

Short-term rentals in Toronto

UPGo city spotlight

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**A report from the
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Executive summary

This brief report sets out the key facts and trends concerning short-term rentals in the City of Toronto. It is based on a detailed analysis of every Airbnb and HomeAway listing active in the city between 1 October 2014 and 30 April 2019.

- On April 30, 2019, there were **21,000 short-term rentals active in the City of Toronto**—an 11% year-over-year increase.
- Toronto has the most STR listings of any city in the country, and generates by far the most revenue. The city's **14,000 STR hosts earned \$208 million in revenue** last year.
- STR listings in Toronto are heavily concentrated in the downtown area, with a secondary concentration near Yonge and Sheppard.
- Toronto's STR market is dominated by **entire-home listings, which represent two thirds of active listings and five sixths of host revenue**. The majority of entire-home STR listings in Toronto are studio (10%) or one-bedroom (52%) units. 13% of entire-home listings are hosted in housing units with three or more bedrooms, which is considered family-appropriate housing by the City.
- STR revenue in Toronto is distributed in a highly unequal fashion: **more than two fifths of all revenue last year was earned by just one in twenty hosts**, and the most successful ten percent of hosts earned fully 56% of all STR revenue.
- **Nearly two fifths (38%) of active listings were commercial multilistings** (listings controlled by a host with two or more entire-home listings or three or more private-room listings), which earned 53% of total host revenue.
- **STRs have removed more than 5,500 housing units from Toronto's long-term housing market.** 4,800 of these were frequently rented entire-home listings, and 745 were clusters of private-room listings operating out of the same housing unit. The equivalent figure one year ago was less than 4,500, which means that **there has been a 24% increase in STR-induced housing loss in the City of Toronto in the last twelve months**—a much higher growth rate than the growth in total active listings (11%).
- **There are approximately the same number of housing units converted to dedicated short-term rentals in Toronto as there are housing units vacant and available for rent.** This means that, if commercial STRs were converted back to long-term housing, this would be equivalent to doubling the rental vacancy rate in the short-term, and bringing down rents in the long-term.
- **Approximately 40% of Toronto STR listings are likely in violation of the STR bylaws' principal residence requirement.** These 8,700 listings would not be permitted if the bylaws come into effect.

Short-term rentals and the City of Toronto

TORONTO'S STR REGULATORY LANDSCAPE

Short-term rentals (STRs) are not currently permitted in the City of Toronto. In December 2017 and January 2018, City Council introduced new regulations on short-term rentals in Toronto, including amendments to the zoning bylaws. These amendments have been appealed to the provincial Local Planning Appeal Tribunal (LPAT), with a hearing scheduled for August 26, 2019. The bylaws will come into effect should the LPAT dismiss the appeal.

The key features of the proposed STR bylaws are:

- Short-term rentals are permitted across the city in all housing types in residential and the residential component of mixed-use zones.
- People can host short-term rentals in their principal residence only; both homeowners and tenants can participate. Secondary-suite residents can participate as long as the secondary suite is their principal residence.
- People can rent up to three bedrooms or the entire residence. Entire-home STRs are limited to 180 nights per year.

- STR hosts must register with the City and pay \$50, while STR platforms such as Airbnb must become licensed and pay a fee of \$5,000, plus \$1/night booked through the platform.
- STR hosts must pay a 4 per cent Municipal Accommodation Tax (MAT) on all rentals that are fewer than 28 consecutive days.

Evaluation of the City of Toronto's STR bylaws requires an empirical understanding of the STR market in Toronto. Accordingly in the report we present an overview of the current status of STRs in Toronto. The analysis is based on a comprehensive dataset of all Airbnb and HomeAway properties in the City of Toronto each day from October 1, 2014 to April 30, 2019. In total we analyze 24 million data points. The data was provided by AirDNA, a firm that specializes in scraping STR data, and one of the two primary sources for scholarly empirical analysis of STRs. Complete methodology details, along with all the code necessary to reproduce this analysis, are freely available under an MIT license on the UPGo GitHub page at github.com/UPGo-McGill.



