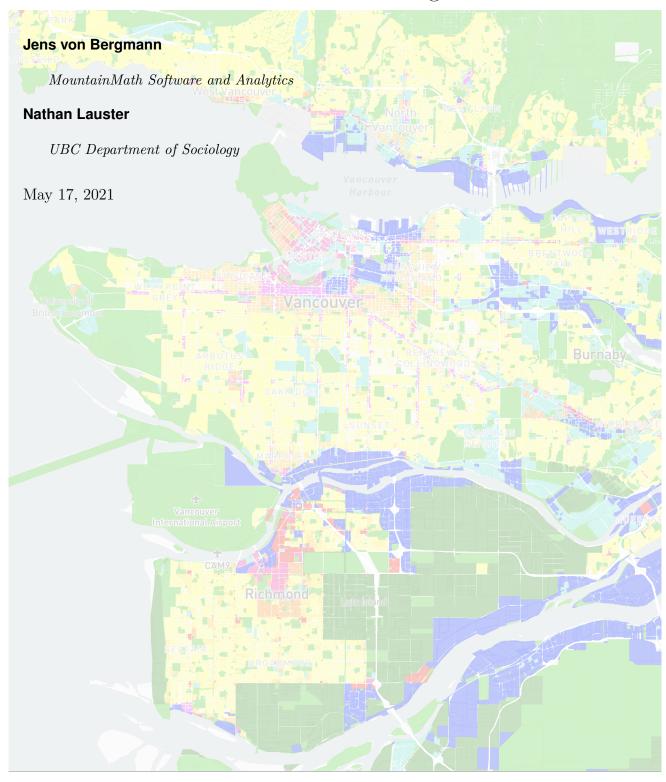
What we do and don't know about housing in BC



1 What we know and don't know about housing affordability challenges in BC

This panel is focused on Housing Supply as it relates to affordability challenges in BC, and with good reason. The CMHC's 2018 report examining price escalation in major metro areas in Canada found that price increases in Metro Vancouver were explained relatively well by their "workhorse" demand models, incorporating basic market features including population growth, income growth, and interest rates (e.g. p. 3). But they also found severe problems with supply elasticity in Metro Vancouver and Toronto, suggesting that housing supply is not keeping pace with rising demand, putting upward pressure on housing price (e.g. p. 6). In another appendix, we explore zoning as a factor explaining Metro Vancouver's difficulties in constructing more housing to meet demand, with potential implications for affordability for both buyers and renters.

Here we examine a number of alternative narratives that have risen purporting to explain challenges to housing affordability in BC. These narratives usually build upon anecdotes and snippets of information about real processes happening in the real estate market in BC, but often fail to place these processes within broader context. As a result, many narratives simply overestimate the impacts of specific selected processes in producing BC's housing affordability challenges. Other times these narratives are directly used to counter the argument that more housing supply is key to BC's affordability challenges (e.g. new housing won't improve affordability because it will all go to foreigners, be left empty, contribute to an already bloated Real Estate Sector, etc.). Below we attempt to gather some of these narratives together and describe their depiction of BC's housing affordability challenges. We also attempt to provide more context for what we do and don't know about how the underlying processes they purport to describe are working and what impact they might plausibly be having on markets at large.

1.1 Some Common Narratives:

- Foreign Buyers & Overseas Investors
- Empty Homes
- Building for the Wrong People
- Incomes de-coupled from Rents
- Development Only Displaces People
- An Outsized Real Estate Sector

2 Foreign buyers and Overseas owners

A common narrative purporting to explain BC's housing affordability challenges focuses on the role of foreign buyers and overseas owners. The broad argument is that global capital is moving into BC real estate as an attractive destination for various reasons, driving up the price of housing beyond the means of those who live and pay taxes here and potentially flooding out the effects of adding any more supply. This narrative places prospective local home buyers as those at the heart of affordability challenges in BC, imagining a housing crisis primarily affecting the middle class. As such, the narrative has little to say about renters, unless coupled with other narratives (e.g. empty homes) discussed below.

