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# DEMOGRAPHIA HOUSING AFFORDABILITY IN CANADA

2021 Edition: Data from 3rd Quarter 2020

Supplement to Demographia International  
Housing Affordability: 2021

BY WENDELL COX

DEMOGRAPHIA



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2021 Edition: Data from 3rd Quarter 2020

## Supplement to Demographia International Housing Affordability: 2021

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## EXECUTIVE SUMMARY

*Demographia Housing Affordability in Canada* assesses middle-income housing affordability (Section 1) using the “Median Multiple,” which is the market rate median house price divided by the pre-tax median household income (gross income).

The Median Multiple is widely used for evaluating housing markets. It has been recommended by the World Bank and the United Nations and has been used by the Joint Center for Housing Studies at Harvard University. The Median Multiple and other price-to-income multiples (housing affordability multiples) are used to compare housing affordability between markets by the Organization for Economic Cooperation and Development, the International Monetary Fund, *The Economist*, and other organizations.

Historically, liberally regulated markets have exhibited median house prices that are three times or less that of median household incomes (a Median Multiple of 3.0 or less). *Demographia* uses the housing affordability ratings in Table 1.

### **Housing Affordability in Canada: The Context**

Among the major markets, housing remained comparatively affordable from 1970 to the mid-2000s, though the Vancouver market had become severely unaffordable. Since then, however, housing affordability has deteriorated materially. Housing was generally affordable in Canada’s as late as the mid-2000s. For example, house prices have increased the equivalent of 7.7 years of median household income in Vancouver from 2004/2005 and 6.0 years in Toronto.

House price increases have been substantial in the other major markets. Montreal and Ottawa-Gatineau house prices have increased the equivalent of more than two years of annual median household income. Calgary and Edmonton, prices rose about the equivalent of one year

### **Housing Affordability in 2020**

Housing affordability ratings for 2020 are shown in Table 2. Affordability ratings by housing market are shown in Table 3 (alphabetical) and Table 4 (by housing affordability rating). Overall, nearly one half of the markets in Canada are severely unaffordable. Five markets remain affordable: Fredericton (NB). Saint John (NB). Trois Rivieres (QC), Cape Breton (NS) and Saguenay (QC).

By far the most severely unaffordable housing is in Vancouver and Toronto, which are rated the second and fifth least affordable among the 92 markets in the *Demographia International Housing Affordability Survey*. In Vancouver, the median income household would need 78 percent of its pre-tax income to afford the average priced house, and nearly as much (66 percent) in Toronto.

Severely unaffordable housing has spread beyond Vancouver to nearby markets in the British Columbia Lower Mainland and Vancouver, and from Toronto to other markets in the Greater Golden Horseshoe.

## **Urban Containment**

The largest housing affordability differences between major metropolitan areas arose as significant restrictions on urban fringe housing development were applied. These measures are called “urban containment” and include “growth management” and “compact city” policies. Favoured policies like urban growth boundaries and greenbelts produce a spike in land values that ripples throughout the entire urban area. Not surprisingly, housing affordability has deteriorated significantly in markets with urban containment.

A principal purpose of urban containment is to curb the physical expansion of urban areas—that is, conversion of rural land to urban land, or what some refer to as “urban sprawl.” However, urban containment can lead to much higher middle-income housing costs and a much higher cost of living.

## **Housing Affordability and the Cost of Living**

Unaffordable housing drives up the cost of living. In the United States, 87 percent of the cost of living differences in higher cost metropolitan areas are due to the difference in housing costs

## **Subsidised Housing: The Market Rate Nexus**

Eligibility for subsidised low-income housing generally requires housing costs that exceed 30 percent of household income. As the market price of housing increases, more households are unable to afford market rate housing. This may be the unkindest cost of all from an out of control housing market—that it drives more households into subsidized housing, or worse, into waiting lists for subsidized housing.

## **Prospects and Going Forward**

The prospects for improved housing affordability in Canada are dim. The prospect is for continued worsening as demand continues to exceed housing supply, driving prices even higher in relation to incomes. Public officials should closely examine any proposed housing or land use regulation for its likely impact on house prices.

The solution starts with attention to the fundamental problem. No proposed housing regulation should reach a provincial, regional or municipal government vote until a “Land Use Regulation Affordability Assessment” is completed and published for public review.

## 1.0: EVALUATING HOUSING AFFORDABILITY

During the pandemic, housing affordability has worsened, as many households have had their incomes decline, and house prices have escalated even beyond previous rates. Housing affordability, already a top public policy issue, has become even more important in this environment.

*Demographia Housing Affordability in Canada* rates middle-income housing affordability in the third quarter of 2020 for 42 housing markets (census metropolitan areas). *Demographia Housing Affordability in Canada*<sup>1</sup> is a supplement to *Demographia International Housing Affordability*, which covered 92 major housing markets (1,000,000 or more population) in 8 nations (Australia, Canada, China [Hong Kong only], Ireland, New Zealand, Singapore, the United Kingdom and the United States).<sup>2</sup> The six major CMAs<sup>3</sup> were included in the earlier report (Toronto, Montreal, Vancouver, Calgary, Ottawa-Gatineau and Edmonton).

## 1.1: DEFINING HOUSING AFFORDABILITY

Housing affordability is more than house prices—it is house prices in relation to income. The median multiple is a price-to-income ratio of the median house price divided by the gross median household income. Price-to-income ratios have been widely used, such as by the World Bank,<sup>4</sup> the United Nations, the Organization for International Cooperation and Development (OECD), the Joint Center for Housing Studies at Harvard University and others.

Housing affordability measures that use median house prices and incomes are useful for evaluating middle-income housing affordability, because higher incomes and luxury housing do not skew measures higher, unlike averages. *Demographia International Housing Affordability* uses the “median multiple, to measure middle-income housing affordability (Table 1, next page).

