

Changing Direction: A Fresh Approach for Assessing Affordable Housing Options in the GTA



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*The opinions expressed in this research report are those of the authors only and do not represent the opinions and views of either CUR or Ryerson University.

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Abstract

This paper argues that the initiatives of the various levels of government to address housing affordability in the Greater Toronto Area (GTA) are not likely to materially improve affordability. They fail to appreciate the dual dimension of the affordability problem: (a) an insufficient supply of the types of housing demanded in the marketplace, which cause prices and rents to be excessively high relative to incomes; and (b) the inability of many low-income households to secure suitable and adequate housing at a cost they can afford. Securing acceptable housing is becoming increasingly harder for low-income households as they are competing with middle-income households to get access to the declining stock of affordable housing.

Consequently, governments are doing little to improve market-wide affordability. They are instead channeling scarce subsidy funds that could be utilized to assist low-income households to middle-income households. The provincial government recognizes that the land use planning system is inhibiting supply of new housing, but its efforts to date to improve the regulatory environment and get land to market have been inadequate given the magnitude of the overall affordability problem.

This paper assesses various housing policies in the GTA using a modified version of a housing policy diagnostic tool formulated by Alain Bertaud in his recent book, “Order without Design, How Markets Shape Cities”.¹ We conclude that housing affordability can be improved only if coordinated action is taken at a regional level, not the municipal one, to reform the planning regulation system to greatly increase and expedite planning applications for all types of housing.

The positive side of planning reform is that improvements to overall market affordability can be achieved with little or no spending by most municipalities, allowing them to direct more money towards subsidies to low-income households in housing need.

It is recommended that the three levels of government devote their money to providing

support to low-income renter households in the form of cash payments or vouchers to landlords, once the backlog in supply has been eliminated.

1. Introduction

The Greater Toronto Area (GTA) is home to one of the most expensive housing markets in the world. With rents and home prices rising faster than household incomes, providing affordable housing in the GTA has become a struggle for all levels of government. The housing challenges are two pronged:

- Many low-income households cannot afford minimally acceptable housing accommodation; and
- Housing is too expensive for a growing number of middle-income households.

While many lower-income households in all urban regions struggle to secure affordable acceptable housing, their troubles are compounded in high-cost areas such as the GTA, where middle-income households compete with them for a declining supply of affordable accommodation.

The provincial government and many municipalities are concerned about the extent of the GTA’s housing affordability challenges. A range of housing studies have been or are being undertaken by municipalities to assess the nature and causes of the housing affordability problem, assess options for improving affordability and recommend policies to deal with the problem. While these studies have collected valuable statistical data on the housing situation within individual municipalities, they suffer from a lack of an analytical framework to address the two-pronged region-wide affordability housing challenge.²

In his recent book, “Order without Design, How Markets Shape Cities”, Alain Bertaud, former principal urban planner with the World Bank, develops and presents a “diagnostic tool” for assessing an urban region’s housing situation and analyzing its policy options.³ His diagnostic tool consists of combining a region’s household income distribution with housing consumption by households. We discuss and critique

Bertaud's diagnostic tool and his findings regarding the efficacy of various housing policy options in Appendix A.

In this report, we formulate a modified version of Bertaud's diagnostic tool based upon our critique and the availability of housing and income data for the GTA, which we used to develop CUR's diagnostic tool for housing policy analysis.

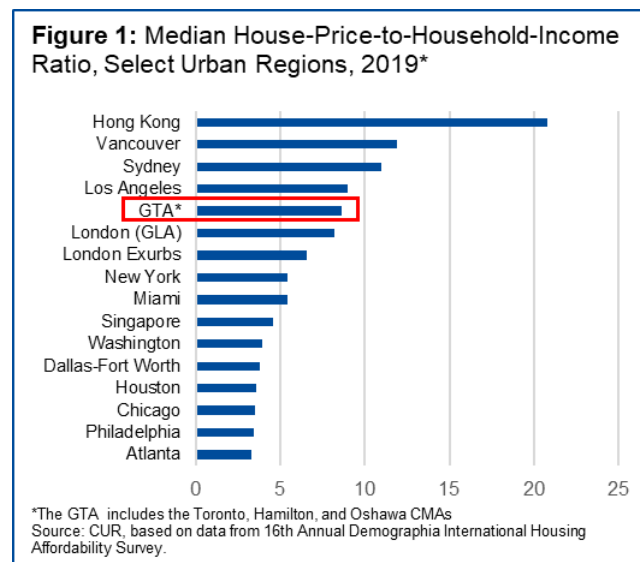
This paper is structured into four parts:

- A brief look at the two-pronged affordable housing problem in the GTA;
- The presentation of CUR's modified version of Bertaud's diagnostic tool;
- The application of CUR's diagnostic tool to an assessment of housing policy options in the GTA; and
- Drawing principles from our analyses of housing policy options that can be applied by governments to significantly improve housing affordability in the GTA.

2. GTA Housing Affordability

2.1 A lack of affordability at the market-wide level

One of the traditional measures for tracking housing affordability is the home price-to-income ratio. This ratio demonstrates how the GTA is the fifth most expensive region when compared to other major global urban regions of similar or larger size (see Figure 1).⁴



The home price-to-income ratio in the GTA has been persistently rising over the past decade and a half, indicating a sharp deterioration in housing affordability. Rental housing also is relatively unaffordable in the GTA and has become even more so over the past few years.

2.2 Low-income households unable to find affordable, acceptable housing

A useful way of pinpointing the affordability challenges of many low-income households is to consider core housing need (CHN), a concept developed by CMHC in the 1980s. At the time, CMHC defined a socially acceptable minimum standard of housing in Canada related to household composition. The measure of core housing need divides households by whether they fall below or above that standard.

CMHC defines socially **acceptable** housing as:

- Housing that is **adequate** – not in need of major repairs;
- Housing that is a **suitable** - the home has enough bedrooms for the makeup of the household. This generally requires that there be no more than two people per bedroom and is subject to household structure and age; and
- Housing that is **affordable** - the global gold standard for affordability is that households do not have to devote 30% or more of their household income to secure adequate and suitable housing. High-income households who can spend more than 30% of their income to secure adequate and suitable housing and still have a high standard of living are excluded.

A household is in core housing need if it falls below one of the above standards.

Figure 2 shows the number of households in core housing need in the GTA by income level in 2016. The top panel indicates the income distribution of owners living in core housing need and the bottom panel represents that of renter households.

The figure shows that most households in core housing need, whether these households are owners or renters, are in the lowest income brackets (under \$60,000 in 2016) and that renter households are much more likely to be in core housing need than owner households (36% versus 11% of all households of the same tenure).

It is worthy of note for housing policy analysis that most owner households (96%) and renter households (86%) in core housing need have an affordability problem, while their home is adequate and suitable under the CMHC definitions.

Finally, the proportion of all households who live in core housing need is just below 20% and has been steady for more than two decades (1996-2018).⁵

3. Description of CUR's Diagnostic Tool for GTA Housing Policy Analysis

This section outlines CUR's version of Bertaud's diagnostic tool which has been populated with GTA data. CUR's diagnostic tool for assessing affordable housing policy options is based on the following considerations: the capacity to analyze the impact of policies on both components of the housing affordability problem, market-wide and low-income specific affordability, their interaction and data availability.

