Short-term rental regulations in British Columbia

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Executive summary

This report analyzes short-term rentals (STR) regulation in the province of British Columbia, and applies the results of a new Canada-wide study of the impact of STR regulations on rents to BC communities. It calculates the amount of rent decreases in BC attributable to municipal STR principal-residence restrictions, the caused by STRs, estimates the likely impact of the Province's new STR rules on rents, and provides early evidence about host compliance with the new rules.

THE EFFECT OF PRINCIPAL-RESIDENCE REQUIREMENTS ON RENTS IN BRITISH COLUMBIA

- The Province of British Columbia has introduced principal-residence restrictions on STRs throughout much of BC, but there has not previously been systematic evidence about the effectiveness of this policy in reducing housing costs.

- Wachsmuth and St-Hilaire's (2024) new study finds that the policy directly causes rents to decrease: by the end of 2023, Canadian neighbourhoods with principal-residence restrictions in place at the beginning of 2023 had rents which were $50 less than they would have been without those restrictions—a 3.3% difference.

- The result is that municipal STR regulations across British Columbia have reduced rents by 5.7%, and saved British Columbia renters more than $600 million last year in lower rent payments.

- In the City of Vancouver, for example, renters now pay an average of $147 less each month than they would have if the City had not restricted STRs to a host's principal residence.

- If the Province's new rules have the same efficacy as existing municipal rules, British Columbia renters in medium and large cities that are newly subject to STR principal residence requirements will see their rents decline 4.0% by 2027, which will be a savings of $592 million per year by 2027.

- This implies that, if the Province's STR rules were to be repealed after 2024, within two years BC renter households in these cities would have paid an extra $1.0 billion in rent.

EARLY EVIDENCE ABOUT HOST COMPLIANCE WITH BRITISH COLUMBIA'S NEW STR REGULATIONS

- Early evidence shows that the Province's principal-residence restriction has begun to remove commercial STRs from the market.
- In jurisdictions subject to the restriction, FREH listings dropped substantially between April and May 2024, and have continued to decline —in total, 15.8% of previously detected FREH listings in these areas had disappeared from Airbnb by July 2024.
- The drop was most pronounced in jurisdictions which had previously adopted local principal-residence restrictions, but was also seen in areas which did not previously have such local restrictions.
- By contrast, in the parts of BC that are not subject to the Province's principal-residence restriction, no decline in listings was observed.
- Highly active listings have been delisted more frequently than less active ones: 18.7% of the listings that were booked 240 nights or more in 2023 are no longer visible on Airbnb.
- The decrease in FREH listings was most pronounced in Northern BC and on Vancouver Island.
- These findings lend confidence to the conclusion that the Province's new STR rules will meaningfully lower rents for BC residents.

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1. Introduction

In October 2023, Bill 35, also known as the Short-Term Rental Accommodations Act, passed British Columbia's provincial parliament. The Act introduced significant new rules governing the operations of short-term rentals (STRs) in BC, and established BC as the Canadian leader in provincial STR regulation. The key provisions of the Act are being unrolled in a staggered fashion; increased fines and regional licensing authority were introduced in October 2023, a principal-residence requirement applying to larger areas of the province came online in May 2024, and a province-wide STR registration system featuring platform accountability requirements for STR platform operators is due to arrive in early 2025.

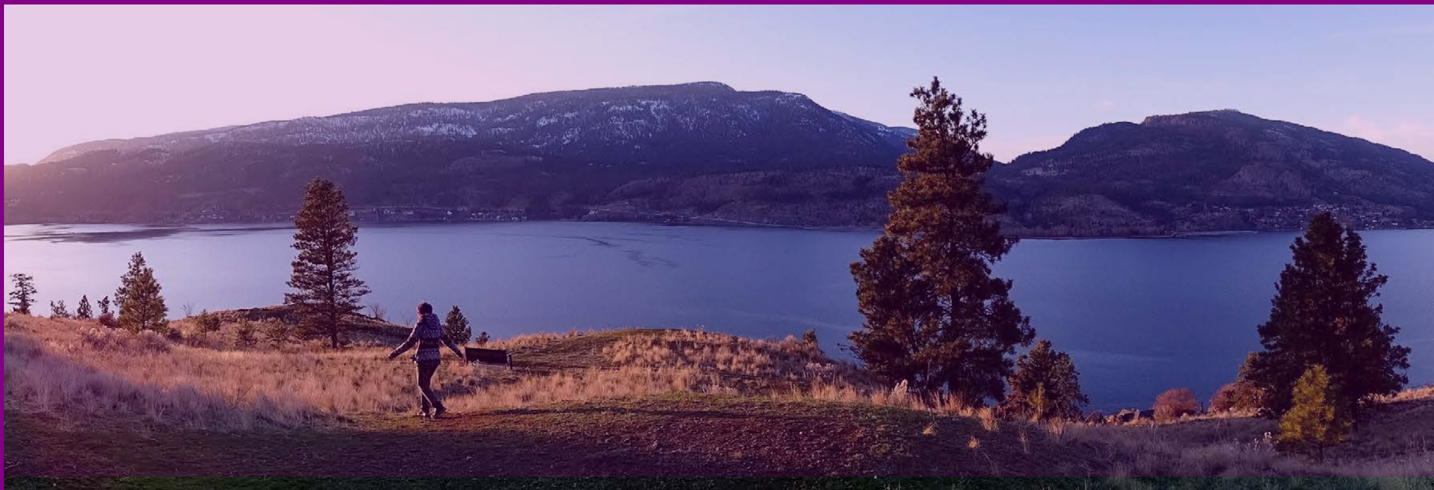
The full implications of BC's STR rules will not be clear until 2025, when the provincial registration system is online and platforms such as Airbnb become obligated to remove listings which do not have valid licenses. However, the province-wide principal-residence restriction which entered into force on May 1 is significant on its own terms. In recent years, many municipal governments in Canada have introduced principal-residence restrictions on STRs, motivated by a widespread belief that STRs which are not operated out of a host's own home are a contributor to rising housing costs, since they remove housing units from the long-term market. Following this logic, BC's province-wide principal-residence rules should exert downward pressure on rents in the areas in which it applies.

The details of BC's rules are as follows. In municipalities with a population of 10,000 or higher, along with smaller neighbouring communities, STRs are restricted to a host's principal residence and a single secondary suite located on the host's property. The carve-out for secondary suites makes the Province's rules less stringent than most of the municipal rules in force in Canada, including Vancouver and Victoria, for example. The Province also exempts certain communities from the rules altogether, most significantly ski resorts and resort municipalities such as Whistler and Tofino. Moreover, many areas covered by the Province's rules are already covered by more stringent municipal rules. However, the Province's principal-residence requirements remain the largest-scale such initiative in Canada.

What effect will they have on housing affordability? Until recently, no empirical research existed in a Canadian context that would help answer this question. In the last several years, there have been several policy reports which have produced estimates of the impact of STRs on rents in Canada, but these have been limited to particular geographies, have not been conducted with transparent data and academic methodologies, or have presented purely correlational analyses which don't rigorously establish causal relationships.

Now for the first time, a forthcoming academic study has examined the relationship between STR activity and rents across all Canadian cities using causal methods. "Supply, demand, or stickiness? A causal analysis of the effects of short-term rental activity on residential rents" by David Wachsmuth and Cloé St-Hilaire is currently undergoing peer review at an academic journal, and is freely available online as a public preview here: https://upgo.lab.mcgill.ca/publication/canada-str-rent/wachsmuth_st_hilaire_public_preview.pdf.

Wachsmuth and St-Hilaire (2024) use causal inference techniques to measure the impact of STRs on rents by analyzing the mediating effect of STR principal-residence requirements. This is



the first such academic analysis conducted in Canada, and it provides systematic evidence about both the extent to which STR activity erodes housing affordability in Canadian communities, and the effectiveness of principal-residence rules at addressing housing affordability challenges.

Wachsmuth and St-Hilaire use the "difference-in-differences" framework which is widely deployed by economists and other social scientists to measure the true causal impact of a policy change when a random trial cannot be devised. The approach uses regression analysis to compare jurisdictions which implemented a policy change with others which did not implement it in order to determine what would have happened had the former jurisdictions not implemented the policy change, and thus the true causal impact of the policy.

Their study also directly measures the effects of STR activity on rents by decomposing STR activity into three channels: supply effects (commercial STRs taking long-term housing off the market), demand effects (home sharing STRs leading residents to demand more housing), and price-stickiness effects (high STR prices make landlords more willing to demand high rent increases in the long-term rental market). The study uses cutting-edge techniques for addressing temporal and spatial autocorrelation.

