

MUNICIPAL ALTERNATIVES AND INNOVATIONS

The purpose of this section is to discuss ways of preventing or reducing future sprawl at the suburban growth boundary and beyond (see Figure 5) and of revitalizing inner areas of municipalities.

Municipalities across Canada recognize the high costs of sprawl and have identified goals for the reduction of future sprawl and the creation of more liveable communities:

- **St. John's (Nfld.) Municipal Plan.** Urban form objective is to “encourage compact urban form to reinforce the older areas of St. John's, to reduce the cost of municipal services, and to ensure orderly development in new areas.”⁸²
- **Saint John (N.B.) Municipal Plan.** “City Structure Goals: 1) Limit urban and rural sprawl and use land more efficiently. 2) Revitalize existing communities through compact development, context-appropriate infill, and promoting infill development on vacant and underused properties. ... 6) Develop a compact built form that supports both a healthy lifestyle and efficient, convenient and viable alternative transportation choices, including transit, walking and cycling.”⁸³
- **Ottawa Official Plan.** “The policy direction of this Plan is to promote an efficient land-use pattern within the urban area through intensification of locations that are strategically aligned with the transportation network, particularly the rapid transit network, and to achieve higher density development in greenfield locations.”⁸⁴

- **Hamilton Transportation Master Plan.** Objective: “Encourage a more compact urban form, land use intensification and transit-supportive node and corridor development.”⁸⁵
- **Saskatoon Integrated Growth.** The Integrated Growth Plan endorsed by city council “will mean a change in focus from planning new greenfield developments to balancing outward growth with strong infill development in locations and forms that make sense.”⁸⁶
- **Calgary Municipal Development Plan.** Urban form goal is to “direct future growth of the city in a way that fosters a more compact, efficient use of land, creates complete communities, allows for greater mobility choices and enhances vitality and character in local neighbourhoods.”⁸⁷
- **Metro Vancouver.** “Goal 1: Create a compact urban area.”⁸⁸

A 2005 CMHC study examined six major metropolitan areas across Canada and found a distinct lack of progress in restraining sprawl.⁸⁹ The 2011 Census of Canada notes that the majority of population growth is in the suburbs,⁹⁰ and municipalities still commonly anticipate upwards of 70% of development ending up in greenfield locations.

Fortunately, there are effective solutions. Public policy can shift price signals and transform markets so they help manage municipal sprawl and create more liveable communities. They can also help boost the economy and help balance government finances.

PRICING

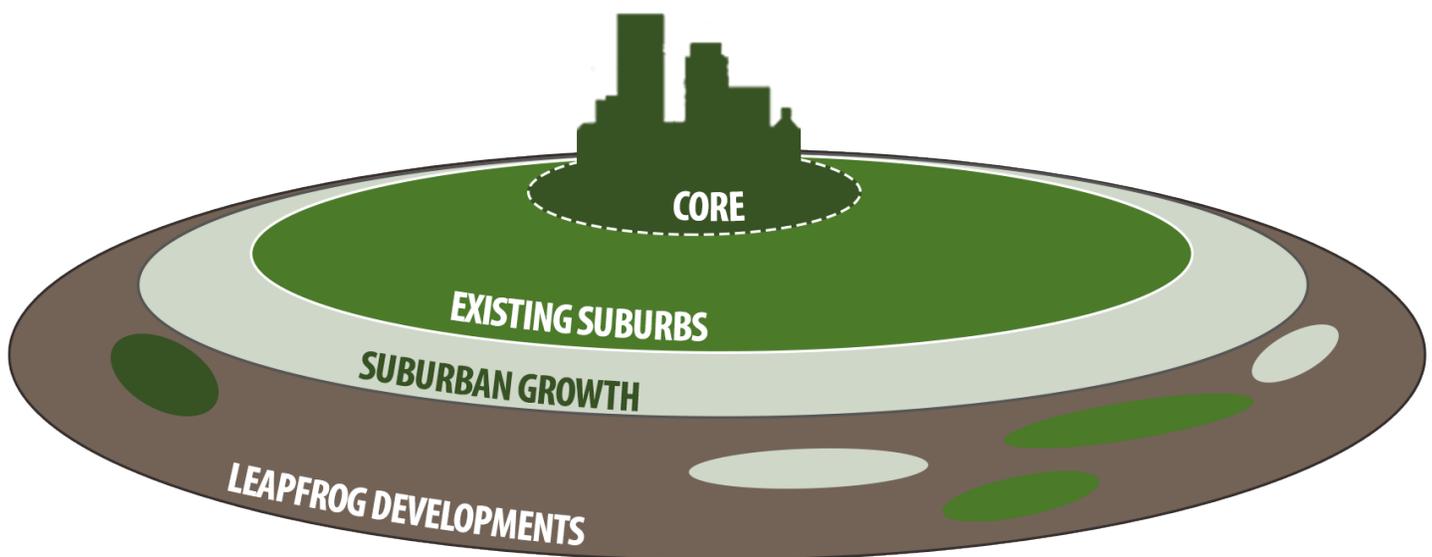
There are many public policy instruments that can correct the price relationships that currently encourage sprawl. In addition to reducing the future growth of sprawl, such policy instruments can revitalize urban cores and existing suburbs, raising property values for existing owners.