## 1.2: RATING HOUSING AFFORDABILITY (THE MEDIAN MULTIPLE)

Demographia rates middle-income housing affordability in four categories, ranging from the most affordable (“affordable”) to the least affordable (“severely unaffordable”), as is indicated in Table 1. The “affordable” rating category is based on price to income ratios as they existed around 1990. In Canada, Australia, Ireland, New Zealand, the United Kingdom and the United States, price-to-income ratios were at or below 3.0.<sup>5</sup> This was before the broad implementation and strengthening of restrictive land use policies (especially urban containment policy), which have been identified with deteriorating housing affordability (Section 5, page 17).

**Table 1: Housing Affordability Ratings**

Housing Affordability Rating	Median Multiple
Affordable	3.0 and Under
Moderately Unaffordable	3.1 to 4.0
Seriously Unaffordable	4.1 to 5.0
Severely Unaffordable	5.1 and Over

Median Multiple: Median house price divided by median household income.

## 1.3: EVALUATING AFFORDABILITY IN METROPOLITAN HOUSING MARKETS

Housing affordability measures are often evaluated and compared at the national level. Demographia International Housing Affordability focuses at the housing market level (metropolitan area) because there can be substantial affordability variations within Canada and other nations.

*Demographia* evaluates housing affordability at the housing market level—the metropolitan area—which is also a labor or commuting market.<sup>6</sup> *Demographia* does not evaluate affordability within metropolitan areas, such as for individual municipalities or neighborhoods.

Housing affordability comparisons are made:

- (1) between housing markets (such as comparison between the Vancouver and the Saskatoon markets) or,
- (2) over time within the same housing market (such between years in the Vancouver market).

## 2.0: HOUSING AFFORDABILITY IN CANADA: THE CONTEXT

The last half century has seen two significantly different trends in housing affordability among the six major metropolitan areas.

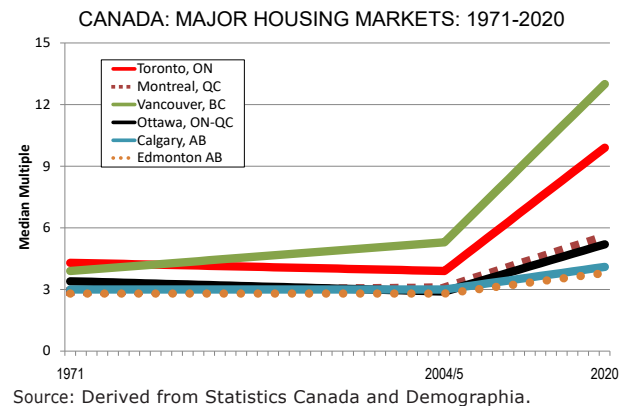
There was generally no significant change in housing affordability, as measured by the median multiple, from 1971 to 2004/2005 (Figure 1). The range between the highest median multiple and the lowest was 1.5 points in 1971 (between 4.3 in Toronto and 2.8 in Edmonton).<sup>7</sup> By 2004/2005, the range had increased to 2.5 points (between 5.3 in Vancouver and 2.8 in Edmonton). However, if costly Vancouver is excluded, the range between the five remaining metropolitan areas was 1.1, below that of 1971.<sup>8</sup>

Moreover, since the middle 2000s, housing affordability has been rapidly deteriorating. This is detailed in *Canada's Middle Income Housing Affordability Crisis*, a publication of the Frontier Centre for Public Policy.

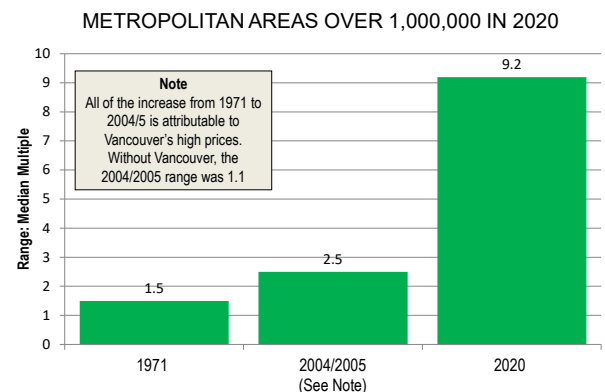
Median house prices virtually exploded relative to median household incomes (Figure 2). The range between least affordable Vancouver (13.0) and most affordable Edmonton rose to 9.2 median multiple points. This is six times the 2004/2005 ratio and more than eight times the 1971 ratio.

House prices have increased the equivalent of 7.7 years of median household income in Vancouver from 2004/2005 and 6.0 years in Toronto. None of Canada's other major markets had housing affordability deterioration of even one-half this level (Figure 3, next page).

**Fig 1: Middle-Income Affordability History**



**Fig 2: Housing Affordability Range (1971-2020)**



Even so, the house price increases have been substantial in the other major markets. Montreal and Ottawa-Gatineau house prices have increased the equivalent of more than two years of annual median household income. Calgary and Edmonton, prices rose about the equivalent of one year.



### 3.0: HOUSING AFFORDABILITY IN CANADA 2020

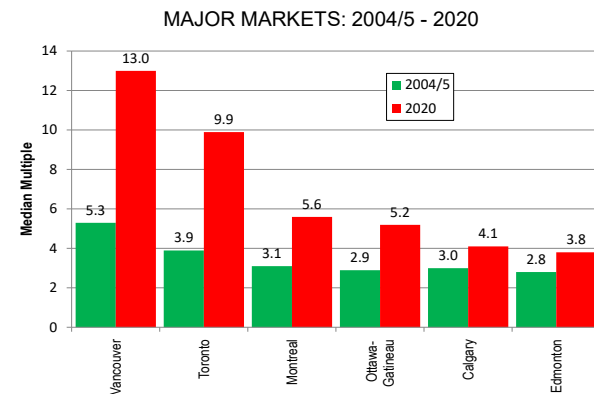
Housing affordability ratings for 2020 are shown in Table 2. Overall, nearly one half of the markets in Canada are severely unaffordable. Five markets remain affordable.

Affordability ratings by housing market are shown in Table 3 (alphabetical), page 12 and Table 4 (by housing affordability rating) page 14. As the discussion below indicates, there is considerable variation in housing affordability by market across Canada.

