CITY-WIDE DEVELOPMENT COST LEVY UPDATE BEST PRACTICES GUIDE

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November 21, 2016

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I INTRODUCTION

The City of Vancouver has been experiencing consistent growth and development over recent years, which places pressure on the City's infrastructure. With strong growth expected to continue, largely in the form of redevelopment and infill, the funding of new, renewed and expanded infrastructure, amenities and City services will continue to be a challenge.

Development Cost Levies (DCLs) are a primary financing tool used by the City to fund the growth-related capital projects that are needed to service development. The City is currently undertaking a comprehensive review of the city-wide DCL rate structure and calculation methodology and looking to potentially upgrade the DCL regime to recover as many eligible growth-related capital costs as possible from development.

In the context of DCLs or similar municipal fees, the reference to growth relates to any development that occurs within a municipality that has the effect of increasing the population and/or employment base, thus increasing demand placed on municipal infrastructure and servicing. Growth, or new development, should be responsible for paying it's share of capital costs required to service the infrastructure and servicing investments required to service the development as the City grows overall.

This report provides a review of municipal best practices employed by comparable jurisdictions to fund growth-related capital infrastructure costs. The report looks at comparable development charge regimes across similar cities in Canada and the United States. The findings will be used to inform the 2016 city-wide DCL update and identify practices that Vancouver might incorporate into the exiting system.

The report is organized as follows:

Section II summarizes the key findings from the best practice analysis, as detailed throughout this best practices report.

Section III explores the key guiding principles of development cost levies and provides an overview of the structure in the City of Vancouver.

Section IV sets out the legislation and policy framework under which the City of Vancouver can impose DCLs. This includes the province's *DCC Best Practices Guide*,

Vancouver Charter, British Columbia's *Local Government Act,* as well as a review of the City's by-laws.

Section V provides context for the five comparable municipalities selected for the best practice analysis. Rationale for the selection of each municipality is discussed. Detailed case studies on the development charges regimes in each selected municipality have been appended to this report.

Section VI summarizes in detail the findings of the best practices analysis and addresses a number of development charge-related issues and practices in both the City of Vancouver and surveyed municipalities. Best practices are identified and associated recommendations are made.

Finally, **Section VII** concludes the report with a summary of lessons learned and recommendations for Vancouver.

II SUMMARY OF KEY FINDINGS

A range of Development Cost Levy practices from other municipalities have been examined and compared to the approaches utilized by the City of Vancouver. From this review, several key recommendations have been identified for the City's consideration. This section provides a summary of the possible policy adjustments.

1. Coordinate development forecast and capital planning

   A detailed forecast of the type, location and timing of anticipated development in any municipality is of critical importance when determining the infrastructure investment that will be required in the future and the way in which it might be funded. Linking a detailed development forecast to the capital budget provides several benefits. Firstly, the forecast allows staff to measure the service levels being provided to new development relative to existing service levels. Secondly, it ensures that development-related infrastructure is appropriately identified and timed so that future communities will be properly serviced. Finally, capital projects can be more easily divided into growth and non-growth categories, which can assist in the determination of the appropriate funding sources. There are currently some shortfalls in the transfer of forecast data to various departments, which creates a disconnect between the way in which the City will grow and the capital projects planned to service that growth. The City should incorporate development forecast information into capital planning exercises at the department level, not only for the purposes of calculating the development cost levies, but also for any capital budgeting.

2. Refine service level determination and DCL rate calculation methodology

   It is important for any municipality to understand the way in which services are provided to the population and employment base. This is particularly important from the perspective of growth, because a clear understanding and established standard of municipal service provision ensures that servicing is consistent as a municipality grows. Establishing and standardizing the way in which municipal services are provided sets a context for the way in which they should be provided into the future. This standardization also assists in budgeting exercises and serves as a reasonability test when identifying required projects.

3. Specify purpose of DCLs in relation to other sources of infrastructure funding

   In compiling the development-related capital programs and establishing infrastructure costs, it is crucial to identify and net off any alternative funding sources available to fund growth-related infrastructure. Alternative funding

sources can come in a variety of different forms, including utility rates (engineered infrastructure), property taxes, senior government grants, donations and partnerships. Capital budgeting and infrastructure planning should be specific in identifying capital costs and all required deductions related to this alternative funding. This is important for the defensibility of the resulting development charges, as it is very important to ensure that funds are not collected from multiple sources to pay for the same costs. There is some confusion among departments at the City of Vancouver regarding the purpose of various funding sources for development-related infrastructure. These include DCLs, conditions of development and Community Amenity Contributions. Confirming the relationship of these funding sources and clearly establishing the purpose of each fiscal tool is recommended, and further explored in the Financing Frameworks report.

4. Formalize DCL study process

The process required to examine the DCL regime, including forecast assumptions, capital infrastructure costs and by-law policy is a significant undertaking. An effective process is one that engages a number of municipal departments as well as Council, stakeholders and members of the public. Having a formalized process and requirement for regular updates allows interested members the opportunity to anticipate not only when, but the way in which reviews will take place. This results in consistency among analyses and transparency of the rate calculation, as all parties are informed as to how the calculations are done. The City of Vancouver currently has no mandated study process or timeline for review and it is recommended that a formalized procedure be established.

5. Continue solid administration practices

In an effort to preserve transparency in the administration of development charge rates, regular detailed reporting should always be done. Information regarding the amount and timing of DCL revenue collection, the way in which monies are spent, as well as annual indexing assumptions should be detailed in annual reports to Council. The information should be well structured, transparent and easy to interpret by members of the public. The City of Vancouver currently produces very detailed reporting and serves as a municipal best practice in this regard.

III DEVELOPMENT COST LEVY GUIDING PRINCIPLES AND BACKGROUND INFORMATION

Development charges are levied by municipal governments throughout Canada and the United States to pay the capital costs of infrastructure required to service new development. In most regions, the authority to impose such charges comes from municipal or planning legislation.

A. GUIDING PRINCIPLE OF DEVELOPMENT COST LEVIES

As the development and redevelopment of land occurs, the need to provide infrastructure and municipal servicing increases. Many factors influence the amount and type of capital investment required. The amount, type and location of development is critical in determining the nature and quantum of required capital investment. Other influential factors include: municipal standards and desired levels of service; the regulatory requirements of senior governments; topography; timing of development; available capacity already in place to service new development or redevelopment; demographic and socio-economic change; and the way in which municipalities plan for the provision of services.

In addition to identifying the capital investments required to service development, a municipality must also determine how the infrastructure and facilities are to be provided and/or funded. This is a critical issue facing many of the faster growing jurisdictions across North America – who should pay for growth?

The intent of imposing fees on development to pay for the increased cost of municipal servicing is to maintain a city's livability while accommodating growth and ensuring that development does not lead to the erosion of municipal service provision for the existing population. In Vancouver, DCLs are fees paid by new development and are used to help finance the initial capital costs of new facilities needed for growth.

Development cost levies in Vancouver are intended to meet the following criteria:

- Help maintain livability of the City
- Based directly on growth-related capital costs of new development
- Not have a negative economic impact or deter desired types of development
- Not harm housing affordability
- Be consistent with City policies
- Distribute costs fairy among types of devlopment and between DCLs and property taxes
- Provide certainty and stablity, be understanable, simple and transparent
- Be developed wtith informed input from all parties

B. DCLS IN VANCOUVER

DCLs in Vancouver are one of the City's primary fiscal tools used to fund development-related infrastructure and the expansion of municipal servicing. The calculation and administration of DCLs is intended to advance the financial and policy planning priorities of Council, focused in the following areas:

- Housing;
- Child care;
- Engineering infrastructure; and
- Parks & open spaces.

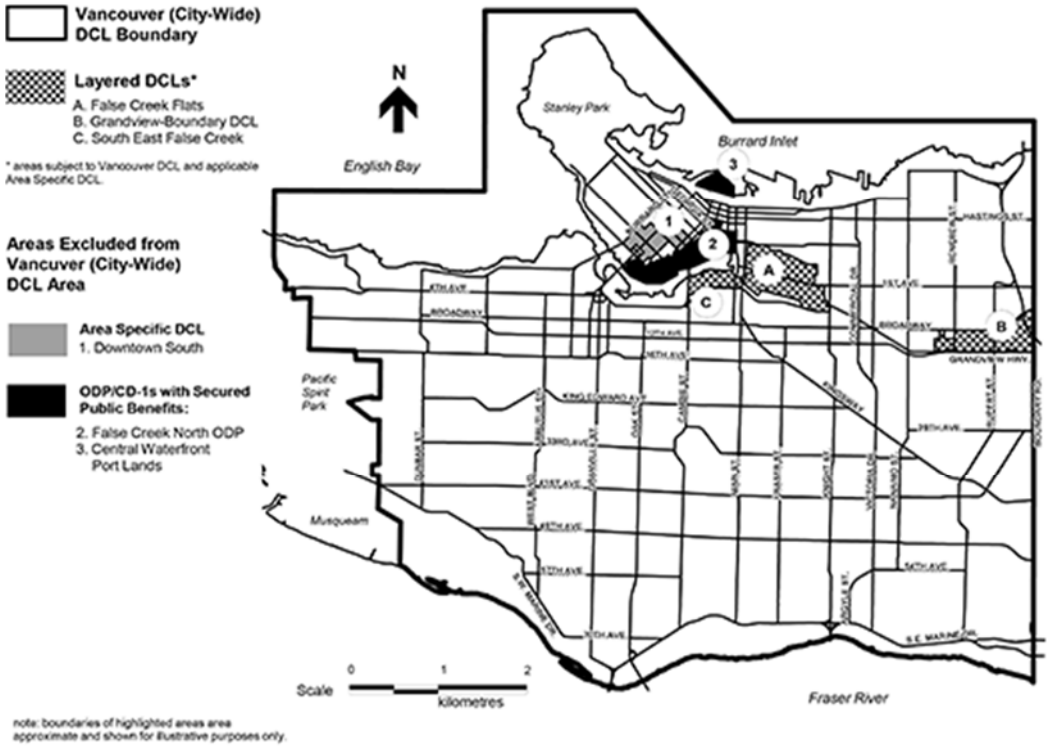
DCL revenue is significant for the City, with $580 million having been collected since 1992. Many notable public amenities, including affordable housing projects, child care facilities and City parks have been emplaced as a result of DCL collection, which have effectively maintained the City's infrastructure and level of municipal service provided as Vancouver continues to grow and develop.

Under the current DCL regime, the City does not recover costs related to water or sewer utility servicing on a City-wide basis. Rather, these services are funded through the area-specific charges and utility rates. The engineering infrastructure included in

the City-wide rate recovers for development related costs for roads and transportation infrastructure.

Currently, there are five DCL districts throughout the City, each with distinct growth-related infrastructure needs and DCL rates. These districts are shown below. All districts can be classified into three categories:

- City-wide DCL district: applies to most of the City;
- Area-specific DCL district: developments in this district is exempt from city-wide DCL but subject to area-specific DCL; and
- Layered DCL district: development in these districts are subject to both city-wide DCL and layered DCL.



Source: Vancouver.ca, 2016

The City-wide DCL was first introduced on an interim basis in 2000. Financing Growth policies were adopted by City Council in 2003 to help guide City-wide DCL and Community Amenity Contribution (CAC) policy implementation and ensure municipal service delivery was maintained as development continued to occur. In 2004, the City's Financing Growth Study was released, which identified approved

policy choices about how to impose fees on new development and help pay for the new facilities and servicing necessitated by growth.

Since 2013, Council has made several decisions to incorporate a number of Area-specific DCL districts and most excluded policy areas into the City-wide DCL district. This ongoing consolidation was done in attempts to simplify the DCL regime and streamline and modernize the way in which servicing needs attributed to development are addressed in Vancouver. These adjustments enable the City to deliver priority DCL-eligible projects across the City more expediently and recognize the true nature of the benefits derived from the municipal investment in infrastructure.

City-wide DCLs can be applied towards growth-related capital projects located in most parts of Vancouver's municipal boundary and service all new employees and residents, regardless of location. Levies collected under the area-specific DCL by-laws must be spent on projects occurring within, and providing benefit to that specific district. One exception are replacement housing projects, which may be located outside an area-specific district boundary.

DCL rates are determined based on a number of factors including development forecasts, growth-related amenity requirements and cost estimates for each DCL district. Generally, DCLs are not expected to cover all costs required by development, and the City is required to fund a share. Those shares not recovered through DCLs come from the Municipal Assist Factor (MAF), shares of development-related projects that benefit the existing community, as well as any alternative funding sources available for a particular project. These shares will be funded from other tools available to the municipality, including property tax, utility fees, CACs and other City funding, or contributions from senior governments or other funding partners.

The City-wide DCL rate structure recovers the development-related costs for parks, housing engineering and childcare. The largest portion of the charge is allocated to parks, at 41% of the total rate. 32% of the charge is allocated to replacement housing, engineering receives 22% and child care receives 5%.

DCLs in Vancouver are levied based on the Gross Floor Area (GFA) of a development. Rates vary by type of development – residential (at or below 1.2 FSR[1]/ laneway house or above 1.2 FSR), commercial, and industrial, and by DCL district. As outlined in s.523.D(13) of the *Vancouver Charter (Charter),* the DCL shall not exceed 10% of the value of the development, which is determined by the Building By-law. Payment is due at building permit issuance and the levy is calculated at the rate in effect on the date of issuance, unless in-stream rate protection applies.

[1] *FSR refers to Floor Space Ratio and is a measure of built form density. The ratio is calculated based on the total floor area of a building relative to the size of land upon which it is located.*

IV OVERVIEW OF RELEVANT LEGISLATION

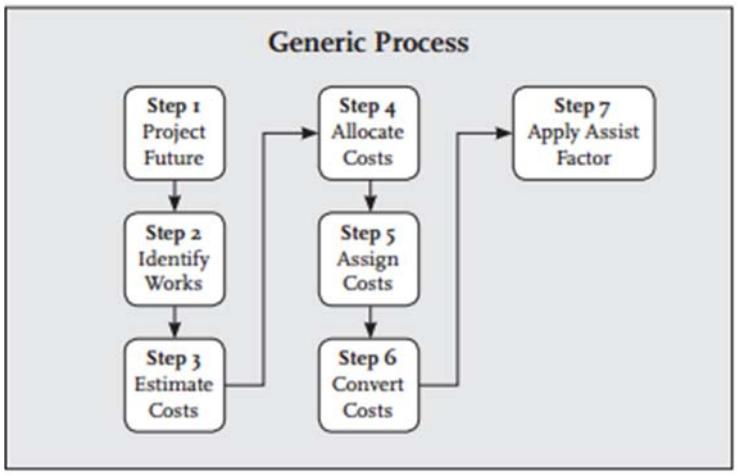
A. DCC BEST PRACTICES GUIDE FOR BRITISH COLUMBIA

Since the introduction of Development Cost Charges (DCCs), the British Columbia Provincial government has published several guides with suggested approaches to implementing development cost charges. For instance, the *DCC Guide for Elected Officials* and the *Development Cost Charge, Best Practices Guide* are intended to provide additional insight to the use of DCCs and advise on calculation and policy planning methodology. The City was actively involved in the preparation of these guides.

The *Development Cost Charge Best Practices Guide* is a provincial tool and advisory report intended to standardize the formulation and administration of DCC by-laws among local municipalities in British Columbia. The guide is based on the provisions of the *Local Government Act (LGA).*

While the methodology for calculating the charges may vary by municipality, generally there are seven sequential steps that are important in the DCC calculation, recommended in the *DCC Guide for Elected Officials* and as shown in Figure 1.

Figure 1: Seven-Step Process in Determining DCCs



B. VANCOUVER CHARTER

In 1990, the Province of British Columbia amended the *Vancouver Charter (s.523D),* giving Council the authority to use DCLs to help fund eligible public amenities needed for growth in the City. DCLs are payable on most new development, including development through the rezoning of lands.

While the *Vancouver Charter* determines eligible projects, the City determines growth-related need and costs for these projects and whether or not to use DCL

revenues for their funding. The *Charter* prescribes services for which DCLs may be imposed. Statutory and discretionary exemptions are also outlined in the *Charter* as are rules regarding the waivers or reductions of DCLs in the delivery of affordable housing and preservation of heritage buildings.

