



# Demographia Housing Affordability in Canada

(2022 Edition: Data from 3<sup>rd</sup> Quarter 2021)

Supplement to *Demographia International Housing Affordability: 2022*

June 2022

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Frontier Centre for Public Policy

June 2022

## EXECUTIVE SUMMARY

*Demographia Housing Affordability in Canada* assesses middle-income housing affordability (Section 1) in 46 markets.

Housing affordability is more than house prices --- it is house prices in relation to income. Price-to-income ratios are frequently used to evaluate housing affordability. They have been used by the World Bank, the United Nations, the Organization for Economic Cooperation and Development, and the International Monetary Fund and other organizations. *Demographia* uses the “median multiple,” which is the median house price divided by the pre-tax median household income.

In Canada, Australia, Ireland, New Zealand, the United Kingdom and the United States, price-to-income ratios were at or below 3.0 as late as the early 1990s. *Demographia* uses the median multiple housing affordability ratings in Table ES-1.

Table ES-1 <i>Demographia</i> Housing Affordability Ratings	
Housing Affordability Rating	Median Multiple
Affordable	3.0 & Under
Moderately Unaffordable	3.1 to 4.0
Seriously Unaffordable	4.1 to 5.0
Severely Unaffordable	5.1 & Over
Median multiple: Median house price divided by median household income	

## Housing Affordability in Canada: The Context

Among the six major markets (now over 1,000,000 population), housing remained comparatively affordable from 1970 to the mid-2000s, though the Vancouver market had become severely unaffordable. Since the mid-2000s, however, housing affordability has deteriorated (Section 2).

## Housing Affordability in 2021

In 2021, there were 25 “severely unaffordable” housing markets out of the 46 rated. This is up from 18 in 2019. There are only three “affordable” markets, which is down from eight in 2019. The housing affordability ratings are summarized in Table ES-2. Affordability ratings by housing market are shown in Table 4 (alphabetical) and Table 5 (both in the report proper).

During the pandemic there has been an important trend toward working at home (“telecommuting”), and many households entered the housing market, seeking more living space (both inside the house and

outside). This has resulted in a “demand shock” that worsened housing affordability. The demand for housing rose faster than could be readily supplied by developers and builders.

Table ES-2 Housing Affordability Ratings Canada: 2021		
<i>Rating</i>	<i>Median Multiple</i>	<i># of Markets</i>
Severely Unaffordable	5.1 & Over	25
Seriously Unaffordable	4.1 to 5.0	3
Moderately Unaffordable	3.1 to 4.0	15
Affordable	3.0 & Under	3
<b>Total Markets</b>		<b>46</b>

Severely unaffordable housing is concentrated in British Columbia and Ontario. By far the most severely unaffordable major markets are Vancouver and Toronto, which are also rated the third and tenth least affordable among the 92 markets in *Demographia International Housing Affordability*.

Severely unaffordable housing has spread beyond Vancouver to other British Columbia markets and beyond Toronto to other Ontario markets. Net interprovincial migration has increased away from Vancouver and Toronto, while the other markets have gained, as households have sought more affordable housing.

Three markets remain affordable: Fort MacMurray (AB). Saquenay (QC) and Moose Jaw (SK).

### **Housing Affordability and Land Use Regulation**

Deteriorating housing affordability is driving the international cost-of-living crisis that threatens the future of the middle-class. In *Under Pressure: The Squeezed Middle-Class*, the OECD finds that the middle-class faces ever costs of living and that rising owned house prices are the “main driver of rising middle-class expenditure.”

Academic research associates declining housing affordability with stronger land use regulation, especially, urban containment. Urban containment places significant restrictions on development on the outskirts of urban areas. This has been associated with large land value increases both on the urban fringe and *throughout* the entire market. Unlike municipal zoning regulations, which apply only within their enacting jurisdictions, urban containment typically applies to the entire housing market (metropolitan area).

In *Rethinking Urban Sprawl: Moving Toward Sustainable Cities*, OECD concludes that urban containment strategies (such as urban growth boundaries and greenbelts) must be accompanied by sufficient land for urban expansion to maintain housing affordability. This land needs to be competitively priced to keep house prices from rising disproportionately compared to incomes. Urban containment policy is typical in the least affordable markets.

### **Housing Affordability and Inequality**

French economist Thomas Piketty identified growing wealth inequality over recent decades. Other economists, such as Giani La Cava of the Bank for International Settlements (Berne) have traced much of this rising inequality to inordinately increasing house values. By definition, house price increases

exceeding household income growth worsen housing affordability, leading to greater wealth inequality. Wealth inequality can be expected to increase so long as house prices continue to rise faster than incomes.

Policies should be adopted that restore the competitive market for land on the urban fringe where housing has become severely unaffordable. In lightly regulated markets, policies associated with inordinately higher land and house prices should be avoided.

### **Recent Improvement**

There have been recent declines in some markets. In May 2022, for example, house prices declined in four of the six major markets. The Bank of Canada policy interest rate increases have led to higher mortgage rates, reducing housing demand. At the same time, as the housing market moves beyond the demand shock, house prices should moderate toward pre-pandemic levels.

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## 1: EVALUATING HOUSING AFFORDABILITY

*Demographia Housing Affordability in Canada* rates middle-income housing affordability in the third quarter of 2021 for 46 housing markets (census metropolitan areas). *Demographia Housing Affordability in Canada* is a supplement to [Demographia International Housing Affordability](#)<sup>1</sup> 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 census metropolitan areas (CMAs)<sup>3</sup> were included in the earlier report (Toronto, Montreal, Vancouver, Calgary, Ottawa-Gatineau and Edmonton) and are included with 40 additional markets in this report

### 1.1: Defining Housing Affordability

Housing affordability is more than house prices --- it is house prices in relation to income.

