

Table of Contents

Introduction	2
A note on terms	2
Data collection: precedents, method and limitations	3
My process	
Accuracy	
Airbnb listings in Vancouver and Metro Vancouver	
Total listings	
Maps	
Vancouver listings by Airbnb neighbourhood	
Limitations of the Airbnb neighbourhood data	
Missing neighbourhood data	
Room types in the City of Vancouver and Metro Vancouver	
STR operators with more than one listing	
Why this matters	
Number of listings with two or more bedrooms	
Why this matters	
Reviews	
Nightly Rates	
How the growth of short-term rentals relates to City of Vancouver regulations, policies an	
goals	
Zoning and Development Bylaw	
Protection of Rental Housing	
Greenest City 2020 Action Plan	
Healthiest City Strategy	
Should the city change its approach?	16
Counterarguments	
The number of listings is too small / minor factor	
Unknown number of listings dedicated to STR use	
Airbnb makes housing more affordable and accessible	20
Options	21
Be proactive	
Obtain data	
Distinguish between listings that are primary residences and those that aren't	
Consider capping STR permits by geographic area	
Set enforcement priorities	
Be prepared for a pro-Airbnb PR campaign	
Other resources	24
Taking action is within the city's jurisdiction	24

Introduction

As part of my urban studies master's thesis research on Airbnb and rental housing in Vancouver, I've collected and analyzed some quantitative data on the number, type and distribution of Airbnb listings in this city (and to a lesser extent, for Metro Vancouver). This data hasn't been publicly available before and I think it's relevant to various ongoing discussions about housing supply and affordability in Vancouver so I'm posting it (and some comments on it) now, rather than waiting until several months from now when (fingers crossed) I will have completed and defended my thesis.

I note that there have been repeated calls in the last few months (and long before then, too) for more research to be produced and data to be tracked on various aspects of Vancouver's housing situation. I strongly agree that more data is needed. I haven't heard anyone specifically calling for data on how many Airbnb listings there are in Vancouver, but I think this information is a relevant (a piece of the puzzle, even if a small one) and should be considered when trying to understand the dynamics of housing in Vancouver - and the challenges that tenants face, in particular.

As I've explained <u>elsewhere</u>, I set this blog up so that I would have a container and outlet for my thesis research, as well as a place to post thoughts and resources related to Airbnb and housing, but not necessarily to my main research question/s. It bears repeating that what I post here is not my actual thesis, and while I like to think I have high academic standards, I am not necessarily holding myself to thesis standards when I post here – because this is meant to be a less formal vehicle. No one else has reviewed this material and any errors are solely my own. Although I've already spent dozens of hours analyzing and reviewing the data I'm providing here, it's possible that further analysis and review will reveal errors and that my results will change before I commit them to posterity in my thesis. I'd be grateful if anyone who finds errors would bring them to my attention.

I have been researching this topic (in one way or another, even before I decided to make it my thesis project), for 1.5 years now and so have formed some opinions during that time. However, my research is ongoing and so my position formation is ongoing too. What I say here is not necessarily my final word on the matter and there are many questions to which I'm still seeking answers. I've found the topic of Airbnb and its effect on housing to be very complex and multi-faceted.

A note on terms

I'm using Airbnb's terms in some cases here, though striving to avoid others that I consider to be too freighted. Airbnb refers to "listings" and I have used that term as well. It means a property that's posted on Airbnb. It could be an entire house or apartment, a private room or a shared room. It may be available for booking or not.

Airbnb uses the term "host" to refer to people who post properties on its site. I try not to use that term, instead preferring "operator" or "STR operator." The reason I avoid the host term is that I think it implies a level of hospitality, generosity and familiarity that does not apply to all Airbnb listings, given the monetized nature of the booking transaction and the fact that many "hosts" and their "guests" never meet, because all interaction is carried out online or by phone.

STR is an abbreviation I use to refer to short-term rentals. While I am only dealing with Airbnb here, I use the STR term in acknowledgement of the fact that Airbnb is not the only STR platform.

Data collection: precedents, method and limitations

While Airbnb generally doesn't provide specific information about the amount, type or distribution of its listings in any given community, a few people and organizations have already collected (i.e. scraped) listing data from its website for various cities and analyzed it, which I've found useful and has helped guide my own inquiries. The first such analysis I found was on New York City Airbnb listings, published by Skift, an online travel industry magazine, in February 2014. The San Francisco Chronicle published a similar analysis for San Francisco in June 2014. Both those organizations hired Connotate, a company that extracts data from the web, to collect their data. Similar work done by researchers (and code writers) Tom Slee and Murray Cox (for a variety of cities) has also been very helpful.

My process

I obtained this data from Airbnb's website using code written by someone who works as a web application developer. All the information I've obtained (and then cleaned, sorted and analyzed) was (or is) already available on Airbnb's website and viewable by anyone with web access.

The datasets I've collected have included listings for several communities outside Metro Vancouver (Gibsons, Sechelt and Friday Harbor, for example), so part of preparing the data for analysis has been to strip out those listings. In a few cases, the data contained obvious errors, which I've corrected after checking the information on Airbnb or by its latitude and longitude coordinates. For example, one listing had "Walnut Grove" in the city column and "Langley" in the neighbourhood column. Several Richmond listings had the city as "Vancouver/Richmond" which I also changed after checking their location.

I've kept track of all the data-cleaning steps and decisions I made for the January 1 dataset and have applied those same steps (with some refinements) to the June 1 dataset (and the November 29 dataset to a much more limited extent).

While I haven't used Tom Slee's code to collect data, I think his explanation of how his own code works is helpful for background purposes: <u>Airbnb data collection methods and usefulness</u>.

Accuracy

Unlike others who have collected and analyzed Airbnb listing data, I am not a software developer, and so don't understand how the code I'm using works the way others who have that knowledge and training do – to understate things. To mitigate these disadvantages and check the accuracy of my data, I conducted various manual searches of Airbnb's website (for private rooms in the West End, for example) while the code was running to see if both methods would return the same results. I've done this for two June datasets and found the results of both methods to be consistent with each other. I also have datasets for several dates, which means that anomalies are more likely to be detected than if I were relying on a single one.

