Sustainable Prosperity

SUSTAINABLE COMMUNITIES

Managing Urban Sprawl:

Reconsidering Development Cost Charges in Canada[1]

Sustainable Prosperity is a national research and policy network, based at the University of Ottawa. SP focuses on market-based approaches to build a stronger, greener, more competitive economy. It brings together business, policy and academic leaders to help innovative ideas inform policy development.

Key messages

- Urban development in Canada in recent decades has been characterized by low-density, automobile-dependent construction at the far edges of the city centre, also known as 'urban sprawl'. Although this urban form provides low-cost housing and offices, at the same time it contributes to many problems, including fragmented communities, increased automobile dependency and traffic congestion, loss of agricultural land, and increased smog and greenhouse gas (GHG) emissions.
- Real-estate developers must pay municipalities a one-time development charge (DC), when developing a new project. This charge typically covers only the upfront municipal capital costs of infrastructure required for these projects, or a portion of those costs. The infrastructure covered by these charges varies by jurisdiction, but often includes roads, sewers and water ("hard" infrastructure) and fire stations, schools or community facilities ("soft" infrastructure). Development charges are currently assessed mainly based on average costs or area, or a combination of both, ignoring the marginal costs, which vary by type of development.
- From the perspective of municipalities, development charges can be seen as both a fiscal and growth management tool. Currently, they are primarily used for cost recovery, making them an important fiscal tool for municipalities. However, they are increasingly also being viewed as part of a growth management strategy. Development charges can influence the

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1 This *Policy Brief* is based on a report authored by Mia Baumeister while she was a Master of Science in Planning student at the University of Toronto, under the supervision of Dr. Enid Slack. Sustainable Prosperity would like to thank Pamela Blais, Principal of Metropole Consultants, for her thoughtful comments and contributions to this *Brief*. Responsibility for the final product and its conclusions is Sustainable Prosperity's alone, and should not be assigned to any reviewer or other external party.

SP-PB-2803-JAN-2012

type of development that occurs, and could be used to encourage more efficient land use. Denser development in established urban areas typically has lower infrastructure costs than sprawling development on the urban fringe.

- Development charges, even if widely deployed in different ways, cannot solve all growth-related problems. However, if municipalities use them in conjunction with other growth management strategies, they can be an effective and powerful tool for encouraging more compact and sustainable urban development. Provincial policy reform is required, in some cases, to give municipalities scope to effectively employ DCs.

The Issue

Municipalities rely on development charges for revenue, but most do not design these charges to support growth management objectives. The current basis of assessment for development charges has played a role in incenting low-density, automobile-centred development. This type of development in turn necessitates investment in new, and more costly, infrastructure by municipalities. There are many factors that influence where development happens, including zoning by-laws, planning policies, and market factors that influence supply and demand. But development charges are a significant cost that can influence development location, timing and other decisions. As a result, more municipalities should consider better aligning the design of their development charges with growth management policies. This *Brief* will examine how development charges can be designed to provide the right incentive for more compact urban development, by changing the incentives for developers and consumers.

The Knowledge Base

Encouraging more compact and sustainable forms of development has become a priority for Canadian provinces and municipalities, as development constraints, environmental concerns and fiscal pressures necessitate an alternative to the prevailing low-density growth pattern. Development charges can influence how land resources are consumed and communities are designed, and as such are increasingly being used not merely as sources of revenue, but as a growth management tool.

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The Costs of the Misalignment of Fiscal Policies with Growth Management Tools

Most Canadians now live in cities. But low-density, sprawling development on the urban fringe has resulted in fragmented communities, automobile-dependent growth patterns, and lost open space. While this type of development may appear cheaper, it carries many hidden costs, including traffic congestion and duplication of infrastructure.[2] For municipalities, this type of development engenders higher upfront and lifetime infrastructure costs than more dense development in established urban areas. This is one of the reasons growth management is increasingly becoming a priority for many municipalities.

The infrastructure costs for this type of sprawling urban development are particularly high. Infrastructure and service provision for high-density development is much more cost effective than for low-density development.[3] For example, the Canada Mortgage and Housing Corporation (CMHC) found that total land, building and infrastructure costs were 20% lower in a high-density community in Surrey, British Columbia than those of a less dense development, even with similar sized housing.[4]

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As the costs of sprawling, inefficient growth patterns become more apparent and the benefits of encouraging more compact, intensive development become better known and understood, more provincial, regional and local governments are introducing growth management policies to encourage and foster intensification, as well as more coordinated, compact development patterns. A key tool to support these objectives is a well-designed development charge structure.

