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Gimme Shelter: How High Municipal Housing Charges and Taxes Decrease Housing Supply

Taxes and charges on new and existing homes are a key driver of the cost and supply of affordable homes for Canadians. Ranging from development charges imposed upfront on developers, to land transfer taxes, or murky density bonus payments, they have the effect of reducing supply and hiking home prices for would-be buyers. Reforms are needed.

Benjamin Dachis

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The Study In Brief

Homebuyers in Canadian cities face a multitude of taxes and charges that increase the cost of buying a home. Government policies whose affect is to limit the supply of the kinds of homes people want and can afford are among the key causes of higher property prices.

Restrictions on housing supply and extra costs hinder the efficiency of the housing market. Recent Canadian-specific research has found a persistent gap between the cost of building new homes and their market price in major Canadian census metropolitan areas. Vancouver's housing regulation costs are by far the largest in Canada, resulting in an extra cost of $644,000 for the average new house. Elsewhere in Canada – Vancouver, Abbotsford, Victoria, Kelowna, Regina, Calgary, Toronto and Ottawa-Gatineau – homebuyers paid an average $230,000 extra on a new house because of limits on supply.

To lower the cost of new housing and increase the supply, the author recommends cities and provinces change their taxes and charges on housing by:

Transforming development charges for water and wastewater from upfront payments for infrastructure to a direct user-pay system. Upfront charges on housing construction are passed on to buyers in the form of higher purchase prices. Lower upfront charges will lower housing purchase costs. Charging the full cost of water-related capital and operations in a per-usage fee on services after project completion, whenever feasible, will also lead to less water wastage than through an upfront fee.

Reforming density bonus payments. For years, the so-called Section 37 benefits in Ontario – at least until reforms in 2019 – and the Community Amenity Contributions in British Columbia have caused developers major problems because of the uncertainty surrounding their costs. Typically, these transactions involve a municipality giving a developer bonus density beyond that permitted by zoning laws in exchange for money or community amenities. All provinces should amend legislation that governs these kinds of payments, making them more predictable and reducing their disincentive for growth.

Eliminate or Reduce Land Transfer Taxes. Land transfer taxes are perhaps the most economically costly tax a government can collect. Cities that currently have them should look to reduce or eliminate them and instead rely more on property taxes. Provinces that have them should also eliminate them and move instead toward financing government services with broadly based consumption taxes.

Rely on property taxes from housing for financing municipal government services. Property taxes are akin to a user fee in cases when individuals cannot be charged for parks or services such as police or fire. Governments should replace reductions or deferrals of property taxes with income-tested supports that people can use for any kind of housing costs.

Policy Area: Public Investments and Infrastructure.
Related Topics: Local Services and Governments; Property Taxes; Urban Issues; User Fees.
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Housing costs have increased dramatically in the past decade in some of Canada's largest cities.

In Toronto and Vancouver, according to the Teranet-National Bank price index, house prices jumped by more than 150 percent and 100 percent, respectively, between early 2009 and September 2020. In Ottawa and Montreal, house prices have risen by a more modest 70 percent over the same period, while in Edmonton and Calgary they rose only around 10 percent. What drives the differences in house prices among cities?

Evidence from around the world consistently shows that government policies whose impact limits the housing supply are among the key causes of higher property prices.[1] Restrictions on housing supply clearly hinder the efficiency of the housing market. Delays in building the homes people demand result in shortages and, therefore, higher prices. Numerous studies (e.g., Glaeser, Gyourko, and Saks 2005, Cheshire and Hilber 2008) have established that a well-functioning market results in the market price of housing being close to the construction costs. If prices exceed construction costs, it is often due to regulations or other government policies that inhibit new construction and create an artificial shortage.[2]

Recent Canadian-specific research has found a persistent gap between the cost of building new homes and their market price in major Canadian census metropolitan areas (Dachis and Thivierge 2018, CMHC 2018). Restrictions on supply that drive up the cost of housing have broad economic consequences, as summarized in Dachis and Thivierge (2018). Vancouver's housing regulation costs are by far the largest in Canada, resulting in an extra cost of $644,000 for the average new house. Indeed, Vancouver's costs from additional restrictions are among the largest internationally as a share of market prices.[3]

Policymakers need to identify what policies are causing supply reductions and driving up housing costs, and what to do about it. This *Commentary* will assess the extent to which municipal policies can affect housing supply, thereby affecting housing affordability.[4] Part 1 will cover charges that apply on homes as they are constructed. These charges

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1 This *Commentary* does not tackle demand-side issues (such as interest rates, demographics, regional preferences and the broader economy), as they are often not within the control of municipal and provincial governments.

2 This methodology measures how supply restrictions drive higher costs, not exceptional levels of demand. Construction costs for single-detached dwellings are also inherently higher in urban areas where there is high demand or hard-to-replicate natural amenities such as waterfronts or mountain views. In a competitive market with no building restrictions, developers would therefore build higher density homes with a higher marginal construction cost to cater to increased demand.

3 Across the eight most restrictive cities in Canada – Vancouver, Abbotsford, BC, Victoria, Kelowna, BC, Regina, Calgary, Toronto and Ottawa-Gatineau –homebuyers paid an average $230,000 extra on a new house because of limits on supply.

4 Given its focus on municipal finances and housing supply, this *Commentary* does not delve into other factors that are more related to the housing-approval process that are also a major constraint on supply. For a related analysis, please see Dachis (2018).

Key Concept Explainer

Development Charges:

Developers pay development charges to compensate municipalities for the cost of building infrastructure to service new homes and commercial properties. In other words, growth pays for itself. These development levies apply only to projects that will require the city to provide more services. In theory, an ideal development charge would reflect the extra cost of building new infrastructure like sewers: the end users who benefit from a service would be the ones who pay for it. In reality, developers are usually charged upfront, and build the costs into home prices.

increase the cost of housing, thereby reducing the supply of affordable houses for a portion of consumers. Part 2 will cover how taxes on existing housing affect the efficient operation of the housing market, thus preventing households from being able to afford to buy or rent a home that best suits their needs.

To lower the cost of new housing and increase the supply, cities and provinces should change their taxes and charges on housing by:

- **Transforming development charges from upfront payments for infrastructure to a direct user-pay system.** The evidence from around the world shows that upfront charges on housing construction are passed on to buyers in the form of higher purchase prices (Dachis 2018). It is also more efficient to charge the full cost of capital and operations in a per-usage fee on services after project completion, whenever feasible, than through an upfront fee that lowers the later end-use cost. This approach is most applicable to water and wastewater infrastructure, as low end-use fees encourage wasting of water. Cutting development charges by a magnitude similar to removing water and wastewater charges would, for example, reduce single-detached home prices by tens of thousands of dollars in the Greater Toronto Area and could also result in large price reductions in BC cities. House prices would decrease by the extent to which households view the current value of projected future costs of higher water fees, as opposed to paying upfront for these costs through development charges. To enable these changes, provinces and cities should take interim steps to create standalone water and wastewater utilities and create strong regulators of water and wastewater prices. Services like emergency shelters or subsidized housing without user fees can be financed justifiably with development charges, property taxes, or density bonuses.
- **Reforming density bonus payments.** For years, the so-called Section 37 benefits in Ontario – at least until reforms in 2019 – and the Community Amenity Contributions in British Columbia have caused developers major problems because of the uncertainty surrounding their costs. (Typically, these transactions involve a municipality giving a developer bonus density beyond that permitted by zoning laws in exchange for money or community amenities.) All provinces should amend legislation that governs these kinds of payments, making them more predictable and reducing their disincentive for growth. Ontario, through its 2019 reforms, is making major progress on this front by making such payments a function of land value, and BC should do likewise.
- **Maintaining property taxes from housing as the most efficient and non-distorting means of financing municipal government services.** Property taxes are akin to a user fee in cases when individuals cannot be charged for parks or services such as police or fire. In other situations, such as water services, cities should increasingly rely on charges paid by direct users. Cities in provinces such as British Columbia, Alberta, and

Quebec have property tax systems that are mostly linked to municipal services directly provided to users, so act as user fees.

- **Replacing BC's homeowner grants and property tax deferrals with a housing support program for any kind of housing, rental or owned, based on income.** BC provides the most generous such grants to reduce property taxes. Similarly, BC offers low-interest loans, particularly for seniors, to lower their property taxes with the balance owed paid upon sale. These programs help residents afford to remain in homes that they own, but may have the unintended consequence of biasing their housing decision toward owning property rather than renting, thereby keeping residents in their homes longer than otherwise. This results in a lower supply of homes for those looking to buy.[5]
- **Reducing or eliminating land transfer taxes.** These taxes reduce the buying power of homebuyers and, therefore, lower the number of sales. And it follows that having fewer transactions in the housing market due to land transfer taxes reduces housing supply and affordability.