Also, the only other publicly available data on Vancouver Airbnb listings that I'm aware of is in this map published by Tom Slee on April 25, 2015. It shows 3,783 Vancouver listings, but based on the map, that figure includes various other Metro cities, such as Burnaby and Richmond (though not Surrey). That puts his results in the same ballpark as mine. Also, media accounts, such as this one, have said there are about 3,000 Airbnb listings in Vancouver. That's very general, but again, in the same ballpark as my data (for November 29, 2014 and January 1, 2015).

Finally, I will point out that when asked to comment on the New York City (and Portland) data published by Murray Cox, <u>Airbnb has said</u>, "We do not comment on public scrapes of our information, because, like here, these scrapes use inaccurate information to make misleading assumptions about our community." In other cases, Airbnb has referred to Tom Slee's data as "flawed," but has not been more specific.

My response is that while I agree with the San Francisco Office of the Budget and Legislative Analyst that "webscrapes are subject to limitations," and understand that the listing data I've collected may not be as accurate as what Airbnb could provide for the same dates, I think that given the extent and severity of Vancouver's affordable housing shortages, the rapid growth of Airbnb since it was founded (some figures on that here) and the concerns over Airbnb's effects on housing supply in many other cities, it's important and useful to have some publicly available data on the number and nature of Airbnb listings in Vancouver. I hope that I can improve upon whatever flaws are in the data I've posted here in the future, or that others will.

In terms of the credibility of data collected or created in this way, I note that data collected by Tom Slee and/or Murray Cox has been relied upon in the recent (May 2015) report on the impact of short-term rentals (STRs) on San Francisco housing by the San Francisco Office of the Budget and Legislative Analyst and in a March 2015 report on STRs in Los

<u>Angeles</u> by the Los Angeles Alliance for a New Economy. Before using scraped data for its report, the San Francisco Office of the Budget and Legislative Analyst asked Airbnb to provide it with anonymized booking and listing data, but the company did not respond.

Airbnb listings in Vancouver and Metro Vancouver

Unless stated otherwise, data is for June 1. Most of this information is for Vancouver because that's the focus of my thesis, but there are some Metro Vancouver figures too.

Total listings

- The number of Airbnb listings in the City of Vancouver increased by 17% from January 1, 2015, to June 1, 2015 (five months).
 - o 2,978 to 3,473, for an increase of 495
- The number of Airbnb listings in Metro Vancouver increased by 19% in that same period.
 - o 3,888 to 4,628, for an increase of 740
- Three-quarters of all Airbnb listings in Metro Vancouver are in the City of Vancouver.
 - o 77% as of January 1 and 75% as of June 1

Notes

Vancouver totals include UBC because Airbnb counts Point Grey and UBC as one neighbourhood.

- Metro Vancouver totals do not include Abbotsford because those listings were not captured.
- There is no distinction in the data between the city and township of Langley.
- There is some vagueness in the data when it comes to North Vancouver because all those listings have "North Vancouver" as the city and some of them have that as the neighbourhood too. Others have "District of North Vancouver" (or West Vancouver) as the neighbourhood (Airbnb neighbourhoods are discussed further below). Since Vancouver is my focus, I haven't tried to sort this out yet.

For a complete list of totals by city, see Table 1.

Note that I also have data for prior to January 1, but so far I've focused my analysis on the January 1 and June 1 datasets. That's why I haven't included figures for earlier dates above: I can't make a complete set of comparisons with the earlier data at this point, though perhaps will take that on later.

The earliest data I have is for November 29, 2014.

- Total listings for the City of Vancouver for that date were 2,901.
 - \circ 2,901 to 3,473 = an increase of 572 listings (20%) over six months
- Total listings for Metro Vancouver for that date were 3,813.
 - \circ 3,813 to 4,628 = an increase of 815 listings (21%) over six months

Maps

I've created two maps that show the distribution of listings across Metro Vancouver, colour-coded by room type.

The locations shown on these maps are approximate, not exact. The main purpose of these maps is to show the general distribution and concentration of listings across the city and region, and the room types.

- One map is for January 1 data. It includes rate information for each listing.
- One map is for June 1 data. It does not include rate information because I was unable to collect it for that date.

Vancouver listings by Airbnb neighbourhood

As the maps show, Airbnb listings are concentrated in Downtown, the West End and other areas close to the core.

- Downtown had 648 listings (19% of the Vancouver total).
- The West End had 474 listings (14% of total).
- Kitsilano had 380 listings (11% of total).
- Mount Pleasant had 317 (9% of total).
- Grandview-Woodland had 218 (6% of total).

See <u>Table 2</u> for a complete list of totals by Airbnb neighbourhood.

Limitations of the Airbnb neighbourhood data

When looking at and calculating where Airbnb listings are in the city, it's important to know that Airbnb divides the city into 26 neighbourhoods, while the City of Vancouver has designated 22 of what it calls "local areas" for planning purposes (shaded blue in Table 2). This means that the City, or residents, might differ from Airbnb when it comes to identifying the neighbourhood where any given listing is located.

When a person lists a space on Airbnb, they must provide the address, but are not given the option to specify the neighbourhood. Instead, this field is automatically filled in by Airbnb based on the address. This is probably a good thing, in that it stops people from presenting a space as being in a more popular area than it may actually be, as is commonly seen in real

estate marketing. Airbnb states that, "Neighborhood boundaries are based on extensive research with locals and city experts. Since neighborhoods evolve over time, we are continuously updating our maps to increase their accuracy."

That's interesting and good to know, but Airbnb doesn't provide an actual map of its own neighbourhood boundaries, so it's still difficult to determine the degree to which those correspond to or differ from the city's. The city makes its local area boundaries available as part of its open data catalogue (and I've made use of those for my own listings maps, linked above), so it's possible that Airbnb has integrated the city's boundaries into its own maps. However, I have noted key differences between the city's local areas and Airbnb's neighbourhood boundaries. Here are some of those:

- Airbnb's totals for Point Grey include UBC, which is outside the city's jurisdiction.
- Airbnb has both a Commercial Drive neighbourhood and a Grandview-Woodland neighbourhood. In my calculations, I've combined the totals for those two areas because residents tend to use the terms somewhat interchangeably.
- Sunset is one of the city's local planning areas, but it is not an Airbnb neighbourhood. Airbnb seems to designate most of the listings in this area as Fraserview. Other Airbnb Fraserview listings are in the local area the city calls Victoria-Fraserview.
- Also, the data says Strathcona had fewer than 30 listings in both January and June, however the maps shows several listings in the area bounded by Campbell, Gore, Prior and East Hastings that are identified as Downtown Eastside. The number of listings in Strathcona is therefore probably more than what the numbers indicate (and the number of DTES listings correspondingly fewer, depending on whether you include Strathcona in the DTES or not).
- Airbnb also states that, "If your listing's neighborhood is a subset of a larger neighborhood, or if two neighborhoods overlap, your listing will show in search results for both neighborhoods." This probably explains why manual searches of the site often turn up 1,000+ Downtown listings (the maximum number of results the site allows), while results returned for that area by the script I used are in the 500 700 range (for January and June).

