

Chapter 4 The Approach to the Calculation of the Charge



4. The Approach to the Calculation of the Charge

4.1 Introduction

This chapter addresses the requirements of s.s.5(1) of the D.C.A. with respect to the establishment of the need for service which underpins the D.C. calculation. These requirements are illustrated schematically in Figure 4-1.

4.2 Services Potentially Involved

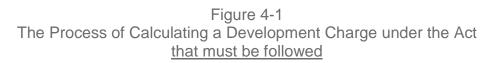
Table 4-1 lists the full range of municipal service categories which are provided within the County.

A number of these services are defined in s.s.2(4) of the D.C.A. as being ineligible for inclusion in D.C.s. These are shown as "ineligible" on Table 4-1. Two ineligible costs defined in s.s.5(3) of the D.C.A. are "computer equipment" and "rolling stock with an estimated useful life of (less than) seven years..." In addition, local roads are covered separately under subdivision agreements and related means (as are other local services). Services which are potentially eligible for inclusion in the County's D.C. are indicated with a "Yes."

4.3 Increase in the Need for Service

The D.C. calculation commences with an estimate of "the increase in the need for service attributable to the anticipated development," for each service to be covered by the by-law. There must be some form of link or attribution between the anticipated development and the estimated increase in the need for service. While the need could conceivably be expressed generally in terms of units of capacity, s.s.5(1)3, which requires that County Council indicate that it intends to ensure that such an increase in need will be met, suggests that a project-specific expression of need would be most appropriate.





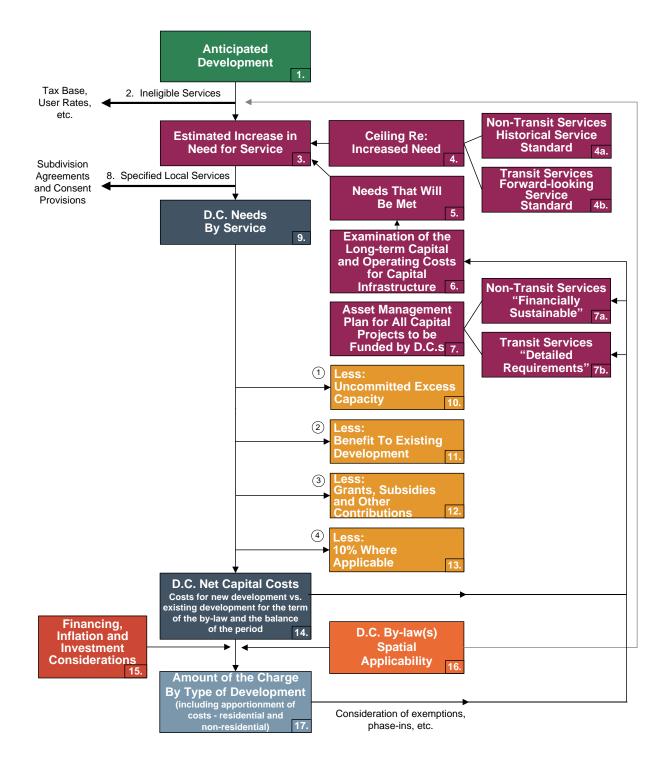




Table 4-1
Categories of Municipal Services to be Addressed as Part of the Calculation

	Categories of inicipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components		Maximum Potential D.C. Recovery %
1.	Services	Yes	1.1	Arterial roads	100
	Related to a	Yes		Collector roads	100
	Highway	Yes	1.3	3,	
				Roundabouts	100
		No		Local municipal roads	0
		Yes		Traffic signals	100
		Yes	1.6	Sidewalks and streetlights	100
	_	Yes		Active Transportation	100
2.	Other	n/a	2.1	Transit vehicles ¹ & facilities	100
	Transportation	n/a		Other transit infrastructure	100
	Services	n/a	2.3	Municipal parking spaces -	
		,		indoor	90
		n/a	2.4	Municipal parking spaces -	
				outdoor	90
		Yes	_	Works Yards	100
		Yes		Rolling stock ¹	100
		n/a	2.7	Ferries	90
		No		Airport	90
3.	Stormwater	n/a	3.1	Main channels and drainage	100
	Drainage and			trunks	
	Control Services	n/a		Channel connections	100
		n/a		Retention/detention ponds	100
4.	Fire Protection	n/a	4.1	Fire stations	100
	Services	n/a	4.2	Fire pumpers, aerials and	100
				rescue vehicles ¹	
		n/a	4.3	Small equipment and gear	100