Part 1: Finances from Housing Development

Cities collect substantial revenue upon the initial construction of housing. The two main sources are, firstly, development charges[6] (also known as impact fees, off-site levies or development-cost charges) that follow specific legislated provincial requirements and, secondly, density bonus charges, which historically are less prescribed in provincial legislation or regulation, and typically fall in the ambit of city councils.

Development Charges

Developers pay development charges to compensate municipalities for the cost of building infrastructure to service new homes and commercial properties. In other words, growth pays for itself. These development levies apply only to projects that will require the city to provide more services. For example, the expansion of a house, which does not increase the number of housing units, would not, in most instances, incur such a development fee. Municipalities can also impose development charges in specific areas and for specific kinds of development. In theory, an ideal development charge would reflect the extra cost of building new infrastructure like sewers (Blais 2010): the end users who benefit from a service would be the ones who pay for it.

Some municipalities differentiate among development charges based on whether the development is in an entirely new area or within an existing urban growth boundary. Such differentiation is a move toward matching beneficiaries with costs. Development charges also often differ by parts of the municipality, old or new. However, these forms of upfront financing create a behavioural incentive for households to make heavy use of the infrastructure, such as roads or water, once it is completed and usage costs are low. When the prices people face at the moment of consumption are less than the overall cost of

5 The recommendations here that pertain to housing supply relate both to rental and owner-occupied properties. Policies that affect rental supply decisions, such as rent control and federal and provincial income tax regimes, are outside the scope of this *Commentary*.

6 Some provinces also levy development charges for services such as education and provincial transit that are outside the scope of this *Commentary*. These amounts are considerably smaller than municipal fees and are sometimes not applicable to new homes.

providing that infrastructure, the result is overuse and congestion.

The empirical evidence shows that homebuyers of new properties in Canada and the US ultimately pay almost all the development fees and that every 10 percent increase in development charges on a new single-detached dwelling results in homes increasing in price by 0.45 percent, on average (Dachis and Thivierge 2018). Recent US studies have found that upfront municipal charges lead to higher home prices to varying degrees, ranging from 83 percent to more than 500 percent of the development charges. Indeed, most studies show that 100 percent of development charges are embedded in house prices.[7]

Why do charges that notionally apply to developers get passed on to the end homebuyers? This rise in home prices from development charges reflects, to some extent, real value added to the house by the new amenities – the municipality is charging fees so it can build or improve infrastructure that can be used by the residents. However, the price increase from widely used amenities – such as parks funded by the charges – often accrues to all homeowners in the city, not just newcomers who are paying development fees.

The upfront cost of all development charges presents a potential equity concern: homebuyers of new properties pay upfront for all development costs while existing homeowners get a free ride. To the extent that development charges are embedded in resale prices, the resulting increase, in competitive markets, will spread to all houses whether or not development charges were paid on a property. This creates a windfall for previous generations of homebuyers already living in a municipality with development charges. The end incidence of charges on homebuyers – that is, who pays the economic cost of the charge as opposed to who notionally pays the initial cash cost – depends on the relative flexibility of supply. In a market with little supply of available land or housing, end-buyers will pay the cost (Dahlby, Smart, and Dachis 2009).

What is the case in favour of development charges or other taxes on property? In supporting development charges or other restrictions on new construction, municipal voters are often endorsing policies that will increase the resale values of their homes at minimum cost to themselves (Fischel 2001). Particularly when local governments collect little future revenues from new growth, development charges may increase the political support for building new homes – despite incumbent homeowner opposition. Homeowners often oppose new development because they resist competition in the resale market that would lower the investment value of existing homes (Hilber and Robert-Nicoud 2013, Hilber and Vermeulen 2016, Hilber and Schöni 2016). For example, if a municipal government does not collect revenues to finance infrastructure, such as through development charges or by increasing property taxes on new homes or user fees to cover the full asset cost, incumbent residents will know that new housing developments will increase their own taxes to pay for required services. As a result, they will oppose new development. On the other hand, development charges and density bonuses may end up strengthening political support for increasing housing supply by making new amenities and/or lower taxes for existing residents conditional on the city approving new housing (Cheshire 2017, Burge and Ihlanfeldt 2006). Development charges also address growth expenses that occur incrementally with initial excess capacity (Found 2019).

7 See, for example, Evans-Cowley et al. 2009, Mathur 2007, Mathur, Waddell, and Blanco 2004, and Ihlanfeldt and Shaughnessy 2004.

Development Charges in Ontario

In Ontario, municipalities collect development charges before construction and place the funds into dedicated reserves. Municipalities then spend the reserves over time, as the city gradually expands the services for which it collected fees. The needed infrastructure is not always developed on a timely basis. From 2010 to 2018,[8] Ontario municipalities collected $17.4 billion in development charges, $6.4 billion of which was dedicated for water infrastructure (Figure 1). However, just over half of that amount ($3.6 billion) went to capital expenditure. Another $2.4 billion (37 percent) of these water-related development revenues was transferred to municipal operations budgets, which may also include the component of development charges that finance debt payments. The rest remains in reserve funds. In total, Ontario municipalities have spent about three-quarters of the development charges they have collected for other types of assets on related capital investments and transferred 11 percent of this amount to operating expenses.[9]

Provincial legislation authorizes municipalities to set development charges, but the municipalities enact specific bylaws to guide their application. In some Greater Toronto Area (GTA) municipalities, development charges for a single-detached house in a new area can be more than $100,000 (Figure 2). Water-related charges are usually the largest single component of these development payments. However, other fees such as for transit and roads are taking on an increasingly large role, with a major increase in cities in York Region, north of Toronto, for non-water fees.

Development Charges in British Columbia

BC's *Local Government Act* enables municipal governments to pass bylaws to collect development-cost charges (I will refer to them as development charges) for capital projects. Since 2009, BC cities have collected $9 billion in development charges (Figure 3).[10] Over that same period, they have spent $8.5 billion of that on capital-related infrastructure. BC does not collect the same level of information as Ontario does on municipal development charge revenues collected by asset type. There are also less data on how that money is spent. However, the aggregate story is the same. As with Ontario, British Columbia cities are increasingly not spending a large amount of the development charges they collect in a given year.

The amounts that BC cities are collecting in development charges are becoming a large share of home values. For example, Kelowna and Surrey break out the water portion of their municipal development charge,[11] which can total nearly $50,000 per typical house in rapidly expanding cities like Surrey. Over the 2014-2020 period, water-related fees have come to represent about

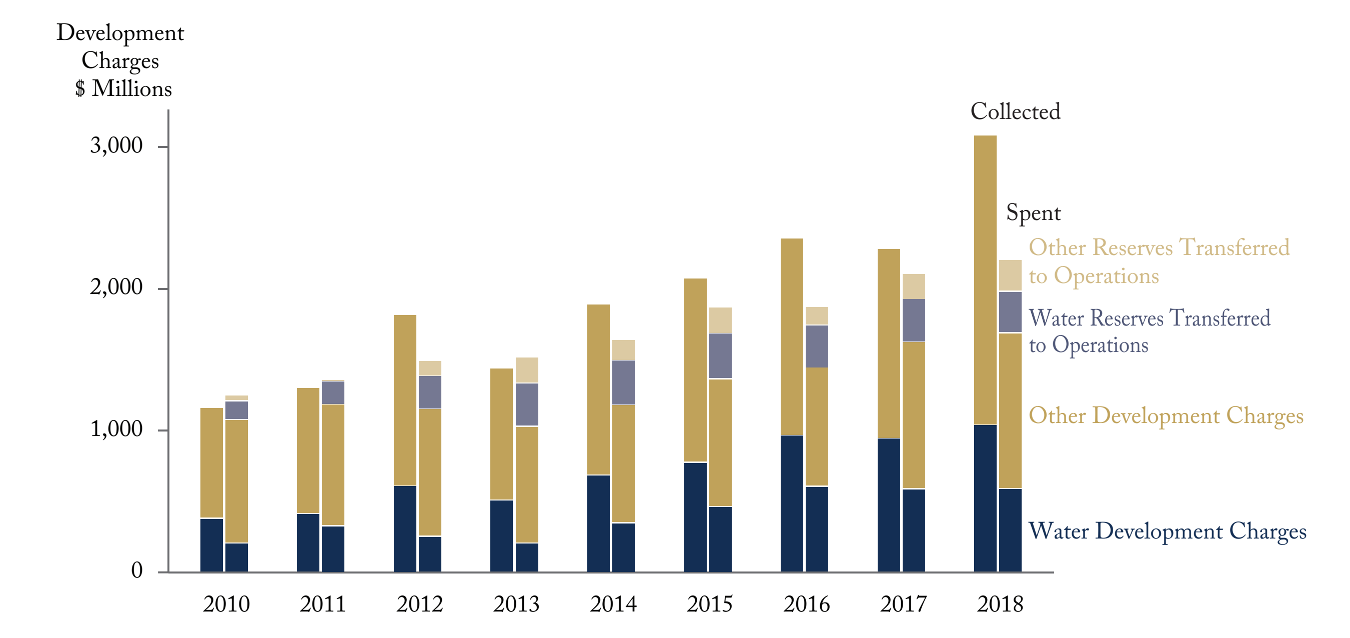
8 This is the latest year in which comprehensive data are available from the provincial government's Ontario Financial Information return, as of October 2020. See https://efis.fma.csc.gov.on.ca/fir/Welcome.htm

9 In addition to monetary development charges, municipalities sometimes ask developers to build capital assets themselves and, after completion, to hand them over to municipalities as part of a subdivision development agreement. Municipalities refer to these as "in-kind" or "donated assets." Because they are not cash items, municipal budgets, which operate on a cash budgeting basis, do not reflect these donated items. The Ontario Financial Information Return does not break out the value of donated assets by type.