Missing neighbourhood data

Also, it seems that Airbnb's automatic neighbourhood assignment function doesn't always work, or perhaps I just wasn't able to collect that info, because there are 341 Vancouver listings with no assigned neighbourhood in my January 1 dataset. Those show up as "NN" on the map. There was also some missing neighbourhood data in my June 1 dataset, but for a much smaller number of listings (17). For thesis purposes, I will probably look up each of those listings by their latitude and longitude coordinates or their Room ID (for those still listed) and assign them to neighbourhoods manually, based on the city's local area boundaries. This is not a perfect fix and is also time-consuming, so I've put it off for now. In

the meantime, the missing neighbourhood data for those 341 January 1 listings (11% of total) makes it difficult to accurately assess the listing growth for each neighbourhood. For example, there were 482 Downtown listings as of January 1 and 648 as of June 1, a 34% increase. Meanwhile, listings in the city as a whole only increased by 17% during that period. It's very possible that the Downtown had more of a surge in listings than the rest of the city, but it's also likely that some of those 341 January listings with no assigned neighbourhood were actually Downtown and that they were identified that way in June – meaning there was less listing growth there than the figures indicate.

Room types in the City of Vancouver and Metro Vancouver

- 71% of all Vancouver Airbnb listings were for "entire homes/apts." (this includes condos).
 - o 66% in Metro Vancouver
- 27% were for private rooms.
 - o 32% in Metro Vancouver
- 2% were for shared rooms.
 - o 2% in Metro Vancouver

Table 3: Room types

Table 4: Room types by neighbourhood, January vs June

I've also looked at these proportions of entire unit ("entire home/apt.") listings in relation to other cities. Vancouver's (and Metro Vancouver's) percentage is higher than some others where data has been recently collected.

- New York City's percentage was 57 percent as of May 1.
- San Francisco's percentage was 60% as of May 4.
- Portland's percentage was 56% as of May 12.

Why this matters

My main reasons for wanting to collect and analyze this data are curiosity and concern about how the rapid recent growth in short-term rentals is affecting the supply of rental housing available to Vancouver residents (as well as influencing the broader housing market), so room type is a key piece of information.

A person can list three types of spaces on Airbnb:

• A shared room, where the guest sleeps on a couch in the living room or perhaps on a cot or bunk bed in a bedroom with others

- A private room, where the guest has their own sleeping space but shares access to kitchen and/or bathroom
- An entire home/apt., where the guest has complete and sole access to the whole unit during the booking period

People who offer this last type of space may be doing so because they're going away temporarily and so don't need to actively use the space for that period, or they may be willing to move out for a few days in return for the extra cash earned from the booking. As with renting out shared rooms, neither of these activities removes housing from the stock available to residents because a resident is already living in the space and continues to do so when the booking is complete.

However, if a person (whether that person owns the unit or is renting it themselves) decides to dedicate an entire unit exclusively to STR use, that does have the potential to remove housing from the stock available to local residents. (In the vast majority of cases that would likely mean removing it from the rental housing stock, though it's also possible that a unit dedicated to STR use might otherwise be available for sale, too.) It's not accurate to say that all units that are dedicated to STR use are being taken out of the rental stock because some of them have perhaps never been part of it, and/or those who own them are unwilling to have a tenant and so would leave the unit vacant if they could not rent it out short-term. That triggers questions of whether we have a problem with vacant homes, and if so how to deal with it, which are outside my scope. But for the purposes of getting a handle on the impact that Airbnb is having on the supply of housing available to tenants, a key baseline figure to know is how many "entire home/apts." are listed. As mentioned above, in Vancouver, those room types make up a high proportion of listings: 71% or 2,481 as of June 1.

Taking that baseline number of entire home/apts. and then determining how many of them are dedicated to STR use, as opposed to only being used that way occasionally, is a challenge. It's clear that there's a significant financial incentive for doing so. I won't go into those calculations here because I've done so elsewhere, but if you look at average rents (such as provided by CMHC) versus Airbnb rates (data on that below) for a roughly equivalent unit, it's clear that someone who's willing to invest some time in becoming a savvy and available Airbnb "host" can make two to three times as much by renting a property on a short-term basis to tourists than is possible by renting long-term to someone who actually lives here. But that's not to say that everyone who can do that is doing so. There are ways of at least estimating how much a property is being used as an Airbnb listing (some have used the number of reviews – more on that below), but I have not attempted that at this point, so won't comment.

Private rooms are important to consider too. While I've focused a lot on entire units, in a city like Vancouver where housing costs are high and incomes are not, private rooms make up an important part of the affordable housing supply. For many (including, but not limited to, students, newly arrived immigrants, and long-time residents of all ages who work in

retail or other service industry jobs), a private room with a shared kitchen and/or bathroom may be as far as the budget stretches. A quick search of Craigslist shows many people hoping to find such shared accommodation in the \$500 to \$700 range. Meanwhile on Airbnb, many private rooms are being offered to tourists for \$50 to \$80 per night or more, depending on the neighbourhood. There were 922 private rooms listed on Airbnb as of June 1 (1,463 in Metro Vancouver). There appear to be some entire houses dedicated to this purpose.

STR operators with more than one listing

- As of June, there were 2,640 STR operators (people or companies called "hosts" by Airbnb) in the City of Vancouver.
 - o 86% of those had only one listing.
 - o 14% (381 people or companies) had more than one listing.
 - Collectively, operators with more than one listing controlled 1,215 listings (35% of 3,473 listings).
- Of the 381 operators with multiple listings
 - o 65% (234) had two.
 - o 19% (73) had three.
 - o 6% (21) had four.
 - o 5% (19) had five.
 - o 3% (11) had six.

