Analysis of Short-Term Lets Data for Edinburgh

Alasdair Rae, University of Sheffield

Summary

The rise of the 'gig economy' has had a significant impact on many cities across the world. In the housing market, the impact of short-term lets has often been profound, with cities such as Toronto, New York and London being some of the most prominent examples of places where the influence of the gig economy has been disruptive, but not in the right way. This has often led to local push-back, with cities such as Berlin, Barcelona and Amsterdam now regulating short term-vacation apartment lets.

A growing number of researchers have looked at the impact of Airbnb in particular, exploring its effect on the hotel industry, gentrification and discrimination. David Wachsmuth and colleagues at McGill University in Canada recently published a report on Airbnb's impact on Canadian housing markets and found evidence that they were being seriously disrupted by this short-term rental market. This is often because large numbers of properties are being taken out of the available housing stock and instead made available for short-term lets.

This short note looks at the volume and distribution of short-term lets in Edinburgh, in order to assess the extent to which their influence is disruptive, localised and problematic. The evidence suggests that much of the sector is unreported and, far from being a way to make a few extra pounds, many 'gig economy' hosts are running potentially lucrative lettings businesses. This has led Wachsmuth et al. to call for regulation using three simple principles:

1) one host, one rental;
2) no full-time, entire-home rentals;
3) platforms responsible for enforcement.

This note is based on an analysis of short-term lets data from Inside Airbnb and Scottish Assessors Association data provided to me via the Scottish Parliament. It shows that there were **6,272** Airbnb listings within the City of Edinburgh boundary in July 2016, and **9,638** by September 2017 (a 54% increase). This is at odds with the **1,316** listed short-term catering units listed in the file I received for this piece of analysis from the Scottish Assessors Association. The data don't allow us to say anything

definitive about impacts but it's clear that the number of lettings in some areas could be a problem, in terms of disrupting the housing market.

By the Numbers: the basics
It is important to understand that not all short-term listings are the same, and that it is not always entire properties that are available for rent. In Edinburgh, as of September 2017, more than half of all Airbnb listings were for entire properties. Very few are for shared rooms.

Listing	Number	Percent
Entire home/apt	5,474	56.8
Private room	4,126	42.8
Shared room	38	0.4
Total	9,638	100.0

Not all of the properties listed are available for 60 days or more, which is considered by some cities, such as Amsterdam, to be the limit of what constitutes a 'short-term' let. In Edinburgh, the break-down of listings available for 60 days or more is shown below.

Listing	Number	Percent
Entire home/apt	3,339	60.0
Private room	2,197	39.5
Shared room	25	0.4
Total	5,561	100.0

The extent to which, in Edinburgh, the short-term lets industry is a 'gig economy' phenomenon seems to be open to question. Of the 9,638 listings in Edinburgh as of September 2017, 28 hosts had 10 or more listings, and 7 hosts had more than 20. One host has 80 listings, which is the most for Edinburgh. All of these listings are for an entire home or