This section outlines a variety of policy instruments that directly alter prices – for example, through taxes, user fees and the like. Many other types of instruments also affect prices, albeit indirectly. For instance, urban growth boundaries (UGBs) – greenbelts that define limits to where development can take place – also affect prices. UGBs are an effective tool for reducing sprawl in a defined area, though sprawl can leapfrog across a UGB if it is too small, and prices are driven up throughout the area. UGBs have been used in many urban areas, such as Vancouver, Portland and now Toronto.

Using prices to influence choices is a “softer” mechanism than regulation; it allows for greater economic efficiency, as well as some degree of flexibility. If, for instance, the cost of commuting by automobile goes up while the cost of commuting by transit goes down, an individual can still choose to use the automobile if and when desired. If infill development is made more profitable than suburban tract development, individual developers could still choose to build in suburban areas.

However, not all the elements behind a given price can be reformed. For instance, land distant from amenities will tend to remain cheaper than land close to amenities. Also,

FIGURE 5: URBAN-SUBURBAN-EXURBAN STRUCTURE



reforming prices won't solve all problems. For some problems, there is still a need for regulation. For example, zoning bylaws will always be required in order to provide an appropriate separation distance between truly incompatible uses. And it may be that pricing-reform policy changes are resisted by vested interests, in which case governments will be forced to consider regulation to achieve their goals.

RETROFITTING SUBURBIA

Canada has an enormous stock of existing suburbs. Over time, if left unattended, infrastructure begins to wear and crumble, children of the original homebuyers graduate and schools close, making the neighbourhood less appealing. Families move out, strip malls are shuttered. If the neighbourhood is not revitalized, vacancies, vandalism and crime can follow.

At the same time, many cities aim to reduce the extent of future greenfield sprawl. Yet, with Canada's population continuing to rise in coming decades, new development is going to have to go somewhere.

Existing suburbs present an tremendous opportunity to reduce the extent of greenfield sprawl, and to densify and revitalize cities.

These three forces – the aging of existing suburbs, the reining in of future greenfield development and the continued growth in population – have sparked an interest in redeveloping existing suburbs. Many communities worldwide are in the midst of doing so under the banner of “retrofitting suburbia” – the redevelopment of vacant lots, abandoned malls and big-box stores, inner city surface-parking lots, brownfield sites (abandoned industrial sites), decaying older suburbs, etc.⁹¹

With another 6 million to 14 million Canadians needing housing in the next 24 years,⁹² there is a opportunity to achieve the kinds of urban form goals that municipalities have adopted. If prices can be aligned to support the retrofitting of suburbia, along with some relaxation of zoning and density rules, it could quickly grow to scale.