The remaining 6% of operators with multiple listings each had 7 or more listings each. Some operators with multiple listings may be companies that manage Airbnb listings on behalf of others.

• 1 person had 29 listings and 1 person had 18.

Table 5: Number of listings per operator (Vancouver)

Why this matters

This data sheds some light on how many housing units may be dedicated to STR use and so unavailable to residents.

Collectively, the 381 STR operators who had more than one listing (as of June 1) controlled 1,215 units. Each of those operators can have only one primary residence, so as a baseline, it's possible to say that the other 834 units (1,215-381) are not needed by any of those operators as a primary residence. It's then possible that if those units were not being used as STRs, they could be available (though we can't assume that they would be, necessarily) for Vancouver residents.

On one hand, this number (834) is an overestimate of the units that are unavailable to residents due to being listed on Airbnb, because some of those multiple listings (about 80) are controlled by businesses that may never make those units available to residents. Also,

an unknown number of the multiple listings may be used as STRs only part-time and lived in by residents at others. Also, the multiple listings include private rooms, so an STR operator who owns a house and rents out two spare rooms on a regular basis, plus sometimes his or her own room, plus sometimes the whole house, will show up as having four listings when in fact the maximum number of rooms that could be available to other residents if they were not being used as STRs is two.

On the other hand the 834 figure is an underestimate because although the vast majority of hosts have only one listing, that one listing could be a unit that is dedicated to STR use and not a primary residence. It's also possible that some operators with multiple listings are not using any of those listings as a primary residence.

And there are grey areas. When looking at listings and operator profiles, it's not unusual to find listings by hosts who live outside Metro Vancouver (as in the Fraser Valley or Sunshine Coast) and who state that they use the unit only for occasional recreational or business trips to Vancouver, renting it out on Airbnb the rest of the time. Some state quite plainly that renting out the unit on Airbnb is what makes it possible for them to afford the luxury of such an arrangement.

Number of listings with two or more bedrooms

- 68% (2,357) of listings had one bedroom.
- 25% (862) had two or more bedrooms.
- 7% of listings did not have this information.
 - These could be shared rooms, bachelors or studios, or other types of listings with missing information.

Table 6: Number of bedrooms, Vancouver

Table 7: 2+ bedroom listings by selected neighbourhoods, June 1

Why this matters

I decided to count the number of two or more bedroom units specifically because I was aware of the concern about the lack of family-appropriate (size-wise) housing in the city. The city published a report on that problem just last week. It said

- there are 8,000 families in the city living in one-bedroom or studio apartments (page 11).
- less than 17% (9,473) of the city's market rental stock was two or three-bedroom units (in 2013, page 20).

As mentioned elsewhere, I haven't tried to determine how many of those Airbnb listings with two or more bedrooms are dedicated to STR use. But I did look at where they are. Like

the rest of Airbnb listings, they're concentrated in areas close to the core that are also very desirable for residents because they have good access to parks, public transit and other amenities. There were 180 Airbnb listings with two or more bedrooms Downtown as of June 1 and 131 in Kitsilano.

Reviews

- 48% of listings had two or fewer reviews.
- 28% (983) had zero reviews.
- 29% had 10 or more reviews.
- 5% (184) had 50 or more reviews.
- The listing with the most reviews in June was a private room with a bath in Yaletown that had 282 reviews. This same listing also attracted the most reviews in January.

Table 8: Reviews per listing

The number of reviews is often used as an indicator of the booking or occupancy rate, but there isn't a consensus on what multiple of review to use to estimate that. Airbnb sends reminders to guests (and hosts), encouraging them to write a review within 14 days of their stay, but guests are free to ignore those reminders.

So, having zero reviews doesn't mean Airbnb guests have never stayed in that listing, though that could be the case and having zero reviews is a reasonable indication that a listing has been infrequently booked. It may also indicate that the listing is new. In September 2012, co-founder Brian Chesky said that 72% of guests leave reviews for hosts. More recently Chip Conley, Airbnb's global head of hospitality, said 78% of guests and hosts review each other. Meanwhile, some Airbnb operators who blog or comment on various forums say their own review rates are considerably lower, despite their efforts to garner feedback. I'm assuming that the percentage of guests who leave reviews varies by city, room type and guest demographics, among other factors.

Also, in the May 2015 report on STRs, published by San Francisco's Office of the Budget and Legislative Analyst, the office looked at the number of bookings in the New York State Attorney General's 2014 report on Airbnb in New York City (which was based on subpoenaed information collected between January 1, 2010 and June 2, 2014) and compared that to data scraped by researcher Murray Cox for the same period. In doing so, the office determined that only 30.5% of NYC bookings had visible reviews. The office then used both these review rates (72% and 30.5%) to construct high-impact and low-impact estimates of Airbnb's effect on San Francisco's housing supply (see pages 49-50 of the report's appendix for a more detailed discussion of methods).

Nightly Rates

The average nightly rate as of January 1 for all areas (in Vancouver) was

- \$120 for all room types.
- \$142 for entire home/apts.
- \$72 for private rooms.
- \$47 for shared rooms.

Table 9: Nightly rates, January 1, Vancouver

I was unable to collect nightly rate information for June 1 and so am reporting it for January 1. I have rate data for other dates, but haven't analyzed it yet.

I definitely found some nightly rate information that seemed anomalous or incorrect, but I have not gone through the dataset specifically looking to identify or correct what appear to be incorrect rates. The averages may therefore be skewed, which is why I chose to also report the mode/s (the most frequently appearing value/s) for these categories. Another thing about these averages is that they are for all listings in each category, including those with zero reviews. One reason a listing could have zero reviews is because it hasn't been booked or booked only a few times, and that in turn might be because the nightly rate is unrealistically high.

It would be more interesting to have the neighbourhood rate breakdowns for room types, but I need more time to calculate those.

How the growth of short-term rentals relates to City of Vancouver regulations, policies and goals

I see a number of City of Vancouver regulations, goals and strategies that seem to be undermined or contravened (or at least have the potential to be) by the existing level and unchecked growth of Airbnb listings in Vancouver. There may also be another set of policies and goals (related to tourism and/or economic development) that are enhanced by having as much Airbnb activity as we do, so those should be considered too (though will not be by me here now).

