

The 50-Year Vancouver Experience with Housing Affordability and Increased Density

Draft

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Across North America and, indeed, across the developed world, governments are responding to what is generally characterized as a housing affordability crisis by weakening or eliminating zoning controls on residential landscapes. It is argued that these inherently restrictive policies stand in the way of creating additional housing supply in existing cities and city districts, and that these impediments to the free flow of housing supply creates a scarcity of available dwelling leading to increased prices. Several studies and theoretical arguments have become the basis for this argument, including most notably Edward Glaser's [*The Triumph of the City*](#). This author and many other urbanists have published and consulted in this crucial work, with this author's [*Seven Rules for Sustainable Communities*](#) being a characteristic example of the genre. The past four decades have, with a high degree of probability, indicated that walkable, mixed use, medium to higher density cities perform better than "urban sprawl" on a number of sustainability metrics, such as health outcomes, greenhouse gas reductions, enhanced social connection, reduction in per capita infrastructure costs. These benefits are not in doubt. However, the presumption that adding new density to existing districts would lead necessarily to lower housing costs is not proven. The absence of cross comparisons between North America's established cities has made it impossible to empirically certify the hoped-for benefits of additional housing supply on average home purchase or rental prices. As an alternative to proceeding with uncertain actions which will take, at best, decades to bear fruit a complimentary policy response may be most propitious under the circumstances. Policy precedents are available which can leverage urban land values strong housing markets to secure non market housing on at least a one to one basis, market unit to non market unit. Examples are provided at the end of this text.

First some empirical evidence on the multi generational efforts of Vancouver citizens and officials to add housing supply in numbers that, it was hoped, would exceed demand. Vancouver, more than any other North American city, has actively tested the hypothesis that adding new housing density to already built out districts will lower prices over time. Since the 1960s, Vancouver has added a higher percentage of new housing units, relative to its population, than any other central city in North America. Thus Vancouver presents a notable case study against which to test this hypothesis. We compare and contrast Vancouver's achievements against a large group of other North American centre cities to allow empirical comparisons.

This study focuses on already developed centre cities like Vancouver. The term "centre city" refers to the primary municipality at the core of a metropolitan region, as detailed in our methodology.

The first illustration below highlights Vancouver's achievement compared to other North American centre cities, showing that Vancouver increased its housing stock by 200%, despite only a 78% increase in population.