*Demographia Housing Affordability in Canada* uses the median multiple to rate housing markets. The median multiple is a price-to-income ratio of the median house price divided by the gross pre-tax median household income (median house price in years of 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.

Median housing affordability measures are preferable to averages, which can be skewed by higher values..

### 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. In Canada, Australia, Ireland, New Zealand, the United Kingdom and the United States, price-to-income ratios were at or below 3.0 as late as the early 1990s.<sup>5</sup>

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<sup>1</sup> *Demographia International Housing Affordability: 2022 Edition* 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> *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). The 2020 *Demographia International Housing Affordability Survey* was featured in the [Global Housing Watch Newsletter](#) (April 20, 2020), published by the International Monetary Fund (IMF).

<sup>3</sup> Over 1,000,000 population.

<sup>4</sup> *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.

<sup>5</sup> 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).

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 4).

Housing Affordability Rating	Median Multiple
Affordable	3.0 & Under
Moderately Unaffordable	3.1 to 4.0
Seriously Unaffordable	4.1 to 5.0
Severely Unaffordable	5.1 & 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. In contrast, *Demographia* focuses at the housing market level (metropolitan area) because there are substantial affordability variations within Canada (and other nations). *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: HOUSING AFFORDABILITY IN CONTEXT**

There was relative stability in housing affordability for nearly 35 years, as house prices increased little in relation to incomes. There has, however, been rapid deterioration since the middle 2000s (Figure 1). The median multiple among the major CMAs was 3.5 in 2004/5, little above the 1971 level, more than three decades before. However, since 2004/5, the median multiple has nearly doubled, leading not only to a housing crisis, but also a cost-of-living crisis. Differences in the cost of living between markets tend to be principally reflect differences in housing affordability (Box 1 and Figure 1).<sup>6</sup>

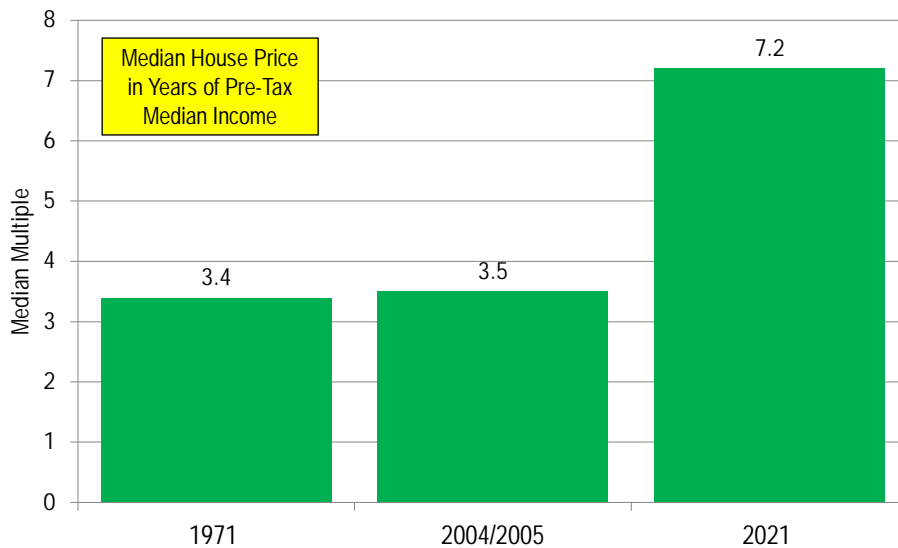
## **3: HOUSING AFFORDABILITY IN 2021**

In 2021, there were 25 “severely unaffordable” housing markets out of the 46 rated in Canada. This is up from 18 in 2019. There were only three “affordable” markets, which is down from eight in 2019. The housing affordability ratings are summarized in Table 2.

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<sup>6</sup> See also [Canada’s Middle Income Housing Affordability Crisis](#), a publication of the Frontier Centre for Public Policy.

## Average Median Multiple: 1971-2021 CENSUS METROPOLITAN AREAS OVER 1,000,000



Derived from: Statistics Canada and Demographia.

Figure 1

Demand for housing, especially in suburban, exurban and even rural areas had increased during the pandemic. Many households sought more living space (inside houses and outside in yards or gardens), as working at home increased substantially. This has resulted in a “demand shock” (“a sudden unexpected event that dramatically increases or decreases demand for a product or service, usually temporarily”<sup>7</sup>) The demand for housing rose faster than could be readily supplied by developers and builders. House prices increased substantially.

Only two of the six major markets were severely unaffordable before the pandemic (2019), with median multiples above 5.0 (Vancouver and Toronto). By 2021 Montreal and Ottawa had also become severely unaffordable. Edmonton and Calgary were moderately affordable.

Table 2 Housing Affordability Ratings Canada: 2021		
<i>Rating</i>	<i>Median Multiple</i>	<i># of Markets</i>
Severely Unaffordable	5.1 & Over	25
Seriously Unaffordable	4.1 to 5.0	3
Moderately Unaffordable	3.1 to 4.0	15
Affordable	3.0 & Under	3
<b>Total Markets</b>		<b>46</b>

<sup>7</sup> Adam Barone (May 6, 2022), “Demand Shock,” Investopedia, <https://www.investopedia.com/terms/d/demandshock.asp>.

### Box 1: Housing Costs Drive Cost-of-Living Differences

[Richard Florida of the University of Toronto](#) concluded that “differences in living costs are basically all about housing.” Further, [Bloomberg reports](#) that nearly all of London’s (UK) higher cost of living is associated with higher housing costs. Similarly, in the United States more than 85% of [cost of living differences between metropolitan areas](#) (Figure 2) are reflected in housing affordability differences.

