

Briefing Note

NOVEMBER 2011

BN11-04E

A Brief on Development Charges: Principles & Practices

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Abstract

Development Charges (DC) are a pricing mechanism used by municipalities to offset the costs associated with infrastructure provision for new urban development. Based on the principle that “growth pays for growth”, DCs are used to finance capital projects such as roads and community centres resulting from urban growth. Three approaches are used in Canada. Under the municipality-wide approach, the DC rate is averaged across the entire city, with the result that small inner city homes subsidize larger homes being built on the urban fringe. The area-specific DC divides the city into zones; rates vary from zone to zone so that new infill homes closer to existing infrastructure (and hence cheaper to connect to existing city services) pay less than those on the urban fringe. Finally, the marginal-cost approach takes DC calculations to a finer grain. In addition to dividing the city up into separate zones, marginal costing takes into consideration the impact of land use and density on the costs of infrastructure servicing. Montreal is one of the few Canadian cities that does not systematically apply DCs on urban development. This brief outlines these approaches and provides a list of resources and contact information for those interested in pursuing the matter further.

Cite as

Kemp, Jordan; Tomalty, Ray (2011). “A Brief on Development Charges: Principles & Practices”. Briefing Note BN11-04E.
Montréal: CURA Making Megaprojects Work for Communities - Mégaprojets au service des communautés.

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Introduction

Development Charges (DCs) are a pricing mechanism used by most Canadian municipalities to offset the costs associated with infrastructure provision for new urban development. They are used to finance capital projects such as hard services (e.g., roads, sanitary systems, trunk sewers) and soft services (e.g., police and fire stations, libraries, community centres) that are the result of urban growth. DCs are an important revenue stream for municipalities because they guarantee that new development can be adequately serviced without imposing a financial burden on the City. In other words, DCs are designed to ensure that “growth pays for growth” and that the costs of infrastructure provision are not borne by taxpayers. Notably, Montreal is one of the last large Canadian cities that does not systematically apply development charges on new developments.

This brief will summarize the principles of DCs, outline the tools used in structuring DCs, and provide some examples of how DCs are used in Canada. For future reference, a list of reports, research and professional contacts are provided at the end.

2 Principles of DCs: Growth Pays for Growth

The practice of charging for infrastructure servicing extends from the “user pays” principle: the additional costs of servicing new development are borne those who incur the costs. By extension, the ultimate objective of DCs is to simply recovery the costs from infrastructure servicing. However, the scope of DCs is slowly shifting from cost recovery to using DCs as a pricing tool for achieving municipal planning goals (e.g., compact growth). This shift is important because as municipalities face tighter financial constraints, there is a need to ensure that new infrastructure resulting from urban growth can be maintained in the long term. The most effective way to achieve this goal is to establish a closer relationship between infrastructure financing and planning goals.

3. Structures of DCs

3a) Overview

Typical DC rate calculations consist of two parts. First, population and employment growth forecasts are made based on historic trends and foreseeable tendencies. Second, growth-related capital needs are determined and may be divided into two categories: major city

services (e.g., trunk sewers, water supply and distribution, parks and recreation facilities) and minor works (e.g., minor roadworks, sanitary sewer pipes, and storm water management facilities). These two forecasts are used to calculate the DC rate:

$$\frac{\text{Growth-Related Capital Costs}}{\text{Projected Population Growth}} = \text{Development Charges Rate}$$

From this calculation, the DC rate is allocated to residential and non-residential growth according to the growth forecasts. In general, residential DC rates are usually divided into dwelling types (single-family dwelling, semi-detached, apartments <2 bedrooms, apartments >2 bedrooms). Non-residential DC rates are typically divided into institutional, commercial, and industrial and charged on per area of building.

3b) Pricing Tools

There are three main DC structures: a) municipality-wide charges, b) area-specific charges, and c) marginal cost charges. The characteristics of each DC structure and their impact on urban land use patterns is described below.

Under the **municipality-wide** approach, the DC rate is averaged across the entire city, with no regard for variability of servicing costs due to location, land-use, or density. The municipality-wide DC is the most commonly used approach because: a) it is easy to administrate by municipal staff b) it is easily understood by developers, and c) it is fair in that all new development must pay for the costs of new infrastructure. However, because DCs are averaged across the entire city, the actual costs of servicing are not allocated based on various servicing requirements for different land uses or building sizes. For example, a small-lot infill home pays the same DC as a large-lot home on the urban fringe, even though their servicing demands are completely different. For this reason, it has been thoroughly argued in the academic research (see below) that a municipality-wide approach to DCs creates disincentives to intensification and encourages urban sprawl.