Development Charges: a Revenue or Growth Management Tool?

Development charges are paid by developers to municipalities, to cover the upfront infrastructure costs for sewer systems, roads and other infrastructure generated by development projects. Generally, DCs are calculated in one of two ways. One method is average cost pricing, where a city estimates all the infrastructure costs that will be necessitated by all new development throughout the city and divides that by the estimated number of new units, arriving at the DC rate. The rate doesn't vary based on the actual infrastructure necessitated by a particular development or geographic location. The other method is marginal cost pricing, where a city sets the DC rate based on the actual costs of

2 Wiewel, W., Persky, J. & Sendzik, M., 1999. Private Benefits and Public Costs: Policies to Address Suburban Sprawl. *Policy Studies Journal,* 27(1): 96–114.

3 Blais, P., 2003. *Smart Growth Issues Papers: Smart Development for Smart Growth*. Toronto: Neptis Foundation, http://www.neptis.org/library/show.cfm?cat_id=6&id=70.

4 Canada Mortgage and Housing Corporation, 2001. *The Headwaters Project – East Clayton Neighbourhood Concept Plan*. Socio-economic Series 78, http://www.cmhc-schl.gc.ca/odpub/pdf/62488.pdf?lang=en.

the development in question. A hybrid, the area-specific DC rate, calculates an average DC rate based on the infrastructure necessitated by new development in a given geographical area larger than a single development, but smaller than the entire city. Often cities will use a combination of methods, where they have a city-wide DC charge, as well as area specific charges for certain geographic and/or development areas.

Traditionally DCs have been seen as fiscal tools that generate much-needed revenue for municipalities. The role development charges play as a revenue-raising tool should not be understated: as funding from upper tiers of government diminishes, these charges are one of the few methods most municipalities have to pay for growth-related infrastructure.

Clearly, DCs are valuable revenue sources, but as currently designed in most municipalities they do not work to encourage more compact and sustainable development patterns. The type of urban form, whether compact or sprawling, will affect not only current infrastructure costs, but also future maintenance and renewal requirements. However, little consideration is usually given to the requirements of a particular type of urban form in terms of the future financial impacts. Development charges are not used to cover ongoing maintenance costs, but policy-makers need to be aware of the immense lifecycle costs of maintaining the infrastructure and services necessitated by inefficient growth patterns. This raises the importance of using development charges as a growth management tool to encourage more efficient growth patterns. If development charges are not restructured to meet current planning objectives for more intensive and compact urban growth, not only are municipalities squandering a valuable growth management tool, but they are missing an opportunity to reduce their future infrastructure costs.

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Designing Development Charges Effectively

To provide the incentive for more compact forms of urban growth, development charges can be adjusted on the basis of rate or timing. In terms of rate, they could be lowered for projects that provide high-density construction, with more integrated employment and residential uses, on already urbanized land.[5] They could also be adjusted in terms of when developers need to pay the charges, which will be explored in more detail below. The current design of typical development cost charges is shown in table 1 on the following page, and is contrasted with how they could be designed to minimize sprawl.

5 Blais, P., 2003. *Smart Growth Issues Papers: Smart Development for Smart Growth*. Toronto: Neptis Foundation, http://www.neptis.org/library/show.cfm?cat_id=6&id=70.

Table 1: Development cost charge structures

	Traditional Design	Potential Design
Design	Average cost	Marginal cost
Basis of calculation	Average cost per unit: city-wide, area-specific[6], or a combination of both	Square-foot (unit size), location, intensity, type of development[7]
Guiding principles	Revenue-raising	Fairness, reduction of overall infrastructure costs, and efficient resource allocation[8]
Type of development encouraged	Urban sprawl (low-density, large units/lots, located far from the city centre and existing infrastructure)	Dense, small lots/units, close to existing infrastructure, including public transit

Source: various; see footnotes

Basis of differentiation

City-wide average-cost development charges subsidize low-density development that has higher per-unit growth-related capital costs, which raises costs for higher-density development.[9] In comparison, area-specific pricing has been shown to encourage more efficient land development and equitable distribution of costs related to development.[10] If area-specific charges are employed by a municipality, established districts generally will have lower development charges, and those who chose to redevelop and intensify development in these areas would benefit from those lower charges. Development that is farther away from existing infrastructure or requires extensive service or infrastructure provision would bear the cost burden of such a location decision. Compared to city-wide average-cost DCs, such a system is more equitable and reflective of the true cost of service provision.