10 We calculate the amount spent as the difference between the value of each municipality's reserve fund balance, at year-end, and the development cost charges collected by the city.

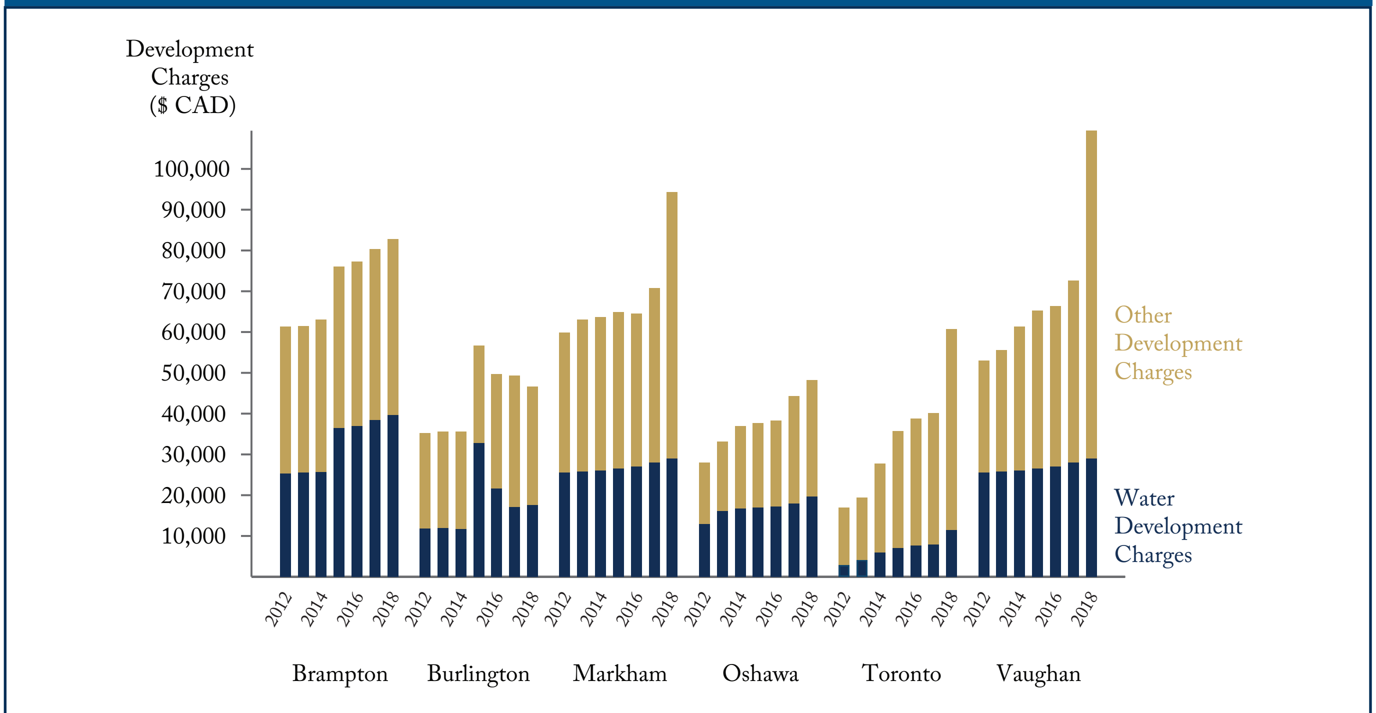
11 Vancouver approves the most single-detached housing of any BC municipality but does not have comparable data available for as many years as Surrey or Kelowna, so we do not include it here.

Figure 1: Development Charges Collected and Spent in Ontario



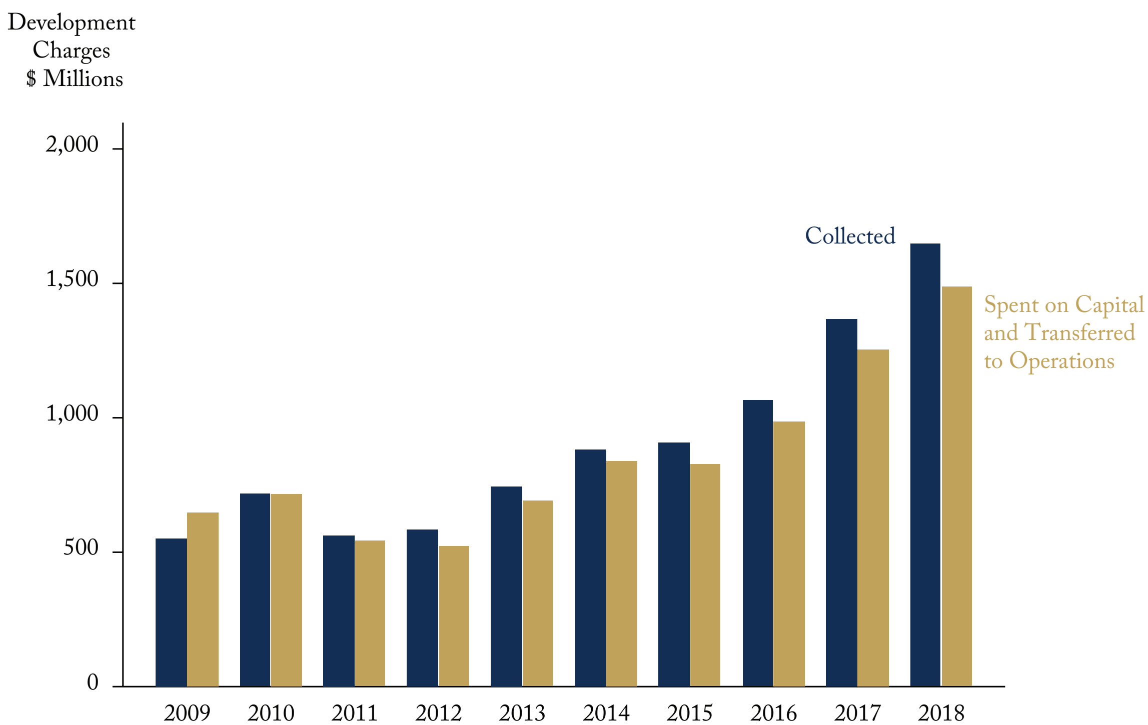
Source: Author's calculations from Ontario Financial Information Returns.

Figure 2: Development Charges on New Single-Detached Housing in Select GTA Area Cities, 2012–2018



Source: Author's calculations from Ontario Financial Information Returns.

Figure 3: Development Charges Collected and Spent in British Columbia



Source: Author's calculations from BC Regional District General & Financial Statistics.

30 percent of the total development charges in Kelowna and Surrey (Figure 4). (Kelowna recently introduced a development charge that would apply to park construction, which led to a substantial increase in development charges in 2020.)