C. LOCAL GOVERNMENT ACT

The DCC regime in British Columbia is largely governed by Part 14 of the province's *Local Government Act*, Division 19. All municipalities, with the exception of the City of Vancouver, are governed by this provincial legislation.

Section 559 of the *LGA* provides the legislative authority to implement a DCC by-law. Capital costs that will "service, directly or indirectly, the development for which the charge is being imposed" may be included in the DCC calculation (*LGA*, ss. 559(2)). Under the authority of the *LGA*, municipalities can recover for costs relating to "providing, constructing, altering or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities" and "providing and improving park land" (*LGA*, ss. 559(1)(2)). Also eligible for recovery are the capital costs that relate to planning, engineering and legal costs directly related to the work for a which a capital expense may be incurred.

Charges may vary based on defined areas; uses; classes of development; or different sizes or number of lots or units in a development. A local government may also waive or reduce DCCs for certain uses defined as eligible developments (i.e. non-profit housing, subdivision of small lots that are designed to have a low environmental impact) in accordance with the legislation (*LGA*, ss. 563(1)(2)).

D. CITY OF VANCOUVER DCL BY-LAWS

The City of Vancouver maintains two DCL by-laws for the city-wide and area-specific districts. By-law 9755 was passed in November 2008, most recently consolidated in September 2015, and imposes city-wide DCLs for the services of sewer, water, drainage and highway facilities, parkland development, daycare facilities and replacement housing. Area-specific By-law 9418 was passed in February 2007 and outlines the rules surrounding ten area-specific DCLs recovering for the municipal services of highways, parks, day care facilities and replacement housing (depending on the area-specific district).

V COMPARATORS IN CONTEXT

A. MUNICIPAL COMPARATORS

Development charges are imposed by municipalities in most provinces in Canada and regions in the United States. Many Canadian municipalities in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and Nova Scotia make use of these types of fees. However, Ontario is the only jurisdiction with separate development charge legislation. In other provinces, municipal or planning regulations provide the authority for the charges. In most cases, the applicable provincial statutes dictate the services for which development charges may be imposed. It is noted that municipalities do not necessarily impose charges for all services that are permitted under legislation. In all cases, the use of development charges is permissive, not mandatory.

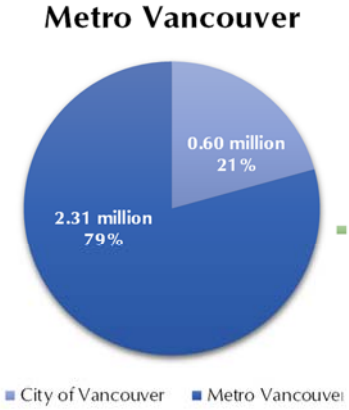
This section discusses the various approaches used by municipalities comparable to the City of Vancouver in determining how and when to impose development charges. The selected municipalities are the Cities of Toronto, Surrey, Calgary, Halifax and San Francisco (California). These were selected as they represent a good cross section of legislation and practice across Canada and provide an example in the United States.

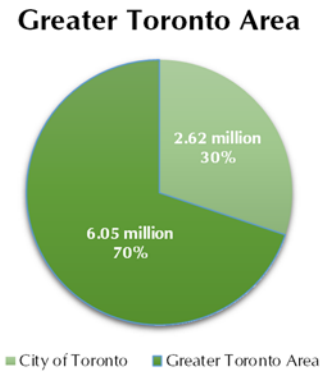
1. Patterns of Development

All selected municipalities are growing and experiencing various forms of land development and redevelopment. Demand on infrastructure and municipal servicing arising from new residential and non-residential development is placing pressure on available municipal fiscal tools. The use of development charge revenue is a key component of financing growth for all comparator municipalities. That said, the selected municipalities are developing in slightly different ways and experiencing distinct servicing pressures. Prior to undertaking the analysis regarding best practices for the calculation and levying of development charges, it is important to understand where Vancouver sits among these other jurisdictions and how comparisons may be drawn.

Generally, the Cities of Toronto and San Francisco are most comparable to the City of Vancouver in terms of development pressures and growth trends. These municipalities are characterized as central cities within much larger metropolitan regions and, as such, experience a significant share of infill and high density development, while more ground-related, greenfield expansion development occurs beyond the municipal boundaries.

As shown, the Cities of Vancouver, Toronto and San Francisco represent just a share of greater regional development. Particularly in the case of San Francisco, with only 9 per cent of the regional population living within the municipal boundaries. The Cities of Toronto and Vancouver represent larger shares of their regional municipalities at 30 and 21 per cent, respectively. This is due to the low density-nature and somewhat early stages of development in the surrounding municipalities within their regions. For example, in the Greater Toronto Area, the City of Toronto has the largest population at 2.62 million. The next largest city, the City of Mississauga has only 713,400. Similarly, the City of Vancouver's 2011 population number of 603,500 is greater than the City of Surrey's 468,300, the next most populous municipality in the region.





All three municipalities tend to be more established with a larger concentration of existing high density built form than that which characterizes the surrounding regions. In all three cases, there is very little, if any, available land for new development, especially of ground-related units. As such, development pressures largely consist of infill and redevelopment.

As shown in Table 1, the population densities of these three municipalities are substantially higher than their more suburban counterparts, due largely to their restricted geographic size.

Table 1
Population Density in Comparator Municipalities

Municipality	Population (2011)	Size (sq.km)	Density (pop/sq.km)	Observations
San Francisco, California	815,016	121.4	6,713.5	Pattern of development, sophisticated DCL regime
Vancouver, British Columbia	603,502	115.0	5,249.1	N/A
Toronto, Ontario	2,615,060	630.2	4,149.5	Pattern of development, extensive DCL funding
Surrey, British Columbia	468,251	316.4	1,479.9	Leading BC example, subject to *LGA*
Calgary, Alberta	1,096,833	825.3	1,329.0	Western Canada, progressive approach to DCL rate setting
Halifax, Nova Scotia	390,096	5,490.3	71.1	Currently undergoing review of DCL funding

Source: Statistics Canada 2011 Census, 2011 National Household Survey, US Census Bureau

In terms of development patterns and servicing pressures, the Cities of Halifax and Calgary are more similar to one another than to the City of Vancouver in that, while they are both single tier municipalities, they are geographically large and their spatial expansion is similar to that of a region. Development occurring within these municipalities is more diverse, encompassing high density and infill in the inner core or downtown areas and greenfield and ground-related units in the outer, more suburban areas. These municipalities experience all types of development throughout, whereas the City of Vancouver is largely higher density redevelopment and infill.

The Halifax Regional Municipality is an amalgamated regional municipality of the former cities of Halifax, Dartmouth, Bedford and Halifax County. Mostly all of the development occurring within the municipality is located in these settlement areas. As such, despite the availability of greenfield lands, a significant share of recent development activity has been in the form of apartments and condominiums. That said, infill and redevelopment, even in the downtown area, are not as prominent as is experienced in Vancouver, and densities tend to be much lower, as is shown in Table 1. These trends also appear in the City of Calgary, with a large geographic size and high density development concentrated in the downtown core surrounded by more low-density, greenfield type built form in the surroundings.

Although closest in proximity, the City of Surrey is likely the least comparable in terms of development activity to the City of Vancouver of all five comparator municipalities analysed. Despite some recent higher density built form, development activity in the City of Surrey continues to be characterized and dominated by ground-related, low density, greenfield units development. Infill and redevelopment do not place significant infrastructure and servicing demands on the municipality and these would not be significant considerations in forming development charge policy.

2. Comparing DCL Regimes

The comparator municipalities analysed as part of this best practices report were also chosen for the detail and structure of the development charges regimes employed. The City of Toronto's DC regime is extensive, recovering for a large number of services and analysing growth-related costs in quite specific detail, as required by the governing provincial legislation. The City of Toronto's DC regime can be viewed as an example of potential services to be considered for the City of Vancouver, as well as the standardized methodology for the determination of replacement, or non DC-eligible, shares of projects included in the capital programs.

The City of Calgary also maintains a DC rate structure with many municipal services included. The City takes a progressive approach to DCL rate setting in that it includes various services not directly permitted under the *Municipal Government Act*. Although not specifically included in the MGA's list of eligible services, the Act recognizes the demand on certain community services emplaced by new development. These services include library, emergency response stations, police stations, recreation

facilities and transit busses. Development-related costs are recovered through levies calculated and imposed as a voluntary contribution from developers. Support for the charges has been reaffirmed by the development industry, which was engaged during the calculation process.

The City of Surrey relies heavily upon DCC revenue due to the accelerated rate of growth and expansion in recent years. The high costs of infrastructure and municipal amenities required to service the low density and spatially vast nature of development in the past has encouraged the City to maximize revenues allowed under the legislation. Also noteworthy is that the City operates under the Province of British Columbia's *Local Government Act*, and includes many of the same permissions and restrictions as the *Vancouver Charter.*

While the Halifax Regional Municipality does not impose a comprehensive or extensive development charge regime, despite being permitted to do so under provincial legislation, it was chosen as a comparator municipality as the municipality is currently undertaking an update to their Infrastructure Charges regime and is likely to incorporate results of best practices analysis similar to the City of Vancouver.

More detailed case studies for each municipality are included in Appendices I – V.

VI BEST PRACTICES ANALYSIS

As part of this analysis reporting, several methodologies and practices related to the calculation, levying and administration of development charges were reviewed. The following section identifies the findings of the analysis and summarizes practices in each surveyed municipality. The information presented within this section is consolidated for comparative purposes in Appendix VI. The findings outlined in this section produce a number of recommendations that will be used to inform the City of Vancouver's 2016 update to the existing Development Cost Levy regime.

A. DEVELOPMENT FORECAST & DCL CAPITAL PROGRAM

1. Forecasting Future Development

Development charge calculations are rooted in a number of assumptions about the way in which a municipality is anticipated to grow. The first step in calculating a charge is to forecast the type and location of anticipated development against which the charges will apply. The City of Vancouver is the most populated municipality within the Metro Vancouver region. Development forecasting and policy planning for the region is outlined in Metro Vancouver Regional Growth Strategy (RGS), which establishes priority policies and objectives related to accommodating regional growth. The RGS contains population and employment targets to 2041 for Vancouver, which the City is committed to accommodating.

It is common practice for municipalities to rely on regional or provincial plans as the basis in forecasting development. Most of the surveyed municipalities employ this practice, as shown in Table 2.

Table 2
Basis of Development Forecast

Municipality	Basis of Forecast
Vancouver, British Columbia	Metro Vancouver Regional Growth Strategy , 30 year population and employment targets and municipal development forecast
Toronto, Ontario	Province of Ontario's *Growth Plan for the Greater Golden Horseshoe*, 2031 population and employment targets by municipality
Surrey, British Columbia	City of Surrey Official Community Plan and municipal development forecasts
Calgary, Alberta	City of Calgary *Municipal Development Plan* contains growth policy for the next 60 years (2076)
Halifax, Nova Scotia	Regional Municipal Strategy, population and employment targets to 2031
San Francisco, California	Municipal development forecasts used

The City of Vancouver's approach to forecasting the location and type of development is concise, detailed and consistent with regional allocations. Development by housing unit and non-residential construction type is based on current zoning, which may be affected by ongoing planning throughout the forecast period. Various zoning designations stipulate development density based on a Floor Space Ratio (FSR), which is used in the calculation and application of the DCLs. Capacity is measured in floor space, units and population. This is the basis upon which city-wide net population, dwelling unit and non-residential building space growth are estimated.

The City of Toronto is identified as a best practice example in this regard due to the detail in the forecasting. The development forecasts for the City are based on long-term targets as outlined in the Province of Ontario's *Growth Plan for the Greater Golden Horseshoe,* which establishes population and employment targets for all municipalities in the region. For development charges purposes, the City forecasts not only growth in Census population, but also the increase in dwelling units by unit type and the associated gross population growth in these new units. On the non-residential side, employment and the increase in non-residential building floor space is projected. All of this is done on an annual basis, illustrating the way in which the City will grow each year. This facilitates cash flowing of development charge revenues as the timing of anticipated DC collection is compared against expenditures related to the capital projects, and accounts for borrowing and inflation costs.

Recommendation: It is recommended that the City continue to forecast the amount, type and location of development. Projections should remain consistent with regional population and employment targets, and be closely tied to the compilation of the development-related capital programs included in the DCL calculation. This relationship results in justifiable charges as the nexus between development and the increased need for service is strongly connected to the charges calculated and imposed.

2. Application of Growth Forecast to DCL Calculations

Development forecasts have a significant impact on the calculation of DCLs and will determine the amount of the charge to be paid—to the extent that the charge is ultimately calculated as the growth-related capital cost divided by the amount of growth. As such, forecasts should be closely tied to a municipality's capital development plans. Depending on the structure of the charge, development forecasts should set out the amount, type, and location of development. They should also address the timing of development; this is especially important if a municipality intends to include borrowing costs in the calculation. Finally, the capital infrastructure needs of new development, which may vary by location must be identified clearly, which will inform the development of a municipal budget and capital plan, as well as the projects included in the DCL calculation.

In preparing development forecasts, the municipality must establish a planning period over which the growth-related capital costs are to be recovered. Typical timeframes

range between 5 and 10 years, though longer horizons may be used where long-term infrastructure plans are known. Generally, shorter timeframes increase the need to account for infrastructure benefits that extend beyond the planning period ("post-period" benefits). Longer timeframes can reduce the accuracy of the calculation, especially if development prospects, available capacity, and project costs are unknown.

In the City of Vancouver, the forecasting of development in terms of timing, location and density is detailed and informed. However, there are some shortfalls in the transfer of information to various departments so that the forecasts may be used in the capital planning process. If this knowledge were to be shared and updated more often, and service departments were to be mandated to consider it in planning and budgeting for the future, it would be helpful in ensuring that future population and employment growth be properly serviced into the future, and help justify the inclusion of certain projects (or shares of projects) into the calculation of DCLs.

In advance of the budgeting process, each department should be provided with the most current development forecasts. This way, departments may consider not only department-specific servicing standards, but also the capacity of existing services to meet the needs of the City as it grows, but also to estimate the magnitude of infrastructure investment required. The City could mandate regular update and circulation of development forecasts on an annual or semi-annual basis.

The City of Calgary is successful in closely relating anticipated development statistics to the capital program and forecasting required infrastructure. Each department, including departments that receive development charge revenue, receive the population projections and incorporate the information into their long range planning documents and capital budgeting. A key consideration is determining the nature and magnitude of infrastructure that would be needed to service anticipated growth.

Recommendation: It is recommended that the City improve linkages between the development-related capital programs and the growth forecasts, particularly with respect to the engineered services. Development forecasts should be used as one of the primary tools in determining the need for investment in new municipal infrastructure.

B. SERVICE LEVELS: HISTORIC, CURRENT & PLANNED

1. Level of Service Analysis

The importance of service levels, both historic and planned, in determining the amount of the development charge is paramount in most municipalities. Municipal infrastructure planning and service provision generally follows the principle that services provided to accommodate growth should be in line with the level of service

provided historically. For some services, it may also be appropriate to use a planned level of service to estimate infrastructure needs.

The City of Vancouver identifies three approaches to determining the growth-related capital costs required by development in the forecast planning period. While the most common approach used in the City is the standards-based, as many standards exist for the DCL-eligible services, all three approaches are used, and vary by service. The various measures used to determine future needs are summarized below:

Standards-based approach	• Service standard based on other cities' service level, national professional association standards or City Council Policy • ex: Replacement Housing* - *Vancouver Charter* stipulates one-for-one replacement of afforedable rental housing lost through redevelopment • ex: Child care - City's Civic Childcare Strategy requires 1 daycare space for 50% of pre-school aged children with working mothers, 1 space per 100 employees
Past level of service-based approach	• Standard is based on past pattern of service provided in Vancouver • ex: Parks - continuing to provide 2.75 acres of neighborhood park per 1,000 population, based on Park Board Policy and long standing municipal practice • ex: Replacement Housing* - maintaining 8.5% of housing stock as social housing, based on past practice and Council policy
Plan-based approach	• Based on Council approved plan • ex: Transportation - growth needs based on City Transportation Master Plan

Note*: Replacement Housing uses both a standards-based and past level of service-based approach. Both types of demand are to be met using a variety of municipal tools, including DCLs.