3.1 An overview of CUR's diagnostic tool

We opted to use data from the 2016 Census of Canada for our empirical work. This data base has the advantage of containing a range of demographic, housing and income data for households. We examine the entire GTA as affordable housing policies are only effective at this level – not individual municipalities.⁶ We retain Bertaud's examination of housing demand and supply by income group.

The demand side of our model consists of two variables presented by income group:

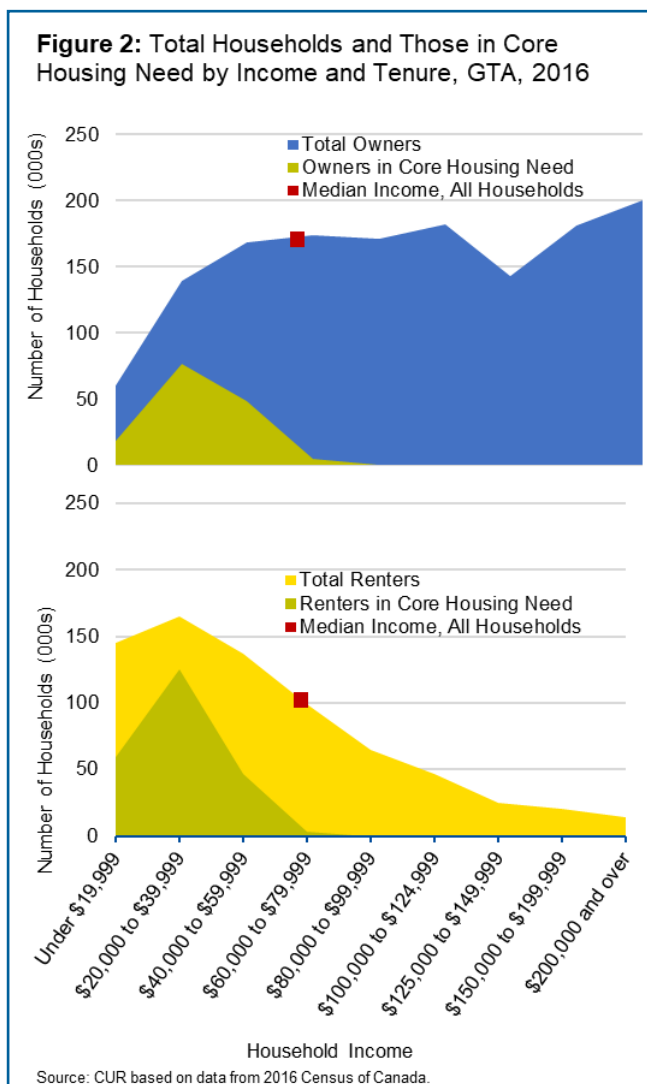
- Total households in 2016; and
- Households in core housing need in 2016.⁷

Core housing need supplemental data are provided for both homeowners and renters (see Figure 2).

The demand side of the model incorporates a single variable presented by income group:

- The average annual growth in occupied dwelling units during the decade prior to 2016.

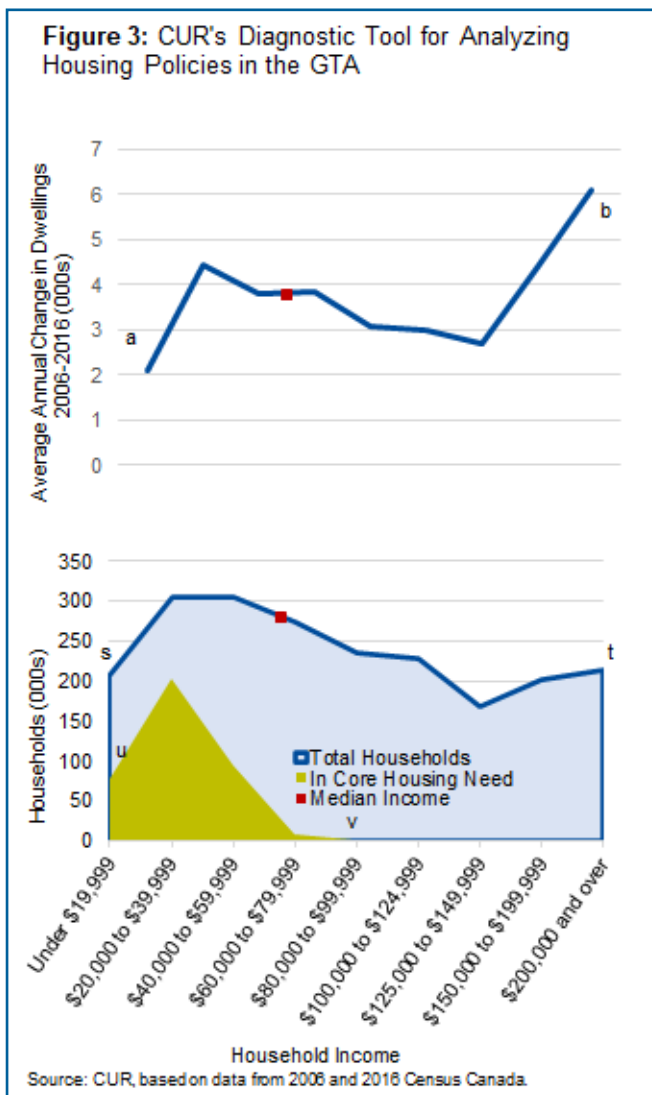
Figure 3 presents CUR's version of the diagnostic tool for the GTA. The bottom half of the figure is housing demand and the top half is housing supply. The demand and supply sides of the marketplace are described below.



3.1.1 The demand side of the housing market – total households and households in core housing need

The main demand variable is the number of households by income group, which is the same variable Bertaud uses in his model (see the bottom half of Figure 3, line “s-t”). We also include a subset of households in core housing need (line “u-v”). As noted in Section 2.2, households in core housing need are found in the lowest income groups. Renters have the largest affordability challenge, as many owners in core housing need have equity in their homes or have the prospect to build up equity.

The demand for housing by GTA low-income households (those with income up to \$60,000) is larger than the demand by middle-income households (incomes \$60,000 to \$124,999).⁸ High-income households (incomes \$125,000 and higher) are less numerous but there are still substantial numbers, especially those with income of \$150,000 or more.



3.1.2 Measuring the supply side - growth in occupied dwelling units

Our supply variable is the average annual net addition of occupied dwelling units in the GTA during the decade ending in mid 2016 (see top half of Figure 3, line “a-b”).⁹

Additions to the housing stock come largely from new residential construction, though units can be created within the existing stock. For instance, a second suite can be added to a single-detached house. Units are also created when hotels or office buildings are converted to residential use and lost if existing homes are demolished or when a duplex is converted into a single-detached house.

Importantly, the growth in housing supply for low- and middle-income groups also results from what economists call the filtering process.¹⁰ Filtering occurs when high- and middle-income households move to more expensive new housing and their previous lower-priced existing units become available to low- and middle-income households.¹¹ The filtering process can be lengthy and less obvious in supply-constrained housing markets such as the GTA. It can also be veiled by demand growth in rapidly growing markets such as the GTA.