In light of the recent introduction of the Province of British Columbia's STR principal-residence requirements, researchers from the Urban Politics and Governance research group (UPGo) at McGill University were commissioned by the British Columbia Hotel Association to analyze the implications of Wachsmuth and St-Hilaire's (2024) study for British Columbia communities and summarize the results for a non-academic audience. They were also commission to provide an early analysis of the Province's new STR rules.

This report is the result of that effort. Specifically, in this report we provide:

1. An analysis of the impact of principal-residence restrictions on rents in British Columbia, both with respect to municipal STR rules which have already had an impact on rents and the new provincial STR rules which are expected to have a future impact.

2. An analysis of host compliance with the Province's STR rules, using a comparison between listing trajectories in areas subject to the Province's principal-residence restrictions and in areas not subject to these restrictions.

Data and methodology are discussed in the Appendix, and all the code used to generate the analysis in the report is available online at https://github.com/UPGo-McGill/bc-report-2024.

2. The effect of principal-residence requirements on rents in British Columbia

The Province of British Columbia has introduced principal-residence restrictions on STRs throughout much of BC, but there has not been systematic evidence about the effectiveness of this policy in reducing housing costs. Wachsmuth and St-Hilaire's (2024) new study finds that the policy directly causes rents to decrease: by the end of 2023, Canadian neighbourhoods with principal-residence restrictions in place at the beginning of 2023 had rents which were $50 less than they would have been without those restrictions—a 3.3% difference. The result is that municipal STR regulations across British Columbia have reduced rents by 5.7%, and saved British Columbia renters more than $600 million last year in lower rent payments. In the City of Vancouver, for example, renters now pay an average of $147 less each month than they would have if the City had not restricted STRs to a host's principal residence. If the Province's new rules have the same efficacy as existing municipal rules, British Columbia renters in medium and large cities that are newly subject to STR principal residence requirements will see their rents decline 4.0% by 2027, which will be a savings of $592 million per year by 2027. This implies that, if the Province's STR rules were to be repealed after 2024, within two years BC renter households in these cities would have paid an extra $1.0 billion in rent.

INTRODUCTION

While a wide variety of STR regulations have been implemented in Canadian municipalities, one of the most common is a principal-residence restriction. Generally speaking, this policy requires STR operators to live in the housing unit that they are offering as a STR, which rules out offering dedicated STRs at all. (Although sometimes principal-residence restrictions have an exemption for an accessory dwelling unit or secondary suite.)

Principal-residence requirements intuitively seem likely to help mitigate housing affordability problems, since they make it illegal for STR hosts to remove housing units entirely from the long-term market. But, particularly since the Province of British Columbia unrolled a province-wide principal-residence requirement (albeit one with a number of exceptions), there has been vigorous debate about whether these regulations are actually effective at achieving housing affordability goals.

One detailed evaluation of Vancouver's principal-residence rules estimated that, prior to the onset of the Covid pandemic, the policy had returned approximately 800 housing units to the long-term market (Wachsmuth et al. 2021). A more recent evaluation of Toronto's 2021 adoption of a principal residence requirement found that it returned approximately 4,000 housing units to the long-term market (Wachsmuth and Buglioni 2023). But the direct impacts of these policies—or of the many other principal residence requirements which Canadian municipalities have adopted—on residential rents have remained difficult to measure.

In this chapter we discuss the first systematic Canadian academic research to measure the actual causal impact of principal-residence requirements on rents (Wachsmuth and St-Hilaire 2024). We first summarize the findings of Wachsmuth and St-Hilaire's (2024) Canada-wide causal analysis of the impact of STR rules on residential rents. Then we measure the detailed impact of these rules on the British Columbia municipalities which have already adopted them. And finally, we discuss the likely outcome of the Province of British Columbia's move to extend principal-residence requirements across much of the province.

THE FIRST CROSS-CANADA ANALYSIS OF STR REGULATIONS

In their forthcoming article, Wachsmuth and St-Hilaire (2024) conduct a causal analysis of the impact of STR principal-residence requirements on average rent levels. This is the first such academic analysis conducted in Canada, and it provides systematic evidence about the effectiveness of principal-residence rules at addressing housing affordability challenges in Canadian communities.

Their analysis uses the "difference-in-differences" framework which is widely deployed by economists and other social scientists to measure the true causal impact of a policy change when a random trial cannot be devised. (Ideally researchers would like to randomly assign jurisdictions to receive or not receive a policy change in order to judge its efficacy, just like a medical trial, but this is rarely feasible.) The difference-in-differences approach uses regression analysis to compare jurisdictions which implemented a policy change with others which did not implement it in order to determine what *would have happened* had the former jurisdictions not implemented the policy change, and thus what the true causal impact of the policy change was.

Wachsmuth and St-Hilaire identified the 38 Canadian cities of 10,000 or more people which implemented an STR principal-residence restriction between 2017 and the beginning of 2023, and built a difference-in-differences model for these cities along with all other cities in their provinces (British Columbia, New Brunswick, Ontario, and Quebec) to serve as the comparison cases.

The model tests whether principal-residence restrictions have an impact on rent levels, and is able to identify true causal (i.e. not just correlational) effects. What they found was that STR regulations have a strongly negative causal impact on rent levels, and that this impact is significant at a $p < 0.0000000001$ level—far in excess of the usual $p < 0.05$ threshold for significance in social science research. This means that there is virtually no chance the results are spurious.

According to Wachsmuth and St-Hilaire's results, neighbourhoods located in municipalities which implement principal-residence restrictions have logged average rents which are 0.096 standard deviations lower than they would have been if those neighbourhoods did not become subject to such restrictions.

Figure 1 shows the effect over time: the points indicate the change in rents in communities before (green points) and after (orange points) they implement principal-residence restrictions, compared to communities which did not implement such restrictions. Before communities implement STR regulations, there is no difference in rent levels between communities which do implement regulations and those which don't. (This is an important statistical test demonstrating that the analysis in the article is correct.) But once the regulations are implemented, rents begin declining in the communities which implement them, and they continue to decline year after year. Since rents in Canadian cities have risen so much in recent years, this decline usually looks like a smaller increase than would have otherwise occurred, rather than an actual decrease in the average rent.