Most surveyed municipalities rely largely on the plan-based approach in determining level of service to be provided to accommodate growth in the future, particularly with respect to engineered servicing (See Table 3). The City of Toronto is unique in it's use of the past-level of service based approach for most development charge eligible services, as it is legislatively required to do so. Ontario's legislation is the most prescriptive in Canada with respect to service levels. The *Development Charges Act (DCA)* legislates a past level of service-based approach for most services in establishing specific rules for calculating the permissible charges. The *DCA* limits the amount of capital costs that can be funded through development charges in the future based on the average level of service provided in a municipality over the ten years preceding the calculation of the charge. The level of service is based on both the quantity and quality of service provided on a service by service basis and considers the beneficiaries of each service category.

In 2015, the Ontario legislation was amended to allow development charges for Transit services to be based on a plan-based rather than past level of service-based analysis, subject to conditions. The change was introduced to allow municipalities to use development charges to fund a greater share of transit projects that would not otherwise have been permitted.

Less prescriptive provincial legislation in other jurisdictions also require that the relationship between planned development/redevelopment in the community and infrastructure and facilities required to service that growth be established. However, there are no references to service levels as in the Ontario legislation.

Table 3
Approach to Determining Level of Service

Municipality	Standards-Based	Past Level-Based	Plan-Based
Vancouver, British Columbia	Replacement Housing, Child care, parks acquisition	Replacement Housing, Parks	Transportation
Toronto, Ontario	N/A	All general services	Transit, Engineered services
Surrey, British Columbia	Parks	N/A	Engineered services
Calgary, Alberta	Community Services	N/A	Engineered services
Halifax, Nova Scotia	N/A	N/A	All services[2]
San Francisco, California	N/A	N/A	All services

There are many advantages and disadvantages to each approach in determining the level of municipal service and predicting the required investment in the future for each service. For example, while transparent and based on a range of best practices, established standards may not always be entirely applicable or beneficial to the specific circumstances in the City of Vancouver. The past level of service-based-approach is helpful in that it is based directly on municipal experience and provides a solid basis for predicting future needs, however it assumes that the past level of service provision is a reliable indicator of future needs and may not allow for the expansion of municipal service delivery. This approach is not effective for the engineered services of water and sewers, which should be planned to adequately service a municipality as it grows. This will depend upon the available capacity of the infrastructure, future demand based on use, and prevailing engineering and health and safety standards.

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[2] *The Halifax Regional Municipality is currently undergoing a major review of the way in which municipal services are provided and development-related infrastructure is funded. Approaches to determining levels of service are currently under review.*

The City of Vancouver's employment of the three different approaches for different services is appropriate and, while it may become complex and perhaps administratively challenging for DCL update studies, it seems to be a fair and accurate way to determine future infrastructure and servicing needs. Conceptually the City is using the standards in an effective way, however they are now out of date, having been established years ago without an update to account for emerging trends. Regular master planning exercises and updates to the DCL system will ensure that standards are updated frequently and the City continues to be serviced in an adequate manner.

Recommendation: It is recommended that the City continue to employ various methods to measuring municipal servicing levels and determining future investment needs. The City should look to quantify and qualify the level of service provided in the past to measure performance on a service-by-service basis to ensure that established standards continue to be adequate and to inform the plan-based approach. This will require the employment of a more formal inventory tracking of the level of municipal servicing provided on an annual basis.

C. DCL CALCULATION METHODOLOGY & ELIGIBLE SERVICES

1. Eligible and Ineligible Services

In Vancouver, according to the *Vancouver Charter*, the following services are eligible:

Parks	Park acquisition, park development
Child care	Daycare, out-of-school care
Housing	Replacement housing, Social housing
Highways (Transportation)	Pedestrian & bike facilities, greenways, traffic signals, transit amenities, highway facilities etc.
Sewer, Water & Drainage	Trunk mains, storage, linear infrastructure (capacity)

Various services are specifically ineligible for funding through DCLs. They include:

Library	Branches, central library
Culture	Theatres, art galleries, museums, archives, etc.
Social Services	Neighborhood houses, family places
Recreation	Community centres, pools, ice rinks
Fire	Halls, trucks
Police	Stations, vehicles

Table 4 indicates the range of services permitted to be recovered through development charges throughout various Canadian provinces. The engineered services, including

water, sanitary sewers, storm drainage and roads are eligible in most jurisdictions. Only British Columbia, Ontario, Nova Scotia, and Saskatchewan municipalities are permitted to impose charges for the general services of park development and recreation facilities.

Other general services, including library, child care and protection services are less frequently included in development charge regimes. This can be due to legislative constraints, but could also relate to a lack of expansion or development-related components to this type of infrastructure. The development of additional affordable housing is less commonly included in development charges, both in the comparator municipalities and across Canada. In Ontario, some municipalities recover for a share of new affordable housing development and relate the share to overall population growth. Vancouver is unique in recovering costs for replacement housing, or affordable housing options that are lost to new development.

The City of Hamilton, in Ontario (population 520,000) has the most extensive DC regime in the province, imposing development charges for 21 service categories: water, wastewater (facilities and linear), stormwater (drainage and control), highways, public works, police, fire, transit, parkland, recreation facilities, libraries, administrative studies, ambulance, long term care, health services, social and child services, housing, airport, parking, provincial offenses, and the conservation authority. The City of Toronto follows closely with development charges recovering 17 service categories.

Table 4
Spectrum of Services in Development Charges

	Vancouver, BC	Surrey, BC	Calgary, AB	Toronto, ON	Halifax, NS	San Francisco, CA
Water	*	*	*	*	*	*
Sewer	*	*	*	*	*	*
Drainage	*	*	*	*	*	
Roads	*	*	*	*	*	*
Recreation			*	*	*	
Parks	*	*		*	*	*
Transit			*	*	*	*
Police & Fire			*	*	*	
Library			*	*	*	
Childcare	*			*		*
Housing	*			*		*
Solid Waste				*	*	
Other			*	*		*

Although the recovery of water and sewer infrastructure through development charges is eligible under the Vancouver Charter, these services are not incorporated into the City-wide rate structure. In most jurisdictions with water and sewer servicing included in the development charge, these services account for a significant share of the overall fees levied. For example, in the City of Calgary, the water and wastewater servicing alone accounts for approximately 50% of the total offsite levy (including community services).

In Vancouver, the capital costs, including development-related expenditures are largely paid for through utility rates and offset by the tax base. Some of the area-specific or layered DCLs include costs for water and sewer infrastructure, however there are few examples. Although it appears in Table 4 that the treatment of water and sewer costs is similar in Vancouver to other comparator municipalities, the degree to which those services are funded through DCLs is much less.

Recommendation: While it is recognized that the City is currently limited by the provisions of the *Vancouver Charter,* it is recommended that negotiations be entered into to review the opportunities that exist to include additional municipal services into the DCL regime. Demand for many of the services that are currently listed as ineligible under the legislation is increased as a result of development throughout the City, and the growth-related capital costs associated with infrastructure investment and municipal servicing should be considered in the analysis. Examples of these services include public transit, protection services, district energy and solid waste collection.

2. Identifying Eligible Capital Costs

In calculating development charges, the increase in need for services necessitated by growth must be estimated and all or a portion of the net capital cost (gross cost less other contributions such as grants or subsidies) of providing particular services may be included in the charges. The projects required to provide various services over specified time periods are generally set out in municipal capital budgets, other long range financial plans, and master servicing plans.

Development charges in Canada are used to fund the initial capital cost of new infrastructure; the cost of repair, rehabilitation, replacement, and other "asset management" costs are generally excluded from the charge calculation. As well, recognizing the occasionally imprecise distinction between "capital" and "operating" costs, development charges in Canada are not typically used to fund operating costs.

Definitions of "Capital Costs"

Ontario's Development Charges Act

Costs to acquire land or an interest in land, including a leasehold interest.
Costs to improve land.
Costs to acquire, lease, construct or improve buildings and structures.
Costs to acquire, lease, construct or improve facilities including,

i. *rolling stock with an estimated useful life of seven years or more,*
ii. *furniture and equipment, other than computer equipment, and*
iii. *materials acquired for circulation, reference or information purposes by a library board.*

Costs to undertake studies in connection with any of the matters referred to above (including the development charge background study).
Interest on money borrowed to pay for costs described above.

Vancouver's Local Government Act

Eligible capital costs include:
(a) planning, engineering and legal costs directly related to the work for which a capital cost may be incurred under Division 19 of the Act, and
(b) interest costs directly related to the work that are approved by the inspector to be included as capital costs.

Only one-time costs of new facilities to serve growth are defined as growth-related costs for the calculation and application of DCLs in Vancouver. Costs associated with maintenance, replacement, accommodating past deficiencies, and operating costs are not eligible for inclusion in the calculation of DCLs.

Development charges must also not be used in establishing new or greater service levels for existing municipal infrastructure. Development fees should be used to service new development at current standards, at the time fees are levied. Theoretically, development should not be required to pay for the costs of upgrading existing servicing. However, as municipal standards change, new development should be built to accommodate the Council-approved (or politically enforced) standards. For example, the City of Vancouver maintains a standard of 1 daycare space for 50% of pre-school children with working parents. This standard has been established by Council as a municipal target. If the City is currently providing daycare services at a rate of 1 space per 25% of pre-school aged children with working parents, DCLs may still be imposed on new development to pay for daycare servicing at the standard established by Council, rather than at the rate it is actually being provided.

This methodology and principle is consistently applied in all surveyed municipalities as it forms the basis of the rationale behind development cost levies or fees associated with servicing development.

3. Use of Master Servicing Studies

Master Servicing Plans, Needs Studies and Master Plans are very useful planning documents that are used by municipalities to support capital programming and identify the needs of a community, both growing and stagnant. Infrastructure and soft services needs are outlined in such documents, which can be tied to the DCL update process in identifying works that are required and the associated financial implications.

Many municipalities rely on Master Plans and Servicing Studies to substantiate budget requests to Council. Plans for both the engineered and general municipal services are helpful in this regard. The maintenance and frequency of updates for these master plans varies from municipality to municipality but, across the board, they are commonly used. The City of Surrey updates the capital programs and resulting rates every two years, which is relatively frequent. The City of Toronto regularly updates infrastructure studies for roads and trails, stormwater, lakes rivers and creeks, water supply and wastewater treatment, area and basement flooding and solid waste facilities. These documents are used to inform decisions about infrastructure investment and financing.

In the City of Calgary, the *MDP* and related Calgary Transportation Plan jointly set out a framework for connecting the nature of new development with future transportation servicing needs. All of the policies and infrastructure identified in the CTP is intended to complement the growth management policies of the MDP in creating compact and connected communities with increased use of active modes and transit.

There appears to be very few Master Servicing Studies examining servicing needs arising from development in the City of Vancouver. With respect to the general services, particularly Parks, Housing and Childcare, some studies have been undertaken, although they remain quite out of date. These studies are most important for the engineered services of Transportation, Water, Wastewater and Solid Waste Management.

Recommendation: It is recommended that the City of Vancouver develop a Master Servicing Plan for all engineered services and mandate regular reviews. The Master Planning documents should be closely tied to the City's development forecasts and should identify funding sources, including potential DCL revenue.

4. Cost Deductions

Gross and net costs are identified for capital projects required to service additional development in the City over the forecast period. For all municipalities that levy development charges, gross costs must be deducted by various available funding from other sources. This includes other City funds, including CACs, alternative funding sources, utility fees, and grants from upper levels of government. Revenues collected through various fees and programs in the City are discussed in further detail under the Financing Frameworks report.

Section 559(2) of the *Local Government Act* states that DCCs may be imposed in order to provide funds that "assist" local governments in paying the capital costs of providing development-related servicing and infrastructure. Municipalities in British Columbia, governed by the *LGA* are implicitly not permitted to recover 100% of the growth-related costs through new development and are required to provide a level of municipal financial assistance. This factor is largely determined and emplaced for political purposes and is determined by local Councils. No specific amount is prescribed by the Ministry, and the MAFs used in local municipalities vary. For example, the City of Vancouver is unique in its application of generous MAFs to city-wide DCL projects of 55%. MAFs for the area-specific DCLs vary, with an average of 62% in the downtown zones and 33% in areas outside the downtown core. The City of Surrey applies differing MAFs to each municipal service included in the DCC regime. For parks, 4% of the development-related costs are funded by the municipality, 5% of roads and related costs and 10% of the water, drainage and sanitary sewer infrastructure is funded through the MAF.

In Ontario, the *DCA* requires municipalities to deduct 10 per cent of the net growth-related capital costs for all general or 'soft' services. This includes parks and recreation, library, social housing and child care.

In an effort to be transparent and clear about the way in which growth-related projects are funded, all available funding sources should be examined and appropriately allocated so that there is no overlap of funding for particular projects. The required deductions from the DCL calculation must have dedicated funding from other sources and together these revenue sources should be tied in with the Capital Strategic Outlook for financial planning purposes.

Recommendation: The City of Vancouver should review its policies and practices surrounding the calculation of the MAF. Although largely politically determined, the significant share of growth-related capital projects being funded through the existing tax base should be reviewed. The MAF should be determined both with the input of staff and Council, but also be tied closely to the Capital Strategic Outlook. The ability to levy DCLs to pay for the true growth-related costs arising from new development should be capitalized upon as much as is fair and justifiable. Other municipalities across Canada and within the province use these types of assist factors or contributions, to a

much lesser extent. It is recommended that the City consider lowering the MAF incorporated into the city-wide calculation.

5. Benefit-To-Existing or Non-Growth Shares of Projects

The rationale for development charges is that growth should pay for growth and not require existing residents and businesses to fund the capital investment necessary to service new development. As such, in all surveyed jurisdictions, municipalities have discretion to calculate and impose the charges for either all developments in the municipality or a specific area thereof (referred to as area-specific development charges that reflect cost differences in different locations); or a combination of municipality-wide and area-specific charges. The charges imposed require that a clear relationship be established between the anticipated development and associated required services and infrastructure.

Municipalities must also remove from the development charge calculation that portion of future infrastructure that will confer benefits on existing residents. The allocation of benefits between existing and new residents can be complex and Canadian municipalities are generally given broad latitude in making these determinations.

The allocation of costs as growth (or DCL eligible) and non-growth is a complex issue and one that depends largely on the servicing or infrastructure under review. Determining the Benefit To Existing (BTE) shares of a development-related project can be based on a number of factors. For example:

- If a municipality were to construct a new indoor recreation centre that would replace an existing, aged facility, not all capital costs should be included in the calculation of DCLs. A share of those costs should be removed to reflect the servicing capacity of the older facility, which could be based on square footage, total value, or amenities being replaced.

- Costs associated with development-related road widening and urbanizations should have a share deducted acknowledging the benefits of the road to the existing community and the regular repair and maintenance work that would be required on that road in the absence of any growth and development in the municipality. This could be established based on a cost per kilometre of road rehabilitation works applied to the road segment in question.

- Where a municipality plans to replace ageing water and sewer linear infrastructure at the end of it's useful life, the infrastructure will often be replaced with larger pipes with increased capacity to accommodate future development. Costs associated with the oversized portion are eligible for

funding through development fees, however the costs related to the repair and asset management should be paid for through the utility rates and/or the tax base. This example is distinct from localized linear infrastructure that is emplaced to service a particular development, which should be the responsibility of the developer entirely.

- In municipalities with more modest rates of growth and development, BTE shares for growth-related projects are often based on the relationship between the existing community and new population and employment growth. For example, in a smaller municipality where new servicing is emplaced, the share of ten-year population and employment growth over the existing base will be used to derive the growth-related share of capital costs. This approach often results in the BTE shares being greater than the growth-related share, however the DCL eligible portion of the works can be recovered through fees.

The City of Vancouver has been effective in standardizing the method of rate calculation and identifying both the growth and non-growth shares of eligible capital projects for the general services DCL rate categories of subsidized housing and childcare. Each of these services have particular ways in which required projects and the associated costs are identified, and non-growth shares are differentiated to be removed from the calculation. This analysis is largely done on a project-specific basis, which allows for distinct interpretation of the cost allocations, however general methodologies have also been accepted within these service categories. The engineered services should be standardized, particularly if the recovery of development –related costs for linear water and sewer works are to be included in the DCL regime.

The City of Surrey, for example, groups required engineering infrastructure into three categories in determining eligible and ineligible costs for inclusion into the calculation of development charges: infrastructure required to support the existing population; infrastructure required to support future development; and infrastructure required to support the existing population and future development.