## Housing Share of Higher Costs of Living MOST EXPENSIVE UNITED STATES MARKETS: 2018

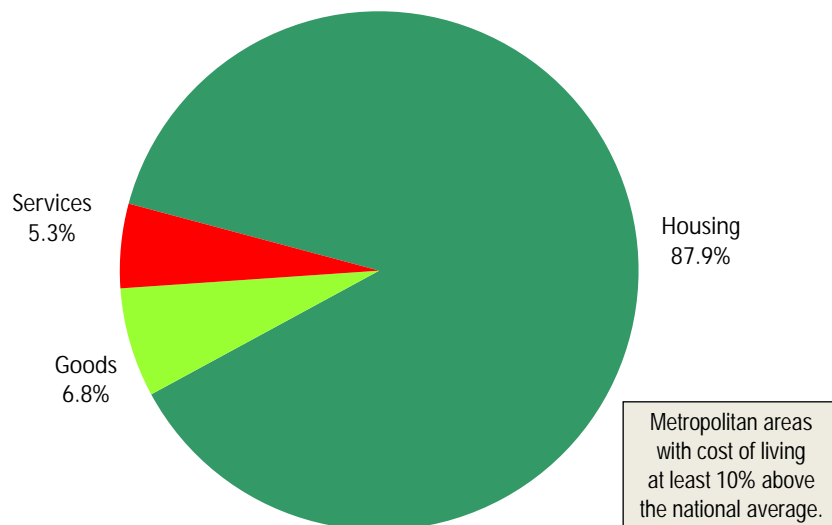


Figure 2

### 3.1: Severely Unaffordable Markets by Province

Severely unaffordable markets, which have a median multiple of above 5.0, are concentrated in British Columbia and Ontario (Table 3). All of the seven British Columbia markets are severely unaffordable, with the median multiples averaging 10.1. In Ontario 14 of the 15 rated markets are severely unaffordable, with the median multiples averaging 8.0. Four other provinces or territories have a single severely unaffordable market, including Quebec, Nova Scotia, Prince Edward Island and Yukon Territory.

There are no severely unaffordable markets in Alberta, Manitoba, Newfoundland & Labrador, New Brunswick and Saskatchewan. No markets were rated in the Northwest Territories and Nunavut.



Table 3  
Severely Unaffordable Markets by Province: 2021

Province or Territory	Severely Unaffordable Markets	# of Severely Unaffordable Markets	Census Metropolitan Area	Median Multiple
British Columbia	100%	7	Vancouver, BC	13.3
			Victoria, BC	11.8
			Nanaimo, BC	10.5
			Kelowna, BC	10.1
			Fraser Valley, BC	9.8
			Kamloops, BC	7.6
			Chilliwack, BC	7.5
Ontario	93%	14	Toronto, ON	10.5
			Hamilton, ON	8.9
			Oshawa, ON	8.9
			Cambridge, ON	8.7
			Peterborough, ON	8.6
			Kitchener-Waterloo, ON	8.4
			Barrie, ON	8.4
			Guelph, ON	8.4
			St. Catharines-Niagara, ON	8.4
			Brantford, ON	8.3
			Kingston, ON	8.3
			London, ON	7.9
			Windsor, ON	6.7
Ottawa-Gatineau, ON-QC	5.6			
Quebec	14%	1	Montreal, QC	6.1
Nova Scotia	50%	1	Halifax, NS	6.1
Prince Edward Island	100%	1	Charlottetown, PEI	5.3
Yukon	100%	1	Whitehorse, YT	5.3
Alberta	0%	0		
Manitoba	0%	0		
Newfoundland & Labrador	0%	0		
New Brunswick	0%	0		
Saskatchewan	0%	0		

Note: Ottawa-Gatineau shown under Ontario because of its higher share of the population. No markets were rated in Northwest Territories or Nunavut.

## Where Affordability is the Worst: Vancouver, Toronto and Spreading to Nearby Markets

Vancouver was the third least affordable market out of 92 major markets in this year's *Demographia International Housing Affordability*. Only Hong Kong and Sydney were more unaffordable. Toronto was the 10<sup>th</sup> least affordable.

**Vancouver and Other BC Markets:** The Vancouver market has had arguably the most restrictive land use regulations in Canada for at least a half century. The housing market's urban containment policy (which includes an agricultural land reserve, which serves as an urban growth boundary) is administered by Metro Vancouver, a regional authority established by the province. Vancouver has reached a median multiple of 13.3, its highest ever in the eighteen years of *Demographia International Housing Affordability*.

There has been strong net intraprovincial migration of 38,000 over the past five years (between 2016/2017 and 2021/2022), to other British Columbia markets. At the same time, the Vancouver market lost a net 63,000 residents through intraprovincial migration<sup>8</sup> This [migration has been driven](#), at least in part, by households seeking lower house prices outside Vancouver.

Along with this new demand there have been substantial house price increases. Housing is severely unaffordable in Victoria (11.8), Nanaimo (10.5), Kelowna (10.1), the Fraser Valley (9.8), Kamloops (7.5) and Chilliwack (7.6). Figure 3 illustrates the deterioration in housing affordability from 2015 to 2021 in the four British Columbia markets that included in 2015 *Demographia International Housing Affordability*.