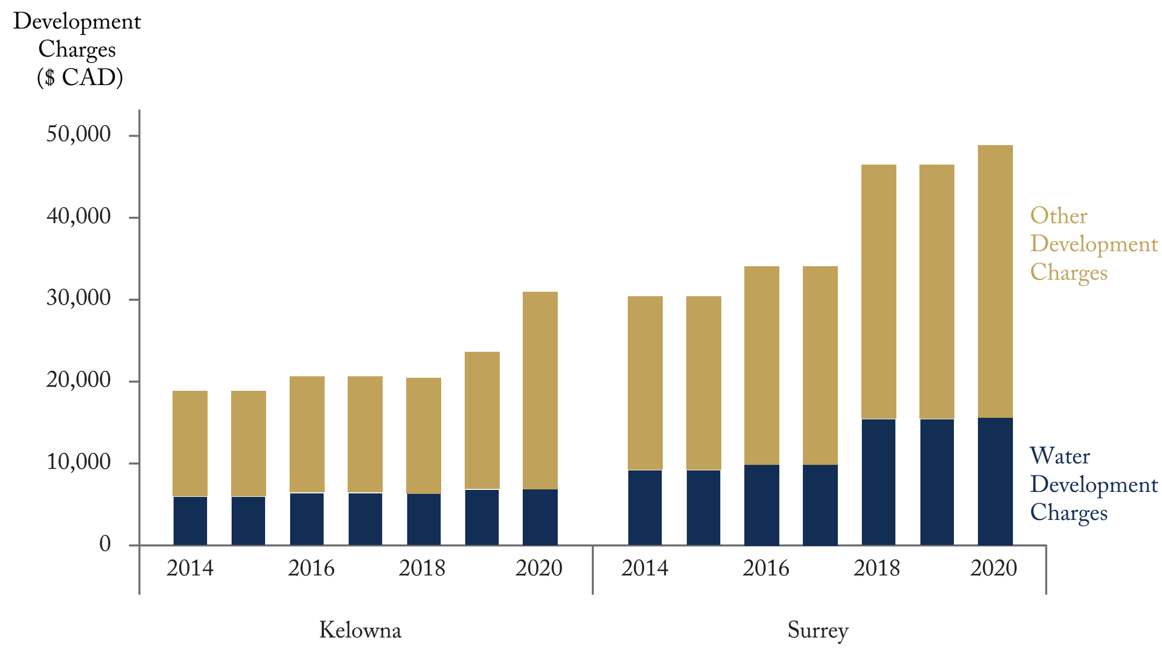
Development Charges Elsewhere in Canada

For its part, Quebec has not granted municipalities the right to levy development charges. The City of Winnipeg, in 2017, introduced a development charge on construction projects that amounts to about $7,200 for the average-sized single-detached home, For its part, Edmonton applies development charges for non-water infrastructure, but developers enter into service agreements with the city for the cost of developing new water infrastructure. Calgary also requires developers to pay similar levies for infrastructure, but these amounts are considerably less than for BC or Ontario cities.

Density Bonuses

Development charges are only part of the upfront costs faced by developers. In many Ontario cities, pending reforms planned for 2021, developers who are building a property that is taller or larger than the area zoning allows must reach "Section 37 agreements," that provide a payment to the city or a benefit to the community such as public art, daycare centres or low-income housing. Developers also pay planning fees, dedicate parkland or make payments in lieu of the market value of dedicated parkland. City planners negotiate with developers over

Figure 4: Development Charges on New Single-Detached Housing in Select Cities, 2014–2020



Source: Author's calculations from BC Regional District General & Financial Statistics.

these benefits, which the local councillor typically specifies. The resulting windfall gives politicians an opportunity to finance ribbon-cutting projects in their ward rather than less exciting infrastructure projects that may be equally, or more, needed.

BC cities have a similar system. Municipalities negotiate with developers to provide community amenity contributions when a development proposal exceeds zoning bylaws (Davidoff 2016, 2017).

The Cost of Density Bonuses

Relatively little data are available on how much money in density bonuses Canadian cities have collected from housing developers. The first study of these benefits relied on trawling through the minutes of City of Toronto council meetings to count how many, what type and where Section 37 benefits occurred (Moore 2013). One study found that between 1998 and 2015, the city collected just more than $400 million in density benefits (Friendly 2017). However, the money that goes to city coffers because of these and other extra development costs is only a fraction of the actual costs to developers. Density bonus agreements often compel developers to devote space nearby or within their buildings to non-cash negotiated benefits – leading to less revenue for developers and likely higher costs for buyers or tenants.

Density bonuses are borne unequally: some developers pay large amounts, while others pay nothing. The reason these payments are uncertain is that municipalities do not have the legal authority to make them explicit – doing so would turn them into a kind of tax.[12] These payments are, therefore, decided in the backrooms of municipal governments, and their very uncertainty increases the cost of housing as developers prepare for the worst.

Meanwhile, municipalities may also have an incentive to keep zoning bylaws out of date – necessitating more project reviews – because updating them could take away future density bonus payments. For developers, density bonus regimes act as a tax on increased density (Moore 2018). If developers are going to be penalized for building more density, they may want to build homes either within the currently restrictive zoning limits or seek a major deviation from zoning rules to build a very tall building. Only such a building would be worth the hassle of going through months or years of negotiations.

Density bonuses have two costs: a direct one to the developer that is reflected in either lower land costs because of lack of demand, or higher house prices because fewer homes are built. The second cost is lost economic value. The uncertainty of density bonus charges has an additional economic cost; that is, a deadweight cost that benefits nobody. A part of the lost economic value is the administrative burden and time lost by developers in negotiating payments with cities, which results in higher housing costs. These costs are likely higher for smaller developers, while more manageable for larger developers with a wide range of projects allowing them to manage the risk of a few projects held up in density-bonus negotiations.

In the end, density bonuses as they exist now may mean fewer homes in the missing middle density level – the kind that is in short supply because of regulatory burdens. In the recommendations section below, we will examine changes to the Ontario density-bonus regime, which have yet to be implemented, that may address these problems.

Part 2: Finances on Existing Housing

Canadian cities are mostly reliant on property taxes as their main revenue source. These are taxes that apply to nearly all private properties in the city. However, property taxes have their detractors. As such, municipal governments have increasingly sought to increase other taxes such as land transfer taxes that do not affect a large share of voters.

Property Taxes

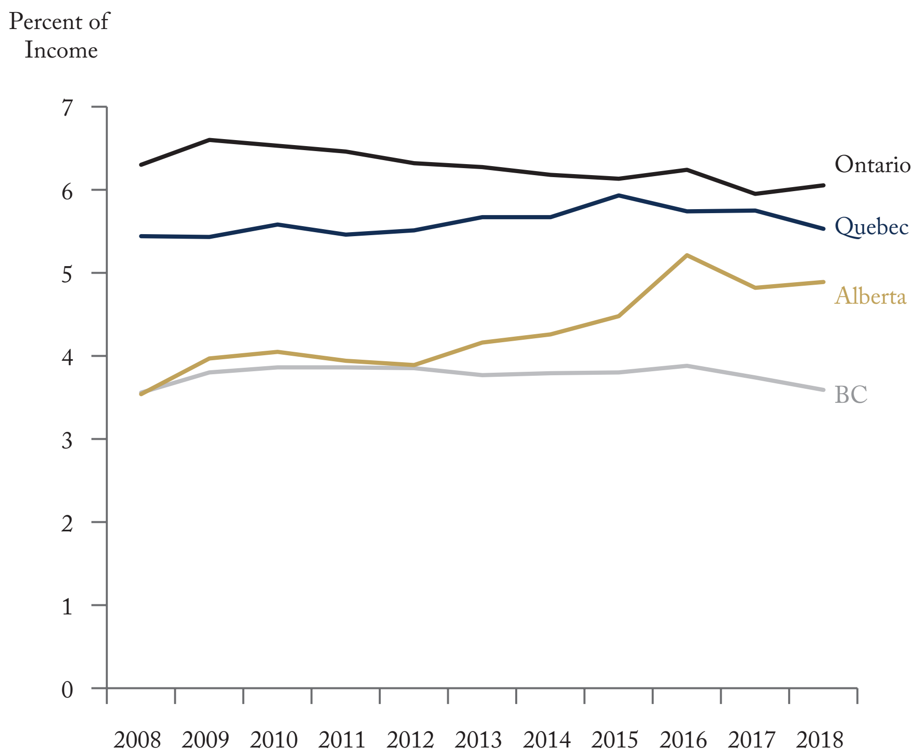
Canadian cities are among those that, worldwide, are most dependent on property taxes. These taxes are the equivalent of 3 percent of the total Canadian economy – an amount that, in 2010, was the second highest among OECD countries, behind only the UK and slightly ahead of the US (Bird and Slack 2015).

Are Property Taxes Regressive?

Property taxes are based on the assessed values of homes, not on incomes. They have remained relatively steady as a share of household income. As Dahlby and McMillan (2018) show, property taxes as a percentage of total income are not appreciably different today from what they have been over the last 60 years. The same is true of even more recent data. Using aggregate (that is, residential and business) property taxes, their share of income has remained steady or fallen in BC, Ontario

12 The Ontario *Municipal Act* and the *City of Toronto Act* do not permit cities to levy such a tax. Indeed, Toronto has noted that laying out an explicit formula for Section 37 benefits would not survive a legal challenge (Friendly 2017).