In addition to using area-specific charges, municipalities can vary their development charges based on factors such as location, type of development, density or unit size.[11] As infrastructure unit costs depend on linear distances (e.g. for roads, sewers or water) factors such as lot size, density and development design will have an impact on total costs. Traditional development charges are calculated on a per-unit basis, and do not account for unit size or linear distances, which effectively subsidizes the construction of large units and low density development, at the expense of smaller units and dense development.[12] In order to remove that subsidy, municipalities could instead calculate their development charges based on unit size, and not the number of units. Lot size has a significant influence on infrastructure costs for both commercial and residential developments.[13]

Ottawa: Differentiation by zone

The City of Ottawa has identified two main development zones: inside and outside the greenbelt. Development charges outside the greenbelt are higher, to account for the increased infrastructure and service costs, estimated to be 80% higher, for development on greenfields far from downtown.

Source: Blais, P. (2010). *Perverse Cities*. Vancouver: UBC Press. Page 93.

6 Area-specific pricing calculates and assigns the costs to develop within a smaller geographical area than the entire city. Conversely, a uniform charge averages the costs of all development within a city and apportions those costs to all new development, regardless of its location or the services it necessitates.

7 Skaburskis, A. & Tomalty, R., 2000. The Effects of Property Taxes and Development Cost Charges on Urban Development: Perspectives of Planners, Developers and Finance Officers in Toronto and Ottawa. *Canadian Journal of Regional Science.* 23(2): 303–325.

8 Blais, P., 2010. *Perverse Cities.* Vancouver: UBC Press. Page 175.

9 Amborski, D., 2011. *Alternatives to Development charges for Growth-Related Capital Costs.* Vaughan: Residential and Civil Construction Alliance of Ontario, http://www.rccao.com/news/files/RCCAO_March2011_REPORT-1.pdf.

10 Skaburskis, A., 1991. The design of development cost charge schedules. *Journal of Property Research.* 8(1): 83–98. See also Blais, P., 2010. Perverse Cities. Vancouver: UBC Press. Page 175.

11 Skaburskis, A. & Tomalty, R. , 2000. The Effects of Property Taxes and Development Cost Charges on Urban Development: Perspectives of Planners, Developers and Finance Officers in Toronto and Ottawa. *Canadian Journal of Regional Science.* 23(2): 303–325.

12 Energy Pathways Inc., 1997. *Levying Development Cost Charges on Square-Foot Basis.* Vancouver: Urban Development Institute Pacific Region.

13 Blais, P., 2010. *Perverse Cities.* Vancouver: UBC Press. Pages 93–95.

In reforming their development charge structure, municipalities can strive toward revenue enhancement (boosting overall development charge revenues) or revenue neutrality (any revenue lost through reduced or waived development fees is offset by added revenues from higher development charges for more expensive development). However, in order to prevent future fiscal shortfalls and avoid market distortions, development charges should not fall below the level required to cover the infrastructure costs. In some provinces, there is currently an upper limit on development charges, which is the cost of the required infrastructure.

In addition to varying development charges, municipalities could provide the option for delayed or staggered payment schedules for development charges. Currently, municipalities generally collect development charges at the subdivision or building permit stage. However, high-rise projects can take longer to complete, which requires developers carry the costs of development charge for a longer period than low-rise development. Consequently, the longer period between when development charges are paid and when a project is completed may impact financing for projects and discourage some developers from pursuing desired forms of development. Municipalities – especially those with an established or emerging high-rise market – could consider greater flexibility as to when they collect development charges and perhaps offer a staggered payment schedule.

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Challenges to Using Development Charges More Effectively

There are several challenges to implementing changes to development charge systems, which can be categorized as fiscal, legislative, administrative, and institutional.[14]

Municipalities would have a difficult time implementing changes that result in lower overall revenues. Municipalities depend on development charges as a revenue stream to pay for the new infrastructure required by new development. In fact, municipalities tend to actively look for ways to increase, not decrease, these charges. A March 2011 report highlighted that in Ontario, the fiscal pressures faced by municipalities have resulted in more jurisdictions "try[ing] to increase development charges to the greatest extent possible," often without regard for other policy objectives, or the incentives created by

14 Of course there may be political challenges as well. For instance, developers who profit from the subsidies provided by area-based DCs will have an incentive to invest in political decisions that sustain those profits. This important factor, while being identified for completeness, is beyond the scope of this *Brief*.

the development charges.[15] Clearly, municipalities will need to raise some charges if they lower others.