**Table 2: Housing Affordability Ratings, Canada 2020**

Rating	Median Multiple	No. of Markets
Affordable	3.0 and Under	5
Moderately Unaffordable	3.1 to 4.0	11
Seriously Unaffordable	4.1 to 5.0	6
Severely Unaffordable	5.1 and Over	20
Total Markets		42

**Fig. 3: Housing Affordability Trends by Market**



Source: Demographia.

### 3.1: VANCOUVER AND TORONTO: AMONG THE LEAST AFFORDABLE INTERNATIONAL MARKETS

Canada has two of the five least affordable major markets out of the 92 in *Demographia International Housing Affordability 2021*, Vancouver and Toronto. In fact, Vancouver and Toronto have had the worst deterioration in housing affordability among major markets since the first annual *Demographia International Housing Affordability Survey*, 16 years ago (Figure 4, page 13).

Vancouver has the second least affordable housing among the major international markets, having risen the equivalent of nearly eight years of median household income, from a median multiple of 5.3 in 2004 to with a Median Multiple of 13.0. This is the highest major market median multiple ever reported in *Demographia* annual reports outside of Hong Kong.

Toronto has a severely unaffordable Median Multiple of 9.9 and ranked as the 5th least affordable major international market in 2020 (Figure 4). Housing affordability has deteriorated precipitously, having cost the equivalent of six years of annual income less since 2004, when its Median Multiple was 3.9. By contrast, there was no housing affordability deterioration in the more than three decades from 1971 to 2004.

In Toronto, the housing affordability loss has been associated with the mid-2000s imposition of urban containment policy (“Places to Grow”), which includes a Green Belt. *Demographia International Housing Affordability* author Wendell Cox predicted at the time that this would lead to worsened housing affordability.<sup>9</sup>

#### **The RBC Economics Affordability**

**Measure:** The RBC Economics Housing Affordability Report for the third quarter of 2020 illustrates the financial challenges faced by middle-income households in Canada’s least unaffordable markets.

In Vancouver, the median income household would need 78 percent of its pre-tax income to afford the median priced house, 103 percent for a detached house and 47 percent for an apartment.

In Toronto, the median income household would need 66 percent of its pre-tax income to afford the median priced house, 79 percent for a detached house and 42 percent for an apartment.

In Vancouver and Toronto, affording the least expensive housing, apartment condominiums is considerably above the Canada Mortgage and Housing Corporation 30 percent housing affordability guideline (6). Even these figures are conservative, since RBC assumes a down payment of 25 percent. This is well above the minimum of 5 percent for the first \$500,000 and 10 percent for the next \$500,000.

### 3.2: SEVERE UNAFFORDABILITY SPREADS TO NEARBY MARKETS

Severely unaffordable housing has spread from Vancouver and Toronto to nearby markets in Ontario and British Columbia as households to communities within their financial reach.

**Vancouver:** In British Columbia, severely unaffordable housing has spread from Vancouver, to nearby markets, as households. Housing is now severely unaffordable in Victoria (9.5), the Fraser Valley (8.7), Nanaimo (8.5), Kelowna (7.9) and Chilliwack (7.8). Each of these is less affordable than four of the major markets (Montreal, Ottawa-Gatineau, Calgary and Edmonton).

These less unaffordable markets have experienced strong net intraprovincial migration of more than 35,000 over the past five years (2016-2020). At the same time, the more unaffordable Vancouver market lost more than 60,000 residents through intraprovincial migration.<sup>10</sup>

More recent information indicates a much broader impact, on Vancouver Island. The Vancouver Island Real Estate Board reports steep escalation of house prices in Nanaimo, Courtenay, Campbell River, Cowican Valley Port Alberni and Parksville. Overall house prices have doubled on average (99 percent) over just the last five years.<sup>11</sup> This ranges from an 85 percent increase in Nanaimo to 125 percent in Port Alberni. Chilliwack, in the Lower Mainland experienced a more than 85 percent price increase over the same period.

**Toronto:** Markets nearby the Toronto metropolitan area (in the “Greater Golden Horseshoe” region) have become severely unaffordable, including Hamilton (8.4), Guelph (8.2), Cambridge (7.4), Kitchener-Waterloo (7.2), Oshawa (7.1), Peterborough (6.9), Brantford (6.5), St. Catharines-Niagara (5.7), Barrie (5.6), and London (5.1). In just five years (from 2015 to 2020), house prices relative to incomes have increased 58 percent in these nearby markets, compared to the 48 percent Toronto rate (Figure 6, page 15).

Each of these less unaffordable markets experienced strong intra-provincial migration gains over the past five years, totalling a net of approximately 110,000. By contrast, more unaffordable Toronto lost a net 225,000 intraprovincial migrants.<sup>12</sup>

**Table 3: Housing Affordability (Canadian Markets, 3rd Quarter 2020)**

Intl. Rank	Canada Rank	Market	Median Multiple	Intl. Rank	Canada Rank	Market	Median Multiple
	28	Barrie, ON	6.3		38	Naniamo, BC	8.5
	29	Brantford, ON	6.5		31	Oshawa, ON	7.1
29	17	Calgary, AB	4.1	57	24	Ottawa-Gatineau, ON-QC	5.2
	33	Cambridge, ON	7.4		30	Peterborough, ON	6.9
	3	Cape Breton, NS	2.9		11	Quebec, QC	3.5
	15	Charlottetown, PEI	4.0		7	Red Deer, AB	3.2
	34	Chilliwack, BC	7.8		8	Regina, SK	3.3
17	13	Edmonton, AB	3.8		5	Saguenay, QC	3.0
	39	Fraser Valley, BC	8.7		1	Saint John, NB	2.4
	1	Fredericton, NB	2.4		13	Saskatoon, SK	3.8
	36	Guelph, ON	8.2		17	Sherbrooke, QC	4.1
	19	Halifax, NS	4.4		27	St. Catherines-Niagara, ON	5.7
	37	Hamilton, ON	8.4		10	St. John's, NL	3.4
	21	Kamloops, BC	4.9		8	Thunder Bay, ON	3.3
	35	Kelowna, BC	7.9	88	41	Toronto, ON	9.9
	25	Kingston, ON	5.4		3	Trois-Rivieres, QC	2.9
	32	Kitchener-Waterloo, ON	7.2	91	42	Vancouver, BC	13.0
	12	Lethbridge, AB	3.7		40	Victoria, BC	9.5
	23	London, ON	5.1		20	Whitehorse, YT	4.8
	6	Moncton, NB	3.1		21	Windsor, ON	4.9
61	26	Montreal, QC	5.6		15	Winnipeg, MB	4.0

Source: International Rank: Demographia International Housing Affordability 2021 (92 Markets).

