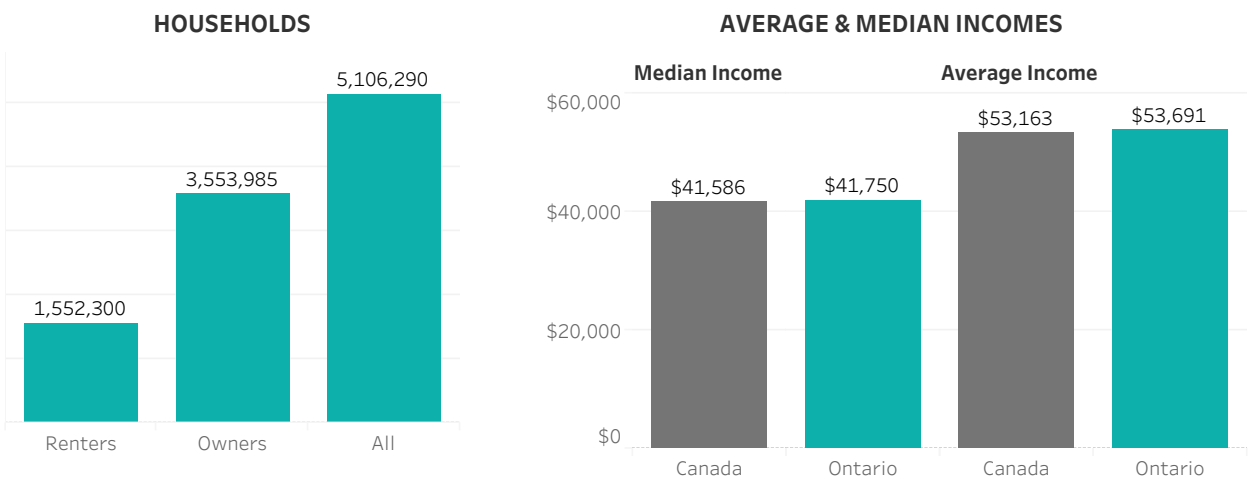


A Snapshot of Renters in Canada & Ontario



AVERAGE PROPORTION OF INCOME SPENT ON RENT & UTILITIES

Canada	Ontario
23%	25%



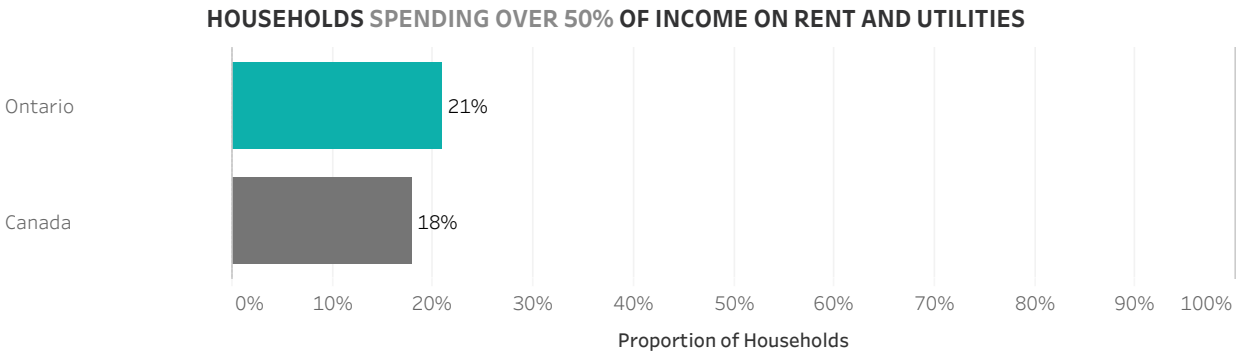
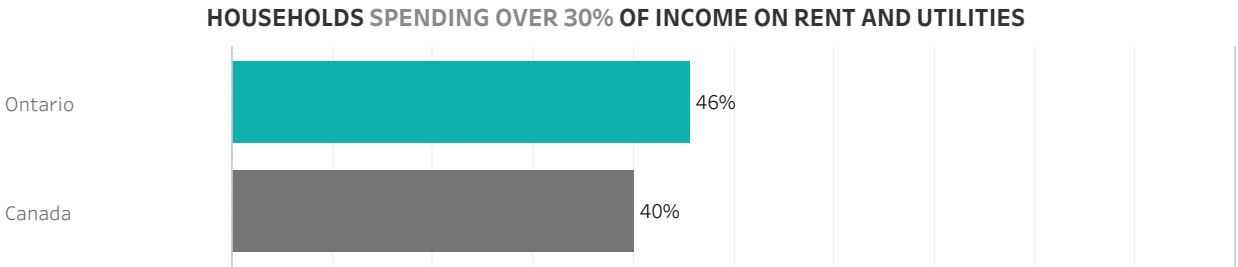
AVERAGE MONTHLY RENT & UTILITIES

Canada	Ontario
\$1,002	\$1,109



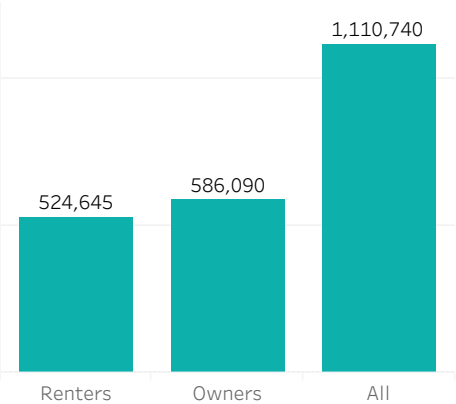
HOUSEHOLDS LIVING IN OVERCROWDED CONDITIONS

Canada	Ontario
9%	12%

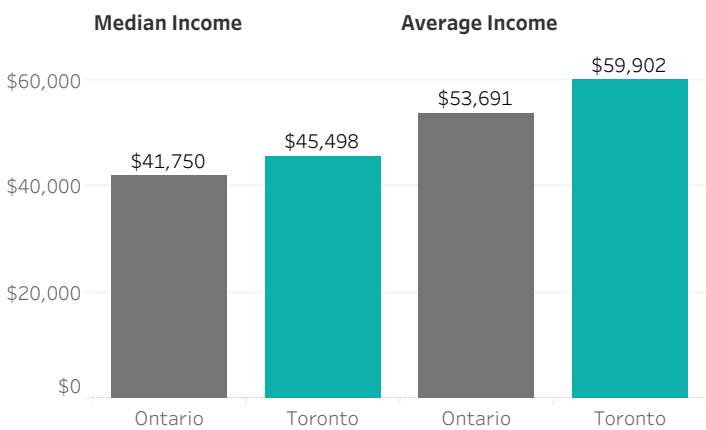


A Snapshot of Renters in Ontario & Toronto

HOUSEHOLDS



AVERAGE & MEDIAN INCOMES



AVERAGE PROPORTION OF INCOME SPENT ON RENT & UTILITIES

Ontario	Toronto
25%	25%



AVERAGE MONTHLY RENT & UTILITIES

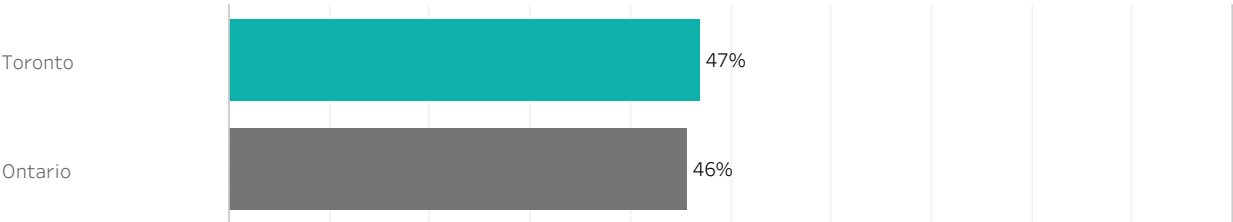
Ontario	Toronto
\$1,109	\$1,242



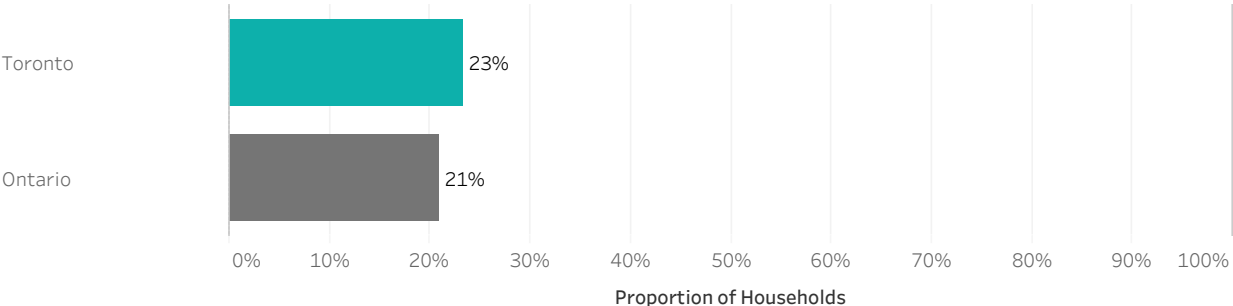
HOUSEHOLDS LIVING IN OVERCROWDED CONDITIONS

Ontario	Toronto
12%	19%

HOUSEHOLDS SPENDING OVER 30% OF INCOME ON RENT AND UTILITIES



HOUSEHOLDS SPENDING OVER 50% OF INCOME ON RENT AND UTILITIES



STEP 1: FILTER THE MAP BY INCOME QUARTILE

Lowest Income Group (Q1)

STEP 2: SELECT A REGION ON THE MAP TO REVEAL A DATA TABLE BELOW. HOLD THE CTRL KEY TO SELECT MULTIPLE REGIONS



STEP 3: SELECT BETWEEN "PROPORTION" AND "AMOUNT" OF INCOME

Amount

AMOUNT/PROPORTION OF ADDITIONAL RENTER HOUSEHOLD INCOME NEEDED ANNUALLY TO MAKE CURRENT RENT AFFORDABLE (30% OF BEFORE-TAX INCOME)

	Name	Household Income Range	Quartile	Average Income	Studio	1-Bed	2-Bed	3-Bed	4-Bed	All Units
Ontario	Toronto	\$0 to \$22,881	Q1	\$12,935	\$12,489	\$21,966	\$34,364	\$38,241	\$41,761	\$25,185
		\$22,881 to \$45,498	Q2	\$33,928	\$3,813	\$8,940	\$12,887	\$13,220	\$17,164	\$10,872
		\$45,498 to \$76,896	Q3	\$59,806	-	-	-	-	-	-
		\$76,896 +	Q4	\$132,975	-	-	-	-	-	-
			All		\$1,350	-	-	-	-	-

ADDITIONAL RENTER HOUSEHOLD
INCOME NEEDED ANNUALLY TO
MAKE CURRENT RENT AFFORDABLE

STEP 1: FILTER THE MAP BY INCOME QUARTILE

Lowest Income Group (Q1)

STEP 2: SELECT A REGION ON THE MAP TO REVEAL A DATA TABLE BELOW. HOLD THE CTRL KEY TO SELECT MULTIPLE REGIONS



STEP 3: SELECT BETWEEN "PROPORTION" AND "AMOUNT" OF INCOME

Proportion

AMOUNT/PROPORTION OF ADDITIONAL RENTER HOUSEHOLD INCOME NEEDED ANNUALLY TO MAKE CURRENT RENT AFFORDABLE (30% OF BEFORE-TAX INCOME)

	Name	Household Income Range	Quartile	Average Income	Studio	1-Bed	2-Bed	3-Bed	4-Bed	All Units
Ontario	Toronto	\$0 to \$22,881	Q1	\$12,935	94%	170%	267%	301%	350%	195%
		\$22,881 to \$45,498	Q2	\$33,928	11%	27%	38%	38%	50%	32%
		\$45,498 to \$76,896	Q3	\$59,806	-	-	-	-	-	-
		\$76,896 +	Q4	\$132,975	-	-	-	-	-	-
			All		4%	-	-	-	-	-

ADDITIONAL RENTER HOUSEHOLD
INCOME NEEDED ANNUALLY TO
MAKE CURRENT RENT AFFORDABLE



AFFORDABLE HOUSING IN ONTARIO

Every child needs a safe home to thrive
A safe and affordable home also means creating strong beginnings for all children



Less than
3%
vacancy rate in
Ontario since
2010

In 2016

36%

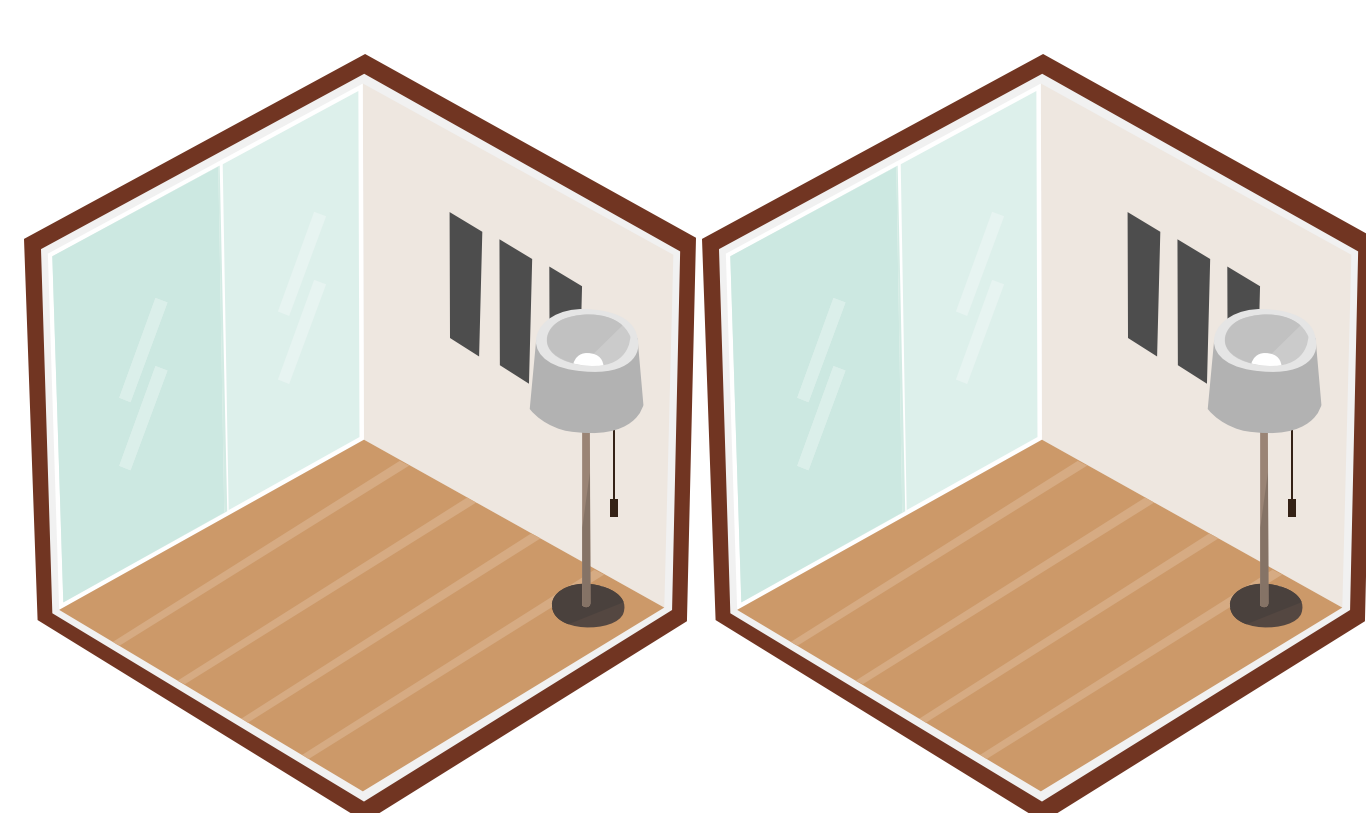
of lone parent families in
Ontario spent

30%

or more of household income
on housing

\$13,812

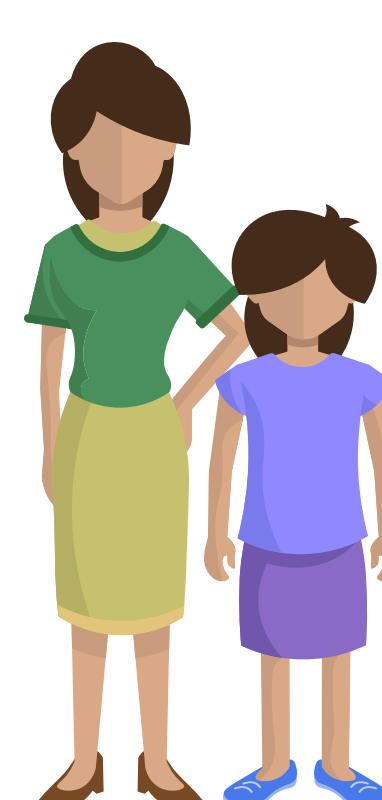
average yearly rent for a 2-
bedroom apartment in
Ontario in 2016



Comparatively

the after-tax median income
of low income lone-parent
with one child was

\$21,780



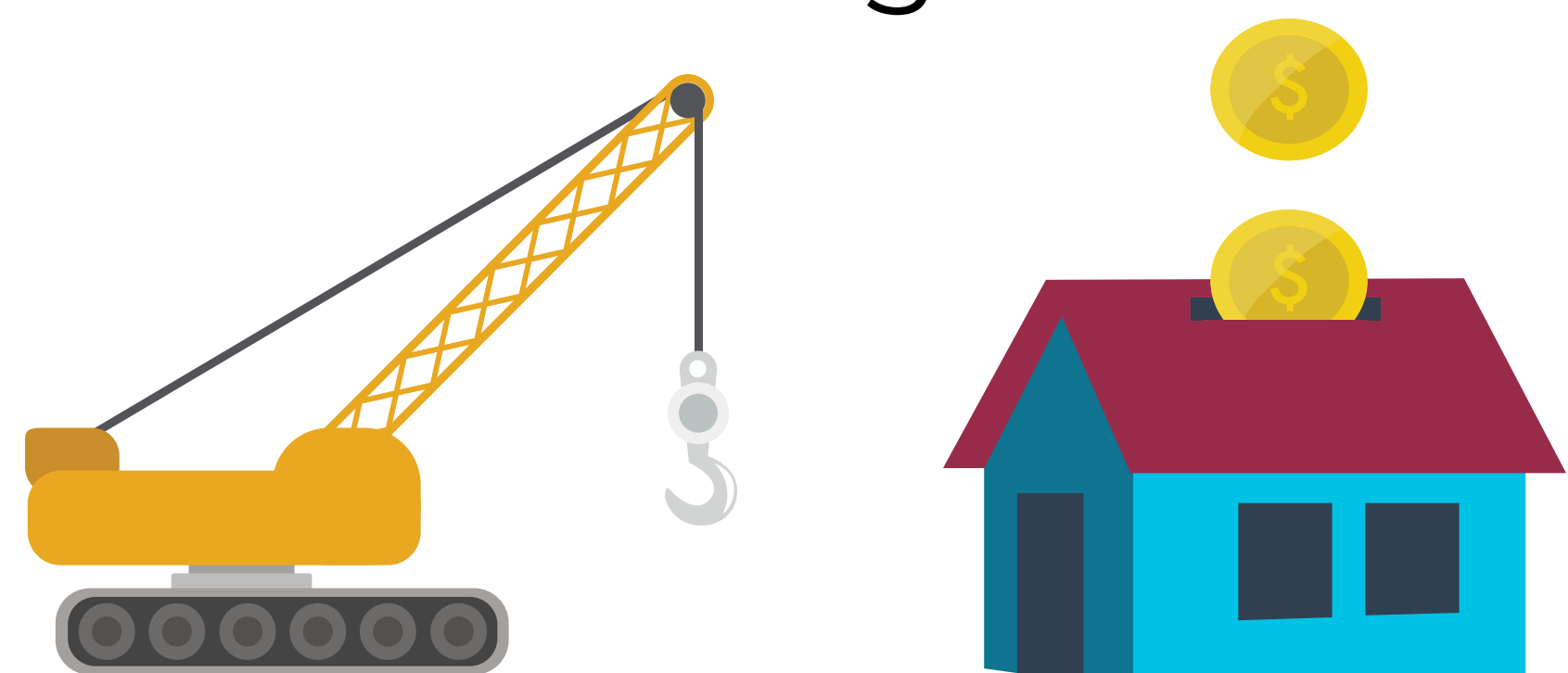
Many low-income families spend
up to 2/3 of their income on
housing which leaves less than
\$700/month for food, medicine,
clothing, transit, and other
necessities.

Recommendations

Create a **multi-year**
supportive housing
plan



Increase **funding** and
maintenance of social
housing units



End **unlimited** rent increases
once property is vacant



Release provincial lands
to **create** affordable
housing units



Define
affordable housing
programs by using **30%**
of income as
affordability

No family should have to
choose between paying the
rent or feeding the kids.
Affordable housing is more
than having an address - it's
about creating a safe home
where children can thrive.

Cost Effectiveness of Ending Homelessness

An adequate supply of safe, affordable and appropriate housing is a prerequisite to truly ending homelessness in the long term. This includes ensuring that people who are chronically and episodically homeless are prioritized and that systems are in place to enable such persons to receive housing and supports through Housing First programs. In a tight housing market, implementing a Housing First agenda becomes that much more challenging. It is also important to address the supply of affordable housing, in order to broaden access for other priority populations, including women fleeing violence, Indigenous Peoples, families, seniors and youth, for instance.

Ultimately, addressing Canada's housing crisis comes down to money, which then begs the question about our national priorities.

Canadian homeowners enjoy over \$8.6 billion in annual tax and other benefits. This kind of investment in home ownership is important because it benefits millions of middle-income households.

Spending on affordable housing for Canada's poorest households, however, is less than one quarter of that invested in homeownership at approximately \$2.1 billion per year and has declined quite dramatically over the past 25 years.

Ironically, it costs more to ignore our housing problem than it would to fix it. Consider the estimate that homelessness alone costs the Canadian economy over \$7 billion per year. While the Government of Canada invests \$119 million annually to address homelessness through the Homelessness Partnering Strategy (provinces and municipalities also invest), this is not sufficient to address the problem and as a result has not led to a noticeable reduction in homelessness.

By not investing adequately in housing for the poorest Canadians, health care, justice and other taxpayer-funded costs increase.

Put another way, as Canadians, we are spending more money on people who do not need help compared to those in greatest need. And by not spending on those in greatest need, we are not only creating hardship for many Canadian families, we are creating a considerably larger expense for the Canadian economy.

We can do things differently. In the State of Homelessness in Canada 2014, we propose a robust housing investment strategy that would cost the economy much less than the current costs of homelessness. The key elements of our strategy include the following proposals:



What will this cost?

Our proposed investment in affordable housing represents an increase in annual federal spending, from the projected commitments of \$2.019 billion to \$3.752 billion in 2015/16 with a total investment of \$44 billion over ten years. These proposals have been carefully costed, drawing from the work of Jane Londerville and Marion Steele and the Canadian Housing and Renewal Association.

While this significantly increases the current federal investment, we feel that in addition to it being the right thing to do, it is also something we can afford to do. Over the past 25 years, federal spending on low-income affordable housing (on a per capita basis) dropped from over \$115 annually, to slightly more than \$60 (adjusted to 2013 dollars). Our proposals would raise the per capita investment to approximately \$106 per Canadian annually, or \$2.04 a week (currently per capita spending amounts to \$1.16/week). While this may seem like a significant increase over previous levels, it is still less than what we were paying in 1989. Additionally, it is necessary to address the accumulated affordable housing deficit built up over the past 25 years. Moreover, we propose that Canadians spend only an additional 88 cents per week to contribute to a realistic solution to homelessness and to the affordable housing crisis. To be clear, this proposal will not completely end homelessness in Canada, but it will dramatically reduce chronic and episodic homelessness.