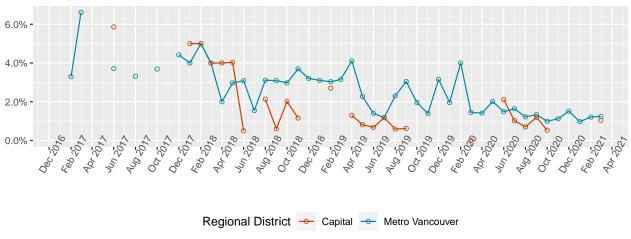
The definition of "foreign" remains ambiguous within the narrative, at different times referring to the citizenship of the buyer, the residency of the buyer, the income tax home of the buyer, or the source of funds of the buyer. The allied "overseas" label usually more directly refers to the residency of the buyer as most at issue. The distinctions matter insofar as BC, and Metro Vancouver especially, takes in a significant portion of Canada's immigrants, and remains well connected to a variety of transnational networks. Immigrants frequently arrive as non-permanent residents before formalizing their immigration status as permanent residents and often eventually applying to become citizens. This pathway to immigration, of arriving first via student or work visa, has increased over time and even become formalized in terms of a distinct "Canadian Experience" immigration pathway (both of the authors of this appendix first arrived in Canada on work visas). Similarly, Canadian permanent residents and citizens often circulate between BC and international destinations, establishing residencies and transnational ties of various durations and legal characters. As a result, those residing in BC and taxed as residents may be considered foreign in terms of immigration status, while those living abroad and taxed elsewhere may count as Canadian. Establishing the transnational origins, movements, and tax homes of people's money raises a host of additional complexities. Overall, given transnational ties and circulation, it is difficult to fully distinguish narratives focused on "Foreign" and "Non-resident" buyers from those blaming Immigration itself for housing affordability challenges in BC.

Insofar as Foreign Buyers are established as a category by policy (i.e. the Foreign Buyer Tax), they are defined as buyers who are not Canadian permanent residents or citizens, and may include non-permanent residents (NPRs) arriving on work and student visas (see CMHC report on rising number of NPRs in Canadian housing markets). BC began collecting data on the foreign status of buyers shortly prior to the imposition of the Foreign Buyer Tax. It is likely that the quality of the data has improved through time, especially after the imposition of the tax. Given the data is collected at point of sale, it remains unknown how many foreign buyers live in the properties they purchase or go on to become permanent residents, officially immigrating to Canada. Overall, real estate prices dropped immediately following the imposition of the foreign buyer tax, but any effects seem to have been short-lived. This led some observers to deem the tax effective at curtailing foreign buying, while others attributed its effects mostly to short term local uncertainty and market psychology. Indeed, as the CMHC has demonstrated in survey findings, the "foreign buyer" narrative remains very influential in structuring market actor beliefs in places like Vancouver, and these beliefs are likely to have independent effects on market psychology.

The data we have demonstrates that foreign buyers are continuing to participate in the market. Overall rates are low and, though early data remains sparse, possibly decreasing. That persistent foreign buying correlates little with price trends over the time period of the

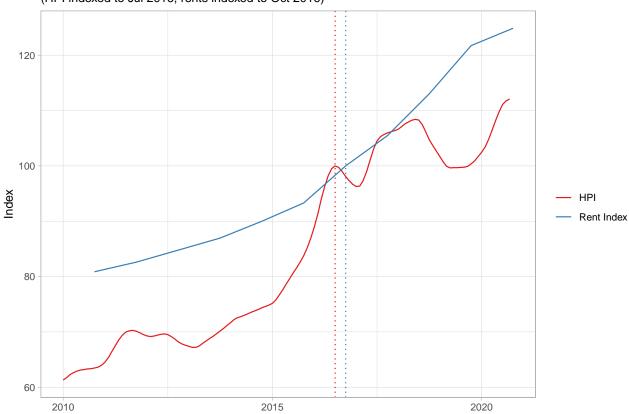
data available lends additional support to the outsized role of beliefs and market psychology (relative to actual foreign buying) as a driver of foreign buyer tax efficacy. That said, shortly after the tax was introduced a variety of other policy changes have made further analysis of the effects of the foreign buyer tax difficult to disentangle.

Foreign buyer residential transaction share of fair market value



BC Open Data

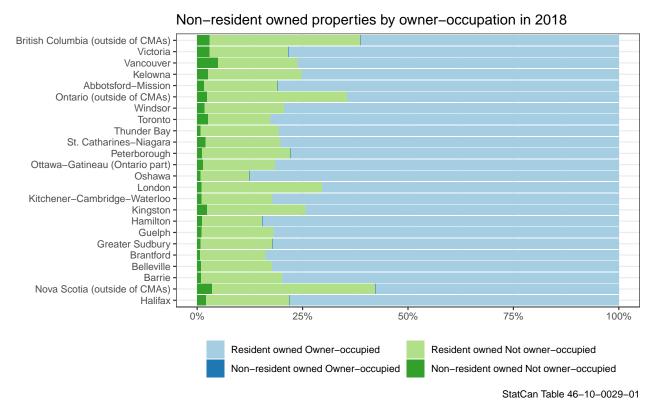
Metro Vancouver home price and rent indices (HPI indexed to Jul 2016, rents indexed to Oct 2016)