The second type of challenge is legislative. Provinces set rules for how development charges are calculated and the types of services for which they can be collected, which ensures some degree of consistency across municipalities. However, provincial rules can also inhibit the ability of municipal governments to utilize development charges more broadly as a growth management tool, by constraining what can be charged for, and the timing. For example, in Ontario, many municipalities find the provincial requirement to discount many services by 10% to be challenging.[16] In particular, this often precludes municipalities from collecting development charges for improved and expanded transit service levels. Given that transit is an integral component of developing more compact and transit-oriented communities, the ability to fund it adequately is crucial for growth management.

Municipalities, particularly smaller ones, may be concerned about the administrative challenge of some development charge systems (e.g. by area). For example, the Town of Markham, Ontario had 31 different area-specific charges until 2008, which has since been reduced to 19 – in part – due, it is claimed, to the administrative demands of managing 31 different charges. Multiple charges can increase the administrative complexity for municipalities, which must keep meticulous records for DC revenue and spending since developers and others keenly observe how DCs are spent. However, researchers examining this type of claim found no evidence that an average cost approach was more efficient in terms of administrative resources needed.[17] Vancouver, which has both area-specific and citywide charges, reports that the administration of these charges is not very onerous.[18]

There may be institutional challenges to improving development charges. Municipalities need to recognize the value of removing internal silos that prevent development charges from being used to their potential. Municipal staff from the planning and financial departments may not have much interaction on a regular basis, and especially the planning department may not have a strong role in development charge planning. It is important for growth management staff to ensure they communicate the role development charges can play in achieving growth management objectives, and horizontal collaboration can be facilitated through the use of common policy plans. A more integrated approach is needed when preparing development charge programs, which would include all relevant departments (and perhaps outside key stakeholders) to resolve issues of competing interests.

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15 Amborski, D., 2011. *Alternatives to Development charges for Growth-Related Capital Costs.* Vaughan: Residential and Civil Construction Alliance of Ontario, http://www.rccao.com/news/files/RCCAO_March2011_REPORT-1.pdf.

16 Interviews conducted by Mia Baumeister with anonymous Ontario municipal officials in December 2010.

17 R. Tomalty, "Development Charges:A Lost Opportunity to Encourage Sustainable Urban Development," http://www.cardinalgroup.ca/nua/ies/ies02.html.

18 Interview conducted by Mia Baumeister with the Financing Growth Team of the City of Vancouver in February 2011.

Implications for Policy-Makers

This *Brief* is meant as an overview of how development charges can be restructured to support growth management objectives at the municipal level. Based on the overview, Sustainable Prosperity believes that the following conclusions are of direct relevance to policy-makers engaged in the development of urban planning policy in Canada:

1. Each municipality has different needs, context and pressures, so there is no one size-fits-all solution. However, shifting how development charges are understood and structured will be key to ensuring that they are used in conjunction with other growth management and urban planning policies to ensure land development and community growth is more efficient.

2. Provincial governments should amend development charge legislation to explicitly require municipalities to collect 100% of the financial costs imposed on them by new developments. Artificially low cost-recovery limits, such as Ontario's limit of 90% of costs, should be removed.

3. Provincial governments could amend development charge legislation to include the costs of providing transit services related to growth, and to remove any restrictions on developing new transit-related development charges. Transit provision is essential to the success of growth management policies. Allowing development fees to go toward growth-related transit services will free up other revenues to support transit for more compact, nodal, transit-oriented communities.

4. Provincial governments could undertake an ongoing study of policy issues related to development charges. Provincial leadership in the form of ongoing support and guidance is needed to ensure development charge programs are designed and used effectively. Specific solutions could include providing information and background studies demonstrating how designing development charges can produce a different outcome depending on the desired planning goal. Another important area for study is the extent to which development charges could be used to address the non-financial, externalized costs of urban sprawl (e.g. smog, GHG emissions, health, etc.).