The supply of additional housing is shown in Figure 3 (line “a-b”).

The supply curve shows that:

- Net additions to the GTA’s housing stock between 2006 and 2016 were largest for the \$150,000 plus household income groups;
- Next largest in housing additions were households with incomes less than \$100,000; and
- Households with incomes between \$100,000 and \$149,999 recorded the smallest growth of housing additions over the 2006-2016 decade.

This slower growth in middle-income households could reflect income polarization within the GTA over that time. For example, a research study documented that the number of middle-income census tracts in the city of Toronto between 1991 and 2016 became fewer, with growth occurring in low-income and high-income census tracts.¹²

4. Analysis of Housing Policy Options in the Context of the GTA

In what follows, we use the tool described above to analyze the potential impact of a number of housing policies, including lifting supply constraints. The goal of policy should be to raise the housing “supply” curve in a way that provides sufficiently more housing to all household income levels.

We cover the entire GTA rather than individual municipalities when analyzing the efficacy of alternate housing policies. A single municipality such as the City of Toronto cannot implement long-lasting housing policies to enhance housing affordability unless the other municipalities in the GTA do likewise. The housing market is regional and households can move from one municipality to another easily. There is a clear need for the province to fill the vacuum as there is no GTA government unit between municipalities and the province.

4.1 Removing constraints on the supply of readily developable residential land by reforming land use regulation and fast-tracking infrastructure

Awareness is growing that the land use regulation system is a major cause of deteriorating overall affordability in the GTA because it constrains the supply of serviced land available for building new housing.¹³ The region’s planning regulation system has become increasingly onerous, costly and uncertain and zoning bylaws often lag realistic densities. These are due to more arduous planning requirements from the provincial government over the past couple of decades as well as to local policies and administration at the municipal level. Inadequate investment in necessary infrastructure at times is an added factor.

Governments pursue many objectives in their land use policies. These include reductions in greenhouse gas emissions, preserving farmland, inclusiveness and social equity. It is not surprising, therefore, that the critical affordable housing objective of maintaining an ample supply of serviced sites for a range of housing types and densities in built-up areas and greenfields to

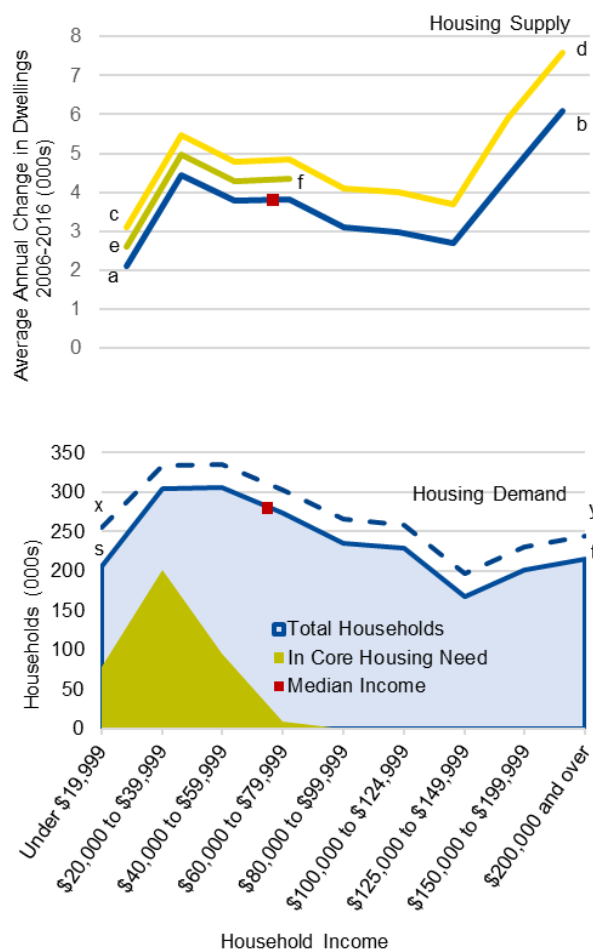
accommodate the current and expected demand can conflict with other priorities.¹⁴

Higher land prices and housing prices result when the supply of new housing lags buoyant demand.¹⁵ The supply of new rental housing is negatively impacted also, as rental developers must bid for the same sites as condominium developers. This leads to upward pressures on rents.

The current provincial government recognizes the land use planning system has been stymieing the supply of a range of new housing and has recently implemented initiatives to spur municipalities into increasing the supply of ready-to-go serviced sites and sites in the short-term planning pipeline. It is not clear yet just how or how quickly municipalities will respond to these recent provincial directives.

Line “c-d” in Figure 4 represents the increase in supply of housing across income groups when the land use planning system is liberalized to bring more housing to the marketplace faster.

Figure 4: CUR's Diagnostic Tool for the GTA: Impact of Alternative Housing Policies, 2016



Source: CUR, based on data from 2006 and 2016 Census of Canada.

(Previously, the supply was represented by line “a-b”.) Most of the additional new housing built will be occupied by high-income households with middle-income households benefiting from the additional housing created through the filtering process.

Low-income households also benefit as the lower priced existing housing units previously occupied by middle-income households become available to them (filtering process). Affordability for all households is improved by the greater supply of new housing, which puts downward pressure on prices and rents, though households in core housing need are likely to benefit only at the margin.

Bottom line: the liberalization of the land use planning system to expedite the supply of serviced sites for all type of housing can make a substantial contribution to improving overall affordability in the GTA. While some households in core housing need could benefit from the easing in overall affordability, most would continue to spend 30% or more of their income for shelter for suitable and adequate accommodation.

4.2 Expediting affordable housing development applications through the land use planning process

Some GTA municipalities have adopted or are considering policies that expedite development applications for “affordable” housing projects through the approval process.¹⁶ Affordable housing typically consists of projects targeted at low-income and middle-income groups with prices or rents below what the market may otherwise be providing.

As seen with regards to line “e-f” on Figure 4, the overall impact of this policy would be less than expediting all applications since it is limited to a small portion of development applications. It therefore does not deal with the constraints on the overall availability of shovel-ready sites for a range of new housing.

There would be more new affordable housing built, but there would not be high-income households moving into new more expensive higher quality housing. This means there would

be less filtering to middle-income and low-income households. The housing situation of most households in core housing need would not change much under this policy.

The bottom line: by itself, the relaxation of planning approval and zoning conditions for affordable housing projects are an inferior way of incentivizing the market to provide more affordable housing. There would be fewer units provided through the filtering process than if all applications are accelerated.

4.3 Subsidizing the supply of rental housing for low- and/or middle-income households

The conventional way for governments to provide affordable housing for low-income households has been to develop new housing projects and subsidize the gap between what renters can afford (30% of household income) and the monthly landlord costs of mortgage payments and operating costs. The housing is typically owned by government or non-profit entities. This housing goes by varying names – public housing, community housing, social housing, non-profit housing, or cooperative housing.