Housing Growth in North American Centre Cities: 1960-2020

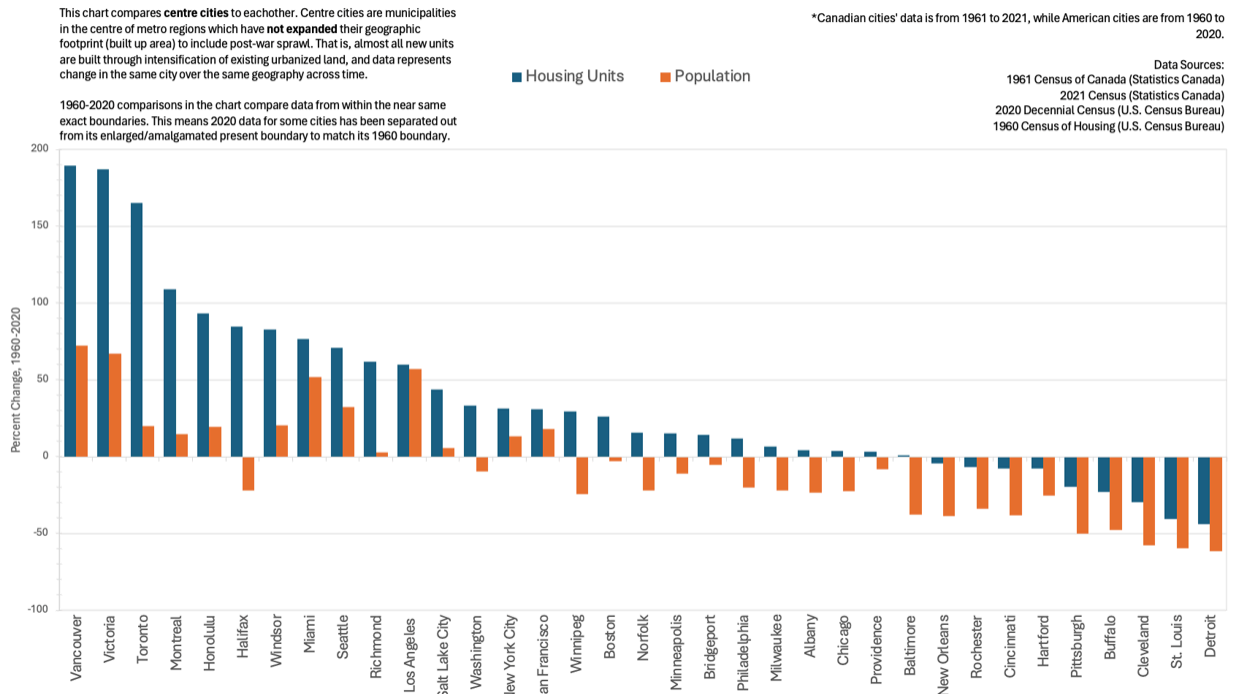


Table 1: The chart above compares growth in centre city housing units with centre city population growth between 1960 and today. Centre cities are municipalities in the centre of metropolitan regions which have not expanded their geographic footprint (city limits) to include post-war urban sprawl. Cities such as Calgary and Portland, which have gradually included post war "greenfield" sprawl have been excluded for this reason. Thus, this data represents all housing units added to these centre cities since 1960 and were thus in the form of "infill" development - development within already occupied urban districts. We stress this point because we have found no other analysis that answers the crucial question: what centre city in North America has done the best job in adding housing units to existing districts. We want to know if adding housing supply in greater numbers than other cities correlates with reduced housing prices as many claim.

In the case of Toronto which only recently incorporated its suburbs into a metropolitan scale metropolis we were able to isolate growth that occurred within its pre 1990s city boundaries.

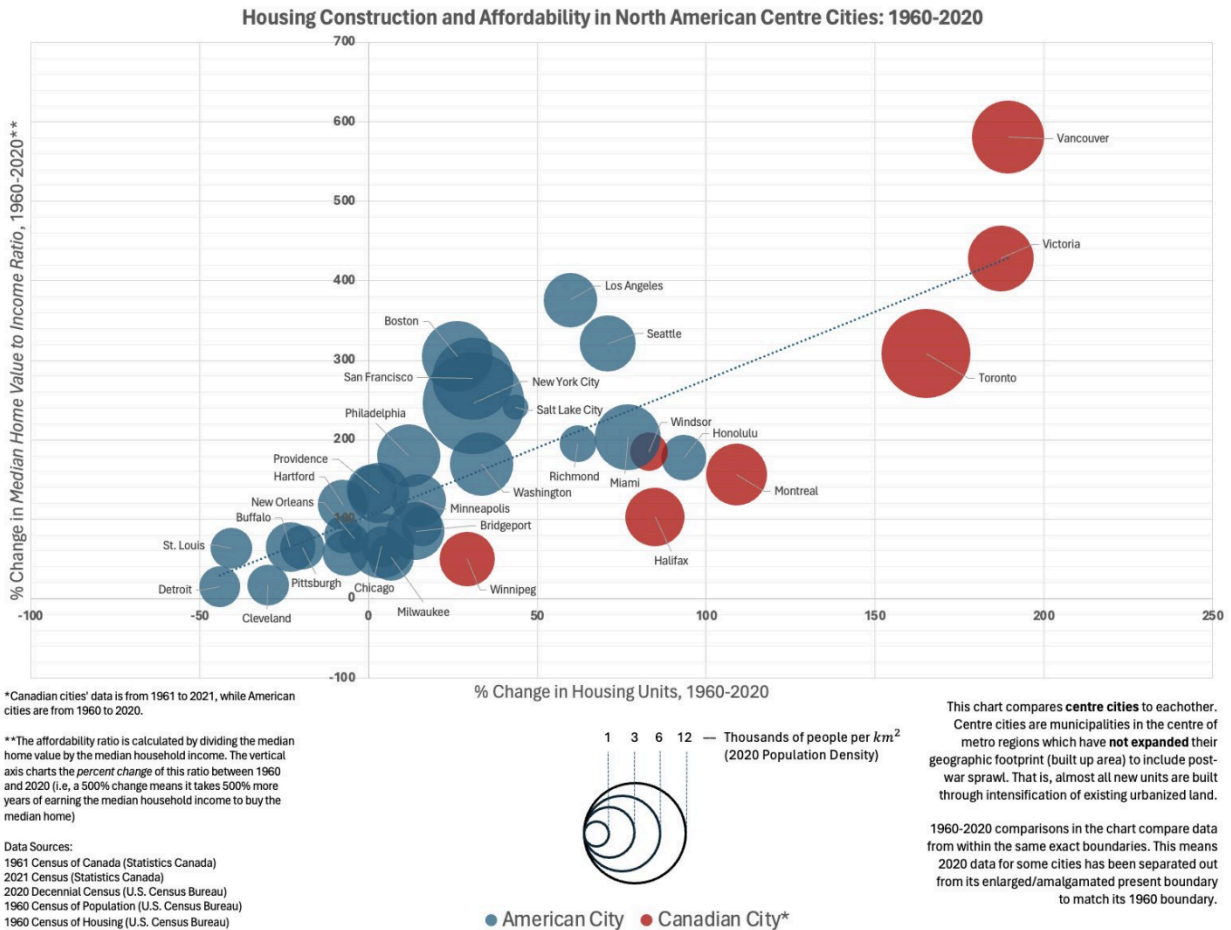
Of note from this data: Vancouver far outpaces other North American centre cities in adding new dwelling units over this period by increasing dwelling units by almost 200%, while increasing population by only 74%. Toronto by contrast increased dwelling units by just over 100% with a roughly 20% increase in population.