apartment and they are spread across the city, in all kinds of different neighbourhoods – from Morningside to Leith Docks.
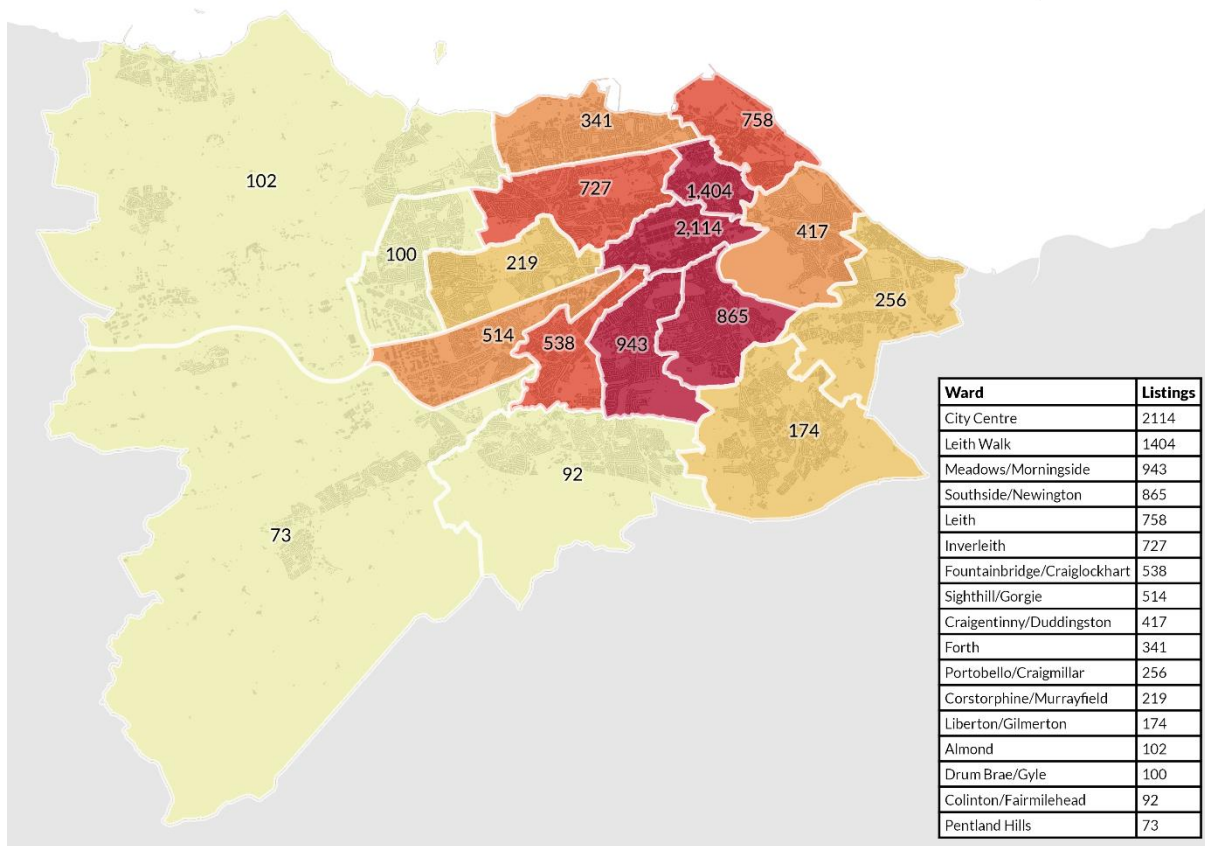
The geography of short-term lets in Edinburgh
In any kind of housing market analysis, location is critical. To get a sense of the potential impact of short-term lets in Edinburgh, we need to look at their spatial distribution. When we do so, we see that both 'official' listings and those sourced from Inside Airbnb are very unevenly distributed across the city. I looked at this issue using Edinburgh's 17 wards and also 111 smaller neighbourhood areas. The results of this analysis, including maps, are provided below.

In the first map below, we can see the distribution of Airbnb listings in Edinburgh as of September 2017. City Centre and Leith Walk wards have the largest number of listings, at 2,114 and 1,404 respectively. Out of Edinburgh's 17 wards, eight have more than 500 Airbnb listings.

