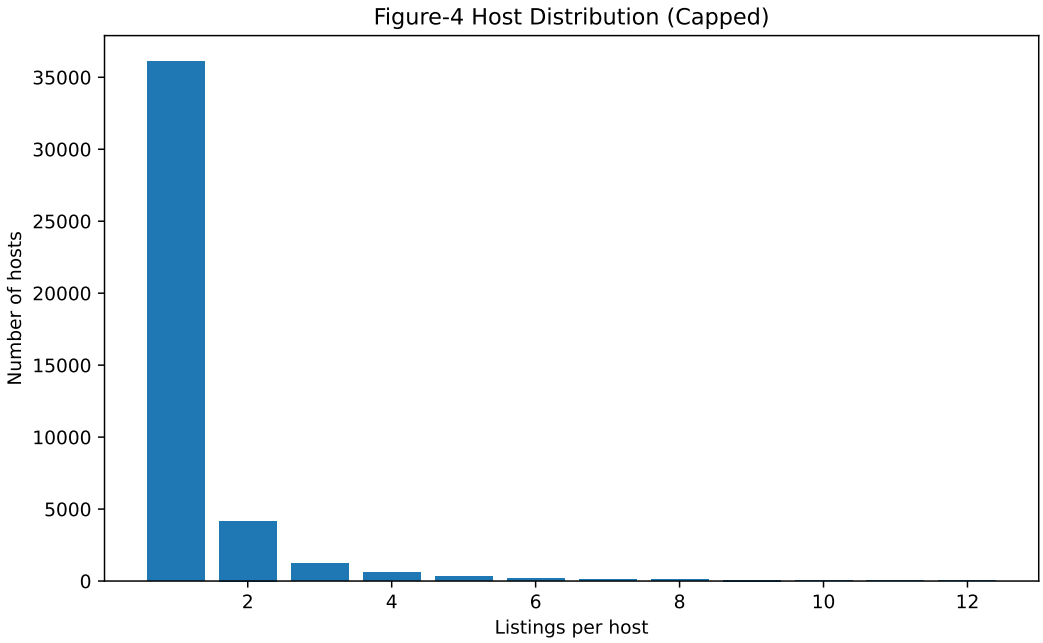


Figure-4 Host Distribution (Capped)
Number of hosts
35000
30000
25000
20000
15000
10000
5000
0
2
4
6
8
10
12
Listings per host