While prices have the advantage of allowing for “choice,” it is important to bear in mind that choice isn't everything: equity, economic mobility and social stability are important, and spending choices are more restricted for those with lower incomes. There is a need to ensure fairness – to consider equity, economic mobility and social stability when designing pricing policies (see section on Equity and Fairness).

Public acceptability is, of course, vitally important to the potential success of using pricing instruments to resolve sprawl concerns. Despite received wisdom, residents are generally supportive of municipalities generating revenues

and delivering good services. For example, a majority of Calgarians⁹³ would prefer to see taxes increased in order to maintain or improve service levels. Only 7% would like to see services and taxes cut (see Figure 6). These proportions have remained consistent over the years.

ERODING THE TAX BASE

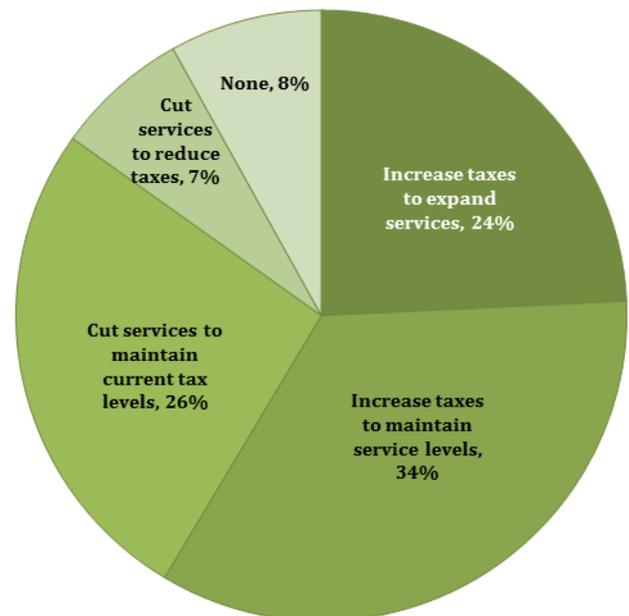
One objection to taxes that seek, as a matter of policy, to reduce social harms (“bads”) is that they could undermine their own base. If, for instance, a carbon tax reduced fossil fuel consumption significantly, then government revenue would decline.

Given that the primary policy aim of taxing externalities is to reduce the bad, achieving that goal counts as a success. Revenues can be restored by boosting the tax rate. If that rate eventually becomes too high, taxes on other bads can be instituted.

If all of the bads end up being greatly reduced or eliminated, then the overall program can be considered a major success. Some public expenses, like health care, will fall if externalities are reduced. But if the revenues need to be replaced, the policy focus can return to raising revenues by taxing goods, such as income and consumption.

Interestingly, when asked what type of revenues the City should collect if it needs more, 73% support new or expanded user fees, while only 27% support increased property taxes. Again this is consistent over the years.

FIGURE 6: CALGARIANS' SUPPORT FOR MUNICIPAL TAXES (2012)



Source: Ipsos Reid⁹⁴

Citizen satisfaction surveys like Calgary's are conducted in cities across Canada, and national norms are consistent with the findings in Calgary: the majority of residents prefer to see taxes increased to maintain or expand services, while a small minority would prefer cuts to taxes and services.

TABLE 4: NATIONAL NORMS – CITIZEN SATISFACTION SURVEYS⁹⁵

PREFERENCE	%
Increase taxes to enhance or expand services	22
Increase taxes to maintain services at current level	32
Cut services to maintain current tax level	22
Cut services to reduce taxes	11

The types of policy instruments discussed below are available to municipalities to varying degrees. The legal capacity of municipalities to implement some of these policy instruments is determined by each province. This is discussed later, in the Municipal Authority section.