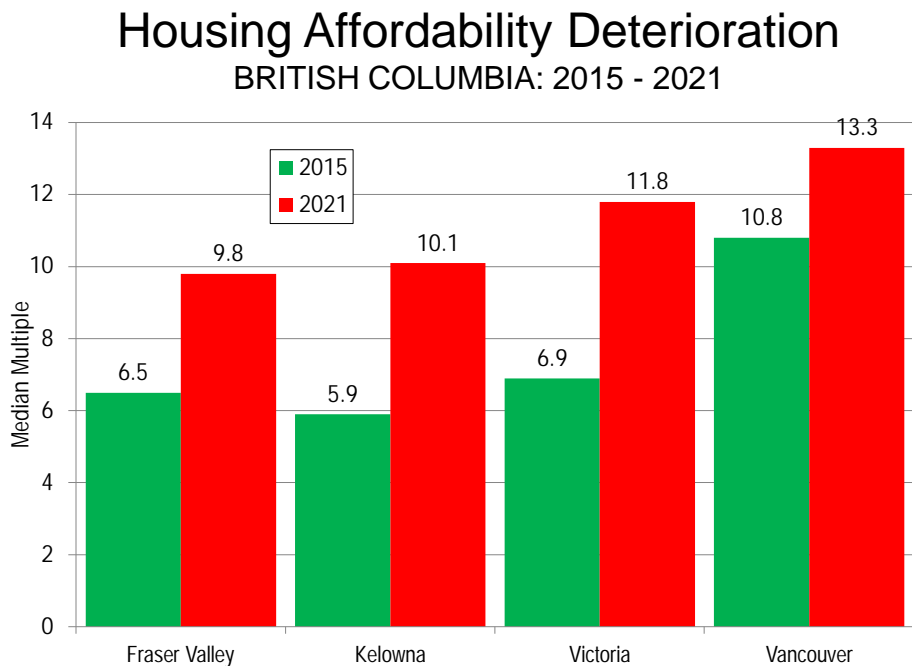


Figure 3

<sup>8</sup> From 2016/2017 to 2021/2022. Derived from Statistics Canada data.

**Toronto and Nearby Markets:** In Toronto, the housing affordability loss has been associated with provincial imposition of urban containment policy<sup>9</sup> This program, implemented in the mid-2000s (“Places to Grow”) includes a greenbelt. Since then, housing affordability has continued to decline, reaching a median multiple of 10.5 in 2021.

The Toronto market has experienced a net loss of 263,000 intraprovincial migrants over the past five years. Meanwhile, nearby markets (Greater Golden Horseshoe) have gained 129,000 intraprovincial migrants<sup>10</sup> As in Vancouver, this [migration has been driven](#), at least in part, by households seeking housing that is less unaffordable.

These markets have become severely unaffordable. This includes Hamilton (8.9), Guelph (8.4), Cambridge (8.7), Kitchener-Waterloo (8.4), Oshawa (8.9), Peterborough (8.6), Brantford (8.3), St. Catharines-Niagara (8.4), Barrie (8.4), and London (7.9). Their 2021 housing affordability is compared to 2015 in Figure 4.

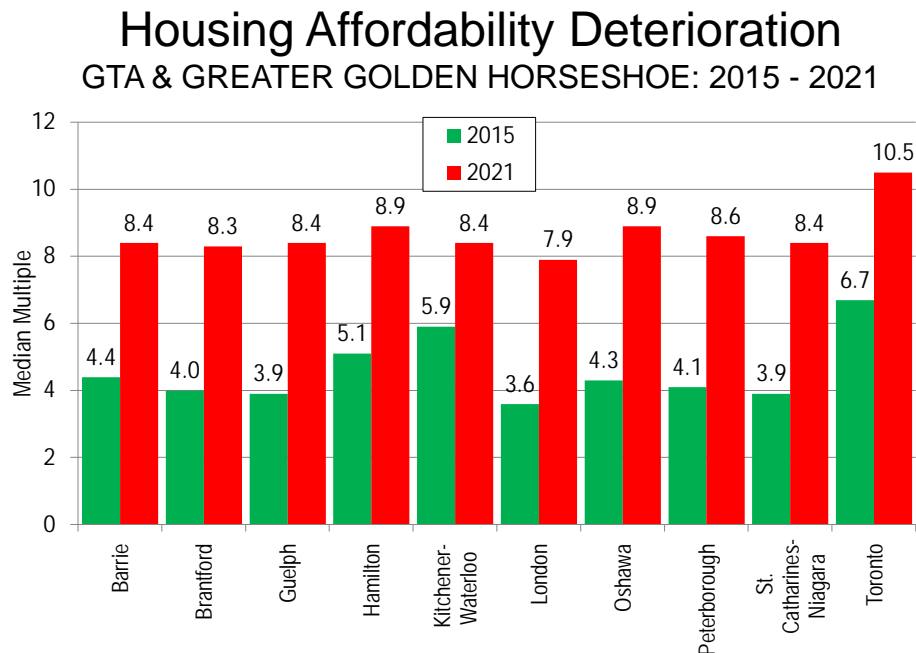


Figure 4

### 3.4: Other Severely Unaffordable Markets

One additional major market was severely unaffordable outside British Columbia and Ontario, Montreal (6.1). Ottawa-Gatineau (5.3), partially located in Quebec, was also severely unaffordable (most of the Ottawa-Gatineau market is in Ontario).

Two other Ontario markets were rated severely unaffordable, Kingston, with a median multiple of 8.3 and Windsor, with a median multiple of 6.7.

<sup>9</sup> Called “Places to Grow” when implemented.

<sup>10</sup> From 2016/2017 to 2021/2022. Derived from Statistics Canada data.

Three other markets outside Ontario were rated severely unaffordable. Halifax (NS) had a median multiple of 6.1. Charlottetown (PEI) and Whitehorse (YT) each had a median multiple of 5.3.

### **3.5: Seriously Unaffordable Markets**

No major markets were seriously unaffordable (median multiple of 4.1 to 5.0). Sherbrooke (QC) and Drummondville (QC) were both seriously unaffordable, at 4.6, as well as Red Deer, AB, at 4.3.