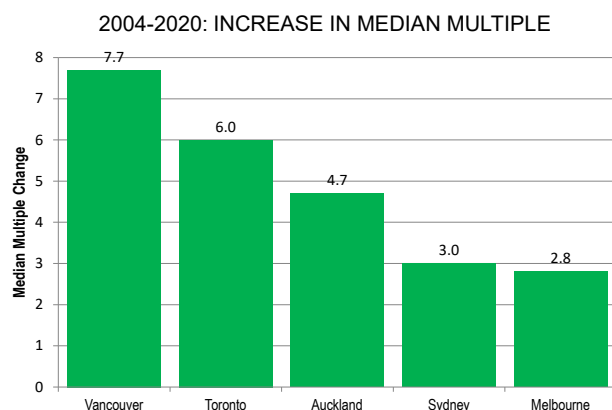
### 3.3: OTHER SEVERELY UNAFFORDABLE MARKETS

Montreal and Ottawa-Gatineau also became severely unaffordable in 2020. Montréal's median multiple rose to 5.6, making housing an increase of 80 percent more costly relative to incomes than in 2004, when the median multiple was 3.1. The Ottawa-Gatineau (Ontario-Quebec) median multiple rose to 5.2 also having deteriorated 80 percent from an "affordable" 2.9 in 2004.

### 3.4: SERIOUSLY UNAFFORDABLE MARKETS

One major market, Calgary has a median multiple of 4.1, compared to 3.0 in 2004. Sherbrooke (QC) is also seriously unaffordable, at 4.1. Halifax has a median multiple of 4.4, and is substantially less affordable than its 3.1 in 2007. Whitehorse (YT), Windsor (ON) and Kamloops (BC) each has a median multiple of 4.8 or 4.9 and could be at risk of slipping into severe unaffordability in the near future.

**Fig. 4: 5 Least Affordable International Markets**



Source: Demographia.

### 3.5: AFFORDABLE AND MODERATELY UNAFFORDABLE MARKETS

Canada's most affordable major market is Edmonton (3.8), which is rated moderately unaffordable. This is a deterioration from the affordable 2.8 Median Multiple in 2005, when Edmonton was first covered in the *Demographia Survey*.

Other larger markets are also moderately unaffordable, including Winnipeg (4.0), Saskatoon (3.8), Quebec (3.5), St. John's (3.4) and Regina (3.3). Even though these markets are more affordable than those above (Sections 3.1 through 3.4), each has experienced substantial deterioration since they first appeared in the *Demographia* reports (in 2007 or 2008). All have had median multiple increases at least the equivalent of a year's median household income.

There are five "affordable" markets, with Fredericton (NB) and Saint John (NB) sharing the lowest Median Multiple, at 2.4. Trois Rivières (QC) and Cape Breton (NS) each have a Median Multiple of 2.9, and Saguenay (QC) is at 3.0.

## 4.0: URBAN CONTAINMENT

The largest housing affordability differences between major metropolitan areas arose as significant restrictions on urban fringe housing development were applied. These measures are called “urban containment” and include “growth management” and “compact city” policies.

A principal purpose of urban containment is to curb the physical expansion of urban areas—that is, conversion of rural land to urban land, or what some refer to as “urban sprawl.” However, urban containment can

lead to much higher middle-income housing costs and a much higher cost of living.

According to prominent urban planners Arthur C. Nelson and Casey J. Dawkins: “... urban containment involves drawing a line around an urban area. Urban development is steered to the area inside the line and discouraged (if not prevented) outside it.”<sup>13</sup> Further: “... urban containment programs can be distinguished from traditional approaches to land use regulation by the presence of policies that are explicitly designed to limit the development of land outside a defined urban area, while encouraging infill development and redevelopment inside the urban area.”<sup>14</sup>

**Table 4: Housing Affordability Ranking (Canadian Markets, 3rd Quarter 2020)**

Intl. Rank	Canada Rank	Market	Median Multiple	Intl. Rank	Canada Rank	Market	Median Multiple
	1	Fredericton, NB	2.4		21	Windsor, ON	4.9
	1	Saint John, NB	2.4		23	London, ON	5.1
	3	Cape Breton, NS	2.9	57	24	Ottawa-Gatineau, ON-QC	5.2
	3	Trois-Rivieres, QC	2.9		25	Kingston, ON	5.4
	5	Saguenay, QC	3.0	61	26	Montreal, QC	5.6
	6	Moncton, NB	3.1		27	St. Catherines-Niagara, ON	5.7
	7	Red Deer, AB	3.2		28	Barrie, ON	6.3
	8	Regina, SK	3.3		29	Brantford, ON	6.5
	8	Thunder Bay, ON	3.3		30	Peterborough, ON	6.9
	10	St. John's, NL	3.4		31	Oshawa, ON	7.1
	11	Quebec, QC	3.5		32	Kitchener-Waterloo, ON	7.2
	12	Lethbridge, AB	3.7		33	Cambridge, ON	7.4
17	13	Edmonton, AB	3.8		34	Chilliwack, BC	7.8
	13	Saskatoon, SK	3.8		35	Kelowna, BC	7.9
	15	Charlottetown, PEI	4.0		36	Guelph, ON	8.2
	15	Winnipeg, MB	4.0		37	Hamilton, ON	8.4
29	17	Calgary, AB	4.1		38	Naniamo, BC	8.5
	17	Sherbrooke, QC	4.1		39	Fraser Valley, BC	8.7
	19	Halifax, NS	4.4		40	Victoria, BC	9.5
	20	Whitehorse, YT	4.8	88	41	Toronto, ON	9.9
	21	Kamloops, BC	4.9	91	42	Vancouver, BC	13.0

Source: International Rank: Demographia International Housing Affordability 2021 (92 Markets).