Costs associated with infrastructure required to support the existing population include the funding of maintenance and overcoming deficiencies within already developed areas of the city. Examples of projects include repaving existing roads; new sidewalks in developed areas, local improvements and climate change adaption initiatives. These costs are identified as non-growth shares and are funded by utility rates and are not included at all in the development cost charge calculation. Projects that fall within the third category – infrastructure required to support both the existing population and future development – recognize that certain projects will provide benefit to both the existing and future population and employment base. For these projects, only the shares of the projects that relate to expansion, upsizing and upgrading to benefit and accommodate future development are incorporated into the

calculation of development cost charges. This approach to identifying and removing replacement or benefit-to-existing shares is transparent, defensible, and consistent with the intent and theory behind the use of DCLs.

The City of Calgary allocates the benefit of each individual infrastructure project among existing development, new growth and regional benefit to apportion the project costs. The treatment of each individual project is unique, however, general considerations in determining allocation of benefit include: improvement above current level of service; resolution of existing deficiencies; regional benefit provided; renewal or replacement of existing infrastructure which benefits existing users; capacity provided; and, projects that are required solely to accommodate new growth. Shares of projects associated with resolution of existing deficiencies and renewal or replacement would be considered the BTE share, and the associated costs would be excluded from the calculation of Off-Site Levies.

The development charge regime in the Halifax Regional Municipality lends itself to a much more straightforward determination of replacement shares of project costs. The municipal-wide charges levied across the region collect for water, sewer and solid waste management. Water and sewer servicing are provided by Halifax Water, a separate corporation. The solid waste management charges recover for a growth-related facility, which requires no BTE deduction. Capital cost contribution charges are levied in the greenfield areas for the other eligible services. Project costs recovered through these charges are always assessed as 100% growth-related. This is because development in the greenfield areas is new and all facilities and infrastructure required to service the development are geographically beneficial to new areas. As such, no BTE shares are deducted from these project costs.

In allocating shares of development-related project costs for linear engineered infrastructure, the methodology applied by the City of Toronto is detailed, project specific, and relates directly to the increased capacity of the infrastructure. The methodology is clear and the relationship between the works benefitting future development and costs incorporated in the calculation of development charges is apparent. This method is recommended as a clear and consistent approach to determining benefit-to-existing shares for engineered services.

Recommendation: It is recommended that the City of Vancouver continue to analyse capital costs on a project-specific basis in determining the deductions required for the benefit-to-existing or replacement shares of development-related projects. Determination of BTE methodology should continue to vary by service, and should be detailed in the report outlining the calculation of the new charges.

Based on the best practices analysis, it is also recommended that the benefit-to-existing determination for linear infrastructure costs acknowledge that the need for some upgrade projects to service higher density development may result in the replacement of infrastructure that may have had some existing capacity. Benefit-to-

existing shares must be carefully determined for these types of projects to ensure that costs associated with the existing available capacity that is lost through the replacement and upgrade is not incorporated into the calculation of DCLs.

D. DCL STUDY & RELATED PUBLIC PROCESS

1. DCL Updates

In order to ensure that the relationship between the anticipated development in a municipality, the infrastructure required to service that development, and the development fees required to pay for that infrastructure remain current; regular reviews of the development charges structure should be undertaken. Most legislation, with the exception of Ontario's *Development Charges Act* do not prescribe regular time intervals at which charges must be revisited. The LGA and *Vancouver Charter* do not prescribe the frequency with which municipal DCC by-laws must be updated, so it is the responsibility of local municipalities to ensure that charges remain current.

The City of Vancouver undertakes regular reporting on DCLs, and has made intermittent amendments since the original charges were calculated and passed. While this is a good way to address emerging issues as they arise, it is likely that changing demographic, economic and policy trends are not being reflected in the DCLs being imposed on new development. Although not required to do so by Alberta's *Municipal Government Act*, the City of Calgary undertakes a complete review of their offsite levy regime every five years. The City of Toronto also updates their development charges background study and passes a new by-law every five years, however they are legislated to do so. The City of Surrey undertakes the most frequent reviews in updating their rates every two years. Table 5 below summarizes frequency of DCL updates undertaken by each comparator municipality.

Table 5 Frequency of Study Update			
Municipality	**Standard Frequency of Review**	**Legislation Requirements**	**Comment**
Vancouver, British Columbia	N/A	None	Has not done a major review since fees were initially calculated (2008)
Toronto, Ontario	5 years	5 years	Last City-wide update 2013, amendment study done in 2015
Surrey, British Columbia	2 years	None	Undertakes review of infrastructure requirements & fees
Calgary, Alberta	5 years	None	Regular update to background report and rates
Halifax, Nova Scotia	N/A	None	Has not done a major review since fees were initially calculated - fees for various services calculated in different years
San Francisco, California	N/A	N/A	Fees for various services updated at different intervals

Recommendation: It is recommended that the City of Vancouver mandate regular reviews to the DCL regime, including a review of the development forecast assumptions, infrastructure requirements and associated costs and by-law policy. Every five years is recommended because it represents a reasonable time frame over which development and infrastructure requirements can be appropriately estimated. Additionally, rates typically do not become significantly out of date within five years.

2. Public Engagement

All provinces require a public consultation process, including notification, to be part of the development charge setting process. This provides for transparency in the process. Periodic review of development charges is generally mandated. In some provinces, there also are provisions in the various enabling statutes for appeal of the development charges. For example, development charge by-laws in Ontario municipalities, including the charges themselves, may be appealed within 40 days of by-law passage. Appeals are adjudicated at the Ontario Municipal Board, an independent administrative tribunal.

In British Columbia, the *Local Government Act* requires that DCC by-laws be sent to the Ministry of Community Services to be approved prior to being legally adopted. While there are no mandatory public consultation activities in the DCC legislation, the *Best Practices Guide* identifies public/stakeholder participation and consultation as one of the guiding principles in establishing DCCs. Input from members of the public and interested parties prior to a by-law being considered by Council is suggested as a condition of Ministry approval under the best practices strategy.

Although not a statutory requirement in any province, municipalities are increasingly consulting directly with representatives of the local development industry and stakeholders when updating development charges and reviewing calculation and collection policies.

Recommendation: The City should maintain the working relationship established with stakeholders and members of the public regarding the calculation and imposition of DCLs. Transparent annual reporting, frequent communication, and discussion, not only during the update process but also on an ongoing basis will encourage this relationship and ensure that DCLs are calculated and implemented in a fair, transparent and effective way.

E. ADMINISTRATION, REPORTING BY-LAW POLICY

1. Discounts, Exemptions and Waivers

Municipalities may, at their discretion, exempt certain types of development from paying development charges. For instance, Ontario municipalities may exempt specific land uses, classes of development, or development within defined areas from charges as incentives and mechanisms to achieve planning policy objectives. In the City of Toronto, non-residential development is required to pay development charges based on the GFA of the main floor only. This is included in the City's by-law in an attempt to attract additional development of this type and is not provided in the *DCA* as a legislated, or statutory exemption.

Some of the provincial statutes in Canada, such as the *LGA,* mandate exemptions for certain property classes (e.g. places of worship). Generally, however, exemptions result in a revenue loss for the municipality, which may not be recovered from other development.

The City of Vancouver, through the *Vancouver Charter* and the City's by-laws, exempt the following development from the payment of DCLs:

- Alterations to existing buildings where the total floor area is not increased;
- Social housing;
- Churches exempt from taxation;
- Renovations;
- Additions smaller than 500 square feet to existing buildings containing fewer than 4 residential units and no other use; and
- Small residential units of 29 square metres (312 square feet) or less.

The *Local Government Act* includes several optional exemptions, discounts or waivers that a Council may elect to enforce under municipal by-laws. These waivers or reductions include; multi-residential development with less than 4 units; for-profit affordable rental housing; subdivision of small lots designed to result in low greenhouse gas emissions; and development designed to result in a low environmental impact.

The City of Vancouver will either reduce or waive DCLs on the construction of for-profit affordable housing, subject to certain terms and conditions of the development. The social housing exemption will apply to any development that falls within the DCL by-law definition of social housing. This applies to both standalone social housing development, as well as those projects blended with other development types. All other elective or discretionary exemptions and waivers provided by the *Charter* are not employed in the City's by-law. As with all discounts, exemptions and waivers, the resulting lost revenue must be funded from other sources, which largely comes from the property tax base or utility fees, where applicable. Similarly, the City of San Francisco also exempts affordable housing from the payment of Development Impact Fees in certain areas of the City, provided the development will meet a number of ongoing conditions.

Table 6 provides a brief comparison of the statutory and non-statutory exemptions employed in other provinces.

Table 6
Comparison of Statutory and Non-Statutory Exemptions Across Canada

Municipality	Statutory Exemptions	Non-Statutory Exemptions[1]
Vancouver, British Columbia	• Places of worship • Renovations • Social housing • Small residential units under 29 sq.m.	• For-profit affordable housing (waive/reduce)
Toronto, Ontario	• Industrial additions • Residential additions • Municipally owned development • Boards of education	• Non-profit / affordable housing • Industrial uses • Other non-residential development charges are applied to ground floor only
Surrey, British Columbia	• Places of public worship • Developments that do not impose new capital cost burdens on municipality • Small residential units under 29 sq.m.	• Work authorized by permit does not exceed $100,000 – residential only • Work authorized by permit does not exceed $50,000 – all other types • Non-profit rental housing
Calgary, Alberta	• None identified	• Rate capped if development in Established Area reaches density equivalent of 285+ people and jobs / hectare
Halifax, Nova Scotia	• Crown land	• None identified

San Francisco, California	• Permits where there is no reasonable relationship between the impact of the development and the amount of the fee charged • Affordable housing units (particular neighborhoods) • Homeless shelters	• None identified

1 The identified municipalities have the authority to determine non-statutory exemptions

Most legislation in Canada exempts municipally owned buildings and facilities from the payment of development charges. Senior levels of government, such as Crown corporations, as well as federal and provincial governments are not subject to municipal fees and charges, including development fees. Generally, these are paid as a fee in lieu or a voluntary contribution, however the exemptions are statutory nation-wide. Statutory exemptions for development on municipal, provincial or federal lands are enforced in Toronto, Surrey and Halifax. These exemptions do not apply to all municipalities when given, however - the City of Calgary does not exempt any development from the payment of off-site levies.

Typically, institutional development is not statutorily exempt. Waivers or discounts for general institutional development are discretionary and included in municipal by-laws depending on specific policy objectives or political will. One notable exemption in Ontario is that colleges and universities have exemptions built into their charters and, as such, are exempt from the payment of development charges across the province. Non-profit or charitable organizations are often exempt as well as a matter of practice. This exemption often falls under the exemption for developments exempt from taxation, which is included in Ontario's *Development Charges Act.* Finally, most Ontario municipalities, by matter of practice, exempt hospital development. Hospitals are exempt from the payment of development fees in Toronto.

While not often outlined in legislation, temporary buildings are typically included as non-statutory exemptions, or they are provided with a refund from development charges paid, provided they are decommissioned within a certain period of time. It is common practice in Ontario for municipal by-laws to specify that temporary buildings are to be exempt, provided that they are demolished within a certain number of months or years, as specified in the by-law definition. If the structure remains in place beyond the time period specified, development charges will be payable at that time.

Recommendation: It is recommended that the City maintain the existing discounts, exemptions and waivers as employed in the city-wide DCL by-law in recognizing that additional discounts or exemptions will result in the loss of DCL revenues, which will need to be funded from other sources.

2. Latecomer Agreements & DC Credits

In attempts to provide servicing to a number of new developments within a geographic area, it is most efficient for a municipality to provide upgraded or oversized infrastructure to meet the needs of future development pre-emptively, rather than undertake expansion works each time new development occurs. These upgraded or oversized infrastructure projects can be very costly and municipalities are limited in how much cost they are able to support in advance of funding sources, such as development fees.

May local governments have the ability to enter into agreements with developers that require key infrastructure be delivered by the developer. This infrastructure, including roads, water, sewer and drainage works with enough capacity to service properties situated near the development is to be constructed and financed by the private sector and the oversized share returned from the municipality over time. The developer is responsible for constructing the works is entitled to recover a portion of the costs from the owners of the properties beyond their development that will benefit from the works in the future. This can be done through development charge credits or waivers and latecomer agreements. Latecomer agreements are entered into with the developer and municipality where the project costs are identified, as well as the share that relates directly to their development. The share of the works (and associated costs) that will provide benefit to other future construction and is therefore to be recovered through the latecomer agreement charges is also identified in the agreement. This is an efficient way to have key infrastructure constructed that is required to allow one development to proceed, but will also benefit future developments. This mechanism increases equitability amongst benefitting landowners, while managing the fiscal risk to the municipality.

Currently, the City of Vancouver is prohibited from entering into latecomer agreements. This has resulted in many circumstances where the initial development in a particular area is required to pay the for required servicing infrastructure, however the benefits derived from neighboring developments that follow are not financially recuperated. This then causes the City to upfront a lot of the costs, or even completely finance the works. This method leads to inequitable distribution of project costs and leaves the City, or in some cases individual developers, assuming a lot of financial responsibility. The City would benefit from the use of this type of infrastructure funding agreement.

Developer agreements are used heavily in municipalities with extensive greenfield development, where most linear infrastructure does not yet exist and must be extended long distances. Servicing the greenfield areas of Calgary are often done through Master Development Agreements and Halifax Regional Municipality. More dense or built-up areas also make use of developer agreements, particularly in instances where existing infrastructure is aging and does not have capacity for additional development. These

agreements are used heavily in the City of Toronto, and neighboring municipalities in the greater Toronto Area, as well as the City of San Francisco.

Recommendation: The City of Vancouver has submitted a request to the Province of British Columbia to amend the *Vancouver Charter* and allow the use of latecomer agreements. It is recommended that the City pursue this request in order to partner with the development industry in the construction and funding of key infrastructure works.

3. Geographic Basis of Charge: Area-Specific Vs. Municipal-Wide

While municipal-wide charges based on average costs are most prevalent in Canadian municipalities, there are numerous municipalities that combine that approach with area-specific charges for select services. Area-specific approaches may be calculated and applied quite differently depending on local circumstances. Some municipalities apply differential development charges by individual development community; others are based on zones such as the central city, suburban or greenfield areas and rural areas; while others are applied with reference to water pressure zones and sewage drainage areas. This approach refines the benefits received principle and also provides greater equity and economic efficiency into the development charges regime than the average cost municipal-wide approach for all services. In redevelopment areas, it may also reflect the availability of servicing capacity that already exists and the associated reduction in need for various services.

Legislatively, none of the surveyed municipalities are required to levy development charges on a municipal-wide or area-specific basis. It is the intent and choice of Council as to how the charges are to be applied throughout the jurisdiction. The City of Vancouver levies city-wide DCLs as well as area-specific and layered development charges to account for the unique servicing needs of some parts of the City. The City has moved towards a more consolidated DCL regime, having recently replaced five area-specific DCLs and eight previously exempt areas with the City-wide system.

The City of Calgary offers a density incentive program for high density development in the established areas. This is seen as a way to incentivize this type of development to achieve planning policy and overall municipal strategy with respect to growth management. One of the major mandates as outlined in the *Municipal Development Plan* is building complete communities throughout the City and encouraging higher density development through lesser offsite levies is seen as an efficient way of achieving this.

Ontario recently amended its development charge legislation to require municipalities to "consider" the use of area-specific approaches when establishing infrastructure charges. The City of Toronto levies uniform charges on all development occurring anywhere within the municipal boundaries. The City of Surrey calculates city-wide charges as well as 3 area-specific charges. However, the city-wide rate is discounted for

particular developments within the City Centre recognizing unique demand on parkland and roads servicing and to incent new development.

Among the surveyed municipalities, the most common practice is a combination of municipal-wide and area-specific development charges. This is shown in Table 7:

Table 7
Geographic Basis of Charge

Municipality	Rate Structure	Comment
Vancouver, British Columbia	City-wide, area-specific & layered DCLs imposed	Area-specific charges independent of City-wide charge, layered charges imposed in addition to City-wide charge
Toronto, Ontario	City-wide	All charges & services levied on a City-wide basis
Surrey, British Columbia	City-wide and area-specific charges	City-wide rate discounted for multi-res development in City Centre for Parks & Roads
Calgary, Alberta	City-wide and area-specific charges	Uniform rates in established area, rates within Greenfield Area specific to each watershed
Halifax, Nova Scotia	City-wide and area-specific charges	City-wide and area-specific charges layered
San Francisco, California	City-wide, area-specific and elective charges	Elective fees are alternative means of compliance with the Planning Code

The use of area-specific charges to reflect the different costs of servicing various areas applies most directly to engineered infrastructure, particularly water distribution and sewage treatment. Typically, the beneficiaries of these works can be quite specifically identified and, the impact of the location and nature of development on the costs of these works can be significant. As the City of Vancouver considers expanding the recovery of water and sewer infrastructure through DCLs, it is recommended that consideration be given to the area-specific nature of the demand on such services.