What will be the outcome of this investment?

For years we have been investing in a response to homelessness that, while meeting the immediate needs of people in crisis, has arguably had no impact in reducing the scale and scope of the problem. Our proposal will contribute to an end to chronic homelessness and reduce the likelihood that many others will fall into homelessness in the future.

ONTARIO 360 – HOMELESSNESS – TRANSITION BRIEFING

A comprehensive strategy to eliminate homelessness in Ontario

Issue

Homelessness remains a persistent challenge for policymakers. Its causes are complex. The solutions are multijurisdictional and involve a continuum of services and supports. This past winter's homelessness "crisis" in Toronto and elsewhere in the province demonstrated that Ontario still has considerable work to do to meet its 10-year goal of eliminating homelessness.¹

Nearly a quarter of a million people in Canada will experience homelessness at some point this year.² Those experiencing homelessness are the other 1-percent – the poorest and most excluded of the Canadian population. The incoming government will thus need a comprehensive strategy to support these individuals and families to have the security, dignity, and other broad-based benefits of adequate housing and shelter.

Overview: Homelessness in Ontario

It is difficult to systematically assess the state of provincial homelessness in Ontario due to a patchwork of data collection³ and different definitions and types – including chronic homelessness, transitory homelessness, and "hidden homelessness."⁴ Fortunately data collection will improve in future

1 Laurie Monsebraaten, "Ontario sets 10-year deadline to end homelessness," Toronto Star, October 29, 2015. Available at: <https://www.thestar.com/news/gta/2015/10/29/ontario-sets-10-year-deadline-to-end-homelessness.html>.

2 Stephen Gaetz, Erin Dej, Tim Richter, Melanie Redman, The State of Homelessness in Canada 2016, The Canadian Observatory on Homeless Press, 2016. Available at: http://homelesshub.ca/sites/default/files/SOHC16_final_20Oct2016.pdf.

3 Danusha Jebanesan and Vivian Tam, Targeting Homelessness in Ontario through Housing, OMSA Position Paper, January 2016. Available at: https://omsa.ca/sites/default/files/position_paper/40/position_paper_targeting_homelessness_in_ontario_through_housing_2016_jan.pdf.

4 For a comprehensive study of homelessness in Ontario and its factors and causes in different parts of the province, see: Carol Kauppi, Bill O'Grady, Rebecca Schiff and Fay Martin, Homelessness and Hidden Homelessness in Rural and Northern Ontario, Rural Ontario

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Canadians for
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Megan Leslie
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World Wildlife Fund
Canada

years, in part as a result of the federal government's push towards coordinated "homeless counts" across the country. But in the meantime there is still some capacity to understand the state of homelessness in the province. There are some estimates for cities and regions across the province – more than 5,200 in Toronto as an example.⁵

As for government policy, there has been some progress in recent years. In late 2015, the provincial government released the report from the Expert Advisory Panel on Homelessness.⁶ The Panel's report, *A Place to Call Home*, set out various recommendations – including better defining and measuring homelessness and related policies, better supporting local capacity and initiatives, and working better with the federal government to align priorities and strategies. The government has since begun implementing many of them as part of its strategy to end homelessness by 2025.⁷

Still, the experience this past winter has shed light on the extent to which more resources and policy reforms are needed to address what is a very complex social problem.

The need for reform

The causes of homelessness (and in turn its solutions) are numerous; if you want to know what will end homelessness in Canada, the best thing you can do is ask someone who has been or is currently homeless. They know best the causes of their homelessness, having experienced the gaps in the safety net first hand.

Institute, 2017. Available at: <http://www.ruralontarioinstitute.ca/file.aspx?id=ae34c456-6c9f-4c95-9888-1d9e1a81ae9a>.

5 Michael Shapcott, "Toronto's homeless population continues to grow: latest city count," Wellesley Institute, July 31, 2013. Available at: <http://www.wellesleyinstitute.com/housing/torontos-homeless-population-continues-to-grow-latest-city-count/>.

6 Government of Ontario, *A Place to Call Home: Report of the Expert Advisory Plan on Homelessness*, 2015. Available at: <http://www.mah.gov.on.ca/AssetFactory.aspx?did=11038>.

7 Government of Ontario Press Release, "Ontario commits to ending chronic homelessness in 10 years," October 28, 2015. Available at: <https://news.ontario.ca/mma/en/2015/10/report-of-the-expert-advisory-panel-on-homelessness.html>.

That said, there are some identifiable and frequent causes of homelessness. Economic causes include poverty and a lack of safe, affordable housing. A history of trauma can frequently lead to homelessness, whether that is violence, sexual abuse, or personal tragedy experienced at any age. Untreated mental illness is another often cited cause of homelessness, though only a small minority of the 235,000 Canadians who experience homelessness this year suffer from a severe mental illness. There are a host of other institutional drivers of homelessness, including child protection services (notably for indigenous children) and a prison system that does not adequately prepare those who have served their time to re-enter and re-integrate into society.

So, what is the government of Ontario to do in the face of a problem, so complex, that it involves all orders of government and all sectors of civil society? Ontario is unique in the Canadian federation in that housing powers have been devolved to the municipal level (after they were first devolved from the federal to the provincial level).⁸ That means that the role of the province of Ontario in resolving homelessness is somewhat different from the role other Canadian provinces can and do play.

How to move forward

Below are three recommendations that are within provincial jurisdiction that the next Government of Ontario should consider as part of its overall policy agenda.

1. *See the whole picture*

While 235,000 Canadians experience homelessness over the course of a year, only about 35,000 people are homeless on any given night. These numbers tell a very important story; the vast majority of people who experience homelessness do so for a short period of time. These people use emergency services such as shelters for only a few days before finding housing of their own. A much smaller portion, an estimated 5-10 percent,

⁸ Gregory Suttor, *Still Renovating: A History of Canadian Social Housing Policy*, Montreal and Kingston: McGill-Queen's University Press, 2016.

experience chronic homelessness, meaning they are homeless for a long period of time (over one year, or several times over the course of one year).⁹

Plans to end homelessness across Canada tend to focus first on ending chronic homelessness. This is the case in Ontario, where the provincial government has committed to ending chronic homelessness by 2025. This focus is appropriate; while a small minority of the homeless population, those who are chronically homeless tend to use a lot of social services. The logic is, by first helping these people, the “homeless serving system” will be much better able to help those who are less chronically homeless, as their support needs tend to be less complex.

While remaining committed to its goal of ending chronic homelessness (and being forthright about its progress towards that goal), the Government of Ontario must not lose sight of the bigger picture. In other words, focusing on the chronically homeless without also preventing people from becoming homeless because they cannot afford or access safe housing is akin to shoveling during a snow storm.

Prevention must also be a key part of any strategy to addressing and ultimately eliminating homelessness. Preventing people from falling into homelessness will require more affordable housing options. There are many ways to create more affordable housing, ranging from building government-owned housing to leveraging private developments to provide a portion of affordable units. One way or another, creating more safe and affordable housing must be a priority of any the Ontario government. A recent Ontario 360 “transition briefing” by Janet Mason sets out some useful ideas in this regard.¹⁰

⁹ Tim Aubry, Susan Farrell, Stephen Hwang, and Melissa Calhoun, “Identifying the Patterns of Emergency Shelter Stays of Single Individuals in Canadian Cities of Different Sizes,” *Housing Studies* 28(6), 2013: 910–927. Available at: https://ruor.uottawa.ca/bitstream/10393/24220/1/Aubry_Tim_2013_Identifying_the_patterns_of_emergency_shelter_stays.pdf.

¹⁰ Janet Mason, “Affordable housing – transition briefing,” Ontario 360 (University of Toronto School of Public Policy and Governance), April 4, 2018. Available at: <http://on360.ca/30-30/ontario-360-affordable-housing-transition-briefing/>.

2. ***Commit to implementation of the Truth and Reconciliation recommendations***

Indigenous people are over-represented among the homeless population in virtually all parts of the country, even cities where there are not a lot of indigenous people among the general population (such as Montreal).¹¹ Rather than seeing this over-representation as the result of poor choices, it is principally the result of a long history of government efforts to assimilate indigenous peoples and to erase their culture and traditions.

Recent research I conducted with my colleague Carey Doberstein (UBC Okanagan) found that public attitudes, including those of liberals and conservatives, are generous and sympathetic towards those who experience homelessness as a result of a mental illness. The same cannot be said of indigenous people experiencing homelessness, towards whom there is still prejudice and misunderstanding (research forthcoming).

These attitudes can lead to a number of challenges when it comes to ending homelessness among indigenous people, from prejudice on the part of landlords towards indigenous housing applicants, to difficulty gaining public support for homelessness programs and policies that are designed for indigenous peoples. The Government of Ontario should commit to the implementation of the Truth and Reconciliation Commission recommendations, particularly those related to education about Canada's past as a part of a broader project of reconciliation and those regarding reforms to the child welfare system.

3. ***Get out of the way***

There is intense innovation on the issue of homelessness happening at the local level across Canada and particularly in Ontario, given its devolution of housing policies to the municipal level. The province should facilitate this

¹¹ Eric Latimer, James Macgregor, Christian Méthot, and Alison Smith, *Dénombrement des personnes en situation d'itinérance à Montréal* le 24 mars 2015. Montréal, Québec: Ville de Montréal, 2015. Available at: https://ville.montreal.qc.ca/pls/portal/docs/PAGE/D_SOCIAL_FR/MEDIA/DOCUMENTS/RAPPORT_DENOMBREMENT_ITINERANCE_102015.PDF.

innovation and not throw up barriers to the creation of new best practices and new affordable housing.

One immediate, tangible change the government could make would be to remove restrictions around inclusionary zoning powers. Inclusionary zoning allows municipalities to require that new housing developments include a portion of affordable units, thus enabling local governments across Ontario to leverage hot housing markets to their benefit.

The current inclusionary zoning framework places serious limitations on a local government's ability to do this. It is a bit counterintuitive: having given local governments the responsibility for housing and homelessness, the province is preventing them from accessing key tools that would allow them to fulfill that mandate. The new Ontario government should revisit this policy, and other transfers of funding and decision-making to the local level such as the Community Homelessness Prevention Initiative, to ensure that local expertise and resources are maxed out in any efforts to respond to homelessness.

Alison Smith is an Assistant Professor of political science at the University of Toronto

ONTARIO 360 – AFFORDABLE HOUSING – TRANSITION BRIEFING

Affordable housing spending should be linked to clear and measurable outcomes

Issue

Despite significant recent and planned investments and policy innovations in Ontario as well as by the federal government and municipalities, the situation for affordable housing in the province continues to deteriorate. The proportion of low- and moderate-income households in Ontario living in unaffordable housing has increased by over 130,000 since 2011.¹ The incoming government must make progress on expanding access to affordable housing across the province.

Overview: The affordable housing file in Ontario

The Ontario government has talked about a province where “every person has an affordable, suitable, and adequate home.” It has launched programs and initiatives to make progress on this goal. The list is long – including its Poverty Reduction Strategy, its Long-Term Affordable Housing Strategy, its Fair Housing Plan, its inclusionary zoning policy, and a commitment to eliminate chronic homelessness by 2025.

These various provincial activities (including nearly \$1-billion per year in affordable housing spending by the Ministry of Municipal Affairs and Housing²) have made some progress on this file. But the needs remain significant and in fact continue to grow.

¹ CMHC and Statistics Canada, “Housing need stable in Canada, 1.7 million Canadian households affected, Government of Canada,” 2016 Census, November 15, 2017. Available at: <https://www.cmhc-schl.gc.ca/en/corp/nero/nere/2017/2017-11-15-0830.cfm>.

² Ministry of Municipal Affairs and Housing, Expenditure Estimates for the Ministry of Municipal Affairs/Expenditure Estimates for the Ministry of Housing (2017-18), Government of Ontario, Date unknown. Available at: <https://www.ontario.ca/page/expenditure-estimates-ministry-municipal-affairsexpenditure-estimates-ministry-housing-2017-18>.

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Why? This is not an overnight problem. The province's affordable housing challenges span decades and involve different policy choices by successive governments. One example: a substantial cut in provincial spending resulted in almost no public housing being built between 1996 and 2000 and very little deeply affordable housing since that time.

The focus since then has been the devolution of social housing to municipalities – including community-based local planning of housing and homelessness services. As an example, the *Housing Services Act* (2011) sets basic provincial policy directions while giving community-based service groups greater flexibility and control in the planning and delivery of housing and homelessness services including social housing administration.

The need for reform

The demands thus continue to grow. The result is fiscal pressure on municipalities, long waiting lists, and a homelessness crisis.

A 2016 survey by the Ontario Non-Profit Housing Association found that 171,360 Ontario households are on municipal waiting lists for subsidized housing. The typical wait time is four years.³

The homelessness picture is also bleak. The “crisis”, as it has rightly been called, escalates seemingly daily as we witnessed this past winter when several cities grappled with a lack of basic shelter capacity. In Toronto, for example, 7,000 emergency shelter beds are full every night. Plans to increase the number of available shelter beds to 10,000 will put Toronto on the same scale as New York and Los Angeles.

The situation is similar across Ontario. There were 310 shelters in the province in 2016. This is 30 less than in 2011. With about 12,000 people experiencing homelessness in Ontario each night, the federal government

³ Author unknown, 2016 Waiting List Final Results, Ontario Non-Profit Housing Association, 2017.

reports that shelters are operating at 90 per cent capacity. The cities are facing considerable fiscal pressures to keep up.⁴

How to move forward

So what is missing in the Ontario government's housing strategy? While we can debate whether the investments made by Ontario and its partners are simply too little and too late in the face of rising housing costs and a decades long underinvestment in affordable rental housing, a more immediate approach should look to the effectiveness of existing and newly planned investments.

Enough evidence is now available on which housing interventions actually work to inform a results-based approach to Ontario's housing investments. Ontario must put in place a housing strategy which combines the funding and policy levers at the provincial and federal levels with municipal delivery capacity to drive investment in proven housing strategies.

The province should propose to the federal government that the two levels of government combine their funding to invest together in a challenge-based approach. Ontario has made significant new funding commitments to affordable housing and supports in recent budgets. The National Housing Strategy is a 10-year, \$40 billion commitment. The money is allocated to broad priorities, such as a new national housing benefit; rather than develop increasingly detailed program criteria, these broad funds should be directed to a proposal driven, outcome-based strategy.

Under this model, the Ontario government would issue a proposal call to its municipal partners and flow new funding based on bids by municipal governments to achieve real measurable outcomes. These outcomes should not relate simply to numbers of affordable units created or to households served, but to measurable improvements in outcomes: fewer people in core housing need, fewer people on the waiting lists for social housing and a

⁴ Elise von Scheel, "Homeless shelter demand rising in Ontario as facilities close," CBC.ca, September 25, 2017. Available at: www.cbc.ca/news/canada/ottawa/homeless-shelter-ontario-closures-1.4299243.

reduction and ultimately elimination of homelessness.

As part of their funding proposals, municipalities would be required to commit their own resources of land, accelerated approvals and policy innovation to achieve these results. The province will bring to this its own investments in capital for new-build and repairs, long-term commitments to provide rental assistance to low-income households, and housing supports to assist vulnerable tenants to maintain their housing.

Under this approach, funds would not be allocated to municipalities based on a pre-determined share of need or population. Rather municipalities would receive funding based on the numbers and outcomes they commit to achieving. This will focus investment on the most effective strategies, and force investment in the most affordable housing. It will also force municipalities to look at the range of their policies which are now ineffective in addressing the problem – such as failed strategies to address the decline in affordable rental housing stock through conversions – and encourage them to make meaningful policy and funding changes. This type of shift is necessary to move to more effective and evidence-based investments which actually improve the situation for affordable rental housing in Ontario.

Janet Mason is a fellow at the University of Toronto's School of Public Policy and Governance and a former senior public servant in the Ontario government



HOUSING FIRST: **WHERE IS THE EVIDENCE?**

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John ROOK PhD

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Housing first – Where is the Evidence?

Jeannette Waegemakers Schiff, PhD & John Rook, PhD

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Canadian Homelessness
Research Network



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Housing first – Where is the Evidence?

Despite new federal and provincial government initiatives to assist with housing, in the last ten years the number of homeless persons continues to increase. With this increase a sizable number of sub-populations have emerged: families with children, people with mental illnesses, those with a primary substance use issue, immigrants and refugees, youth and seniors. The premise that most homeless people are without housing because of functional skill deficits grew out of historical impressions that hobos of the Great Depression were all alcoholics and those thereafter came from the mental illness deinstitutionalization movement of the 1960s and 1970s. The ongoing move to community treatment saw many persons who had become reliant on the care of others thrust into the community without the financial and ancillary supports required for housing stability (Metraux, et al., 2010).

Because of the high prevalence of mental health and substance use issues in the homeless population (sometimes a cause of homelessness, but often a consequence of life on the streets), in the last twenty-five years, in most instances programs for people who are homeless modeled their re-housing programs after the format used for those with mental illness and addictions issues. The result was a “treatment before housing” approach across the spectrum of homeless service providers. In other words, people need to resolve their mental health and/or addictions issues before they can be ready for housing.

In the last ten years a radical transformation has occurred in the attitudes and practices guiding housing programs that provide emergency and long-term housing for homeless people. This shift evolved from linear or step-wise models of either coupling housing with treatment, or of requiring treatment prior to obtaining permanent housing (Treatment Continuum – TC) (Padgett, et al., 2006), to a priority placed on housing without treatment expectations (Brown, 2005). The latter approach has been labelled *housing first* (HF) and has rapidly acquired widespread adoption by communities with 10-year plans to end homelessness in Canada and the U.S. (e.g. Calgary, Toronto, Minneapolis, San Diego, New York) and by mental health service providers seeking housing stability for clients (Newman & Goldman, 2008).

Fuelled by some scientific evidence (Atherton & McNaughton Nicholls, 2008), and increasingly made popular by press and housing authorities developing “10 year plans” to eradicate homelessness, *housing first* has emerged as an increasingly popular approach to addressing homelessness. (The HF approach was embraced by all levels of government in Canada,

as evidenced by the *Streets to Homes* initiative in Toronto and the housing initiatives in Calgary). Despite the rapid uptake of this approach, there is the absence of “best practice” evidence to support this. “Best practice” is commonly understood to imply evidence-based techniques or interventions that have been demonstrated to work well with most persons and have the least potential for adverse results. To the extent that there was some, but not conclusive, evidence that HF was effective for those with mental illness and co-occurring mental illness, the Mental Health Commission of Canada (Mental Health Commission of Canada, 2010), introduced a large, multi-site study of HF in five Canadian cities (referred to as the At Home/Chez Soi project). This project is examining the approach in various political contexts and with differing target populations, thereby including the multi-cultural dimensions essential to Canadian adoption of this approach. Although early results are promising, conclusive answers will not be available for several years. In the interim, adoption of the HF approach is rapidly growing.

Speedy implementation of a new initiative is often fraught with issues of fidelity in replicating the model program in other locations (McGrew, et al., 1994). Our search uncovered three founding programs that can be considered *housing first* models. Because of their differences, we begin this review with a brief description of each and then turn our attention to the evidence base for *housing first* as reported in the academic literature. Because of the limited documentation of this approach, we will further the understanding of *housing first* by reviewing government documents and reports that provide an insight on this evolution and its current public acceptance. Finally, we critically examine the assumptions and gaps in the literature that require further evidence-based data.

Three Founding Programs

It is widely assumed that *housing first* was developed as an approach to rapidly house absolute homeless individuals with mental health and addictions issues who were served by the *Pathways to Housing* program in New York City (Tsemberis & Elfenbein, 1999; McNaughton Nicholls & Atherton, 2011). Begun in 1992, the *Pathways to Housing* model has been highly successful in housing and maintaining housing for dually diagnosed individuals with a history of homelessness (Tsemberis, et al., 2004b). Well before this, in 1977 a community organization, *Houselink* (Adair et al., 2007; Houselink, 2011b), founded a housing program for those discharged from psychiatric facilities in Toronto. It was and continues to be, based on the values that housing is a right and individuals have a right to participate in the operation of the organization as partners. This is the earliest record, in our review, of housing as a right for those experiencing deinstitutionalization. *Houselink* has promoted housing without treatment requirements for over 30 years.

The term, *housing first*, had its origins in another highly successful program, *Beyond Shelter*, which originated in 1988 in Los Angeles. It coined the term *housing first* for a program dedicated to the rapid re-housing of homeless families by minimizing the use of shelter and transitional housing in order to quickly place families into permanent housing. Although using the same terminology, these three agencies have had different views of what constitutes *housing first*.

The *Houselink* and *Pathways to Housing* programs emerged exclusively out of the mental health and concurrent disorders service field. We start with the oldest, in Toronto. *Houselink* (Houselink, 2011a) has been providing an array of housing options for those with a history of mental illness with and without substance use issues, in a variety of settings: scattered site apartments, agency-owned apartment buildings, and congregate care in varying levels of intensity. All tenants are covered under the Landlord and Tenant Act of Ontario. There is no requirement for treatment (mental health) adherence or abstinence from substance use. It has a recovery-oriented program philosophy and thus the support services provided are mutually agree on. However, there is no Assertive Community

Treatment team to provide 24/7 service (Carpinello, et al., 2002). Unlike the programs in California and New York, *Houselink* provides an array of support, social and rehabilitation services to all tenants. Housing is available to single individuals as well as couples and families with dependent children. It also engages members who are not housing tenants. Finally, it provides work opportunities for members within the organization. In this context, its organizing philosophy is more in line with operating principles of the International Center for Clubhouse Development (ICCD, 2012), which focus on recovery and encourage member participation as colleagues in organizational operations.

Both the New York and Toronto models of *housing first* programs provide an array of support services to persons with histories of mental illness and neither preclude individuals who have had criminal justice system involvement. In Toronto, the recently established (2009) unified intake system for housing for persons with histories of mental illness now provides a centralized intake process and individuals seeking housing in the *Houselink* program must specify their preference, as they cannot apply directly to the organization. Unlike *Pathways to Housing*, which provides individual accommodation, *Houselink* owns most of its units and has both single and shared units. It is the shared units that most often become available, as they are least preferable for tenants (Nelson, et al., 2003). While the *Pathways to Housing* model is limited by the number of housing support vouchers allocated, *Houselink* is limited by units available in the organization. Of these three organizations, *Houselink* is the only one to stress the now well-accepted importance of community, culture, consumer participation and recovery in its organizational principles.

At *Pathways to Housing* (New York), prospective tenants (as they are termed), are identified by two intake streams: first, by program outreach workers who approach those sleeping rough and second, by hospital discharge staff seeking rapid accommodation for dually diagnosed individuals scheduled to be discharged from hospital (D. Padgett et al., 2006). Prospective clients are engaged in conversations around individualized housing and, when an agreement is made, the prospective tenant is shown available accommodation, usually a bachelor

style or one-bedroom apartment in a place acceptable to them, at scattered-site locations. During this negotiation phase the prospective tenant either remains un-housed and unsheltered, or in hospital or municipal shelter. When funding (usually a Section 8 voucher, which acts as a rental subsidy to the landlord) is secured, the process of obtaining basic furniture and household equipment is initiated along with establishment of move-in plans. While individuals are not required to be clean and sober, or in compliance with mental health treatment, two conditions are placed on tenants. The agency assumes representative payee status for the tenant so that rent and utilities are paid before a person receives the monthly allotted living subsidy. The agency also requires that tenants accept contact from a member of the organization's Assertive Community Treatment (ACT) team on a regularly scheduled basis. Involvement of the ACT team, which is available 24/7, is meant to assure that tenants do not become completely isolated, decompensate (inability to maintain defence mechanisms in response to stressors) to the point of requiring hospitalization, become destructive to the point of jeopardizing the rental housing, and are not left without resource contacts for additional supports. The ACT team is also intended to provide quiet encouragement to those who wish to enter or maintain mental health and/or substance abuse treatment. If there is a housing failure (loss) the support worker will continue to engage the client in order to obtain new accommodation as quickly as possible. There are no time-limits on the support services delivered by the ACT team so that discharge is initiated only by a client/member. Only single men and women are accommodated and *Pathways to Housing* has no couples or family oriented program or accommodation.