In recent times, the types of subsidies for affordable housing have become more varied. In Ontario, non-profit groups, such as places of worship, the province and municipalities including Toronto and Mississauga, have provided land at little or no cost for affordable housing projects. Also, municipalities often forgive development charges for affordable housing projects.¹⁷ In the case of both these subsidies, taxpayers are bearing a portion of the costs. These subsidy costs seldom turn up as a financial expense in the government financial statements and so are not transparent. Nevertheless, the costs are very real and should be made explicit as a tax expenditure.¹⁸

Many subsidized projects are being launched to provide affordable housing to middle-income households. Targeting middle-income households means that more affordable housing units can be built since the per unit subsidy costs will be less than that to subsidize low-income households.

CMHC's 10-year "National Housing Strategy" is an ambitious effort to repair the existing social housing stock and to create more affordable housing units. A recent critique of the strategy concluded that much of its resources are directed towards the creation of purpose-built rental projects for middle-income households through the Rental Housing Finance Initiative.¹⁹

In its latest housing action plan, the City of Toronto targets both new purpose-built market rental housing and new affordable housing for both low- and middle-income renters.²⁰ The city has not released data on the number of affordable rental units created for each group. It seems likely that the thrust is on units targeted to middle-income households, given that more affordable units can be created with a given pool of subsidy funds when the per unit subsidy is lower.

Subsidizing affordable housing for middle-income households will not do much to help low-income households with housing affordability, since the number of units filtering down to them will be small compared to the pool of households needing affordable housing. This approach also suffers from the disadvantages as mentioned by Bertaud, namely:

- Households must move to receive the subsidy as the units' location has been selected by planners or others and not by the end user;
- Mobility is reduced since beneficiaries must remain in the new unit to keep the subsidy - this conflicts with labour market efficiency;
- Directing subsidies to new rental housing for middle-income housing diverts funds that could be available to build housing for low-income households; and
- The supply side subsidies provided by government are frequently hidden from public purview because they are in the form of tax expenditures rather than direct expenditure of funds.

Bottom line: supply side subsidies have many shortcomings, including a lack of

transparency and a propensity to target middle-income more than low-income households as a larger number of affordable housing units can be created. This reduces assistance available to households in core housing need.

[4.4 Providing demand side subsidies to households in core housing need](#)

Applying demand side subsidies involves low-income households paying shelter costs according to what they can afford for acceptable housing. Governments cover the difference between market rents and affordable rents through cash payments or a rent vouchers to landlords. This approach targets households in core housing need and is an income support program that requires the recipients to direct the subsidy funds they receive to housing. Unlike supply side subsidies, demand side subsidies typically allow households to choose locations they prefer and therefore are less likely to diminish labour force mobility.²¹

There are government rent supplement programs, but they are limited in number and the subsidies are often tied to individual units, which discourages labour force mobility. CMHC's National Housing Strategy includes rent supplements for over 4,500 units across Canada but these units must be low-income community housing units.²²

A challenge with any subsidy program is to have an accurate accounting of recipients' incomes over time. This is increasingly difficult with more gig jobs and more self-employment. Unlike supply side subsidies, however, which are not often transparent, demand subsidies appear as an expense on the financial statements of the donor government.

A word of caution, though. As Bertaud warns, unless there is a surplus of available housing at the time, it is critical that demand side subsidies be accompanied by increased supply of housing through the easing of land use planning and infrastructure constraints to moderate prices and rents in the overall market and to provide choice. Otherwise, landlords could increase rents with no long-lasting benefit to households in core housing need.

Bottom line: demand side subsidies combined with planning reforms to accelerate the supply of new housing are more efficient than supply-side subsidies alone to attack the lack of affordable housing for low-income households.

5. The Challenge to Affordability Created by Rapid Household Growth in the GTA

This analysis of policy options addresses the current affordability circumstances in the GTA. However, the affordability challenge is much more likely to increase in severity since affordable housing must be provided for many of the huge net influx of people into the GTA through anticipated international and domestic migration.

Recent forecasts by Hemson Consulting, conducted for the Ministry of Municipal Affairs and Housing, anticipate that net migration of all types will add more than 70,000 persons per year on average to region's population during the 2021-2031 decade.²³ This accounts for much of the GTA's expected population growth during the period.

In terms of households in the GTA, Hemson forecasts average annual growth of 47,000 during the 2021-2031 decade, up from 38,000 in 2016-2021. Much of this housing demand will be from net immigrants.

Bottom line: with robust immigration, it is even more imperative for GTA municipalities to gear up quickly to bring serviced sites on to the market for a range of housing types to accommodate this growth as well as to assist existing low-income households with affordability issues.

6. Principles for Municipalities in the GTA: The Path to Improved Housing Affordability

Building on the modelling and analysis undertaken by Bertaud, the analysis here provides concrete directions for municipalities in the GTA to follow if they are serious about enhancing the supply of affordable housing in a meaningful way.

Principle 1: There are two separate but interrelated affordable housing challenges with different causes

The GTA housing challenges are two-pronged: the region struggles to provide adequate housing for low-income households, and housing is too expensive for a growing number of middle-income households. The root of the affordable housing difficulties of many low-income households is their lack of income. The excessively high housing cost-to-income ratio in the overall GTA housing market reflects the inability of municipalities to bring an abundant supply of approved, serviced sites to the marketplace. Hence, builders cannot meet demands for a variety of housing types in a variety of locations.

Many lower-income households in all urban regions struggle to secure affordable, acceptable housing. Their troubles are compounded in high-cost areas like the GTA, where they have to compete with middle-income households for a declining supply of affordable accommodation.

Principle 2: All GTA municipalities must coordinate their policies to address housing affordability materially

The GTA is a proxy for an economic region that provides labour for the primary job nodes like central Toronto and the airport employment centre. It is a commuter shed that encompasses both a labour and a housing market. Even if a municipality within the region, such as the

city of Toronto, were to succeed in generating a sizable supply of additional affordable housing units, this success would be short-lived. Residents of adjacent areas would move to the municipality, causing prices and rents to increase once again.

With the GTA not having a region-wide governance body, the Ontario government is the only effective body to provide the necessary coordinated action across all the municipalities.

Principle 3: A sustained improvement in overall housing affordability depends on a significant increase in approved, serviced land sites that GTA municipalities continually replenish

The way to improve the housing cost-to-income ratio across the GTA is to increase household choice and provide more competition for builders to bring purchase prices and rents more in line with household incomes. Doing this requires seismic reform to land use regulation in the GTA in both built-up and greenfield areas to bring enough approved, serviced sites for a range of housing types. The current approvals and zoning system lack the flexibility to expeditiously produce the quantity and density of shovel-ready serviced sites needed to accommodate growing housing demand and allow for choice and competition in built-up and greenfield areas.

The current Ontario government has taken several actions to increase the supply of appropriately approved, serviced sites in the GTA and elsewhere in the province. Among them is an amendment to the Provincial Policy Statement (PPS) in 2020 for the housing mix in municipalities to meet projected market-based needs. The PPS now requires municipalities to maintain an ample supply of serviced sites and sites in the development pipeline to meet anticipated market demand by unit type, something the previous PPS did not explicitly do. Especially effective is the requirement to maintain a minimum of a three-year supply of always ready-to-go sites in built-up and, as needed, greenfield areas (Policy 1.4.1 a). The Ontario government is urged to regard this policy as a high priority and regularly

monitor GTA municipal compliance to the minimum land inventories specified, encourage municipalities to exceed them, and require laggard municipalities to take corrective action.