### **3.6: Affordable and Moderately Unaffordable Markets**

Canada's most affordable major market is Edmonton (3.6), which is rated moderately unaffordable. Major market Calgary is also rated moderately unaffordable, with a median multiple of 4.0.

Other markets are also moderately unaffordable, including Winnipeg (4.0), Quebec (3.7), Moncton, NB (3.7), Lethbridge, AB (3.6), with Thunder Bay (ON), St. John's (NL) and Saint John (NB) each at 3.5. An additional six markets have median multiples of 3.4 or less, including Trois-Rivieres (QC) and Medicine Hat (AB) at 3.4, Saskatoon (SK), Regina (SK) and Fredericton (NB) at 3.2 and Cape Breton (NS) at 3.1.

### **3.7: Affordable Markets**

There are three "affordable" markets (3.0 and below), with Fort MacMurray (AB) the most affordable, with a median multiple of 2.1, followed by Saguenay (QC) at 2.8 and Moose Jaw (SK) at 3.0. No major markets are rated "affordable."

### **3.8: All Markets**

Affordability ratings by housing market are shown in Table 4 (alphabetical) and Table 5 (by housing affordability rank).

## **4: HOUSING AFFORDABILITY AND LAND USE REGULATION**

There is a broad view that deteriorating housing affordability is an existential threat to the middle-class.<sup>11</sup>

In [Under Pressure: The Squeezed Middle-Class](#), the OECD: "finds that the middle-class faces ever rising costs relative to incomes and that its survival is threatened." Further that "..., the cost of essential parts of the middle-class lifestyle have increased faster than inflation; house prices have been growing three times faster than household median income over the last two decades." Further OECD found that "Housing has been the main driver of rising middle-class expenditure," with the largest increases in the costs of ownership (or housing affordability), rather than rents.<sup>12</sup>

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<sup>11</sup> This section is adapted from *Demographia International Housing Affordability*, 2022 edition.

<sup>12</sup> Urban Reform Institute Executive Director Joel Kotkin's book [The Coming of Neo-Feudalism: A Warning to the Global Middle Class](#) provides a similar perspective. The Urban Reform Institute sponsors *Demographia International Housing Affordability*, along with the Frontier Centre for Public Policy.

Intl. Rank	Canada Rank	Market	Median Multiple	Intl. Rank	Canada Rank	Market	Median Multiple
	33	Barrie, ON	8.4	60	25	Montreal, QC	6.1
	31	Brantford, ON	8.3		3	Moose Jaw, SK	3.0
10	17	Calgary, AB	4.0		43	Nanaimo, BC	10.5
	38	Cambridge, ON	8.7		39	Oshawa, ON	8.9
	4	Cape Breton, NS	3.1	50	24	Ottawa-Gatineau, ON-QC	5.6
	22	Charlottetown, PEI	5.3		37	Peterborough, ON	8.6
	28	Chilliwack, BC	7.5		15	Quebec, QC	3.7
	20	Drummondville, QC	4.6		19	Red Deer, AB	4.3
4	13	Edmonton, AB	3.6		5	Regina, SK	3.2
	1	Fort MacMurray, AB	2.1		2	Saguenay, QC	2.8
	41	Fraser Valley, BC	9.8		10	Saint John, NB	3.5
	5	Fredericton, NB	3.2		5	Saskatoon, SK	3.2
	33	Guelph, ON	8.4		20	Sherbrooke, QC	4.6
	25	Halifax, NS	6.1		33	St. Catharines-Niagara, ON	8.4
	39	Hamilton, ON	8.9		10	St. John's, NL	3.5
	29	Kamloops, BC	7.6		10	Thunder Bay, ON	3.5
	42	Kelowna, BC	10.1	83	43	Toronto, ON	10.5
	31	Kingston, ON	8.3		8	Trois-Rivieres, QC	3.4
	33	Kitchener-Waterloo, ON	8.4	90	46	Vancouver, BC	13.3
	13	Lethbridge, AB	3.6		45	Victoria, BC	11.8
	30	London, ON	7.9		22	Whitehorse, YT	5.3
	8	Medicine Hat, AB	3.4		27	Windsor, ON	6.7
	15	Moncton, NB	3.7		17	Winnipeg, MB	4.0

International Rank: Demographia International Housing Affordability 2022 (92 Markets)

## Housing and the Cost of Living

A considerable body of research associates the deterioration of housing affordability of recent decades with stronger land use regulation.<sup>13</sup> For example, Edward Glaeser of Harvard University and Joseph Gyourko of the University of Pennsylvania described how house prices diverge between well-functioning markets, where market prices (roughly) equal the costs of production and where costs materially exceed the costs of production.<sup>14</sup>

<sup>13</sup> See, for example, K. Herkenhoff, L. Ohanian, and E. Prescott. 2018. "Tarnishing the Golden and Empire States: Land-Use Restrictions and the U.S. Economic Slowdown." *Journal of Monetary Economics*. [https://www.nber.org/system/files/working\\_papers/w23790/w23790.pdf](https://www.nber.org/system/files/working_papers/w23790/w23790.pdf), Edward Glaeser and Joseph Gyourko. 2018. "The Economic Implications of Housing Supply." *Journal of Economic Perspectives*, <https://www.aeaweb.org/articles?id=10.1257/jep.32.1.3>, Chang-Tai Hsieh and Enrico Moretti. 2019. "Housing Constraints and Spatial Misallocation." *American Economic Journal: Macroeconomics*, <https://www.aeaweb.org/articles?id=10.1257/mac.20170388>, Wendell Cox, "A Question of Values: Middle-Income Housing Affordability and Urban Containment Policy," Frontier Centre for Public Policy, 2015. <https://fcpp.org/sites/default/files/documents/Cox%20-%20A%20Question%20of%20Values.pdf>.