Edinburgh Airbnb Listings, by Ward

Source: Inside Airbnb, September 2017

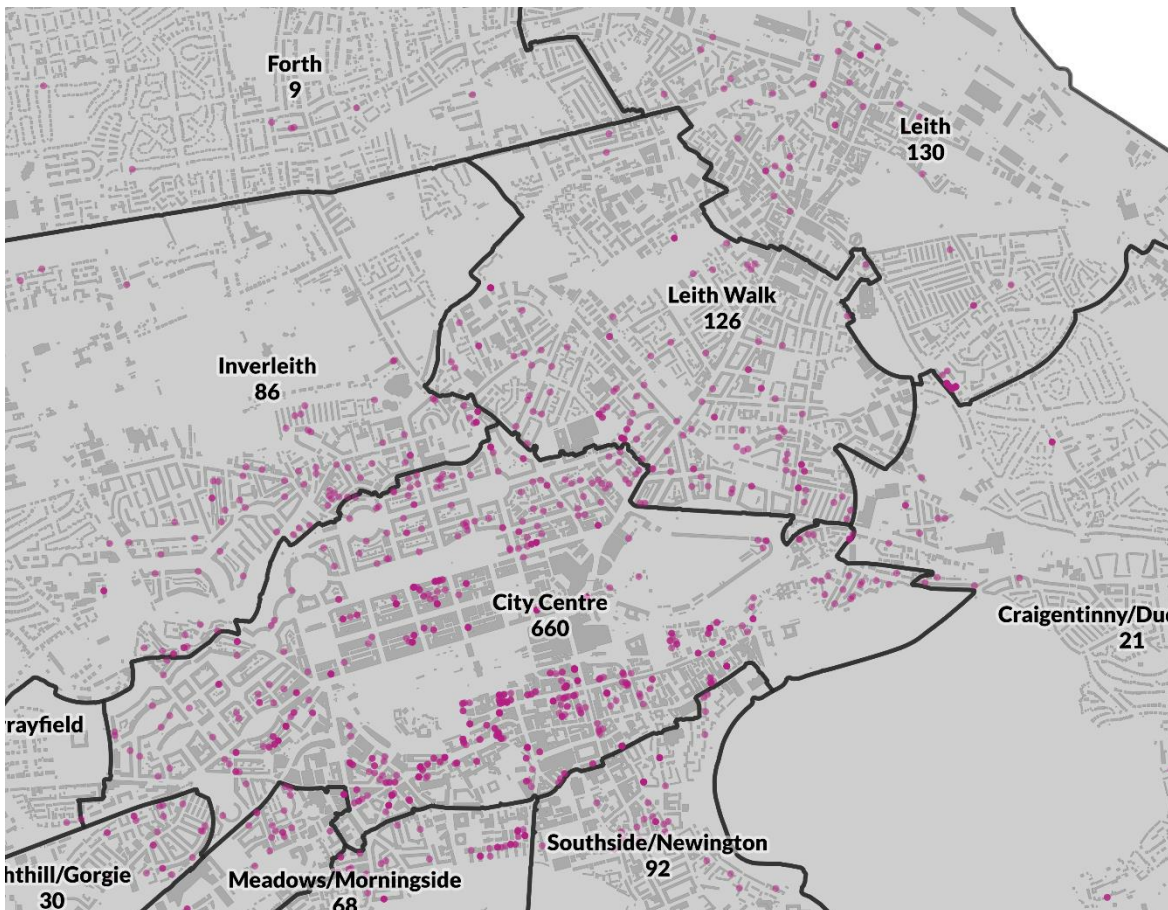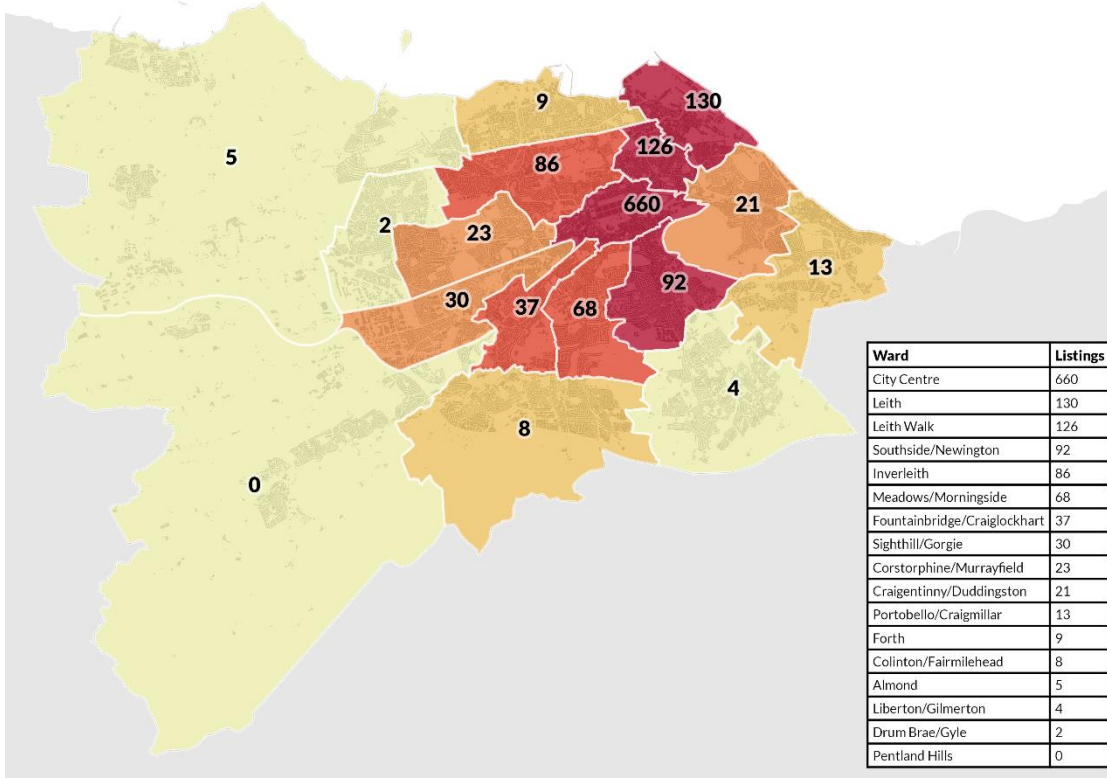| Ward	Listings
City Centre	2114
Leith Walk	1404
Meadows/Morningside	943
Southside/Newington	865
Leith	758
Inverleith	727
Fountainbridge/Craiglockhart	538
Sighthill/Gorgie	514
Craigentinny/Duddingston	417
Forth	341
Portobello/Craigmillar	256
Corstorphine/Murrayfield	219
Liberton/Gilmerton	174
Almond	102
Drum Brae/Gyle	100
Colinton/Fairmilehead	92
Pentland Hills	73