Recommendation: It is recommended that the City continue to consolidate the DCL regime geographically and reflect the spatial needs arising and benefits derived from growth in the City. However, the City should continue to examine the applicability and appropriateness of area rating for some services, particularly the engineered projects.

4. Structure of Charge

The basis for imposing development charges is generally discretionary. In Ontario, municipalities differentiate development charges payable between residential and non-residential development, reflecting the different demand for and benefit derived from municipal various services. Further differentiation is often reflected in charges by

housing unit type, reflecting occupancy patterns and resulting service demands in, for instance, single family versus higher density housing forms. The non-residential charges are sometimes differentiated between industrial and commercial uses, typically reflecting road traffic generation between these two land uses. However, increased differentiation results in decreased ease of administration of development charges for a municipality.

The City of Vancouver levies all DCLs on a Gross Floor Area basis. This is due in part to the fact that the previous city-wide and current area-specific DCLs are charged on this basis for all types of development. Also, floor space is the measure of development used in the City's capacity projections forecast modelling. City policy is directed at facilitating the supply of a variety of sizes of housing units in order to achieve City and regional goals.

Some municipalities, including the City of Halifax, impose charges based on the area of land to be developed. These approaches are predicated on the notion that it is the amount of developed land, rather than the built form, building area, or number of people associated with the development, that drives the increase in need for municipal services.

Table 8 below provides a comparison of selected municipalities and the rate structure employed in each.

Table 8
Rate Structure Comparison of Development Charges Across

Province	Residential	Non-Residential
Vancouver, British Columbia	$/sq.ft. of GFA	$/sq.ft. of GFA
	Residential at or below 1.2 FSR, residential over 1.2 FSR, laneway house	Commercial, industrial, daycare ($/building permit)
Toronto, Ontario	$/unit type	$/sq.m. of GFA Applies only to ground floor Industrial development exempt
	Single & semi detached, large multiples, small multiples, large apartments, small apartments, dwelling room	
Surrey, British Columbia	Single-family - $/lot Multi-family - $/sq.ft.	Industrial - $/acre or $/sq.ft. Other - $/sq.ft.
	Based on zoning & land use designation	Based on zoning & land use designation
Calgary, Alberta	$/unit type (established area) $/hectare of land (greenfield)	$/sq.m. of GFA (established area) $/hectare (greenfield)
	Single detached, semi-detached/duplex, multi-residential at grade, large multi-residential non-grade, small multi-residential non-grade	Commercial, industrial
Halifax, Nova Scotia	$/acre (HRM)	$/acre (HRM)
	Single unit dwellings/townhouses, multiple unit dwellings	
San Francisco, California	$/sq.ft. of GFA	$/sq.ft. of GFA
		Office, hotel, retail, other

Note: Large units defined by 2 or more bedrooms

The fees that are imposed on new development should be calculated and structured to reflect the level of demand placed on municipal servicing related to that type of development. Varying types of residential development are likely to place different levels of demand on servicing and infrastructure and the magnitude of the DC fees should reflect that. The nexus between the demand on municipal services and charges imposed must be established and clearly factored into the calculation of development charges. This can be done based on residential dwelling unit occupancy or established based on average occupancy of varying unit sizes, however the rate structure should always reflect this relationship.

In Ontario, the common practice among most municipalities, including the City of Toronto, is to calculate a development charge per capita (per population increase) and then apply that to dwelling units based on occupancy data. The rationale here is that certain unit types are occupied by varying numbers of inhabitants and, as such, place demand on municipal services to different degrees. Having a differentiated rate structure, with higher charges imposed on units with more occupants ensures that

those units requiring more municipal services are contributing more development charge revenue.

On the non-residential side, where there is a basis to identify a differentiated demand on municipal services based on non-residential development type (ex: office vs. retail), it is appropriate to differentiate the charges. This level of differentiation is most often appropriately used in municipalities that recover for major road expansion works and water and wastewater supply and treatment. Data related to trip generation and use of water and wastewater infrastructure can be used to justify levying a differentiated charge that should reflect the different demand on municipal services. A common distinction in non-residential charges relates mostly to industrial, as the level of demand on municipal servicing is often distinct form office or commercial uses. The non-residential development forecast must be specific enough in identifying the share of growth associated with each type.

Recommendation: It is recommended that the City maintain the rate structure calculation as it stands today, by levying DCLs on the basis of a Gross Floor Area. Analysis should be undertaken to determine the difference in occupancy and use of municipal services between various types of non-residential development so that consideration can be given to introducing a differentiated non-residential rate structure with respect to office and commercial development.

5. Timing of Collection

Development charge payments are typically triggered by either a subdivision agreement or the issuance of a building permit. The former occurs earlier in the planning and development process and is therefore financially expedient for the municipality. However, it can be onerous for developers in requiring payment well in advance of realizing a share of the sales. In the Cities of Vancouver, Toronto and San Francisco, DCLs are payable at the issuance of building permit. In all Ontario municipalities, the default trigger is building permit issuance, as legislated through the *DCA,* however municipalities may require payment of charges for hard services earlier in the planning process, at the time of subdivision agreement signing.

Collection of development charges at building permit issuance or subdivision approval is common across all surveyed municipalities. In some instances, the timing of collection varies depending on the type of development occurring. In the City of Surrey, for example, DCCs for single family homes are payable at subdivision approval, while multi-family residential and non-residential DCCs are payable at building permit issuance. In Calgary, development occurring within Greenfield Areas will pay offsite levies at the timing of subdivision approval, while development within the Established Areas is required to pay at building permit issuance.

Table 9 Comparison of Timing of Levy Collection	
Municipality	**Timing of Levy Calculation & Collection**
Vancouver, British Columbia	Building permit issuance
Toronto, Ontario	Building permit issuance
Surrey, British Columbia	Single family dwellings – subdivision approval Multi-family residential and non-residential – building permit issuance
Calgary, Alberta	Greenfield area – subdivision approval Established area – building permit issuance
Halifax, Nova Scotia	Subdivision approval
San Francisco, California	Building permit issuance

6. Management of Funds

For the most part, development charge revenues are required to be deposited into one or more distinct and dedicated accounts. The funds and any accrued interest are to be used only for the purpose for which they were collected, or for debt incurred by the municipality as a result of expenditures incurred, or to reimburse an owner for payments from subsequent benefitting owners, although it is noted that there may be specific requirements related to flow-through of payments from subsequent benefitting owners. This practice is followed in the City of Vancouver, maintaining DCL revenues in service-specific funds to be put towards growth-related projects within each service category.

7. Indexing

Municipal best practice is to index development charges (annually, occasionally or more frequently) to ensure that costs resulting from inflation are covered. DCLs in Vancouver are adjusted annually to account for changes in property values and construction inflation. Legislation in Ontario and Alberta prescribe a non-residential construction price index from Statistics Canada for this purpose. Similar indices are used by municipalities across the country. Vancouver is therefore not unusual in its indexing of charges as a matter of common practice.

8. Tie-In to Broader Financial Planning

Finally, to the extent that portions of growth-related capital projects may benefit the existing community or development beyond the planning period covered by the calculation, funding from non-development charge sources would be required to support the capital program. It is important for municipalities to address this funding requirement to ensure that financial capacity is available to support the growth-related capital program as proposed.

VII RECOMMENDATIONS

Overall, the method of calculating and levying DCLs in Vancouver is consistent, particularly in principle, with other municipalities across Canada. The use of development cost levies to recover a share of the capital costs required to service development-related infrastructure and municipal servicing is a tool commonly employed throughout developing municipalities in North America. This approach can help to alleviate pressure on already stretched municipal funds.

A. SUMMARY OF RECOMMENDATIONS

This best practices report has reviewed the methodologies used to calculated development charges for five comparable North American municipalities and, as a result, has provided several recommendations to the City of Vancouver in updating the city-wide DCL regime. The recommendations regarding calculation methodology are summarized below.

1. Forecasting Future Development

It is recommended that the City continue to forecast the amount, type and location of development. Projections should remain consistent with regional population and employment targets, and be closely tied to the compilation of the development-related capital programs included in the DCL calculation. This relationship results in justifiable charges as the nexus between development and the increased need for service is strongly connected to the charges calculated and imposed.

2. Application of Growth Forecast to DCL Calculations

It is recommended that the City improve linkages between the development-related capital programs and the growth forecasts, particularly with respect to the engineered services. Development forecasts should be used as one of the primary tools in determining the need for investment in new municipal infrastructure.

3. Level of Service Analysis

It is recommended that the City continue to employ various methods to measuring municipal servicing levels and determining future investment needs. The City should look to quantify and qualify the level of service provided in the past to measure performance on a service-by-service basis to ensure that established standards continue to be adequate and to inform the plan-based approach. This will require the

employment of a more formal inventory tracking of the level of municipal servicing provided on an annual basis.

4. Eligible and Ineligible Services

While it is recognized that the City is currently limited by the provisions of the *Vancouver Charter,* it is recommended that negotiations be entered into to review the opportunities that exist to include additional municipal services into the DCL regime. Demand for many of the services that are currently listed as ineligible under the legislation is increased as a result of development throughout the City, and the growth-related capital costs associated with infrastructure investment and municipal servicing should be considered in the analysis. Examples of these services include public transit, protection services and solid waste collection.

5. Identifying Eligible Capital Costs

It is recommended that the City of Vancouver develop a Master Servicing Plan for all engineered services and mandate regular reviews. The Master Planning documents should be closely tied to the City's development forecasts and should identify funding sources, including potential DCL revenue.

6. Cost Deductions

The City of Vancouver should review its policies and practices surrounding the calculation of the MAF. Although largely politically motivated and determined, the significant share of growth-related capital projects being funded through the existing tax base should be reviewed. The ability to levy DCLs to pay for the true growth-related costs arising from new development should be capitalized upon as much as is fair and justifiable. Other municipalities across Canada and within the province use these types of assist factors or contributions, to a much lesser extent. It is recommended that the City consider lowering the MAF incorporated into the city-wide calculation.

7. Benefit-to-Existing or Non-Growth Shares of Projects

It is recommended that the City of Vancouver continue to analyse capital costs on a project-specific basis in determining the deductions required for the benefit-to-existing or replacement shares of development-related projects. Determination of BTE methodology should continue to vary by service, and should be detailed in the report outlining the calculation of the new charges.

It is also recommended that the benefit-to-existing determination for linear infrastructure costs acknowledge that the need for some upgrade projects to service higher density development may result in the replacement of infrastructure that may have had some existing capacity. Benefit-to-existing shares must be carefully determined for these types of projects to ensure that costs associated with the existing

available capacity that is lost through the replacement and upgrade is not incorporated into the calculation of DCLs.

8. DCL Updates

It is recommended that the City of Vancouver mandate regular reviews to the DCL regime, including a review of the development forecast assumptions, infrastructure requirements and associated costs and by-law policy. Every five years is recommended because it represents a reasonable time frame over which development and infrastructure requirements can be appropriately estimated. Additionally, rates typically do not become significantly out of date within five years.

9. Public Engagement

The City should maintain the working relationship established with stakeholders and members of the public regarding the calculation and imposition of DCLs. Transparent annual reporting, frequent communication, and discussion not only during the update process but also on an ongoing basis will encourage this relationship and ensure that DCLs are calculated and implemented in a fair, transparent and effective way.

10. Discounts, Exemptions and Waivers

It is recommended that the City maintain the existing discounts, exemptions and waivers as employed in the City-wide DCL by-law in recognizing that additional discounts or exemptions will result in the loss of DCL revenues, which will need to be funded from other sources.

11. Latecomer Agreements & DC Credits

The City of Vancouver has submitted a request to the Province of British Columbia to amend the Vancouver Charter and allow the use of latecomer agreements. It is recommended that the City pursue this request in order to partner with the development industry in the construction and funding of key infrastructure works.

12. Geographic Basis of Charge: Area-Specific vs. Municipal-Wide

It is recommended that the City continue to consolidate the DCL regime geographically and reflect the spatial needs arising and benefits derived from growth in the City. However, the City should continue to examine the applicability and appropriateness of area rating for some services, particularly the engineered projects.

13. Structure of Charge

It is recommended that the City maintain the rate structure calculation as it stands today, by levying DCLs on the basis of a Gross Floor Area. Analysis should be undertaken to determine the difference in occupancy and use of municipal services

between various types of non-residential development so that consideration can be given to introducing a differentiated non-residential rate structure with respect to office and commercial development.

B. CONCLUDING COMMENTS

The City of Vancouver is a growing Canadian municipality experiencing pressures to maintain existing infrastructure and fund the provision of future capital works. Development pressures are felt largely through infill and redevelopment activities, which have specific associated servicing requirements, that must be funded through a variety of fiscal tools available to the City. A prime funding source that can be capitalized upon to fund the provision of new development-related infrastructure and municipal servicing are Development Cost Levies.

While the City is limited in the amount that may be recovered through DCLs going forward, both by the *Vancouver Charter* and the province's *Best Practices Guide*, the City may have some flexibility to take on a more detailed and analytical approach to calculating the DCLs to fit within the existing legislative framework and capture more development-related costs. In order to maintain transparency and good working relationships with members of the local stakeholder groups, detailed reporting and the determination of future needs based on both a past level of service provision and a planned level of service is recommended. The City currently employs a high level analysis when determining development-related needs and costs, and it is recommended that this practice be somewhat refined and more detail be incorporated into the review. This will allow the City to capture more costs, maintain compliance with the *BCC Best Practices Guide*, and require no amendment to the *Vancouver Charter*, as is the current wish of staff.

APPENDIX I: CITY OF TORONTO – DEVELOPMENT CHARGES

A. LEGISLATIVE CONTEXT

1. Development Charges Act, 1997, c.27

The *Development Charges Act (DCA)* and its associated *Ontario Regulation 82/98* is the enabling legislation in Ontario that allows municipalities to recover growth-related capital costs from new development. While the *DCA* is one of the most prescriptive pieces of legislation, it also allows for the recovery of a broad range of services through Development Charges (DC).

The first piece of development charge legislation was introduced in 1989, which gave municipalities the authority to recovery for growth-related capital costs. In 1997, the legislation underwent significant amendments and introduced a number of services that were considered to be ineligible under the legislation. The most recent amendment to the *DCA* came into force on January 1, 2016 which aimed to make the calculation of development charges more transparent and the study process more consultative and engaging. For instance, municipalities are now required to include an Asset Management Plan demonstrating that assets are financially sustainable over the full lifecycle. Ontario municipalities must also give consideration to the use of area-specific charges on a service by service basis, reflecting varying servicing needs.