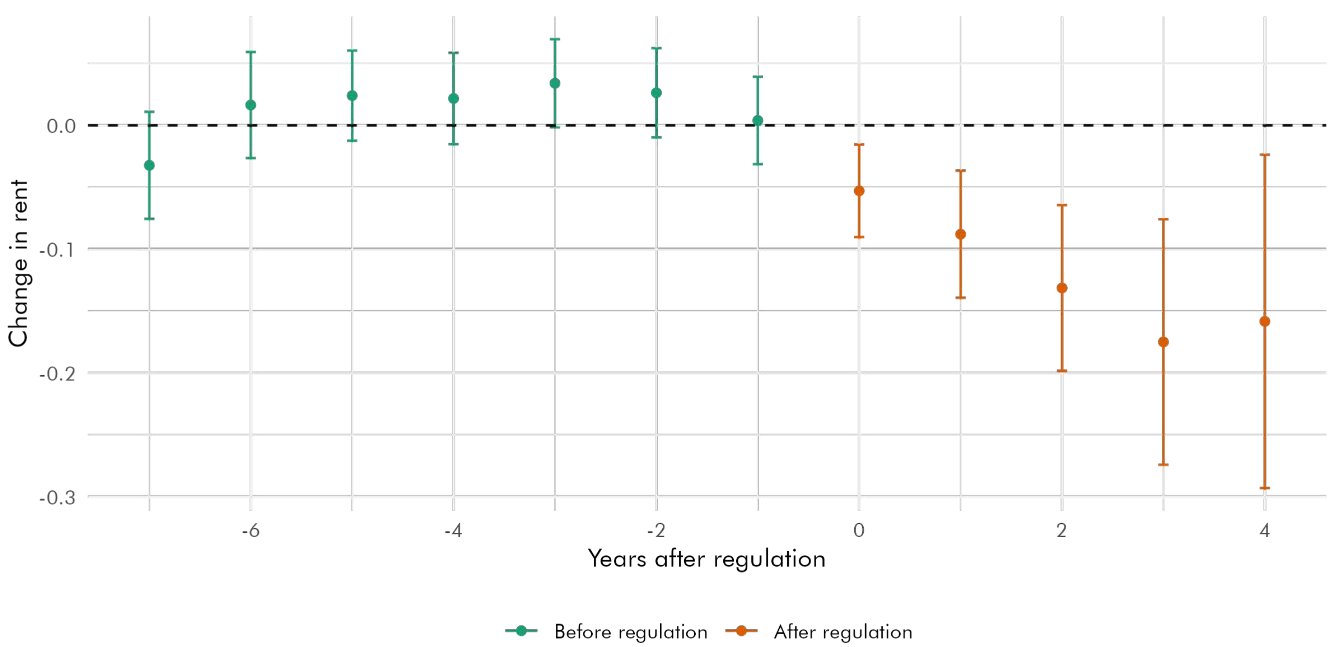
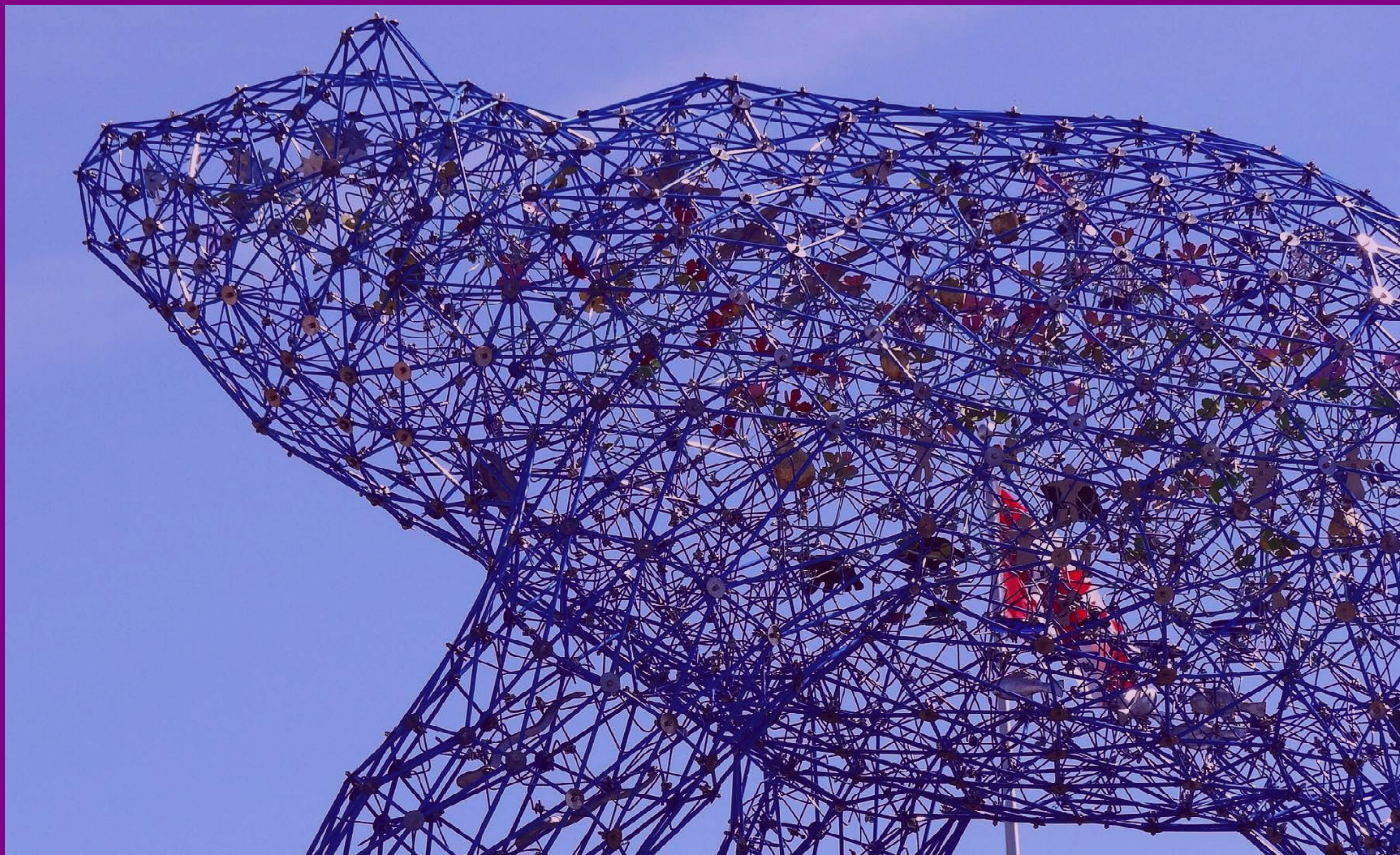


Figure 1. The average change in rent caused by STR principal-residence regulations in Canada, by length of time since regulations came into force (point estimates with 95% confidence intervals)



Translated into practical terms, in neighbourhoods which implemented principal-residence requirements, the year after the regulations took effect rents were on average $24 lower each month than they would have been in the absence of the regulations—a 1.7% difference. By the end of 2023, neighbourhoods with principal-residence restrictions in place by the beginning of 2023 had rents which were $55 less than they would have been without those restrictions in place—a 3.3% difference. In total, renters in these communities were saving $155.8 million each month in lower rents thanks to their STR principal-residence requirements—nearly $2 billion per year.

PRINCIPAL-RESIDENCE RESTRICTIONS WERE WORKING IN BC PRIOR TO THE PROVINCE'S NEW RULES

The evidence from across Canada is that STR principal-residence requirements lower rents for Canadian renters. The same is true in British Columbia specifically. As of January 1, 2023, 55 neighbourhoods across ten BC municipalities had a principal residence restriction in place. Three of these municipalities adopted such a restriction prior to 2018, and were excluded from the nation-wide model in Wachsmuth and St-Hilaire (2024) because of the lack of sufficient early adopters in the national dataset. Among the remaining 52 neighbourhoods, in the first year principal-residence restrictions were in place, these neighbourhoods saw an average decrease in monthly rents of $21 thanks to their STR rules.

By the end of 2023, rents were an average of $110 lower in communities with STR restrictions in place than they would have been if these restrictions were not in place. This is a 5.7% decrease: the average rent was $1,821 per month, but the model in Wachsmuth and St-

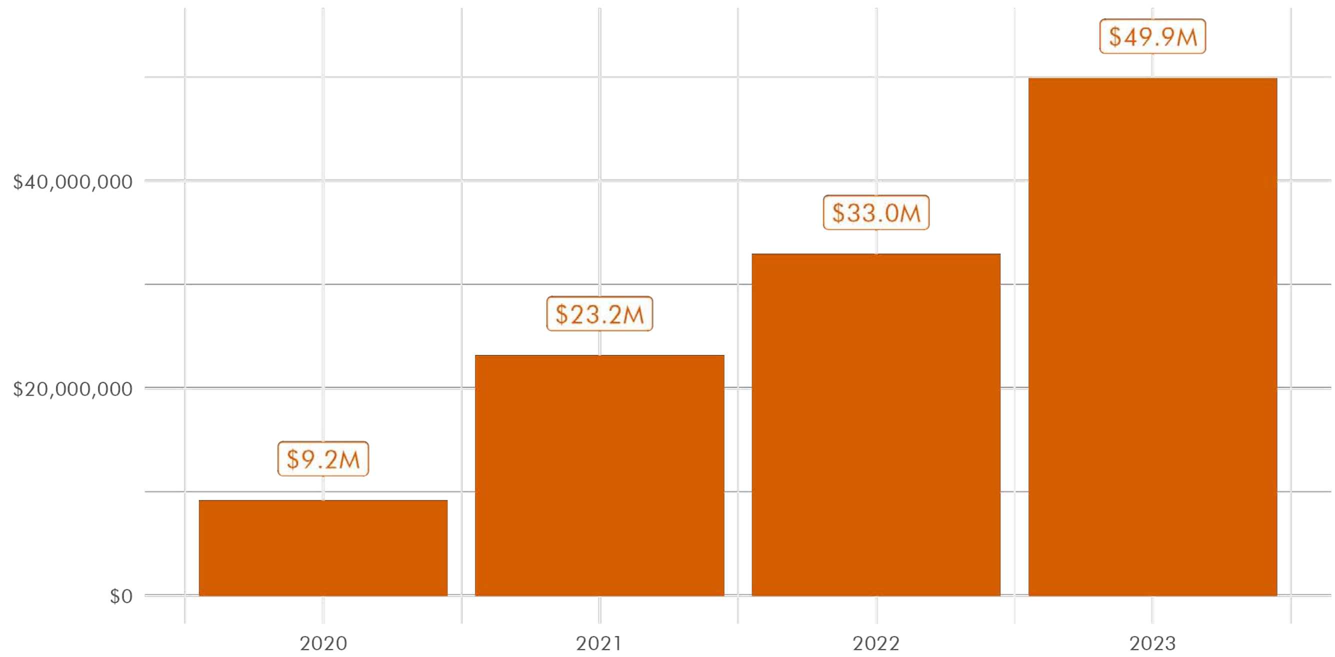


Figure 2. The estimated total monthly rent saved by British Columbia renters attributable to STR principal-residence requirements across British Columbia, according to Wachsmuth and St-Hilaire (2024)

Hilaire (2024) suggests it would have been $1,931 in the absence of STR rules. This means that BC renters in these seven municipalities are collectively saving $49.9 million each month in rent payments, or $600 million each year.