Figure 5: Property Taxes as Share of Family Income, 2008-2018



Note: Property taxes include business and residential taxes.
Source: Author's calculations from Statistics Canada Tables 385-0009, 385-0003, 385-0037, 385- 0036, 206-0011 and 326-0021.

and Quebec since 2008. Only in Alberta have taxes increased as a share of incomes since 2008 (Figure 5).[13]

Although Quebec and Ontario have relatively similar shares of income devoted to property taxes, they finance different services. Ontario municipalities finance a relatively larger share of social services (public health, childcare and social assistance, for example) than Quebec (Dachis 2018). Quebec's property tax system is more in line

13 Property taxes are one, albeit the main, part of a municipal government's fiscal picture. Grants from other governments and other revenues are a part of the broader municipal fiscal picture that is outside the scope of this *Commentary*. Cities (and provinces that have property taxes) also have a strong tendency to set taxes on businesses at a much higher rate than on residential properties (see Dachis 2018 for details). The political incentives are clear in these cases, with residents voting based on their property tax bills and businesses having limited voting power, albeit offset with their financial power. The result is an over-taxation of business and under-taxation of residential properties to pay for all municipal costs. Business and provincial property taxes are outside the scope of this *Commentary*.

with the user-fee basis, with a direct link to services provided to property users, than is Ontario's. BC and Alberta municipalities also spend relatively little on social services, making their property taxes akin to user fees. The degree to which a pure user-fee property tax system is regressive depends on the extent to which residents of varying incomes use the services a city provides. That distribution to social services makes Ontario's property tax system more progressive than other provinces, but less efficient as a way to match those who benefit from and pay for services.

These property tax figures as a share of income are aggregates. The property tax bill for some residents may not be in line with their incomes. For example, a senior citizen may have bought a house decades ago that is now worth many times what the resident paid for it. However, because property taxes are based on a house's current assessed value, they have climbed well past what the resident could pay with only a retirement income. This problem relates to income rather than property taxes, and governments have tried to solve it through tax credits in the income tax system for seniors and low-income earners. Some cities, such as Toronto, have cancelled property tax increases for senior citizens with incomes less than $40,000 and home values less than $850,000. BC cities have extensive tax-deferment programs or reductions, such as the Homeowner Grant that provides property tax reductions of more than $1,000 per year for some property owners.

From the perspective of matching those who pay for a service with those who benefit, these are not good policies. If a senior citizen homeowner is paying relatively little in property tax compared to a renter (who will need to pay the higher property taxes his/her landlord embeds in rent) down the street in a house of similar value, the senior citizen is underpaying for municipal services.

Subsidies to deal with perceived tax regressivity problems (ie., taking a larger percentage of income from low-income earners) create deeper distortions. Property prices reflect the value society places on a resource. With rising prices in many cities, housing is a valuable resource. Lower property taxes subsidize a resident to stay in a home that others may value more highly and are better able to afford. Subsidies to lower or defer property taxes for existing residents create an incentive for them to stay in their homes, perhaps keeping them from downsizing to something that would suit their needs better. This impediment occurs because of the "capitalization effect." People who are thinking about buying a house know they will have to pay property taxes on the house they purchase. As property taxes go up, so will the future tax bills on their potential new house, and they must factor this capitalization into their decision.

Moreover, policies that attempt, from a single point in time, to introduce fairness into property taxes result in keeping housing out of the hands of young families that are hoping to buy bigger homes (İmrohoroğlu, Matoba, and Tüzel 2018). Looked at over a lifetime, residential property taxes are a fair way of financing municipal services.

The state of California has had a much more extensive system of reducing property tax increases than any jurisdiction in Canada, with revised assessments occurring only when the existing resident sells the property. This policy, known as Proposition 13 for the amendment to the state constitution, resulted in people moving an estimated 30 percent less than they otherwise would have (Ferreira 2010).

BC's Homeowner Grant is not nearly as distorting as California's Proposition 13. For one, it reduces property taxes for all homeowners by some amount, not just for seniors, although the amounts differ. The property-tax reduction also carries over to a new homeowner. However, the Homeowner Grant is still potentially distorting given that it applies only to homeowners and not renters. Such a grant may discourage people from moving away from properties they own and occupy to rental properties that would otherwise better suit their circumstances.

On top of the Homeowner Grant, BC also offers a low-interest loan (0.45 percent for the 2020/21 fiscal year) for those older than 55, widows and persons with disabilities. Like Proposition 13, this measure creates a wedge between an owner's realized sale value and the value a buyer places on a home. In this way, the Homeowner Grant and property tax deferrals have the unintended consequence of discouraging some kinds of mobility.

Land Transfer Taxes

Several provinces and a few municipalities across Canada levy land transfer taxes (LTT). Recently, Toronto and Montreal have introduced LTTs that apply alongside province-wide LTTs. At the provincial level, BC, Manitoba, New Brunswick, Newfoundland and Labrador, Ontario and PEI all levy a LTT. Among these, the LTTs in BC, Manitoba and Ontario exhibit progressive rates on transaction values, with the lowest rates of zero, 0.5 or 1 percent applying on the value of the transaction above a set threshold and a top marginal rate of 2.5 percent on houses at the top end of the market (thresholds for top and bottom rates vary by location). These three provinces collected an estimated $4.8 billion in LTT revenues in fiscal 2018/19, nearly double the amount from 2011/12. Newfoundland and Labrador, New Brunswick and PEI each levy a flat-rate LTT.[14] In addition, BC and Ontario have introduced transfer taxes on foreign buyers.

Toronto, under the authority of Ontario's *City of Toronto Act*, 2006, is the only municipality in the province that has the authority to impose its own LTT. Originally 2 percent, the top marginal rate now is 2.5 percent of the value of a house selling for more than $400,000. In 2018, Toronto collected $730 million from the LTT, representing more than 5 percent of that year's operating budget. In comparison, in 2008, Toronto collected $150 million, representing less than 2 percent of its operating budget.

In an odd twist on assigning taxing powers, Quebec requires municipalities to collect duties on the transfer of property, with a top provincially mandated marginal rate of 1.5 percent for homes with a value greater than $250,000. In January 2010, Montreal introduced two additional brackets, with a higher rate applying at prices more than $500,000 and then more than $1 million. Montreal's total 2019 LTT revenue was $260 million, representing 5.2 percent of its total revenues. In 2011, the city collected $100 million in that tax, representing 2.7 percent of the city's total revenues.

Other Canadian cities, such as in Nova Scotia, also levy a special LTT. In general, cities across the country are constantly asking their provinces to grant them the power to introduce such a tax. Still, Winnipeg, which has the legislative authority to impose an LTT, has chosen not to do so.

The Cost of Land Transfer Taxes to Homeowners

LTTs make up a significant portion of the expense of moving into a new home. The Organisation for Economic Co-operation and Development (OECD) estimates that in 2007, before the introduction of Toronto's LTT, average total housing transaction costs – real-estate agents' fees, lawyers' fees, existing transfer taxes and so on – amounted to 7.8 percent of the average property value in Canada (Andrews, Sánchez, and Johansson 2011). The addition of Toronto's LTT, which averaged 1.1 percent for the average sale price of all resale transactions of $469,000 in that city from 2008 through June 2012, increased average transaction costs in Toronto by an estimated

14 Alberta and Saskatchewan levy land title transfer fees instead of a tax. At an effective rate of 0.02 percent, the Alberta amount is economically insignificant in contrast to Saskatchewan's 0.30 percent of a house's purchase cost.

14 percent. To assess the impact of the LTT on household mobility, it is important to distinguish the effect of the LTT from overall market trends and local real-estate market effects. For example, there were significant swings in the economic cycle, particularly in the housing market, between 2005 and 2012. Housing prices and the level of transactions in the overall market rose between 2005 and 2007, only to fall quickly in 2008, followed by an even faster rise starting in 2009.

Accordingly, a 2008 C.D. Howe Institute study (Dachis, Duranton, and Turner 2008) analyzed regions that faced similar economic conditions and local real-estate characteristics, but where some were subject to the LTT and others were not. Introduction of the LTT resulted in a 16 percent decrease in sales volume over the first year of the tax. Although these estimates are based on housing sales along the border of Toronto and its suburbs, this tax-induced gap between what sellers are willing to accept and what buyers are willing to pay applies equally to sales throughout Toronto, not only to those along the border.

The effect of the LTT on transactions also varies by average neighbourhood sale price: sellers of homes in areas with lower average values are less willing or able to accept sale prices that are affected by the LTT than are sellers in areas with higher-value homes. Overall, prices declined by about the amount of the LTT paid on the house at the time of introduction. These economic consequences of the LTT are likely to be similar in other jurisdictions that have imposed such a tax, especially municipalities such as Montreal that levy a special LTT on top of a provincially mandated LTT.

The Economic Cost of Land Transfer Taxes

In addition to the above study on Toronto's LTT, other studies in places as diverse as France (Bérard and Trannoy 2017), Germany (Büttner 2017), New York City (Kopczuk and Munroe 2015), Washington, D.C. (Slemrod, Weber, and Shan 2017), Australia (Davidoff and Leigh 2013) and the UK (Besley, Meads, and Surico 2014, Best and Kleven 2017) all show the same result: LTTs substantially reduce the number of housing transactions.

The world has also learned about the broader economic costs of these levies. The C.D. Howe Institute's 2008 study (Dachis, Duranton, and Turner 2008) estimated that the dollar value of lost mobility is about 13 percent of every dollar the LTT generates for Toronto's coffers.