RPS Real Property Solutions HPI, CMHC RMS

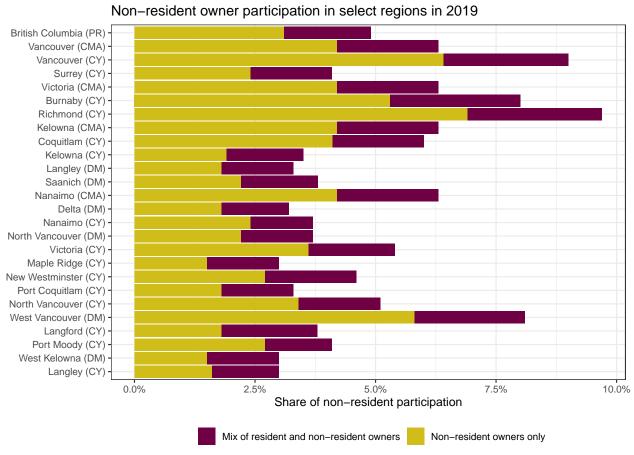
3 Non-resident owners

Turning to overseas property owners, Statistics Canada has begun collecting data on whether owners of properties are resident in Canada (e.g. having a Canadian address), as well as whether they occupy the properties they own, both of which are distinct questions from the citizenship or permanent residency status of owners, but potentially better distinguish real estate investment. Overall, data indicate that the proportion of owners who don't occupy their properties are generally similar for regions in BC as for elsewhere in Canada. These owners may consider themselves investors (usually renting out their properties), second home owners (e.g. pied-a-terre), or owners purchasing or co-signing on other family members' residences. The vast majority of real estate investors in BC have an established Canadian address as residents, but a slightly higher proportion of these investors in Metro Vancouver are non-resident (about 1 in 5) relative to other regions of Canada. Of note, investment ownership is generally more common in condominium developments, where it is built into the pre-sale model of financing. Metro Vancouver's heavy reliance upon condominium development (including for the vast majority of new rental stock) tends to boost investor ownership rates accordingly.



The level of non-resident participation can vary from all owners being non-residents at a given point in time to a minority of owners being non-resident. To illustrate this we can split up the properties with any non-resident participation (i.e. with at least one non-resident owner) into those that are fully owned by non-residents during the reference period and those partially owned by residents and non-residents. We see clear evidence from splitting that

many overseas owners are co-signers of ownership with Canadian residents, likely indicating the high prevalence of transnational family assistance, but also in some cases transnational investment cooperation.



MountainMath, StatCan table 46-10-0027

Finally, to return to the legal status of non-resident investors, we can compare Statistics Canada data on property owners by residence (CHSP) to Speculation and Vacancy Tax data on who qualifies and pays taxes as a "Foreign" owner. The comparison enables us to see that at least half of those Statistics Canada assesses as living abroad but owning property within BC municipalities are considered by BC to be legal Canadian citizens or Permanent Residents. Most "Foreign" owners are exempt from the Speculation and Vacancy Tax, largely because they are renting out their properties. Overall, no major municipality saw more than half a percentage point of its property owners paying the Speculation and Vacancy Tax as Foreign property owners in 2019.

Contextualizing the data, the fact that non-owner occupied (e.g. investment) ownership in BC, including Metro Vancouver, is similar to elsewhere across Canada suggests that the extent of non-owner occupied ownership, by itself, explains little about local affordability challenges for prospective home owners. So long as non-occupying owners are renting their properties out, they may be constributing to greater affordability for renters (see our discussion of "empty homes" as a narrative below). What about the location of non-occupying owners being outside of Canada? Given that local owner-occupation rates roughly match

Canadian rates, there is no a priori reason to believe that the location of non-occupying owners (whether in BC, in Alberta, in the UK or China) matters for local affordability. Roughly the same proportion of locals appear to be living in homes that they own as elsewhere in Canada.

That said we note that non-occupying owners living outside of BC (whether in Alberta or abroad) may have mechanical effects on increasing price-to-income ratios, as when a parent cosigns or out-right purchases a property for a child attending school in BC. The child, whether co-signing as an owner or not, may have a direct effect reducing local wages (by introducing a dependent student) while directly connecting local real estate price setting to income or wealth beyond BC. Yet the child may find their own housing affordability in BC enhanced by this arrangement (speaking to the problems with the price-to-income ratio as a measure of affordability), and the child may be or become permanently resident (speaking to the difficulty of determining who should be considered foreign). Of note, other factors (e.g. immigration and imperfect correlations between wealth and income) further challenge reliance upon price-to-income ratios, as discussed further in our appendix concerning housing metrics. Ultimately the data do not suggest a strong role for non-resident owners in local unaffordability, but may suggest more attentiveness to appropriate metrics for assessing affordability.

Here we turn from narratives that focus on housing affordability challenges in Vancouver for prospective home buyers to those with more implications for renters. We note that where housing affordability challenges for prospective buyers tend to represent threats primarily to housing goals and aspirations and middle class identity, housing affordability challenges for renters have potentially far more dire implications, including, for example, homelessness. When comparing different narratives about housing affordability challenges in BC, we would generally argue that those involving the housing needs of renters should be considered the most pressing by policymakers.