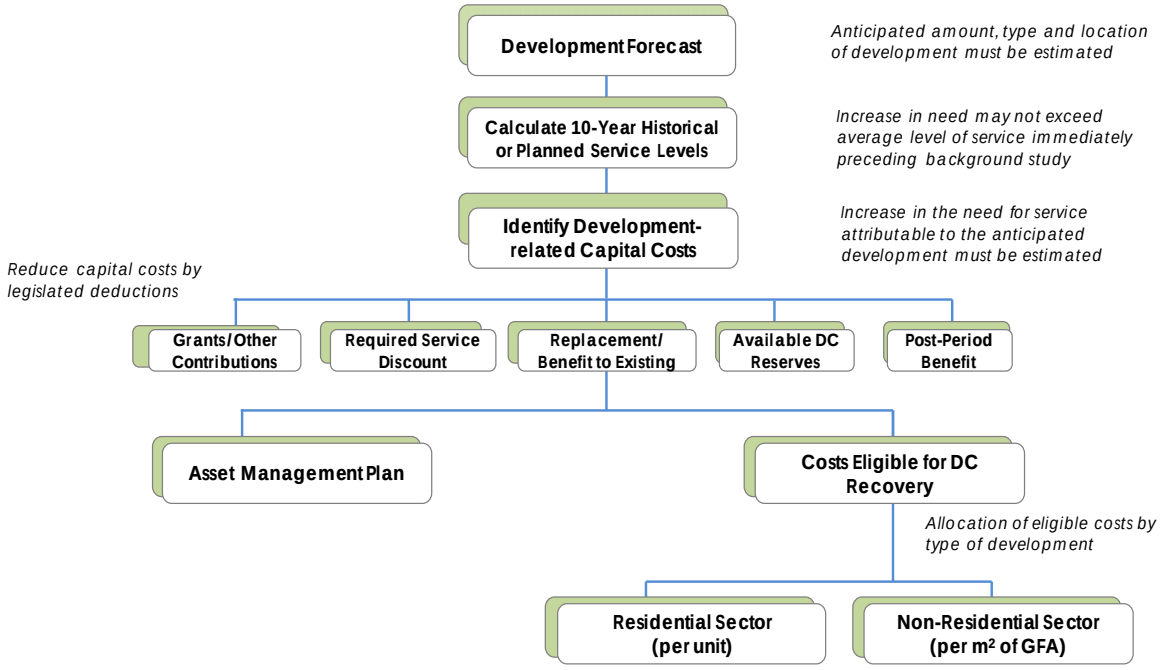
Ontario is unique in the sense that unlike most other provinces, it has a dedicated piece of legislation that prescribes how development charges should be calculated. In order for a DC by-law to be brought forward to Council for consideration, a specific study process must have been followed, a formal and detailed background study released for review by members of the public and Council, and a statutory public meeting held. The *DCA* requires that a development charges background study be prepared in which DCs are determined with reference to:

- A forecast of the amount, type and location of development anticipated in the municipality;
- The average level of service provided by a municipality over the ten-year period immediately preceding the preparation of the study for eligible non-engineered services;
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by a municipality or it's local boards to provide for the expected development, including the determination of the development and non-development-related components of the capital projects;

- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-law relates; and
- An asset management plan to deal with all assets whose capital costs are proposed to be funded under the DC by-law, demonstrating that all assets included in the capital program are financially sustainable over their full life cycle.

The schematic below provides an overview of the legislated development charge process in Ontario.

Figure 1: Development Charges Study Process



The *DCA* provides municipalities with flexibility to define services that will be included in the development charge by-laws, provided that the other provisions of the *DCA* and its associated regulations are met. A number of services have been included in the legislation as being ineligible for recovery through DCs. These services are:

- The provision of cultural or entertainment facilities, including museums, theatres and art galleries;
- Tourism facilities;

- Acquisition of land for parks[3];
- The provision of a hospital, as defined in the *Public Hospitals Act*;
- Landfill sites and services;
- Facilities and services for the incineration of waste; and
- The provision of headquarters for the general administration of municipalities and local boards.

All other municipal services may be included in the analysis and those with development-related capital costs may be included in the DC rate calculation.
The *DCA* also identifies certain development that is categorically exempt from the payment of development charges. These statutory exemptions apply to all municipalities in Ontario that levy DCs and include:

- Land, buildings or structures owned by and used for the purposes of a municipality or a board.
- Land, buildings or structures owned by and used for a college or university as defined in the *Education Act.*
- The enlargement of an industrial building provided the gross floor area is being enlarged by 50 per cent or less.
- Development charges are not imposed on residential development if the only effect of the development is:
- An enlargement of an existing dwelling unit,
- The creation of one or two additional dwelling units in an existing single detached dwelling, provided the total GFA of the additional unit(s) does not exceed the existing GFA, or
- The creation of one additional dwelling unit in an existing multi-unit.

The final enacted DC by-law must set out the rules for determining if a DC is payable, how rules related to exemptions are applied, if rate increases are to be phased in, whether or not the rates will be indexed, how rates apply to the redevelopment of land, and the geographic area of the municipality to which the by-law applies.

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[3] While the costs associated with parkland development are eligible for funding through development charges, land acquisition for a park purpose are specifically excluded from the analysis as they are paid through different municipal fees in Ontario.

2. City of Toronto DC By-law 1347-2013

The City of Toronto has one of the most encompassing development charges regime and includes 17 municipal services in the charge. The eligible services included in the City's regime are as follows:

- Transit
- Library
- Fire
- Police
- Child Care
- Health
- Emergency Medical Services
- Subsidized Housing
- Parks & Recreation
- Development-Related Studies
- Spadina Subway Extension
- Pedestrian Infrastructure
- Civic Improvements
- Water
- Storm Water Management
- Sanitary Sewer
- Roads

The eligible City-wide DC rates are differentiated by residential and non-residential development. The residential charges are levied as a cost per unit and vary by unit type, including; single & semi-detached units, multi-residential units with 2 bedrooms or more, multi-residential units with 1 bedroom or bachelor units, large apartments (2 bedrooms or more), small apartments (1 bedroom and bachelor), as well as a charge per dwelling room. The non-residential charges are levied as a cost per square metre of gross floor area of the development.

Both residential and non-residential development charges are calculated and payable at building permit issuance.

The City provides for statutory exemptions in accordance with the provisions of the *DCA*. The following non-statutory exemptions are outlined in the City's by-law:

- Land, buildings or structures used for a public hospital receiving aid under the *Public Hospitals Act.*
- Land, buildings, or structures used for a place of worship, cemetery or burial ground.
- Temporary sales offices or pavilions associated with the sale of new residential development to the public.
- Industrial development.
- Development creating an accessory use or structure not exceeding 10 square metres of gross floor area.
- Non-profit housing.
- Dwelling rooms within a rooming house.
- Temporary structure erected for a continuous period not exceeding eight months.

Of note, non-residential development charges are only calculated based on the gross floor area of any eligible development.

B. CALCULATION METHODOLOGY

1. Measuring Levels of Municipal Service

The DCA requires that development charges be set at a level no higher than the average level of service provided in the municipality over the ten-year period immediately preceding the preparation of the background study, on a service by service basis. Historic ten-year average service levels thus form the basis for development charges in Ontario.

Both the quantity and quality of the service is considered in determining average levels of service provided by a municipality. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per capita. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new development reflect not only the quantity (number and size) but also the quality (value or replacement cost) of service provided historically by the City.

This average level of service is applied to new development and, for certain eligible services, limits the amount that can be funded through development charges over the planning period under review. In the case of transit services, the eligible costs are limited by what is referred to as the planned level of service over a future 10-year period.

2. Forecasting Development

The *DCA* requires municipalities to forecast the anticipated amount, type and location of development for which development charges can be imposed. The City of Toronto includes a forecast of net population growth (net of Census undercount and population decline), new dwelling units by type, population growth in new units, as well as employment growth and the anticipated increase in non-residential building space by development type. In the Greater Toronto Area, population and employment targets are established by the province's *Places to Growth Act and the Growth Plan for the Greater Golden Horseshoe,* which sets out development targets to 2031 for all municipalities in that region.

3. Development-Related Capital Costs

The development-related capital forecast included in the calculation of DC rates must ensure that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in the calculation of development charges

merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, *Ontario regulation 82/98,* s.3 states that:

> For the purposes of paragraph 3 of subsection 5(1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an Official Plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of council has been approved by the council.

The City of Toronto relies upon the approved capital budget, available master servicing plans, and knowledge of staff in identifying development-related capital costs or, in accordance with section 2(1) of the DCA, the increase in need for service arising from development.

4. Deductions

Under the current requirements of the legislation, municipalities are not permitted to recover for the total sum of the capital costs, rather deductions must be made to account for non-development charge eligible costs. Section 5(1) of the *DCA* sets out the tests and filters that must be met in the determination of the development charge. The eligible capital costs must be adjusted for several considerations.

- Any anticipated grants, subsidies and other contributions that may be put towards the funding of DC eligible projects.
- Development-related net capital costs must be reduced by ten per cent for all services except services related to a highway and engineered services.
- For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing residents. As required by the DCA, these portions of projects and their associated costs are the funding responsibility of the municipality from non-development charge sources.
- Any development charges collected under previous by-laws that are available in the service-specific DC reserve funds[4].
- Shares of projects that provide a benefit to development that will occur beyond the identified planning horizon.

5. DC Calculation

After the necessary adjustments, the development charge eligible costs related to growth occurring within the planning period are allocated between the residential and

[4] *Under the DCA, a municipality may also recover DC reserve fund balances*

non-residential sectors. This is done using apportionments for different services in accordance with the demands placed and benefits derived. Where reasonable data exists, the apportionment is based on the expected demand for, and use of, the service by sector (e.g. shares of population and employment growth anticipated over the planning period).

The final determination of the development charge results from adjustments made to development-related net capital costs for each service and sector resulting from the application of any unallocated reserve fund balances. A cash flow analysis is undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the *DCA.*

The share allocated to residential development is applied to the anticipated increase in gross population (population in new dwelling units). This derives a cost per capita. A cost per dwelling unit type is calculated by applying the cost per capita to various built form based on occupancy information, or persons per unit data. The occupancy figures used are based on Statistics Canada data as part of the Census. The *DCA* requires development charge rates to reflect the increase in need for municipal service attributable to anticipated development. Occupancy is thought to be the best measure of demand as the actual size of any one dwelling unit is not always reflective of the number of people living there or the amount of demand placed on municipal service. This is common practice in Ontario, with nearly every municipality levying DCs in this way.

Costs allocated to the non-residential sector are applied to the total number of square feet or square metres of non-residential building space anticipated to be constructed in the municipality over the planning period to derive a cost per square metre or per square foot.

C. DC ADMINITRATION

1. Public Consultation & Reporting Requirements

The *DCA* provides for a period of public review and comment regarding the proposed development charges. The legislation requires that a background study be released for review by members of the public no later than 60 days prior to by-law passage. A Statutory Public Meeting of Council is required to be held, and to be advertised at least 20 days prior. At this meeting, members of the public are offered the opportunity to provide comment and feedback on the development charges calculations and details of the background study. Submissions are received and responded to, and feedback is considered prior to Council consideration.

The City of Toronto maintains an active relationship with the local development community and stakeholders. As part of the most recent study update process in 2013, three public consultation sessions were held prior to the Statutory Public Meeting.

Following the passage of a development charge by-law, the by-law is subject to a 40-day appeal period where any person or organization may appeal to the Ontario Municipal Board. If an appeal is received, the Ontario Municipal Board shall hold a hearing and may: dismiss the appeal in whole or in part; order the council of the municipality to repeal or amend the by-law in accordance with the Board's order; or repeal or amend the by-law in such manner as the Board may determine (DCA, ss. 16(2)).

2. Frequency of Review

The *DCA* states that unless repealed or a specific expiry date is set, a development charge by-law will expire five years after the day it comes into force. This means that the complete study process, including preparation of a background study and public consultation must occur every five years for all municipalities in Ontario. The City of Toronto last passed a City-wide DC by-law in 2013 and will therefore look to pass a new by-law in 2018.

3. Area-Specific vs. Municipal-Wide Development Charges Levied

Municipal infrastructure and servicing provided by the City of Toronto is deemed to benefit development in all locations and is therefore levied on a City-wide basis.

APPENDIX II: CITY OF SURREY – DEVELOPMENT COST CHARGES

A. LEGISLATIVE CONTEXT

1. Local Government Act, 2015

The City of Surrey levies Development Cost Charges (DCC) to fund the provision of development-related infrastructure to ensure a healthy stock of developable land is available in the City. The DCC regime is governed by Part 14 of the province's *Local Government Act (LGA),* Division 19.

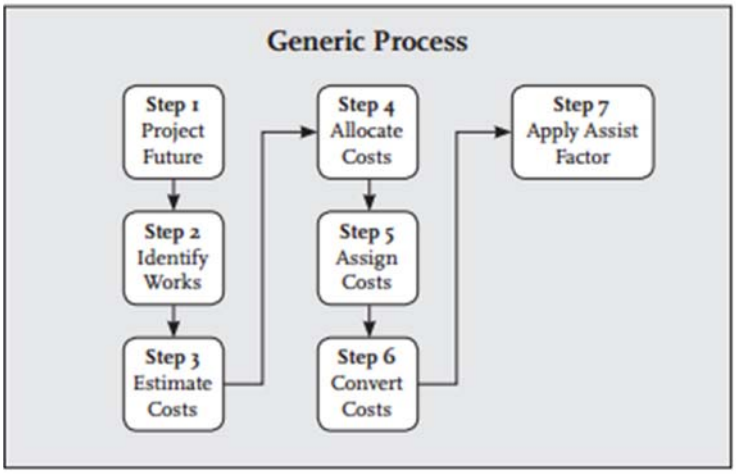
Section 559 of the *LGA* provides the legislative authority to implement a DDC by-law. Capital costs that will "service, directly or indirectly, the development for which the charge is being imposed" may be included in the DCC calculation (*LGA*, ss. 559(2)). The trigger for the payment of the charge is either at time of subdivision approval or at the issuance of a building permit. Typically, residential charges that are levied against single-family detached homes are collected at the time of subdivision approval. In contrast, charges for non-residential development are collected at the time of building permit issuance.

Under the authority of the *LGA*, municipalities can recover for costs relating to "providing, constructing, altering or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities" and "providing and improving park land" (*LGA*, ss. 559(1)(2)). Also eligible for recovery are the capital costs that relate to planning, engineering and legal costs directly related to the work for a which a capital expense may be incurred.

Since the introduction of DCCs, the Provincial government has published several guides with suggested approaches to implementing development cost charges. For instance, the *DCC Guide for Elected Officials* and the *Development Cost Charge, Best Practices Guide are* intended to provide additional insight to the use of DCCs and advise on calculation and policy planning methodology. The City was actively involved in the preparation of these guides.

While the methodology for calculating the charges may vary by municipality, generally there are seven sequential steps that are important in the DCC calculation, as recommended in the *DCC Guide for Elected Officials* and as shown in Figure 1.

Figure 1: Seven-Step Process in Determining DCCs



Charges may vary based on defined areas; uses; classes of development; or different sizes or number of lots or units in a development. A local government may also waive or reduce DCCs for certain uses defined as eligible developments (i.e. non-profit housing, subdivision of small lots that are designed to have a low environmental impact) in accordance with the legislation (*LGA*, ss. 563(1)(2)).

2. City of Surrey DCC By-law 18664

The City of Surrey enforces DCCs through By-law 18664, which was approved in February 2016. The eligible City-wide services recovered through the rates include Water, Drainage, Arterial Roads, Collector Roads, Sanitary Sewer, Parkland (acquisition) and Parkland Development. The By-law also includes the area-specific rates for Campbell Heights, Highway 99 Corridor and Anniedale-Tynehead areas.

The eligible DCC rates are determined by:

Type of Development	Charge Calculated By
Residential	
Single-family	Per lot
Multi family	Per square foot
Non Residential	
Commercial	Per square foot
Industrial	Per acre or square foot
Institutional	Per square foot
Dwelling units in non-residential developments	Per square foot

The applicable rates vary depending on zoning of lands upon which development occurs. DCCs for single family residential development are required to pay the rates in force at the time of subdivision approval, whereas multi-family residential are required to pay at building permit issuance.

The City provides for statutory exemptions in accordance with the provisions of the *LGA*. The following types of development are exempt from the payment of DCCs:

- Developments authorizing building permits for the construction, alteration or extension of a place of public worship as defined in the Community Charter.
- Developments for which a DCC has previously been paid.
- Developments of self-contained dwelling units if each unit is no larger in area than 29 square metres.
- Developments authorizing building permits in residential zones where the value of the work does not exceed $100,000.
- Developments authorizing building permits where the value of work is less than $50,000 for all development in non-residential zones.
- The construction, alteration or extension of a building or part of a building that is, or will be used for not-for-profit rental housing.

B. CALCULATION METHODOLOGY

1. Measuring Levels of Municipal Service

The City of Surrey uses DCCs to fund growth-related capital infrastructure costs based on the investment required to service future development. The *LGA* does not require the City to quantify the level of service provided prior or at the time the study is completed.

2. Forecasting Development

As part of the 10 Year Servicing Plan, the increase in residential dwelling units and non-residential floor space by unit type and/or size is forecast. Based on occupancy factors, this forecast generates the anticipated increase in population and employment over that same time period.