DEVELOPMENT CHARGES

As noted earlier, new developments bring costs to municipal government, and some of these costs are recovered from developers through development charges (also termed development cost charges, development levies, off-site levies).⁹⁶

The costs of development vary considerably. For developments that are close to existing infrastructure (e.g., infill), the costs tend to be relatively low. Those that are far from existing infrastructure tend to have higher costs. Some types of infrastructure have costs that vary by length (e.g., roads and pipes), which results in costs being higher for low-density development.

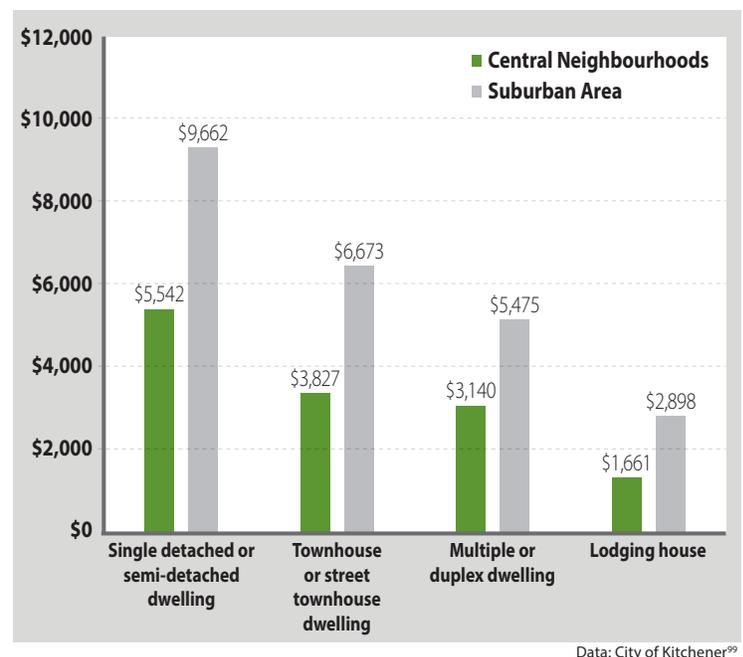
Despite these variations in costs, many municipalities have charged a flat development charge rate per unit or per unit area (square footage). This results in location, density and other cost drivers being ignored in the calculation of development charge rates. Thus, compact, location-efficient developments end up subsidizing far-flung sprawling developments, thereby providing another financial incentive for economically inefficient development.⁹⁷

Development charges can better reflect direct and indirect infrastructure and other costs engendered by development. Development charges can be adjusted so they are relatively low on developments near municipal cores and relatively high on developments in greenfield areas on urban fringes. This can be done cost-effectively by calculating development charge rates based on the area in which the development is taking place (area-specific rating), which is easier than

calculating the exact costs on a per-unit basis (marginal cost rating).

As an example, the City of Kitchener has set lower development charges for central neighbourhoods as compared to suburban areas. Comparing fully serviced lots, suburban charges are 74% higher than those for central neighbourhoods across all building types (see Figure 7).⁹⁸ Even semi-serviced suburban lots (no sewage or water service) require a 40% higher development charge than fully serviced lots in central neighbourhoods. For non-residential buildings, the difference is even starker. Fully serviced suburban lot charges are 157% higher, and semi-serviced suburban lots 84% higher, than fully serviced central lots.

FIGURE 7: KITCHENER RESIDENTIAL DEVELOPMENT CHARGE RATES (FULLY SERVICED LOTS)



Ottawa has similar rate differentials for development outside its greenbelt.¹⁰⁰ The City of Hamilton has taken a slightly different approach with a similar pricing result, providing a 90% exemption from development charges payable for developments in the downtown area.¹⁰¹

In addition to adjusting charges based on location, municipalities can provide incentives for particular types of development, such as redevelopment of brownfield (old industrial) sites, development in areas well served by transit, or infill of older inner-ring suburbs (see earlier discussion of retrofitting suburbia). The City of Hamilton, for example, has established exemptions and credits of up to 100% of the costs of development charges or environmental remediation required to redevelop a brownfield site.