These raw numbers are not standardised in relation to housing stock or underlying population, but when we do so the intensity of the short-term letting phenomenon becomes clearer. In the City Centre ward, there is one Airbnb listing for every 11 residents, with comparable figures of 23 for Leith Walk, 37 for Meadows/Morningside and 34 for Leith. To get a sense of just how many listings there are in the centre of Edinburgh, I've plotted the locations of individual listings in the map below.
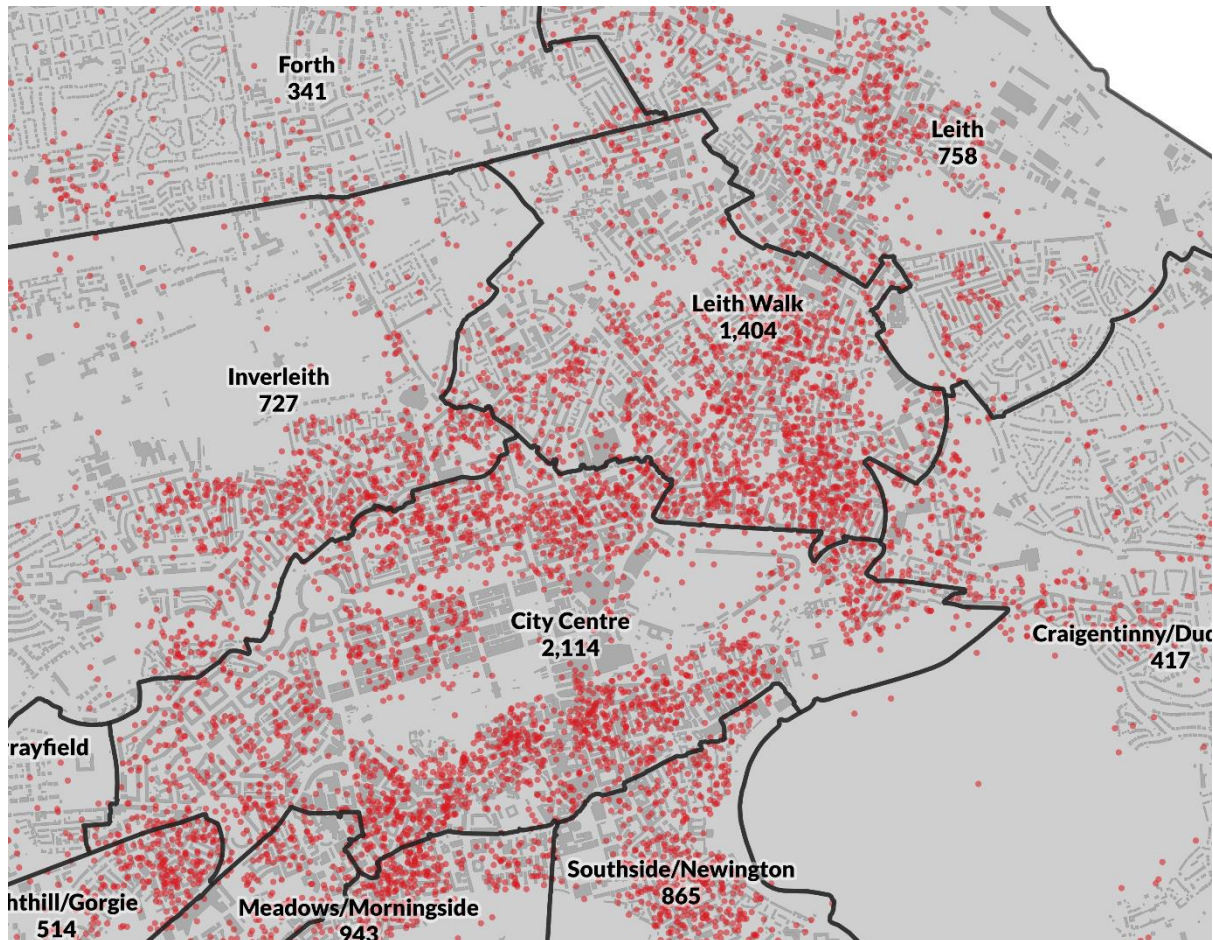
When we look at official short-term catering unit data for Edinburgh published by the Scottish Assessors Association, as opposed to data published by Airbnb, a much less intense pattern emerges, as you can see in the maps below. Whereas there are 2,114 Airbnb listings for Edinburgh's City Centre ward, the official short-term lets data counts only 660 in the same area (just over 30% of them). This pattern is repeated across the city but in many areas a far lower proportion of Airbnb listings are captured in the official short-term listings data. For the city as a whole, the figures for self-catering units listed amounts to 14% of Airbnb listings.