Urban containment is intended to increase land costs. According to Nelson and Dawkins “...the regional demand for urban development is shifted to the area inside the boundary. This shift should decrease the value of land outside the boundary and increase the value of land inside the boundary.”<sup>15</sup>

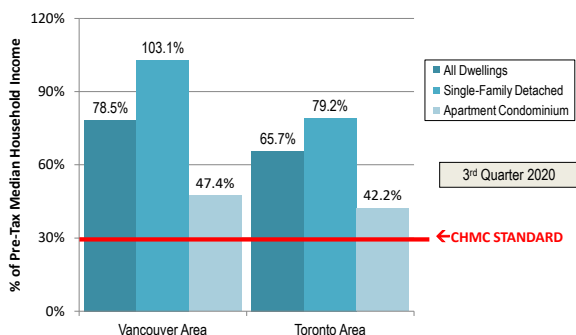
There was, however, a risk. Nelson and Dawkins note that “higher prices (especially for housing) could occur if planning fails to increase the supply of buildable land within the boundary” and that “...urban containment boundaries are prudent land-use policies ... only when accompanied by policies that increase urban development density and intensity.”<sup>16</sup> Housing affordability was to be preserved by expanding urban containment boundaries “to accommodate projected growth over a specified future time period, typically 10 to 20 years.”<sup>17</sup> Despite these policies, housing affordability has deteriorated significantly in markets with urban containment. Research has identified land cost escalation in urban containment environments at from five to twenty times (or more).<sup>18</sup>

### Dynamics of Urban Land Markets:

Harvard University’s William Alonso showed that the value of land tends to rise from the low agricultural (“floor”) values outside the built up urban area to the center.<sup>19</sup> Normally, without urban containment, land values tend to rise gradually, as distances increase from the center. As noted above, with urban containment, it is expected that there will be abrupt land value increases, such as at urban growth boundaries.<sup>20</sup> Moreover, land values (and house prices) tend to be higher throughout the entire area of urban containment (Figure 7, page 17).<sup>21</sup> At the same time, construction costs have risen far less in urban containment markets (Box: Land and Construction Costs, page 18).

### Fig. 5: Share of Median Pre-Tax Income Required

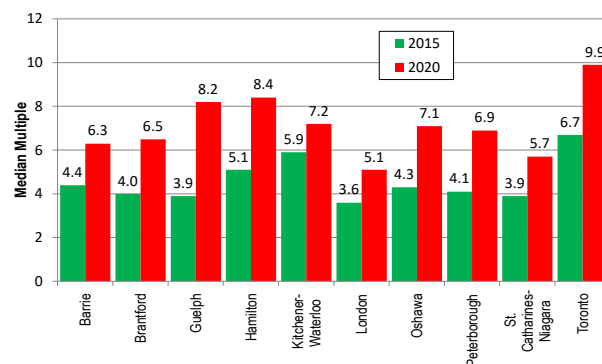
AVERAGE PRICED HOUSE: VANCOUVER & TORONTO: 2020



Source: RBC Economics.

### Fig. 6: Housing Affordability Deterioration

TORONTO & GREATER GOLDEN HORSESHOE: 2015 - 2020



One of the world’s leading urbanists, Professor Shlomo Angel, Director of the Urban Expansion Project at New York University<sup>22</sup> raises concerns about prohibiting urban expansion. Angel said: ‘I’m for making room. And the reason that I’m for making room is that I’m for keeping cities affordable. And if you don’t make enough room, then cities are no longer affordable.’<sup>23</sup> According to Angel, et al: “... the explicit containment of urban expansion—by greenbelts, as in Seoul, Korea or in English cities, by urban growth boundaries, as in Portland, Oregon, or by environmental restrictions as in California—has inevitably been associated with declines in housing affordability.”<sup>24</sup>

Angel, et al, also note that, the compact city paradigm (which includes urban containment) dominates urban development.<sup>25</sup> This means that virtually any market can be threatened by the imposition of urban containment policy, or other strong land use policies that have the potential to increase middle-income housing prices relative to incomes and drive lower-income households into the subsidized housing queue, with typically long waiting lists.

Virtually all of the major housing markets rated severely unaffordable included in *Demographia International Housing Affordability* have urban containment. Figure 8 illustrates the regulatory environments of the markets with more than 2,000,000 population.



## 5.0: HOUSING AFFORDABILITY AND THE COST OF LIVING

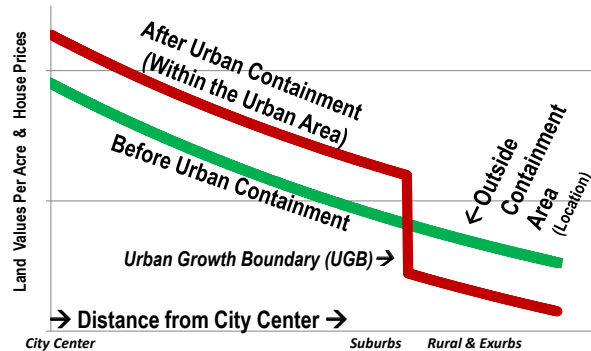
Housing costs are generally the largest item in household budgets. Housing costs are even higher for households living in severely unaffordable markets. These higher housing costs drive both the cost of living and thus the standard of living.

In the United States, 87 percent of the cost of living differences attributable in higher cost metropolitan areas are due to the difference in housing costs (Figure 10, page 19). Other goods and services account for only 6 percent and 7 percent respectively. Richard Florida of the University of Toronto has noted “differences in living costs are basically all about housing.”