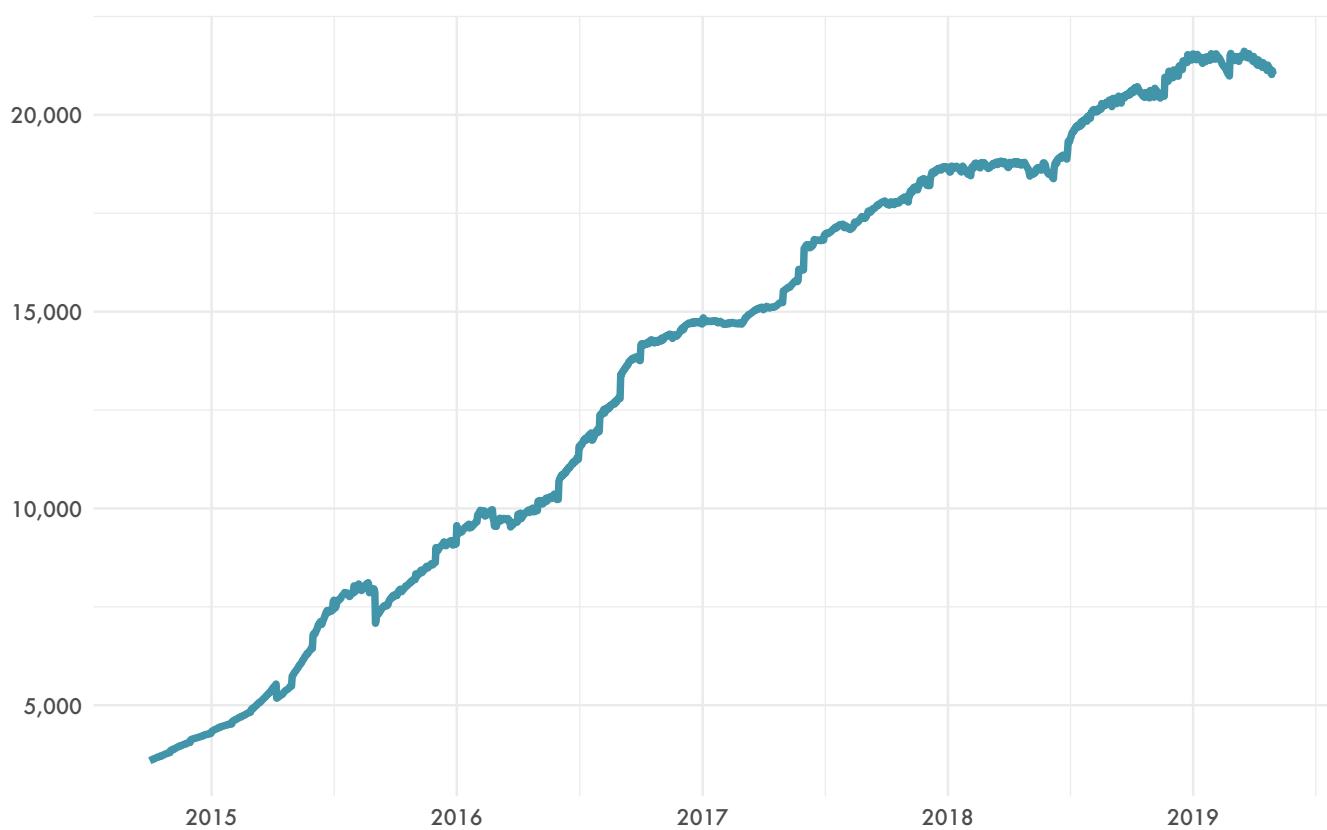


Figure 1: Active daily STR listings in the City of Toronto

ACTIVE DAILY LISTINGS

"Active daily listings" are those which were displayed on either the Airbnb.ca or HomeAway.ca website on a given day, regardless of their availability status (reserved, available, or blocked). It is the clearest and least ambiguous means of determining the overall size of the short-term rental market in a location, particularly with respect to change over time.

On April 30, 2019, there were 21,409 active listings in Toronto. However, 229 of these were hotels or other traditional accommodation providers using the Airbnb platform for bookings. In all the analysis that follows, we exclude these listings, and focus on the 21,070 listings which were located in conventional

housing units. These 21,070 listings were operated by 14,026 hosts.

STR listings located in housing units in Toronto earned \$218.9 million last year (May 2018 - April 2019). The number of active listings in Toronto increased 10.9% from the previous year. Figure 1 shows the growth rate of active daily listings in Toronto.

Table 1 provides a comparison of the top five STR markets in Canada as of April 30, 2019. Toronto has the most active STR listings of any city in the country, although it is only slightly ahead of Montréal, which has a much lower population. However, Toronto's STR market generated by far the most revenue last year, on

the basis of its considerably higher average revenue per listing. (It is only surpassed by Vancouver in this regard.) Figure 2 shows the growth rates of active listings in each of these markets. It shows that Montréal has just recently been surpassed by Toronto in terms of

active listings, and that both of these cities are far ahead of the rest of the country with respect to the size of their short-term rental markets. (The figure also shows a significant drop in STR listings in Vancouver, following the introduction of regulations there last year.)

City	Active listings	Listings per 1000 residents	Annual revenue	Revenue per listing
Toronto	21,070	7.7	\$218.9 million	\$10,400
Montréal	21,044	12.3	\$174.4 million	\$8,300
Vancouver	5,536	8.8	\$115.6 million	\$20,900
Calgary	4,528	3.7	\$28.9 million	\$6,400
Ottawa	4,139	4.4	\$29.0 million	\$7,000