Principle 4: To relieve the affordability burdens of many middle-income households, the number one housing priority of GTA municipalities should be the expansion of the supply of approved, serviced sites for a range of housing types

The only sustainable way to make housing more affordable to more middle-income households in built-up and greenfield areas is to reform land use regulation to significantly increase the inventory of available approved, serviced sites and expedite planning applications through approvals and zoning processes for all housing types.

Some municipalities have initiated a policy thrust of subsidizing new housing projects to deliver affordable units for middle-income and low-income households. However, these policies will provide accommodation for only a fortunate few and do not address the GTA's fundamental affordability problem.

The achievement of market-wide affordability improvements through land use regulatory reforms can happen with little or no spending by many municipalities. Thus, this would allow the effective direction of scarce subsidy dollars to aid low-income households living in core housing need, unlike today when funds go to subsidize middle-income housing.

In other words, governments should focus on easing land use regulatory burdens and facilitating infrastructure expansions to allow the market to operate more efficiently in delivering housing to middle-income households, while increasing subsidies for low-income households.

Principle 5: It is better to support low-income households through demand-side rather than supply-side housing subsidies

There are advantages to providing low-income households in need of affordable, acceptable housing with a monthly subsidy to make up the difference between market rent and the rent they can afford rather than subsidizing

new housing for these households. One such advantage is the increased mobility permitted for low-income households, which allows them to find affordable housing closer to jobs and transit. Once increases in the overall supply of housing outpace demand, thus reducing upward price and rent pressures, the three levels of government should devote their subsidy dollars, including so-called tax expenditures (subsidies), to low-income renter households. The federal government's National Housing Strategy's program of rent supplements to community housing residents, while modest in scale, is a step in the right direction.

Appendix A: Description and Critique of Alain Bertaud's Diagnostic Tool for Assessing Housing Policy Options

A.1 Bertaud's diagnostic tool for analyzing housing affordability policy options

This appendix provides a summary of the main takeaways from the description of the diagnostic tool in Chapter 6 of Alain Bertaud's book, "Order without Design, How Markets Shape Cities".²⁴

A.1.1 Bertaud's questions for housing policy makers

Bertaud suggests governments should answer the following questions in developing policies for affordable housing:

1. **How many** households does the government want to help or which income groups does the government want to provide housing to?
2. **What standard** of housing should be provided?
3. **How many units** should the government subsidize every year?

4. **How many years** this subsidy should be provided?
5. **How much** does the government need to spend annually to meet these targets?

A.1.2 Details of Bertaud's diagnostic tool

Bertaud's diagnostic tool was developed to answer these questions. In his view, the best way to do so is to link how much housing households currently consume to their income distribution, using an indicator such as average square feet of floor space per household.²⁵

The graphic diagnostic tool developed by Bertaud is presented in Figure A-1. In this model, the bottom chart presents the income distribution of households – what he calls the demand side of the housing market. The top chart represents the supply side of the market (marked on Figure A-1 as line "a-b") - average housing consumption (measured as average square feet occupied) per household by income group. This figure illustrates how the average size of housing differs by income level.

Figure A-1: Bertaud's Diagnostic Tool for Analyzing Housing Policies

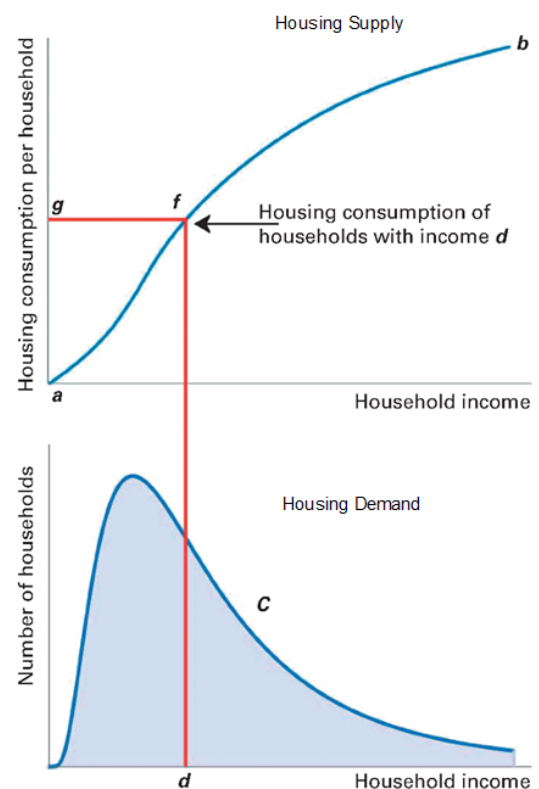


Figure 6.12
Income and housing consumption—market outcome.

Source: Bertaud, Alain (2018). "Order without Design: How Markets Shape Cities." Cambridge: MIT Press, 251.

It might be a bit confusing to think of consumption as the supply side, but Bertaud's model assumes that what households are consuming is a function of what the market is producing and that each household makes trade-offs between quality, location and affordability given the supply.

Figure A-1 illustrates that:

- There are far more low-income households in this economy than middle- and high-income households (demand);
- The average size of a home occupied is positively linked to the level of household income in a free market. As a household's income goes up, so does the average size of its home; and
- The market rarely provides housing for very low-income households.

A.2 Bertaud's insights from his analysis of affordable housing policy options

Before turning to a synopsis of what Bertaud has to say about specific housing policies it is useful to summarize his view on the roles of the private marketplace and government in providing affordable acceptable housing:

- In regions with balanced market conditions, the private market can be relied upon to provide housing for all households except those at the lowest end of the income scale. It is the responsibility of government to subsidize these households or directly provide them with housing if they lack sufficient income; and
- In regions that have high costs of housing relative to income, especially where this is due to government regulation and underinvestment in infrastructure, the policy response should be to reform the government regulation and invest more in infrastructure to support increased housing supply.

Here are some key insights from Bertaud about specific types of housing policies. Our comments on what he says are provided in the next section.

A.2.1 Bertaud: Relaxing onerous planning regulation is the least costly way to significantly increase the supply of serviced land and new housing

Supply constraints largely flow from government involvement in the housing market, especially regarding the availability of serviced sites to meet housing requirements.

Accelerating the supply of service land to the marketplace results in a large increase in housing consumption (see Figure A-2) and usually is not very costly to governments.²⁶ While all income groups would benefit from the additional housing directly or indirectly through filtering, the benefits to low-income households would be less than for middle- and high-income households (compare lines "a-c" and "a-b" in Figure A-2). Government action to increase consumption for low-income households would still be needed. Bertaud, as with many economists, regards the plight of low-income households unable to find affordable acceptable housing as largely one of inadequate income.