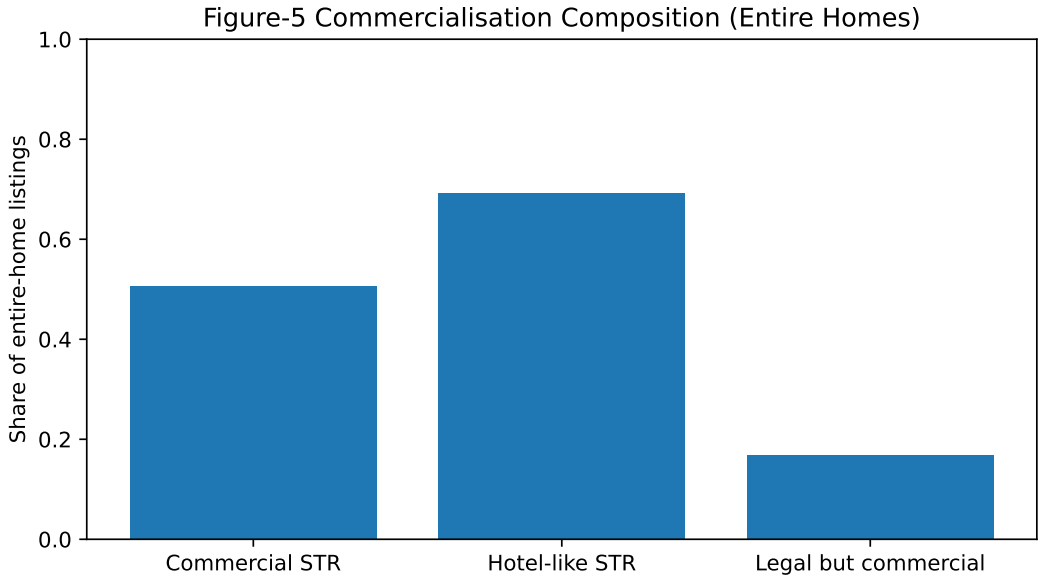
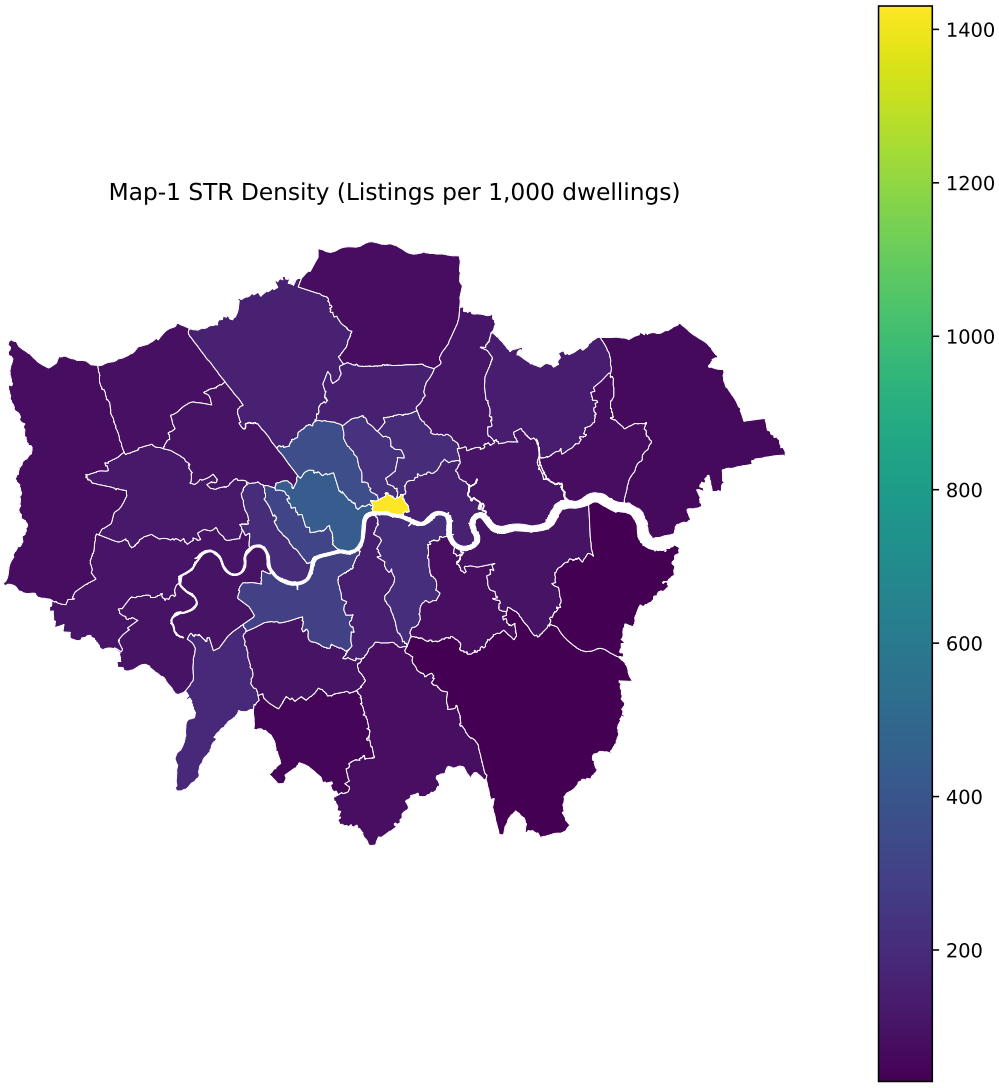
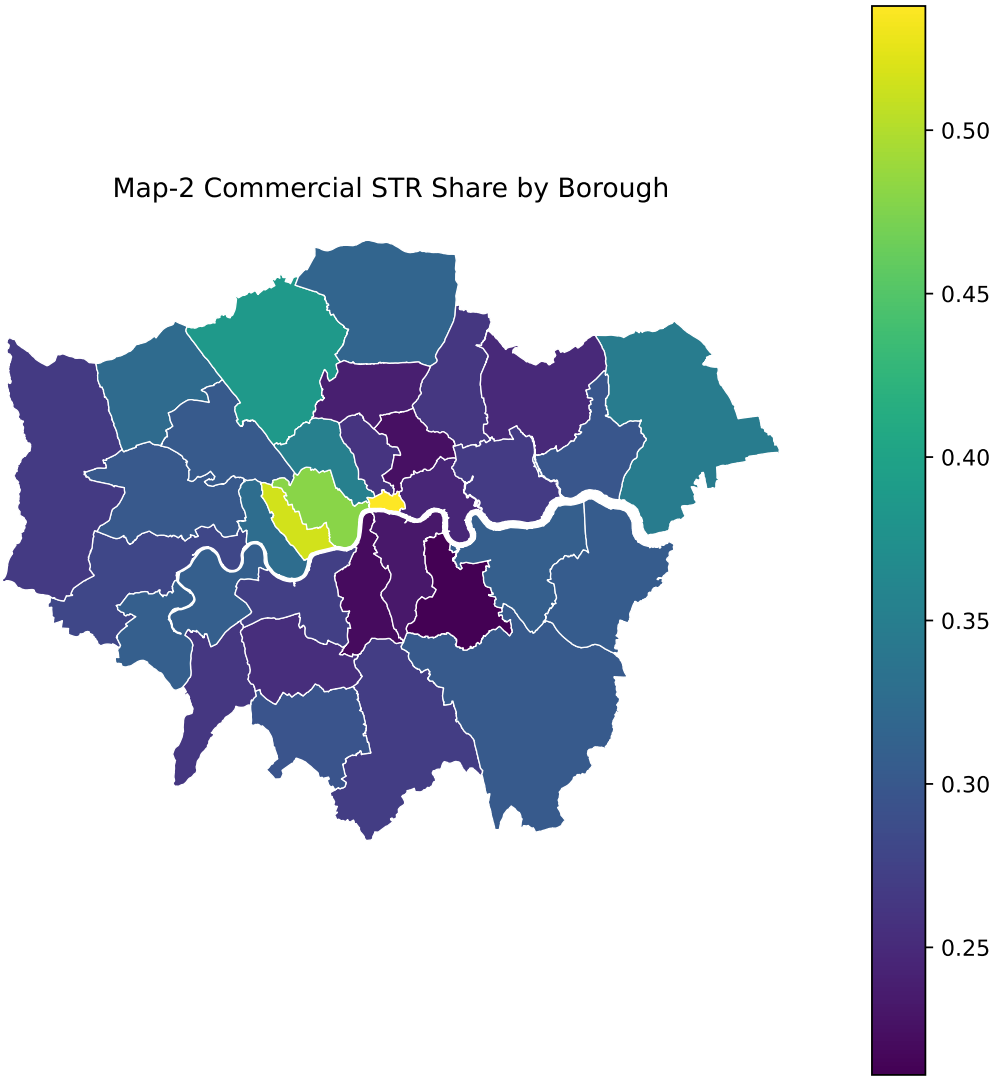