<sup>14</sup> Edward Glaeser and Joseph Gyourko. 2018. "The Economic Implications of Housing Supply." *Journal of Economic Perspectives*, <https://www.aeaweb.org/articles?id=10.1257/jep.32.1.3>

Intl. Rank	Canada Rank	Market	Median Multiple	Intl. Rank	Canada Rank	Market	Median Multiple
	1	Fort MacMurray, AB	2.1	50	24	Ottawa-Gatineau, ON-QC	5.6
	2	Saguenay, QC	2.8		25	Halifax, NS	6.1
	3	Moose Jaw, SK	3.0	60	25	Montreal, QC	6.1
	4	Cape Breton, NS	3.1		27	Windsor, ON	6.7
	5	Fredericton, NB	3.2		28	Chilliwack, BC	7.5
	5	Regina, SK	3.2		29	Kamloops, BC	7.6
	5	Saskatoon, SK	3.2		30	London, ON	7.9
	8	Medicine Hat, AB	3.4		31	Brantford, ON	8.3
	8	Trois-Rivieres, QC	3.4		31	Kingston, ON	8.3
	10	Saint John, NB	3.5		33	Barrie, ON	8.4
	10	St. John's, NL	3.5		33	Guelph, ON	8.4
	10	Thunder Bay, ON	3.5		33	Kitchener-Waterloo, ON	8.4
4	13	Edmonton, AB	3.6		33	St. Catharines-Niagara, ON	8.4
	13	Lethbridge, AB	3.6		37	Peterborough, ON	8.6
	15	Moncton, NB	3.7		38	Cambridge, ON	8.7
	15	Quebec, QC	3.7		39	Hamilton, ON	8.9
10	17	Calgary, AB	4.0		39	Oshawa, ON	8.9
	17	Winnipeg, MB	4.0		41	Fraser Valley, BC	9.8
	19	Red Deer, AB	4.3		42	Kelowna, BC	10.1
	20	Drummondville, QC	4.6		43	Nanaimo, BC	10.5
	20	Sherbrooke, QC	4.6	83	43	Toronto, ON	10.5
	22	Charlottetown, PEI	5.3		45	Victoria, BC	11.8
	22	Whitehorse, YT	5.3	90	46	Vancouver, BC	13.3

International Rank: Demographia International Housing Affordability 2022 (92 Markets)

## Urban Containment

The largest housing affordability differences between major markets are between those with significant restrictions on the urban fringe<sup>15</sup> (edge of urban development), and more lightly regulated markets. These urban fringe restrictions, called “urban containment” apply to entire housing markets.<sup>16</sup> Urban containment is in contrast to municipal zoning, which applies only within enacting jurisdictions. Urban containment is authorized under provincial law and administered either directly or by regional authorities, established by provincial law (such as Metro Vancouver). This precludes any control over urban containment and its associated impacts on land prices by municipalities in such markets (below).

***The Urban Containment Effect:*** A principal purpose of urban containment is to curb the physical expansion of urban areas – that is, conversion of rural land to urban land (“urban sprawl”<sup>17</sup>).

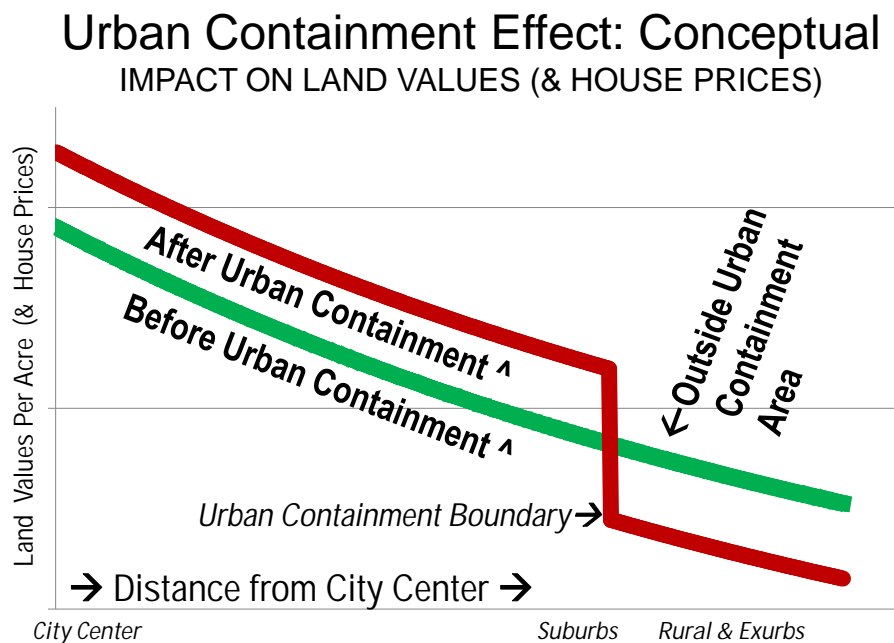
<sup>15</sup> Where urbanization meets rural (such as agricultural) land.

<sup>16</sup> Urban containment includes “growth management” and “compact city” policies.

<sup>17</sup> Judge Glock, “Sprawl is Good: The Environmental Case for Suburbs,” <https://thebreakthrough.org/journal/no-15-winter-2022/sprawl-is-good-green>

Urban containment's prototypical strategy is urban growth boundaries (or greenbelts) that encircle urban areas. According to urban planning literature: "Urban development is steered to the area inside the line and discouraged (if not prevented) outside it." Urban containment is contrasted with "...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..."<sup>18</sup>

Normally, without urban containment, land values in a housing market tend to rise gradually, from the low agricultural values on urban fringe to the highest values in the center (or centers).<sup>19</sup> Urban containment is associated with abrupt land value increases, for example, at urban growth boundaries or the inner boundaries of greenbelts. Moreover, the land values (and house prices) will tend to be driven higher throughout the entire market (area of urban containment) (Figure 5<sup>20</sup>).