Figure 2 shows the monthly rent savings attributable by Wachsmuth and St-Hilaire's model to STR regulations in British Columbia each year; the figure demonstrates that STR principal-residence rules have become increasingly meaningful in BC over the last several years, as these rules have had a longer time to become effective in municipalities which were regulatory pioneers (such as Vancouver) and as they have been implemented in additional jurisdictions (such as Burnaby and Nanaimo).

These results apply the model in Wachsmuth and St-Hilaire which uses all municipalities across Canada, but a version which only looks at British Columbia municipalities demonstrates even stronger effects. According to an BC-specific version of the model (which retains an extremely high level of statistical significance—$p < 0.001$), principal-residence regulations in the seven BC municipalities which implemented them caused rents to fall an average of $34 in the first year the regulations were in effect.

In the City of Vancouver, where there have been concerns that the City's STR rules have been not been effective, these rules have in fact caused rents to decline by at least 6.9% compared to the level they would now be at had the rules not taken effect. Across the city, renters pay an average of $147 less each month than they would have if the City had not restricted STRs to a host's principal residence. This means that, this year, Vancouver renters will collectively save $530 million on rent payments thanks to the City's STR rules.

Figure 3 shows the monthly rent savings which Wachsmuth and St-Hilaire's (2024) model attributes to STR rules in Metro Vancouver. The evidence is clear: STR rules work to bring down rents. In some Vancouver neighbourhoods, average rents are as much as $200 lower than they would

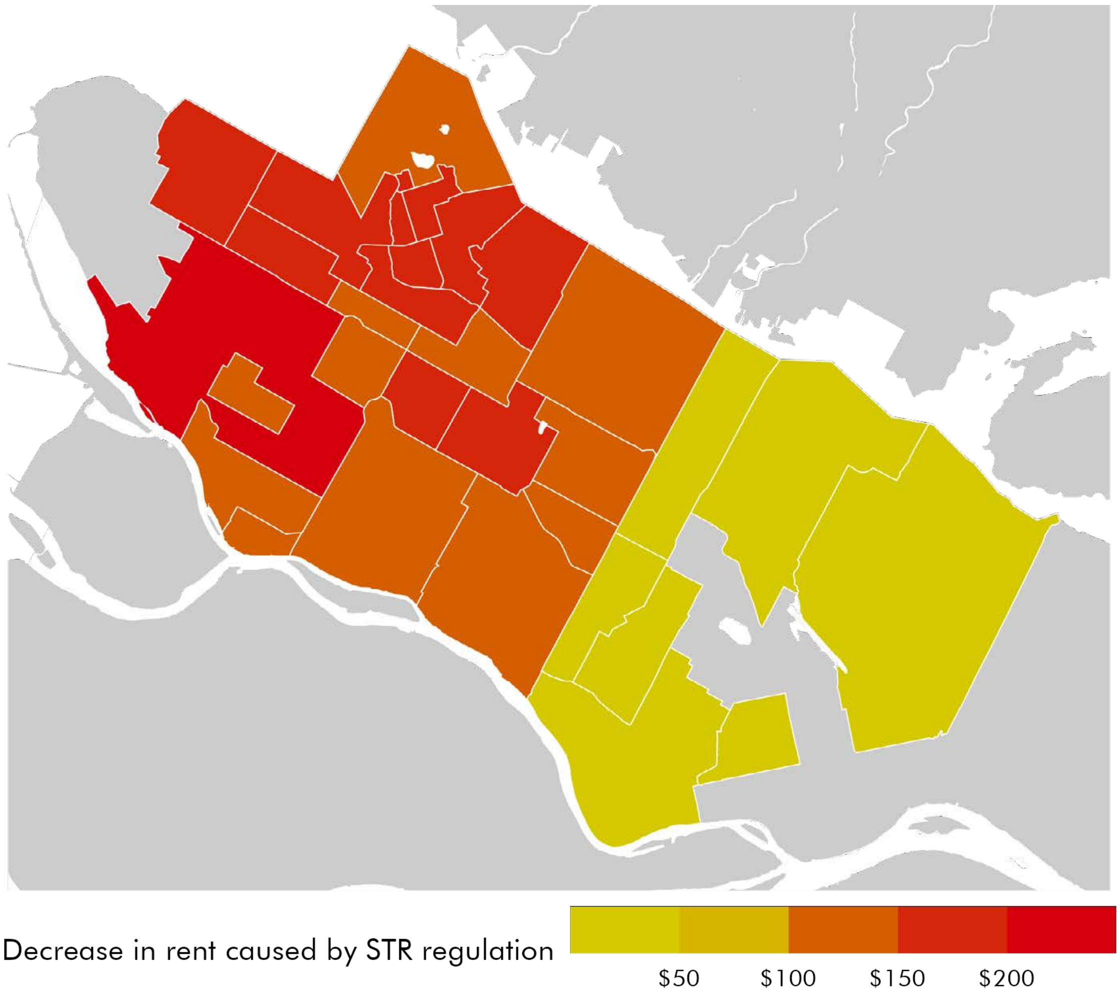


Figure 3. The estimated change in average monthly rent caused by STR principal-residence requirements across Metro Vancouver, according to Wachsmuth and St-Hilaire (2024)

have been without STR regulations, thanks to the compounding effects of the regulations over time. (I.e., as Figure 1 above shows, the longer a jurisdiction has had principal-residence restrictions in place, the larger the impact on rents.).

Table 1 summarizes the estimated effect of STR regulations across BC municipalities, presenting the range of estimates from the Canada-wide model in Wachsmuth and St-Hilaire (2024) and the BC-specific version described here.

WHAT ARE THE RESULTS LIKELY TO BE OF THE NEW PROVINCE-WIDE PRINCIPAL-RESIDENCE RESTRICTION IN BRITISH COLUMBIA?

As discussed in the previous chapter, on May 1, 2024, the Province of British Columbia's province-wide STR regulations came into effect. They include a principal-residence requirement for much of the province which now acts as a "policy floor" upon which municipalities are welcome to build with regulations that respond to local conditions and priorities. While it is far too soon to measure the actual impact of this new requirement on rents in BC cities, the results in Wachsmuth and St-Hilaire (2024) provide a strong basis for estimating the likely results.

City	Estimated average monthly rent saved (2023)	Estimated % of monthly rent saved (2023)	Estimated total monthly rent saved (2023)
Vancouver	$147 - $155	6.9% - 7.3%	$44.1M - $46.5M
Burnaby	$4	0.2% - 0.3%	$0.2M - $0.3M
Victoria	$78 - $96	5.0% - 6.0%	$5.2M - $6.4M
Nanaimo	$20 - $24	1.5% - 1.8%	$0.3M
Other municipalities	$4 - $5	0.3% - 0.4%	$61,000 - $67,000

Table 1. The estimated monthly rent savings caused by STR principal-residence requirements across British Columbia, according to Wachsmuth and St-Hilaire (2024)

As of January 1, 2023, 55 neighbourhoods across British Columbia were located in or contained municipalities which had implemented principal-residence requirements. However there were 75 neighbourhoods in cities of 10,000 people or more that had not implemented such requirements. Of these 75 neighbourhoods, 71 either implemented a principal-residence requirement locally between January 2, 2023 and April 30, 2024, or became subject to the Province's principal-residence requirement as of May 1, 2024. The remaining four neighbourhoods (located in Dawson Creek, Fort St. John, Quesnel, and Taylor) do not have a local principal-residence requirement and also are not subject to the Province's requirement.

Wachsmuth and St-Hilaire's (2024) model allows us to estimate what the likely effect of an STR principal-residence restriction would be on rents in these neighbourhoods, assuming that the restriction has the same efficacy as the average Canadian municipality that implemented STR regulations at some point in the last several years.

The model suggests that average rents next year in the neighbourhoods that have recently received a principal-residence restriction could be expected to be 2.1% lower than they would be in the absence of that restriction, based on the experiences in the first year of implementation of jurisdictions which implemented principal-residence restrictions in recent years.