The marginal cost of funds measures the cost to society from raising an additional dollar of government revenue. It varies by the type of tax, with corporate income taxes having the highest marginal cost and consumption taxes the lowest (Dahlby 2009). The range of studies cited above show that LTTs have a marginal cost as high as $5.65. That is, for every dollar of government tax revenues a LTT raises, the economic harm is $5.65 in changed behaviour. In comparison, a more efficient tax such as a consumption tax in Quebec has an economic cost of less than $2 (Dahlby and Ferede 2016). These LTTs have a high cost to society because the money raised by government creates a relatively large change in selling and buying behaviour.

Another study of the LTT-similar UK stamp tax (Hilber and Lyytikäinen 2017) found that the economic cost of this tax on property purchases was 29 cents for every dollar of government revenue and that the economic costs accelerate as the tax rate increases. By tracking households over time, before and after they move, the UK study examined the kind of household moves that transfer taxes stymie. They tend to reduce moves within a city, rather than those at longer distances or for job changes. The major economic costs to homeowners are that they can't afford to purchase larger houses for growing families, they suffer through increasing traffic congestion year after year to get to their same jobs, or they don't have access to neighbourhoods with the kinds of schools they want their children to attend.

When a piece of land or real estate changes hands multiple times, the LTT can end up being applied more than once on the same project – or on variations of it – during its construction process and final sale, creating a "tax cascading" effect. For example, a developer who purchases vacant land from a landowner would pay the LTT on the initial purchase. If that developer then chose to resell the vacant property to another developer, who then builds homes on it, the LTT would apply at three different stages in the construction and sale of a home and would either be embedded in the final purchase price for the buyer or result in a lower sale price for the landowner.

Why Land Transfer Taxes are not a Good Revenue or Policy Tool

Part of the reason why the LTT is an inefficient tax is that it is applied to a relatively narrow base – the subset of properties sold in a given year. Residential property taxes, which are applied annually to all property owners, have few of the distortionary effects on mobility or the economic costs of an LTT. Perhaps policymakers will be convinced that LTTs are bad taxes when the revenues from them dry up.

The latest Canada-wide statistics on local government finances show that LTTs have a higher degree of year-over-year variability than other major municipal revenue sources, as measured by a variation coefficient of 0.31, than general property taxes (0.14), user fees (0.13) and even government transfers (0.15). LTTs (which Statistics Canada measures as taxes on other property) had double the degree of variation of these other sources (Dachis and Kim 2018a). This high revenue variability is due to the cyclical nature of real-estate markets, making budget planning difficult for cities with an LTT. For example, total Canada-wide LTT revenues increased 62 percent (the largest annual increase since 1988) between 1991 and 1992, while they fell by 17 percent in 1990 and by 14 percent in 1995. LTT revenues that have been growing substantially since the bottom of the last-real estate cycle may see a precipitous drop in 2020. Regardless, provincial and city governments around the country with LTT revenues will face a big budget decline during the next real-estate market downturn.

Part 3: Policy Recommendations

Municipal governments need revenues to provide services, both for incoming and existing residents. As a general principle, cities should follow as closely as possible the user-fee principle when deciding which users are best placed to finance infrastructure and municipal services. As municipal governments are legally creatures of the provinces, much of the necessary changes to policy outlined here are in the hands of provinces.

Reforming Development Charges and Water and Wastewater Services

Provinces and cities should look to move away from homebuyers paying the full cost upfront of new municipal water and wastewater infrastructure. Other services that are less amenable to user-fee pricing, such as parks or protective services, may still merit being partially financed upfront. However, to the extent that incumbent residents can benefit from these enhanced services, they should be financed through property taxes.

Moving Development Charges to End-User Pricing for Water and Wastewater

One way municipalities can reduce the cost of new housing is by replacing development charges with full-cost user pricing. To do so, they should create standalone utility corporations to operate regionally under the watchful eye of independent regulators.

Another option is for provinces to allow municipal governments to create special-purpose government bodies. These bodies, common in parts of the US, are known as Municipal Utility Districts. They are able to issue bonds to finance local infrastructure investments that future residents of new areas pay for, e.g., through property taxes. These districts are most appropriate to replace non-user-fee-based services included in development charges. This is a more generationally equitable way of paying for the debt and interest cost of municipal assets that benefit future generations of taxpayers.

Many municipalities have started to cover historical capital costs for water and wastewater through development charges levied on new construction. That creates a mismatch between those who benefit from an asset and those who pay for it. Upfront financing of existing water capital infrastructure through development charges is effectively a debt transfer from cities to households. Transfers of development charge fees to operations that finance debt-related costs are a move in the right direction, but only if those who ultimately pay the development charges are those who benefit from them.

Consumers will pay the full cost of water assets only if municipalities charge the full cost of both annual operations and amortization in the per-unit cost of water. When customers pay the full cost of using an asset on a life-cycle basis, they are implicitly making the choice of consuming the economically efficient amount of water every time they turn on the taps or flush their toilet. Charging less than the full cost results in households over-consuming water.

However, full-cost pricing is incompatible with the current system of financing capital infrastructure upfront with development charges. Under this scheme, buyers of new homes pay twice for the upfront capital investment through development charges and an annual amortization expense embedded in user fees.

Similarly, capital grants from other levels of government discourage municipalities from charging the full cost of every litre of water. Higher levels of government should not be giving grants for water and wastewater infrastructure to municipalities that can charge users the full cost of water.

User pricing has been used for decades by private and municipally owned utilities in the natural gas and electricity markets, without heavy reliance on upfront fees. If municipalities moved to such a system for new developments, housing affordability would improve. If households have the same time value of money as the interest rate paid to finance the upfront investment, the cost to consumers in the long run will be the same. If interest rates are lower than the value that households place on the future value of money today, the net costs to households will be lower.[15]

Quebec, which does not use development charges, collects water-related property taxes on a per-building-lot or per-foot-of-frontage calculation. This system leads to higher property taxation, but only in the new developments that would otherwise be subject to high water-related development charges in other provinces. It also ensures that infrastructure is modest in its design and cost and that it is financed over its useful life, or the term

15 A tangible way that property cost savings may materialize for homeowners and society as a whole depends on relative financing charges and discount rates. Currently, upfront development levies are embedded in higher mortgage payments that households finance at commercial borrowing rates. Instead, user-fee financed infrastructure owned by either cities or utilities would be financed in the government or corporate bond market. If these interest rates are lower than those faced by households, consumers would see a net savings if the debt were transferred from their mortgages to municipal governments or utilities. For example, as of mid 2020, residential mortgage rates in Toronto were as low as 1.6 percent, while provincial bond coupon rates were in the range of 1 percent. Notably, the actual construction cost risk does not change between these two financing scenarios, subject to whether a utility or municipal government behaves differently upon construction if they receive payment only upon commencing provision of the necessary service. If private utilities take on such debt, there would be no transfer of debt load onto municipal taxpayers.

of the financing, to defray the initial capital costs. Rather than adopt such long-term financing via the property tax base, which does not encourage water conservation, municipalities elsewhere in Canada can achieve the same outcome of long-term financing with per-use pricing.

Enabling Public or Private Utilities to Provide Water and Wastewater Services

A key motivation for moving to end user payments is to address the consistent problem in both Ontario and BC that municipal governments underspend what they collect from homebuyers via developers (see Figures 1 and 3). That is, developers are paying charges expecting to get services provided by such charges, such as water infrastructure or other services, but are not receiving them in a timely manner. Why might this be?

When cities collect funds upfront for infrastructure, there is little monetary incentive for them to complete the work on a timely basis. The incentive to expedite development of water infrastructure would be stronger if utilities only had access to water-user revenues and not to taxpayer or development-charge dollars. If water utilities started receiving full payment only upon capital infrastructure completion and when users benefit from these assets, the utilities would be more motivated to provide the necessary infrastructure in a timely manner.

A major impediment to reform of financing water and wastewater services is that in many municipalities they are line-item operations within the city; i.e., they are indistinguishable from other city services. In contrast, a standalone water utility would be able to issue debt in its own name without recourse to today's municipal taxpayers.[16] This would lighten the upfront charge on current homebuyers, with water users paying off the debt as they used the service.

Some cities, such as Windsor, Ont. (EnWin), Edmonton (Epcor) or Innisfil (InnServices) in Ontario's Simcoe County, have moved their water services into separate corporations. These municipalities have also taken steps toward integration with local electricity companies to take advantage of economies of scope in similar types of billing or administrative services. Moving to a utility model can have numerous benefits: first, these services would be less likely to receive property tax subsidies; second, separate utilities would be better positioned for future mergers or cross-border agreements; and, third, utilities could practise modern accrual accounting in their budgeting, unlike the current practice of municipalities, which can enable full-cost recovery pricing over the life-cycle of the assets (Fenn and Kitchen 2016).