Figure A-2: Bertaud's Diagnostic Tool: Impact on Housing Consumption of Removing Supply Side Constraints

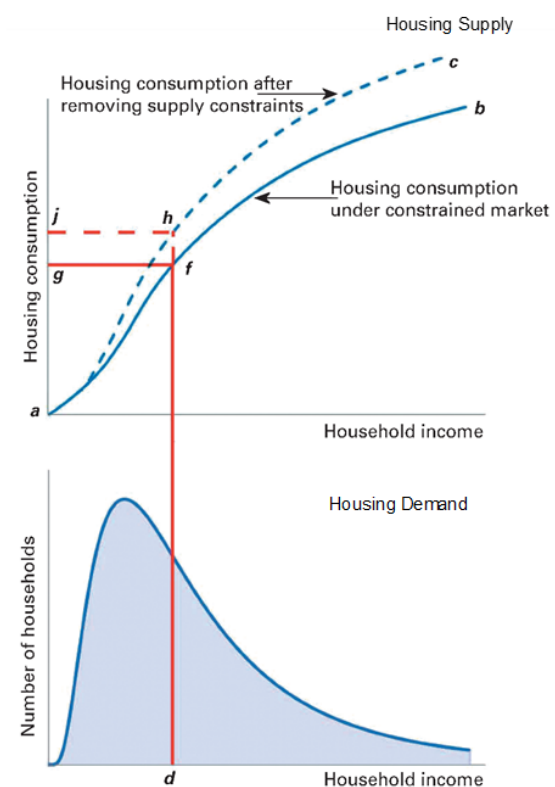


Figure 6.13
Impact on housing consumption of removing supply side constraints.

Source: Bertaud, Alain (2018). "Order without Design: How Markets Shape Cities." Cambridge: MIT Press, 251.

A.2.2 Bertaud: Demand side subsidy programs most advantageous if supply constraints are removed in advance

There are different types of demand subsidies where payments are made directly to households in cash or in vouchers. They range from rent supplements to low-income renters to cover the gap between market rents for acceptable housing and the rents the households can afford to pay to subsidies to first-time buyers to assist them find acceptable housing they can afford.

The cost to government of establishing a minimum socially acceptable housing standard is illustrated by reference to Figure A-2. If the minimum standard is set at the line “g-f”, then the cost to bring all low-income households up to this standard is indicated by the box demarked by line “a-g-f” and the y axis, assuming no increase in new supply and not allowing for price inflation caused by additional demand. The total cost is less when supply increases as the vertical line with “f” on top moves left to the new dotted supply line.

The advantage of demand side subsidies is that they address the main cause of low housing consumption – low-incomes. They also have other advantages: allowing households to make their own trade-offs between dwelling size and location; more financial transparency since the payments made to households are a financial expense of government; and there is no need for a large bureaucracy to administer a sizeable program.

Disadvantages include: a large annual cost if the program is to seriously address the affordability program and aims to maintain waiting lists of say no more than say three years, for example. Most importantly, Bertaud argues this policy requires supply constraints on land and construction be removed in advance of the distribution of financial assistance. Otherwise, the subsidies could result in higher prices and rents instead of improving the housing situation of the recipients.

A.2.3 Bertaud: Supply side subsidies: inferior to demand side subsidies

Supply side subsidies include the direct provision of housing by government or government subsidies to private sector developers to build and manage new affordable housing.

Bertaud lists the disadvantages of supply side subsidies: households must move to receive the subsidy as the location has been selected by planners or others and not by the end user; mobility is reduced since beneficiaries must remain in the new unit to keep the subsidy; and an enormous annual financial commitment would be required.

According to Bertaud, a major problem with the supply side approach is that the households benefiting could end up with a higher standard of housing than households which have higher incomes. This could give encouragement of recipients to sublet their subsidized home.

Even with all these disadvantages, Bertaud asks why many municipalities so prefer supply side subsidies to demand side subsidies. He suggests it is as the political benefits of being seen as addressing the solution outweighs those available from providing demand side subsidies. He also argues that bureaucrats have a more vested interest in supply-side subsidies.

A.2.4 Bertaud: Supply side subsidies: inclusionary zoning – an expensive way to create a few “affordable” apartments and there is no “free lunch”

Inclusionary zoning seeks to have developers pay housing subsidies to low-income households with minimum dispersal of public funds. It involves requiring developers wanting to build a housing project beyond some minimum project size to provide a percentage of units at affordable prices as set by municipalities.

Bertaud argues inclusionary zoning is typically supported by politicians more interested in optics than in analysis. He therefore opposes inclusionary zoning as a meaningful affordable housing policy tool. Here is his reasoning:

- Developers are unlikely to decrease the price of a percentage of their units out of charity. Eventually the prices of new market housing in the market areas will all rise – meaning the developer does not pay the cost of this affordable housing subsidy, rather, all future purchasers do.
- Inclusionary zoning will not produce many units because the pool of high-income buyers, the source of the subsidy relative to the need for affordable housing is small – meaning accessing an affordable unit would be similar to winning a lottery.
- Beneficiaries of the developer subsidies will have an incentive to never move from the affordable units, thus reducing mobility.
- Municipalities offering developers higher floor space densities in exchange for a percentage of affordable units have an incentive to keep permitted densities low so that developers applying for a higher density must give the municipality “free” affordable units, and therefore limits supply.
- Ironically, municipality pressure to increase regulatory pressures to keep densities artificially low makes housing more expensive for everyone and yet it produces a limited number of units below market price.
- The cost is not transparent and likely increases over time.
- The unit subsidies may not be adjusted for changing incomes.

A.2.5 Bertaud: The folly of setting minimum planning standards for new housing units

Minimum housing standards include minimum lot sizes, minimum floor areas, maximum densities, floor area ratio (FAR) and minimum standards for road width and open space/parks.

Bertaud states these minimum standards harm low-income households who cannot afford housing at or above the minimum standards but could if the standards were reduced or eliminated. This can be illustrated by allowing so-called micro apartments which also have lower rents. These micro apartments permit some households, especially smaller households who were

previously unable to afford new apartments, to be able to do so.

Allowing the market to decide on the minimum size of new dwelling units enables low-income households more choice in the trade offs between location, quality and affordability. Those wanting to be centrally located would not have the choice of smaller units.

A.3 Comments on Bertaud’s diagnostic tool and his assessment of housing policies

This section provides our comments on both Bertaud’s diagnostic tool for assessing housing policies and his analysis of several specific policies.

A.3.1 Comments on Bertaud’s diagnostic tool

Salient features and limitations of Bertaud’s diagnostic tool for assessing housing policies are presented here.

- **The diagnostic tool is intended to assess the efficacy of housing policy choices at a high level**

Governments have a potpourri of policies to consider when they are examining the nature of their housing affordability problems and the policy direction to follow. Bertaud argues many governments want to be seen doing something to address housing affordability and pick policies which may have a high media profile but are costly or ineffective in dealing seriously to improve housing affordability. What his diagnostic tool and analysis is intended to do is to steer municipalities and other governments in the direction of adopting the most effective policies (e.g., getting the biggest bang for the bucks spent).

This high-level analysis of policy options is much needed in the GTA.