Zoning and Development Bylaw

In terms of rules and policies that are undermined, the main one is the city's zoning bylaw, under which it is a contravention "to use or permit to be used any dwelling unit for a period of less than one month unless such unit forms part of a hotel or is used for bed and breakfast accommodation." This wording is in section 10.21.6. As I understand it (and I

stand to be corrected), this means that all Airbnb listings in Vancouver, except those listed by licensed bed-and-breakfasts operators and hotels, are in contravention of the bylaw, and that this is true whether the unit in question is a single family dwelling; an apartment for which the tenant has the landlord's permission to sublet through Airbnb, which I think is quite rare in any case; or in a condominium building where the strata has bylaws allowing short-term rentals.

Some would say that while this zoning provision may be a rule, it's a bad rule and people should be allowed to do what they want with their own properties. There's a lot to unpack and respond to in those sorts of statements – more than I can deal with here. Briefly, though, homeowners are usually quite concerned with protecting the resale value of their own properties – sometimes even to the exclusion of other priorities and values – and typically maintaining the resale value of residential properties depends very much on people collectively following the rules, including zoning rules.

Also, those who want to change the rule would need to make a case for that change, and in a city where residents with a wide range of income levels are so challenged to find affordable housing (and have been for more than a decade now in this last round) and the rental vacancy rate continues to hover under one percent, I find it hard to imagine a persuasive argument for changing the rules in a way that would make it easier for people to make more money by renting housing units to tourists than they can by renting to residents.

Protection of Rental Housing

I've already touched on the city's report on the need for more family-size housing units (which is part of its Healthiest City Strategy) but more generally, the city has a <u>several policies and programs</u> aimed at protecting and increasing the market rental housing stock. The ones aimed at protecting existing rental housing include the rate of change guidelines that were expanded in 2007 (which require anyone who proposes to demolish rental housing units in a building of six or more units in designated areas to replace each of those units or contribute an equivalent amount) and the recent creation of an online rental standards database. I've attended several city presentations in which the protection of existing rental housing is noted as a top priority when it comes to affordable housing and that priority is included in <u>Vancouver's Housing and Homelessness Strategy 2012-21</u> (see page 6). These are all good and appropriate steps given that, for a variety of reasons, there has been very little purpose-built rental housing built in the city since the 1970s. The existing stock is aging and not being replaced at a rate that meets demand. (This has begun to turn around in the last few years, but there is still a massive gap to fill).

Greenest City 2020 Action Plan

The Greenest City 2020 Action Plan calls for more than 50% of city trips to be made by foot, bicycle and public transit (this one was recently achieved). Another of the plan's transportation goals is to reduce the average distance driven by residents by 20% from 2007 levels (see page 29 for both goals). As mentioned, the areas with the highest percentage of Airbnb listings in the city are those in or close to the core (Downtown, West End, Kitsilano, Mount Pleasant and Grandview). Residents who live in those areas arguably have the best opportunities to live close to work, make the majority of their trips by foot, bicycle or transit, and maybe even give up their cars. If housing units in those areas are being converted to STRs and rented to tourists at higher rates than residents can afford, this may undermine the achievement of the city's sustainable transportation goals. It's no doubt very pleasant for the tourists to be able to stay in these appealing neighbourhoods and walk to all the amenities they offer - I too try to stay in walkable areas when I visit other cities so I understand the attraction. But if there's a choice to be made between supporting the people who actually live here to make sustainable choices (and allowing them to benefit from the quality of life and reduced transportation costs those core areas offer) and supporting tourists to do the same, shouldn't city policy (and actions) lean in favour of residents? The city's zoning bylaw already does that by prohibiting short-term rentals, but it's being routinely flouted.

A recent Metro Vancouver report that looks at both housing and transportation issues is the *Housing and Transportation Cost Burden Study*. Instead of viewing housing costs in isolation, it looks at housing and transportation costs together, because both costs are unavoidable and because trying to reduce one (housing) by moving to cheaper areas further away from the core usually increases the other (transportation). The report shows that while the City of Vancouver is generally the most expensive when housing costs are viewed in isolation, it is actually more affordable than suburban areas when the two costs are calculated together. This was true in all areas for renter households and in most areas for owner households (see pages 14 and 15). Again, this indicates that by allowing unchecked growth of Airbnb and other STR rentals in core areas, the City and Metro Vancouver may be undermining their own affordable housing and sustainable transportation goals.

This is one of the many areas where the impacts of Airbnb are complex, because obviously the city (and Metro Vancouver) would like to support sustainable transportation choices by tourists too. Also, the city considers tourism jobs to be green jobs – and some people are clearly using Airbnb as a job.

Healthiest City Strategy

Things get more murky here....certainly many Airbnb operators will argue that their hosting activities and the new and interesting people they meet that way bring them

substantial quality of life and mental health benefits and make them feel more socially connected. I don't doubt that, but I also wonder whether those benefits for the operators (and their guests) come at the cost of substantial drawbacks for other city residents. And I also wonder whether the other residents who are forced to deal with the effects may be less well off to start with than the STR operators. Property owners, for example, are in the best legal and regulatory position to list units on Airbnb because tenants (unless they're in the minority of those whose landlords will grant their permission to sublet on Airbnb) who do so risk eviction.

In terms of specific goals in this strategy, two of them are to increase Vancouver residents' sense of belonging by 10% and their sense of safety by 10%. Not withstanding Airbnb's "belong anywhere slogan" it's hard to see how increasing numbers of high-turnover short-term visitors staying in Vancouver's condos, apartments and houses helps either of these or will reduce social isolation. Keep in mind that in order to stay under the radar and keep the peace, operators renting out entire condos and apartments often advise their guests not to interact with the neighbours. The operator and the guest may get to know each other, particularly if the guest is staying in a private room while the operator is present, but these arrangements are now in the minority. There's always a chance that a resident and an STR guest will have a chance encounter in the hall and strike up a lifelong friendship, but the odds of forming enduring social connections seem much better between people who are planning to stay for the long-term.

Should the city change its approach?

Given the above policies and Airbnb's potential to undermine them, the number of Airbnb listings (and particularly the number of entire home/apt. listings and operators with multiple listings), and the severity of the city's housing shortages, I believe a more proactive approach by the city to this issue is justified. And in a broader sense, I think a more active approach is warranted on the grounds of stopping, or at least moderating, the further commodification (and financialization) of housing in Vancouver. I took note of a recent statement by Vancouver planning director Brian Jackson. It was on a different issue (land assembly in anticipation of upzoning), but I think it applies equally well here: "It treats housing as a commodity as opposed to a place where people live. We want to discourage that."