Revisiting the development charge structure across the board gives municipalities an opportunity to reduce,

eliminate and even reverse some of the subsidies that many are currently providing to suburban sprawl. Municipalities are moving on this opportunity. For example, Calgary recently reached an agreement with developers to double the development charges on new suburbs;¹⁰² Mayor Naheed Nenshi would like to see them doubled again.¹⁰³ Peel Region also recently decided to double its development charges after being faced with the data indicating that development was not paying for itself.¹⁰⁴ Ottawa is currently phasing in increased development charges.¹⁰⁵ Below, in the section on Municipal Authority, some of the legislative limits on development charge reform will be discussed.

UTILITY PRICING REFORM

Many local utilities are based on networks of infrastructure, e.g., water delivery, wastewater (sewage) collection and electricity delivery. The larger the network infrastructure requirements per dwelling, the higher the capital investment cost. This means that sprawling, low-density developments are less cost-efficient than higher-density developments. Likewise, developments in new greenfield areas that don't already have infrastructure in place will have higher costs than redevelopment of central and established areas that have good infrastructure.

Not only do the capital costs of providing municipal servicing to sprawling areas tend to be higher, but so do operation and maintenance costs. For example, solid waste collection that requires more driving time and fuel use will be more costly. Moving water and wastewater greater distances boosts pumping costs; a study of data from 10 municipal wastewater systems in the Great Lakes area of the United States found that operation and maintenance costs in low-density areas is higher – sometimes more than twice as high – as it is in higher-density areas. The same is true for distance to utility plants.¹⁰⁶ As Enid Slack puts it:

“Given the evidence that the cost of services increases directly with distance and inversely with the density of development, the most costly areas to service logically tend to be the outlying, low-density developments.”¹⁰⁷

These findings suggest that in municipalities where services are charged at the same rate regardless of density or location, the higher-density and central areas are subsidizing the low-density and sprawling areas. The policy implications of this wealth transfer are clear: the financial subsidy should be eliminated. Municipalities can charge for utilities based on costs related to frontage (property width, measured at the front of the lot) and, in fact, many do so.

For example, the City of Terrace charges \$0.65/foot for water main,¹⁰⁸ while Winnipeg charges \$0.95/foot for water main and \$2.95/foot for sewer main.¹⁰⁹ Such charges help create a financial incentive for denser development.

PROPERTY TAX REFORM

Municipalities levy property taxes through a basic formula: the assessed value of the property multiplied by the tax rate (sometimes called the mill rate) produces the annual tax payable. There are some variations on the basic formula, as will be seen below. Tax rates are calculated once the total assessed values and annual municipal revenue needs are determined.

LAND VALUE TAXATION

Property value is composed of two elements: the value of land and the value of buildings or other “improvements” on the land. Taxing the improvements on land, which is part of market value assessment, provides a disincentive to improve that land.

Land value taxation means levying the tax on the land value only, not the improvement value. A variant – having property tax based on both values, but more heavily weighted on the land component of the value – is termed “split-rate taxation.” Land value taxation or split-rate taxation would boost the financial incentive to improve underutilized land.¹¹⁰

Many downtown cores in Canada have derelict buildings, empty lots and relatively low-value surface-parking lots. Shifting to a system of land value taxation or split-rate taxation would provide greater incentive to redevelop such sites and put them to a higher-value use. Doing so would boost the density of the urban core, thereby reducing the demand for suburban land.