Edinburgh Short-Term Lets, by Ward

Source: Edinburgh City Council, 2017

Ward	Listings
City Centre	660
Leith	130
Leith Walk	126
Southside/Newington	92
Inverleith	86
Meadows/Morningside	68
Fountainbridge/Craiglockhart	37
Sighthill/Gorgie	30
Corstorphine/Murrayfield	23
Craigentinny/Duddingston	21
Portobello/Craigmillar	13
Forth	9
Colinton/Fairmilehead	8
Almond	5
Liberton/Gilmerton	4
Drum Brae/Gyle	2
Pentland Hills	0

Neighbourhood-level analysis

The data published by Inside Airbnb is not provided by Airbnb themselves, but my analysis of it – and that of others – suggests is it an accurate representation of the number of listings in cities. One particularly useful feature of the data is the ability to explore it by 'neighbourhood', and this is what I have attempted here. Edinburgh is split into 111 small neighbourhoods and I have produced a map set, with a single map for each neighbourhood in Edinburgh showing how many properties are listed as of September 2017. This ranges from a city-wide high of 674 in the 'Old Town, Princes Street and Leith Street' neighbourhood to a low of 4 in 'Barnton, Cammo and Cramond South'. Some sample maps are included below.

674

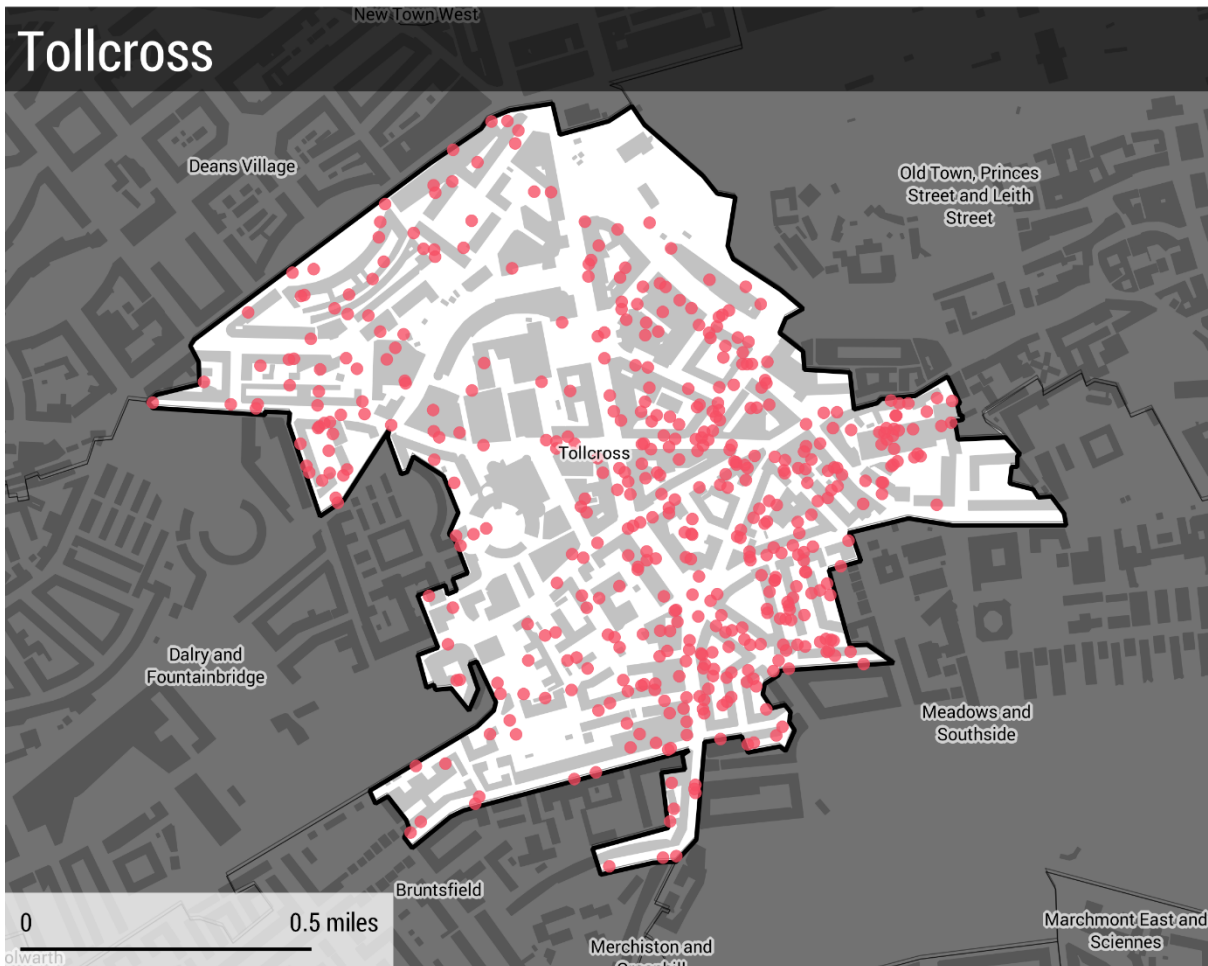**Airbnb listings**
10.7% of Edinburgh total
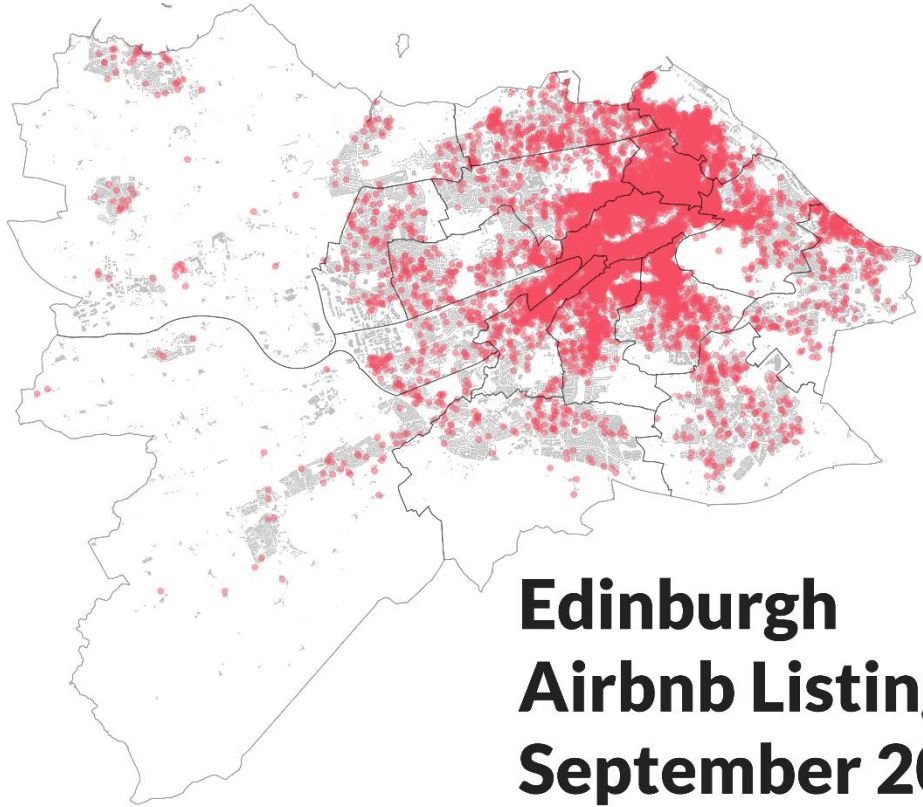Area: 0.5 square miles