4 Empty Homes

As we note above, non-occupying owners are often acting as investor-landlords. To the extent they contribute dwellings to the rental stock, they may be contributing to affordability where it's needed most. But they may be leaving their properties empty rather than renting them out. Generally this would result in foregone income for investor-landlords, and hence we would expect empty dwellings to be rare. But non-occupying owners may follow alternative investment strategies, as where short-term rentals through platforms like AirBnB offer a better return. Or in volatile markets, they may be focused on timing the re-sale of their property for maximum profit, and worry that having a tenant would reduce their flexibility. Or they may have other motives for leaving properties empty (e.g. for their own or associates' temporary use). In some cases, they may have abandoned properties.

For all of these reasons, it is important to keep track of empty dwellings to insure that

affordability challenges for renters (as well as potential buyers) aren't being exacerbated by the potentially diverse orientations of non-occupying owners. Are properties being left empty? If so, why? Data prior to the Empty Homes Tax (EHT, applying within City of Vancouver) and Speculation and Vacancy Tax (SVT, applying across most populated portions of BC) was generally scarce. We start by examining census data.

5 Empty Homes in the Census

The census is focused on enumerating people and households, but also enumerates dwelling units. The difference between dwelling units and households (a.k.a. dwelling units occupied by usual residents) are "dwelling units not occupied by usual residents" that are often taken in the media as a proxy for empty homes. This category is further split up into "unoccupied" dwelling units and "dwelling units occupied by temporarily present persons" such as students that think of their primary residence at their parent's place, or temporary workers that have their main residence elsewhere in the country or outside of Canada. The enumerator makes the call if a dwelling unit should be classified as occupied but not responding or as unoccupied.

The Canadian census does not attempt to determine the reason why a particular dwelling unit was classified as unoccupied, but the US ACS does and it is instructional to use this as a comparison. We see that dwelling units can register as empty on any particular day for a variety of reasons, ranging from moving-related vacancies to recreational or other uses. Comparing across North America, regions of BC did not stand out as unusual in terms of unoccupied dwellings in 2016, fitting on the low end for US cities, but toward the high end for Canada. Census results generally match well with contemporaneous BC Hydro power use studies produced for the City of Vancouver by consulting company Ecotagious.

6 Empty Homes in Administrative Data

The EHT and SVT have imposed penalties on properties left vacant and owners who don't occupy or rent out their properties and don't qualify for other exemptions (e.g. newly purchased, recent death of owner, etc.). Data from these taxes demonstrate very low rates of unoccupied properties now. Even lower are the rates of those who don't qualify for some form of exemption. In the SVT area 0.6% of homes (8,722 out of 1,454,227) paid the tax because the home was vacant.

Comparing administrative tax data with earlier BC Hydro and Census data, there is some evidence that the EHT and SVT lowered the proportion of properties left vacant. It is difficult to know exactly by how much, but a decent estimate based on comparing Ecotagious estimates would be that two units were returned to the market for every unit taxed, implying that the SVT in particular may have shifted 1.2% of homes, on the order of 17,000 dwellings, back to either rental or owner-occupation. While this represents a significant addition of housing stock, the fact that empty dwellings were not especially prevalent prior to the taxes

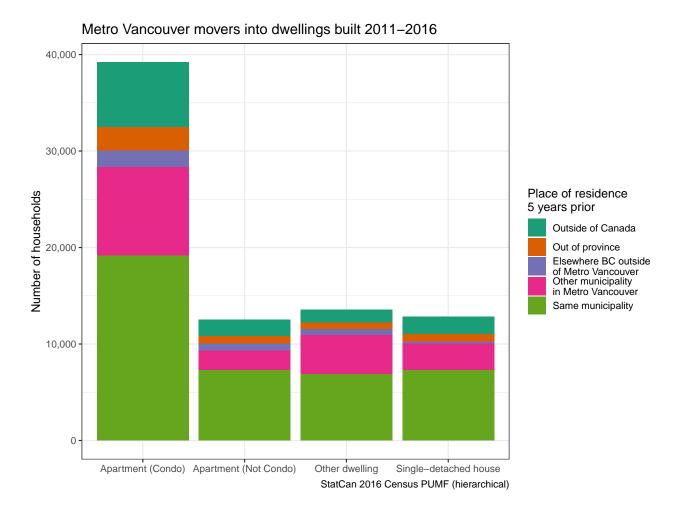
suggest that they were not a major factor driving BC's affordability challenges.

At this point there appear to be relatively few dwellings left vacant. Overall, when we add new homes we can be relatively certain they will fill up with residents, contributing to the housing market.