Cities in Pennsylvania have experimented with land value taxation. In 1979–80, the City of Pittsburgh shifted to a split-rate taxation that boosted the tax on the land component to more than five times the rate on structures. It experienced a “dramatic increase in building activity, far in excess of other cities in the region,” particularly in the commercial sector. While demand for commercial space was an important factor in this growth, the evidence suggests that the shift toward land taxation was important in enabling the city to avoid rate increases in other taxes that could have impeded development.¹¹¹

“[One] way to promote compact metropolitan development would be to ... adopt split-rate property taxation. Under this type of property tax reform, a city can lower the tax rate on buildings and other capital improvements and still maintain the level of municipal services by raising the tax rate on land values. The Commonwealth of Pennsylvania has had this form of property taxation since 1913. Pittsburgh and Scranton have been the pioneers in tax reform, but by 1995, some 15 cities in the Keystone State had adopted two-rate property taxation.”

– R. ENGLAND¹¹²

One complication is that if tax rates on all unimproved lands rise, farmers would end up paying more, boosting their incentive to sell to property developers. However, this effect could be mitigated or eliminated by reducing the tax rate for land that is actively farmed.

PROPERTY CLASS TAX REFORM

Some municipalities vary tax rates across property classes. In Edmonton, for example, the tax rate on higher-density apartment buildings is greater than the rate on single-family dwellings.¹¹³ This creates an incentive to build at a lower density, which contradicts Edmonton's stated goals of increased density.¹¹⁴ Toronto's property class rates are similarly skewed against existing multi-residential buildings,¹¹⁵ but other cities' are not (e.g., Hamilton,¹¹⁶ and Winnipeg¹¹⁷). Some Montreal boroughs have higher rates for multi-unit dwellings, while others have lower rates.¹¹⁸

Whatever the rationale for varying rates on different types of property,¹¹⁹ those rates will affect the incentives in relation to density of development. In order to serve municipal goals of higher density, property class tax rates can be structured to favour multi-residential, townhouse and other relatively dense classes.

In addition, higher property tax rates for parking lot and vacant land classes would encourage more productive development.¹²⁰ This would have a similar effect to land value or split-rate taxation, without the side effect of making farming more expensive.

SPATIAL-BASED REFORM

Some municipalities set standard tax rates across the entire municipality. Others vary their tax rates by location, e.g., Hamilton¹²¹ and Winnipeg.¹²² Hamilton currently has higher tax rates for properties that are in the central part of the city and well served by transit.¹²³ These rates constitute a financial incentive for development in outlying communities and away from transit. This undermines Hamilton's Transportation Master Plan objective of encouraging "a more compact urban form, land use intensification and transit-supportive node and corridor development."¹²⁴

Removing area rating in such cases would help to revitalize central neighbourhoods and achieve municipal goals related to increased density and transit use. A further step in the same direction would be for municipalities to have lower rates in central areas and near transit. Provincial legislation governs what is possible for area rating; Ontario's Municipal Act, for example, would require amendment to expand the range of factors that could be used to set area rates.

As noted earlier (see Utility Pricing Reform section), some municipalities also have a frontage levy – an annual charge based on property width, which is added to the property tax bill. Such a charge not only addresses the cost of providing utilities to properties, but also functions as an encouragement to denser development.

TARGETED TAX REDUCTIONS

Municipalities can provide special tax reductions aimed at reducing future sprawling development.

For instance, municipalities can provide tax reductions for development of brownfield sites, which will reduce the demand for greenfield building sites. The City of Windsor's Brownfields Property Tax Assistance Program cancels any increase on property taxes for a brownfield property undergoing remediation and development.¹²⁵ The City also provides grants for brownfield rehabilitation.