Table 1. STR activity in the top five Canadian cities

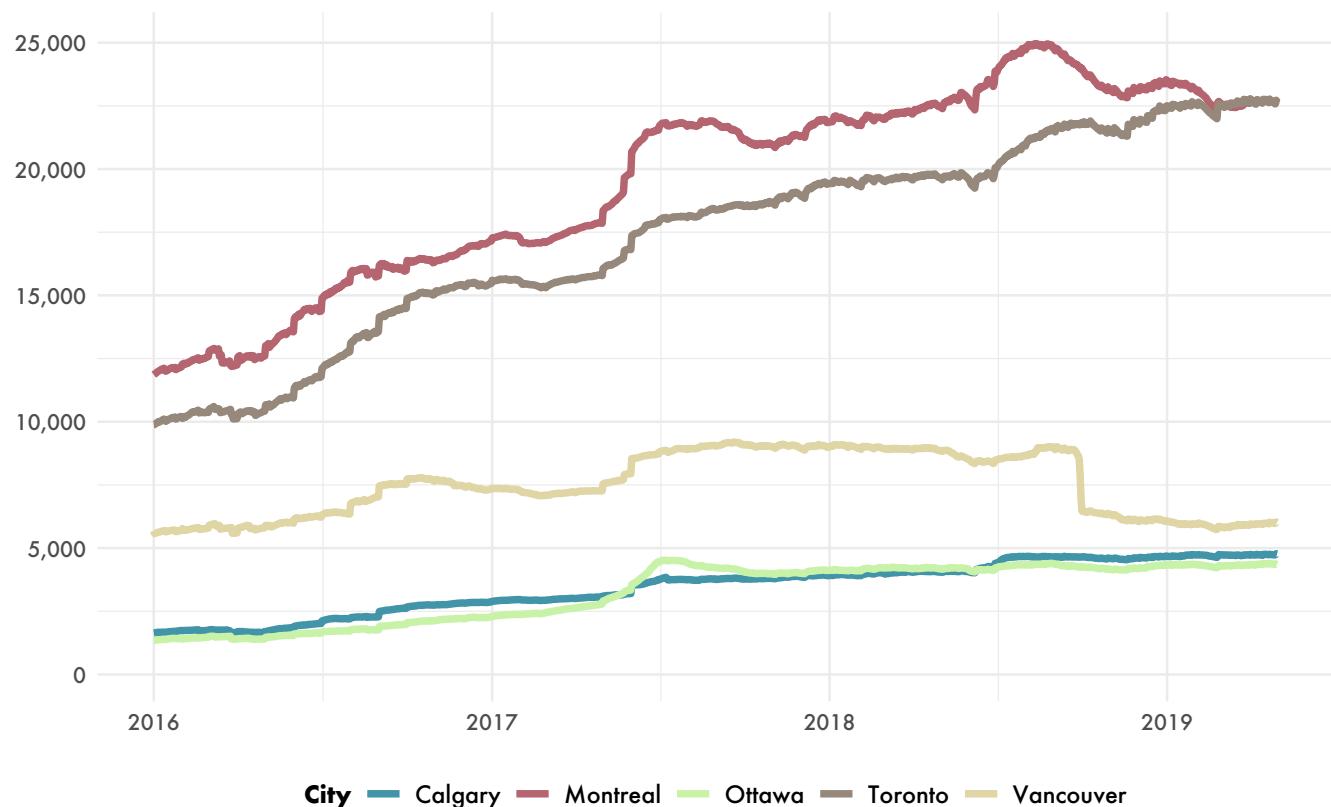


Figure 2: Active daily STR listings in the top five Canadian cities

SPATIAL DISTRIBUTION OF LISTINGS

Figure 3 shows the location of active STR listings in the City of Toronto over the last four years, with their size proportionate to their annual revenue. It demonstrates that listings are heavily concentrated in the downtown area, with a secondary concentration near Yonge and Sheppard. It also

demonstrates the steady spread of STRs out of these areas of high concentration, with an increasingly large number of listings now located in low-rise residential neighbourhoods. All of the city's highest-earning listings are downtown, with the waterfront area particularly over-represented.

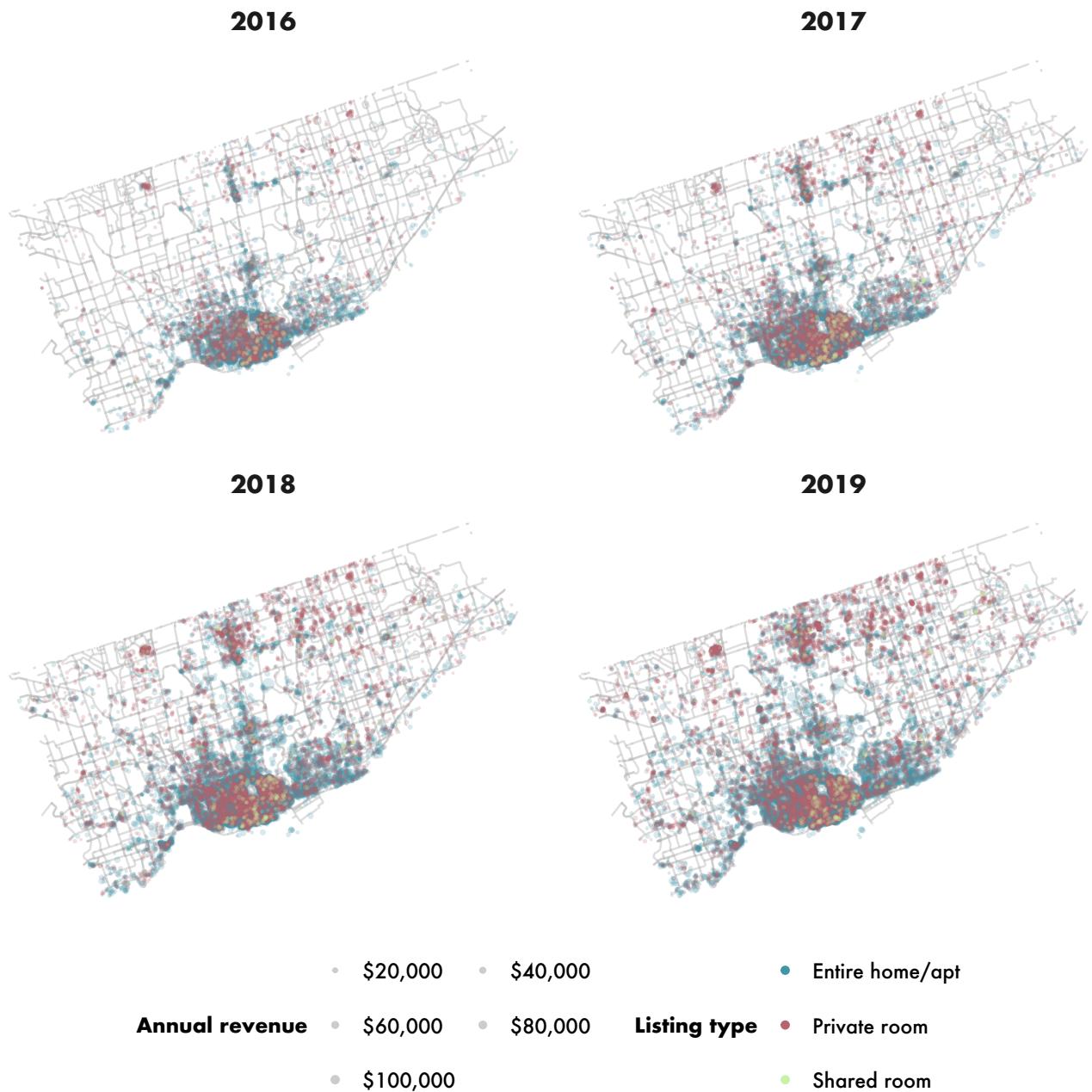


Figure 3: Spatial distribution of active STR listings in Toronto

WHICH STR PLATFORMS ARE USED IN TORONTO?

Of the 21,070 STR listings active in the City of Toronto on April 30, 2019, 19,957 of them were listed exclusively on Airbnb, 363 were listed exclusively on HomeAway, and 750 were listed on

both Airbnb and HomeAway. This fact implies that attempts to estimate the extent of the STR market in Toronto using Airbnb data alone will be highly accurate.