Beyond Shelter (Beyond Shelter, 2011), in Los Angeles, which coined the term "*housing first*," takes a somewhat different approach to housing, probably because its target population, homeless families who have dependent children, need immediate shelter and cannot be left in "rough sleeping" arrangements, or sequestered in hospital wards. Thus the program provides (Appendix Three) immediate shelter in an emergency family hostel, but actively seeks a suitable placement so that families can be permanently housed as quickly as possible (rapid re-housing). Housing may be available in several different forms: as scattered site apartments and multi-unit apartment buildings with various types of landlord-tenant and

rent subsidy arrangements. A service plan is developed and support services are provided for six to twelve months. Housing needs and preferences are taken into account and there is no indication if there are pre-requisites for sobriety. Services may be provided on site or off-site depending on circumstances. Thus this model is time-limited in its active post-housing intervention. However, by nature of the clientele served, fewer families are expected to have the functional deficits of those with serious mental illness and substance use issues. It is a model that has achieved significant success in housing families and has been recognized by the United Nations as one of "100 international best practices" in housing and re-settlement. A replication of this model was implemented by the Peel Family Shelter Program, a special Salvation Army initiative, in Mississauga, ON in 2002.



Fig.1 Peel Family Shelter

In the Peel Family Shelter, services include: case management for parents and children, assistance in securing housing and employment, children's drop in program, child and youth programs, life skills classes, spiritual support, and ongoing access to community resources. There is an on-site office for Ontario Works (public assistance) to provide assistance to families with their financial needs. The staff team includes Case Workers, Resource Workers, Front Line Workers, Kitchen Coordinator, Child and Youth Worker, ECE Worker and Management. Volunteers, students and community groups continue to provide a helping hand with a multitude of tasks. Like its California counterpart, this shelter aims to provide a complete needs- assessment, access to support services and permanent housing. In Los Angeles, this process takes one to six months. In Mississauga, the aim is to provide permanent residence within thirty days. Thereafter ongoing support is provided for at least one year and service recipients are welcome to stop by the Shelter for additional support. There are reports of other Canadian organizations

that have many elements of a *housing first* approach, such as the *Phoenix Program* in Regina and *Streets to Homes* in Toronto. However, none have been the subject of research studies.

The map below shows the disparate locations and dates of origins of the three main programs that were originally founded on HF principles. From the disparate locations it appears possible that the individual programs may not have known of each other's existence but that each was responding to increasingly valued consumer issues: empowerment, the right to self-determination, recovery (in mental health and addictions) and the right to determine personal living style and location, in so far as feasible. The proliferation of the three program models was also affected by the leadership styles within the organizations and the political climate that favoured research in housing (related to those with a mental illness or dual diagnosis). Research funding in the U.S. also tended to favour mental health issues, while both mental health and housing programs were not recipients of much funding in Canada. Thus the likelihood of data supporting the programs was more likely to occur in the mental illness and substance abusing service provider community in New York.

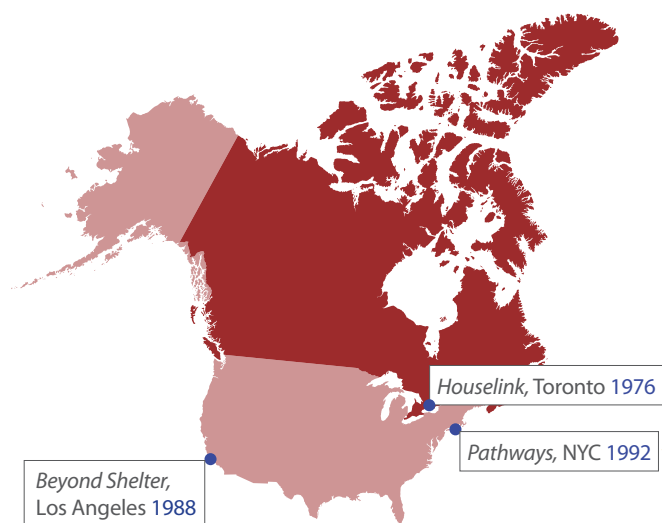


Fig.2 Location and start dates of original *Housing first* programs

Program Fidelity Standards

There are some basic principles which guide all three programs. They do not require demonstration of housing readiness (although tenants cannot be incapacitated by psychiatric symptoms to preclude independent living). Housing location and type is by choice to the extent of local availability (including affordability). Support services, ranging from case management to assertive community treatment are available, but not required, for all. There are no requirements for absolute sobriety but a harm reduction approach is advocated. That is, tenants will not lose housing because of substance use. In addition, *Houselink* stresses the existence of a supportive community of tenants and includes families with dependent children as well as couples in the housing program. Both *Houselink* and *Beyond Shelter* house persons in an array of accommodations, including designated apartment buildings as well as scatter site units, agency owned and operated as well as by contract with private landlords. *Pathways to Housing* uses only a scatter-site approach of single tenant apartment units and does not own any of its own housing. The other two founding programs use a variety of housing options, including owning some of their own buildings. Of the three founding programs, only *Pathways to Housing* has worked with investigators to define program standards specific to the uniqueness of its program (Tsemberis, 2011). In preliminary work, these have been identified as “no housing readiness requirements, individualized services, a harm reduction approach, participants choosing the type, frequency and sequence of services, and housing that is scatter-site and otherwise available to persons without disabilities” (ibid). Since the other two pioneering agencies have used a variety of housing options, we question if the scatter-site model is essential to a *housing first* approach, or if it should be an option among several. We also note that the intentional communities philosophy used by *Houselink* may be an important component to a supportive environment for some persons seeking to deal with challenging disabilities. Within the context of the evidence-based practice research considered below, we note that fidelity to *housing first* principles has not been explicitly articulated and impacts the generalizability of all results.

Evidence-based practice

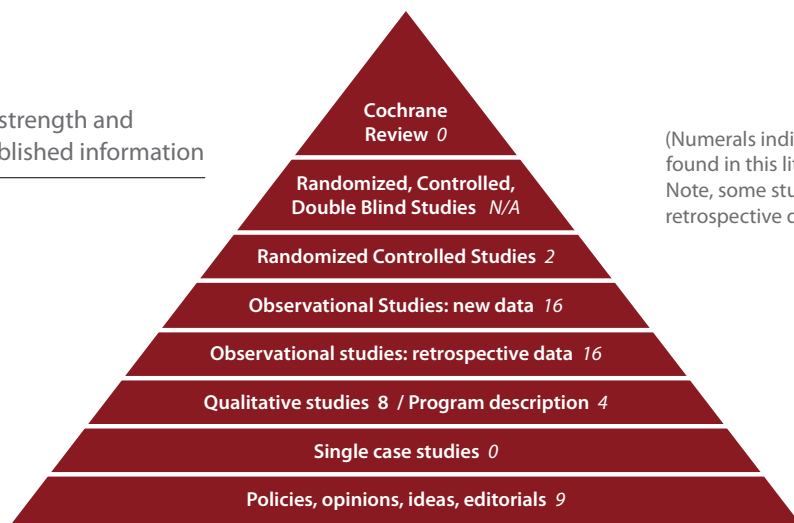
Given the plethora of information, including research studies of various kinds (quantitative and qualitative, evaluative and cost-benefit), there is a pressing need to have an established ranking of the validity, reliability and generalizability of results across different groups of people and contexts. For validation, results must be replicated across at least a similar group of persons, but by a separate (independent) research team. Studies with the most rigorous scientific standards constitute the hallmarks from which the valid “best practices” are determined. This process allows service providers to determine the effectiveness and efficacy of new interventions. It also provides opportunities to identify groups for whom it is not proven to be effective or instances where it may result in further harm. Psychotropic drugs are an excellent example of where the specificity of effect is determined by age and in many instances limited to certain age groups, such as not for children or adolescents. Shumway and Sentell (2004) provide a succinct description of evidence-based practice that is used in the behavioural science field.

There are objective standards for evaluating the scientific rigor of research and the resulting quality of evidence for the efficacy and effectiveness of interventions. Various hierarchical systems exist for evaluating the quality of evidence. In both efficacy and effectiveness research, large, well-controlled randomized trials provide the highest-quality evidence, followed by smaller randomized trials, nonrandomized group comparisons, systematic observational studies, and unsystematic, observational studies. Overall,

research designs that minimize bias and maximize generalizability yield the highest-quality evidence. Effectiveness studies also emphasize relevance to routine practice settings. Evidence from studies that reflect the characteristics of practice settings, such as public-sector and managed care settings, will be more persuasive than studies from purely academic research settings. Evidence of treatment effectiveness in diverse client populations—reflecting heterogeneity in age, gender, culture, social class, psychiatric diagnosis, and health status—increases both the relevance and the generalizability of published evidence. (p650)

A pyramid, which is often used to rank studies and reports in medical and behavioural sciences, includes all information from animal studies to systematic reviews of the literature. In the social and behavioural sciences, animal studies are not typically included in this pyramid and instead concentrate on the sequential steps from ideas and opinions to randomized, controlled studies using human subjects. Double blind studies are not possible with psychosocial interventions because there is no practical way to mask those in placebo and clinical groups from the individuals providing the interventions. For purposes of this evidence-based practice review we examined all articles in the academic and grey (government and research institute) literature. Because of the paucity of literature we did not rank anything according to the prestige of the journal in which the study or opinion was published. The following pyramid delineates the number of each type of published study in this review.

Fig.2 Pyramid of the strength and reliability of published information



(Numerals indicate the number of articles found in this literature review on HF. Note, some studies used new and retrospective data)

Housing first: what the literature indicates.

While there are three different program models, each with unique characteristics, all share a common philosophy of providing housing without treatment or abstinence requirements. All adhere to a consumer preference model, in so far as is logistically and financially possible. Stabilization, return to and integration in the community are valued and programs targeted towards those with mental health issues have a history of employing program tenants (mental health consumers) in staff positions where appropriate. None are based on a peer-run housing program. All three programs have engaged in evaluation of outcomes and program efficiency in order to document their effectiveness. Despite a long history of consumer oriented-housing by these three agencies, *Pathways to Housing*, the youngest of the three, is the only one that has engaged in research to document its efficacy by means of a large, multi-year randomly assigned research design – a gold standard of best practices in a field where the ultimate – a double blind study – is not feasible.

The housing and homeless literature has become vast and all-encompassing, with considerable contributions in the last ten years. In order to limit this search to those items concerned with a housing or re-housing strategy that address immediate need rather than treatment before housing, the search strategy started with a designation of the term *housing first* and was expanded to include the term “rapid re-housing.” Additional descriptors were derived from the most widely accepted sub-groups of homeless individuals, by age: youth, adults, seniors; by demographic descriptors: families, Aboriginal people, immigrants and refugees; and by psycho-social/behavioural issues: mental health, addictions, domestic violence.

There has been a proliferation of information and debate about housing for homeless persons in the last decade. A quick look at all citations for *housing first* and homeless(ness), including magazines and newspapers, found 1,701,978 results for the years 2000 to 2011. When the search was narrowed to homeless families the results decreased to 1,648. A look at items using the term “rapid re-housing” brought up 684 citations, many of them describing local initiatives that have developed over the last three years. These numbers are a reflection of the tremendous public

interest that has been brought to the issue of homelessness and re-housing, but do not reflect the evidence for effective or best practice programs and interventions. When we limited the search to items in the academic literature a different picture emerges.

An extensive search of the academic and grey literature, including government documents and material from organizations that have a mandate to work with homeless persons, found 121 unduplicated references. The terms “homeless,” “*housing first*,” and “rapid re-housing,” in combination with one or more of the following: mentally ill, substance users/abusers, addiction, families, youth and justice/criminal justice were searched in the following data bases: PsycINFO, Social Work Abstracts, Abstracts in Social Gerontology, AARP Ageline Social Services Abstracts, Sociological Abstracts, SocINDEX, Medline, Family Studies Abstracts, Family & Society Studies Worldwide, World Wide Science, and Google Scholar. Of the citations, 84 originated in the academic and grey (government reports) literature and in addition, there were numerous magazine and newspaper articles (Eggerston, 2007; Burke, 2011; Fitzpatrick, 2004) as well as multiple housing websites that detail *housing first* approaches (National Alliance to End Homelessness, 2011; United States Interagency Council on Homelessness, 2006; United States Department of Housing and Urban Development, 2011).

Examining only academic journals that dealt with re-housing and *housing first* approaches narrowed the field to 66 articles. Of these, 6 dealt with housing policy, and the other 60 came from health, mental and behavioural health and psychology and public health fields. The major themes that emerged from this group included housing stability, satisfaction, choice versus coercion, changes in mental and physical health, issues of sobriety, reduced substance use and harm reduction, cost effectiveness, and quality of life. Despite the fact that a HF approach presents itself as housing before treatment, all of the articles reviewed include a focus on what would be considered treatment outcomes: decreased mental health symptoms, hospitalization, decreased substance abuse, and harm reduction. This puts into question whether HF programs are indeed about

housing separate from treatment, or if the audience for these studies expects to see improved mental health outcomes in all housing programs.

Of these, nine reviewed housing policy in the light of a *housing first* approach, typically including the *Pathways to Housing* model as a springboard for contrast and further discussion. In the nine policy-related papers, four focused specifically on policy reformation to move from a treatment first model of community integration to an immediate housing and subsequent support services format (Robbins & Monahan, 2009; van Wormer & van Wormer, 2009; Tsemberis & Elfenbein, 1999; Crane, Warnes, & Fu, 2006). Two articles examined British and Canadian (Toronto) approaches (Falvo, 2009; McNaughton Nicholls & Atherton, 2011), and one advocated a move from policy initiatives driven by political forces to one mitigated by scientific evidence (Stanhope & Dunn, 2011).

The cost-effectiveness of a HF approach is mentioned in many of these research and policy reports. A specific analysis of the relative costs compared to a continuum of care approach is explored by the *Pathways to Housing* program (Gulcur, et al., 2003; Tsemberis et al., 2004b) as well as the REACH program in San Diego, which looks at the cost effectiveness of a *housing first* approach that uses “Full Service Partnerships of housing and support services” (Gilmer, et al., 2010; Gilmer, et al., 2009). These reports clearly show a cost savings – although not necessarily large – in the HF approach. The Gulcur et al., (2003) cost analysis of *Pathways to Housing* versus treatment-as-usual showed a significant positive difference for the HF model. However, this cost analysis was basic in that it failed to examine the multiple treatment and societal costs associated with being housed or homeless (the control and experimental groups). Thus the literature on cost effectiveness shows, at this time, no significantly greater costs associated with the increased deployment of wrap-around or ACT team services in a HF approach. The longer-term savings across multiple service sectors, including health, housing and

justice systems has not been systematically analyzed.

Internationally, the Australian government is moving towards a *housing first* philosophy (Johnson, 2011), but as yet there are no research results that examine this in the context of that political climate. The European Collaborative on homelessness (Feantsa), has explored *housing first* as a strategy within various national contexts (Atherton & McNaughton Nicholls, 2008), but has also not produced any quantitative research results (McNaughton Nicholls & Atherton, 2011). One report from Finland (Tainio & Fredriksson, 2009) documents the introduction of a *housing first* approach but cautions that the evidence of applicability across all sub-sectors of the homeless population is not established. Thus the primary source of data on the efficacy and effectiveness of a HF approach has been presented by American researchers, primarily in major U.S. cities (urban areas). The majority of these quantitative American studies have relied on data from the *Pathways to Housing* research program in New York City (11 out of 17), or on multi-site studies that include *Pathways to Housing* as one of the programs (an additional 3).

The qualitative literature has become recognized as an important component to developing an understanding of the complexities of a psycho-social intervention such as housing. Thus the eight studies that look at housing in the context of lived experience do so by both examining recipient preferences and that of providers (Burlingham, et al., 2010; Schiff & Waagemakers Schiff, 2010). These reports also include a look at issues of fidelity to the Assertive Community Treatment program, a linchpin of the HF model (Matejkowski & Draine, 2009; Neumiller et al., 2009), HF as an approach for those with primary substance abuse issues (Padgett, et al., 2011; Padgett et al., 2006), provider reactions (Henwood, et al., 2011), and best practices (McGraw et al., 2010). The following chart breakdowns by primary focus the HF literature. Some articles focused on more than one issue or subject population so totals do not necessarily add up to the 35 that were reviewed. The items selected were classified as:

TABLE 1

Major Characteristics of <i>Housing first</i> Studies		
Type of study	No. of Studies	Studies Using Pathways to Housing Data
Quantitative studies of HF	17	11 (3 multi-site)
Qualitative Studies	8	4 (one multi-site)
Program descriptions	4	3
Program outcome	15	11
Policy review	4	N/A
Health outcomes	6	
Cost-effective studies	7	2
Population studied		
• Mentally ill/Psychiatric disabilities	22	
• Dual diagnosis	5	
• Substance Users	3	
• Mixed Population	4	
• Physically ill/disabled	3	
• Women	2	
• Providers	2	
• Single Adults	29	

Focus of *Housing first* Studies: Single Site, Single Adults

All of the HF studies found in the literature focus on single adults, the majority of whom are identified as having a mental illness, serious mental illness, with (dually diagnosed) or without a substance abuse problem. All these studies came from U.S. service providers in major metropolitan areas. There were no studies that addressed issues of diversity, ethnicity, and only one that looked at concerns of Aboriginal persons (Schiff & Waegemakers Schiff, 2010). In Canada, and elsewhere, the homeless sector is considered to consist of a number of sub-groups: youth, families, seniors, Aboriginal people, immigrants and refugees, those with a mental illness with and without a substance abuse problem, and substance abusers. At the present time no research literature addresses these groups and whether or not HF will be appropriate for them. Within a Canadian context, the acceptability and accessibility of

housing that is culturally and ethnically suitable, as well as housing that is appropriate for families, youth and seniors is of utmost importance (Waegemakers Schiff, et al., 2010). The Mental Health Commission of Canada has a multi-city study of HF programs for the mentally ill and dually diagnosed (Mental Health Commission of Canada, 2010) that takes ethnicity, age and other distinguishing characteristics into account. However, the results of this project are several years away from publication. In the interim, the only study that examines HF in the Canadian context is one prepared for the *Streets to Homes* (S2S) program in Toronto (Falvo, 2009). The S2S report relies on key informant interviews and post program enrolment data to support the program's claims of success. Without statistical evidence, this information falls into the realm of "professional opinion" rather than a robust quantitative study.

Multi-Site Studies

Multi-site studies have the advantage of being able to compare interventions across different geographic and political landscapes and discern if essential characteristics of a program can be easily transported. However, they have the challenge of meeting the standards of scientific rigour across different service units, sometimes subject to differing operational rules established by state, province, and local authorities. The four multi-site studies that include HF as an intervention all come from one collaborative and examine different outcome aspects. Thus they lack true independence of data that would allow for a robust comparison of these studies.

In the Collaborative Initiative to End Chronic Homelessness (CICH), eleven communities were selected by the U.S. Departments of Housing and Urban Development, Health and Human Services, and Veterans Affairs to provide housing, mental health and primary health services in a collaborative fashion to persons deemed chronically homeless. The CICH includes Chattanooga, Tennessee; Chicago, Illinois; Columbus, Ohio; Denver, Colorado; Fort Lauderdale, Florida; Los Angeles, Martinez and San Francisco, California; New York City, New York; Philadelphia, Pennsylvania; and Portland, Oregon (Tsai, et al., 2010). Some of the communities use HF, but refer to it as independent *housing first* (IHF) in this literature, and others provide “residential/transitional treatment first.” The specifics of these plans vary across communities (Mares & Rosenheck, 2009), but each plan includes strategies for providing permanent housing, linking comprehensive supports with housing, increasing the use of mainstream services, integrating system and services, and ensuring the sustainability of these efforts (Tsai et al., 2010).

There are three quantitative, and one qualitative, studies in the multi-site reports produced from the CICH that examine HF and supportive housing and include *Pathways to Housing* as a participating site. The CICH provided funding to support implementation of and research on best practices that support clients in their housing. The sites included in the report on this large multi-site initiative (McGraw et al., 2010) examined the use of ACT and MI (Motivational Interviewing) across sites using a retrospective qualitative analysis of all CICH documents. The

main findings indicate that lack of understanding of the model, failure to use all model elements, including incomplete and inadequately trained teams, as well as interagency teams and competing mandates from government funders interfered with implementation.

The first comparison of HF in three programs, San Diego (REACH program), Seattle (DESC) and NYC (PTH) - all part of the 11 site CICH study -, used a convenience sample of 80 participants across the three sites (Pearson, et al., 2009) and obtained some of the client data retrospectively and through administrative and case manager report analysis. The study reports an 84% housing retention rate, which is in keeping with previous retention data from the *Pathways to Housing* program and suggests that the model works to keep people sheltered. The small samples (25, 26 and 29) respectively across these sites and the lack of longitudinal follow-up (24 months) precludes robust analysis of the results and does not allow for predictability of housing stability in the HF model.

A second report in the CICH initiative used the same HF sites as above (REACH, DESC and PTH) and compared client satisfaction and non-coercion, two key features of the HF approach, in two supportive housing programs, Project Renewal and The Bridge, both located in NYC (Robbins & Monahan, 2009). This study also used convenience samples of residents, and while the total study sample size was sufficiently large (N=139), the number of participants at each site ranged from 17 to 47 with only one site having more than 30 participants. Thus a robust statistical analysis was not possible. Given these limitations, the results do indicate that the HF model was positively correlated with non-coercion, freedom of choice regarding treatment for mental health or substance misuse and a harm reduction tolerance to substance use. However, the two models were not significantly different in housing satisfaction for participants.

The study by Tsai and colleagues (Tsai et al., 2010) examined whether IHF or residential treatment first (RTF) models were more successful in housing and maintaining housing for this cohort and found the IHF clients reported more days in their own housing, more housing choice and less days incarcerated. There were no differences in clinical (symptom) or community

integration outcomes. The study was limited by the lack of control over the time spent in residential/transitional housing (which varied from less than two weeks to over three months), the problem of attrition occurring in the study group after 24 months, and the relatively low (59.1%) rate of housing recipients willing to participate in the study. Without a control group at each site, there is the potential of large variability in the reported results.

Scientific strength of the quantitative studies

The 18 studies that used quantitative data included 11 articles that were based on New York City area participants in PTH programs, two in California, one in Illinois, and four that had data from multiple sites. The over-reliance in the literature on data coming from the *Pathways to Housing* program can readily be seen in the following breakdown. All of the NYC articles used the *Pathways to Housing* as one, or the sole, unit of investigation. Eleven articles stem directly from *Pathways to Housing* data. Two introduce the program and provide outcome data to support a HF approach. Seven use the same data set, the original NY Housing Study, to examine various parameters of the outcome. Three of the four multi-site studies include *Pathways to Housing* as a participating program. While the *Pathways to Housing* data has participant numbers to produce reliably significant results, the multi-site studies may allow for program comparisons across the country.