Adapted from Lincoln Institute of Land Use Policy (1992)

Figure 5

Indeed, higher land prices are both an expected and *intended* result.<sup>21</sup> Planners anticipated that the higher land prices would be counterbalanced by more dense development within the contained area. Yet, this has not occurred in the most unaffordable markets.

<sup>18</sup>Arthur C. Nelson and Casey J. Dawkins (2004), "Urban Containment in the United States: History, Models and Techniques for Regional and Metropolitan Growth Management," American Planning Association Planning Advisory Service

<sup>19</sup>See William Alonso (1964), *Location and Land Use: Toward a General Theory of Land Rent* (Cambridge, Massachusetts, Harvard University Press).

<sup>20</sup> Figure is adapted from other works dealing with urban containment policy. Other graphical representations can be found in Gerrit Knaap and Arthur C. Nelson, *The Regulated Landscape: Lessons on State Land Use Planning from Oregon*, 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. Without urban containment, the land value gradient is smooth (the green line labeled "Before Urban Containment"). With urban containment an abrupt increase occurs at and within the urban containment boundary (the red line labeled "After Urban Containment").

<sup>21</sup>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](https://www.researchgate.net/publication/288101674_Urban_containment)

In [Rethinking Urban Sprawl: Moving Toward Sustainable Cities](#), the OECD cautions that urban containment policies, such as urban growth boundaries and greenbelts can lead to higher house prices, unless sufficient land is maintained for urban expansion.<sup>22</sup>

Moreover, this urban expansion land must be large enough to preserve the competitive market for land, which was stressed by economist Anthony Downs of the Brookings Institution.<sup>23</sup> Without a competitive market for land it is virtually impossible to profitably produce housing affordable to middle-income households. In these markets, severe urban fringe measures, (such as urban growth boundaries and greenbelts), planning administered rationing has replaced the competitive market for land. While land costs are much higher in urban containment markets, the construction costs of housing are much closer to those of lightly regulated markets (Box 2).

Severely unaffordable major housing markets emerged in Canada, Australia, New Zealand and the United States *only* after implementation of urban containment. In addition, before the pandemic demand shock (2019), *all* severely unaffordable major markets in *Demographia International Housing Affordability Survey* were subject to urban containment.

**Assessing Urban Containment:** One of the world’s leading urbanists, Professor Shlomo Angel, Director of the Urban Expansion Project at New York University<sup>24</sup> raises concerns about urban containment. 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>25</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>26</sup>

Angel, et al also note that the “compact city paradigm” (which includes urban containment) dominates thinking about urban development.<sup>27</sup> Today housing affordability can be threatened by imposition of urban containment policy virtually in any lightly regulated market.

According to Alain Bertaud, former principal urban planner at the World Bank, urban growth boundaries and greenbelts put “arbitrary limits on city expansion” and that “the result is predictably higher prices.”<sup>28</sup>

Long-time [Reserve Bank of New Zealand Governor Donald Brash](#)<sup>29</sup> commented on the continuing failure of public policy to restore housing affordability, [despite political promises to the contrary](#): “One thing I can say with confidence, however, is that house prices will not return to more affordable levels until land becomes available at more reasonable prices.”

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<sup>22</sup>Organization for Economic Cooperation and Development (OECD), *Rethinking Urban Sprawl: Moving Towards Sustainable Cities*. 2018, <https://www.oecd.org/publications/rethinking-urban-sprawl-9789264189881-en.htm>

<sup>23</sup> Anthony Downs, *New Visions for Metropolitan America*, (1994), <https://www.brookings.edu/book/new-visions-for-metropolitan-america/>

<sup>24</sup> Angel has advised the United Nations, the World Bank and the Inter-American Development Bank.

<sup>25</sup> 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):

<sup>26</sup> 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>.

<sup>27</sup> 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>.

<sup>28</sup>Bertaud, *Order without Design*.

<sup>29</sup> Governor Brash contributed the Introduction to the [4th Annual Demographia International Housing Affordability Survey](#) (2008).



## Box 2: Land and Construction Costs

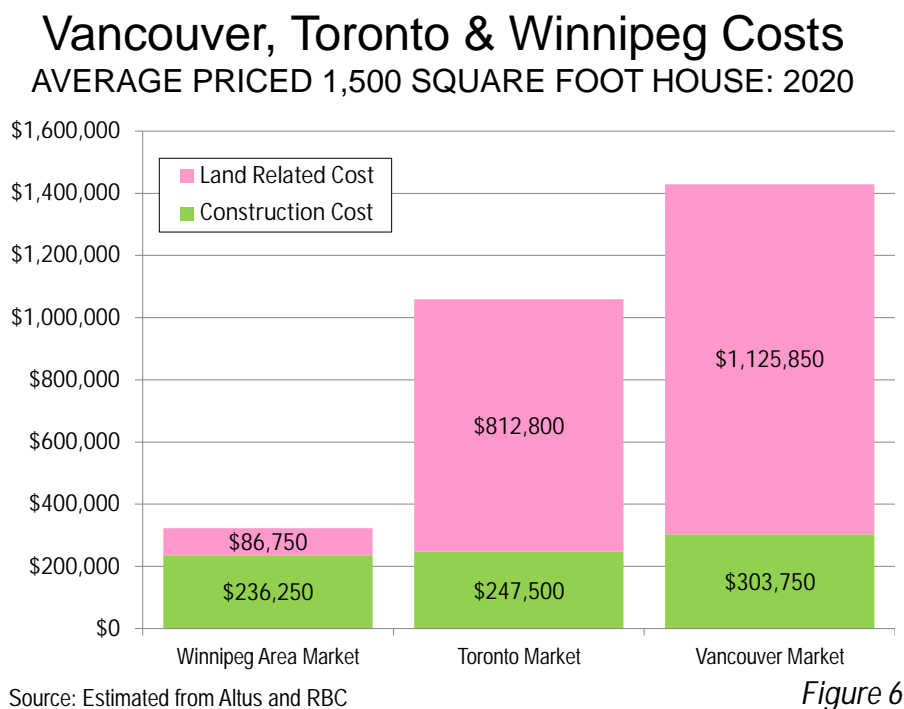
As house prices have escalated in urban containment markets compared to lightly regulated markets, construction costs have remained relatively similar. Land costs and land related regulatory costs have been the drivers of the housing affordability crisis.