Reducing tax rates for farms can make farming more viable in the face of challenges from global competition, farm subsidies and subsidized food transportation. Ontario, for instance, has adopted a reduced tax rate for farm properties: 25% of the normal property tax rate. This provides an incentive for farmers to stay in the business of farming, rather than selling their farms to developers.¹²⁶ Likewise, a municipality can adopt special tax rates for other green spaces protected from development by a conservation covenant.¹²⁷

TRANSPORTATION PRICING REFORM

The subsidies to motor vehicle transportation, discussed above, provide an added incentive to live and conduct business in sprawling areas. Eliminating those subsidies, and applying the savings to sustainable transportation modes, will help to rein in sprawl.¹²⁸ There are many policy instruments that can be used to alter the suite of transportation prices facing individuals and firms.¹²⁹

TRANSIT, CAR SHARING, AND ACTIVE TRANSPORTATION SUBSIDIES

Subsidizing transit, car sharing¹³⁰ and active transportation (walking and cycling) infrastructure will reduce the environmental costs of transportation and make living in urban neighbourhoods more attractive.

A significant impact of providing transit is its ability to help reshape a municipality. Surface transit (bus and streetcar/light rail) helps build ribbons of greater density along its routes. Subways and sky trains build nodes of greater density along their routes. Central networks of transit help build density throughout a municipal core. These various forms of added density help to reduce the growth of sprawling development on the urban fringes.

Of course, it matters where transit is built. Transit in urban cores and established areas can attract residents and businesses, reducing sprawl. Building transit systems that extend into sprawling areas can provide an added incentive to sprawl.

The costs of transit are often cited as a rationale for not proceeding with transit system expansion. However, as shown earlier, Canadian governments spend far more on

roads every year than they spend on transit – nearly four times as much – and Canada is the only G8 country without a national, long-term transit funding strategy.¹³¹

FIGURE 8: NODES OF DENSITY AT SUBWAY STOPS, YONGE STREET, TORONTO



Image: phototouring¹³²

The initial investment costs of transit system improvements can be offset by capturing the increase in nearby real estate values created by the improvements. Municipal governments capture some of the value increases through higher tax revenues from increased density. They can also purchase property near future transit locations and then rent or sell it when the value has risen. And, of course, all levels of government will benefit financially from reduced automobile use and its attendant costs.

PARKING PRICING

Parking is often provided at a subsidy, even free of charge, although there are real costs that are borne by society.

Parking prices can be reformed to pay for the overall costs of parking and to help achieve municipal goals like slowing sprawl and revitalizing urban cores. Currently, parking downtown in many municipalities costs money, while parking is provided free of charge in suburban malls, big box stores and business parks. Free suburban parking provides a gravitational pull for shoppers, employers and others – undercutting downtown businesses and helping to hollow out central areas. Municipalities (and provinces) could eliminate and even reverse this pull by charging for parking in suburban areas. Doing so would not only encourage greater use of sustainable transportation modes and help downtown areas, it would also reduce demand for parking, freeing up land for other purposes.

The technology to price parking in suburban lots already exists and is in use. Metered parking lots with self-serve kiosks are quite common and can be expanded across municipal regions. Mobile phone technology can make it even more convenient to make payments.

Parking taxes (also termed parking levies) can be tailored in a number of different ways, one of which is to apply them only to parking lots that are currently unpriced.¹³³ This would provide an incentive to charge for parking in such lots, and to provide less “free” parking space.¹³⁴ Parking taxes could be adjusted to provide for reduced rates for efficient forms typically found in urban cores, such as underground parking or parkades above commercial uses.¹³⁵

Provincial governments can implement a range of such parking tax systems or can give municipalities powers to do so.¹³⁶ Parking fines could be increased in order to encourage better compliance with parking rules and free up more parking spaces.

FUEL TAXES

Fuel taxes boost the costs of commuting and provide a disincentive to locating far from urban cores. A US Federal Reserve Board study across several large municipal areas between 1981 and 2008 found that a 10% increase in gas prices resulted in a long-term 10% decline in new house construction in areas with long commuting distances.¹³⁷

A study of Canada’s 12 largest metropolitan areas concluded that higher gasoline prices contributed significantly to reducing sprawl: a 1% increase in price caused an average 0.32% increase in the population living in the inner city and a 1.28% decrease in low-density housing units. Gasoline prices were found to be a larger influence on sprawl than household income or the population of a major census area.¹³⁸

As noted earlier, existing fuel taxes (even when added to the full basket of road user fees) fail to cover the financial costs of roads, let alone the social cost. In addition, fuel taxes in North America are at the bottom of the pack in the developed world. By both measures, there is room to increase fuel taxes as many other countries have done (see Figure 10).