Counterarguments

Before providing some thoughts on what the city might do, I'd like to deal with some of the arguments against attempting to curb the growth of STRs and taking a more active enforcement approach.

The number of listings is too small / minor factor

One of these arguments is that despite the number of Airbnb listings (as well as STRs on other platforms) and their rapid recent growth, the overall number is just too small to have a noticeable negative impact on the amount of housing available to tenants or to significantly increase rents. Responding to critics on these points, Airbnb hired Kenneth Rosen (of the Haas School of Business at UC Berkeley) to study the question of whether "home-sharing" was contributing to increasing rents in San Francisco, and more recently another academic (Thomas Davidoff, an assistant professor at UBC's Sauder School of Business) to look at the effect on rents in a variety of other U.S. cities

In the 2013 report on San Francisco by the Rosen Consulting Group, the authors wrote that

"The impact of Airbnb and other online marketplaces on trends in urban housing markets are minimal, though admittedly are difficult to quantify. However, we believe that the local apartment market tightened significantly because of job creation and the improving economy combined with positive demographic conditions...Furthermore, the short-term rental marketplace is small relative to the size of the region's housing stock and cannot realistically impact regional housing trends."

This report has numerous shortcomings. For one thing, despite having access to Airbnb data, nowhere does the report state how many Airbnb listings there actually were in San Francisco at any given date. It instead says that "At any given time, there were thousands of individual listings available on Airbnb." (page 4). Rosen is somewhat more specific in a blog post on the topic (where he refers to "a couple of thousand), but still, not exactly precise. The most precise figure the report gives is when it states that Airbnb booking activity peaked in 2012 in August at 1,576 bookings. It notes that at that peak level, this works out to bookings in 0.4% of San Francisco's 378,000 homes. While it's useful to have that booking information, given Airbnb's rapid growth, the 2012 figure was likely quite out of date by the time the report was published in 2013. Also, since that entire housing stock is not available to tenants, for the sake of perspective it would be useful to also compare the bookings and/or listings to the rental stock and/or the number of units available to tenants at any given time, as indicated by the vacancy rate.

One could make the same argument that Rosen does about the number of Airbnb listings in Vancouver compared to the overall housing stock, i.e. that there are too few to make a difference According to Statistics Canada's 2011 National Household Survey, there were 264,570 occupied private dwellings in the City of Vancouver. The 3,473 Airbnb listings (not bookings as Rosen refers to, because I don't have that info) in the City of Vancouver (as of June 1, 2015) make up only 1.3% of that total housing stock (which has also increased since 2011). However, the picture starts to shift when you look at that number in relation to dwellings occupied by renter households. That figure is 136,135, though it's likely an undercount, due to the NHS' 24.5% nonresponse rate in Vancouver, and the difficulty of enumerating secondary suites and tenants as opposed to owners. The number of Airbnb listings as of June 1 is 2.6% of that stock. I'm not arguing here that most Airbnb listings are

in rented dwellings (in fact I think the opposite is more likely) but I do think it's important to consider the number of Airbnb listings in relation to the stock of housing available to tenants. Given that the City of Vancouver had an overall 0.5% rental vacancy rate (according to CMHC's Fall 2014 report), a rough estimate of the number of available rental units when this vacancy rate is in effect would be in the range of 680. This would not account for rental units built since 2011, but I am trying to get a ballpark sense here of how the number of Airbnb units might impact the rental vacancy rate. It seems that if even 10% of the 3,473 June 1 Airbnb listings might otherwise be available to tenants, that would have an impact on the vacancy rate. Given the number of operators with multiple listings (381) and the number of units they held as of June 1 (1,215), this 10% estimate seems quite conservative.

Overall, the Rosen report seems to argue that it is San Francisco's low vacancy rate that is contributing to increasing rents, rather than Airbnb, meanwhile dismissing the idea that Airbnb could be contributing to that low vacancy rate. The unstated but implied jist is that since there are so many other reasons for increasing rents, there is no justification for trying to curb STRs as a means of slowing that trend. It's not exactly surprising that a study commissioned by Airbnb would reach those conclusions.

Similarly, Davidoff's study found that Airbnb was responsible for an increase of only \$6 per month on a New York City one-bedroom apartment and an average increase of \$19 per month in San Francisco. This is predicated on "Airbnb's estimates" that 80 to 90% of its listings are posted by "residents sharing the home in which they live." The actual study doesn't seem to be publicly available, but there is a <u>story on it in the Wall St. Journal</u>, in which Davidoff is paraphrased and quoted. According to the story, Davidoff said that even putting aside Airbnb's estimates, if all Airbnb listings were assumed to be used solely as STRs, the increases would still be "modest" (meaning \$24 per month in NYC and a \$76 per month in San Francisco).

What the focus on rent increases doesn't address, however, is Airbnb's effect on vacancy rates. Many tenants may be able manage an increase of \$6 or even \$24 per month, but can they find an apartment in the first place? In the article Davidoff acknowledges this, noting that criticisms of Airbnb go beyond its effect on rents and concern how it may be affecting who can continue to live in the neighbourhoods where Airbnb is most popular. "It's not an affordability issue. It's a luxury neighborhood issue or a bohemian neighborhood issue," Davidoff states.

I hope Vancouver city council will not adopt the idea that the areas that have the most Airbnb listings are "luxury" neighbourhoods and those who control properties in those areas should be free to rent them out to tourists at higher rates than residents can afford (or are allowed under B.C.'s *Residential Tenancy Act*, which doesn't cover short-term rentals). If they do, the limited affordable rental housing that's still available to tenants in the West End, Kitsilano, Fairview, Mount Pleasant and Grandview-Woodland will shrink

further than it already has and current residents will have to move to less central areas (where they will likely have to make more trips by car).