The 2020 edition of *Demographia International Affordability* identified even larger affordability differences between Canadian markets than among US markets. The most costly market (Vancouver) had a median multiple (affordability measure) 5.4 times that of the most affordable (Saint John and Fredericton).<sup>26</sup> This is a larger difference than the US maximum of 4.6 times, between McAllen, Texas (2.1) and San Jose (9.6). The larger affordability difference in Canada suggests that its cost of living differences may be at least as high as those observed in the United States.

**Fig. 7: Urban Containment Effect: Conceptual**

IMPACT ON COMPETITIVE LAND VALUES & HOUSE PRICES

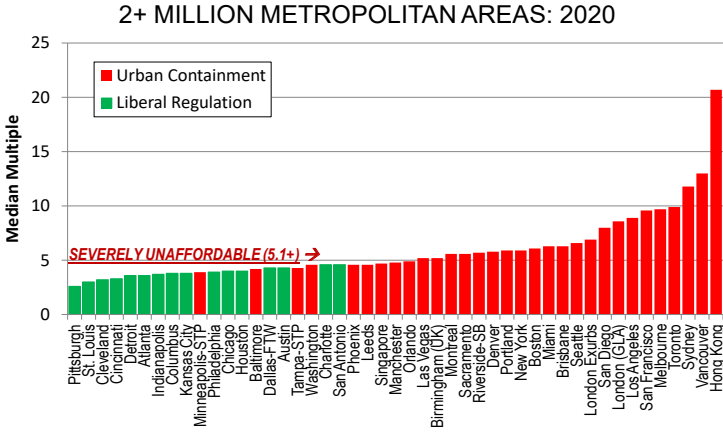


Source: Adapted from Lincoln Institute of Land Use Policy (1992).

## 6.0: SUBSIDIZED HOUSING: THE MARKET RATE NEXUS

Eligibility for subsidized housing generally requires housing costs that exceed 30 percent of household income. As the market price of housing increases, more households are unable to afford market rate housing. This creates greater pressure for housing subsidies on governments.

**Fig. 8: Housing Affordability and Land Regulation**



Source: Derived from Demographia International Housing Affordability.

### Land and Construction Costs

As house prices have escalated in markets with urban containment, construction costs have remained fairly constant. Land costs and land related regulatory costs have been the drivers of the housing affordability crisis.

This is illustrated by comparing the cost of single-family house construction between the Vancouver, Toronto and Winnipeg<sup>27</sup> housing markets. The huge housing cost premiums in Vancouver and Toronto areas.<sup>28</sup>

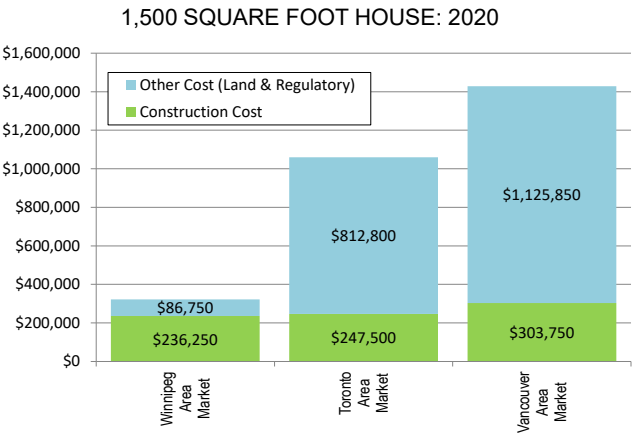
In 2020, construction costs per square foot were only 5 percent more in the Toronto area than in the Winnipeg area. Yet the sale price for the average detached house in the Toronto area was at least 225 percent more than in Winnipeg.<sup>29</sup>

The differences are even greater in comparison with Vancouver. The construction cost for the average detached house would be 29 percent greater in the Vancouver area than in the

Winnipeg area. However, the average sale price in Vancouver would be about 340 percent higher than in Winnipeg (Figure 9).

Both Vancouver and Toronto have strict urban containment policy, which is typically associated with much higher land costs.

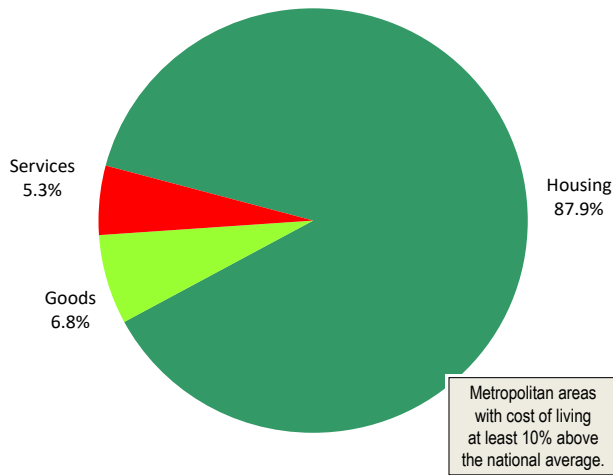
**Fig. 9: Vancouver, Toronto & Winnipeg Area Costs**



Source: Derived from Altus and RBC.