Assuming that the underlying level of rent growth in BC will be similar to the last two years, this 2.1% reduction in rents in the cities now covered by the Province's STR regulations means that these regulations are likely to reduce the average household's monthly rent by $41. That is more than $250 million dollars in annual rent saved—an especially significant number considering that it does not include the cities which already had principal-residence rules in place by the beginning of 2023, such as Vancouver and Victoria.

Additionally, the rent savings would be expected to increase in subsequent years: to 3.3% in 2026 and 4.0% in 2027, based on the experience of jurisdictions with rules already in place. Again assuming baseline rent growth remains steady, this would mean that average monthly rents are $94 lower in fall 2027 than they would be in the

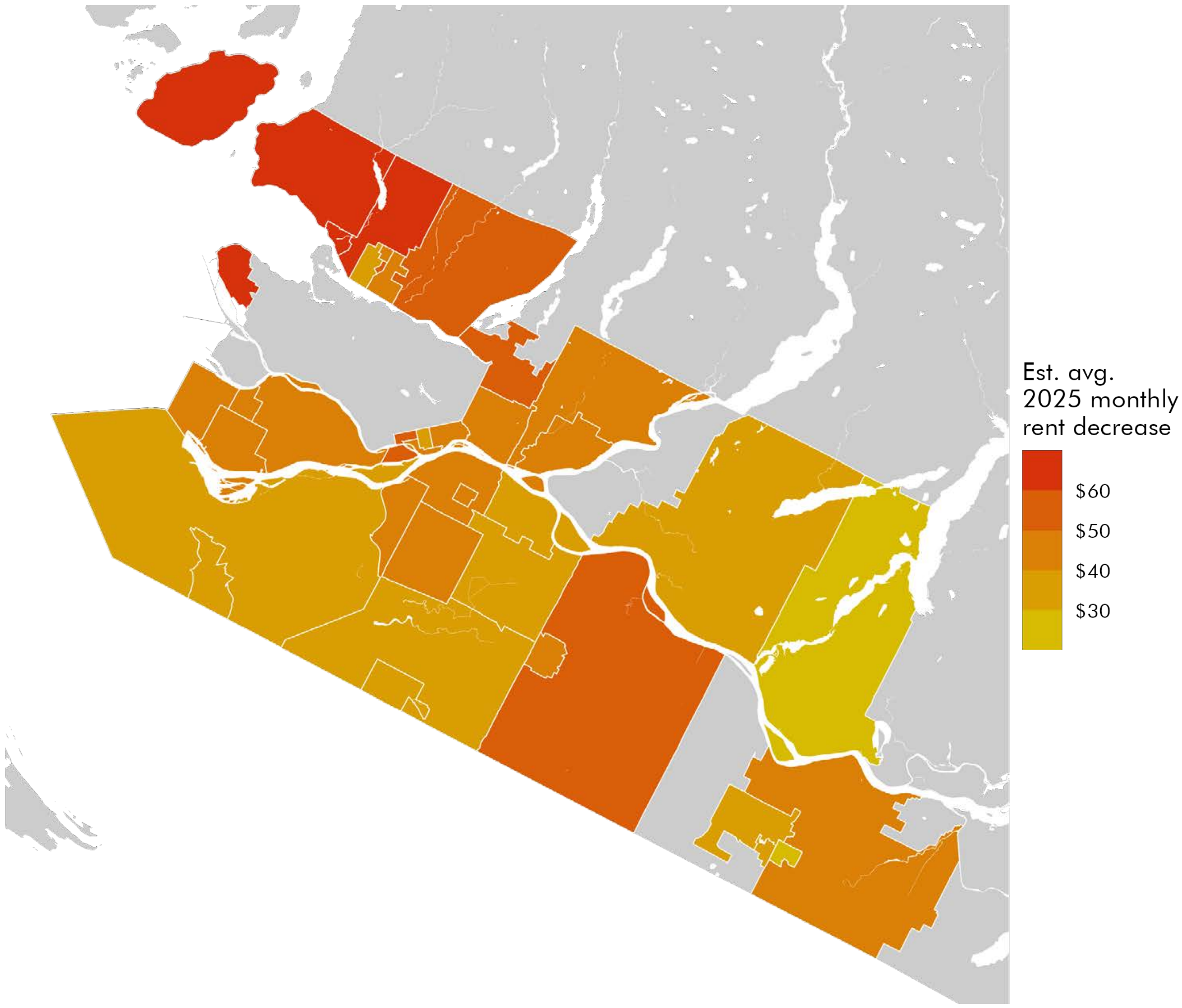


Figure 4. The change in average monthly rent in 2025 which is expected to result from the new provincial STR principal-residence requirements in Lower Mainland neighbourhoods which did not have such requirements as of January 1, 2023, according to the model in Wachsmuth and St-Hilaire (2024)

absence of the Province's STR regulations. This would amount to $49.4 million dollars saved per month by British Columbia renters in medium and large cities newly covered by the Province's STR regulations, or $592.4 million per year.

A different way of reporting the same findings is that the Province's new rules have already set rents in affected communities on a lower trajectory, such that average monthly rents in these communities should be expected to be $41 lower than they otherwise would have been by the fall of 2025. Because the impact of STR regulations on rents measured by Wachsmuth and St-Hilaire's (2024) model is cumulative, if the Province's rules stay in place for a further two years, the anticipated savings growth to $94 a month by the fall of 2027. If, by contrast, the laws were to be repealed in 2025, these further years of rent reductions would not materialize. In this case, BC renter households in the cities newly subject to a principal-residence requirement would have paid an extra $1.0 billion in rent by the fall of 2027 because of the repeal of the rules, compared to what they would be expected to pay if the regulations remain in place.

Figure 4 shows the anticipated impact on average 2025 rents across the communities in the Lower

City	Avg. potential monthly rent saved (2025)	Avg. potential monthly rent saved (2026)	Avg. potential monthly rent saved (2027)	Total potential monthly rent saved (2025)	Total potential monthly rent saved (2026)	Total potential monthly rent saved (2027)
Abbotsford	$36	$61	$82	$0.9M	$1.6M	$2.1M
Coquitlam	$44	$75	$101	$0.9M	$1.6M	$2.1M
Kelowna	$41	$70	$95	$1.0M	$1.7M	$2.3M
Langley	$48	$82	$111	$0.9M	$1.6M	$2.2M
Nanaimo C	$43	$74	$99	$0.5M	$0.9M	$1.3M
New Westminster	$44	$75	$102	$1.2M	$2.1M	$2.8M
North Vancouver	$49	$83	$112	$1.9M	$3.3M	$4.4M
Richmond	$45	$77	$104	$1.6M	$2.7M	$3.6M
Saanich	$39	$66	$89	$0.6M	$1.1M	$1.4M
Surrey	$41	$69	$93	$4.1M	$7.0M	$9.5M

Table 2. The estimated monthly rent savings expected in different British Columbia municipalities from the Province's STR principal-residence requirements, according to Wachsmuth and St-Hilaire (2024)

Mainland which did not have a principal-residence requirement as of January 1, 2023. Similarly, Table 2 provides three years of projections for several British Columbia municipalities which lacked principal-residence restrictions as of January 1, 2023. Importantly, these projections do not require any implausible assumptions about perfect efficacy in enforcing STR rules. The projections here simply say: "what is likely to happen if the Province's new STR regulations have the same average efficacy as the regulations already in force in communities across BC and the rest of Canada?"

As a result, the estimates in this chapter are conservative, since they assume that the Province of British Columbia would only be as successful in administering short-term rental rules as the average municipality. In reality, the Province has significantly greater resources at its disposal which would make its rules likely to be *better* enforced than the average municipality. Likewise, even in cities which already have municipal STR regulations, additional provincial oversight and resources will be likely to improve regulatory outcomes and drive further rent decreases.

3. Early evidence about host compliance with British Columbia’s new STR regulations

Early evidence shows that the Province’s principal-residence restriction has begun to remove commercial STRs from the market. In jurisdictions subject to the restriction, FREH listings dropped substantially between April and May 2024, and have continued to decline—in total, 15.8% of previously detected FREH listings in these areas had disappeared from Airbnb by July 2024. The drop was most pronounced in jurisdictions which had previously adopted local principal-residence restrictions, but was also seen in areas which did not previously have such local restrictions. By contrast, in the parts of BC that are not subject to the Province’s principal-residence restriction, no decline in listings was observed. Highly active listings have been delisted more frequently than less active ones: 18.7% of the listings that were booked 240 nights or more in 2023 are no longer visible on Airbnb. The decrease in FREH listings was most pronounced in Northern BC and on Vancouver Island. These findings lend confidence to the conclusion that the Province’s new STR rules will meaningfully lower rents for BC residents.