Location

468

Airbnb listings
7.5% of Edinburgh total
Area: 0.2 square miles

Location

Tollcross

New Town West

Deans Village

Old Town, Princes
Street and Leith
Street

Tollcross

Dalry and
Fountainbridge

Meadows and
Southside

Bruntsfield

Merchiston and
Greenhill

Marchmont East and
Sciennes

0   0.5 miles

These neighbourhood-level maps also tell us what proportion of all Edinburgh's Airbnb listings are to be found in each neighbourhood. So, for example, over 10% of listings are in 'Old Town, Princes Street and Leith Street' and 7.5% of listings are in Tollcross.

This more localised analysis points to a potentially very serious problem with short-term lettings in certain parts of Edinburgh, to the extent that it may require urgent policy attention, particularly if, as this analysis suggests, the sector is largely unregulated.

Edinburgh Airbnb Listings, September 2017

References

Wachsmuth et al paper (2017) http://upgo.lab.mcgill.ca/airbnb/Short-term%20Cities%202017-08-10.pdf

Airbnb 'Responsible Hosting' for the UK:
https://www.airbnb.co.uk/help/article/1379/responsible-hosting-in-the-united-kingdom

Inside Airbnb: http://insideairbnb.com/

Scottish Assessors Association: https://www.saa.gov.uk/