For example, Edmonton's Epcor provides services for other cities, as does Toronto-based Corix, which is owned by an institutional investment manager for pension plans. Moving to a standalone utility model could also create opportunities for more private investment in water and wastewater services. Such a utility could take advantage of the scale economies available in the sector to reduce costs (see literature summarized in Dachis 2018 on the savings achieved internationally from water-utility scale).

Before governments actively pursue private water and wastewater infrastructure ownership, they should create the appropriate regulatory environment. Creating an arm's-length regulatory agency for major water and wastewater infrastructure can have numerous benefits,

16 Canadian municipalities do not have the ability to issue debt that is backed exclusively by revenues from specific infrastructure assets. As a result, taxpayers are ultimately on the hook if an investment meant to be user-financed fails to cover costs.

independent of whether the asset is privately or publicly owned. Without such an independent body, governments have an inherent conflict of interest when they hold the power of both operating and regulating infrastructure in areas such as safety or price setting.

Weaker regulatory standards make operations easier to manage. Creating an independent infrastructure economic regulator – for example, the UK set up Ofwat for its water sector – can address both this conflict and monitor any potential private investors for overspending that they try to pass onto users.

Canadian provinces should establish new regulatory bodies or expand the scope of existing ones to cover both private and municipal water services. These regulators could ensure that municipal governments and private operators set rates and submit financial plans that meet the public interest of long-term sustainability.

How to Reform Density Bonuses

Density bonusing plays a role in preventing NIMBYism – the powerful "not in my backyard" anti-development syndrome. New developments can bring increased congestion, blocked views of green space or landscapes and other negatives for existing residents. Density bonus benefits can bridge that divide by providing local residents with a tangible positive that persuades them to allow greater density in their community. Removing density bonusing might result in no development at all.

To encourage more beneficial housing development, cities could codify what they expect in density bonus benefits from developers. That at least would level the playing field between developers and municipal governments. Smaller developers would have greater cost certainty and more incentive to build projects that are only marginally beyond existing zoning regulations. While amenities increase the value of housing, requiring developers to finance them results in homebuilders paying upfront for these kinds of services.

A better solution is to finance municipal amenities over the life of the services associated with new development. For community services, that means putting more of the total cost onto property taxes and paying for those that benefit the overall community as they operate. A land-value capture tax would allow local residents to benefit from new amenities paid for, in part, by new construction. For example, land values increase in a neighbourhood near a new transit line because developers look at properties in the area and think they can profitably put more people, or people willing to pay a premium, on the existing plots. Land-value capture, even if applied only on sites being developed as an interim step to avoid politically difficult tax changes for incumbent residents, is a way to have the best parts of density bonusing while not having the downsides of backroom deals and a mismatch of those who pay with those who benefit.

Lessons from Ontario's Housing Supply Action Plan

In May 2019, as part of its Housing Supply Action Plan, Ontario announced major reforms of the provincial Planning Act's density bonusing policies. Instead of ad hoc negotiations over the value of benefits, and having density bonus payments contingent on a rezoning, the new system will require developers to pay a Community Benefit Charge (CBC) based on the value of land at the time of building-permit approval. The initial changes to Section 37 of the *Planning Act* passed the legislature in June of 2019. Subsequent amendments came in July of 2020, further clarifying the application of the new CBC. The government began initial consultations on the regulations that will define how cities calculate the payment in mid-2019. A second round of consultations began in early 2020 and was completed in September.

Provincial consultation documents have indicated a maximum 4 percent charge on the appraised land value. There will also be a threshold number of 10 units and five storeys in any development for which a charge will be levied, meaning that it is less like a development charge and applies only in the case of a development that significantly increases density. The change to a land value charge will result in taxpayers capturing a larger share of the increased utilization of land by developers, rather than existing landowners being the only beneficiary through a higher sale value.

The alternative approach to using the full land value in setting the density bonus is "value uplift." That is, the difference between the land value as proposed minus the land value as currently zoned. This would be a purer basis of determining the incremental development value, since a tax on the full value of land would also incorporate some amount of tax on the inherent use of land and create a disincentive for some development. However, it is already difficult enough to estimate the value of a proposed site, as it is not always a transacted value.[17] Ontario addressed this problem by allowing two separate valuations of a site (one by the city, another by the developer) with an appeal to a third party if the valuations differed by more than 5 percent.

Ontario's reforms should produce multiple ways to increase housing supply and should be carried over to similar provincial density bonus systems like the BC Community Amenity Contribution. The move from an ad hoc negotiation to an appealable formula will provide for consistency in application, allowing both developers and cities to know how much is owed. The move away from applying a density bonus to a charge on land value importantly removes disincentive to building greater density within the planning system on the part of developers. Municipal governments will no longer have a financial incentive to keep planning limits low to enable access to larger density bonuses in the future. And moving the charge base from the amount that a project increases density to land value will not result in an incentive to increase a proposed project's density. This greater cost certainty and incentive to build density is likely to help motivate more construction, improving housing affordability.[18]

Municipalities will be required to pass a bylaw that outlines the kinds of facilities and services that a community benefit charge will finance. This bylaw will be subject to review by an independent provincial tribunal upon any appeal from a developer. Once passed, municipalities are required to spend at least 60 percent of what they collect from community benefit charges in a given year, and the dedicated spending cannot be used for services for which a city also collects development charges. These requirements make clear that there will be a nexus between the community benefit charges that a developer pays on behalf of buyers of new homes and the services that new residents will receive. As well, it should be clear that the amount levied on new homes represents the value of services provided.

One element of the Ontario scheme that other provinces should avoid is limiting the benefit to developments with 10 units or more. Such a limit will surely skew the market to units just under this limit.

Another approach would be for a longer phase-in of the land value tax, such as over five to 10 years. This would create a political issue, however: legislatures are elected typically for four years or less, and a new levy that is binding only after a new legislature is elected is vulnerable to removal

17 In the UK, such a scheme to capture uplift was the downfall of three post-Second World War attempts to capture development value (Cheshire, Nathan, and Overman 2014).

18 A likely net result of creating more certainty in the density bonus system is to increase the value of land, as the deadweight loss from the current uncertainty would be borne by one of the key factors of production. That would create a larger tax base for the land value tax to then capture.

by a new government. This is particularly the case if there are interest groups, such as municipalities or landowners who have an interest in supporting an opposition party promising to reverse existing government policy that has yet to take effect.

Reforming Taxes on Existing Homes

Municipal governments consistently ask for legislative changes to expand their tax base beyond property taxes. However, property taxes should remain the main tool for municipal finances. Furthermore, LTTs are unreliable revenue tools for cities, and should be eliminated or reduced where applicable, and certainly not extended to municipal governments as they have been.

Eliminate or Reduce Land Transfer Taxes

LTTs are perhaps the most economically costly tax a government can collect. Cities that currently have them should look to reduce or eliminate them and instead rely more on property taxes. Provinces that have them should also eliminate them and move instead toward financing government services with broadly based consumption taxes.

In support of LTTs, policymakers state that they curb real-estate market speculation and reduce the volatility of house prices. This reasoning has been used to introduce foreign buyer taxes in BC and Ontario. Although higher transaction costs might lessen price volatility by reducing the number of speculative transactions, this effect is relatively small compared to that of other factors such as banking supervision, increasing the responsiveness of housing supply to demand or decreasing the maximum loan-to-value ratios of insurable mortgages (Andrews, Sánchez, and Johansson 2011). As such, provincial governments should look to federal policies to curb speculative behaviour rather than impose harmful transaction taxes.

Rely on Property Taxes – and Target Tax Reduction to all Residents in Need

As a nation, Canadians have agreed that services such as police and fire protection, basic health and education and a system of social supports are integral parts of society. Many of those services are redistributive in nature. Health and social services are best paid for by income or sales taxes where people with a higher income pay relatively more compared to the services they receive.

Municipal services are somewhat different. Many municipal costs are financed through property taxes – but higher taxes means lower property prices. A more efficient city that provides good services at a lower property tax cost will see otherwise higher property values. What this means is that property taxes are akin to a user fee for city expenses in aggregate. That makes property taxes an effective way of financing inherently local services that have little to do with redistribution of resources.

The concern about people being unable to pay property taxes is not linked solely to the existence of property taxes. The core problem is a lack of income. A better approach than reducing or deferring property taxes is an income-tested provincial benefit that all residents can receive, whether homeowners or renters, and which they can use toward their housing costs. There is no need for society to subsidize property owners ahead of renters with a special credit on property tax. A credit that anyone in need can use for any kind of housing is a less economically distorting choice and a more efficient way of converting tax dollars into the kinds of housing people need. This move to income-testing housing support should go forward only if it is available for all housing. An income-tested homeowner's grant that reduces property taxes paid only by owners would greatly distort the housing purchase market by exacerbating the difference between the buyer's and seller's perception of a home's value.