Figure-5 Commercialisation Composition (Entire Homes)
Share of entire-home listings
1.0
0.8
0.6
0.4
0.2
0.0
Commercial STR
Hotel-like STR
Legal but commercial

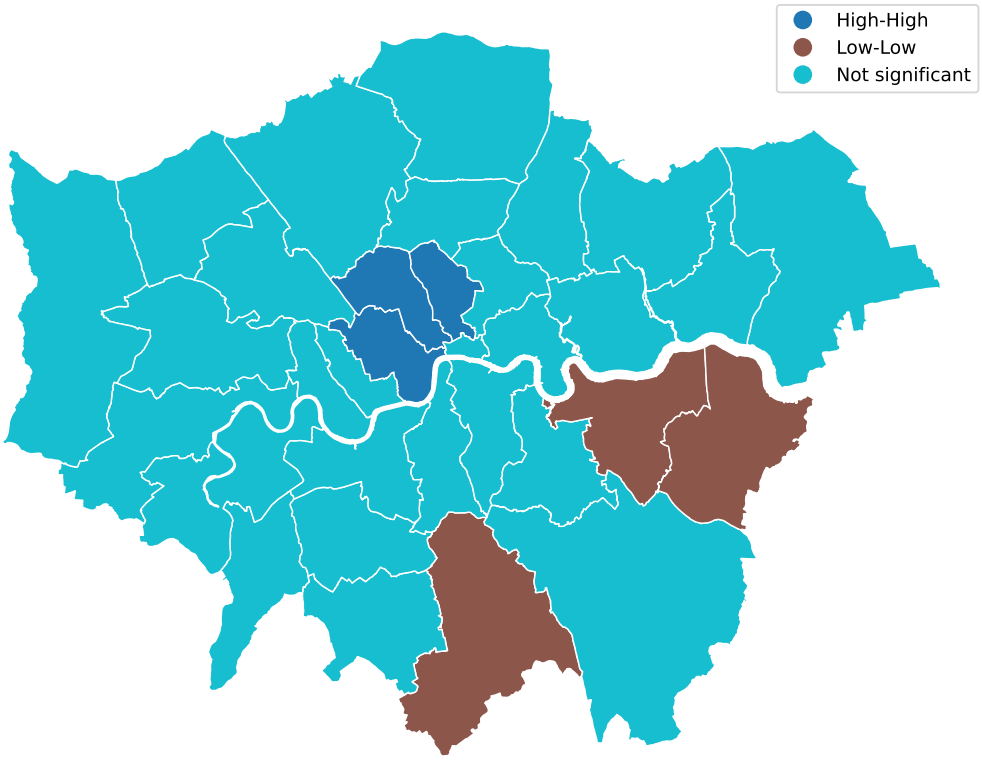
Map-1 STR Density (Listings per 1,000 dwellings)






```
Global Moran's I (observed): 0.2037
Permutation p-value (two-sided, 999 perms): 0.0030
cluster
Not significant    27
Low-Low             3
High-High           3
Name: count, dtype: int64
```

Map-3 Local Moran's I (LISA) clusters for STR density (p ≤ 0.05)



Briefing

References

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