INTRODUCTION

The previous chapter established two things. First, based on either the country-wide model in Wachsmuth and St-Hilaire (2024) or a BC-specific variant of that model, existing municipal STR principal-residence restrictions have reduced rents substantially (5.7%, or $600 million per year, according to the country-wide model) in the communities that have adopted such restrictions. Second, based on the past experience of Canadian municipalities which adopted STR principal-residence restrictions, the Province of British Columbia's new province-wide principal-residence restrictions are likely to lead to a similarly sized ($592 million per year) impact on rents over the next few years.

An important assumption of the second conclusion, however, is that the Province's rules will have an effect on STR markets which is comparable to the *average* effect which Canadian municipal rules have had. If the Province's regulations are more effective than municipal rules have been, they would be expected to have a larger effect on rents in BC, and if they are less effective than municipal rules have been, they would be expected to have a smaller effect on rents.

It is too soon to know the full impact of the Province's STR regulations. Only a few months have passed since their May 1, 2024 implementation date, and an important component of the larger regulatory apparatus (a province-wide STR registration system) is not expected to be active until 2025. However, it is possible to determine whether or not the early indicators suggest positive regulatory momentum.

In what follows, we answer this question by examining one specific segment of the province's STR markets: listings on Airbnb which we had previously determined (Wachsmuth and St-Hilaire 2023) were highly likely to be dedicated commercial operations. In the parts of the province which are newly subject to a principal-residence restriction, we should expect many of these listings to have been taken offline. In the parts of the province which already had municipal principal-residence restrictions in place, we might further expect to have seen some of these listings to have been taken offline, since hosts who had been content to break local laws might be less content to break provincial laws. By contrast, in areas which were exempted from the provincial principal-residence restriction, we would not expect to see any meaningful decrease in these listings, since their is no additional regulatory scrutiny in these cases.

LISTING TRAJECTORIES BEFORE AND AFTER MAY 1, 2024

We begin with a simple apples-to-apples comparison. At the end of June 2023, we identified 13,624 properties on Airbnb in British Columbia as being FREH (frequently rented entire-home) listings, which is to say that, over the previous twelve months, they were available for reservations a majority of nights (i.e. 183 nights or more) and were reserved roughly half of that time (i.e. 90 nights or more). We identified a further 34,665 properties as active on Airbnb but not FREH.[1] To assess the early impacts of the Province's STR rules coming into force, we simply

[1] These calculations formed the basis for our calculations of STR-induced housing loss in Wachsmuth and St-Hilaire (2023) and elsewhere, which take these raw counts and apply seasonal adjustment and predictive modelling to infer the total number of housing units taken off the market by STRs.

ask: how many of those listings are still active on Airbnb one year later? By comparing FREH to non-FREH listings, and by comparing regions which were affected by the Province's principal-residence restriction to regions which were not, we can gather evidence about the early effects of the Province's rules.

The top panel of Figure 5 shows what has happened to listings which were active in June 2023 in areas which did not have a principal-residence restriction as of the beginning of 2023 but which became subject to the Province's rules in May 2024. The panel demonstrates clearly that both FREH (the solid line) and non-FREH listings (the dotted line) were steady from February through April 2024. In May 2024, as the Province's principal-residence rules came into effect, a noticeable subset of the listings which we categorized as FREH in June 2023 stopped being listed on Airbnb. Compared to the February 2024 numbers, only 86.6% of listings were still visible in May 2024, and the numbers declined slightly to 86.3% by July 2024. Listings which were active in June 2023 but which we did not categorize as FREH also saw a decrease in May 2024, albeit a weaker one than that experienced by the FREH listings, to 90.8% in May and then 88.7% by July.

These declines follow months of steady activity among formerly active STRs, and, on their own terms, suggest that many hosts withdrew their non-compliant listings in response to the Province's new STR rules entering into force.

The middle panel of Figure 5 shows the trajectory of the same type of listings for jurisdictions which already had a principal-residence restriction in place as of 2023. In these areas, there was relatively little change in the types of STRs allowed. (One potentially significant change is that the Province's new rules define STRs as rentals of fewer than 90 days, whereas many municipalities have used 28 days or something similar. This

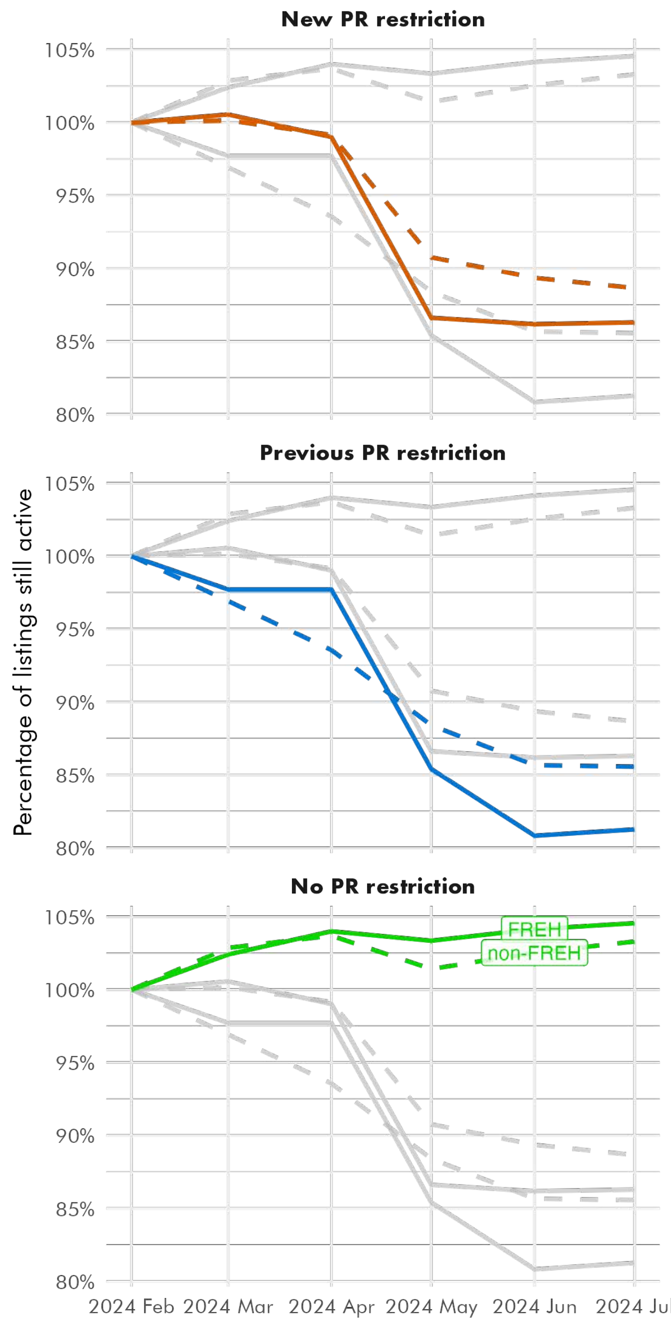


Figure 5. The percentage of STR listings which had been active in June 2023 which were still active in 2024, by regulatory status. (February 2024 values are 100%.)

means that a property which was being offered full-time on Airbnb for one-month minimum bookings might have been permitted under municipal rules prior to May 2024, because it was not classified as a short-term rental, but would have become illegal under the Province's rules, because it is now classified as a short-term rental.)

Nevertheless, we observe a modest decrease in FREH listings in the months prior to the May 1 implementation date for the Province's regulations, a steep decline in May, and a further shallow decline in the following months. Relative to the number of June 2023 listings still active in February 2024, 85.4% were still active in May 2024, and only 81.3% were still active in July 2024. Non-FREH listings saw a similar—albeit shallower—decline: to 88.4% of February levels in May and to 85.6% in July.

Turning finally to the bottom panel of Figure 5, listings in the parts of BC that were not covered by the Province's principal-residence restriction had no decline in previously active listings coinciding with the Province's regulations entering into force. In fact, the share of both FREH and non-FREH listings which had been active in June 2023 and which were still active in 2024 was nearly flat throughout the entire study period. In these locations, STR regulations did not change, and there is correspondingly no evidence of any change in STR activity in and around May 2024.

In sum, the broad patterns in the trajectories of Airbnb listings identified as FREH listings in summer 2023 are exactly what would be expected if the Province's new STR rules are beginning to have their intended impact.

In jurisdictions subject to the principal-residence restriction, FREH listings dropped substantially between April and May 2024, and have continued to decline. The drop was most pronounced in jurisdictions which had previously adopted local principal-residence restrictions, perhaps suggesting that hosts have been most sensitive to situations where they would be violating two levels of regulation.