The **area-specific** DC divides the city into zones, whereby the charges for infrastructure services vary according to the costs associated with servicing each zone. For example, the costs of installing sewers are dependent on the distance from pumping stations within different zones of the sanitary sewer shed. Across the city, infrastructure costs vary by zone, but within each zone the costs are averaged. This approach to DCs more effectively allocates infrastructure costs within the defined zones of a municipality. For example, a small-lot infill

house in one zone will pay less than a large-lot house on the urban fringe in another zone. The area-specific approach effectively supports infill development by making it cheaper to build in areas with existing infrastructure.

The **marginal-cost** approach takes DC calculations to a finer grain. In addition to dividing the city up into separate zones, marginal costing takes into consideration the impact of land use and density on the costs of infrastructure servicing. Unlike the municipality-wide approach, marginal cost DCs are designed to integrate the efficient use of infrastructure with long term planning goals (e.g., compact growth). It is argued that the marginal cost approach is more “fair” than the municipality-wide approach because the actual costs of servicing are allocated to the users. For example, a small-lot infill house will pay less DCs than a large-lot house on the urban fringe because they are utilizing existing infrastructure capacity and therefore placing less demand on the network. The marginal cost approach is used to better direct urban growth patterns in a logical extension and encourage land use intensification.

4. Examples of DC Structures

London, Ontario: (Municipality-wide DC)

The DC structure used in London is typical of most municipality-wide structures in that the costs of development are averaged for the entire city. Residential DCs are calculated as a per-unit rate, differentiated by dwelling types. Non-residential DCs are charged per square foot of building and categorized as either institutional or commercial. There are no DCs for industrial uses because the City operates as the largest developer of industrial lands in London. To incentivize development in the downtown, the City exempts DCs. This exemption has produced a significant rebound in the construction of residential buildings in the downtown. DCs are collected when a building permit is issued.

See: www.london.ca/d.aspx?s=/Planning_and_Development/Development_Approvals/developmentcharges.htm

Markham, Ontario: (Area-Specific DC)

Markham, ON utilizes a two-tier structure, where DCs are divided between fixed and variable costs. Fixed costs include the “soft” services that do not vary by location, such as libraries, community centres, and police and fire stations. Variable costs include the “hard” services that vary by location, such as sewer and stormwater management. Residential uses are

categorized the same as London, but for non-residential uses, the City of Markham separates charges for ICI, retail, and “mixed-use.” A portion of the DC is collected when a subdivision agreement is executed and the remainder is collected when building permits are issued.

See: www.markham.ca/wps/portal/Markham/BusinessDevelopment/PlanningBuilding/DevelopmentCharges

Kelowna, British Columbia: (Marginal Cost DC)

The marginal cost approach used by the City of Kelowna calculates DCs using four criteria:

- Different zones or defined areas
- Different land uses
- Different capital costs as they relate to different classes of development, and
- Different sizes or different number of units in a development.

The four factors that directly affect the costs of infrastructure servicing are accounted for in the DC. In Kelowna, DCs are payable either at the time of subdivision approval or when a building permit is issued.

See: <http://www.kelowna.ca/CM/page321.asp>

Also, see below: R. Tomalty (2007).

5. Conclusion:

Development charges are an important financial tool that can provide additional revenue streams for municipalities while directing urban development via pricing strategies. While Montreal and St. John’s Newfoundland are the two remaining large Canadian cities that do not systematically apply development charges in urban development, other Canadian cities are exploring how this approach can be used to give clearer pricing signals to the private market. Development charges, because they are based on the real costs of urban development, can both assure that the burden of additional capital costs for urban development is shared fairly, while in the best examples integrate the efficient use of infrastructure with long term planning goals and compact growth.

6. Resources:

Online:

www.impactfees.com. (Duncan Associates). This website contains a library of publications, surveys, and case law on development charges in the United States.

Reports & Presentations:

Blais, P. "Achieving Sustainable Communities: Not Without Better Pricing Signals!" Presented at the CIP Conference, St. John's, NL (July 10 – 13, 2011). Accessed online (November 4, 2011); <http://cip2011.cip-icu.ca/english/pdfs/TCS25%20-%20Achieving%20Sustainable%20Communities.pdf>

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Tomalty, R. (2007). "Innovative Infrastructure Financing Mechanisms for Smart Growth." *Smart Growth B.C.* See: Section 2.2 (p. 8) and Section 3.2 (p. 23 – 24).

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