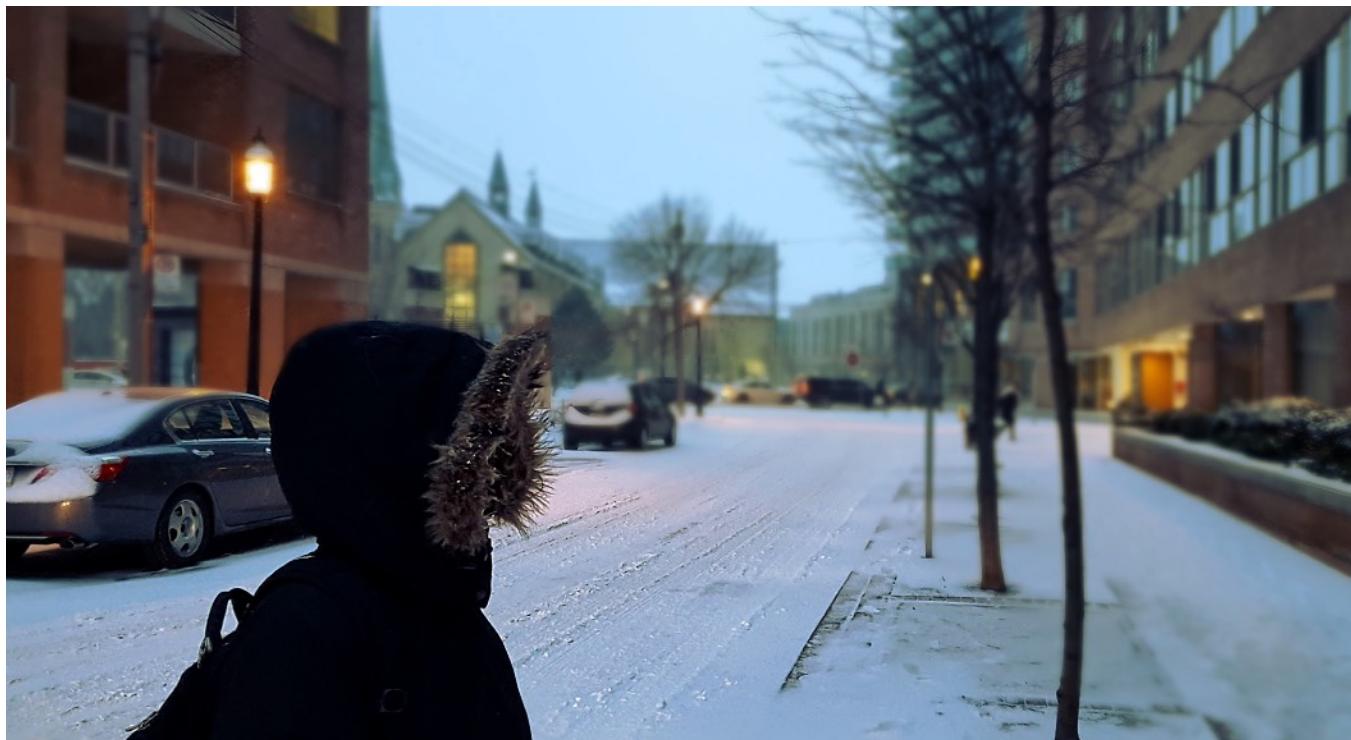
LISTING TYPE PREVALENCE

STR listings can be one of three types: entire homes, private rooms, or shared rooms. Most policy attention has focused on entire-home listings, under the theory that these listings are most likely to generate harmful negative externalities, including housing loss and

neighbourhood nuisance. Table 1 provides the breakdown of listing types in Toronto on April 30, 2019. It demonstrates that Toronto's STR market is dominated by entire-home listings, which make up two thirds of all active listings and earn five sixths of all host revenue.

Listing type	Active listings	Annual revenue	% of all listings	% of annual revenue	Revenue per listing
Entire home/apt.	13,845	\$187.7 million	65.7%	85.8%	\$13,600
Private room	6,874	\$30.2 million	32.6%	13.8%	\$4,400
Shared room	351	\$0.9 million	1.7%	0.4%	\$2,700