**Fig. 10: Housing Share of Excess Costs of Living**

MOST EXPENSIVE UNITED STATES MARKETS: 2018

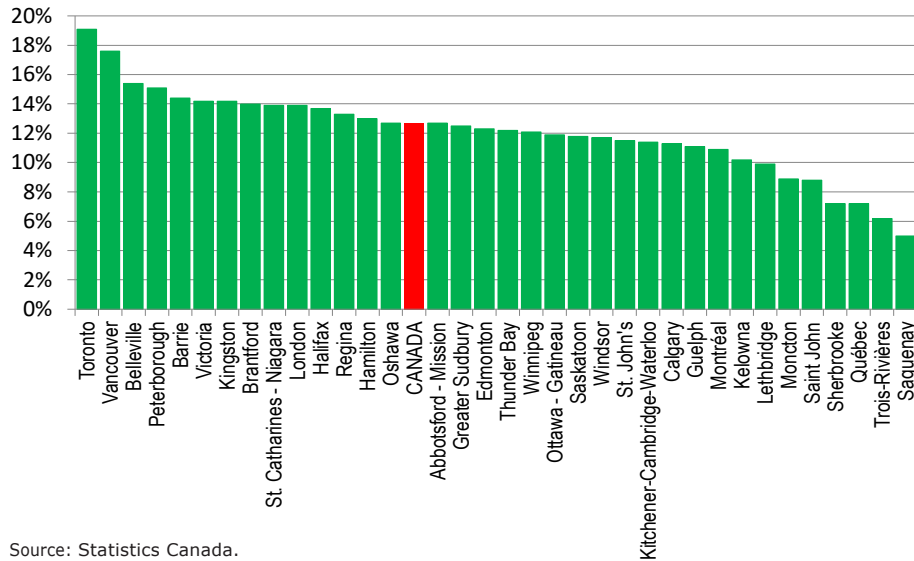


Source: Derived from Statistics Canada and Demographia.

Unlike market rate housing, subsidized housing is often not readily available. Yet households in “core housing need” require readily available adequate housing.<sup>30</sup> Many such households are placed on waiting lists, because there is not enough subsidized housing to serve the legislatively mandated need.<sup>31</sup> Not surprisingly, the highest core housing needs are found in the least affordable CMAs (Figure 11). For example, in Ontario, households can be on waiting lists for more than ten years before housing is available.<sup>32</sup>

In fact, the most effective strategy for controlling the expansion of need for subsidized housing is to keep market rate house prices from rising faster than incomes. Improving

**Fig. 11: Core Housing Need by CMA**  
2016 CENSUS



Source: Statistics Canada.

middle-income housing affordability, can reduce the number of households eligible for housing subsidies.

## 7.0: PROSPECTS AND GOING FORWARD

The prospects for improved housing affordability in Canada are dim. Canada's housing affordability crisis is very real. Its most serious repercussions are evident in the highly elevated median multiples in Vancouver and Toronto. These high prices are driving households to nearby markets, where housing has predictably become severely unaffordable with their urban containment regulations. Other major metropolitan areas—Montreal and Ottawa-Gatineau—have also become severely unaffordable.

The prospect is for continued worsening in each of these metropolitan areas, where demand is likely to continue exceeding housing supply, driving prices even higher in relation to incomes. Public officials should closely examine any proposed housing or land use regulation for its likely impact on house prices.

The reality is that stronger land use regulation, especially urban containment, is associated with higher house prices. Higher house prices relative to incomes reduce the standard of living for middle-income households and likely have a detrimental effect on local business, because residents have less discretionary income.

Perhaps the “unkindest cut” of all is the impact on lower income households, which can be thrown into “core housing need,” as higher house prices increase the need for subsidized housing. Unlike market rate housing, which is readily available to any who can afford it, subsidized housing is often not readily available, consigning households most in need to years of waiting.

The solution starts with attention to the fundamental problem. No proposed housing regulation should reach a provincial, regional or municipal government vote until a “Land Use Regulation Affordability Assessment” is completed and published for public review.

## SOURCES AND METHODS

House price data is estimated from published government and real estate industry sources reporting on housing sectors representing the majority of existing dwellings.

Median incomes are estimated from official government sources, and updated by more general economic data as necessary to develop a figure for the year reported upon. Because median income indicators are generally unavailable for the pandemic year (2020), 2019 income estimates are used in *Demographia International Housing Affordability 2021*. It seems clear that median incomes will show declines from 2019, so even that is likely to understate the seriousness emerging housing unaffordability trends on middle-income households. More reliable data should be available over the next year.

## BIOGRAPHICAL NOTE

Wendell Cox is a Senior Fellow at the Frontier Centre for Public Policy (Winnipeg). He is principal of Demographia.com, author of *Demographia World Urban Areas* and was co-author (with Hugh Pavletich) of the *Demographia International Housing Affordability Surveys* (16 annual editions).

Wendell earned a BA in Government from California State University, Los Angeles and an MBA from Pepperdine University. He served as a visiting professor at the Conservatoire des Arts et Metiers in Paris, a national university. 