It's true that Airbnb is only one of many factors that are contributing to the squeeze on Vancouver's tenants and that this pressure has been underway for some time, prior to Airbnb's existence. As of 2011, tenants made up 51% of the city's population – an often-repeated statistic. But that percentage is lower than the 58% it was in 1986 (see page 27 of the city 's Grandview-Woodland Housing Backgrounder, found here) and in 2001, when tenants made up 56% of the city's population (See Statistics Canada or the city's own census-based local area profiles for that figure). Tenants make up a smaller percentage of the population even in areas where residents have historically found affordable housing. Grandview-Woodland was 73% tenants in 1986 but only 66% in 2006 (see the backgrounder referenced above). The proportion of tenants in that neighbourhood is not available from the city for 2011, due to the switch from the mandatory long-form census to the voluntary National Household Survey.

Unknown number of listings dedicated to STR use

It is also true that just knowing the number of Airbnb listings or even the number of entire home/apt. listings, does not tell us how much housing is being diverted from the supply that would otherwise be available to residents. That is a difficult thing to determine because 1) It is challenging to assess which listings are being used exclusively as STRs and which are primary residences that are being used as STRs on an occasional basis. The number of reviews and calendar availability do provide some grounds for estimation, however. I will take another approach to estimating this ratio for a subset of Vancouver listings in my thesis, but am still working out the details of that method. 2) Even if it were possible to ask all the people who have listed entire units or private rooms that are dedicated to STR use whether those were previously rented to tenants or would be rented to tenants if the STR option were not available, there are a variety of reasons why people might not respond honestly.

However, the fact that complete information is not currently available (due to Airbnb's unwillingness to *share* that information, ironically) and that Airbnb is not the primary or only factor putting the squeeze on tenants, doesn't mean the city should continue with the status quo approach. I would argue the opposite: The lack of easily available information should spur the city to investigate. And, since Vancouver was already in an affordable housing crisis before Airbnb came on the scene in 2008, the City should take all actions within its power to prevent the situation from worsening. The severity of the Vancouver's affordable housing shortages means action is required on a number of fronts simultaneously, and the regulation of STRs is an area where the City has the power to act on its own, not requiring information, permission or cooperation from senior levels of government.

Airbnb makes housing more affordable and accessible

Finally, Airbnb typically responds to criticisms of its impacts on the housing market with claims that it actually makes housing more affordable and accessible. I urge the City to view such claims skeptically and to ask two critical questions: For whom and at what cost?

This is because in order to make money to offset your housing costs through Airbnb, you must first have some housing to "share," so if you're homeless or precariously housed – i.e. if you're one of those most in need of affordable, accessible housing - don't count on Airbnb helping you out with this.

And for tenants, the benefits are dubious. Tenants require the permission of their landlord to sublet and any who do so without that permission are risking eviction, as Landlord BC recently warned. Given the legal responsibilities of landlords to provide for the "quiet enjoyment" and safety of all their tenants, it seems unlikely that many landlords will be willing to delegate their screening processes to their tenants. This means that only a tiny minority of tenants are likely to gain the permission of their landlords to rent their spaces on Airbnb, while the rest will never have access to that source of income to offset their housing costs and will instead have to cope with a pool of units that is dwindling, thanks in part to the incentives to rent short-term that Airbnb provides. Even if a landlord doesn't evict a tenant who rents her or his space on Airbnb without permission, the landlord would certainly be less inclined to provide a reference, and it would be imprudent for tenants in this tight rental market to risk that. Given these circumstances, I don't see how the claim that Airbnb makes housing more affordable and accessible for the majority of tenants can stand.

Meanwhile, homeowners, the group of residents who are arguably already best off in Vancouver's extreme and unusual housing market, are legally well-positioned to benefit from Airbnb, and it probably does make housing more affordable and accessible to them. Airbnb and others argue that "sharing" (i.e. renting) one's home helps homeowners afford their mortgages or even keep their homes when threatened with foreclosure. Since we didn't have a foreclosure crisis in Vancouver, that argument doesn't really apply here, but there certainly is much public debate and concern over the indebtedness of homeowners and Vancouverites in general, and the city's housing costs (especially in relation to incomes) are a major factor in that indebtedness. For those who are stretching to afford their current mortgage or who are hoping to use Airbnb to afford something they otherwise couldn't, Airbnb may indeed make housing more accessible, but again the question is - at whose expense?

If a property owner can't afford to pay their mortgage based on their own income and/or the rent from a long-term tenant and therefore decides to rent out that unit on Airbnb instead, then perhaps that property was not a wise purchase in the first place. Why should tenants (many of whom can't afford to own under any circumstances) be deprived of already scarce housing options because someone (perhaps during a time when mortgage

lending requirements were quite a bit looser than they are today) bought more house than they could afford? And why should the city allow and foster that rule-breaking and inequity by continuing with its current complaint-based approach to enforcement? There will of course be exceptions....people who have been affected by sudden job loss or health problems. No one could blame a person in those situations for maximizing all possible income sources. But exceptions are just that.

Also when the owner of a detached house rents out that property on Airbnb, they are breaking the zoning bylaw just like everyone else, but due to the detached structure, are less likely to be noticed and complained about than those who live in apartments and condos. And even if someone does complain, the only consequence the owners are likely to face as it currently stands is a letter from the city asking them to stop. Those who rent out condo units are more likely to be detected and complained about, depending on the rules of their strata association, but even still, the consequences they're likely to face from their strata or the city are much less severe than tenants are subject to.

Given these differing benefits, rules and potential consequences, it seems to me at this point that the net effect of Airbnb in Vancouver is to further enrich those who are already housing-advantaged and to worsen the situation of those who aren't. Is this path – one of increasing housing inequality – one the city wants to sanction? I hope not.

Options

How to effectively and fairly regulate short-term rentals is a question many cities are currently grappling with, or have recently dealt with. For a while, I was trying to keep track of how many cities have recently changed or brought in new STR regulations, (see here and here) but that's a full-time job or two in itself. I estimate at least 60 in North America and Europe. The good news is that since many cities have already completed or begun this process, there are many models to follow (and some to avoid).

As I mentioned at the outset, my research is ongoing, so the formation of my ideas on this topic are ongoing too, but here are a few current thoughts.