The most rigorous of the studies reviewed is the *Pathways to Housing* program's original controlled study with random assignment into control and experimental groups (Tsemberis, et al., 2004a). This work examined housing satisfaction, consumer choice, housing retention, substance use, treatment utilization and psychiatric symptoms over 24 months in 225 individuals randomly assigned to either a HF or a "treatment as usual" group. The results indicate significant positive change in all but the substance abuse area, and most importantly showed that dually diagnosed, hard to place consumers, would retain housing most of the time (80%) over two years (Tsemberis et al., 2004a; Tsemberis, et al., 2003). The research protocols were well established and the robust significance of the findings was quickly disseminated. This also led to an additional six articles using the same data set to report on a variety of different

outcomes, including cost outcomes (Gulcur et al., 2003), substance use and justice system involvement (D. Padgett et al., 2006), community integration (Gulcur, et al., 2007), and delivery issues such as adopting best practices (Greenwood, et al., 2005), using full-service partnerships (Fischer, et al., 2008) and research issues such as adopting best practices (Greenwood et al., 2005) maximizing follow-up (Stefancic, et al., 2004) and assuring treatment fidelity (Tsemberis, et al., 2007).

Beyond the data from the original PTH program, there has also been several articles that examine the *Pathways to Housing* model in a suburban setting (New York City area) looking at long-term shelter users (Stefancic & Tsemberis, 2007) and a comparison of HF and treatment as usual persons (Fischer et al., 2008). The first study confirmed that long-term shelter users can be successfully housed, but that adherence to the program model of separation of housing and clinical issues was important. The program used a *Pathways to Housing* satellite office as one of the service providers, a county-based HF unit and a control group. Although this study attempted to use random assignment, it was unable to control for this through two cohorts of clients entering the program. In addition, lack of demographic data on the second cohort made it difficult to describe many participants. Finally, it would be a stretch to consider the sections of the county included in the study as "suburban" in that many have more city than suburb characteristics and the wealthier areas of the county were not included in the study. The study examining the court system in the Bronx (Fischer et al., 2008) also used a *Pathways to Housing* cohort to examine whether sheltered homeless persons were more or less likely to commit a crime, either violent or non-violent. This study used the original *Pathways to Housing* research data to examine criminal behaviour in sheltered and unsheltered homeless individuals and found a relationship between severity of psychotic symptoms and non-violent criminal behaviour, but did not find that HF immediately reduced criminal activity. Since the study used self-reporting on criminal activity it is difficult to establish if any sub-group in this cohort was more likely to under-report such activity. Regardless of research limitations, it does not appear that HF directly impacts criminal behaviour except for perhaps a small, psychiatrically unstable sub-group.

Outside of the New York area studies, two other single site projects examined aspects of a HF approach. San Diego County's project

REACH, which is one of the 11 city CICH sites, presents outcomes of a full-service partnership (FSP) program where individuals are offered housing and a complete array of integrated services. Program results (T. P. Gilmer et al., 2009) show a sharp decline in mean days spent homeless, use of emergency room, inpatient and justice system services. Although mental health service usage increased, along with increasing costs, this engagement is a benefit, rather than net expense, and was factored into the conclusion, which purported that the full-service, HF approach is cost-effective. A second control-group (Gilmer et al., 2010) examination of the FSP program again showed cost-effectiveness and also indicated that FSP clients reported a greater life satisfaction than the control group.

A recent study used a single site program to conduct a blind, randomized trial in Chicago, under the auspices of the Housing for Health Partnership. The program provides housing and case management for homeless people with HIV (Buchanan, et al., 2009). Unlike HF programs, it required sobriety or treatment for substance abuse before housing. We mention it here because the result of immediate housing for this very vulnerable group produced dramatic improvements in health and HIV status and may thus be a practical housing (almost first) option for this high risk group.

The Qualitative Studies

Qualitative studies may enhance the ability to understand the multi-faceted aspects of housing homeless persons. In light of the lack of outcome evidence, they are unable to determine “best practices.” To the extent that they provide indicators of important ancillary issues, such as provider views of housing and the acceptable neighbourhood characteristics, they can inform the implementation of programs in greater specificity. Thus we have included these in the review of the literature.

Eight qualitative studies examined some of the facets involved with a *housing first* approach. ACT teams are considered essential components of a HF approach and three studies looked at their implementation (Neumiller et al., 2009), fidelity (Matejkowski & Draine, 2009) and inclusion as best practices (McGraw et al., 2010) in HF programs and compared them to intensive case management (Buchanan et al., 2009) and motivational

interviewing (McGraw et al., 2010). Consistent conclusions across studies was that the ACT team, implemented according to ACT fidelity standards, is essential to stability in housing for the chronically mentally ill who have had long periods of homelessness. The inconsistency of implementation of all of the components of a *Pathways to Housing* model has led to the development of HF standards by P2H. However, these have not yet been tested or promulgated (private conversation) (Canadian Mental Health Association, 2004).

The meaning of “home” (D. K. Padgett, 2007), and the needs and preferences, especially of women with substance abuse problems has also been explored within the context of HF philosophy (Schiff & Waegemakers Schiff, 2010; Burlingham et al., 2010). In all three of these studies, privacy, safety and security were highlighted as critical features of acceptable housing to persons with a mental illness or substance abuse problems. While the two studies that looked at women with substance abuse issues (Schiff & Waegemakers Schiff, 2010; Burlingham et al., 2010) were not equivocal about their need for housing without a treatment context in the early phase of sobriety, the study examining ontological security, which focussed on a sub-group of the P2H original study participants, supported the need for privacy and security in the context of a person’s own housing, thereby reinforcing the HF model. The experiences and attitudes of service providers in treatment first and *housing first* programs was explored through a series of interviews (Henwood, et al., 2011) with NYC providers. The authors note that paradoxically, the treatment first providers were more preoccupied with securing housing and the HF providers with securing treatment. This affirms the HF model but also supports the stance that the importance of treatment is not neglected in HF programs.

One report used a mixed qualitative and quantitative methodology to examine the neighbourhood and housing characteristics of persons in a HF program and a treatment first continuum (Yanos, et al., 2007). One half of the cohort in this study was drawn from the original *Pathways to Housing* study and consisted primarily of persons who had been continually housed for three or more years. The study lacks predictive value because of its small sample size (N= 44) and because participants may have self-selected housing type. No conclusions regarding community integration and housing type could be drawn.

The Canadian Context

As mentioned earlier, there have been no systematic studies of a *housing first* approach in Canada. At Home/Chez Soi, a major project sponsored by the Mental Health Commission of Canada (2010), promises to provide a five city analysis of *housing first* interventions that include attention to cultural and ethnic concerns and are framed in the Canadian context. Preliminary information from this large and complex study indicates that a HF approach is effective across a wide variety of geographical settings and with different homeless groups reflective of Canadian cultural and ethnic heterogeneity. While preliminary results show that HF approaches are effective, final data is needed before it is determined if HF applies across all the diverse populations studied. One promising aspect of this multi-site research program is the promise that it will help to explain how HF approaches may work with the various populations that are part of the initiative.

What is the evidence?

The apex of research findings usually consists of a rigorous review and analysis of quantitative research found typically in a Cochrane review. These reviews start by considering the number and quality of double-blind, randomly assigned studies and examine the methodological soundness of the study before accepting its conclusions. All conclusions from this “gold standard” of clinical trials are then assembled and conclusions drawn. A second phase would examine studies that have participants randomly assigned (see the pyramid model, p. 7). Observational studies and studies using retrospective data command sequentially less scientific soundness and receive proportionately less value in the overall review conclusions.

In the instance of best practices in *housing first*, there is a dearth of research that would qualify for a Cochrane analysis. A Cochrane Review of supported housing in 2007 (Chilvers, et al., 2007) failed to identify the *Pathways to Housing* program in its review process, perhaps because it failed to include all relevant databases that would cite this work. We include it because this study focuses on a specific supported housing program with

One limitation of all of the HF studies results from their focus on individuals with a mental illness or dual diagnosis, who are primarily single with no dependents. These studies ignore the complexities that families, single parent adults and multi-generational households present, and which may not address the efficacy of HF approaches for other homeless and high risk groups such as youth and seniors. The “*Streets to Homes*” housing initiative in Toronto uses a general *housing first* approach and has been acclaimed as a successful project. However, the project has not been independently reviewed, there is no refereed literature on its success and most of the data comes from a single report (Falvo, 2009) of program process and reported outcomes rather than rigorous research.

a special set of operational values. Thus the only study using randomized assignment of participants is the New York study of the *Pathways to Housing* program (Tsemberis, Rogers, et al., 2003; Tsemberis, et al., 2003). While a number of articles emerge from this initiative, all rely on the same data set and thus cannot be considered independent studies for purpose of validating the results. The three multi-site studies sponsored by CICH include the *Pathways to Housing* program as a comparison program and offer study sites from across the U.S. However, as mentioned above, they lack scientific soundness because of problems with sample size, use of retrospective data and lack of random assignment.

A comprehensive cost-benefit analysis includes a variety of costs associated with a specific intervention. Such cost include inpatient and community-based, mental health and addictions treatment, physical health, shelter and income, use of the justice system as well as emergency services of various sorts. Benefits include reduced use of support services, employment – and a reduction of income transfer entitlements, among others. In a

well conducted study there are also actuarial efforts to quantify increased health, social contact and quality of life. Studies that examine only costs associated with different interventions fall far short of a true comparison. (Jones et al., 2003)

The cost analysis articles from San Diego (Buchanan et al., 2009; Gilmer et al., 2009), provide an analysis of basic cost of mental health and justice system services, but not benefits of this intervention and thus do not meet the hallmark of a rigorous review of the financial implications of the interventions. The Denver *Housing first* Collaborative Cost Benefit Analysis & Program Outcomes Report (Perlman & Parvensky, 2006) provides only analysis of the health and emergency service records of participants. Although it reports a significant savings in emergency and health service utilization, this is still an incomplete picture of all resources needed and used in this HF initiative. The same lack of full methodological rigour can be ascribed to the *Pathways to Housing* cost analysis (Gulcur et al., 2003). While they show that the HF approach is not significantly more expensive than housing through the continuum of care,

these studies underestimate the benefits of the additional treatment interventions (which make up most of the increased cost) on HF participants.

The evidence, to date, comes primarily from governmental agencies and non-profit organizations, which have adopted a HF approach to rapid re-housing of hard to place individuals. These communities include Toronto (Street to Homes), the Calgary Homeless Foundation, the Alex Community Health Centre *Pathways to Housing* program (Calgary), the five cities involved in the Mental Health Commission of Canada national housing study which uses the *Pathways to Housing* models, modified for a Canadian context. In the U. S., they include the eleven cities in the CICH studies, Minneapolis, Washington, Portland, and NYC. In Europe, HF has been implemented in Dublin (Ireland) and Stockholm (Sweden), among others. This recognition comes with the acceptance that even when additional costs for supports and extra services are factored in, HF is an effective model for addressing homelessness even in a chronically unsheltered population.

Conclusions

In this report, it is immediately obvious that the literature review on *housing first* programs features the New York *Pathways to Housing* programs. With relatively sparse external scientific evidence or research on the model, it is nonetheless supported by the US department of Housing and Urban Affairs (HUD) and has been declared a “best practice” by the United States Interagency Council on Homelessness (USICH).

A brief overview of the literature shows the following: there are only eighteen quantitative studies, eleven of which use data from two *Pathways to Housing* studies. The first of these is a rigorous, randomly controlled, longitudinal (4 year) study of 225 individuals with a diagnosis of a serious mental illness along with concurrent substance abuse. Robust results strongly support a ‘housing before treatment and independent of treatment’ (*housing first*) approach. The second study, which was at a suburban New York City location, examined a population of chronic shelter users who were housed through one of two

HF oriented programs or “treatment as usual”, which entailed sobriety services before permanent housing. This study also documents that the HF model was highly effective (68% to 80% housing retention depending on the HF program provider), but that implementation of the original model resulted in higher compliance. The second study was less rigorous than the first in that demographic data was only available for a first cohort and recruitment issues led to an unregulated additional group of participants. In both studies there is reason to speculate that the service providers knowledge of their participation in a major research study may have resulted in their greater attention to tracking and keeping study participants housed.

Pathways to Housing also participated as one of 11 sites in four reports of a multi-site HF research project. Each of the three quantitative reports examines one aspect of the HF strategy. Results are limited as they are reported after 24 months, as further results at 48 months would be more definitive in housing

retention. Because the number of participants at each site was small, robust analysis is not possible. The studies also suffer from lack of consistency in participant selection and program delivery (Pearson et al., 2009; Robbins & Monahan, 2009; Tsai et al., 2010). While they report favourable results for a HF approach, the weakness of the methodology makes these reports less than robust. A fourth report offers a qualitative methodology that looks at the impact of ACT and MI services on implementing these programs. While the title refers to “best practices” it is ambiguous about whether this implies a HF approach or the ACT and MI treatment approaches (which are elsewhere considered best practices on their own). While suggestive of what impedes program effectiveness, within the definition of best practice research, it does not contribute to the robustness of the HF research.

There are seven journal articles that look at costs and these focus for the most part on the health and justice systems. Seven qualitative studies examine the needs and preferences of clients as well as provider views on *Housing first*. There are also four program descriptions, three of which are modeled on the *Pathways to Housing* program. There is however no data presented. Double blind studies are non-existent.

Until 2008, most HF research, including outcome studies and program evaluations, were conducted by Sam Tsemberis, the founder of the New York *Pathways to Housing* program. Since 2007 there have been relatively few external program evaluations and no double blind studies. One of the earliest external evaluations looked at the *Pathways to Housing* program and two others, which were selected for their use of the *housing first* model and because they had enough intakes for the data to be significant.¹ Before 2007 there were several cost benefit analyses completed² and there have been several since. In a report from Seattle Washington,³ savings were significant when

people were housed even if they were allowed to consume alcohol. There are numerous cities which show a decrease in shelter bed occupancy and this is attributed to *housing first* policies.⁴

Given the paucity of highly controlled outcome studies, we examined the process whereby HF had so rapidly become accepted as a “best practice.” Declaring the *Housing first* model a best practice appears to be a political decision rather than a scientific research decision. In 2003 Philip Mangano, the executive director of the United States Interagency Council on Homelessness, was pushing to include alternative housing approaches (Economist, 2003). In 2008, through the McKinney-Vento Homeless Assistance Grants, \$25 million was made available in order to show the effectiveness of rapid re-housing programs designed to reduce family homelessness. The following year, the US President signed the American Recovery and Reinvestment Act of 2009 which allocated \$1.5 billion to HPRP (Homeless Prevention and Rapid Re-Housing Program). In that same year, President Obama signed the Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act which reauthorized HUD’s Homeless Assistance programs. The HEARTH Act supports the prevention of homelessness, rapid re-housing, consolidation of housing programs, and new homeless categories. Finally, with regard to the political involvement related to housing and *housing first*, on June 22, 2010, the United States Interagency Council on Homelessness’ document *Opening Doors: Federal Strategic Plan to Prevent and End Homelessness* was submitted to the Obama Administration and Congress. This comprehensive housing strategy names *Housing first* as a best practice for reaching the goal of ending chronic homelessness by 2015.⁵

We can safely conclude that HF has been shown to be effective in housing and maintaining housing for single adults with

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1. Carol L. Pearson, et. Al., The Applicability of Housing first Models to Homeless Persons with Serious Mental Illness, US Department of Housing and Urban Development, July 2007, available on the web at: www.huduser.org/portal/publications/hsgfirst.pdf
 2. See Denver Housing first Collaborative: Cost Benefit Analysis and Program Outcomes Report.
 3. This April 2009 a study in the Journal of the American Medical Association determined that Seattle Washington saved over \$4,000,000 for 95 chronically homeless individuals with serious substance abuse issues by providing them with housing and support services.
 4. In Boston, there has been a significant drop in homeless individuals but an increase in family homelessness. See the report by Brady-Myerov, Monica, “Homelessness On The Decline In Boston”, WBUR Radio, Boston, September
 5. The report, *Opening Doors: Federal Strategic Plan to Prevent and End Homelessness*, is available on the USICH website at www.usich.gov/opening_doors/

mental illness and substance use issues in urban locations where there is ample rental housing stock. There is no “best practices” evidence in the form of randomly assigned, longitudinal studies on families, youth, those with primary addictions, those coming from a period of incarceration, and those with diverse ethnic and indigenous backgrounds. There are, however, reports of substantial reductions in homelessness and associated costs for those who employ an HF approach (Perlman & Parvensky, 2006; Colorado Coalition for the Homeless, 2006). We also have observed that in spite of the lack of rigorous studies, many communities that have adopted a HF approach report and confirm housing retention and lowered cost of service delivery across a number of sub-groups in the homeless population, in Canada (Baptist, 2010; Calgary Homeless Foundation, 2011), the United States (Willse, 2008; United States Interagency Council on Homelessness, 2006) as well as Ireland (CornerStone, 2009), the UK and other countries in the European Union (Atherton & McNaughton Nicholls, 2008; Tainio & Fredriksson, 2009; Jensen, 2005; Mental Health Weekly, 2004; “MH agencies among the collaborators in initiative for homeless veterans,” 2011).

We note that in Canada, the Homeless Hub (Hub, 2011)

has become a large repository for both academic articles, government reports, especially from Canadian sources, and the free press, on housing and HF issues in Canada. While these reports come from the popular press, they confirm the vast and rapid uptake of this approach despite the availability of, by generally accepted research standards, rigorous confirmation of outcomes and lack of adverse consequences. Thus the evidence appears to be in reported program outcomes and cost savings in a number of diverse geographic areas. Since more persons, regardless of age or disability (if any) are being housed and, with appropriate supports, remaining housed, the *housing first* approach has achieved its primary purpose, and mitigated against the inevitable poor social and health consequences of homelessness. It is important to note, that for fundamental human services, such as housing, evidence of “best practice” may be found in sources other than those based on clinical trials of a medical model of research (Shumway & Sentell, 2004). To that end, the evidence of best practice in housing is retention of domicile, as reported by program outcome data, and, despite lack of rigorous multiple clinical trials, *housing first* overwhelmingly meets that requirement for a majority of the homeless population.

Appendix 1: National *Housing first* Logic Model

Objective: To ensure that the hardest to house people in Canada are adequately housed.

Method: A Prevention Model (for those who are precariously housed) and an Intervention Model (for those who are in need of housing) are detailed.

1st level: Activities

The *Housing first* Program Logic Model has two activities:

- Development of a Prevention Model flow chart;
- Development of an Intervention Model flow chart.

2nd level: Outputs

The outputs for the activities are:

- Literature Review;
- Design of the two Program Models;

3rd level: Immediate Outcomes

The immediate outcomes are:

- The Literature Review is completed;
- The two Program Models are designed;

4th level: Intermediate Outcomes

The intermediate outcomes are:

- Increased capacity of homeless and housing stakeholders to develop and improve preventative and intervention programs;
- Increased use of best practices, information and research among stakeholders;
- Increased uptake of housing options in communities;
- Increased governmental awareness of *housing first* as a viable housing model; and a
- National shared understanding of *housing first* model.

5th level: Long-Term Outcome

The long-term outcomes are:

- Housing for the most difficult to house and those with precarious housing, which is more appropriate and relevant;

6th level: Ultimate Outcome

The ultimate outcome is:

- All precariously housed and those in need of housing are appropriately housed.

Appendix 2: *Housing first* Logic Model

Appendix one provides the sequence of components used in one approach to logic models often found in management and program evaluation methodologies. It generally provides a list of resources and activities used to achieve targeted program goals. Since prevention and intervention strategies target different groups of persons, either at high risk of losing housing or those who are absolutely homeless, we have developed two separate models to indicate strategies for each group.

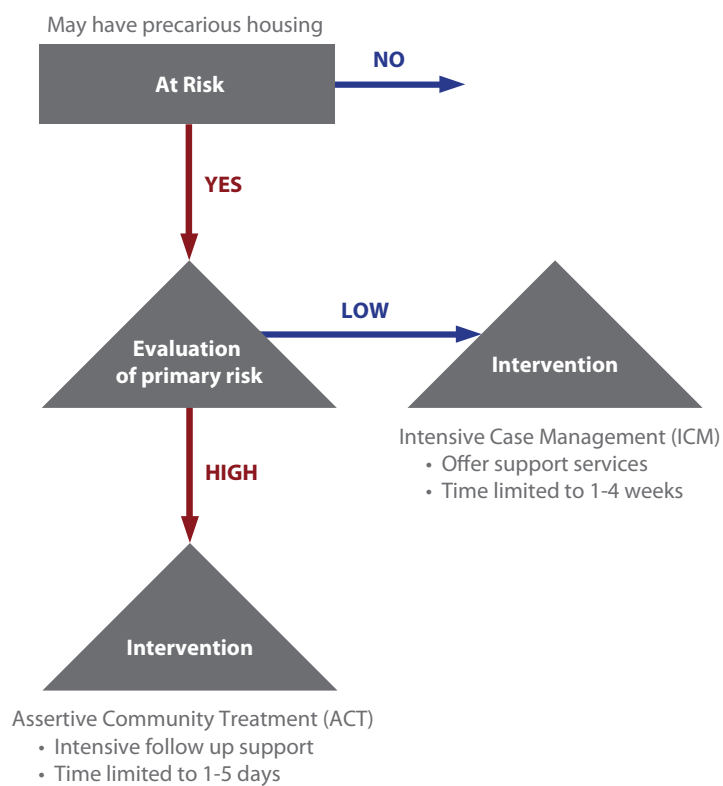
In addition, we feel that a logic model based on a decision tree format is also of particular importance. This format allows programs to recognize priorities and develop strategies that can deal with the complex issues most commonly present for families and persons with ongoing homelessness (the so called chronically homeless). Used in concert, these two approaches will help programs manage the complex process of housing and housing retention across wider groups of people.