Conclusion

Homebuyers in Canadian cities face a multitude of taxes and charges that increase the cost of buying a home. These costs are due for reform if policymakers want to keep Canada's cities affordable for homebuyers and renters. A move to user-fee financing for infrastructure can lower property costs. It's time for Canadian cities to make these changes.

References

Andrews, Dan, Aida Caldera Sánchez, and Åsa Johansson. 2011. "Housing Markets and Structural Policies in OECD Countries." OECD Economics Department Working Paper 836. Paris: Organisation for Economic Co-operation and Development. January.

Bérard, Guillaume, and Alain Trannoy. 2017. "The Impact of a Rise in the Real Estate Transfer Taxes on the French Housing Market." Marseille, France: AMSE Working Paper 1732, Aix- Marseille School of Economics.

Besley, Timothy, Neil Meads, and Paolo Surico. 2014. "The Incidence of Transaction Taxes: Evidence from a Stamp Duty Holiday." *Journal of Public Economics* 119: 61–70.

Best, Michael Carlos, and Henrik Jacobsen Kleven. 2017. "Housing Market Responses to Transaction Taxes: Evidence from Notches and Stimulus in the UK." *Review of Economic Studies* 85(1): 157–93.

Bird, Richard, and Enid Slack, eds. 2015. *Is Your City Healthy? Measuring Urban Fiscal Health*. Toronto: Institute on Municipal Finance and Governance.

Blais, Pamela. 2010. *Perverse Subsidies: Hidden Subsidies, Wonky Policy and Urban Sprawl*. Vancouver: UBC Press.

Burge, Gregory, and Keith Ihlanfeldt. 2006. "Impact Fees and Single-Family Home Construction." *Journal of Urban Economics* 60 (2): 284.

Büttner, Thiess. 2017. "Welfare Cost of the Real Estate Transfer Tax." Beiträge zur Jahrestagung des Vereins für Socialpolitik 2017: Alternative Geld- und Finanzarchitekturen – Session: Taxation III, No. C19-V2.

Cheshire, Paul. 2017. "How to Capture Land Value Rises." Planning Resource. February 10.

Cheshire, Paul, and Christian Hilber. 2008. "Office Space Supply Restrictions in Britain: The Political Economy of Market Revenge." *Economic Journal 118* (529): F185–F221.

Cheshire, Paul C., Nathan, Max, and Overman, Henry G. (2014) *Urban economics and urban policy: challenging conventional policy wisdom*. Edward Elgar, Massachusetts.

CMHC. 2018. "Examining Escalating House Prices in Large Canadian Metropolitan Centres." May 24.

Dachis, Benjamin. 2018. *A Roadmap to Municipal Reform: Improving Life in Canadian Cities*. Toronto: C.D. Howe Institute.

Dachis, Benjamin, Gilles Duranton, and Matthew Turner. 2008. *Sand in the Gears: Evaluating the Effects of Toronto's Land Transfer Tax*. Commentary 277. Toronto: C.D. Howe Institute. December.

Dachis, Benjamin, and Jacob Kim. 2018a. "Let's Get Off the Land Transfer Tax Roller Coaster." Intelligence Memo. Toronto: C.D. Howe Institute. March 19.

Dachis, Benjamin, and Vincent Thivierge. 2018. *Through the Roof: The High Cost of Barriers to Building New Housing in Canadian Municipalities*. Commentary 513. Toronto: C.D. Howe Institute. May.

Dahlby, Bev, Michael Smart, and Benjamin Dachis. 2009. "New Housing and the Harmonized Sales Tax: Lessons from Ontario." Backgrounder 119. Toronto: C.D. Howe Institute. October.

Dahlby, Bev, and Melville McMillan. 2018. "An Assessment of Municipal Property Taxes and Land Transfer Taxes." Paper for the CTF-IMFG Conference, Funding the Canadian City, Toronto. February 6–7.

Dahlby, Bev. 2009. "Once on the Lips, Forever on the Hips: A Benefit-Cost Analysis of Fiscal Stimulus in OECD Countries." Backgrounder 121. Toronto: C.D. Howe Institute. December.

Dahlby, Bev, and Ergete Ferede. 2016. "The Costliest Tax of All: Raising Revenue Through Corporate Tax Hikes Can Be Counter-Productive for the Provinces." University of Calgary, School of Public Policy, Research Paper 9 (11). March.

Davidoff, Thomas. 2016. "Governments need to act on housing affordability." *Vancouver Sun*. May 20. Available online at http://vancouversun.com/opinion/ opinion-governments-need-to-act-on-housing-affordability

Davidoff, Ian, and Andrew Leigh. 2013. "How Do Stamp Duties Affect the Housing Market?" *Economic Record* 89: 396–410.

———————. 2017. "Zoning for dollars: Getting community amenity contributions out of the backroom." *Vancouver Sun*. June 19. Available online at http://vancouversun.com/opinion/op-ed/ opinion-zoning-for-dollars-getting-community-amenity-contributions-out-of-the-backroom

Evans-Cowley, Jennifer, Larry Lockwood, Ronald Rutherford, and Thomas Springer. 2009. "The Effect of Development Impact Fees on Housing Values." *Journal of Housing Research* 18 (2): 173–93.

Fenn, Michael, and Harry Kitchen. 2016. "Bringing Sustainability to Ontario's Water Systems: A Quarter-Century of Progress, with Much Left to Do." An independent research study commis- sioned by the Ontario Sewer and Watermain Construction Association of Ontario.

Ferreira, Fernando. 2010. "You Can Take It with You: Proposition 13 Tax Benefits, Residential Mobility, and Willingness to Pay for Housing Amenities." *Journal of Public Economics* 94 (9–10): 661–73.

Fischel, William A. 2001. The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies. Cambridge, MA: Harvard University Press.

Found, Adam. 2019. "Development Charges in Ontario: Is Growth Paying for Growth?" Institute on Municipal Finance & Governance 41.

Friendly, Abigail. 2017. "Land Value Capture and Social Benefits: Toronto and São Paulo Compared." Institute on Municipal Finance & Governance 33.

Glaeser, Edward, Joseph Gyourko, and Raven Saks. 2005. "Why Is Manhattan So Expensive? Regulation and the Rise in Housing Prices." *Journal of Law and Economics* 48 (2): 331–69.

Hilber, Christian A.L., and Teemu Lyytikainen. 2012. "Transfer Taxes and Household Mobility: Distortion on the Housing or Labor Market?" *Journal of Urban Economics*, Vol. 101, 57-73

Hilber, Christian, and Frederic Robert-Nicoud. 2013. "On the Origins of Land Use Regulations: Theory and Evidence from US Metro Areas." *Journal of Urban Economics* 75: 29–43.

Hilber, Christian and Wouter Vermeulen. 2016. "The Impact of Supply Constraints on House Prices in England." *Economic Journal*, Vol. 126, No. 591, 358-405.

Hilber, Christian and Olivier Schöni. 2016. "Housing Policies in the United Kingdom, Switzerland and the United States: Lessons Learned," *Cityscape*, Vol. 18, No. 3, 291-332.

Ihlanfeldt, Keith, and Timothy Shaughnessy. 2004. "An Empirical Investigation of the Effect of Impact Fees on Housing and Land Markets." *Regional Science and Urban Economics* 34 (6): 639–61.

İmrohoroğlu, Ayşe, Kyle Matoba, and Şelale Tüzel. 2018. "Proposition 13: An Equilibrium Analysis." *American Economic Journal: Macroeconomics* 10 (2): 24–51

Kopczuk, Wojciech, and David Munroe. 2015. "Mansion Tax: The Effect of Transfer Taxes on the Residential Real Estate Market." *American Economic Journal: Economic Policy* 7(2): 214–57.

Mathur, Shishir. 2007. "Do Impact Fees Raise the Price of Existing Housing?" *Housing Policy Debate* 18 (4): 635–59.

Mathur, Shishir, Paul Waddell, and Hilda Blanco. 2004. "The Effect of Impact Fees on the Price of New Single-Family Housing." *Urban Studies* 41 (7): 1303–12.

Moore, Aaron. 2013. "Trading Density for Benefits: Toronto and Vancouver Compared." Institute on Municipal Finance & Governance 13.

——. 2018. "Buildings with Benefits: The Defect of Density Bonusing." E-Brief. Toronto: C.D. Howe Institute April.

Slack, Enid. 2011. "The Property Tax – In Theory and Practice." IMFG Papers on Municipal Finance and Governance 2.

Slemrod, Joel, Caroline Weber, and Hui Shan. 2017. "The Behavioral Response to Housing Transfer Taxes: Evidence from a Notched Change in D.C. policy." *Journal of Urban Economics* 100(C): 137–53.

Teranet-National Bank House Price Index. June 2020. Accessed at: https://housepriceindex.ca/2020/07/june2020/

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