Table 2. Listing type prevalence in Toronto



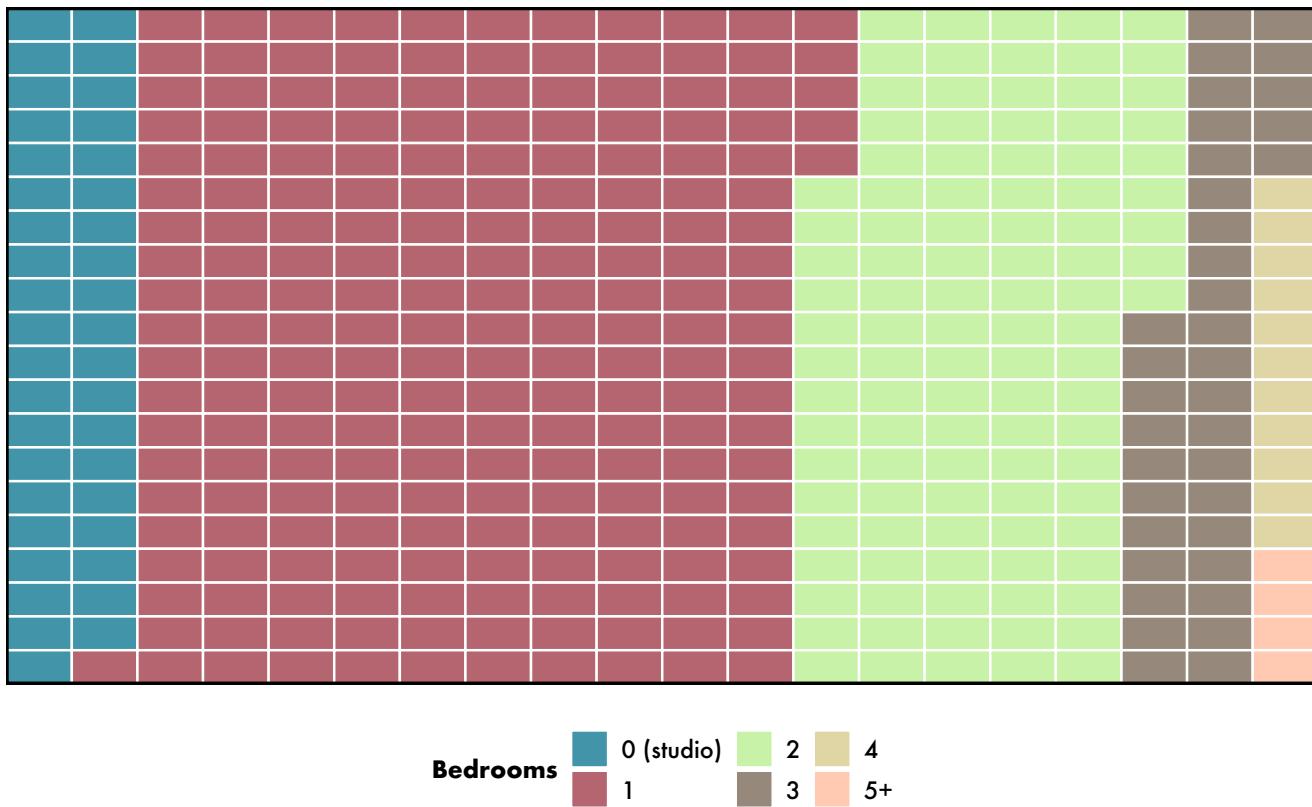


Figure 4: Bedroom sizes among Toronto entire-home STRs

BEDROOM BREAKDOWN

Since almost every STR in Toronto is being operated out of a housing unit which could otherwise be housing a long-term resident, the size of these units is an important factor in determining the impact of STRs on housing supply in the city. If most housing units being listed as STRs are studios and one-bedroom apartments, the opportunity cost of not housing long-term residents in those units will be somewhat lower than if most of the units are family-sized. Figure 4 shows the breakdown of

bedroom types among active entire-home listings. (Private-room and shared-room listings are overwhelmingly listed as having one bedroom, but the actual size of the dwelling unit cannot be inferred from that fact.) As the figure indicates, the majority of entire-home STR listings in Toronto are studio (9.7%) or one-bedroom (51.5%) units. 12.8% of entire-home listings are hosted in housing units with three or more bedrooms, which is considered family-appropriate housing by the City.

REVENUE DISTRIBUTION AND COMMERCIAL OPERATORS

A crucial distinction for understanding the structure of an STR market is between casual STRs ("home sharing") and dedicated STRs ("commercial operations"). There are multiple

ways to capture this distinction, but arguably the most straightforward is to examine the distribution of revenue among STR hosts. Figure 4 shows the percentage of the total \$218.9 million in STR

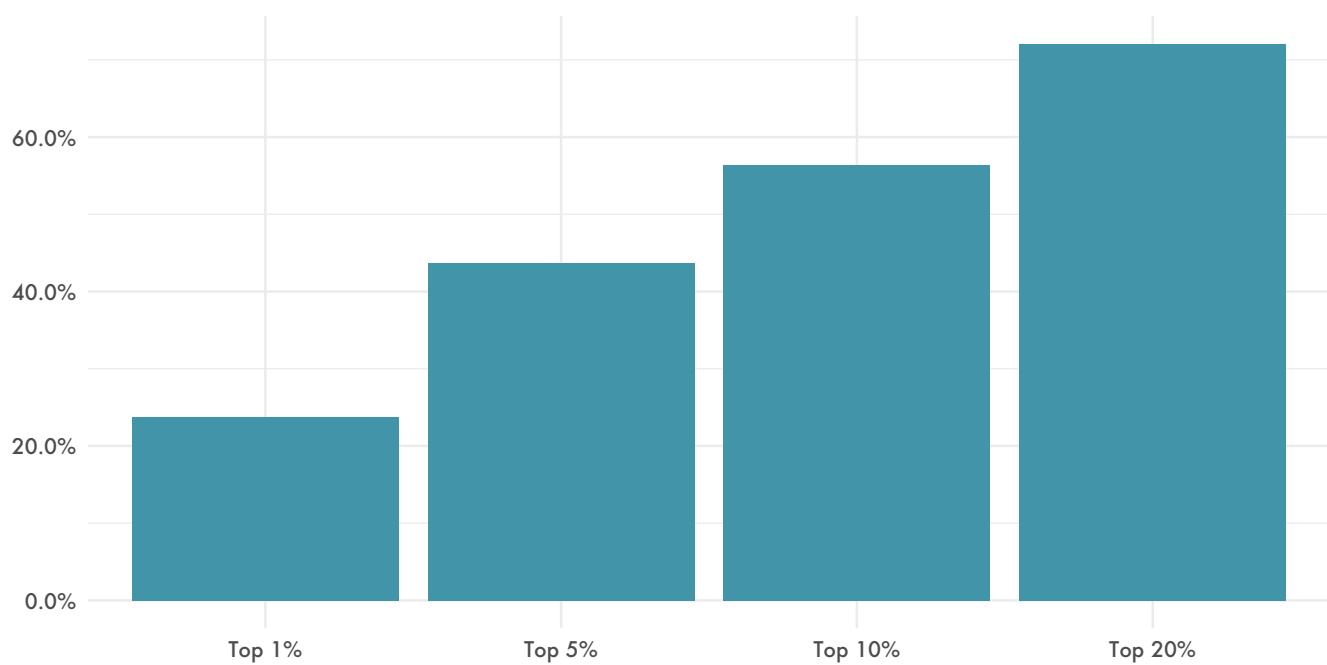


Figure 5: STR host revenue distribution in Toronto

revenue last year which accrued to the top ten percent, five percent and one percent of Toronto hosts. More than two fifths of all revenue was earned by just one in twenty hosts, and the most successful ten percent of hosts earned fully 56.4% of all STR revenue.

What this analysis suggests is that STR regulations which targeted dedicated commercial operations would likely only affect a small number of STR hosts in absolute terms, since most hosts earn revenue which is consistent with them being casual, part-time home sharers operating out of

their principal residence. As Table 3 shows, the median host revenue in Toronto last year was \$7,700, while the top earning host earned more than \$350,000 in Toronto. (In fact, the top earning hosts had listings in other cities in Canada, including elsewhere in the Greater Toronto Area, so their total earnings were much higher than this.)