<i>Housing first</i> logic model						
	Activities	Outputs	Immediate Outcomes	Intermediate Outcomes	Long Term Outcome	Ultimate Outcome
Prevention Model	To Develop a Flow Chart	<ul style="list-style-type: none"> • Complete Literature Review • Design Program Model • Increase numbers of Canadians who maintain housing 	<ul style="list-style-type: none"> • The Literature Review is completed • The two Program Model is designed 	<ul style="list-style-type: none"> • Increased capacity of homeless and housing stakeholders to develop and improve preventative and intervention programs; • Increased use of best practices, information and research among stakeholders; • Increased uptake of housing options in communities; • Increased governmental awareness of <i>housing first</i> as a viable housing model; and a • National shared understanding of <i>housing first</i> model. 	<ul style="list-style-type: none"> • Housing for the most difficult to house and those with precarious housing which is more appropriate and relevant 	<ul style="list-style-type: none"> • 100% of precariously housed and those in need of housing are appropriately housed.
	To determine housing vulnerability	<ul style="list-style-type: none"> • Risk is assessed 	<ul style="list-style-type: none"> • Agencies trained in use of Assessment tool 	<ul style="list-style-type: none"> • Agencies begin using the tool 	<ul style="list-style-type: none"> • All agencies use the tool 	<ul style="list-style-type: none"> • All at risk individuals and families are assessed
	To determine intervention level	<ul style="list-style-type: none"> • All at risk are offered an evaluation 	<ul style="list-style-type: none"> • Agencies begin assessing clients 	<ul style="list-style-type: none"> • Clients are streamed to appropriate services 	<ul style="list-style-type: none"> • Clients access services 	<ul style="list-style-type: none"> • Clients graduate from service
	To ensure all remain or are housed	<ul style="list-style-type: none"> • Housing is available for all clients 	<ul style="list-style-type: none"> • Agencies locate housing 	<ul style="list-style-type: none"> • Clients are offered housing according to need 	<ul style="list-style-type: none"> • Clients obtain housing 	<ul style="list-style-type: none"> • Clients remain housed

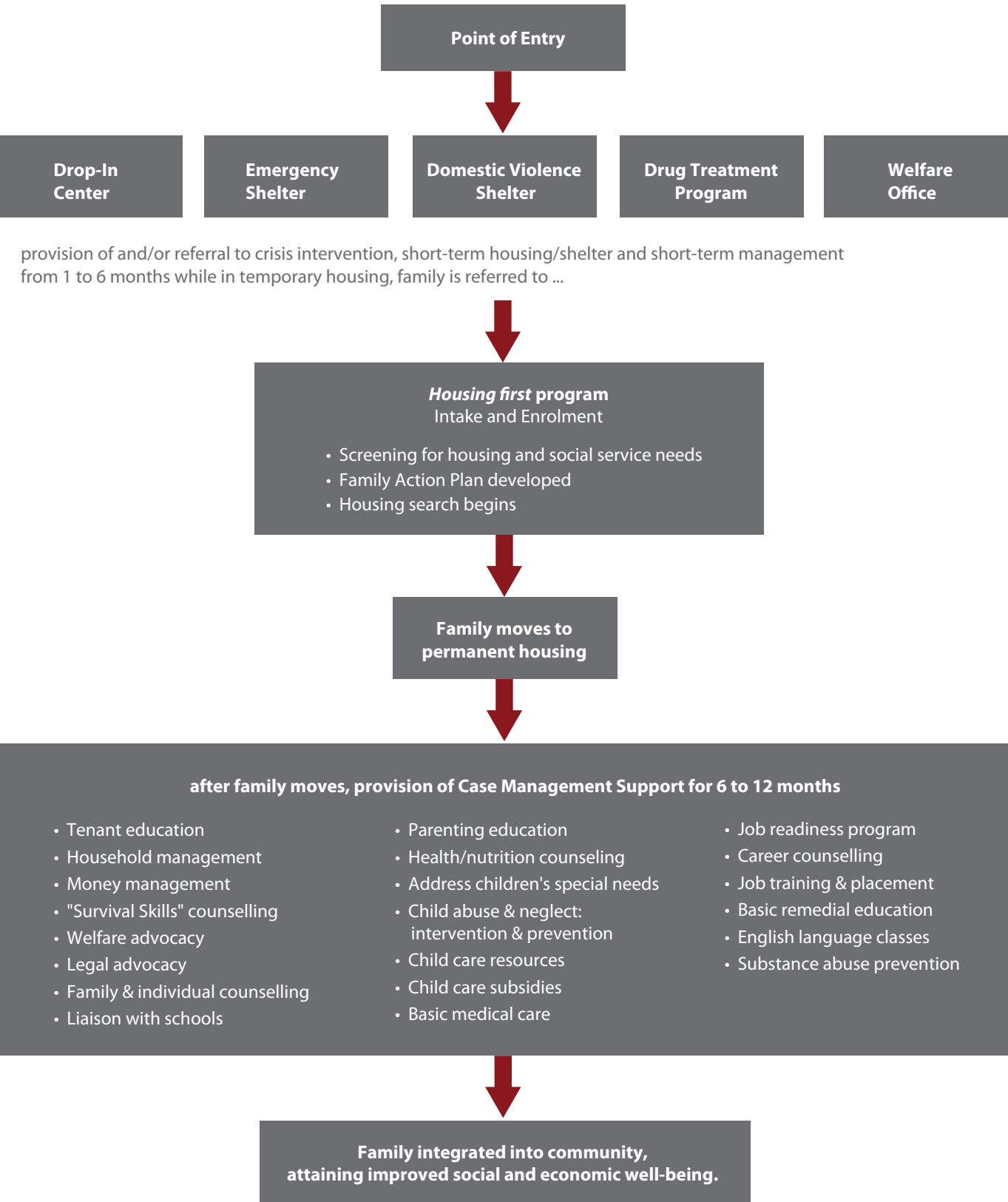
Housing first logic model (continued)

	Activities	Outputs	Immediate Outcomes	Intermediate Outcomes	Long Term Outcome	Ultimate Outcome
Intervention Model	To develop a Flow Chart	<ul style="list-style-type: none"> • Complete Literature Review • Design Program Model • Increase number of Canadians who achieve housing stability 	<ul style="list-style-type: none"> • The Literature Review is completed • The two Program Model is designed 	<ul style="list-style-type: none"> • Increased capacity of homeless and housing stakeholders to develop and improve preventative and intervention programs • Increased use of best practices, information and research among stakeholders • Increased uptake of housing options in communities • Increased governmental awareness of <i>housing first</i> as a viable housing model; and a • National shared understanding of <i>housing first</i> model. 	<ul style="list-style-type: none"> • Housing for the most difficult to house and those with precarious housing which is more appropriate and relevant 	<ul style="list-style-type: none"> • 100% of precariously housed and those in need of housing are appropriately housed.
	To determine housing vulnerability	<ul style="list-style-type: none"> • Vulnerability is assessed 	<ul style="list-style-type: none"> • Clients are offered vulnerability assessment and shelter 	<ul style="list-style-type: none"> • Clients accept shelter bed 	<ul style="list-style-type: none"> • Clients remain in shelter while housing options are evaluated 	<ul style="list-style-type: none"> • All clients are housed inside
	To determine supports required	<ul style="list-style-type: none"> • Service needs are assessed 	<ul style="list-style-type: none"> • Client service plan is written 	<ul style="list-style-type: none"> • Clients begin receiving services 	<ul style="list-style-type: none"> • Clients complete service plan 	<ul style="list-style-type: none"> • Client wellbeing is increased
	To provide appropriate housing	<ul style="list-style-type: none"> • Clients are matched to available housing 	<ul style="list-style-type: none"> • Client is offered appropriate housing 	<ul style="list-style-type: none"> • Client accepts housing 	<ul style="list-style-type: none"> • Client retains housing 	<ul style="list-style-type: none"> • All clients remain successfully housed

Prevention Model: Precarious Housing



Appendix 3



Appendix 4: Academic (Research) Articles covered in this review

- Broner, N., Lang, M., & Behler, S. A. (2009). The Effect of Homelessness, Housing Type, Functioning, and Community Reintegration Supports on Mental Health Court Completion and Recidivism. [Article]. *Journal of Dual Diagnosis*, 5(3/4), 323-356. doi: 10.1080/15504260903358801
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- Henwood, B., Stanhope, V., & Padgett, D. (2011). The Role of Housing: A Comparison of Front-Line Provider Views in Housing first and Traditional Programs. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 77-85. doi: 10.1007/s10488-010-0303-2
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CANADA'S MIDDLE-INCOME HOUSING AFFORDABILITY CRISIS

BY WENDELL COX & AILIN HE | JUNE 2016



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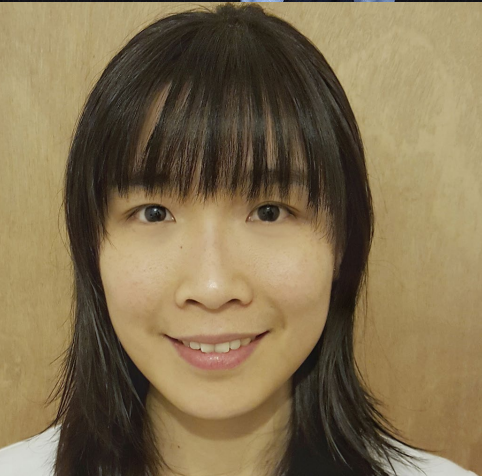
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EXECUTIVE SUMMARY

Canada has a serious middle-income housing affordability crisis. Canada's house prices have grown nearly three times that of household income since 2000. This contrasts with the stability between growth in house prices and household income during the previous three decades. These house-price increases raised serious concerns at the Bank of Canada and at international financial organizations such as the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF).

This public policy report examines overall housing affordability in 35 housing markets, including all 33 CMAs and two census agglomerations (Section 1).

Higher house prices reduce the standard of living and constrain economic growth.

Housing affordability is analyzed using indicators with comparisons *between* housing markets and within individual housing markets *over time*. Price-to-income multiples are used. Higher house prices mean less home buyer discretionary income (the amount left over after paying for necessities such as housing, food, clothing and transportation). Households have less income available for purchasing other goods and services, which can constrain economic growth and job creation. Moreover, less discretionary income translates into lower standards of living (Sections 1.1 and 1.2).

There was serious deterioration in middle-income housing between 2000 and 2015.

This analysis shows that house prices rose faster than income in each of the 35 markets. The largest losses in housing affordability occurred in the six markets with a population of more than one million (Calgary, Edmonton, Montréal, Ottawa-Gatineau, Toronto and Vancouver), where house prices rose on average 3.3 times that of household income. More alarmingly, house prices rose more than four times household income in Vancouver and Toronto. In the five metropolitan areas with between 500,000 and one million residents (Hamilton, Kitchener-Waterloo, London, Québec and Winnipeg), house prices rose 3.2 times that of

household income. Even in the smaller markets, house prices rose by at least double that of household income (Section 2).

Substantial mortgage affordability losses could occur with the expected interest increases. Should mortgage interest rates rise in 2020 as projected by The Conference Board of Canada, approximately 800,000 fewer households will be able to qualify for a mortgage on an average-priced house, all else being equal. This could have an impact sooner than expected, since many mortgages require renewing every five years (Section 3).

Higher house prices have made it more difficult for middle-income households to afford the housing that Canadians have preferred for decades. Higher house prices appear to have been a principal factor in a trend toward smaller houses and condominiums across Canada between 2001 and 2011. This shift is most evident in Vancouver and Toronto, where housing markets have the most-restrictive land-use regulation (Section 4).

Restrictive land-use policy is associated with housing affordability losses. International economic literature associates more-restrictive land-use regulation with diminished housing affordability. The largest housing affordability losses have occurred in metropolitan areas (markets) that have adopted urban containment land-use strategies, which severely limit the land that can be used for building houses on and beyond the urban fringe. Consistent with basic economics, this reduction of land supply is associated with rising land prices, which lead to higher house prices. Without the substantial reform of restrictive land-use policies, housing affordability is likely to continue deteriorating (Section 5).

Higher house prices impose adverse social and economic consequences. Higher house prices are associated with increased rates of internal migration out of higher-cost markets, increased inequality, overcrowding, the greater public expenditure that is required to support low-income housing and losses to the economy (Section 6).

Solving the middle-income housing affordability crisis will require policy reforms. There is considerable evidence that restrictive land-use policies are associated with significant losses in housing affordability in Canada and elsewhere. Metropolitan areas with restrictive land-use policy should undertake reforms aimed at improving housing affordability. There should be a moratorium on the adoption of urban containment policy where it is not yet in place. Concerns have been expressed about the potential for high house prices and high household debt to complicate the ability of central banks (such as the Bank of Canada) to perform their monetary policy responsibilities. ***It is concluded that middle-income housing affordability in Canada is a profound social and economic crisis that warrants serious and concentrated public policy attention (Section 7).***

1.0 BACKGROUND

Note: This report builds on “A Question of Values: Middle-Income Housing Affordability and Urban Containment Policy,”¹ which contains a more detailed analysis of the impact of land-use policy on housing affordability. Parts of the present report are adapted from “A Question of Values.”

In 2014, *The New York Times* reported that Canada had developed the most affluent middle class in the world. It reached this conclusion using the Luxembourg Income Study Database data and the rise of income in Canada relative to the United States in recent years.² However, just as the Canadian middle class was emerging with the top income in the world, it also experienced extraordinary and unprecedented house-price increases. Between 2000 and 2015, house prices rose at nearly three times the rate of household income increases. This led to a loss of middle-income housing affordability, which is a stark contrast with at least the three previous decades, when house prices rose at approximately the same rate as household income.

The Bank of Canada and international organizations such as the OECD³ and the IMF⁴ raised broader concerns about these rising house prices and the associated increase in household debt levels. Recalling the national and international financial devastation that resulted from the collapse of housing prices in the United States in the late 2000s, some analysts have even suggested that Canada has a housing bubble.⁵ This could lead to similar catastrophic declines in housing values and severely disrupt people’s lives and damage the economy. The “UBS Real Estate Bubble Index” recently ranked Vancouver below only London, Hong Kong and Sydney in its potential for a housing bubble.⁶ The Bank of Canada included the housing market and the related high household debt levels as two of three vulnerabilities in the economy in its December 2015 “Financial System Review.”⁷

These factors would work against high priority domestic objectives of improving the standard of living and reducing

poverty. Ultimately, housing policy should be evaluated based on such objectives.

Description of the Report

This public policy report analyzes housing affordability trends in 35 housing markets (CMAs or CAs) including all 33 CMAs and two CAs,⁸ Fredericton, New Brunswick, and Charlottetown, Prince Edward Island. These CAs are the only provincial capitals in the analysis that are not metropolitan areas.⁹

The principal analysis is a comparison of housing affordability measures from 2000 and 2015 in the 35 markets. This analysis shows a significant loss of housing affordability that is out of step with affordability in the preceding three decades. A comparison of average house price to household income ratios over the period illustrates this (Section 1.2).

A theoretical analysis asks the question (all else being equal), *What would the effects have been on housing affordability in 2015 if the projected mortgage interest rates for 2020 had been in place?* It concludes that rising interest rates would likely substantially reduce to an even greater degree the share of households that could afford homes (Section 3).

Another analysis examines how rising house costs appear to be limiting the dwelling choices (among types of housing) of Canadian households, which are increasingly unable to afford single-detached houses (housing that has been the standard throughout the nation) and are now purchasing smaller houses (especially condominiums).¹⁰ For many, this could mean a reduction in their standard of living (Section 4).

These analyses point to housing affordability losses that are substantial enough to justify serious policy attention.

1.1 MIDDLE-INCOME HOUSING AFFORDABILITY

Middle-income housing affordability is distinguished from that of low-income households that often require housing subsidies.¹¹ Historically, the competitive market provided middle-income housing without housing subsidies. Middle-income housing affordability has received little attention from government, but it has been thrust on to the public agenda by the huge price increases relative to income.

Housing is the largest expenditure category in household budgets. As a result, any substantial increase in housing costs is likely to be a challenge for most middle-income households. Servicing mortgages for more expensive houses reduces the discretionary income that households would have after paying for necessities such as taxes, transportation, food and clothing.

Middle-income housing affordability is also important to the economy. Paul Cheshire of the London School of Economics and Wouter Vermeulen of VU University wrote,¹² "... [h]ousing being the dominant asset in most households' portfolios, there are also repercussions on saving, investment and consumption choices." Where housing is more affordable, households will have enough discretionary income available to purchase additional goods and services and to save (which generates investment). All of this can contribute to job creation and a stronger economy.

Discretionary income virtually defines a household's standard of living or its poverty. Therefore, it is important to keep middle-income housing affordable when seeking the objectives of a better standard of living and less poverty.

Measuring Middle-Income Housing Affordability: Between and Within Markets

By definition, housing affordability implies a relationship between the price of housing and household income. One

of the most utilized housing affordability metrics is the price-to-income ratio. A United Nations' publication indicated,¹³

If there is a single indicator that conveys the greatest amount of information on the overall performance of housing markets, it is the house price-to-income ratio. It is obviously a key measure of housing affordability. When housing prices are high relative to incomes, other things being equal, a smaller fraction of the population will be able to purchase housing.

The median multiple (median house price divided by median household income) and the average price-to-income multiple (average house price divided by average household income) are examples of price-to-income ratios.

In this report, middle-income housing affordability is measured at the housing market level (CMAs or CAs).¹⁴ No comparisons are made between municipalities, neighbourhoods or other geographical components within housing markets. From a consumer and economic perspective, there are two dimensions of middle-income housing affordability --- between housing markets and within an individual market over time).

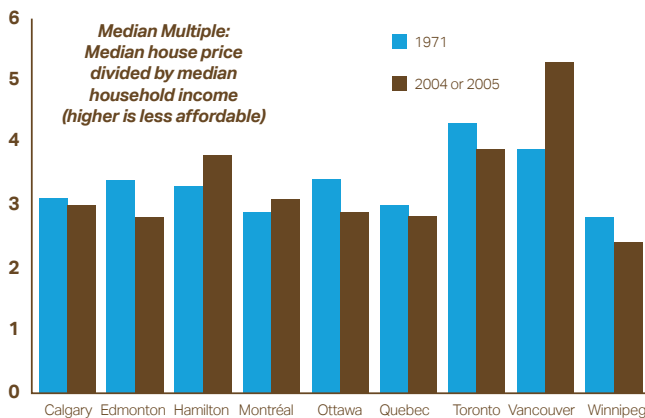
Thus, housing affordability comparisons are made using the average price-to-income multiples among the 35 housing markets. Price-to-income multiples are also compared over time within housing markets, principally between 2000 and 2015.

Industry sources such as the Canada Mortgage and Housing Corporation (CMHC), the Canadian Real Estate Association and local and provincial real estate boards publish periodic average house-price data. This report uses the average price-to-income multiple to evaluate housing affordability.¹⁵ The average household income data is derived from Statistics Canada and The Conference Board of Canada data.¹⁶

1.2 MIDDLE-INCOME HOUSING AFFORDABILITY TREND

For the 35 years following 1971, house prices increased at approximately the same rate as household incomes in the largest metropolitan areas. Among the nine metropolitan areas with more than 500,000 people in 2004 or 2005, the median multiple (median house price divided by median household income) remained constant at 3.3 in both 1971 and 2004 or 2005 (Figure 1).¹⁷ However, since then, the long-standing demand and supply relationship that had characterized the Canadian market was broken by unprecedented house-price escalation.

Housing Affordability: 1972 & 2004 or 2005 Median Multiple: Metropolitan Areas



Estimated from Statistics Canada and Demographia data

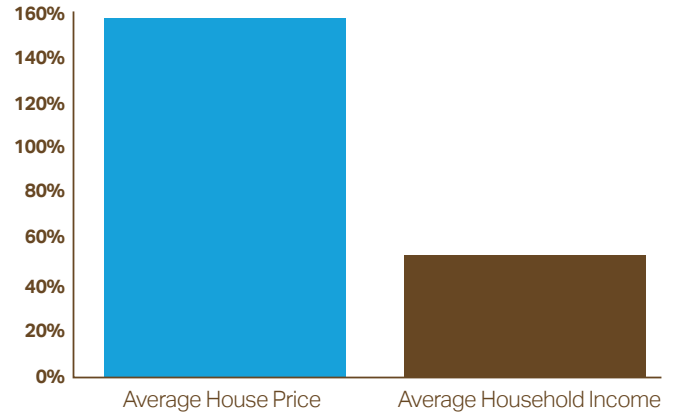
Figure 1

The substantial increase in house prices relative to income developed over the last decade. By the time the 11th Annual *Demographia International Housing Affordability Survey* was published, the average median multiple for the same nine metropolitan areas had risen to 5.1. This is more than a 50 per cent increase from 2004-2005 in house prices relative to income and represents a radical departure from the stability that characterized the previous three and one-half decades.

The average house price rose 158 per cent between 2000 and 2015. By comparison, the average household income rose only 55 per cent over the same period (Figure 2).

Thus, the average house price rose 2.9 times the rate of household income.¹⁸

House Prices & Household Incomes Change in 35 Markets: 2000 - 2015



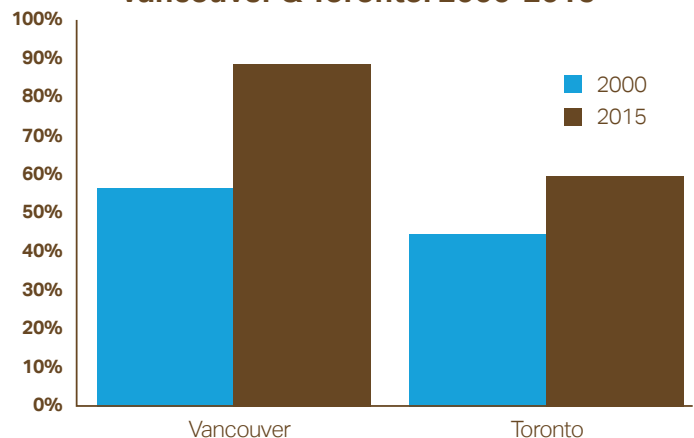
Estimated from Statistics Canada and Conference Board data

Figure 2

The RBC Housing Affordability Measure paints a particularly stark picture.¹⁹ It estimates the share of pre-tax median household income that is required to pay for the average-priced house. The calculation includes the mortgage, property taxes and utilities.²⁰ CMHC guidelines indicate that the total mortgage payment, property taxes and utilities should not exceed 32 per cent of gross income.²¹

Figure 3 indicates that the purchase of a standard 1,200-square-foot detached bungalow in the Vancouver metropolitan area requires 88.6 per cent of monthly household income. This is nearly three times the CMHC

RBC Affordability Measure: Bungalow Vancouver & Toronto: 2000-2015



RBC Data

Figure 3

guideline and obviously places such housing outside the financial means of middle-income households. In comparison, in 2000, 56.6 per cent of pre-tax income was required to pay for the average-priced bungalow in Vancouver.²² Even that was much higher than the 32 per cent CMHC guideline.

The situation is also severe in Toronto, where in 2015, 59.8 per cent of the pre-tax median household income would have been required to pay for the average-priced house. This is an increase from 44.6 per cent in 2000. Even this was well above the CMHC 32 per cent standard.

2.0 MIDDLE-INCOME HOUSING AFFORDABILITY 2000-2015

As indicated above, there has been a serious loss in housing affordability in Canada since 2000. This section provides housing affordability comparisons between housing markets and within individual markets over 15 years (2000 to 2015).²³ It includes the trends in average house prices, average household income and the average house price to average household income ratio (price-to-income ratio).

House prices rose at a greater rate than household income in all 35 markets, indicating a pervasive loss of housing affordability (Table A-1).²⁴

2.1 Metropolitan Areas with More than 1,000,000 Population

The six largest metropolitan areas, each with more than 1,000,000 residents, (Toronto, Montréal, Vancouver, Calgary, Edmonton and Ottawa-Gatineau) are particularly important to the national economy. Statistics Canada indicates that these areas accounted for approximately 51 per cent of the gross domestic product (GDP).²⁵ The six largest metropolitan areas had approximately 47 per cent of the national population in 2014.²⁶

These six metropolitan areas accounted for the greatest loss in housing affordability. The average house price²⁷ rose 176 per cent from 2000 to 2015, or 3.3 times the 54 per cent average increase in household income (Figure 4).²⁸

Toronto: Toronto, the largest metropolitan area, contained approximately 6.1 million residents in 2014, an increase of nearly 30 per cent over 2001.²⁹ Toronto plays a leading role in the national economy, generating 19 per cent of the GDP.

Toronto has experienced strong house-price increases since 2000, with the average house price rising by 164 per cent. This is 4.1 times the estimated 39 per cent rise in

average household income. In 2015, the price-to-income ratio was 6.0 in Toronto. This compares with 3.2 in 2000. The average house price has nearly doubled relative to the income of the average household.

On average, condominiums are the least costly housing option in Toronto, though they are often not considered the most desirable or appropriate dwelling type by households, especially families with children. The seriousness of Toronto's housing market cost escalation is indicated by the fact that by 2015 the average price of condominiums was higher than that of detached bungalows in 2004 (not inflation adjusted).³⁰ With rising land prices (Section 5) and less detached housing construction, higher detached housing prices have driven many home buyers to condominiums (whether they prefer them or not).

Montréal: Montréal, the second-largest metropolitan area, had a population of 4.0 million in 2014, an increase of 18 per cent from 2001. Montréal accounts for 11 per cent of the national GDP.

The average house-price increase in Montréal was even higher than the house-price increase in Toronto, at 172 per cent between 2000 and 2002. This increase was 3.7 times the estimated 47 per cent increase in average household income. Montréal's average price-to-income rose from 2.3 in 2000 to 4.3 in 2015.

Vancouver: Vancouver is the third-largest metropolitan area and had a population of approximately 2.5 million in 2014, up nearly 25 per cent from 2001. Vancouver accounts for nearly 7 per cent of the national GDP.

International surveys routinely rank Vancouver as one of the top metropolitan areas in the world for quality of life. Yet, Vancouver has by far the worst housing affordability in Canada and is among the worst in the high-income world. The 11th Annual *Demographia Housing Affordability Survey* (2014 data) rated Vancouver the second-least-affordable major metropolitan area.³¹ Among metropolitan areas in the

nine nations surveyed, Vancouver's house price-to-income multiple was the highest except for Hong Kong.