3. Growth-Related Capital Costs

The development-related infrastructure projects for roads, drainage, water and sewer included in the calculation of DCCs are based on the 10 Year Servicing Plan that is released by the City. The City-wide charge is based on development over ten years, which reflects the City's ability to reasonably forecast infrastructure needs to service development. Infrastructure and servicing needs for the area-specific districts are based on a build-out planning period.

Capital costs incorporated into the calculation of parks development cost charges are based on the City's Parkland Acquisition Program. The program is based on the

Province's Parkland Acquisition Best Practices Guide, which was established to standardize local municipal policy regarding the acquisition of lands for parks.

4. Deductions

Once capital costs for growth-related infrastructure and municipal servicing projects have been identified, deductions are made for alternative funding sources and benefit-to-existing shares. The net development-related costs attributable to growth in the future ten-year planning period are identified. A Municipal Assist Factor (MAF) is removed from this amount, which varies based on service. The MAF is required by the *LGA*, however the amount is not specified. It is intended to reflect the fact that DCCs are intended to 'assist' local governments in paying for the costs of municipal infrastructure related to growth, but not 100 per cent of the costs. The City of Surrey applies relatively generous MAFs to the development-related capital costs:

Water	10%
Drainage	
Sanitary Sewer	
Arterial Roads	5%
Collector Roads	
Parkland	4%*
Parkland Development	

Note*: MAF for Parkland Acquisition & Development is 5% but is proposed to be lowered to 4% in 2016

Benefit-to-existing shares are removed from the capital project costs to recognize the share of growth-related works that will benefit the existing population in Surrey. For the engineered services, benefit-to-existing shares relate to the share of projects that will replace or renew existing infrastructure. DCCs are calculated based on the upsizing cost for infrastructure projects only. For collector and arterial roads, only the widening or upgraded portion of the project is to be included in the calculation of development cost charges.

For park development and acquisition, the City uses a servicing standard of 4.2 hectares of parkland per 1,000 residents. This standard has been met in the City by the existing population, therefore any additional parkland acquisition and development is considered entirely development related. Due to ever increasing costs, the acquisition and development of additional parkland in Surrey must be funded by a variety of sources supplementary to DCCs. Although DCCs fund the majority of the cost, revenues from Cash-in-lieu of Parkland Dedications, the City's Municipal Assist Factor, donations and grants from upper levels of government are required to offset the increasing values. These alternative funding sources are deducted from capital costs in advance of the calculation of DCCs.

Non-growth shares of the roads infrastructure is funded by a combination of general revenue, the Road and Traffic Safety Levy and a portion of the revenues generated through the Secondary Suite fee for transportation infrastructure. Replacement shares of other infrastructure is funded from utility fees for sewer, water and drainage, with some limited external funding.

Post period shares of growth-related costs are not deducted as the costs included in the analysis are based on a ten-year servicing plan, and applied to development within that planning horizon. Therefore, all costs incorporated into the calculation of DCC rates should apply to the applicable and benefitting development in the City of Surrey.

5. DCC Calculation

Once the net development-related costs have been identified, they are applied to the total increase in population and employment as anticipated in the development forecast. This derives a rate per capita and per employee, which is then applied to various forms of development based on occupancy and levied as a cost per unit or cost per square foot.

DCCs are calculated based on occupancy of different forms of development to reflect the varying level of demand placed on municipal services. Based on the results of the growth forecast, a population equivalent factor is derived for various types of residential development. Floor space per worker assumptions are used to generate the increase in employment over the ten-year planning period based on the number of acres of non-residential development forecasted. These factors are used to calculate the water, sewer, and parks portion of the charge. For the drainage charge, a runoff co-efficient is used and for the transportation component, an impact ratio, reflecting average vehicle road usage by different types of development is used.

C. DCC ADMINITRATION

1. Public Consultation & Reporting Requirements

The *LGA* does not indicate the extent to which stakeholders and members of the public must be consulted. Section 564(5) states:

> …a local government must make available to the public, on request, the considerations, information and calculations used to determine the schedule or schedules referred to in subsection (1), but any information respecting the contemplated acquisition costs of specific properties need not be provided.

The City of Surrey engages members of the development community throughout the calculation process to ensure transparency and ongoing working relationships. Information on the Servicing Plan and proposed rates are posted to the City's website,

as well as Public Open Houses and ongoing consultations are held with interested groups and organizations. When Council considers new DCC rates every two years, a revised 10 Year Serving Plan is approved, and contains a forecast of future development, infrastructure project cost estimates, non-growth related shares, as well as a DCC report and an accompanying by-law.

2. Frequency of Review

While the *LGA* does not prescribe the frequency with which municipal DCC by-laws must be updated, the City of Surrey updates the 10 Year Servicing Plan every two years, which leads to an update of the DCC report and By-law. The *Development Cost Charge, Best Practices Guide* recommends updates every five years to keep current and reflect changing development projections and infrastructure project cost estimates. The most recent update undertaken by the City of Surrey was in 2016 and another is planned for 2018.

3. Area-Specific vs. Municipal-Wide Development Charges Levied

DCCs in Surrey are largely levied on a municipal-wide basis, with three area-specific charges – Highway 99 Corridor, Campbell Heights, and Anniedale-Tynehead. The municipal-wide charge is applied to all development located in Surrey, outside of those specific areas, regardless of the location. One exception to this City-wide DCC is that apartment development in the Surrey City Centre are charged for parkland and roads at a different rate to reflect the open space needs and traffic impact of those types of development.

APPENDIX III: HALIFAX REGIONAL MUNICIPALITY – INFRASTRUCTURE CHARGES

The Halifax Regional Municipality is currently undertaking a comprehensive review of the infrastructure charges regime. An Infrastructure Charges Report was completed for the Region in 2006 and, since then, no adjustments have been made. The recommendations included in that report have influenced the way in which charges are calculated and levied, however it is likely that following the review in 2016, changes to the regime will be imposed. This appendix summarizes both the current regime in Halifax, as well as the previous recommendations made.

A. LEGISLATIVE CONTEXT

1. *Municipal Government Act,* 1999

Until 2008, Nova Scotia's *Municipal Government Act* (MGA) was the enabling legislation permitting the Halifax Regional Municipality (HRM) to levy Capital Cost Contributions (CCC) for on- and off-site growth-related capital costs. The MGA has four relevant sections that allow municipalities to recover these costs. Table 1 summarizes the eligible services that are permitted.

Table 1 Overview of *MGA,1999*		
Section	**Description**	**Comments**

274, 275 and 276	• Eligible services that can be recovered through infrastructure charges:
	  • Water systems;
	  • Wastewater facilities;
	  • Stormwater facilities;
	  • Streets;
	  • Traffic signs and signals and transit bus bays
		• Enabling provision that permitted for the collection of infrastructure charges
		• Eligible capital project costs include land, studies, engineering, surveying and legal fees

81	• Wastewater facilities and stormwater systems; • Capital costs of water system installation; • Streets; including curbs and gutters, sidewalks, culverts, bridges and retaining walls (including new construction, repair, maintenance and improvements); • Major trees removal programs; and • Capital costs of underground electrical power distribution systems	• Allows Council to establish by-laws regarding the payment of charges for wastewater, stormwater, and water systems, and also roads, major tree removal programs and underground electrical power distribution

In order for a municipality to impose an infrastructure charge under the MGA, a subdivision by-law must be passed defining the area to which the charge will apply as well as the purpose of the charge and the way in which it is to be calculated. The charges themselves are imposed under individual subdivision agreements.

Under the *Infrastructure Charges Best Practices Guide*, the Region considers capital costs of both on- and off-site services to be eligible for recovery through the infrastructure charge provided they relate to improvements that can be attributed to the defined area. Examples of off-site (or exterior) infrastructure costs that have been funded in recent years under the CCC policy include street improvements outside the area that are required due to increased traffic arising from the development as well as capacity-enhancing expansions or upgrades to water and wastewater facilities.

2. Halifax Regional Municipality Charter

In October 2014, Bill 50 introduced amendments to the HRM Charter that would expand the scope of services eligible for infrastructure charge funding. The amendment was intended to address the funding pressures for capital costs not

addressed through the provisions of the MGA. As shown in Table 2 below, the new eligible services included parks, indoor recreation, fire and library services. In addition, the eligible capital costs were expanded to include studies or engineering related costs for any eligible service.

Table 2
New Services Proposed Under the HRM Charter

New Service	Description
Parks	• New or expanded parks, playgrounds, trails and bicycle paths
Indoor Recreation	• New or expanded swimming pools, ice arenas, recreation centres and other recreational facilities
Fire	• New or expanded fire departments and other fire facilities
Library	• New or expanded public libraries and other library facilities
Other	• Costs for studies and engineering, surveying and legal costs incurred with respect to any service

Note: In addition to new services, the existing eligible services, such as transit, were included in the HRM Charter

Prior to the amendment, the Region was limited in its ability to recover for these services. Table 3 summarizes the relevant provisions under the Charter. Section 104 of the Charter allows for the establishment of a by-law to impose infrastructure charges for various eligible services and basic provisions with respect to how the charges should be determined. However, the legislation still provides a great deal of flexibility to establish a calculation methodology.

Table 3
Overview of HRM Charter

Section of Charter	Description

Section 104(1)	• Regional Council may pass by-laws imposing, fixing and providing methods of payment for eligible services
	• Eligible services include:
	  • Water and wastewater facilities or stormwater systems (i.e. includes use and expenditures incurred to wastewater management systems);
	  • Constructing, repairing and maintaining roads and related infrastructure (i.e. bridges, streets, curbs, sidewalks, gutters, bridges, culverts and retaining walls etc.)
	  • Solid-waste management facilities;
	  • Transit facilities;
	  • Major tree removal;
	  • Underground electrical distribution system;
	  • Parks, playgrounds, trails, bicycle paths, swimming pools, ice arenas, recreation centres and other recreation facilities;
	  • Fire departments or facilities;
	  • Public library or facilities;

Section 284	• The Municipality may collect infrastructure charges through a subdivision by-law, including new or expanded:
	  • Water systems;
	  • Wastewater systems;
	  • Stormwater systems;
	  • Streets;
	  • Solid-waste management facilities;
	  • Traffic signs and signals and new or expanded transit facilities;
	  • Parks, playgrounds, trails, bicycle paths, swimming pools, ice arenas, recreation centres and other recreation facilities;
	  • Fire departments or facilities;
	  • Public library or facilities;
	  • Land, planning, studies, engineering surveying and legal costs are also eligible
	• The subdivision by-law must provide details including the areas to which the infrastructure charges are to be levied and the amount
	• Based on servicing requirements for different areas
	• Final approval of subdivision may be withheld if infrastructure charges are not paid

Currently, the Region collects infrastructure charges through the Regional Subdivision By-law for the Master Plan areas of Wentworth Estates, Bedford South, Bedford West, Russell Lake West and Portland Hills. The charges are levied to fund the capital costs associated with oversizing of new streets, street intersections, traffic

signs and signals, storm water systems and wastewater facilities. By implementing these charges through the Regional Subdivision By-law, charges can only be collected when land is being subdivided. Should the Region implement charges under section 104(1) of the Charter, the trigger for payment of infrastructure charges can be defined in the by-law. Payment for infrastructure charges is often required at the time of building permit application or issuance.

B. CALCULATION METHODOLOGY

1. Measuring Levels of Municipal Service

HRM's Infrastructure Charges Report recommended that service levels be clearly defined to establish realistic levels of service that do not exceed what the Region has provided historically. It is important to note that under this approach, HRM has the ability to increase its service levels, however any service level increase above the historical average would need to be funded from non-infrastructure charge sources (almost certainly property taxes).

Under the Charter, the Region is not required to limit its infrastructure charges based on a historical level of service. Rather, the methodology should reflect the way in which the Region plans for the delivery of that service. Currently, the Region relies on department specific master plans that have established general standards of service provision. This often comes in the form of a number of assets per capita and is based on current figures. Under the current review, the Region is considering quantifying and qualifying the level of service provision over a historical period, likely 10 years which is in line with practice in Ontario, to determine servicing needs into the future.

2. Forecasting Development

The Halifax Regional Municipality forecasts both residential and non-residential development out to 2041. These projections are outlined in the Region's Municipal Planning Strategy and all master planning documents. The residential forecast estimates both population growth and growth in housing (dwelling units by type) and the non-residential forecast estimate both employees and the associated square metres (or GFA) of non-residential building space. The report also noted that planning periods need to be determined and can vary by service.

These planning periods should correspond with relevant master servicing plans or capital plans, where available. Should the Region wish to examine the charges for different areas, area-specific development forecasts should also be prepared.

3. Growth-Related Capital Costs

Growth-related costs associated with required infrastructure and servicing investment are sourced from the Region's budgets. The Region maintains five-year budget

forecasts which identify the capital costs required to service both the existing population and future development. These are relied upon for the allocation of infrastructure charge revenues. Typically, costs for required engineering services infrastructure can be predicted over a longer planning period as is detailed in the Master Servicing Plans, which extend out to 2041.

4. Deductions

In calculating infrastructure charges, adjustments are made to the capital programs to represent shares of projects that are either not related to growth or are more appropriately allocated to development occurring outside of HRM. Other deductions for alternative revenue sources, either known or anticipated are also made.

For example, it was determined that approximately seven per cent of all commuter trips were originating outside of HRM and therefore, were not considered to be related to growth occurring within the Region. As such, in the roads and related capital program, an appropriate deduction was made to reflect the beneficiaries of road-related works. Adjustments are also made in the capital programs to account for the contributions of new home owners through increased property taxes to support ongoing repair and replacement and capital costs through additional levies. The rationale for this reduction was based on the 10% deduction required by the legislation in Ontario, although the purpose of the discount has not been formally described.

5. Municipal-wide Vs. Area-specific

Historically, the Region has employed an area-specific approach for the purposes of calculating and imposing infrastructure charges. Areas corresponding to master planning zones, as identified in relevant land use plans, and charges were set to pay for the capital costs associated with oversized infrastructure required for development in each specific area.

The HRM Charter also allows the Region to recover growth-related capital costs on a Region-wide basis. However, if there are distinct service level targets, or capital infrastructure benefits identified related to a specific area, the use of area-specific charges should at least be considered.

The Infrastructure Charges Report identified that either a municipal-wide, area-specific or blended approach would be appropriate and that the rates should be structured based on the demand for services created by different types of development (such as different residential dwelling unit types). The report ultimately recommended that a Region-wide infrastructure charge by-law be implemented and that rates be differentiated based on urban, suburban and rural areas.

C. DCC ADMINITRATION

1. Rate structure

Neither the MGA or the HRM Charter prescribe the rate structure to be used when levying and infrastructure charges. The recommendation in the Infrastructure Charges Report was for the charges to be based on residential unit type. Under this approach, the charge for each unit type is calculated in relation to the different occupancy patterns for each unit, recognizing the direct relationship between the population residing in a particular type of dwelling unit and the resulting demand on municipal infrastructure and services. In this regard, good data is fundamental to differentiate a charge by unit type.

2. Public Consultation & Reporting Requirements

While not specifically mandated to do so under the legislation, the Halifax Regional Municipality has undertaken significant stakeholder engagement as part of the 2016 updated to the infrastructure charges regime. Members of the development industry and local stakeholders have been involved in the process since it's beginnings and have formed part of the working groups to influence the way in which the regime is shaped and the charges are calculated.

3. Frequency of Review

Past practice has shown that HRM does not undertake regular updates to the infrastructure charges regime or undertake calculations of new charges. The previous review of the system was done ten years ago in 2006 and, since then, no rate calculations have been done. In 2016, the Region engaged a consultant to undertake a comprehensive review of the regime, best practices analysis, and calculation of new infrastructure charges. It is likely that this will result in a more regimented structure which mandated reviews at regular intervals.

APPENDIX IV: CITY OF CALGARY – OFFSITE LEVIES

A. LEGISLATIVE CONTEXT

1. Municipal Government Act

The enabling legislation under which the City of Calgary imposes offsite levies is the Province of Alberta's *Municipal Government Act* (MGA). The legislation allows local municipalities to calculate and impose charges for the full or partial recovery of growth-related capital costs related to the following engineered services:

- Water;
- Sanitary Sewerage;
- Storm Sewer; and
- Roads.

Section 648 of the MGA specifies the eligible services and capital costs for new or improved infrastructure required to service growth that may be included in the City's offsite levy regime.