Another way to identify commercial operators is to look for hosts who operate multiple listings. To take the simplest case, by definition a host with two or more entire-home listings cannot be operating both listings out of their principal residence. We define a “multilisting” as any listing operated by a host who is simultaneously operating other listings. If a host has two or more entire-home listings active on the same day, those are multilistings. We likewise identify private-room multilistings in cases where a host has three or more private-room listings operating on the same day. Since 96.2% of entire-home listings have three or fewer bedrooms, there will be extremely few cases where a host operating three private-

Host percentile	Annual revenue
25th percentile	\$2,600
50th percentile (median)	\$7,700
75th percentile	\$18,400
100th percentile	\$355,700

Table 3. Toronto STR host earnings

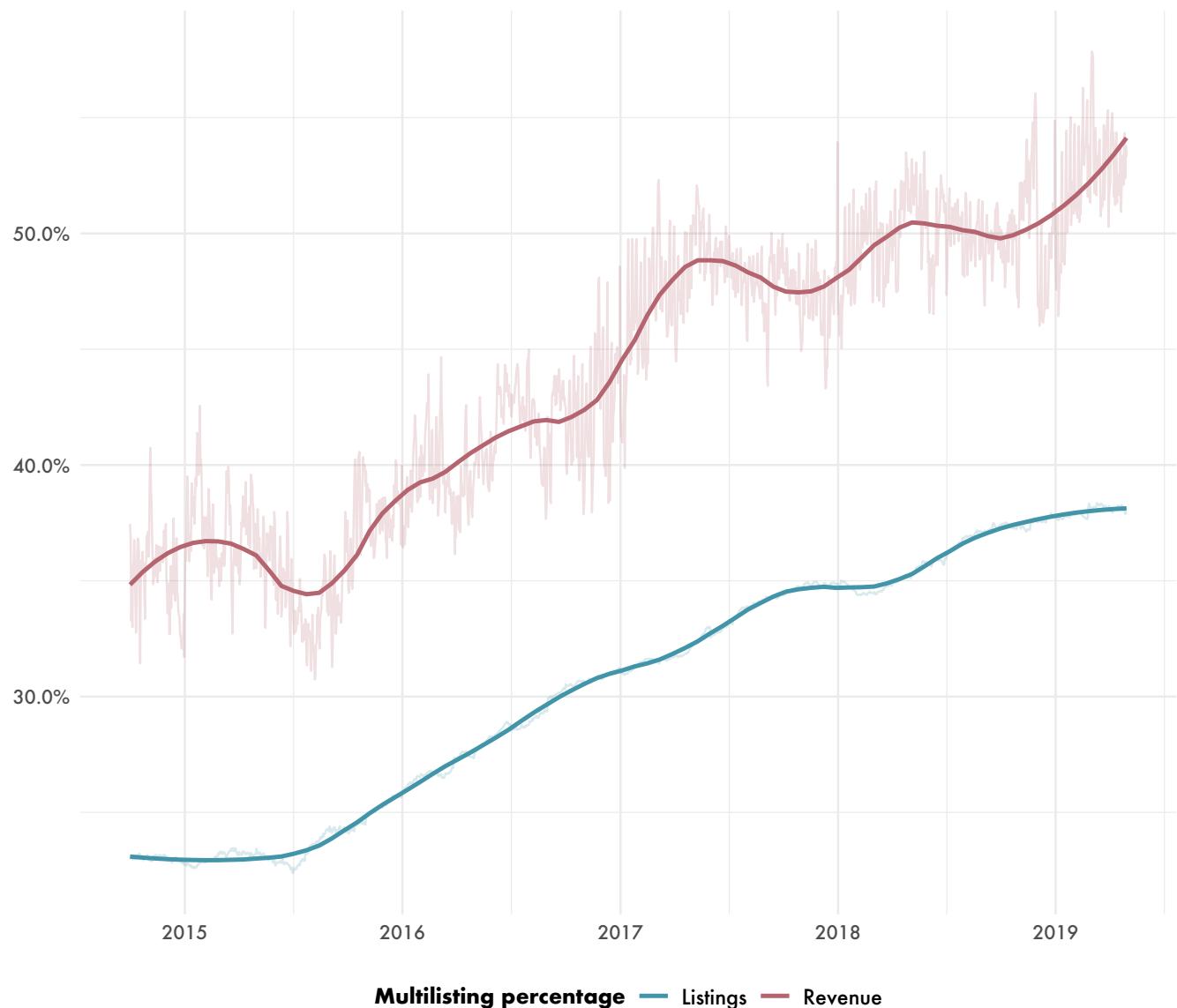


Figure 6: The percentage of total listings and revenue accounted for by multilistings

room STR listings in a dwelling unit has not converted that unit into a dedicated STR operation.

The results of Figure 6 demonstrate that a large and increasing share of both active listings and host revenue in Toronto belong to multilistings. As of April 30, 2019, 37.9% of active listings were multilistings, and these listings earned 53.3% of total host revenue. Moreover, these figures should be taken as absolute minimums, since many commercial operators split their operations across

several Airbnb or HomeAway accounts, and their listings would therefore be erroneously counted as non-commercial. Moreover, many—perhaps most—STR commercial operators only operate a single listing, but on a full-time basis. A house owner with a secondary suite, or the owner of an investment condo who operates an STR in it, are clearly commercial operators running listings which are not their principal residences, but they would not be counted by this method of identifying multilistings.

HOUSING LOSS

One of the most important considerations when gauging the impacts of STRs on a city is the extent to which STRs are removing long-term housing from the market. This process can occur either directly, where tenants are evicted or not replaced at the end of a lease, or indirectly by absorbing new construction which otherwise would have gone onto the long-term market. To obtain a precise number of such cases of housing loss, STR hosts would need to be individually surveyed, which is infeasible because hosts are anonymous on the Airbnb and HomeAway platforms.

One reasonable proxy for STR listings which represent long-term housing loss is multilistings, discussed in the previous section, since these are highly likely to be commercial operations, and by definition cannot be operated out of a host's principal residence.