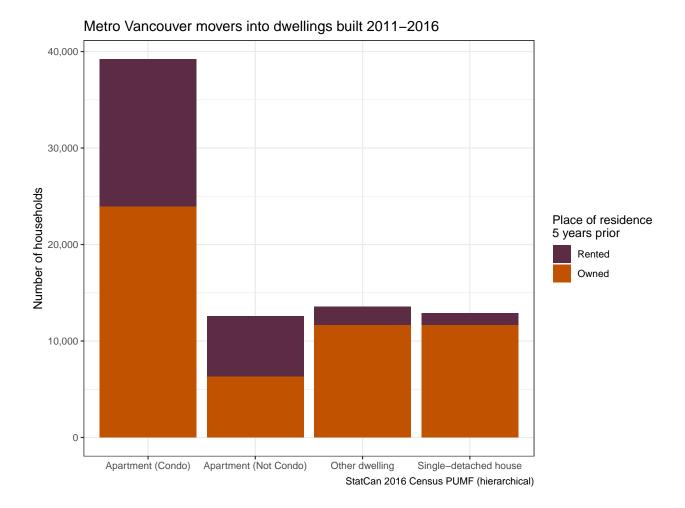
7 Building for the Wrong People

If housing isn't empty, then who are we building for? A common (if problematic) complaint is that we're building for the "wrong" people (e.g. non-locals, condo owners, only the rich, etc.). As a result, some narratives suggest that constructing more housing supply will not alleviate BC's housing affordability challenges. Here we examine a few of these complaints.

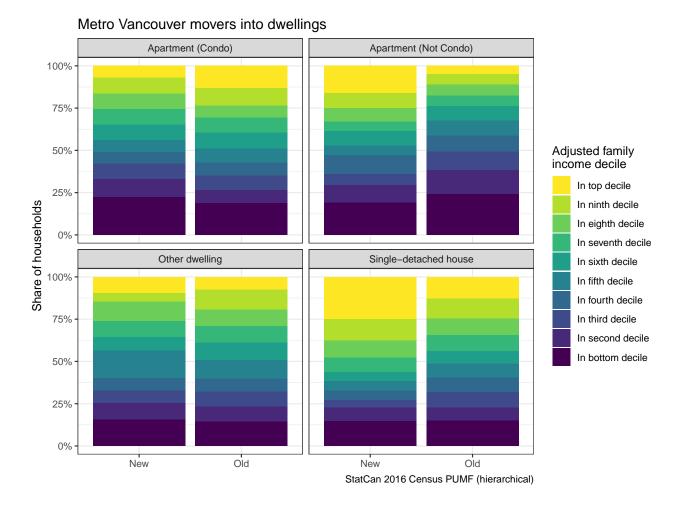
Section 6 of the Canadian Charter of Rights affirms that Canadians enjoy freedom of movement. The assertion that BC is only building for non-locals fundamentally casts this right as disposable, and is problematic on that ground alone. But the assertion is also wrong from a factual standpoint. The Census allows us a peek at who lives in new housing. We can see that in Metro Vancouver (as in most places) most people moving into new housing are locals, most often coming from within the same municipality (green). Others come from nearby municipalities (pink) within the same metropolitan area. Those arriving from BC, but outside the Vancouver Metro Area (purple) are relatively rare, while new housing residents arriving from elsewhere in Canada (orange), or outside of Canada (blue) are also fewer in number than locals.



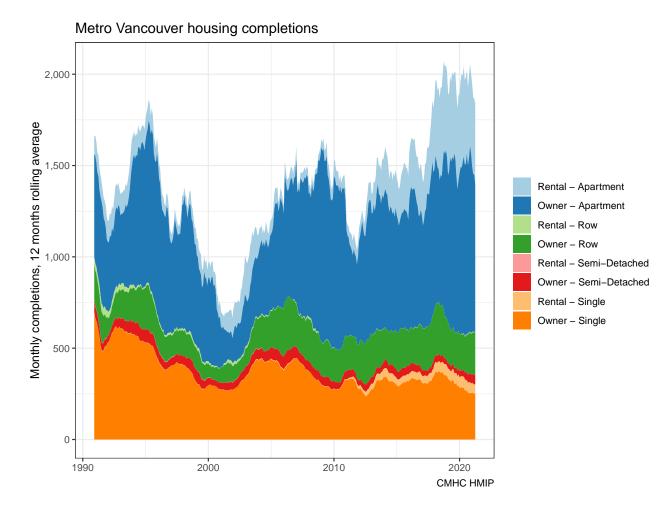
We can also see that new housing frequently houses renters as well as owners. Indeed, breaking out by kinds of new housing added, we see that as of 2016, new condominiums and non-condo apartments (largely secondary suites) were commonly being rented out by the investors owning them, providing the bulk of new rental stock.