This is illustrated by comparing the costs of an average priced 1,500 square foot single-family house between the Vancouver, Toronto and Winnipeg housing markets.<sup>30</sup>

In 2020, construction costs per square foot were only 5% 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% more than in Winnipeg.<sup>31</sup>

The differences are even greater in comparison with Vancouver. The construction cost for the average detached house would be 29% greater in the Vancouver area than in the Winnipeg area. However, the average sale price in Vancouver was about 340% higher than in Winnipeg (Figure 6).

Both Vancouver and Toronto have strict urban containment policy, which is associated with higher land costs. The Winnipeg market is more lightly regulated.



<sup>30</sup> 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/>.

<sup>31</sup> 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.

Whatever its advantages, urban containment is associated with higher housing costs, higher costs of living (as is described in Box 1, above). From a policy perspective urban planning has become a higher priority than maintaining the standard of living and alleviating poverty. Importantly, higher house prices have led to greater inequality (Section 5).

### **Subsidized Housing**

Further, higher house prices are also associated with higher housing costs for low-income housing. Eligibility for subsidized housing generally depends on housing costs exceeding an housing cost threshold (such as 30% of household income) As house prices increase, more households cannot afford market rate housing and become eligible for subsidies.

Unlike market rate housing, subsidized housing is often not readily available. Eligible households can be placed on waiting lists, because there is not enough subsidized housing to serve the legally defined need. . For example, [waits in the city of Toronto are over 10 years for one and two bedroom units](#).<sup>32</sup>

## **5: HOUSING AFFORDABILITY AND INEQUALITY**

There is considerable concern about rising income and wealth inequality in Canada and beyond. French economist Thomas Piketty identified increasing inequality around the world over recent decades.<sup>33</sup> Much of this greater inequality is attributable to the rise in house costs, according to research by Matthew Rognlie, at Northwestern University.<sup>34</sup> In a Bank for International Settlements (Berne) paper, Reserve Bank of Australia economist [Giani La Cava](#) found that rising inequality in the United States was largely associated with increased housing values in markets with more severe housing supply constraints.<sup>35</sup>

By definition, house price increases that exceed household income growth result in *greater inequality*. Moreover, to the extent that housing costs are higher due to regulation, the resulting inequality *is an outcome of public policy*. This is not to suggest that all regulation is detrimental. However, the standard of living and poverty alleviation, which may arguably be the most important domestic policy objectives would seem to command higher priority.

These wealth inequality gaps are likely to continue growing so long as house price increases continue to exceed household income growth.

Rognlie suggests that “A natural first step to combat the increasing role of housing wealth would be to reexamine these regulations and expand the housing supply.”<sup>36</sup>

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<sup>32</sup> “Supportive Housing Program,” Sprint Senior Care, <https://www.sprintseniorcare.org/programs-and-services/supportive-housing-program/>, accessed June 15, 2022.

<sup>33</sup> Thomas Piketty, (2014). *Capital in the twenty-first century*.

<sup>34</sup> Matthew Rognlie, “A note on Piketty and diminishing returns to capital,” June 15, 2014. Available online at [http://mattrognlie.com/piketty\\_diminishing\\_returns.pdf](http://mattrognlie.com/piketty_diminishing_returns.pdf).

<sup>35</sup> Gianni La Cava, Housing Prices, “Mortgage Interest Rates and the Rising Share of Capital Income in the United States,” *BIS Working Paper No. 572*, <https://www.bis.org/publ/work572.pdf>

<sup>36</sup> Matthew Rognlie, “A note on Piketty and diminishing returns to capital,” June 15, 2014. Available online at [http://mattrognlie.com/piketty\\_diminishing\\_returns.pdf](http://mattrognlie.com/piketty_diminishing_returns.pdf).

To discontinue the trend toward greater middle-income wealth inequality, housing cost increases need to be reduced to the rate of household income growth. This requires:

- (1) In severely unaffordable markets, restoring an affordable and competitive land market on the urban fringe, and
- (2) In other markets, avoiding policies associated with a less affordable market for land and housing (especially urban containment).

## **6: RECENT IMPROVEMENT**

There have been recent declines in some markets. In May, for example, house prices declined in four of the six major markets.<sup>37</sup> The Bank of Canada policy interest rate increases have led to higher mortgage rates, reducing housing demand. At the same time, as the housing market moves beyond the demand shock, house prices should moderate toward pre-pandemic levels.

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<sup>37</sup> Robert Hogue (June 15, 2022), "Focus on Canadian Housing: Monthly Housing Market Update: Canada's housing market in full-blown cooling mode," RBC Economics, <https://royal-bank-of-canada-2124.docs.contently.com/v/canadas-housing-market-in-full-blown-cooling-mode>

## **METHODOLOGY**

House price data is estimated from published real estate industry sources. Median incomes are estimated from official government sources, and updated by more recent economic data to develop a current figure.

## **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). He 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.