## ENDNOTES

1. Last year's *Demographia International Housing Affordability Survey* was featured in the *Global Housing Watch Newsletter* (April 20, 2020), published by the International Monetary Fund (IMF).
2. *Demographia International Housing Affordability* provides analysis similar to the major market analysis in the 16 editions of the *Demographia International Housing Affordability Survey*, co-authored by Wendell Cox and Hugh Pavletich (2005 to 2020).
3. Over 1,000,000 population.
4. *The Housing Indicators Program*, <http://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/336387-1169578899171/rd-hs7.htm>. Also see Shlomo Angel, *Housing Policy Matters: A Global Analysis*. Oxford University Press, 2000.
5. See: Anthony Richards, *Some Observations on the Cost of Housing in Australia, Address to 2008 Economic and Social Outlook Conference*, The Melbourne Institute, 27 March 2008, <http://www.rba.gov.au/speeches/2008/sp-so-270308.html>. This research included all nations covered in the *Demographia International Housing Affordability Survey* except for Ireland. The Richards research is also illustrated in the of the National Housing Council of Australia, [http://www.fahcsia.gov.au/sa/housing/pubs/housing/national\\_housing\\_supply/Documents/default.htm](http://www.fahcsia.gov.au/sa/housing/pubs/housing/national_housing_supply/Documents/default.htm) (Figure 1.1).
6. "Housing markets" in this report refers to metropolitan areas.
7. Derived from 1971 Census data.
8. This range of 1.1 median multiple points in 2004/2005 was the same as between Edmonton (3.8) and Vancouver (3.9) in 1971.
9. Wendell Cox (2004), *Myths about Urban Growth and the Toronto Greenbelt*, Fraser Institute, <https://www.fraserinstitute.org/sites/default/files/MythsUrbanGrowthToronto.pdf>.
10. From 2015 to 2010. Derived from Statistics Canada data.
11. *Monthly Statistics Package: July 2021*, Vancouver Island Real Estate Board, [http://www.vireb.com/assets/uploads/07jul\\_21\\_vireb\\_stats\\_package\\_64847.pdf](http://www.vireb.com/assets/uploads/07jul_21_vireb_stats_package_64847.pdf).
12. From 2015 to 2020. Derived from Statistics Canada data.
13. Arthur C. Nelson and Casey J. Dawkins, *Urban Containment in the United States: History, Models and Techniques for Regional and Metropolitan Growth Management*, American Planning Association Planning Advisory Service, [https://www.researchgate.net/publication/288101674\\_Urban\\_containment\\_in\\_the\\_United\\_States\\_History\\_models\\_and\\_techniques\\_for\\_regional\\_and\\_metropolitan\\_growth\\_management](https://www.researchgate.net/publication/288101674_Urban_containment_in_the_United_States_History_models_and_techniques_for_regional_and_metropolitan_growth_management) (2004).
14. Arthur C. Nelson, Thomas W. Sanchez and Casey J. Dawkins (2004), "The Effect of Urban Containment and Mandatory Housing Elements on Racial Segregation in the United States," *Journal of Urban Affairs*. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.521.4467&rep=rep1&type=pdf>.
15. Arthur C. Nelson and Casey J. Dawkins, *Urban Containment in the United States: History, Models and Techniques for Regional and Metropolitan Growth Management*, American Planning Association Planning Advisory Service (2004), [https://www.researchgate.net/publication/288101674\\_Urban\\_containment\\_in\\_the\\_United\\_States\\_History\\_models\\_and\\_techniques\\_for\\_regional\\_and\\_metropolitan\\_growth\\_management](https://www.researchgate.net/publication/288101674_Urban_containment_in_the_United_States_History_models_and_techniques_for_regional_and_metropolitan_growth_management).
16. Arthur C. Nelson and Casey J. Dawkins, *Urban Containment in the United States: History, Models and Techniques for Regional and Metropolitan Growth Management*, American Planning Association Planning Advisory Service, [https://www.researchgate.net/publication/288101674\\_Urban\\_containment\\_in\\_the\\_United\\_States\\_History\\_models\\_and\\_techniques\\_for\\_regional\\_and\\_metropolitan\\_growth\\_management](https://www.researchgate.net/publication/288101674_Urban_containment_in_the_United_States_History_models_and_techniques_for_regional_and_metropolitan_growth_management) (2004).
17. Nelson, Dawkins (2004).
18. This research is cited in Wendell Cox (2021), "Housing Affordability and Urban Containment in Canada," Frontier Centre for Public Policy.

19. William Alonso (1964), *Location and Land Use: Toward a General Theory of Land Rent*, Cambridge, Massachusetts, Harvard University Press.
20. The international research is summarized in Wendell Cox (2021), *Housing Affordability and Urban Containment in Canada*, Frontier Centre for Public Policy.
21. The figure illustrates impact of an urban containment boundary on land values, consistent with treatments in Gerrit Knaap and Arthur C. Nelson, *The Regulated Landscape: Lessons on State Land Use Planning from Oregon*, Cambridge, Massachusetts: Lincoln Institute of Land Policy, 1992; William A. Fischel, *Zoning Rules! The Economics of Land-use Regulation*, Lincoln Institute of Land Policy, 2015; Gerard Mildner, "Public Policy & Portland's Real Estate Market," *Quarterly and Urban Development Journal*, 4th Quarterly 2009: 1-16, and others. Similar impact on house prices have been typically documented in the economic research (see: *A Question of Values: Urban Containment Policy and Middle-Income Housing Affordability*).
22. Angel has advised the United Nations, the World Bank, and the Inter-American Development Bank.
23. NYU Marron Newsletter, March 3, 2021. Transcript extract from <https://marroninstitute.nyu.edu/blog/solly-angel-discusses-complex-challenges-of-the-development-and-expansion-of-cities> (podcast in English):.
24. Shlomo Angel, Patrick Lamson-Hall, Alejandro Blei, Sharad Shingade and Suman Kumar (2021), *Densify and Expand: A Global Analysis of Urban Growth, Sustainability*, <https://www.mdpi.com/2071-1050/13/7/3835>.
25. Shlomo Angel, Patrick Lamson-Hall, Alejandro Blei, Sharad Shingade and Suman Kumar (2021), *Densify and Expand: A Global Analysis of Urban Growth, Sustainability*, <https://www.mdpi.com/2071-1050/13/7/3835>.
26. Vancouver's median multiple was 13.0. while Fredericton and Saint John had median multiples of 2.4.
27. Winnipeg was chosen because it was the least expensive market with more than 500,000 population listed in RBC Economics (December 2020), *Housing Trends and Affordability*, <https://royal-bank-of-canada-2124.docs.contently.com/v/historic-housing-market-rally-made-it-less-affordable-to-own-a-home-in-canada-pdf>. This report shows that 27 markets in Canada, but not in the RBC report were more affordable than Winnipeg.
28. Based on the mid-point square foot costs of "Single Family Residential with Unfinished Basement," as reported in Altus Group *2020 Canadian Cost Guide*, <https://www.altusgroup.com/services/reports/2020-canadian-cost-guide/>.
29. RBC Economics (December 2020), *Housing Trends and Affordability*, <https://royal-bank-of-canada-2124.docs.contently.com/v/historic-housing-market-rally-made-it-less-affordable-to-own-a-home-in-canada-pdf>. Data is for the second quarter of 2020.
30. "Core Housing Need: 2016 Census" (November 15, 2017). Statistics Canada, <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/chn-biml/index-eng.cfm>.
31. See: Jordan Press (November 22, 2019), "Hundreds of thousands on waitlist for affordable housing in Canada: study," Global News.
32. "How can I apply for subsidized housing?" (November 2, 2018), Ontario Council of Agencies Serving Immigrants, <https://settlement.org/ontario/housing/subsidized-housing/subsidized-housing/how-can-i-apply-for-subsidized-housing/>.