- **Comparison of two equilibrium situations – before and after a housing policy is implemented**

Bertaud’s approach looks at two equilibriums and does not consider the time involved in between. This can be lengthy for all policies, but particularly so for the results of the easing of land use planning

constraints to significantly augment the supply of shovel-ready sites for a range of housing in both greenfield and built-up areas.

There is nothing wrong about this approach, but policymakers should be aware of the absence of a timing dimension.

- **Working with households existing at a point of time – exogenous growth in demand not explicit**

While Bertaud does discuss growth in demand and supply over time not related to housing policies being examined, the model ultimately looks at households at a point in time and how various policies will affect the consumption (average square feet of space) occupied.

In a market like the GTA, there must be a sizable amount of housing built annually simply to meet the external demand from immigrants and domestic migration. Immigration has been the dominant source of population growth over the past couple of decades and its role is likely to increase since the federal government recently raised its target for annual immigration. As the need for affordable housing increases every year with population growth, the supply of new housing must increase accordingly just to keep housing affordability from deteriorating, let alone improving.

- **The appropriate geographic unit for housing policy analysis is the economic region – not individual municipalities within the region**

When Bertaud talks of “cities” or “municipalities”, he is referring to the entire economic region as this represents a commuter shed and is a housing market. If one municipality in an economic region is successful in creating an ample supply of affordable housing, households will move into the municipality from other municipalities within the region. This added demand will raise prices or rents and reduce the stock of affordable housing for residents in the municipality, thus countering the initial improvement in affordability.

While the GTA incorporates two economic regions or commuter sheds – the Toronto and Oshawa census metropolitan areas – Toronto is by far dominant. In this paper we approximate the GTA by the Toronto census metropolitan area.

- **Bertaud’s approach does not disentangle the dual components of a lack of housing affordability – overall unaffordability and the plight of low-income households**

Bertaud discusses the two aspects of housing affordability, but his diagnostic tool addresses affordability overall and not by component.

- **Bertaud looks at average housing consumption by income group and not the supply of housing units**

Looking at housing consumption (average square feet of floor space) by income group is useful for examining policies intended to raise the consumption of low-income families, though perhaps median floor space would be more robust. It is not as helpful when considering the impact of policies on overall affordability as housing prices are jointly determined by the interaction of supply and demand.

[A.3.2 Comments on Bertaud’s assessment of housing policies](#)

- **Relaxing onerous planning regulation as the least costly way to significantly increase the supply of serviced land and new housing – what about infrastructure?**

We support Bertaud’s contention that municipalities must not only loosen planning provisions which constrain the supply of new sites for new housing, they must ensure the expansion of infrastructure to these sites. In Ontario’s case, most new infrastructure required to service sites is funded by development charges levied on new development so that municipalities can concentrate on liberalizing the available supply of sites in both built-up and greenfield areas without worrying about the funding of infrastructure.

- **Supply side subsidies: inferior to demand side subsidies?**

We generally agree with Bertaud that demand side subsidies to low-income households are a better able to aid low-income households if the overall supply of housing is ample to meet market demand. His observation that recipients would have an incentive to sublet their subsidized home because of its high-quality is debatable. Suffice to say that a restriction on subletting could deal with this issue if it were to arise.

Similarly, his observations on why politicians and bureaucrats prefer supply side subsidies because of their visibility may contain an element of truth, but he does not support it with research results.

- **Is inclusionary zoning as awful as Bertaud believes?**

In its purist form, inclusionary zoning can be a “win-win” situation for a municipality and a developer. In exchange for a greater density than would otherwise be allowed on a site, a developer can earn greater profits and a municipality gets some affordable housing units. The municipality decides whether it wants fewer affordable units with “deeper subsidies”, aimed at low-income households, or more affordable units with “shallow subsidies”, more targeted to middle-income households. Municipalities frequently provide additional subsidies such as forgoing development charges or property tax exceptions to encourage the creation of more affordable units in new developments.

Several of Bertaud’s points in opposition are more in the nature of opinion than evidence-based research. For instance, mobility is not always a good thing for low-income households where there can be empirically measured tangible economic, sociological and planning benefits to remaining in an existing neighbourhood even with a job change to another location.²⁷

A [2015 CUR study](#) concluded that inclusionary zoning in Ontario might not be necessary. Inclusionary zoning effectively

duplicates the provisions of Section 37 of the Planning Act which allow municipalities to provide additional density in exchange for community benefit contributions, including affordable housing.²⁸ Moreover, municipalities can enhance housing affordability in the GGH in a significant way by greatly increasing the supply of serviced sites for all types of new housing units and encouraging the creation of second units in the existing stock of single-detached houses.²⁹

Bertaud states that municipalities with inclusionary zoning provisions have an incentive to keep permitted densities low to maximize the “free” affordable units from developers. According to a study by Aaron Moore, while the City of Toronto does not yet have an inclusionary zoning provision, it is well established that its existing zoning by-laws and related height and density limits are outdated. The City uses the total uplift in density between the outdated low density and the permitted density to calculate the amount of community benefit payments (known as Section 37) payable by a developer.³⁰

- **Should minimum sizes be removed for new housing units?**

Bertaud’s view that minimum unit sizes should be removed for new housing has merit. He gives the example of Paris’s *chambres de bonne* which are in the city’s most upscale neighbourhoods and can be as small as 9 square meters.³¹ Small units give lower-income households the choice of living in a prime location with limited space or to live in a less desirable location with more space. There is the question of whether a municipality should impose a minimum lower bound on size at some point.