Certainly it is the case that newly built housing on the market tends to sell and rent for more than older housing, a factor generally attributed to the depreciation and declining repair of older housing stock, but also due to the rise in housing standards over time. Looking at the adjusted incomes of moving households by whether they move into new or older forms of housing reveals that while new housing is generally more expensive than older housing, it's also not just for those with the highest incomes. Households across the full range of income deciles move into new housing. Renters especially help broaden the income distribution of those moving into new housing, especially in condominiums.



For non-condominium apartments, the older purpose-built rental stock can also be seen as providing for the most lower income movers. While we haven't built much purpose-built rental stock in the last thirty years (and longer), recent programs have begun to add to the stock again within the past decade.



Overall, the evidence suggests that newly constructed housing stock is predominantly occupied by locals, and the incomes of occupants vary widely. Of note, people move a lot. As housing stock ages, it tends to filter downward, becoming cheaper over time. But without the addition of new housing stock, filtering can work the opposite way. Where rising demand meets stagnant supply, older housing can become more expensive. In this sense, adding new housing stock has a protective effect on the affordability of older housing stock, a finding well-supported by recent research.

8 Incomes de-coupled from Rents

Another common narrative is that incomes have not kept up with rents in Metro Vancouver, proving that local demand could not possibly be driving rent increases. There are a variety of reasons incomes and rent may become de-coupled. As noted above, incomes are not perfect proxies for demand or determinants of housing affordability. In particular, wealth may be distinct from income, and households may have assistance in paying rent that doesn't show up in income, as when parents assist students. On the other side, rent control policies, like those in BC, may prevent rents from rising in tandem with incomes, at least for those who don't move. So there remains potential for rent to become decoupled from incomes. That

said, there is very limited evidence of this kind of decoupling occurring in Metro Vacouver.

Here we index incomes and rents to the year 2000, by bedroom mix and household type, to see how they've tracked in the past twenty years. Rents have risen across bedroom mixes roughly in tandem, almost precisely in line with the incomes of couple households. Single parents have actually improved their incomes relative to rents since 2000. Only the incomes of those not in census families (e.g. mostly those living alone or as roommates) have declined relative to rents, and there only in the post-2008 years. This may reflect stagnation in the incomes of the most marginal households as well as the rise in households containing student renters, as noted above, and the trend is worth tracking and disaggregating more closely. Of note, both incomes and rents have generally risen above inflation (CPI).

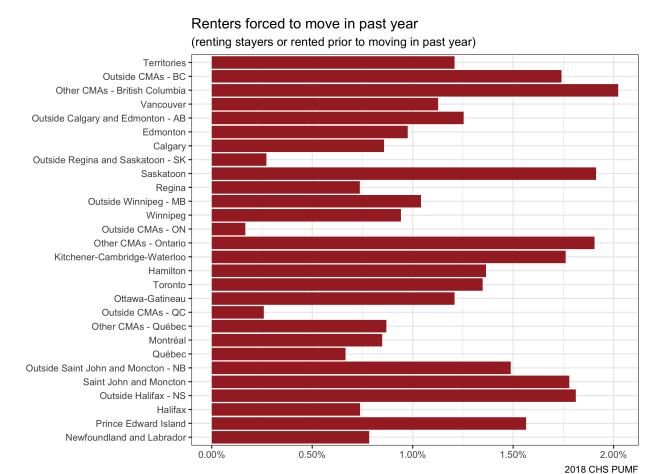
Overall, rent growth has generally tracked income growth quite closely. That said, concerns remain about outsized rent burdens for the most marginal households. And incomes tracking rents also means that affordability struggles, which have been plaguing renters for a long time now, have not gotten easier. Concerns also remain about the potential that underlying processes are pushing lower income households out of Metro Vancouver. Subsidies and a substantial investment in non-market housing (e.g. with rents geared to incomes) will likely be needed to assist low-income households and address their housing affordability challenges for quite some time to come.

9 Development Only Displaces People

Another common narrative ties development to displacement, taking away housing rather than providing it. As noted above, the housing produced in BC tends to become occupied relatively quickly, with very few empty dwellings. Hence we know new housing is housing people. Nevertheless, redevelopment can temporarily remove housing stock. This can lead to displacement - especially for tenants - when old dwellings are torn down in the process of constructing new ones without renter protections put in place. Early results from the Canadian Housing Survey (CHS) showed an elevated share of moves in BC where people were "forced to move by a landlord, a bank or other financial institution or the government" on their most recent move during the 5 years prior to the reverence year 2018. Could this relate to redevelopment pressures?

The CHS does not list specific reasons for forced moves. But a report collecting data on disputed evictions within Metro Vancouver suggests that relatively few evictions (~4%) are filed under landlord's use of property (the likeliest filing for redevelopment), though these rose up to 2017. The vast majority of evictions resulted from unpaid rent or cause filings. A recent release of CHS data enables a return to further explore forced moves. CHS data confirms that forced moves were mostly a problem faced by renters. We can further calculate the share of renters forced to move within the past year, establishing a baseline risk of eviction generally running between zero and two percent. Here we see that the higher risk parts of BC lie outside of the high demand Metro Vancouver area, which appears to offer a

middling risk of eviction.