Non-FREH listings have also declined in locations which are subject to the provincial principal-residence restriction (albeit not as much as FREH listings); this is most likely due to a combination of a commonly observed drop in defunct listings which accompany new STR regulations and our conservative identification strategy for FREH listings failing to identify some listings which are in fact commercial operations. By contrast, in the parts of BC that are not subject to the Province's principal-residence restriction, no decline in either FREH or non-FREH listings was observed. In these regions, it has been business as usual in the STR market.

HIGHLY ACTIVE LISTINGS HAVE BEEN DELISTED MORE FREQUENTLY THAN LESS ACTIVE ONES

We can deepen these conclusions by examining listings based on the volume of their activity. Specifically, while we demonstrated that FREH listings declined in areas covered by the Province's principal-residence restrictions but not in areas not covered by these restrictions (and that non-FREH listings declined in the former areas as well, albeit less than FREH listings did), it might be the case that more active listings were more or less likely to have been delisted when the Province's rules came into force.

Figure 6 accordingly divides the listings which were active on Airbnb in June 2023 and located in areas subject to the Province's principal-residence restrictions by activity category based on the reservations they received in the previous 12 months.

The figure demonstrates a clear pattern: among the FREH listings, the more active a listing was in 2023, the more likely it has been to have been delisted since May 2024. Among listings which were on the borderline of FREH status in June 2023 (at least 90 nights reserved, but fewer than

120), 89.2% of those active in February 2024 were still active in May 2024, and this proportion has remained stable over the following two months. Among listings which had been reserved 240 nights or more, only 85.5% were still active as of May, and that proportion dropped further to 81.3% by July. In general, the more active the listing, the lower chance it was still visible on Airbnb after May 2024.

Among non-FREH listings, the clearest distinction is between those listings which received zero reservations over the previous year (i.e. they were defunct) and those which received some non-zero number. The former saw steady declines throughout 2024, likely reflecting the natural decay of defunct listings being pulled from the Airbnb platform. The latter saw modest decreases —to 90.0% in May and 88.1% in July—which were comparable to the least-frequently rented FREH listings.

The results are encouraging from a regulatory compliance standpoint. Among listings active in June 2023, those which were the most likely to have been taken offline in the spring of 2024 were those which had been very frequently rented (200 nights or more) in the year ending June 2023. These are the listings of which there can be very little doubt that they were commercial operations not being operated out of their host's principal residence, and within the first few months of the Province's new STR rules coming into effect nearly 20% of these listings were no longer visible on Airbnb.

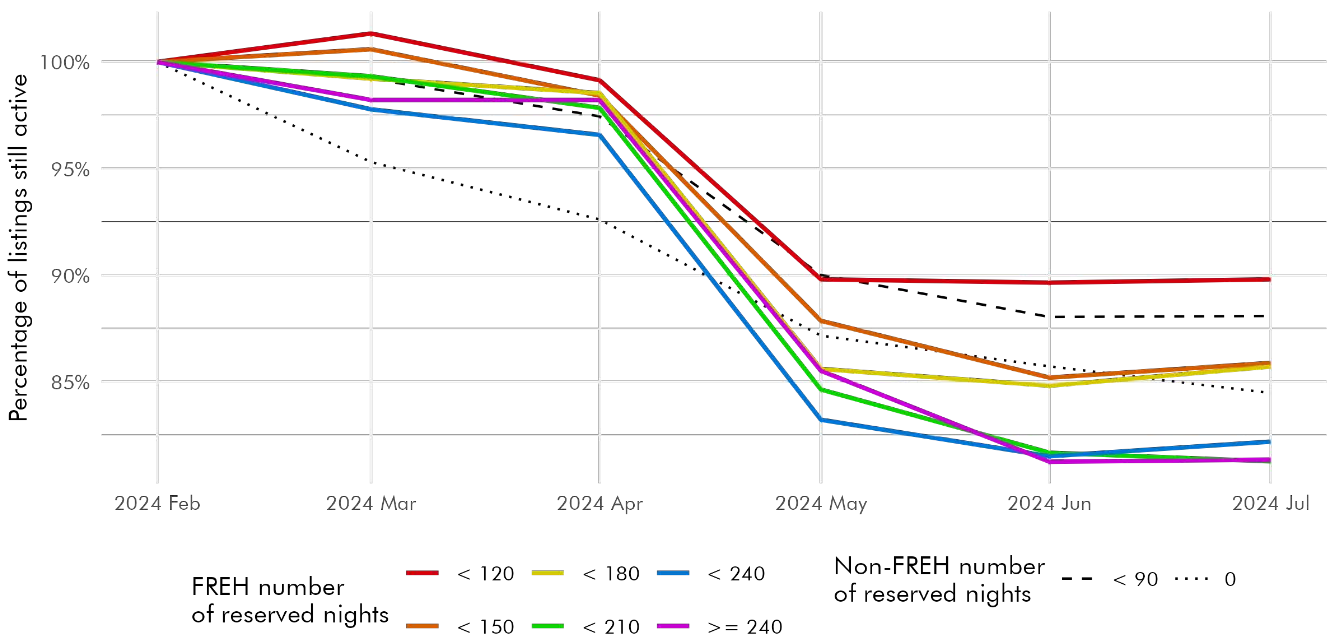


Figure 6. The percentage of STR listings which had been active in June 2023 which were still active in 2024, by 2022-2023 activity. (February 2024 values are 100%.)

REGIONAL PATTERNS IN EARLY STR COMPLIANCE

A final perspective comes from segmented listing trajectories geographically. Figure 7 shows the percentage of FREH listings which had been active in June 2023 which were still active in 2024 in

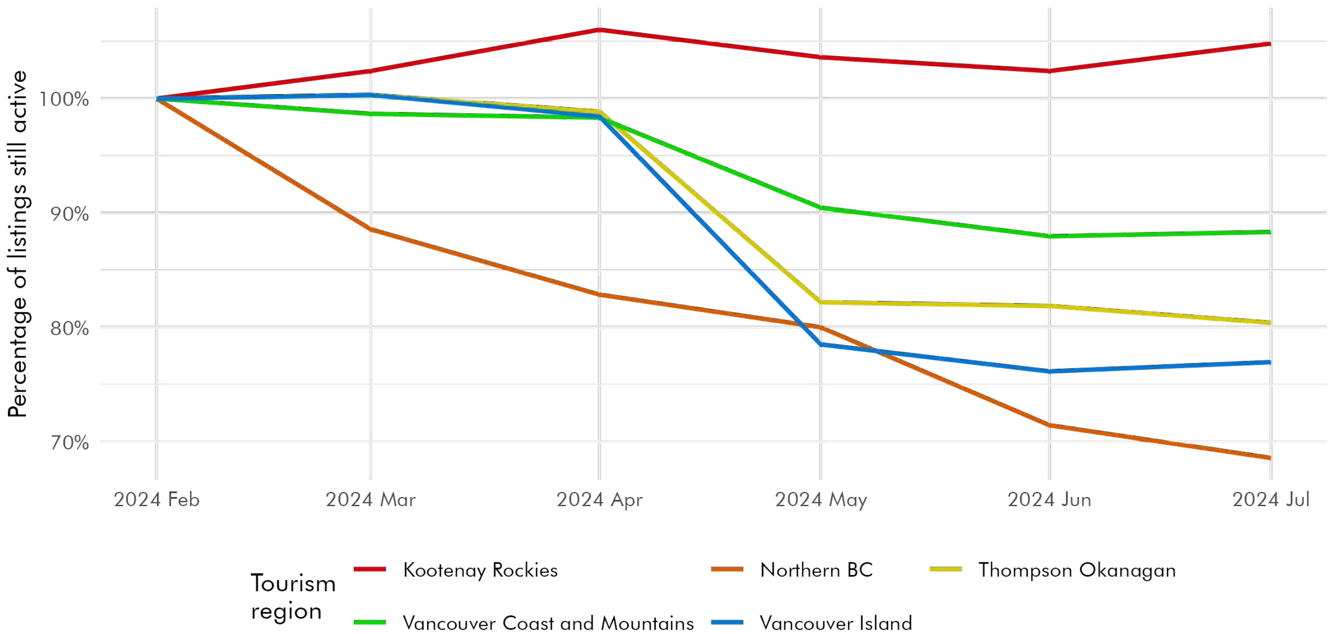


Figure 7. The percentage of FREH listings which had been active in June 2023 which were still active in 2024 in areas covered by the Province's restrictions, by tourism region. (February 2024 values are 100%.)

areas covered by the Province's restrictions, by tourism region. It shows that the drop in previous FREH listings has been most pronounced in Northern BC and on Vancouver Island, and that there has not been any drop at all in the Kootenay Rockies region. (Northern BC and the Kootenay Rockies both had relatively few FREH listings in absolute terms, however, which means that these trends are less reliable than in the more populous regions.) Figure 8 shows the monthly change in the percentage of June 2023 FREH listings still active throughout the Metro Vancouver region, and demonstrates relatively consistent declines in these listings throughout the region, with the strongest declines generally seen in the suburban municipalities surrounding the City of Vancouver.