Endnotes

- 1 Alain Bertaud (2018). “Order without Design, How Markets Shape Cities”, Cambridge: The MIT Press.
- 2 These studies often recognize that housing prices/rents are too high relative to incomes but fail to address the causes and solutions to this lack of overall affordability. As we shall see, a primary cause is a land use planning system which impedes the ability of the market to respond to housing demand in a robust and timely manner. To improve overall affordability will require the province and municipalities to work in concert at the regional level to greatly expand and accelerate the supply of serviced sites for a range of housing types in both built-up and greenfield areas.
- 3 Bertaud (2018). “Order without Design,” 250.
- 4 Demographia (2020). “16th Annual Demographia International Housing Affordability Survey: Rating Middle-Income Housing Affordability.” [Online]. Available: <http://demographia.com/dhi16-intro.pdf>
- 5 Using statistics from Statistics Canada’s annual household income survey, CMHC calculated annual estimates for the years 2012 to 2018. The results indicate that the percentage of households in core housing need fell between 2016 and 2018. “Number of Urban Households in Core Housing Need 2012 – 2018.” [Online]. Available: <https://www.cmhc-schl.gc.ca/en/data-and-research/data-tables/number-urban-households-core-housing-need>; and CMHC, “Incidence of Urban Households in Core Housing Need (%) 2012–2018.” [Online]. Available: <https://www.cmhc-schl.gc.ca/en/data-and-research/data-tables/incidence-urban-households-core-housing-need>.
- 6 Individual municipalities within the GTA, including the City of Toronto and York Region, ignore the reality that they are part of a regional housing market. If one municipality successfully improved overall affordability within its boundaries, this improvement would not last long as residents of adjacent municipalities would move to the municipality to secure more affordable housing.
- 7 The Census of Canada data have irregular sized income groups which are used here. Bertaud, in contrast, calculated equivalent sized income groups which he regards as being more appropriate for the analysis of housing policies. He smoothed the base data by interpolation of the published data using a spline methodology to ensure he had even income groups and the groups are smaller to allow a better visualization/tool. Bertaud (2018). “Order without Design,” 239-240. Our focus is on the lower- and middle-income groups which have income intervals of \$20,000 for the five lowest income group (up to \$100,000) which is adequate for the analysis here.
- 8 Data used is for the before tax incomes in 2015 of households counted in the 2016 Census of Canada.
- 9 Occupied dwelling units and households are the same since a household consists of one or more persons occupying a dwelling unit. The increases in occupied dwelling units between 2006 and 2016 are derived from a Statistics Canada table showing households by constant dollar income groups. See: Statistics Canada, (2019). “Household Total Income Groups (22) in Constant (2015) Dollars, Household Type Including Census Family Structure (11), Household Size (7), Ages of Household Members (18), Number of Earners in the Household (6) and Year (2) for Private Households of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2006 Census - 20% Sample Data and 2016 Census - 100% Data.” [Online]. Available: <https://www12.statcan.gc.ca/census-recensement/2016/geo/geosearch-georecherche/ips/index.cfm?q=98-400-X2016097&l=en&g=2016S0503537>
- 10 Bertaud uses the term ‘trickle-down theory’ to refer to the filtering process. Bertaud (2018). “Order without Design,” 240-241 and 391, footnote 10.
- 11 Typically, as homes age, their price or rents tend to decline in real dollar terms (removing the effect of inflation) as the structures depreciate in quality, though this may not happen in areas experiencing gentrification. See Bertaud (2018). “Order without Design,” 240-241 and 391, footnote 10.
- 12 J. David Hulchanski and Richard Maaranen (2018). “Neighbourhood Socio-Economic Polarization & Segregation in Toronto Trends and Processes since 1970,” TU Delft, Slide 15. [Online] Available: <http://neighbourhoodchange.ca/documents/2018/09/hulchanski-2018-toronto-segregation-presentation.pdf>
- 13 A recent CMHC study documented the sluggish responsiveness of housing supply to increases in housing prices in the GTA and Metro Vancouver compared to four other large urban regions, concluding they were “consistent with corresponding regulation and geographic characteristics.” CMHC (2018). “Examining Escalating House Prices in Large Canadian Metropolitan Centres”, [Online] Available:

<https://www.cmhc-schl.gc.ca/en/data-and-research/publications-and-reports/examining-escalating-house-prices-in-large-canadian-metropolitan-centres>, 6.

14 For example, the pursuit of environmental objectives can artificially suppress the supply of ground-related homes (singles, semis and townhouses) resulting in higher prices and diminished affordability.

15 Economists modelling housing market typically use what is called stock adjustment models which take account of new housing supply in relation to the total housing stock and changes in the existing housing stocks through additions, conversions and demolitions.

16 Municipalities such as the cities of Markham, Brampton and Toronto are making attempts to improve the efficiency of all approvals, but often with special consideration for affordable housing.

17 In Ontario, subsidies in the form of forgiveness of development charges must be borne by the general taxpayer and not by the payers of development charges on other types of new real estate projects.

18 Economists call subsidy costs incurred through the revenue side of the financial statement “tax expenditures”.

19 Steve Pomeroy (2021). “Toward Evidence Based Policy: Assessing the CMHC Rental Finance Initiative (RCFI)?” Centre for Urban Research and Education, Carleton University. [Online] Available: <https://carleton.ca/cure/wp-content/uploads/CURE-Brief-12-RCFI-1.pdf>

20 City of Toronto (2019). “HousingTO 2020-2030 Action Plan,” [Online] Available: <https://www.toronto.ca/wp-content/uploads/2020/04/94f0-housing-to-2020-2030-action-plan-housing-secretariat.pdf>

21 This is not to say that rent vouchers tied to households are a perfect housing policy instrument.

An overview of the housing choice voucher program in the United States is provided by Ingrid Gould Ellen (2018), “What Do We Know About Housing Choice Vouchers?” Furman Center, NYU. [Online] Available: https://furmancenter.org/files/fact-sheets/HousingChoiceVouchers_ige.pdf. Among its findings: “Research shows that vouchers reduce the rent burdens of low-income households, allow them to live in less crowded homes and help them to avoid homelessness. The program has been less successful, however, in getting recipients to better neighborhoods and schools and perhaps the greatest disappointment of the program is its limited reach. Families wait for years in most places to receive a voucher and only one in four households eligible for a voucher nationally receives any federal housing assistance. Further, a significant minority of households who receive vouchers never use them, in part because of the difficulty of finding willing landlords with acceptable units”, 1.

22 Government of Canada (2020). “Progress on the National Housing Strategy.” [Online] Available: <https://www.placetocallhome.ca/progress-on-the-national-housing-strategy#:~:text=On%20November%2022%2C%202017%2C%20the,housing%20for%20Canadians%20in%20need.>

23 Hemson Consulting Ltd (2020). “Greater Golden Horseshoe: Growth Forecasts to 2051. A Technical Report Prepared for the Ministry of Municipal Affairs and Housing.” [Online] Available: <https://www.hemson.com/wp-content/uploads/2020/08/HEMSON-GGH-Growth-Outlook-Report-26Aug20.pdf>.

24 Readers who have already read this chapter can skip to the next section, though we recommend you read it if you have not already done so.

25 However, Bertaud says that other readily available variables could work too, including average rooms per person, or average land area per household.

26 An exception would be if municipalities had to fund infrastructure so housing can be built. In Ontario, infrastructure funding to support housing growth is not an issue since most infrastructure is funded through development charges levied on the new development.

27 Section 37 provisions are being phased out by the new Community Benefit Charges.

28 While voluntary mobility by low-income households can benefit these households and the economy at large, involuntary mobility resulting from gentrification forces can be harmful to low-income households.

29 Frank Clayton and Geoff Schwartz (2015). “Is Inclusionary Zoning a Needed Tool for Providing Affordable Housing in the Greater Golden Horseshoe?” Centre for Urban Research and Land Development. [Online] Available: [https://www.ryerson.ca/content/dam/cur/images/projects/CUR%20RR%235_Inclusionary%20Zoning%20Report_Updated_Oct%2020%2C%202015\(LG\).pdf](https://www.ryerson.ca/content/dam/cur/images/projects/CUR%20RR%235_Inclusionary%20Zoning%20Report_Updated_Oct%2020%2C%202015(LG).pdf).

30 Aaron Moore (2013). “Trading Density for Benefits: Toronto and Vancouver Compared.” IMFG Paper on Municipal Finance and Governance. [Online] Available: https://munkschool.utoronto.ca/imfg/uploads/220/imfg_no_13_moorer3_online_final.pdf, 8.

31 Bertaud (2018). “Order without Design”, 47.

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- CMHC (2018). "Examining Escalating House Prices in Large Canadian Metropolitan Centres," [Online] Available: <https://www.cmhc-schl.gc.ca/en/data-and-research/publications-and-reports/examining-escalating-house-prices-in-large-canadian-metropolitan-centres>
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