Another method, arguably simpler, is to identify listings which are highly available throughout the year and which receive many bookings. Along these lines, we define frequently rented entire-home listings, or FREH listings, as entire-home listings which were available on Airbnb or HomeAway a majority of the year (at least 183 nights) and were booked a minimum of 90 nights. Except in the rare cases of residents who travel most of the year, it would be very difficult for someone to rent their home as an STR a majority of the year and still actually live there. As of April 30, 2019 there were 4,812 FREH listings in Toronto. These listings are what Airbnb has called "ghost hotels"—entire homes converted to dedicated STR operations. Each of these dwelling units could be housing Toronto residents, but instead, are serving as de facto hotels.

These 4,812 FREH listings are a good starting point for estimating housing loss caused by conversions to STR. However, it is also possible that private-room listings are contributing to

housing loss. To begin with, a full-time private-room STR might have otherwise been offered to a roommate on a long-term lease. But it is also possible that entire housing units have been subdivided into multiple private-room listings. We call these "ghost hostels", in analogy to the ghost hotels discussed above. We detect ghost hostels by finding clusters of three or more private-room listings operated by a single host, whose reported locations are close enough to each other that they could have originated in the same actual housing unit. (Airbnb and HomeAway obfuscate listing locations by shifting them randomly up to 200 m.) In addition to the 4,812 FREH listings, we identified a further 745 housing units which we believe had been converted into ghost hostels.

As of April 30, 2019, therefore, we believe there were 5,557 housing units in the City of Toronto which were being used as dedicated short-term rentals and therefore are not being offered on the long-term rental market. 4,812 of these were frequently rented entire-home listings, and 745 were clusters of private-room listings operating out of the same housing unit.

The equivalent figure one year ago (April 30, 2018) was 4,469, which means that there has been a 24.3% increase in STR-induced housing loss in the City of Toronto in the last twelve months—a much higher growth rate than the growth in total active listings (10.9%). Figure 7 shows the growth rate in STR-caused housing loss in Toronto since 2015, and demonstrates the steep growth curve of this housing loss, suggesting it will continue growing unless regulatory measures are taken to slow it.

One way to contextualize the magnitude of STR-caused housing loss in Toronto is to compare the number of housing units converted to STRs with the number of vacant rental units available for rent. Toronto currently has a very low rental

vacancy rate of 1.1%. Given the size of Toronto's rental housing stock, this means that, at any given moment, there are approximately 5,800 apartments available for rent in the city. There are nearly this many housing units which have been converted to dedicated STRs in the city.

In other words, if all the dedicated STRs in Toronto were returned to the long-term housing market,

the effect would be to nearly double the city's rental vacancy rate in the short term. These newly available units would be absorbed relatively quickly by new tenants, and the vacancy rate would decline again. But it would settle at a new equilibrium higher than the previous one, and residential rents would likewise be lower than they would have been if the STR units continued to act as hotels rather than housing.

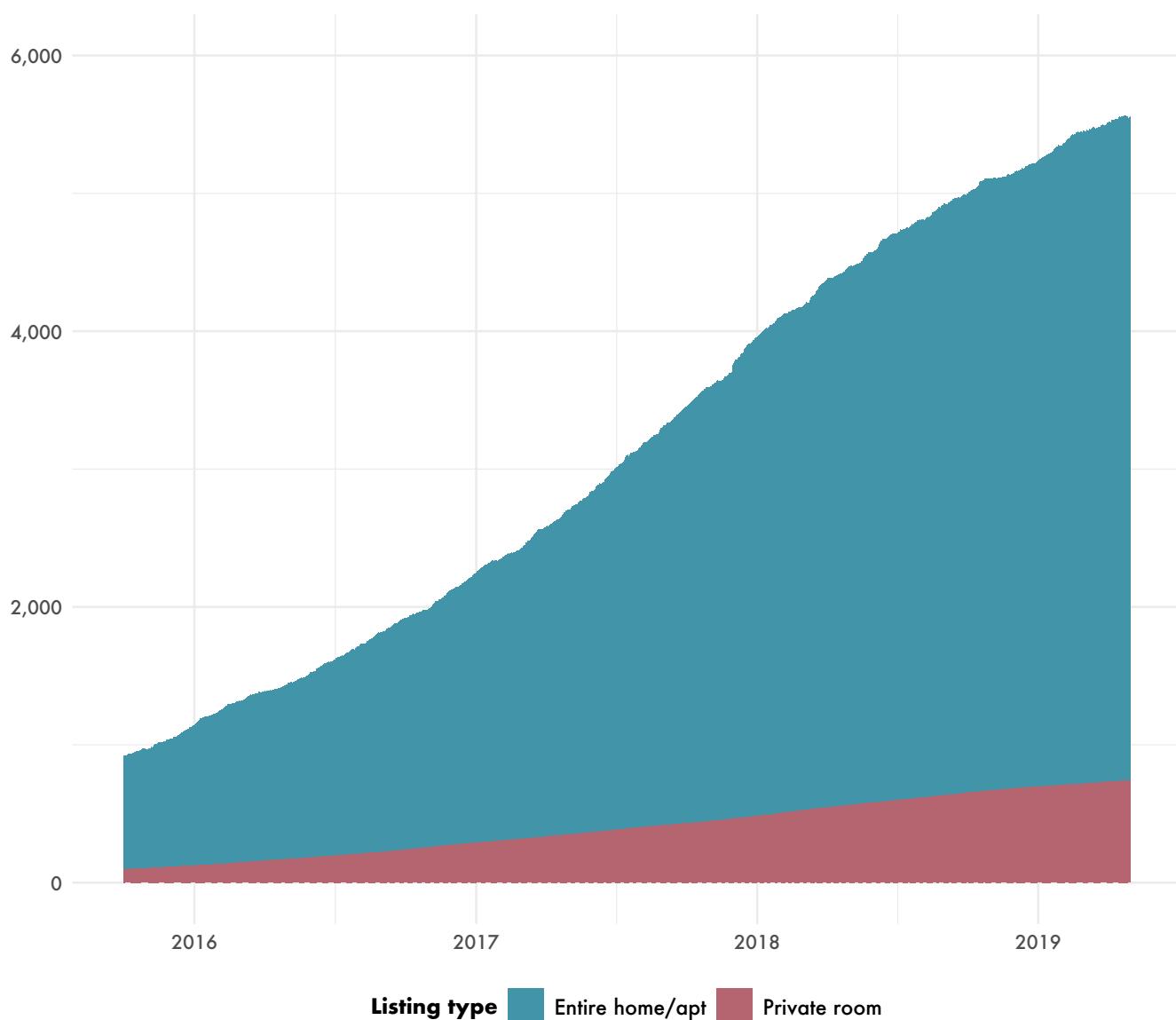


Figure 7: Housing units converted to dedicated STRs in Toronto

LISTINGS LIKELY IN VIOLATION OF THE PRINCIPAL RESIDENCE REQUIREMENT

The City of Toronto's STR bylaws require that all STRs be operated out of a host's principal residence. This principle residence requirement implies that numerous currently existing STRs will become illegal and will need to be closed. Here we provide an estimate of listings which will be in violation of the bylaws if they come into effect.