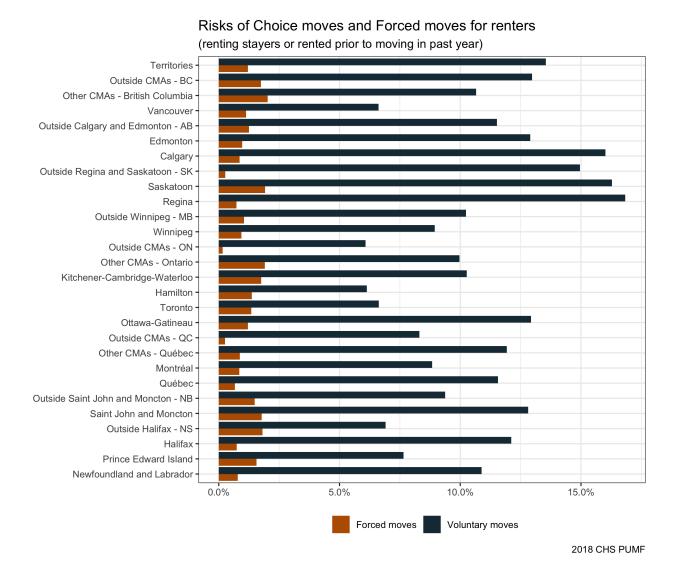


Using more of the CHS data, we can look at moves further back than within the previous year, attempting to see if there's evidence of change over time in risk of eviction. Here it appears that BC's risk of eviction went down relatively uniformly in 2018 relative to previous years and other jurisdictions, which may be connected to changes to the Rental Tenancy Act, closing some loopholes previously used by landlords to evict tenants.

Renters forced to move (renting stayers or rented prior to moving) Outside CMAs - BC Other CMAs - British Columbia Vancouver Saskatoon Toronto Montréal 0.0% 1.0% 3.0% 2.0% 1 years 2 years 3 years 4 years 5 years

If risk of eviction - or forced moves - remains similar in BC to elsewhere in Canada, what about moves for other reasons, or what we might consider choice moves? Choice moves far outnumber forced moves and include a wide range of "reason for move," including moves, for example, to start a new household, add more space, or move closer to work. Comparing the two kinds of moves, as below, suggests that renters demonstrate very low levels of choice mobility in BC. This likely relates to the lack of options, especially given the gap between current rents (governed under rent control) and rent that might be paid for something different (subject to market competition). Forced moves make up a greater proportion of moves overall in places like Metro Vancouver not because forced moves are more common, but rather because choice moves are less so.

2018 CHS PUMF



The main takeaway is that tenant protections are good and they help renters stay in place. But lack of choice in the rental market depresses mobility and hurts renters. Policy should focus on both, protecting existing tenants and also expanding choice in the rental market.

10 An Outsized Real Estate Industry

An additional narrative suggests that investments in constructing more housing in BC will simply further bloat an already oversized real estate sector. In particular, the narrative looks to how British Columbia's "Real Estate Industry" dominates the province's GDP. To evaluate this claim, it's important to understand how GDP is constructed as a measurement. In short, rather than reflecting people working in real estate or constructing housing, the Real Estate contribution to the GDP is mostly derived from rent and imputed rent (i.e. the "rent" that landlords pay themselves). As such, Real Estate as a portion of GDP is largely a

product of BC's housing affordablity challenges. Adding more housing supply may increase a small portion of Real Estate's contribution to GDP (through construction), while working to reduce a larger portion (through rent).

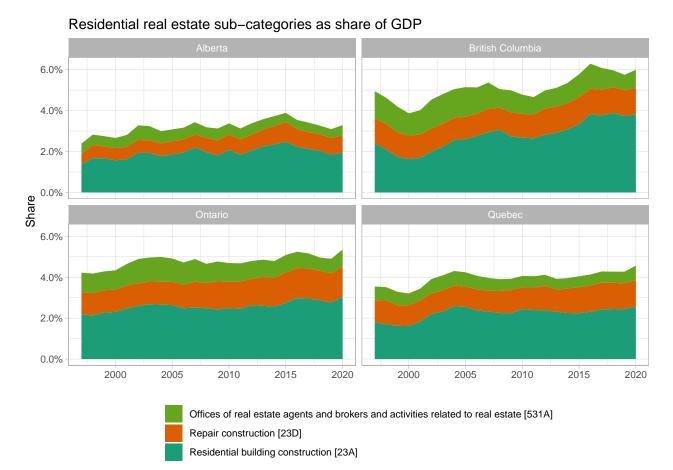
Breaking out sub-components, we see that the high share of GDP connected to the Real Estate Sector in BC is mostly a reflection of how much people in people spend on housing as either "lessors of real estate" (rent) or residents of "owner-occupied dwellings" (imputed rent) and not the extent to which our economy is "reliant" on the construction industry. It also speaks to how housing costs stifle economic growth by sucking up financial resources that could otherwise be spent more productively. Lowering housing costs will work to lower rent and imputed rent, and the evidence suggests we'll need to build a lot more housing to get there.