Be proactive

Airbnb listings have grown rapidly in Vancouver since the company launched its website in 2008. Affordable housing shortages have arguably worsened too, but for the most part, the city has continued with its status quo, complaint-based enforcement approach to STRs. This may be due to a lack of resources, which are of course limited. And the city has many housing priorities to juggle. Still, I think that given current circumstances (number of listings, number of entire homes listings, number of STR operators who have multiple listings, etc.) a more active approach is warranted. More active enforcement will require staff time and resources, which costs money – but so does building brand new housing from scratch to replace whatever Airbnb activity is removing from the existing supply. A

more active approach is also justified based on the city's stated priority of preserving existing rental housing stock. In addition to stepping up enforcement efforts, a more proactive approach might involve creating some kind of permit system allowing limited use of primary residences as STRs

Obtain data

It will be difficult for the city to act effectively without access to accurate data on the types of metrics I've reported on here, as well as others. I suggest the city ask Airbnb to supply it with anonymized booking and listing data, such as the San Francisco Office of the Budget and Legislative Analyst recently requested. Airbnb did not respond to that request and I wouldn't expect it to respond any differently to Vancouver, but it's still worth asking. If Airbnb doesn't provide the data the city needs to properly understand the land use, housing, economic, safety and security impacts the company is contributing to, then the city might want to consider either getting that data via subpoena (as Malibu did, though I'm not sure of the outcome) or obtaining scraped data, as San Francisco has done.

The city might also want to be aware that taking the friendly and collaborative approach to the regulation of Airbnb, as San Francisco and Portland did, will not necessarily result in Airbnb sharing its data with the city, or in regulations that are more effective or enforceable.

Airbnb was actively involved in drafting San Francisco's new regulations (which are now being revised) and it ended up passing rules that set STR permit fees at \$50 for two years – a level that staff said does not come close to covering administration costs. Also, despite San Francisco's cooperation with Airbnb, the company was still unwilling to share the data the city needs to enforce the rules that Airbnb helped write. As a result, staff said the 90-day limit on STR rentals when the owner is not present was unenforceable. Regarding the current situation in San Francisco supervisor David Campos <u>put it this way</u> at a late April public meeting:

"I believe that home sharing and short-term rentals have a place in San Francisco but what doesn't have a place in San Francisco is the idea that a corporation can write a law, then ignore the very law that it wrote, and then refuse to provide the very basic information that is needed to enforce that law."

Similarly Portland's cooperation has not prompted Airbnb to share the data the city has asked for, <u>as noted by city commissioner Nick Fish</u> in a December 2014 exchange with Airbnb's David Owen: "You want to have your cake and eat it too. We have an obligation to go after folks who are not following the law. The only way we can do that is [if] we know where they live, and you're claiming that's confidential and somehow an erosion of your privacy rights."

Airbnb can justify its refusal to share its data with the cities it operates in on the grounds that it's proprietary, but it's also true that Airbnb is (or was) facilitating transactions that contravene local government bylaws in many of these same places, so I think cities have a strong case for demanding the information. Also, Airbnb's whole business model is predicated on the idea that it's good to share what you own. Why is sharing good for everyone else, but not for Airbnb?

Distinguish between listings that are primary residences and those that aren't

As I argued earlier, people who occasionally rent out their own primary residences when they go away are having little to no impact on the city's supply of housing, since the unit is already occupied by a resident and continues to be so after the booking. This type of listing is arguably beneficial because it makes use of space that would otherwise be vacant. There may still be negative effects (noise and security concerns) on neighbours, but I am mainly concerned with housing supply and affordability impacts. Airbnb claims that this type of occasional renting of a primary residence represents the vast majority of bookings on its site, but it never supplies anything more than its assertions to back that up. It's also unclear how reliable Airbnb's information is. If these claims are based on surveys of its own operators (or "hosts"), those operators may be motivated to comply with the frame Airbnb consistently advances, for fear of repercussions. In any case, even a cursory review of Airbnb listings will turn up many examples of listings with indications that they are not primary residences. In some cases these indications are very clear: The operator may actually state that he or she lives close by, but not in the available unit. Regardless of how the percentage of listings breaks down in terms of those devoted to STR use versus those used that way occasionally, the city should keep this distinction in mind. Given the housing situation in Vancouver, I find it hard to imagine justifications for changing the rules to allow property owners to use housing units exclusively as STRs.

Consider capping STR permits by geographic area

Many cities have tried to limit the impacts of STRs by creating a permit system and capping the number of nights a permit holder can rent their space for per year, either with or without the operator present. As noted above, this appears to be very difficult to enforce, especially in the absence of access to Airbnb's booking data.

A more effective approach to permits, especially when it comes to protecting affordable housing, may be to cap the number the city will allow by a geographic area (neighbourhood, building or census tract). Amsterdam, Austin, Texas and Nashville, Tennessee all use variations of this approach.

Set enforcement priorities

Given the number of listings and limited resources, if the city decides to take a more proactive approach to enforcement, it may want to set priorities in line with its various

policy goals. To protect existing rental stock, it might want to focus on operators with multiple listings, for example. It could focus on listings with the most reviews or on neighbourhoods with the lowest rental vacancy rates. If family housing is a priority, it could focus enforcement on two-bedroom units that are being dedicated to STR use.

Be prepared for a pro-Airbnb PR campaign

Any large city that takes steps towards tightening or defining the rules on STRs should count on Airbnb marshalling its local "hosts" and fans to lobby councillors and pack the public meetings – recent hearings in New York City and San Francisco (complete with stickers) prove that. Local governments should also expect to be visited by professional lobbyists. Airbnb reportedly spent more than \$47,000 lobbying the City of Portland in 2014, the year Portland became Airbnb's first official "shared city." The last reported valuation of Airbnb put it at \$20 billion, so it has ample resources to spend on lobbying campaigns.

Other resources

If it hasn't already, the City may wish to review a 2015 draft report on STRs by the Sustainable Economies Law Center, as it covers a variety of regulatory issues and has a section on "Regulating the Housing Supply for the Common Good." I don't agree with everything this report recommends, but still think it's a useful resource.

Taking action is within the city's jurisdiction

To conclude, the city's housing shortages (of social housing, affordable market rental and affordable ownership options) and the intense public concern over these issues mean that any factors or phenomenon that might affect local housing supply or affordability are worthy of investigation and response, as far as the city's powers and budget allows. Many of the factors that have created these shortages – and that might mitigate them - are complex and largely beyond the city's jurisdiction and influence: interest rates, and federal policies on housing, taxes and immigration being some of the key ones. The city does, however, have the ability to influence and respond to the proliferation of STRs and it doesn't need permission from other levels of government do that.