The legislation is complimented by the province's *Principles and Criteria for Off-Site Levies Regulation* (*Alberta Regulation 48/2004*) that provides municipalities flexibility in negotiating and calculating levies in good faith and "in a manner that recognizes the unique or special circumstances of the municipality" (s.3(1)). Municipalities are required to be open and transparent in the reporting of the charges and disclose the assumptions and inputs that were used in their calculation. Lastly, the legislation emphasizes the importance of the relationship between municipalities and the development industry in sharing responsibility of the establishment of offsite levies and working together to define existing and future infrastructure requirements and the beneficiaries of development in the municipality.

2. By-law

The City of Calgary passed Bylaw 2M2016 in January 2016, which includes off-site levies for transportation, storm sewer, sanitary sewer and water infrastructure components. Through a resolution included in the Bylaw, Council also approved Community Services charges for library, fire, police, indoor recreation and transit busses infrastructure.

As identified in the City's Background Report, growth necessitates not only the emplacement of engineered services infrastructure, but also community services. Although not specifically included in the MGA's list of eligible services, the City includes the services of library, emergency response stations, police stations and recreation facilities into the regime of offsite levies as a voluntary contribution from

developers. These charges apply only to development in Greenfield Areas beyond the developed area. Although somewhat beyond the scope of the legislation, it was confirmed by the development industry during the extensive consultation process that it is important to find funding sources for these types of development-related infrastructure to continue to build and establish complete communities in the City of Calgary.

As outlined in the Bylaw, certain developments are exempt from the payment of development charges. These developments include: land that has already paid similar levies and charges under agreements; industrial or commercial additions of less than 160 square metres; environmental reserve lands; and skeletal roads.

B. CALCULATION METHODOLOGY

1. Measuring Levels of Municipal Service

Historical service levels are established for each portion of the levy based on the unique way in which service is provided in the City of Calgary. The engineered services of transportation, water, drainage and wastewater use a planned level of service, which is determined based on usage and how the population and employment base will grow and need to be serviced adequately. For the community services category, which includes libraries, emergency response stations, police stations, recreation centres and transit busses, standards-based service levels are used to determine future needs to accommodate growth. For example, the City identified that the provision of new library space will be required in the Greenfield Areas at a rate of 0.36 square feet per person. Standards for the protection services suggest one emergency response station to serve 30,000 persons and one police district office for every 149,000. One small recreation facility will service 63,000 people and a standard of six transit busses per 20,000 people is identified. These standards translate directly into a required amount of additional infrastructure based on projected population growth.

2. Forecasting Development

The City of Calgary's *Municipal Development Plan* (MDP) is the guiding document envisioning the way in which they should grow. Population and employment development policies and targets over the next 30 and 60 years are outlined in the document and provide the projected growth numbers used in the calculation of offsite levies. The MDP forecasts both the amount and location of growth population and employment growth out to 2076 at five year increments. The forecasts consider present day patterns of development, short term development intentions and growth policies, emerging demographic trends, and the socio-economic priorities of the plan.

3. Growth-Related Capital Costs

The growth-related capital programs are assembled for each service and area with consideration given to maintaining standard levels of service provided (community services) or achieving planned levels of service to accommodated anticipated development (engineered services). Projects are sourced from the City's capital budget and any available master planning documents, such as the Calgary Transportation Plan. Capital projects are examined based on the infrastructure and servicing required to accommodate development within established timeframes. The timeframe for the transportation program is 60 years, 30 years for all community services programs and 10 years for water, sewer and drainage.

4. Deductions

Only the development-related capital cost of new infrastructure or municipal servicing is included in the calculation of offsite levies. Various costs must be removed from the gross project costs, including alternate funding sources such as utility rates, property taxes and government grants. The rationale behind the calculation methodology is that levies are set at a rate that will determine how much of the capital costs should be funded by developers and which shares are more appropriate to be funded through other sources.

Costs associated with each infrastructure project are allocated between existing development, new development and regional benefit. Allocation methodologies vary by service and are more formalized for the engineered services. Overall, several key considerations are used in the allocation of costs:

- Is there an improvement above the current level of service being provided?
- Are any existing deficiencies being addressed or resolved through the works?
- Does the benefit of the works extend beyond the City to the region?
- Is any existing infrastructure being replaced or expanded?
- Is any additional capacity being provided by the works?

5. DCC Calculation

Section 3(9) of the *Principles and Criteria for Off-Site Levies Regulation* stipulates that the calculation of offsite levies should include the following:

- Description of specific infrastructure or project;
- Description of the benefitting area;
- Supporting technical data and analysis; and

- Estimated costs and mechanisms to address cost increases over time.

It is a priority for the City that costs be determined in consultation with affected landowners and developers and that all costs included in the capital program lead to reasonable offsite levies being imposed. At a high-level, offsite levies are calculated by dividing the estimated net infrastructure costs required to service population growth and land absorption by the total hectares required to serve the projected population.

C. DCC ADMINITRATION

1. Public Consultation & Reporting Requirements

The study process involved extensive public consultation and stakeholder engagement. Workshops, public hearings and Council sessions were held and a number of representatives with the development industry were part of the City's steering committee. Information was openly shared with members of the public to maintain transparency throughout the whole calculation process. Open public engagement and collaborate rate setting are outlined in both the City's MDP and the province's MGA. For this reason, the City of Calgary is both required and committed to encouraging healthy stakeholder engagement and public consultation.

The City's Background Report clearly outlines the process that was undertaken in calculating the offsite levies. It includes a review of assumptions, summary of the development forecast, as well as the detailed calculation of all offsite levies, including the charges for community services. The amount of revenue generated by the levies and how that revenue was directed is detailed in the City's annual reporting. The City is committed to such annual reporting to maintain transparency and accountability to foster ongoing working relationships as the charges are revisited every five years.

2. Frequency of Review

The offsite levy By-law allows for periodic amendments that may be required as socio-economic or demographic factors change in order to keep the charges current. Amendments may also be required if project costs or scope changes significantly, or available funding sources are identified. The overall calculation and study assumptions are to be reviewed every five years. This has the effect of reducing administrative costs and the development and capital forecasts are unlikely to change significantly over this period.

APPENDIX V: CITY OF SAN FRANCISCO – DEVELOPMENT IMPACT FEES

A. LEGISLATIVE CONTEXT

1. San Francisco Planning Code

The City of San Francisco imposes Development Impact Fees (DIF) on development projects in order to mitigate the impacts caused by new development on public services, infrastructure and facilities. Article 4 of the *San Francisco Planning Act (SFPA)* is the enabling legislation in the City of San Francisco for most of the fees levied. The *SFPA* is under a piece of municipal legislation that governs the operation of multiple by-laws or local ordinances. California State Law governs the administration of each individual Impact Fee, for example the School Development Impact Fee is legislated through the California Education Code. Other's fall within the jurisdiction of the California Mitigation Fee Act. The administration practices of each particular fee are outlined in each ordinance.

2. By-laws

A vast number of DIFs exist and are outlined in district by-laws, or ordinances. Each ordinance relates to a specific DIF, for example, the Transit Impact Development Fee, or to a particular area of the City. The living by-laws are amended as required and are revised as issues arise. Each by-law must comply with the provisions of the *SFPA,* however several discretionary conditions and administrative practices are laid out in each.

B. CALCULATION METHODOLOGY

1. Measuring Levels of Municipal Service

Planned levels of services are used for the establishment of development-related capital programs for most departments. The City does not record or rely upon a historical level of service provided, however current service provision levels are considered in establishing standards. As applicable, the standards for each service receive Council support and are often documented in department-specific master plans and capital outlook documents.

2. Forecasting Development

The City of San Francisco relies on the Association of Bay Area Governments fore estimates for population and employment growth projections. From the projections provided, the City develops forecasts of net population growth (net of population

decline), new dwelling units by type and size, as well as employment growth and the anticipated increase in non-residential building space by development type. Current trends of vacancy rates, persons per household and rental shares are also incorporated into the forecast in order to accurately forecast the increased demand on municipal servicing that will need to be financed from impact fees in the future.

3. Growth-Related Capital Costs

On a department-specific basis, development-related needs are identified and costs are estimated. Based on development projections, reasonable estimates of demand for each service is brought forward to Council. Infrastructure needs vary by department and are often based on the established standard levels of municipal service provided applied to the anticipated growth. For example, in establishing the traffic and roads development-related capital program, the number of peak hour road traffic trips that will be generated by new development is estimated. In order to mitigate the increase of these trips, a list of traffic improvements is prepared, which is factored into the calculation of the Traffic Impact Fee.

4. Deductions

Once costs are estimated for all required development-related infrastructure, the growth-related shares are isolated and included in the calculation of DIFs. Because the DIF regime is so complex and the fees vary depending on the area of the City in which development is expected, adjustments are made to the capital programs to remove shares of projects that are either not related to growth or are more appropriately allocated to development in other areas of the City, or beyond San Francisco's border. Other deductions for alternative revenue sources, either known or anticipated are also made. Existing development's share of the costs are funded from other sources, including the City's General Fund, grants, and other developer contributions.

5. DIF Calculation

Once the net development-related costs have been identified, they are applied to the net growth figures as outlined in the development forecast. Based on the anticipated increase in gross floor area of building space (by type and location of a development) a cost per square foot is identified which will be recovered through the various DIFs to recover the costs needed to service development.

The City of San Francisco's DIF rate structure is extremely complex, and the total fees payable depend on a myriad of factors, including the location, type and size of the development, as well as the types of fees that are eligible. For that reason, the calculation of fees is done on a fee-specific basis. For example, Education Impact Fees apply to all development in all areas of the City. It is therefore a more straightforward application of the development-related costs to the anticipated increase in residential and non-residential square footage. For other, more specific fees like the Eastern

Neighborhoods Infrastructure Fee, this must be calculated by applying only the costs of the relevant infrastructure to the population growth in these neighborhoods.

C. DCC ADMINITRATION

1. Frequency of Review

Each impact fee is revisited every calendar year to confirm that the capital projects are still required, the municipal servicing standards and assumptions are current and that the development forecast is reasonable. Aside from major adjustments to the DIF calculations, the rates are indexed every year to keep pace with inflation and accelerating costs. The annual index is often in the magnitude of 5%.

APPENDIX VI
SUMMARY OF BEST PRACTICES FINDINGS

Municipality	City of Vancouver	City of Toronto	Halifax Regional Municipality	City of Calgary	City of Surrey	City of San Francisco
Population	603,502	2,615,060	390,096	1,096,833	468,251	852,469
Population Density (pop/sq.km)	5,249	4,150	71	1,329	1,480	6,714
Term	Development Cost Levies	Development Charges	Infrastructure Charges	Off-site levies	Development Cost Charges	Development Impact Fees
Governing Legislation	Vancouver Charter, SCB 1953, Chapter 55 Part XXIV - A	Development Charges Act, 1997, S.O. 1997, c.27	Halifax Municipal Charter Section 104(1)	Municipal Government Act, 2000 (Part 17, Div 6) & Alberta Reg 8/2004	Local Government Act, Division 19	San Francisco Planning Code
Basis of Development Forecast	Metro Vancouver Regional Growth Strategy	Ontario *Growth Plan for the Greater Golden Horseshoe*	City of Surrey Official Community Plan	City of Calgary *Municipal Development Plan*	Regional Municipal Strategy	Municipal development forecasts
Approach to Determining Service Levels	**Standards based:** replacement housing, child care, park acquisition **Past level based:** replacement housing, parks **Plan based:** transportation	**Past level based:** all general services **Plan based:** transit, engineered services	**Plan based:** all services	**Standards based:** community services **Plan based:** engineered services	**Standards based:** parks **Plan based:** engineered services	**Plan based:** all services
Recoverable Services	Water, sewer, drainage, roads, parks, child care, housing[1]	Transit, parks, recreation, library, subsidized housing, police, fire, emergency medical services, development-related studies, civic improvements, child care, health, pedestrian infrastructure, roads, water, sanitary sewer and storm water management	Water, sewer, drainage, roads, recreation, parks, transit, police, fire, library, solid waste[2]	Water, sanitary sewer, storm sewer, roads, library, fire, police, indoor recreation and transit busses3	Water, drainage, sanitary sewer, roads, parkland acquisition and development	Roads, Bicycle Parking, child care, housing, transit, parks, community infrastructure, wastewater, and sewer
Frequency of Study Update	No legislative requirement to undertake updates. City has not done a major review since fees were initially calculated in 2008	Municipalities required by provincial legislation to undertake a DC background study, re-calculate charges and pass a new by-law every five years	No legislative requirement to undertake regular updates. Municipality has not done a major review since fees were initially calculated. Fees for various service were calculated in different years, so some charges are more current than others. City undertaking a major review currently (2016)	No legislative requirements to undertake updates, City undertakes review and rate re-calculations every five years	No legislative requirements to undertake updates, City undertakes review and rate re-calculations every two years	No legislative requirement to undertake regular reviews. City reviews impact fees for specific services as required.
Exemptions	**Statutory:** Places of worship, renovations, social housing, small residential units (under 29 sq.m.) **Non-statutory:** for-profit affordable housing (DCLs waived or reduced)	**Statutory:** Industrial additions, residential additions, developments for the purpose of the municipality, boards of education **Non-statutory:** Non-profit/affordable housing, industrial uses, other non-residential development beyond the first floor	**Statutory:** Crown land **Non-statutory:** n/a	**Statutory:** n/a **Non-statutory:** rate capped if development in Established Area reaches density equivalent of 285+ people and jobs/hectare	**Statutory:** places of public worship, developments that do not impose new capital cost burdens on municipality, small residential units (under 29 sq.m.) **Non-statutory:** Work authorized by permit that does not exceed $100,000 (residential), work authorized by permit that does not exceed $50,000 (all other), non-profit rental housing	**Statutory:** Permits where there is no reasonable relationship between the impact of the development and the amount of the fee charged, affordable housing units (particular neighborhoods), homeless shelters **Non-statutory:** n/a
Geographic Basis of Charge	City-wide, area-specific and layered DCLs imposed. Area-specific charges independent of City-wide charged. Layered charges imposed in addition to City-wide charge in certain areas of the City	City-wide charges for all services	City-wide and area-specific charges levied	City-wide and area-specific charges. Rates are uniform across established area. Rates within the greenfield area are specific to each watershed	City-wide and area-specific charges imposed. City-wide rate discounted for multi-residential development in City Centre for Parks and Roads services	City-wide, area-specific and elective charges imposed Elective fees are alternative means of compliance with the Planning Code for certain services
Rate Structure - Residential	**Residential:** $/sq.ft. of GFA. Categories include development at or below 1.2 FSR, development over 1.2 FSR and laneway housing	**Residential:** $/unit type. Categories include single and semi-detached, large multiples, small multiples, large apartments, small apartments, dwelling room	**Residential:** $/acre. Categories include single unit dwellings, townhouses, multiple unit dwellings	**Residential:** $/unit type in established area and $/hectare of land in greenfield. Categories include single detached, semi-detached/duplex, multi-residential at grade, large multi-residential non-grade, small multi-residential non-grade	**Residential:** $/lot for single family dwellings and $/sq.ft. of GFA for multi-family dwelling. Rates depend on zoning and land use designation of development	**Residential:** $/sq.ft. of GFA
Rate Structure - Non-Residential	**Non-residential:** $/sq.ft. of GFA. Categories include commercial, industrial, daycare	**Non-residential:** $/sq.m. of GFA	**Non-residential:** $/acre	**Non-residential:** $/sq.m. in established area and $/hectare of land in greenfield. Categories include commercial and industrial	**Non-residential:** $/acre or $/sq.ft. based on zoning and land use designation of development	**Non-residential:** $/sq.ft. of GFA. Categories include office, hotel, retail, other
Timing of Levy Collection	Building permit issuance	Building permit issuance	Subdivision approval	Subdivision approval (greenfield) and building permit issuance (established area)	Subdivision approval (single family dwellings) and building permit issuance (multi-family residential and non-residential)	Building permit issuance

Note 1: Small portions of water and sewer works are recovered through the area-specific and layered DCLs in Vancouver. These services are not included in the City-wide DCL regime.
Note 2: Governing legislation for HRM is permissive and permits many services as eligible for recovery though infrastructure charges. The municipality does not include all eligible services in the rate structure
Note 3: Alberta's *Municipal Government Act* lists water, sanitary sewer, storm sewer and roads as eligible services. However, the City's by-law includes community charges for library, fire, police, indoor recreation and transit busses despite not being explicitly listed in the governing legislation.