In 2015, Vancouver's price-to-income multiple was 9.6. This is more than double the 4.7 price-to-income multiple in 2000. Between 2000 and 2015, the average house price rose 207 per cent. This is 4.1 times the estimated 51 per cent increase in household income. The price of detached homes now averages over \$1.4-million. The Vancouver City Savings Credit Union (Vancity) forecasted that detached house prices could reach \$2.1-million in 15 years.³²

Condominiums, the least costly home ownership option in Vancouver, escalated to a 2015 average price greater than the price of detached bungalows in 2004 (not inflation adjusted).³³ As in Toronto, with rising land prices (Section 5) and less detached housing construction, higher detached housing prices have driven many home buyers to condominiums (whether they prefer them or not).

Calgary: Calgary is the fourth-largest metropolitan area and had a population of 1.4 million in 2014. Its 48 per cent population increase since 2001 is the largest among the six metropolitan areas of more than 1,000,000 population. Calgary represents approximately 5 per cent of the national GDP.

Calgary has experienced extraordinary household income growth since 2000. Yet, income has not kept pace with house-price increases. Between 2000 and 2015, the average house price rose 162 per cent, 2.2 times the estimated 73 per cent increase in the average household income. Calgary's price-to-income multiple rose from 2.4 in 2000 to 3.6 in 2015, a 50 per cent increase.

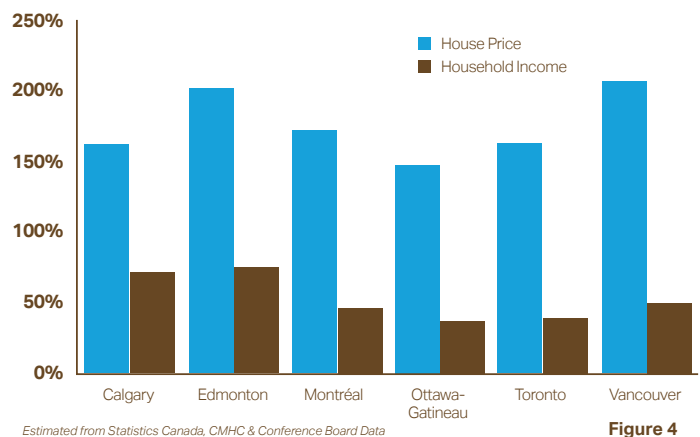
Edmonton: Edmonton is the fifth-largest metropolitan area, with a population of 1.3 million in 2014. The population increased 42 per cent from 2001. Edmonton, which had been the sixth-largest metropolitan area, displaced Ottawa-Gatineau in 2014. Edmonton represents approximately 5 per cent of the national GDP.

Like Calgary, Edmonton enjoyed extraordinary income growth between 2000 and 2015. Nonetheless, house prices rose at an even greater rate. The average house price increased 202 per cent between 2000 and 2015. This is 2.7 times the 75 per cent increase in average household income. Edmonton's price-to-income multiple rose from 2.0 in 2000 to 3.5 in 2015, a 75 per cent increase.

Ottawa-Gatineau: Ottawa-Gatineau³⁴ is the sixth-largest metropolitan area, with 1.3 million residents in 2014, which reflected an increase of nearly 25 per cent from 2001. Ottawa-Gatineau represents approximately 5 per cent of the national GDP.

Its average house price increased 148 per cent between 2000 and 2015. This is approximately 3.9 times the estimated 38 per cent increase in average household income. The price-to-income multiple in Ottawa-Gatineau rose from 2.1 in 2000 to 3.7 in 2015, nearly 75 per cent.

House Price & Household Income Growth Average: CMAs Over 1,000,000: 2000-2015



2.2 Metropolitan Areas with 500,000 to 1,000,000 Population

The five metropolitan areas with between 500,000 and 1,000,000 residents accounted for approximately 9 per

cent of the GDP³⁵ as well as approximately 9 per cent of the national population in 2014.³⁶

These metropolitan areas include two that are exurban (outside Toronto) and are located in the Greater Golden Horseshoe,³⁷ Hamilton and Kitchener-Waterloo. The largest metropolitan areas in this population category are Québec (Québec City or Ville de Québec) and Winnipeg. The category also includes London.

The housing affordability losses in metropolitan areas with 500,000 to 1,000,000 people were somewhat smaller than they were in the major metropolitan areas. The average house price rose 164 per cent between 2000 and 2015. This is 3.2 times the 52 per cent increase in average household income (Figure 5).

Québec: The Québec metropolitan area had a 2014 population of approximately 800,000 residents. It is the second-largest metropolitan area in Québec and the seventh in Canada. Between 2000 and 2015, the average house price rose 200 per cent, 3.4 times the 60 per cent increase in average household income. Québec's price-to-income multiple nearly doubled from 1.8 in 2000 to 3.4 in 2015.

Winnipeg: The Winnipeg metropolitan area had a population of approximately 780,000 in 2014. Winnipeg experienced the largest house-price increase of any metropolitan area over 500,000 population, at 224 per cent. This is 3.7 times the increase in average household income of 60 per cent. Winnipeg's price-to-income multiple was 1.6 in 2000 and rose to 3.3 in 2015, more than doubling.

Hamilton: The Hamilton metropolitan area is adjacent to the Toronto metropolitan area and can be considered a continuation of the Toronto urban footprint. Hamilton is located 63 kilometres from the Pearson International Airport area and 69 kilometres from downtown Toronto, Canada's two largest employment centres. Hamilton had a population of 765,000 in 2014. It ranks third in population in Ontario and ninth in Canada.

Hamilton house prices rose 173 per cent between 2000 and 2015. This is 3.7 times the 47 per cent increase in average household income. Hamilton's average price-to-income multiple rose from 2.6 in 2000 to 4.8 in 2015, a 75 per cent increase.

Kitchener-Waterloo: Kitchener-Waterloo had a population of almost 510,000 in 2014. It is the tenth-largest metropolitan area in Canada and the fourth largest in Ontario. Kitchener-Waterloo is located in the Greater Golden Horseshoe and is a long commute from Pearson International Airport (90 kilometres) and downtown Toronto (approximately 111 kilometres).

The average house price increased 125 per cent from 2000 to 2015. This is considerably less than all but one other metropolitan area with a population over 500,000 (London). Nonetheless, the average house price increased 2.4 times the average household income increase of 52 per cent between 2000 and 2015. The price-to-income multiple in Kitchener-Waterloo rose from 2.4 in 2000 to 3.5 in 2015, a 45 per cent increase.

London: London had a population of just over 500,000 in 2014. House prices rose the least of any metropolitan area over 500,000 population, at 100 per cent between 2000 and 2015. This is 2.3 times the 42 per cent increase in average income. London's price-to-income multiple increased from 2.3 in 2000 to 3.2 in 2015, nearly 40 per cent.

House Price & Household Income Growth Average: CMAs 500,000 - 1,000,000: 2000-2015



Figure 5

2.3 Markets with Less than 500,000 Population

The housing markets with less than 500,000 population account for at least 12 per cent of the GDP.³⁸ These markets represent a somewhat larger 14 per cent of the national population.³⁹

Among these 24 markets (22 metropolitan areas and the two census agglomerations, Fredericton and Charlottetown), the average house-price increase was 108 per cent between 2000 and 2015, or 2.1 times the 52 per cent increase in average household income.

Worst-performing Markets: House prices rose three times or more than the rate of household income increases in five of the areas. The largest relative house-price increase was in Abbotsford in the exurban Vancouver area at 3.5. Regina had the second-highest increase in house prices relative to income at 3.2, followed by St. John's at 3.0.

The least-affordable markets with a population under 500,000 were Abbotsford, with a 6.5 house price-to-income ratio, along with the two other British Columbia metropolitan areas outside Vancouver, Victoria (6.0) and Kelowna (5.3). In comparison, in 2000, the price-to-income multiples in these three metropolitan areas were between 3.5 and 4.1.

Two Greater Golden Horseshoe metropolitan areas had price-to-income multiples of 4.0 or more, Oshawa (4.2) and Barrie (4.0). Nearby Peterborough (3.8), Guelph (3.7), Brantford (3.7) and St. Catharines-Niagara (3.5) also increased toward 4.0. In other parts of the country, Saskatoon (3.6), Kingston (3.6) and Halifax (3.5) had price-to-income multiples of 3.5 or more.

With the exception of the three British Columbia metropolitan areas, all of the markets with fewer than 500,000 people had average price-to-income ratios below 3.0 in 2000, including those in the Greater Golden Horseshoe.

Markets with the Least Housing Affordability Losses:

Unlike the markets with populations of more than 500,000, some markets with under 500,000 people experienced house-price increases that were less than double the household income increase rate between 2000 and 2015.⁴⁰ Even this is cause for concern, in view of the connection between house-price increases and income increases in the previous decades.

The smallest house-price increases were in Saint John and Moncton at 1.3 times that of household income. Charlottetown and Windsor had house-price increases of 1.5 times that of household income.

Despite the pervasive losses in housing affordability, a number of markets retained price-to-income ratios below 3.0. The best price-to-income ratios were in Moncton and Saint John, at 2.0. Fredericton, Windsor, Saguenay and Trois-Rivières followed at 2.3. Charlottetown, Sudbury and Thunder Bay also had price-to-income ratios below 3.0.

3.0 IMPACT OF EXPECTED HIGHER INTEREST RATES

This section asks the following theoretical question:

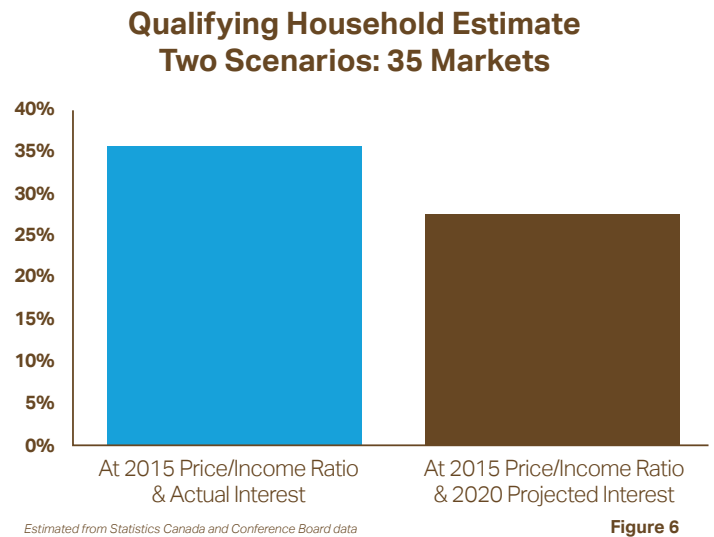
What would the effect have been on housing affordability in 2015 if the mortgage interest rates projected for 2020 had been in place?

Despite the huge losses in housing affordability that occurred in the last 15 years, it seems likely that the losses would have been even greater had mortgage interest rates not fallen so sharply (other factors held constant). This analysis is a theoretical attempt to suggest the potential impact of projected interest rate increases, holding other factors unchanged.

Under CMHC guidelines,⁴¹ households may qualify for mortgages if their housing expenses (including mortgage payment, property taxes, utilities and mortgage insurance) are no more than 32 per cent of their income.

Although the expected interest rate increases are not in place, there seems to be a consensus among economists that interest rates will return to levels more consistent with historic rates. The Conference Board of Canada projects that five-year conventional mortgage rates will be 6.57 per cent by the middle of 2020.⁴² Because of the large number of five-year renewable mortgages, higher mortgage interest rates at renewal could raise housing costs for many households in a comparatively short period.

If the mortgage rates projected for 2020 had been in effect in 2015, only 28 per cent of households in the 35 markets would have been able to qualify for a mortgage on an average-priced house, all else being equal. This compares with the 36 per cent of households that would have been eligible at the mortgages rates and price-to-income ratio of 2015 (Figure 6). This would reduce the number of eligible households by nearly one-quarter (800,000).



4.0 THE CANADIAN DREAM

While there have been substantial housing affordability losses across Canada, price-to-income ratios may understate the extent of the losses. At the same time that prices have been rising, houses have become smaller and the cost per square foot has risen even more than average house prices have.

As a result, some households in the Millennial generation as well as others are increasingly unable to afford the single-detached houses that have been the preference of Canadian households for decades. Some households may associate smaller housing with a lower standard of living.⁴³

In a report titled “Downsizing the Canadian Dream: Homeownership Realities for Millennials and Beyond,” Vancity says that the future “will see single detached homes become a scarce luxury.”⁴⁴

Preference for Home Ownership

Home ownership remains a priority, even for the Millennial generation. As Vancity indicates:

While many assume that Millennials want to rent a cool apartment in a hip inner-city neighbourhood forever, a recent study by the Demand Institute revealed that 60% of Millennials say they eventually want to own a home, 75% think ownership is a primary long-term goal and 73% believe a home is an excellent investment.

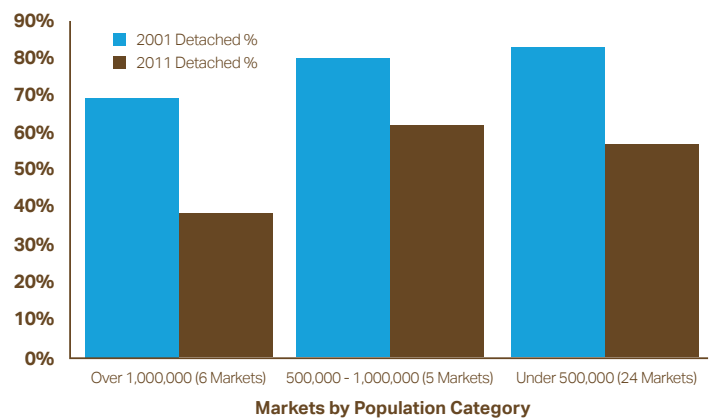
According to an online survey conducted by real estate firm Royal LePage,⁴⁵ a large majority of young Canadians are worried that affordability will hamper their chances of ever becoming homeowners. Although more than 72 per cent of the interviewees are pessimistic about being able to afford a house at the current prices, they expressed a strong desire for owning homes in the future.

Losses in housing affordability have taken a toll on first-time home buyers.⁴⁶ Many, especially younger households, have delayed home purchases, especially because of their more-limited income relative to house-price growth.⁴⁷

Decline in Detached Housing: 2001-2011

Detached housing became a smaller share of owned housing between 2001 and 2011. At the national level, the detached share of owned housing dropped from 80 per cent in 2001 to 76 per cent in 2011.⁴⁸ The largest decline was in the more than 1,000,000 population category, from 69.4 per cent to 62.5 per cent. The decline in the 500,000 to 1,000,000 category was from 80.1 per cent to 77.2 per cent, while the under 500,000 category experienced a decline from 82.9 per cent to 78.9 per cent (Figure 7).

**2001 & 2011 Detached Housing Share
CMA's by Size (Owned Housing)**



Derived from 2001 Census & 2011 National Household Survey

Figure 7

All of the six metropolitan areas with more than 1,000,000 population experienced a reduction in detached housing as a percentage of all owned housing between 2001 and 2011. The largest declines were 24 per cent in Vancouver and 13 per cent in Toronto (Table 1). In Vancouver, there was a net reduction in detached housing between 2001 and 2011.

Table 1
Detached Owned Housing Stock Share: 2001-2011
CMA's Over 1,000,000 Population

CMA	2001	2011	Change in Detached Share
Calgary	79%	74%	-7%
Edmonton	82%	76%	-7%
Montréal	60%	57%	-4%
Ottawa-Gatineau	68%	64%	-7%
Toronto	66%	57%	-13%
Vancouver	61%	46%	-24%

Calculated from 2001 Census & 2011 National Household Survey

Though their reductions were below 10 per cent (Table 2), the five metropolitan areas with 500,000 to 1,000,000 residents also experienced a decline in the share of detached housing between 2001 and 2011.

Table 2
Detached Owned Housing Stock Share: 2001-2011
CMA's 500,000 to 1,000,000 Population

CMA	2001	2011	Change in Detached Share
Hamilton	81%	75%	-7%
Kitchener-Waterloo	79%	76%	-4%
London	82%	81%	-2%
Québec	71%	68%	-4%
Winnipeg	88%	87%	-1%

Calculated from 2001 Census & 2011 National Household Survey data

Among the metropolitan areas with under 500,000 population, all except St. John's and Saguenay experienced a reduction in detached-housing shares. The largest declines were in Victoria at 18 per cent and Abbotsford at 15 per cent (Table A-2). As in Vancouver, the number of detached houses declined in Victoria between 2001 and 2011.

Preferences, Smaller Dwellings and Urban Cores

There are at least two perspectives on why house sizes have decreased and why more households are buying condominiums.

Smaller Versus Larger Houses: One perspective is that people now prefer denser, multifamily dwellings such as apartments and condominiums closer to the city centre

as opposed to larger houses, which are generally in the suburbs.⁴⁹ Proponents point to an unprecedented resurgence of population growth in urban cores (in and around downtown areas).

Another viewpoint is that the more-restricted housing choices are driving the reduction in house size. This view holds that the huge price increases relative to inflation have removed the detached house as a choice for a large share of the middle-income population. Proponents indicate that this has left many households with no choice but to accept smaller houses or condominiums.

There are advantages and disadvantages associated with all housing sizes and all urban environments, whether living in smaller or larger dwellings or in urban cores or suburban areas. When households make house-purchase decisions, there are not only considerations such as house size but also neighborhood safety, surrounding amenities, travel time to work and other factors.

For example, smaller dwellings in higher density urban cores are often situated so that jobs, service and shopping are within walking or cycling distance, and transit service tends to be a better match to consumer travel demand than it is in suburban areas. Cultural opportunities are likely to be closer. However, traffic congestion is likely to be worse.⁵⁰ There can be a shortage of open spaces and recreational facilities and a higher incidence of crime, problems that urban cores are trying to address.⁵¹

At the same time, the lower density suburbs generally offer more living space and backyards, which can be important for families with children. Traffic congestion is usually less severe and despite generally longer distances from downtown, work trips often take less time due to the dispersion of employment throughout the metropolitan area.⁵² Moreover, research indicates that larger lot sizes and house sizes, which are generally found in the suburbs, are the most important preferences in determining house prices and demand.⁵³

Urban Cores Versus Suburbs: A closely related issue is whether there has been a substantial shift in preferences toward living in urban cores and away from suburbs. In recent years, urban cores have experienced a resurgence virtually across North America. Older, disused office and warehouse buildings are being converted to apartments and condominiums in dense urban cores.

After decades of stagnation or even population decline, urban core populations have generally grown. In the last 20 years, urban core environments have improved markedly. In part, the improvement may be the result of the dropping crime rates, which have increased the safety of the more-exposed modes of mobility typical of urban cores (walking, cycling and transit). These population increases reflect, at least to some, a greater preference than before for urban living. Another factor, however, might be that rapidly rising detached-housing prices may have encouraged some people to accept smaller houses, sometimes in the urban core. However, in the context of metropolitan area trends, the urban core population gains are modest.

The overwhelming proportion of metropolitan population growth continues to be in automobile-oriented suburbs. Small-area (census tract) research by David L.A. Gordon and Isaac Shirokoff at Queen's University found that 90 per cent of metropolitan area growth was in automobile-oriented suburbs and exurbs between the 2006 and 2011 censuses.⁵⁴ Other research indicates that between 87 per cent and 98 per cent of growth in the six largest metropolitan areas was outside the urban cores, with an overall average of 94 per cent (2006-2011).⁵⁵ This tends to indicate a preference for more-suburban locations, albeit less intense than before.

Assessment: The question is whether the trend toward smaller houses and the restoration of population growth in the urban cores is the result of changes in preference or the substantial price increases in housing. The evidence seems to be stronger on the economic side, given the continuing dominance of population growth in the suburbs.

The largest shifts in house size have been in Toronto and Vancouver. These markets have had the largest losses in housing affordability and the largest reduction in detached housing shares. In these markets, land-use planning policies are directed toward limiting the amount of detached housing being built and favour smaller houses and condominiums. These public policies seem to be limiting the choices available to many middle-income households.

Before policy makers start looking for remedies for housing affordability crises, it is important to analyse potential drivers to ever-increasing house prices. Section 5 focuses on the association between losses in housing affordability and one particularly important factor--restrictive land use policy.

5.0 RESTRICTIVE LAND-USE POLICY

Metropolitan land-use policies have become stronger in recent years. Restrictive land-use policies⁵⁶ are associated with severe housing unaffordability in the metropolitan areas of Canada and other nations.⁵⁷ Restrictive land-use policy can include components such as urban containment policy, excessively large infrastructure fees, height limits, large lot zoning and building moratoria. This section, aimed particularly at policy-makers, describes research on the influence of such policies on housing affordability.

Urban Containment Policy

Housing markets with urban containment policy have substantial losses in housing affordability when compared with other housing markets and within the individual markets. Many urban containment markets have had house-price escalation as their price-to-income ratio differentials have expanded relative to more liberally regulated markets. Moreover, there have been substantial losses in housing affordability over time in such markets, which are associated with the implementation of urban containment policy.⁵⁸

Urban containment policy is characterized by severe restrictions or even prohibitions on greenfield land.⁵⁹ This land, on and beyond the periphery of urban areas, is less expensive, which, all else being equal, makes housing less expensive. Specific strategies can include urban containment boundaries, so-called growth areas (with most land being off limits to development) and other measures that significantly reduce the supply of developable land relative to housing demand. This leads to higher house prices, all else being equal.

Urban Containment Policy and Basic Economics:

The association between higher house prices and urban containment policy is a matter of basic economics. All things equal, the price of a good or service that is in demand will increase where supply is limited. Economists

Richard Green of the University of Southern California and Stephen Malpezzi of the University of Wisconsin described the impact of more-restrictive land-use policy: “When the supply of any commodity is restricted, the commodity’s price rises. To the extent that land-use, building codes, housing finance or any other type of regulation is binding, it will worsen housing affordability.”⁶⁰

International research demonstrates the association between urban containment policy and higher house prices relative to income. For example, a Reserve Bank of Australia paper noted,⁶¹ “There is a growing body of international evidence on the role of supply-side constraints in limiting construction and driving up prices.”⁶²

In a groundbreaking evaluation of urban containment policy in Great Britain four decades ago, legendary urban planner Peter Hall et al.⁶³ said, “[P]erhaps the biggest single failure” of urban containment has been that it has failed to prevent losses in housing affordability. Hall et al. continued, “In practice the system seems almost systematically to have had the reverse effect: it is the most fortunate who have gained the most benefits from the operation of the system, while the least fortunate have gained very little.”⁶⁴

Urban Containment Policy: Irreconcilable with Housing Affordability?

Paul Cheshire of the London School of Economics referred to “the irreconcilable conflict between current planning policies and underlying economic forces” in contending that housing affordability is not compatible with urban containment.⁶⁵

OECD and other research⁶⁶ indicates that the prices tend to be more stable (less volatile) where housing supply is more responsive to demand.⁶⁷ Edwin Mills of Northwestern University, a premier urban economist, concluded, “The result of controls on housing supply is high prices,” and they “... contribute to home prices that are not only high, but unstable as well.” Mills expressed his concern about the impact on all households but particularly on low-income households.⁶⁸

Finally, comparisons between metropolitan areas show that the worst housing affordability is strongly associated with urban containment policy. Data from one of the world's most comprehensive metropolitan housing affordability reports, the *Demographia International Housing Affordability Survey*, shows this.⁶⁹ The 11th annual survey rated housing affordability in 378 metropolitan areas, including 86 major metropolitan areas⁷⁰ in nine nations (Canada, Australia, China, Ireland, Japan, New Zealand, Singapore, the United Kingdom and the United States). Virtually all of the major metropolitan markets that were rated "severely unaffordable" (price-to-income ratios exceeding 5.0) in the history of the survey have urban containment policies.