To capture what is intuitively understood as the Real Estate Industry, and which differs substantially from Statistics Canada defintions of the NAICS 53, we can assemble various residential real estate sub-categories.

Residential real estate sub-categories as share of GDP 25.0% 20.0% 15.0% 10.0% 5.0% o.0% 25.0% 0.0% 20.0% 15.0% 10.0% 5.0% 0.0% 2000 2005 2010 2015 2020 2000 2005 2010 2015 2020 Offices of real estate agents and brokers and activities related to real estate [531A] Owner-occupied dwellings [5311A] Lessors of real estate [5311] Repair construction [23D] Residential building construction [23A]

StatCan Table 36-10-0402

Taking out rent and imputed rent we are left with residential construction and repair construction, as well as real estate agents, brokers and other activities related to real estate like residential and non-residential property management, appraisers and related industries.



StatCan Table 36-10-0402

British Columbia still registeres higher than peer provinces in terms of jobs related to the construction, sale, and management of Real Estate. Construction is likely boosted by a record high number of buildings currently under construction (but not yet completed) and the kinds of buildings being built (often condominium apartments). The high share of condominium apartments as part of their residential building stock in BC also leads to more people working in building management and related occupations. Regardless, the overall portion of the economy devoted to these kinds of real estate occupations scarcely exceeds 6% of GDP, implying little in the way of sector dominance. To the extent adding more housing supply will reduce rising prices and rents, adding more construction workers will ultimately bring down the overall proportion of the GDP devoted to the real estate sector.

11 Conclusion

In sum, a variety of common narratives have purported to explain housing affordability challenges in BC in ways that might cast doubt upon the efficacy of adding more housing (i.e. fixing BC's supply elasticity problems). We find little evidence to support these narratives.

Though there are foreign buyers and non-resident owners in BC, they do not seem to be a very large part of the housing market, even where most active (i.e. in Metro Vancouver). Historical patterns demonstrate limited discernible impact of foreign buyer participation in the market on affordability. Overall, levels of property ownership indicative of investment (i.e. where owners do not live in their properties) do not suggest investors are playing an outsize role in BC municipalities relative to other markets across Canada. Similarly there is little evidence that BC municipalities have an unusually high proportion of properties left unoccupied or empty, especially after imposition of the Empty Homes Tax (in Vancouver) and Speculation and Vacancy Tax (more broadly). Newly built housing seems to be serving a variety of housing needs, mostly for locals, and including both the needs of owners and renters. Rents appear to be rising roughly in response to rising incomes. And the Real Estate Sector, while larger than in other provinces, does not seem especially outsized after extracting rents and imputed rents.

We would also note that rather than casting doubt on the efficacy of adding more housing, some narratives might actually suggest room for additional positive effects of addressing BC's supply elasticity problems. For instance, to the extent speculative investors (either foreign or domestic) are viewed as driving up prices, the promise of more housing supply can work to drive such investors from BC markets. That's because investors (including e.g. REITs) are especially likely to invest in existing properties (including, e.g., older purpose-built rental stock) in places they view as supply-constrained, in hopes that the lack of competition means they will be able to extract more rent and resell existing properties for higher value later.

Finally we would note that our emphasis upon the importance of fixing BC's supply elasticity problems (i.e. adding more housing) does not imply inattention to other housing policies. We would broadly support the ramping up of housing subsidies and the construction of more non-market housing to assist the lowest income households in BC. We support the continuation of empty homes taxes and vacancy taxes to discourage long-term vacancies. We would also support increasing property taxes, including especially on the land portion of properties, as a way of turning private real estate windfalls back toward the public benefit. We note increased property tax revenue could offset decreased income taxes and/or be turned toward the investments in subsidies and non-market housing we suggest above. Increased property taxes could also potentially stabilize price swings related to interest rate shifts at the national level. And higher property taxes moreover serve to shift the balance back to first-time buyers and away from investors that generally have better access to capital, which forms the primary barrier to buying housing in a low-interest low-property tax environment. We emphasize that all such policy suggestions will work better with moves to enable a more responsive housing supply in BC. Indeed, the evidence suggests that addressing the supply barriers to housing affordability in BC remains crucial to fixing all our other problems and building a more equitable and prosperous province.