EARLY INDICATIONS: THE PROVINCE'S STR REGULATIONS ARE WORKING

Overall, in the parts of BC where the Province has restricted most STRs to a host's principal residence, we found that, compared to February 2024, 15.8% of the listings that we had previously identified as FREH (and thus likely to be dedicated commercial STRs) were no longer visible on Airbnb as of July 2024. We did not find any such change in the parts of BC not subject to the Province's new rules, which makes it highly likely that the changed observed in areas that fall under the Province's new restrictions were in fact caused by those restrictions.

The question remains, however, how to interpret this 15.8% decline in previously active FREH listings. Is this a small or large change? The key detail is that the decline in FREH listings has occurred without any major intervention on Airbnb's part.

In a number of previous instances in Canada where major new STR regulations have been introduced, Airbnb removed large numbers of listings that had *prima facie* failed to comply. For example, in March 2023 when the Province of

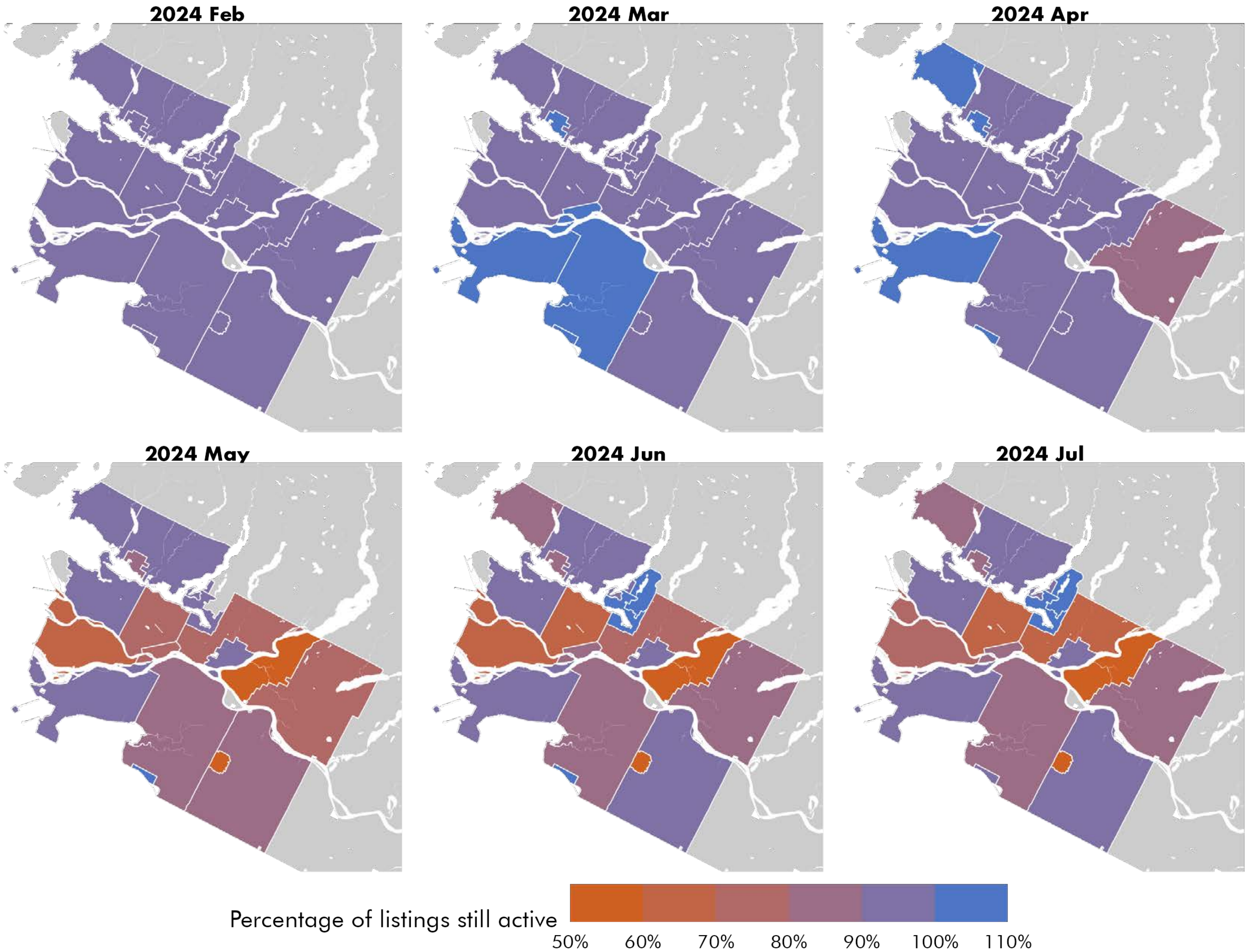


Figure 8. The percentage of FREH listings which had been active in June 2023 which were still active in 2024 in Metro Vancouver. (February 2024 values are 100%.)

Quebec obligated Airbnb to remove non-compliant listings, 64.5% of total listings were removed from Airbnb. In 2018, when the City of Vancouver's STR rules came online, Airbnb removed 30.8% of total listings for failing to properly register. The Province of British Columbia has not yet unveiled a provincial registration system, although it has promised that one is coming in 2025.

This means that all of the decline in FREH listings has been accomplished *without* the use of the easiest mechanism for policing STR listings: mass removals by the platform operators. When the Province's registration system comes online, it would therefore be reasonable to expect a further decrease in commercial STR listings. If either Quebec or Vancouver provides a precedent for the Province of British Columbia, for instance, we might expect somewhere between one third and two thirds of STR listings in the province to be taken down in 2025, when the Province's registration system comes online and platform accountability obligations become enforceable.

These findings suggest that BC is on a trajectory towards decreased commercial STR activity, and lend confidence to the conclusion from the previous chapter that the Province's new STR rules will meaningfully lower rents for BC residents.

Appendix. Data and methodology

The analysis in this report is based on a combination of private and public data sources. The key sources are the following:

- **Activity data about Airbnb and Vrbo short-term rental listings gathered by the consulting firm AirDNA and the non-profit organization Inside Airbnb.** This data includes canonical information about every short-term rental (STR) listing on the Airbnb and Vrbo (including HomeAway) platforms which was active in British Columbia between January 2016 and September 2022 (Airdna) and October 2022 and July 2024 (Inside Airbnb). The data includes "structural" information such as the listing type (entire home, private room, shared room or hotel room), the number of bedrooms, and the approximate location of the listing. AirDNA and Inside Airbnb collect this information through frequent web scrapes of the public Airbnb and Vrbo websites. Airdna's data also includes estimates of listing activity (was the listing reserved, available, or blocked, and what was the nightly price?), which AirDNA produces by applying a machine-learning model to the publicly available calendar information of each listing. We use this data for our core analysis of the STR market, including our counts of active listings, our breakdown of different listing types, our estimates of STR-induced housing loss, and our estimates of listings which are commercial operations.

- **Additional data about Airbnb listings collected by UPGo researchers.** This includes information to verify activity, location and registration numbers, and listing photographs which were obtained through web scrapes.

- **Data from Statistics Canada and the Canada Mortgage and Housing Corporation (CMHC).** We use this data to analyze population and dwelling counts.

Data cleaning: We process the raw STR data we receive from AirDNA through an extensive data cleaning pipeline, using our **strr** software package (Wachsmuth 2021), the code for which is available at https://github.com/UPGo-McGill/strr.

FREH modelling: We define "frequently rented entire-home listings" as entire-home STR listings which are available for a majority of the year (so 183 days or more in a 365-day period), and which are reserved at least 90 days of that year. This is a consistent and conservative way to estimate listings operated sufficiently often that they are unlikely to be their host's principal residence.

Regression and difference-in-differences models: Detailed methodology for Wachsmuth and St-Hilaire's regression and difference-in-differences models can be found in the original paper: https://upgo.lab.mcgill.ca/publication/canada-str-rent/wachsmuth_st_hilaire_public_preview.pdf.

In order to facilitate public understanding and scrutiny of our work, complete methodological details, along with all the code used to produce this analysis, are freely available under an MIT license on the UPGo GitHub page at https://github.com/UPGo-McGill/bc-report-2024.

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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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