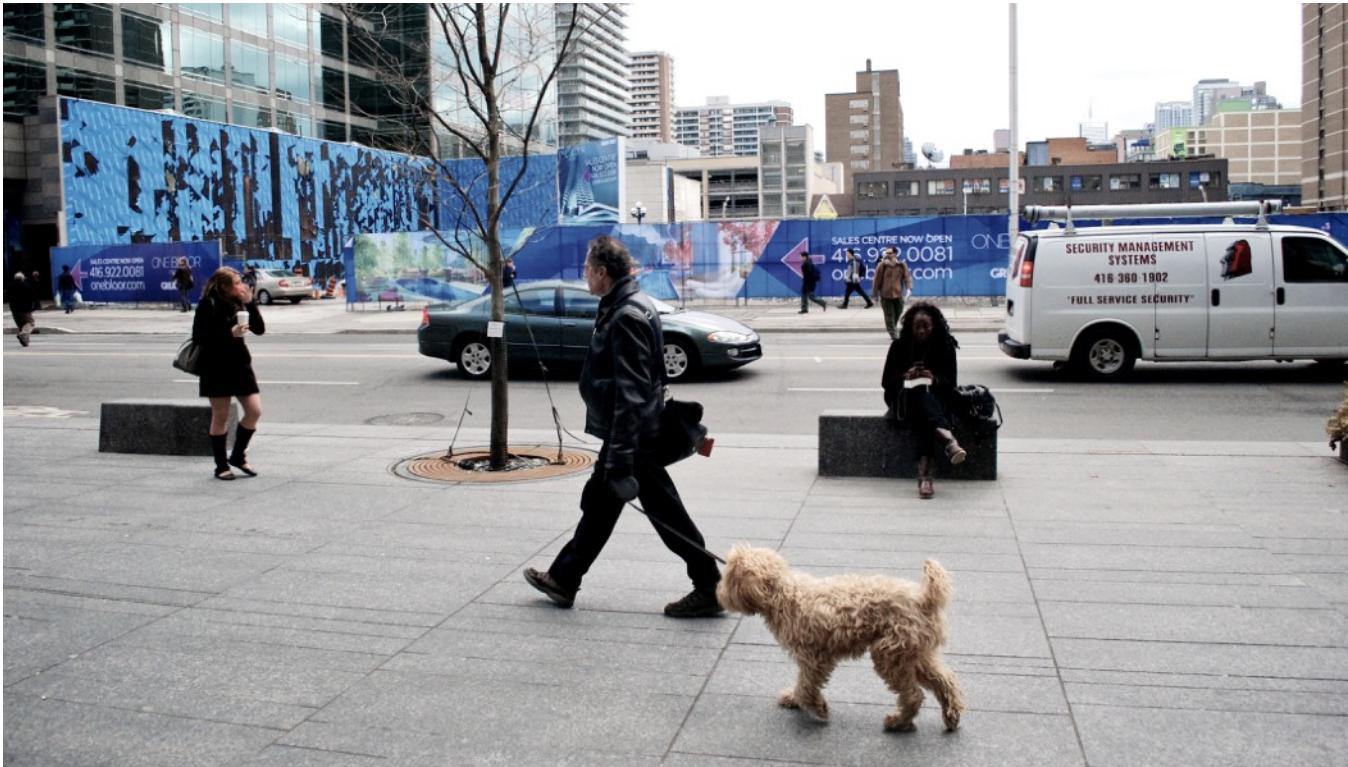
We begin with the 21,070 STR listings active on April 30, 2019. Entire-home multilistings will, with one important exception to be discussed momentarily, by definition violate the principal residence requirement, since a person cannot claim multiple homes as their principal residence. There were 5,274 entire-home multilistings. However, it is possible that a host rents out their own principal residence occasionally while also operating additional entire-home listings. So we conservatively assume that the least frequently rented entire-home multilisting is in fact the host's principal residence. There are 1,210 such

listings, which leaves 4,064 likely in violation of the principal residence requirement.

To this number we add the FREH listings not already included in the list of multilistings. There are 2,298 such listings, which brings the total listings likely in violation of the principal residence requirement to 6,362. Finally, we add private-room listings located in ghost hostels. There are 2,363 of these listings. This means, in total, that 8,725 of the 21,070 STR listings active in the City of Toronto are likely in violation of the principal residence requirement of the City's STR bylaws. This is 41.4% of active listings.

There is a high level of uncertainty in this estimate, since assumptions had to be made at each step of the analysis. However, given that jurisdictions which have imposed principal residence requirements have seen drops in active listings in the realm of 30-50%, a 41.4% estimate seems plausible.





ACKNOWLEDGMENTS

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ABOUT UPGO

UPGo, the Urban Politics and Governance research group at McGill University, conducts rigorous, public-interest research into pressing urban governance problems—particularly those that exceed or challenge city boundaries. UPGo has published numerous peer-reviewed journal articles and policy reports on Short-term rentals in cities in Canada and around the world, including “Short-term rentals in Canada: Uneven growth, uneven impacts” and “The high cost of short-term rentals in New York City”. UPGo is led by Prof. David Wachsmuth, the Canada Research Chair in Urban Governance at McGill University’s School of Urban Planning, and is online at upgo.lab.mcgill.ca.



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