Comparing these Canadian examples to American equivalents reveals that both New York City and San Francisco increased dwelling units by roughly 35% each and in this were among the US centre cities that added the most units in proportion to their population. Many US centre cities lost both housing units and population during this period.

In sum the chart reveals that Vancouver has added far more housing units than virtually any other US city (within fixed urban boundaries) and that the near tripling of housing far exceeded its less than doubled population count. Compare this for example with Los Angeles where both housing units and population increased by roughly 60 percent each.

A more insightful representation of the data might show how the ratio of housing prices to median household income has evolved over time. This chart reveals how Vancouver's housing market has far

exceeded the North American norm in terms of higher than average residential density, the gap between median wages and median home prices (a measure of housing price stress), and additional housing supply as a percentage of housing existing in 1960. The salient result of this unique analysis reveals that among the centre cities examined, Vancouver has added far more housing than almost any other centre city examined. It also, counter-intuitively, shows that despite exceeding all other cities examined in adding new infill housing, the added supply correlated with much higher than average home prices over this period. .



adding housing units as a percentage of

This chart combines three important related factors for the centre cities analyzed.. They are: residential density, housing unit growth, and affordability. This comparison is important because within the context of the housing affordability crisis, these three factors are inveighed as critical influences.

The affordability ratio, shown on the vertical axis, is the ratio between median home price and median annual income. In the case of Vancouver that ratio has increased by 600 percent since 1960, meaning that Vancouver has North America's most expensive housing when measured against median household wages.

On the horizontal axis we chart the percent increase in housing units. Again using Vancouver as the example we show an almost 200 percent increase in housing units added to existing city districts. This points out a correlation between infill development and increasing home prices in many cities, especially Vancouver.

The size of the bubbles represents average residential density per square kilometer. Vancouver is second only to Toronto in average residential density among Canadian centre cities and above average internationally, matching or exceeding all but New York City in centre city density.

When attempting to explain this contradiction - where adding supply did not lead to lower home prices relative to lower performing municipalities - one factor not included in the charts above that stands out as the major driver of home prices is the changing price of urban land. These price changes are easily charted online, notably on the independent GIS site mountainmath.ca. There one can see that over the past few decades, the cash value of developable parcels, of any size, has exploded from a ratio of roughly two times the value of the buildings above to a contemporary ratio of roughly ten times the value of the buildings above.

This raises the question: doesn't adding new density to the parcel lower the land price component of the final home price? In answering this crucial question looking again at the data shows that higher density buildings, which you would hope be more valuable than the land for this to be true, maintain a roughly similar five to one land price to building value ratio - and that hoped for price reductions assumed when density is added are typically swallowed up by increases in land price. Thus, urban land prices are linearly linked to the number of habitable square feet zoning allows on a site. In Vancouver this value is easily calculated and has hovered between 600 and 700 dollars per "buildable" sq. foot, and has maintained that price since roughly 2016.

In sum, this evidence strongly suggests those who argue that policy constraints, notably zoning, stand in the way of housing affordability are mistaken. Vancouver, since the 60s, has added more housing, as a percentage of the whole, than any other North American city and is, at the same time, North America's most expensive. Other factors may be more salient. Our evidence suggests that the capacity of land to absorb most of the new value associated with new density is the more compelling target. This of course raises the question of what to do about it.

My current book, [Broken City](#), gives a great deal of attention to this question; but let me summarize. There are a variety of ways to use policy levers to prevent urban land price inflation during laudable urban densification efforts. Vienna is a famous global example of capturing land value for public purpose, so is Singapore, in a different way. The differences are insignificant. The main point is that you can link public growth policy to land value capture. Vancouver did this very effectively in the 80s and 90s through a requirement that 80 percent of newly created land value, due to upzoning, would be returned to the

community. This land value was used to fund a variety of social benefits, including affordable housing. A last example is that of Cambridge Massachusetts in the form of their "[affordable housing overlay](#)" zone. This policy allows for a doubling of density anywhere in the city over current zoned allowance, but only if 100 percent of units are rented to households making median area wages or below; this holds land prices at stable rates making it more possible for the projects of non profit housing providers to "pencil out".

These precedents suggest that the policy tool of zoning, rather than being seen as an impediment to affordable housing, standing in the way of more sustainable walkable mixed use affordable neighbourhoods, can instead become the policy lever for ensuring these evolved communities satisfy our common desire for housing equity.

This data and the associated policy suggestions are offered here to open up a more thoughtful understanding of the housing affordability problem. There is ample evidence that "global cities" like Vancouver, where prices are rising out of reach of ordinary wage earners, can capture enough of the inflated value of their city lands for social purposes, and that the social purpose most in most need of attention right now is affordable housing. To mitigate these trends we need to revive the tradition, abandoned in the neo-liberal 80s - of building housing protected from the vagaries of global finance - i.e, a "non market" for housing so that ordinary wage earners can access what is, for them, an increasingly inaccessible housing market..