Nearly all of these "severely unaffordable" markets had price-to-income ratios of 3.0 or less before adopting urban containment policy. Some markets with urban containment policy have experienced a tripling or even more of their price-to-income ratios from before the adoption of urban containment.⁷¹

Donald Brash, formerly a long-time governor of the Reserve Bank of New Zealand,⁷² noted, "... [T]he affordability of housing is overwhelmingly a function of just one thing, the extent to which governments place artificial restrictions on the supply of residential land."⁷³

Illustrating the Urban Containment Association with Higher Prices: The economic relationship between markets with and without urban containment boundaries is shown in Figure 8.⁷⁴ In urban containment markets, a large gap in land price occurs at or near the urban containment boundary. The value of comparable land per hectare has been shown to vary by six to hundreds of times inside the urban containment boundary, usually virtually across the street (the blue line in Figure 8 illustrates this). In contrast, in liberally regulated markets (those without urban containment policy), the land-value gradient tends to fall gradually from the city centre to where agricultural, resource (such as mining) or undevelopable lands begin (the red line in Figure 8 illustrates this).

Urban Growth Boundary & Land Values Theoretical Land Value Gradient

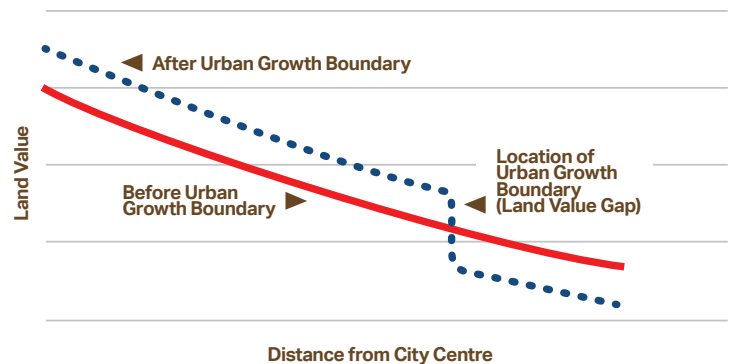


Figure 8

Urban Containment: Association with House Price

Increases: Land is an important element in the cost of houses. Because urban containment policy is associated with higher land prices inside an urban containment boundary, it is also associated with higher house prices, all else being equal. Indeed, the house-value increases that occur inside the urban containment boundary can be expected to produce a windfall financial gain for all existing homeowners. This can further enlarge inequality differences between incumbent homeowners with properties within urban containment boundaries and renters.

Urban containment theorists expected that denser housing would be constructed inside the urban containment boundaries.⁷⁵ They hoped that the land-cost increases would be at least offset by the expected lower cost of denser housing that would be built inside the boundary (Figure 8). This ideal, though well intentioned, typically has not been achieved, as is indicated by the housing affordability losses in severely unaffordable markets (above).

Origin and the Spread of Urban Containment Policy:

Urban containment policy has been a national policy since the late 1940s in the United Kingdom. Metropolitan areas such as Vancouver, Sydney and Portland (Oregon) adopted it around 1970. A number of other metropolitan areas have

adopted urban containment policy since then. Virtually all of the major metropolitan areas of the United Kingdom, Australia and New Zealand are subject to urban containment policy. In each of these cases, house prices have doubled or tripled relative to household income since the adoption of urban containment policy.

Urban Containment Policy in Canada: Vancouver was among the earliest metropolitan areas outside the United Kingdom to adopt urban containment policy. Vancouver's policies date back more than 40 years.

During the 2000s, the Ontario government began implementing its Places to Grow⁷⁶ policy, which severely constrained the land available for greenfield development. Places to Grow was initially implemented in Toronto and is now in effect in other metropolitan areas in the province.

Montréal has long had an agricultural preservation boundary. The diminishing supply of land on which building is permitted has put upward pressure on land prices.

The City of Calgary, which represents nearly all of the Calgary housing market population, implemented urban containment policies, starting with its Plan It Calgary program in the early 2000s.

A number of metropolitan areas have adopted urban containment policies since 2000.

A Future of Even Higher Prices Likely: Generally, house prices continue to increase under urban containment policy because demand continues to exceed supply because of the reduction in land supply. Prices for the more-constrained land tend to increase well ahead of household income, as indicated by the much higher house prices in strong urban containment markets.⁷⁷

Moreover, housing affordability deteriorates even more as time goes on, because the imbalance between demand and insufficient supply grows as long as the problem is not addressed properly.

*The problem is it is utterly unviable in the long term. With every passing decade the problems would get worse, the wider economic costs would become more penalising, the economy and monetary policy more unmanageable and the outcomes – the divide between the property haves and the property have-nots – more unacceptable.*⁷⁸

For example, in Vancouver, the market with the strongest urban containment policies, house prices have doubled relative to income since 2004. The most recent data (December 2015) indicate that the average detached-house price in the Vancouver metropolitan area has risen to approximately \$1.65-million, an increase of nearly \$250,000 since July of 2015. This is approximately 2.5 times the average annual household income in the Vancouver metropolitan area.⁷⁹

Similarly, house prices continue to rise in Toronto, with its more recently enacted urban containment policy. In Toronto, the escalation of house prices relative to household income is becoming evident in exurban metropolitan areas such as Hamilton, Oshawa, Kitchener-Waterloo, Barrie, Brantford and Peterborough (Section 2).

For up to seven decades, urban containment policy has been used in metropolitan areas to combat urban sprawl, the spatial expansion of cities.⁸⁰ In recent years, environmental issues have been the principal justification for policies to curb urban sprawl, though such rationales are questionable.⁸¹

Yet, as *The Economist* noted in an article on the housing affordability losses that are associated with London's urban containment policy: "Suburbs rarely cease growing of their own accord. The only reliable way to stop them, it turns out, is to stop them forcefully. But the consequences of doing that are severe."⁸²

Infrastructure Fees

In addition to restrictions like urban containment boundaries, more-restrictive land-use policy often includes significant

infrastructure fees (impact fees) on new houses.⁸³ There can be huge differences in infrastructure fees, even within the same housing market (below). Research indicates that infrastructure fees are often passed on to purchasers of new homes, and worse, that at least a portion of any such increase can occur in higher market values of already existing housing in a metropolitan area.⁸⁴ In effect, this provides a windfall profit to owners of existing houses (as in the case of urban containment boundaries). As in the case of urban growth boundaries, this can further enlarge inequality differences between incumbent homeowners with properties within urban containment boundaries and renters.

In Canada, infrastructure fees are generally set at the municipal level rather than at the metropolitan area level. There is considerable variation in infrastructure fees between municipalities, even within the same province and metropolitan area. A CMHC report on larger municipalities found a range from zero on new detached houses in Montréal and Québec and \$2,000 in Halifax to \$46,000 in Vaughn, a suburb of Toronto, and \$41,000 in Surrey in the Vancouver metropolitan area. The City of Vancouver's infrastructure charge was \$18,000, while the City of Toronto's was \$15,000. Another Vancouver suburb, Burnaby, had a much lower infrastructure fee of \$4,500.⁸⁵

No research has been identified that compares housing affordability measures between metropolitan areas based on differences in infrastructure fees, though house prices could be driven upward over time in a housing market if virtually all new housing is subjected to substantial infrastructure fees.

Other Restrictive Land-Use Policies

No research was identified associating other restrictive land-use policies with substantial differences between housing affordability measures (such as price-to-income ratios) at the market level. Further, there appears to be little research associating substantial housing affordability losses over time within individual housing markets (Section

1.1). An exception is Boston, a severely unaffordable market in which large lot zoning was identified as the most important factor in that metropolitan area's severely unaffordable housing.⁸⁶ Boston's median multiple was 5.4 in 2014, and Boston was the 20th least-affordable market among the 24 severely unaffordable markets in the *Demographia International Housing Affordability Survey* (2014).⁸⁷

Large lot zoning is frequently cited as a major impediment to housing affordability. This type of regulation, aimed at limiting population densities, has been used mainly in the United States.⁸⁸ However, no research was found, beyond Boston, linking large lot zoning with severe unaffordability at the housing market level or within a housing market over time. This is indicated by an analysis of major metropolitan area land-use classifications developed by the Brookings Institution. The markets in the Brookings' land-use classification with the most frequently occurring large lot zoning (Middle America) averaged a median multiple of 3.0 in 2014. This is within the affordable range (2.1 to 3.0) and well below the severely unaffordable minimum (5.1), which is characteristic of many housing markets with urban containment policy.⁸⁹

Low Interest Rates and Related Higher Demand

The more-accessible mortgage loan products and low mortgage interest rates of recent years are likely to have increased the demand for owned housing. However, the influence of these factors would be similar in all markets across the nation and are unlikely to be the source of housing affordability differences between markets.

It is likely that the resulting higher demand would have a greater upward association with house prices where there were more-restrictive land-use regulations. In more liberally regulated markets, it can be expected that the higher prices would lead to a subsequent increase in the supply of new housing. As a result, there would be comparatively little upward impact on house prices.⁹⁰

Much of the loss in housing affordability might have been averted in the most expensive markets if urban containment policy had not been adopted. Much or all of the increased demand from the lower interest rates and more-accessible mortgages could have been satisfied by the increased supply of housing, and housing would have remained more affordable.

6.0 CONSEQUENCES

The potential consequences of higher house prices relative to income extend well beyond the housing affordability impact on middle-income households.

- Higher house prices relative to income have an effect on internal migration. Since 2004, there has been net internal migration away from Toronto, Montréal and Vancouver (Figure 9). Even with the strong urban core resurgence in Toronto, there have been substantial net internal migration losses in the city itself, with some of the losses going to suburbs within the Toronto metropolitan area, some to more-distant metropolitan areas such as Kitchener-Waterloo and Barrie, some to other parts of Ontario and some outside Ontario (Figure 10). This is consistent with the international experience.⁹¹ In the United States, metropolitan areas with less-affordable housing have tended to lose internal migrants.⁹²
- Inequality is likely to increase, especially to the disadvantage of younger households, visible minorities and immigrants. Massachusetts Institute of Technology researcher Matthew Rognlie found that virtually all of the rising inequality identified by French economist Thomas Piketty has been in the increase in housing values.⁹³ Public policy that induces a reverse Robin Hood redistribution violates a fundamental Canadian value of fairness and is inappropriate. Rognlie noted,

... [T]he literature studying markets with high housing costs finds that these costs are driven in large part by artificial scarcity through land use regulation A natural first step to combat the increasing role of housing wealth would be to reexamine [sic] these regulations and expand the housing supply.

- Higher house prices can lead to economic losses. Raven Saks of the U.S. Federal Reserve Board has shown that

metropolitan areas with stronger housing regulation tend to have slower than expected job growth.⁹⁴

- Higher house prices have imposed an annual reduction of nearly \$2-trillion US in the United States' gross domestic product, according to *Chang-Tai Hsieh* of the University of Illinois and Enrico Moretti of the University of California. An economic loss of this magnitude would equal 12 per cent of the U.S. economy (2009). They referred to the effect as a "large *negative externality*." [emphasis in original]⁹⁵

In addition to the above issues, the Productivity Commission of New Zealand attributed social consequences to higher house prices, such as a decline in home ownership, greater overcrowding and increased low-income housing subsidy requirements.⁹⁶

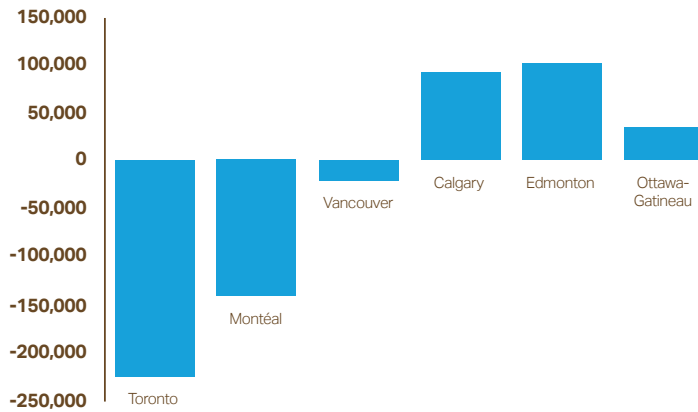
The Greater Golden Horseshoe and its Importance to the Economy

The higher house prices that are emerging could retard economic growth in the Greater Golden Horseshoe. This could have a dampening effect on the national economy, because the Greater Golden Horseshoe accounts for a disproportionately high share of national economic production (approximately one-quarter).⁹⁷

The Greater Golden Horseshoe could be at some risk because of economic reforms that could improve the competitiveness of nearby U.S. states, especially for manufacturing. For example, Michigan, Indiana and Wisconsin enacted voluntary unionism laws that for decades have been associated with lower labor costs, giving the South the advantage in attracting manufacturing investment and employment.⁹⁸ Each of the states implementing these reforms has better housing affordability, which can be an important issue in business-site selection. Poor housing affordability can represent an important barrier for businesses in attracting a qualified

work force at competitive compensation rates. The higher land prices can also lead to higher commercial property prices, creating another barrier to business expansion and job creation.

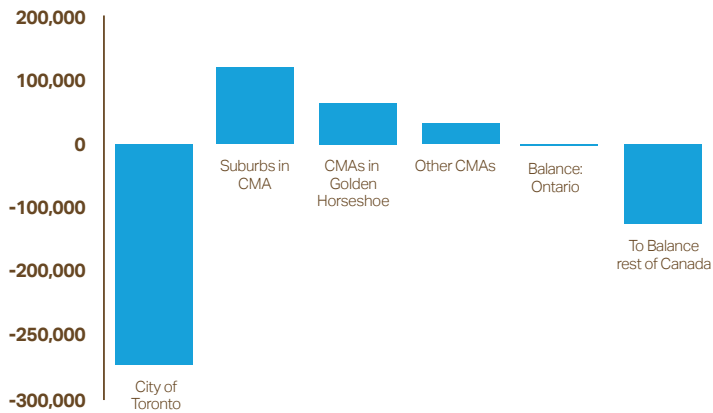
Internal Migration 2004-2014 Interprovincial & Intraprovincial



Statistics Canada Data

Figure 9

Internal Migration: GTA: 2004-2014 Interprovincial & Intraprovincial



Statistics Canada Data

Figure 10

7.0 POLICY OPTIONS

There is considerable evidence that restrictive land-use regulation, especially urban containment policy, is associated with the huge differences in housing affordability that have developed in Canada and other countries. These differences are not only evident between metropolitan areas, but also over time following the implementation of urban containment policy (Sections 2 and 5).⁹⁹ Huge housing affordability losses have occurred in markets with urban containment policy in Canada and other nations.

It will likely be difficult to prevent additional losses in housing affordability, much less roll back the excessively high house prices that have developed in recent years. Of course, consistent with concerns raised in various quarters, a housing bust as occurred in the United States and countries such as Ireland and Spain could do serious damage to the economy and severely disrupt people's lives (Section 1). It is therefore important that governments first seek to prevent further housing affordability losses and then restore housing affordability to the greatest extent possible.

Urban Containment Reforms

The challenges are substantial with respect to the urban land-use regulations, which will be far more difficult to unravel than they were to implement. As metropolitan housing markets become more distorted by urban containment policy, many people and business organizations develop strong financial interests in their retention and expansion.¹⁰⁰ Yet, this happens at great cost to younger households, less affluent households and the economy in general.

Provincial and Metropolitan Recommendations

Authorities overseeing land-use policy at both the provincial and metropolitan area levels ought to undertake the following actions:

1. Implement measures to halt and reverse the deterioration in housing affordability. In the metropolitan markets with urban containment policy, reforms are needed to prevent further deterioration in housing affordability, moderate its severity and work toward the eventual restoration of housing affordability. Housing affordability improvement objectives should be set and annually reviewed, and if the objectives are not met, land-use regulations should be liberalized. Solutions could be modelled after approaches that have been proposed in New Zealand (see box below).
2. There should be a moratorium on the implementation of urban containment policy in metropolitan areas where it has not been adopted.

The New Zealand Correction Proposals

Two recent proposals were made to reverse housing affordability in New Zealand, where the largest housing market (Auckland) has a price-to-income ratio of approximately 10.0.¹⁰¹

"Event Trigger" Expansion of Greenfield Land: In late 2015, the Productivity Commission of New Zealand held that land use authorities have a responsibility to provide "capacity to house a growing population while delivering a choice of quality, affordable dwellings of the type demanded"¹⁰²

Consistent with that finding, the Productivity Commission proposed a measure that would automatically expand the supply of greenfield land when housing affordability targets are not met. The Commission said, "Where large discontinuities emerge between the price of land that can be developed for housing and land that cannot be developed, this is indicative of the inadequacy of development capacity being supplied within the city." The Productivity Commission recommended that

expansion of greenfield land for development be required where the difference between land prices on either side of an urban containment boundary become too great.¹⁰³ The government intends to consider this recommendation as part of its land-use planning reforms, which have not been finalized.¹⁰⁴

The Commission further noted that failures in this regard imposed consequences (negative externalities) on the nation as a whole.

Adoption of Housing Affordability Targets:

The Chief Economist of the Auckland City Council recommended that the City adopt an objective to reduce the price-to-income ratio by approximately 50 per cent between 2015 and 2030. This would require various strategies, such as expanding greenfield land supply and allowing higher population densities in inner areas.¹⁰⁵

London School of Economics and Political Science economists Paul C. Cheshire, Max Nathan and Harry G. Overman made a similar recommendation in their recent book.

Cheshire et al. join others¹⁰⁷ in noting that restrictive planning increases price volatility. Further, they also express concerns about the impact on central banks (such as the Bank of Canada, the Bank of England and the Reserve Bank of New Zealand) as they manage monetary policy. Price volatility

*...makes monetary policy more difficult even for central independent bankers since it becomes increasingly difficult to ignore housing-market pressures rather than just inflation targeting in setting monetary policy.*¹⁰⁸

The Bank of Canada has important macroeconomic objectives. Yet, the growth in house prices and related household debt levels¹⁰⁹ may unduly constrain it. Restrictive land-use policies independently adopted at the provincial or metropolitan area level can strongly influence these factors. The Productivity Commission of New Zealand and Cheshire et al. raise this concern.

It is important that the Bank of Canada, which was established to “promote the economic and financial welfare of Canada,”¹¹⁰ not be encumbered by provincial or metropolitan policies that have the potential to work against this important objective. This fundamental issue should be carefully considered at the federal level, by the first ministers and especially by the Bank of Canada. These officials should commence a comprehensive and systematic review of the effect of higher house prices and their causes on both national economic performance and middle-income households.

A Profound Social and Economic Crisis

The loss of housing affordability is an issue deserving of greater public consideration. Already, discretionary income has been sharply reduced, as housing expenditures continue to consume a greater part of household income, especially in the largest metropolitan areas. Less discretionary income leads to lower standards of living and

Restrictive Land-Use Policy and Monetary Policy

Through its association with higher house prices and higher consumer debt levels, restrictive land-use policy may negatively affect the achievement of monetary policy objectives. Such concerns were recently raised by the Productivity Commission of New Zealand with respect to housing affordability in that nation’s largest metropolitan area (Auckland). The Commission indicated that high house prices could result in a greater risk of economic volatility and macroeconomic instability and could undermine “the effectiveness of monetary policy to manage economy-wide inflation.”¹⁰⁶

higher public expenditures, such as subsidized housing. Less discretionary income is also associated with less consumer demand for goods and services. As a result, lower levels of employment and economic growth are likely.

In conclusion, middle-income housing affordability in Canada has become a profound social and economic crisis worthy of serious and concentrated public policy attention.

APPENDIX A: DETAILED TABLES

Table A-1

Housing Affordability: 2000 to 2015

35 Housing Markets

	Price-to-Income Ratio		Change: 2000 to 2015		
Housing Market	2000	2015	Average House Price	Average Household Income	House-Price Increase Relative to Income
Abbotsford	3.5	6.5	190%	55%	3.5
Barrie	2.7	4.0	116%	45%	2.6
Brantford	2.6	3.7	125%	54%	2.3
Calgary	2.4	3.6	162%	73%	2.2
Charlottetown	2.2	2.6	81%	56%	1.5
Edmonton	2.0	3.5	202%	75%	2.7
Fredericton	2.0	2.3	65%	48%	1.4
Guelph	2.8	3.7	105%	55%	1.9
Halifax	2.3	3.5	125%	48%	2.6
Hamilton	2.6	4.8	173%	47%	3.7
Kelowna	3.6	5.3	142%	64%	2.2
Kingston	2.2	3.6	133%	46%	2.9
Kitchener-Waterloo	2.4	3.5	125%	52%	2.4
London	2.3	3.2	100%	42%	2.3
Moncton	1.9	2.0	62%	47%	1.3
Montréal	2.3	4.3	172%	47%	3.7
Oshawa	2.6	4.2	148%	53%	2.8
Ottawa-Gatineau	2.1	3.7	148%	38%	3.9
Peterborough	2.7	3.8	114%	51%	2.2
Québec	1.8	3.4	200%	60%	3.4
Regina	1.7	3.3	242%	76%	3.2
Saguenay	1.6	2.3	144%	69%	2.1
Saint John	1.8	2.0	78%	61%	1.3
Saskatoon	2.1	3.6	206%	81%	2.5
Sherbrooke	2.1	3.4	149%	52%	2.9
St. Catharines-Niagara	2.3	3.5	111%	41%	2.7
St. John's	1.8	3.3	204%	67%	3.1
Sudbury	2.0	2.6	125%	71%	1.8
Thunder Bay	2.0	2.8	117%	50%	2.4
Toronto	3.2	6.0	164%	39%	4.1
Trois-Rivières	1.6	2.3	133%	61%	2.2
Vancouver	4.7	9.6	207%	51%	4.1

Victoria	4.1	6.0	122%	49%	2.5
Windsor	2.1	2.3	44%	29%	1.5
Winnipeg	1.6	3.3	224%	60%	3.7
UNWEIGHTED AVERAGES					
CMAAs over 1,000,000	2.8	5.1	176%	54%	3.3
CMAAs 500,000-1,000,000	2.1	3.6	164%	52%	3.2
Markets under 500,000	2.3	3.4	108%	52%	2.1
35 Markets					
	2.4	3.8	158%	55%	2.9
Methodology: Section 2					

Table A-2
Detached Owned-Housing Stock Share: 2001-2011
Housing Markets Under 500,000 Population

Housing Market	2001	2011	2001-2011 Net Change
Abbotsford	68%	58%	-15%
Barrie	87%	83%	-5%
Brantford	87%	86%	0%
Charlottetown	89%	88%	-1%
Fredericton	89%	78%	-12%
Guelph	81%	76%	-7%
Halifax	79%	76%	-4%
Kelowna	75%	66%	-11%
Kingston	82%	81%	-1%
Moncton	86%	77%	-10%
Oshawa	82%	79%	-3%
Peterborough	91%	89%	-2%
Regina	92%	87%	-5%
Saguenay	75%	75%	0%
Saint John	83%	80%	-3%
Saskatoon	86%	80%	-6%
Sherbrooke	78%	77%	-1%
St. Catharines-Niagara	87%	85%	-3%
St. John's	74%	75%	0%
Sudbury	89%	86%	-3%
Thunder Bay	91%	88%	-3%
Trois-Rivières	78%	77%	-1%
Victoria	71%	58%	-18%
Windsor	90%	87%	-3%

Calculated from 2001 Census and 2011 NHS data

ENDNOTES

¹ Wendell Cox, "A Question of Values: Middle-Income Housing Affordability and Urban Containment Policy," Frontier Centre for Public Policy, October 2015. Available online at https://www.fcpp.org/a_question_of_values.

² David Leonhardt and Kevin Quealy, "The American Middle Class is No Longer the World's Richest," *The New York Times*, April 22, 2014. Available online at <http://www.nytimes.com/2014/04/23/upshot/the-american-middle-class-is-no-longer-the-worlds-richest.html>.