Municipalities in Canada do not generally have authority to levy fuel taxes independently. Both the provincial and federal levels of government have established fuel taxes, and there is some revenue sharing with municipalities. The tax rates could be raised and more revenue shared with municipalities. Alternatively, providing municipalities the authority to establish fuel taxes would give them another tool with which to reduce the subsidies to sprawl. Metro Vancouver has the authority to set a local portion of the fuel tax and collect the proceeds, and the money is provided to the regional transit and transportation authority.¹³⁹ Such authority also helps to balance the books, as well as helping municipalities diversify away from their dependence on the property tax. Every penny of fuel tax in Toronto, for instance, would be worth a 1-3% change in property tax.¹⁴⁰

ROAD USE PRICING

Another option for reforming transportation pricing is to charge directly for road use.¹⁴⁸ Tolling technology has come a long way since the days of toll booths that stop traffic. Billing on the 407 toll highway in Ontario, for instance, is fully automated.

“There is ... real potential for municipalities to introduce user fees in the area of non-public transportation, especially given the emergence of new, efficient technologies to collect tolls.”

– TD BANK¹⁴⁹

There are several ways to implement road pricing.¹⁵⁰ Many methods can be tailored to help rein in the impacts of sprawl.

Road Tolls. Tolls can be charged for the use of a particular section of road, which can be long or short. Tolling a network of urban ring and radial roads can provide a disincentive to long commutes.

Cordon (Area) Tolls. Cordon tolls are fees paid by motorists to drive into a particular area, usually a city centre. The London (UK) cordon toll has reduced congestion and sped up traffic dramatically compared to baseline levels, as well as providing funds for transit expansion. Complementary measures are needed to reduce the risk of driving people and businesses toward suburbs, e.g., exemptions for central area residents, ring-road tolls.

Congestion Pricing (Value Pricing). Congestion Pricing means varying toll charges over time and across locations to reduce traffic congestion and peak-period commuter traffic volumes. Variation can be on a fixed schedule or dynamic to reflect real-time congestion.

HOT Lanes. High Occupancy Toll (HOT) lanes are essentially Carpool/High Occupancy Vehicle (HOV) lanes that also allow low occupancy vehicles paying tolls. Provided that the toll-paying, low occupancy vehicles don't displace or slow the high-occupancy vehicles,¹⁵¹ HOT lanes assist in reducing congestion and emissions. HOT lanes, like other road pricing systems, can provide revenues to support transit, downtown renewal, brownfield remediation and so on.¹⁵²

DISTANCE-BASED PRICING

Motorists currently pay a number of annual and one-time flat-rate fees and charges, which could be restructured to reflect the amount they drive.¹⁵³ Such a restructuring would reward decisions to locate in central areas of town rather than distant areas requiring long commutes.

Vehicle registration and licensing fees, for instance, could be based on kilometres travelled per year. Currently, authority to collect such fees rests with provincial governments but this could be changed, and some major cities have already been given the authority to do so (e.g., Toronto, Vancouver

and many large cities in Quebec).¹⁵⁴ Similarly, insurance premiums can be pro-rated to distance travelled – termed pay-as-you-drive (PAYD) insurance pricing.¹⁵⁵

INFORMATION

While not directly affecting prices, providing information to market participants can bolster the impact of prices. For example, municipal governments could publish community walkability scores¹⁵⁶ and housing + transportation index scores (see Personal Household Costs section). If provincial governments or industry associations required real estate agents and mortgage lenders to provide such scores, it could assist homebuyers in making well-informed decisions.¹⁵⁷