³ Organisation for Economic Co-operation and Development, "OECD Economic Surveys Canada," June 2014. Available online at http://www.oecd.org/eco/surveys/Overview%20CANADA_2014.pdf.

⁴ International Monetary Fund, "2014 Article IV Consultation – Staff Report; Staff Statement; and Press Release," *IMF Country Report No. 15/22*, January 2015. Available online at <https://www.imf.org/external/pubs/ft/scr/2015/cr1522.pdf>.

⁵ There have been many news articles and commentaries on this subject. For example, see Kim Mackrael and Jason Chow, "Canada Grapples with Housing Bubble Risk," January 19, 2016, *The Wall Street Journal*. Available online at <http://www.wsj.com/articles/canada-grapples-with-housing-bubble-risk-1453229761>.

⁶ UBS, "UBS Global Real Estate Bubble Index," 2015. Available online at https://www.agefi.com/uploads/media/UBS_Global_Real_Estate_Bubble_Index_Study.pdf.

⁷ Bank of Canada, "Financial System Review – December 2015." Available online at <http://www.bankofcanada.ca/2015/12/fsr-december-2015/>.

⁸ According to Statistics Canada, "A census metropolitan area (CMA) or a census agglomeration (CA) is formed by one or more adjacent municipalities centred on a population centre (known as the core). A CMA must have a total population of at least 100,000 of which 50,000 or more must live in the core. A CA must have a core population of at least 10,000. To be included in the CMA or CA, other adjacent municipalities must have a high degree of integration with the core, as measured by commuting flows derived from previous census place of work data." Statistics Canada, "Census Dictionary 2011," p. 90. Available online at <https://www12.statcan.gc.ca/census-recensement/2011/ref/dict/98-301-X2011001-eng.pdf>.

⁹ The local or regional focus of this report, CMAs, is labour markets (which are also housing markets). These are the economic and physical forms of the city (as opposed to individual municipalities, which are parts of metropolitan areas). Census agglomerations are labour and housing markets that are smaller than metropolitan areas.

¹⁰ Statistics Canada term.

¹¹ The term "affordable housing" is often used to denote lower-income housing affordability, especially subsidized housing.

¹² Paul Cheshire and W. Vermeulen, "Land markets and their regulation: the welfare economics of planning," LSE Research online, 2009. Available online at [http://eprints.lse.ac.uk/30787/1/Land_markets_and_their_regulation_\(LSERO_version\).pdf](http://eprints.lse.ac.uk/30787/1/Land_markets_and_their_regulation_(LSERO_version).pdf).

¹³ Shlomo Angel, Stephen K. Mayo and William L. Stephens, Jr., "The Housing Indicators Program: A Report on Progress and Plans for the Future," *Netherlands Journal of Housing and the Built Environment* 8, no. 1 (1993): 13-48. Available online at <http://sollyangel.com/wp-content/uploads/2013/10/38.-1993-The-Housing-Indicators-Program.pdf>.

¹⁴ A census metropolitan area or census agglomeration is the economic city and usually includes multiple municipalities. For example, the Toronto metropolitan area includes at least 20 municipalities (or equivalents), such as the cities of Toronto, Markham, Richmond Hill and Mississauga. The Montréal metropolitan area includes approximately 90 municipalities (or equivalents), such as the Ville de Montréal, the Ville de Laval and the Ville de Sainte-Thérèse. The Vancouver metropolitan area includes nearly 40 municipalities (or equivalents), such as the city of Vancouver, the city of Surrey and the city of New Westminster. Among the other six largest metropolitan areas, Calgary has nine municipalities or equivalents, Edmonton has approximately 35 and Ottawa-Gatineau has 15. Some international metropolitan areas have even more municipalities. For example, the Paris metropolitan area, with a population of approximately double that of the Toronto metropolitan area, has nearly 1,800 municipalities.

¹⁵ In a number of nations, periodic house prices are reported as medians (middle of the distribution) rather than as averages. The International Demographia Housing Affordability Survey principally uses the median multiple rather than the average price-to-income multiple used in this report. Co-author Wendell Cox is also co-author of the Demographia Survey.

¹⁶ Statistics Canada 2001 Census and 2011 National Household Survey and The Conference Board of Canada, Metropolitan Forecast, August 7, 2015.

¹⁷ The 1971 median house value and median household income data are from the Census of Canada for 1971 (Statistics Canada). The 2004 and 2005 median house-price data and median household income are from the Annual Demographia International Housing Affordability Surveys. Five metropolitan areas reported in 2004 (Toronto, Montréal, Vancouver, Ottawa and Calgary) and four other metropolitan areas were added in 2005 (Edmonton, Québec, Winnipeg and Hamilton).

¹⁸ All house price and income data are in current dollars (not inflation adjusted) unless otherwise noted.

¹⁹ Royal Bank of Canada, "RBC Housing Affordability Report," various issues. Available online at <http://www.rbc.com/newsroom/reports/rbc-housing-affordability.html>.

²⁰ A down payment of 25 per cent is assumed.

²¹ See Canada Mortgage and Housing Corporation, "Homebuying Step by Step: Step 2: Are You Financially Ready?" Available online at http://www.cmhc-schl.gc.ca/en/co/buho/hostst/hostst_002.cfm.

²² Estimated from RBC graph using Craig Wright and Robert Hogue, "Housing Trends and Affordability," RBC Economics Research, August 2015.

²³ Average 2000 house prices from CMHC and Statistics Canada, "Evolving Housing Conditions in Canada's Census Metropolitan Areas, 1991-2001," January 2005. Available online at <http://publications.gc.ca/collections/Collection/Statcan/89-613-MIE/89-613-MIE2004005.pdf>; see Appendix Table A1. Average 2015 prices from the second quarter are from CMHC "Housing Now," various editions. Available online at <https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?cat=70&itm=1&lang=en&sid=1NFLgwLCBuWLPTW9eHPcAGA4mlaozlvGL7s97PJ6nW24H3xwnSWeoheFRFVfjCx8&fr=1447160020302>.

²⁴ In Appendix A.

²⁵ Latest available Statistics Canada data. See Mark Brown and Luke Rispoli, "Metropolitan Gross Domestic Product: Experimental Estimates, 2001 to 2009," Statistics Canada, Economic Analysis Division, November 10, 2014. Available online at <http://www.statcan.gc.ca/pub/11-626-x/11-626-x2014042-eng.htm>.

²⁶ Statistics Canada.

²⁷ Unweighted.

²⁸ The 2015 average household income is from the 2011 National Household Survey (2010 data), adjusted by the per capita income estimated change from The Conference Board to 2014, then adjusted to 2015 using the provincial change in weekly earnings.

²⁹ Statistics Canada, "Population of census metropolitan areas," February 2015. Available online at <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo05a-eng.htm>.

³⁰ Calculated from RBC data.

³¹ Metropolitan markets with more than one million population.

³² Vancouver City Savings Credit Union, "Downsizing the Canadian Dream: Homeownership Realities for Millennials and Beyond," March 2015. Available online at https://www.vancity.com/SharedContent/documents/News/Downsizing_Canadian_Dream_March2015.pdf.

³³ Calculated from RBC data.

³⁴ Ottawa-Gatineau was called Ottawa-Hull in 2000.

³⁵ Brown and Rispoli, "Metropolitan Gross Domestic Product."

³⁶ Statistics Canada, "Population of census metropolitan areas."

³⁷ See map at Neptis, "Implementing the Growth Plan for the Greater Golden Horseshoe," October 2013, p. 21. Available online at http://www.neptis.org/sites/default/files/growth_plan_2013/theneptisgrowthplanreport_final.pdf.

³⁸ This excludes Fredericton and Charlottetown, for which data is not available.

³⁹ Statistics Canada, "Population of census metropolitan areas."

⁴⁰ The Saguenay metropolitan area was called Chicoutimi-Jonquière in 2000.

⁴¹ Canada Mortgage and Housing Corporation, "Are You Financially Ready? Affordability Rule #1." Available online at http://www.cmhc-schl.gc.ca/en/co/buho/hostst/hostst_002.cfm.

⁴² Even this rate would be well below historic norms. The Conference Board of Canada data indicate an average five-year conventional mortgage rate of approximately 10.0 per cent between 1975 and 2010. Canadian Forecast - 20 yr.

⁴³ Based on their own preferences, individual households determine their quality of life. Given the overwhelming preference of households for single-family houses, it seems likely that most households would equate being priced out of the market for single-family houses with a lesser quality of life. However, other households might not consider that this more-limited choice represents a lesser quality of life (percentage in single-family houses then and now).

⁴⁴ Vancity, "Downsizing the Canadian Dream."

⁴⁵ Royal LePage, Royal LePage Baby Boomer and Generation Y Survey, March 2013. Available online at <http://www.royallepage.ca/realestate/news/despite-challenges-canadas-generation-y-still-plan-to-own-homes-according-to-royal-lepage-national-survey/#Vs57DOZVfgo>.

⁴⁶ Jeff Lagerquist, "Condos the only option for average Toronto first-time homebuyers," Business News Network. Available online at <http://www.bnn.ca/News/2015/10/5/Condos-the-only-option-for-average-Toronto-first-time-homebuyers.aspx>.

⁴⁷ Feng Hou, "Homeownership over the Life Course of Canadians: Evidence from Canadian Censuses of Population," Statistics Canada Analytical Branch Research Paper Series 325 (2010).

⁴⁸ Average of 35 markets. Data from the 2001 Census of Canada and the 2011 National Household Survey.

⁴⁹ GWL Realty Advisors Inc., "Drivers of Apartment Living in Canada for the Twenty-First Century," September 2010. Available online at http://www.gwltrealtysadvisors.com/Portals/0/Research%20Reports/2010/Drivers_of_21st_century_apartment_living%5B1%5D.pdf.

⁵⁰ Wendell Cox, "Smart Growth (Livability), Air Pollution and Public Health," Newgeography, September 29, 2011. Available online at <http://www.newgeography.com/content/002462-smart-growth-livability-air-pollution-and-public-health>.

⁵¹ See for example, David Lane et al., "St. John's Parks & Open Space Master Plan," City of St. John's, December 2014. Available online at <http://www.stjohns.ca/sites/default/files/files/publication/Open%20Space%20Master%20Plan.pdf>. Also see the Institute for the Prevention of Crime, "Making Cities Safer: Canadian Strategies and Practices," University of Ottawa, No. 2, July 2008. Available online https://www.fcm.ca/Documents/reports/Making_Cities_Safer_Canadian_Strategies_and_Practices_EN.pdf.

⁵² Contrary to popular perception, downtown areas contain comparatively little metropolitan area employment. In 2006, downtown employment represented an average of just 14 per cent of employment in the six largest metropolitan areas, ranging from 7 per cent in Edmonton and 12 per cent in Toronto to 20 per cent in Calgary. See Wendell Cox, "Improving the Competitiveness of Metropolitan Areas," Frontier Centre for Public Policy, May 2012. Available online at http://archive.fcpc.org/files/1/PS135_Transit_MY15F3.pdf.

⁵³ Raymond B. Palmquist, "Estimating the Demand for the Characteristics of Housing," *The Review of Economics and Statistics* (1984): 394-404, and Stacy Sirmans, David Macpherson and Emily Zietz, "The Composition of Hedonic Pricing Models," *Journal of Real Estate Literature* 13, no. 1 (2005): 1-44.

⁵⁴ David L.A. Gordon and Isaac Shirokoff, "Suburban Nation? Population Growth in Canadian Suburbs, 2006-2011," Council for Canadian Urbanism, Working Paper No. 1, July 2014. Available online at <http://www.canadianurbanism.ca/wp-content/uploads/2014/07/CanU%20WP1%20Suburban%20Nation%202006-2011%20Text%20and%20Atlas%20comp.pdf>. Similar research in the United States, where there has also been a resurgence of urban core growth, indicates that virtually all major metropolitan area growth between 2000 and 2010 was in automobile-oriented suburbs. The urban core growth was more than offset by population losses in the ring outside the central business districts. See Wendell Cox, "The Long Term: Metro America Goes from 82% to 86% Suburban since 1990," Newgeography, June 12, 2014. Available online at <http://www.newgeography.com/content/004361-the-long-term-metro-america-goes-from-82-86-suburban-since-1990>.

⁵⁵ Wendell Cox, "Special Report: Census 2011: Urban Dispersion in Canada," Newgeography, February 14, 2012. Available online at <http://www.newgeography.com/content/002672-special-report-census-2011-urban-dispersion-canada>.

⁵⁶ More-restrictive land-use policies go by various terms such as "smart growth," "growth management," "compact city policy," "densification," "livability" and (in Australia), "urban consolidation."

⁵⁷ Cox, "A Question of Values."

⁵⁸ The increase in land values (and house prices) can precede the adoption of the urban containment boundary. Participants in the housing market, both buyers and sellers, may anticipate the higher prices as there are indications that stronger regulations may be adopted. For example, Ball et al. document an announcement effect on values in Melbourne, Australia, (Michael Ball, Melek Cigdem, Elizabeth Taylor and Gavin Wood, "Urban Growth Boundaries and their Impact on Land Prices," Working Papers in Real Estate and Planning, August 2012, Reading, U.K.: University of Reading.

⁵⁹ Undeveloped land on or beyond the urban fringe.

⁶⁰ Richard K. Green, and Stephen Malpezzi, *A Primer on U.S. Housing Markets and Housing Policy*, The Urban Institute Press, 2003, p. 146.

⁶¹ Mariano Kulish, Anthony Richards and Christian Gillitzer, "Urban Structure and Housing Prices: Some Evidence from Australian Cities," *Economic Record* 88, no. 282 (2012): 303-322.

⁶² All cited in this report.

⁶³ Peter G. Hall, Ray Thomas, Harry Gracey and Roy Drewett, *The Containment of Urban England: The Planning System: Objectives, Operations, Impacts*, Vol. 2. Allen and Unwin [for] P.E.P., 1973.

⁶⁴ Hall et al., *The Containment of Urban England*.

⁶⁵ Paul Cheshire, *Urban containment, housing affordability and price stability – irreconcilable goals*, SERC Policy Papers, SERCPP004, The London School of Economics and Political Science, Spatial Economics Research Centre, London, U.K., 2009.

- ⁶⁶ Edward L. Glaeser and Joseph Gyourko and Albert Saiz, "Housing supply and housing bubbles," *Journal of Urban Economics* 64, no. 2 (2008): 198-217.
- ⁶⁷ Dan Andrews, "Real House Prices in OECD Countries: The Role of Demand Shocks and Structural and Policy Factors," OECD Economics Department Working Papers, No. 831, OECD Publishing, 2010. Available online at <http://dx.doi.org/10.1787/5km33bqzhbzr-en>.
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- ⁶⁹ Wendell Cox and Hugh Pavletich, "11th Annual Demographia International Housing Affordability Survey: 2015," Demographia. Available online at <http://www.demographia.com/dhi2015.pdf>.
- ⁷⁰ Populations of more than 1,000,000 people.
- ⁷¹ Cox and Pavletich.
- ⁷² New Zealand's central bank.
- ⁷³ Donald Brash, "Introduction to the 4th Annual Demographia International Housing Affordability Survey," Demographia. Available online at <http://demographia.com/dhi4-preface.pdf>.
- ⁷⁴ Other graphical representations of this relationship are found 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.
- ⁷⁵ See Gerrit J. Knaap and Arthur C. Nelson, "The effects of regional land use control in Oregon: a theoretical and empirical review," *The Review of Regional Studies* 18, no. 2 (1988): 37-46.
- ⁷⁶ For more information, see https://www.placestogrow.ca/index.php?option=com_content&task=view&id=9&Itemid=14.
- ⁷⁷ Cox, "A Question of Values," p. 50-53, describes the public policy failure to provide sufficient land to maintain housing affordability.
- ⁷⁸ Paul C. Cheshire, Max Nathan and Henry G. Overman, *Urban Economics and Urban Policy: Challenging Conventional Policy Wisdom*, Edward Elgar Publishing, 2014.
- ⁷⁹ Based on data from the Real Estate Board of Greater Vancouver, "Monthly Statistical Reports," various reports from June to October 2015. Available online at <http://www.rebgv.org/monthly-reports>.
- ⁸⁰ There are a number of conflicting definitions of "urban sprawl." Indeed, even the world's densest urban area has been referred to as "sprawling" (Dhaka, Bangladesh). See Wendell Cox, "Focusing on People, not Sprawl," *Newgeography*, August 4, 2014. Available online at <http://www.newgeography.com/content/004255-focusing-people-not-sprawl>.
- ⁸¹ Urban containment policy is comparatively ineffective at addressing environmental concerns, and its costs can be prohibitive. See Cox, the "Appendix: Perspectives on Urban Containment Rationales," in "A Question of Values."
- ⁸² "Places Apart: A Planet of Suburbs," *The Economist*. Available online at http://www.economist.com/node/21634591/sites/all/modules/custom/ec_essay.
- ⁸³ There are also significant taxes, such as provincial sales tax, federal goods and services tax and land registry fees or land transfer tax, which are proportionate to the price of the house, according to CMHC 2010.
- ⁸⁴ The extent, if any, of this is the result of local demand and supply factors. See for example, Vicki Been, "Impact Fees and Housing Affordability," *Cityscape: A Journal of Policy Development and Research*, vol. 8, no. 1 (2005): 139-185, and G.S. Burge, "Impact Fees in Relation to Housing Prices and Affordable Housing Supply," *A Guide to Impact Fees and Housing Affordability*, Washington, D.C.: Island Press, (2008).
- ⁸⁵ CMHC, "Government-imposed Charges on New Housing in Canada (2009)," CMHC Social-economic Series 10-022, *Research Highlight*, November 2010. Available online at <http://www.cmhc-schl.gc.ca/odpub/pdf/67163.pdf?fr=1454362810755>.
- ⁸⁶ Planned residential developments in which houses can only be sold (or rented to) people above a certain age, such as 55.
- ⁸⁷ The land consuming effect of Boston's large lot zoning is illustrated by its large urban footprint, which at the metropolitan region level (combined statistical area) exceeds all urban areas in the world with the exceptions of New York and Tokyo-Yokohama. Yet, the population of Boston's urban footprint is only one-third that of New York and one-fifth that of Tokyo-Yokohama. See Wendell Cox, "The Evolving Urban Form: Sprawling Boston," *Newgeography*, July 16, 2015. Available online at <http://www.newgeography.com/content/004987-the-evolving-urban-form-sprawling-boston>.
- ⁸⁸ Another density regulating measure is the floor space index (FSI) or floor area ratio (See Alain Bertaud, Mumbai FAR/FSI conundrum, July 20, 2011.

Available online at http://alainbertaud.com/wp-content/uploads/2013/06/AB-Mumbai-FSI-Conundrum-Revised_June-2013_kk-ab1.pdf), which limits the amount of floor space that can be built on particular plots. An FSI is effectively a height limit. Bertaud, a former principal planner at the World Bank, shows that Mumbai has an FSI that is miniscule in an international context. Its highest FSI is less than one-sixteenth that of Vancouver, and Mumbai's FSI is lower than that of Vancouver for the first 25 kilometres from the city centre, despite Mumbai's far larger population. This has seriously decreased the standard of living in Mumbai and is associated with a substantial increase in slum populations. FSIs of this severity that cover so much of a housing market are unknown in North America.

⁸⁹ The Middle America classification in Rolf Pendall, Robert Puentes and Jonathan Martin, "From Traditional to Reformed: A Review of the Land Use Regulations in the Nation's 50 Largest Metropolitan Areas," The Brookings Institution, August 2006. Available online at http://www.brookings.edu/~media/research/files/reports/2006/8/metropolitanpolicy-pendall/20060802_pendall.pdf. Data from the 12th Annual Demographia International Housing Affordability Survey.

⁹⁰ See for example, Amber C. McCullagh and Robert W. Gilmer, "Neither Boom nor Bust: How Houston's Housing Market Differs from Nation's," *Houston Business*, January 2008. Available online at <http://dallasfed.org/assets/documents/research/houston/2008/hb0801.pdf>.

⁹¹ Cox, "A Question of Values," p. 37-38.

⁹² Peter Ganong and Daniel Shoag, "Why Has Regional Income Convergence in the U.S. Declined?" Research Working Paper Series, March 28, 2013. Available online at http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2241069_code1638787.pdf?abstractid=2081216&mirid=5 and Demographia, "Net Domestic Migration & Land Regulation by Severity of the Housing Bubble." Available online at <http://www.demographia.com/db-bubbleaff.pdf>.

⁹³ Matthew Rognlie, "A note on Piketty and diminishing returns to capital," June 15, 2014. Available online at http://www.mit.edu/~mrognlie/piketty_diminishing_returns.pdf.

⁹⁴ Raven Saks, "Job creation and housing construction: Constraints on metropolitan area employment growth," *Joint Center for Housing Studies Working Papers*. Available online at http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/w04-10_saks.pdf.

⁹⁵ Chang-Tai Hsieh and Enrico Moretti, "Why Do Cities Matter? Local Growth and Aggregate Growth," The National Bureau of Economic Research, May 2015. Available online at <http://www.nber.org/papers/w21154>.

⁹⁶ New Zealand Productivity Commission, "Using Land for Housing," September 2015. Available online at <http://www.productivity.govt.nz/inquiry-content/2060?stage=4>.

⁹⁷ Calculated from data in Brown and Rispoli, Metropolitan Gross Domestic Product.

⁹⁸ Right-to-work laws.

⁹⁹ Or even in anticipation of urban containment regulation (Ball et al., 2012).

¹⁰⁰ These challenges are further discussed in William A. Fischel, "Why are there NIMBYs?" *Land Economics* 77, no. 1 (2001): 144-152; U.S. Department of Housing and Urban Development, "Why Not In Our Community? Removing Barriers to Affordable Housing," U.S. Department of Housing and Urban Development, HUD's Office of Policy Development and Research, February 2005. Available online at <https://www.huduser.gov/portal/Publications/wnioc.pdf>; and David Schleicher, "City Unplanning," *Yale Law Journal* 122, no. 7 (2012).

¹⁰¹ Catherine Harris, "Auckland Council Wants to Halve Median House Prices," *Business Day*, October 16, 2015. Available online at <http://www.stuff.co.nz/business/73106230/Auckland-Council-wants-to-halve-median-house-prices>.

¹⁰² Productivity Commission of New Zealand, "Using Land for Housing."

¹⁰³ The Productivity Commission did not propose a standard.

¹⁰⁴ New Zealand Parliament, "Order Paper and questions: 5. Housing Affordability and Availability – Productivity Commission Report," sitting date October 22, 2015. Available online at http://www.parliament.nz/en-nz/pb/business/qa/51HansQ_20151022_00000005/5-housing-affordability-and-availability%e2%80%94productivity.

¹⁰⁵ Wendell Cox, "Auckland Tackles Housing Affordability Crisis," *Newgeography*, February 11, 2015. Available online at <http://www.newgeography.com/content/005086-auckland-tackles-housing-affordability-crisis>.

¹⁰⁶ Productivity Commission of New Zealand, "Using Land for Housing."

¹⁰⁷ Such as Glaeser and Gyourko (2008) and Andrews (2010).

¹⁰⁸ Cheshire et al., 2015.

¹⁰⁹ Bank of Canada analysis indicates that increases in household debt mainly come from the increase in home equity loans, while first mortgage debt has only grown modestly. Nevertheless, a financial collapse would likely have a disastrous effect on repayment of this debt, like that of first mortgages. Jeannine Bailliu, Katsiaryna Kartashova and Césaire Meh, "Household Borrowing and Spending in Canada," *Bank of Canada Review* Winter (2011-2012): 16-29.

¹¹⁰ Bank of Canada, "An Act respecting the Bank of Canada," October 2008. Available online at http://www.bankofcanada.ca/wp-content/uploads/2010/07/act_loi_boc_bdc.pdf.

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