¹with 7+ year life time

^{*}same percentage as service component to which it pertains computer equipment excluded throughout



5. Outdoor Recreation Services (i.e. Ineligible n/a 5.1 Acquisition of land for parks, woodlots and E.S.A.s 0 Parks and Open Space) n/a 5.2 Development of area municipal parks 90 Space) n/a 5.3 Development of district parks 90 Na 5.4 Development of special purpose parks 90 6. Indoor Recreation Services n/a 5.6 Parks rolling stock1 and yards 90 6. Indoor Recreation Services n/a 6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land) 90 7. Library Services Yes 7.1 Public library space (incl. furniture and equipment) 90 8. Electrical Power Lineligible Ineligible 8.1 Electrical substations 0 9. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres Ineligible 8.1 Electrical system rolling stock 0 9. 9.2 Tourism facilities and convention centres 0 0 0 9. Ineligible 9.2 Tourism facilities and convention centres 0			Eligibility for Inclusion in the D.C. Calculation		Service Components	Maximum Potential D.C. Recovery %
Services (i.e. Parks and Open Space)n/a5.2Development of area municipal parks90n/a5.3Development of district parks90n/a5.4Development of municipal- wide parks90n/a5.5Development of special purpose parks90n/a5.6Parks rolling stock1 and yards906.Indoor Recreation Servicesn/a6.1Arenas, indoor pools, fitness facilities, community centres, etc. (including land)907.Library ServicesYes7.1Public library space (incl. furniture and equipment1907.Library ServicesYes7.2Library vehicles1 90908.Electrical Power ServicesIneligible Ineligible Review8.1Electrical substations 8.209.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible 9.29.1Cultural space (e.g. art galleries, museums and theatres)09.2Tourism facilities and convention centres000	5.		Ineligible	5.1		0
Space)n/a n/a5.3 5.4Development of district parks wide parks90n/a5.4Development of municipal- wide parks90n/a5.5Development of special purpose parks906.Indoor Recreation Servicesn/a6.1Arenas, indoor pools, fitness facilities, community centres, etc. (including land)907.Library ServicesYes7.1Public library space (incl. furniture and equipment1907.Library ServicesYes7.1Public library space (incl. furniture and equipment1908.Electrical Power ServicesIneligible Ineligible8.1Electrical substations 8.208.Electrical Power Cultural, Entertainment and Tourism Facilities and 		Services (i.e.	n/a	5.2	Development of area	90
wide parks90n/a5.5Development of special purpose parks90n/a5.6Parks rolling stock1 and yards906.Indoorn/a6.1Arenas, indoor pools, fitness facilities, community centres, etc. (including land)906.Indoorn/a6.2Recreation vehicles and equipment1907.Library ServicesYes7.1Public library space (incl. furniture and equipment)907.Library ServicesYes7.2Library vehicles1 90 Yes908.Electrical Power ServicesIneligible Ineligible8.1Electrical substations 8.208.Electrical Power Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible9.1Cultural space (e.g. art galleries, museums and theatres)09.2Tourism facilities and convention centres0.400			n/a	5.3		90
n/apurpose parks90n/a5.6Parks rolling stock1 and yards906.Indoorn/a6.1Arenas, indoor pools, fitness facilities, community centres, etc. (including land)90n/a6.2Recreation vehicles and equipment1907.Library ServicesYes7.1Public library space (incl. furniture and equipment)90Yes7.2Library vehicles190Yes7.3Library materials908.Electrical Power ServicesIneligible Ineligible8.1Electrical substations services09.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible9.1Cultural space (e.g. art galleries, museums and theatres)09.2Tourism facilities and convention centres000					wide parks	90
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Recreation Servicesfacilities, community centres, etc. (including land)n/a6.2Recreation vehicles and equipment17.Library ServicesYes7.1Public library space (incl. furniture and equipment)90Yes7.2Library vehicles1 90Yes7.3Library materials8.Electrical Power ServicesIneligible Ineligible8.1Electrical Power ServicesIneligible Ineligible8.18.Electrical Power ServicesIneligible Ineligible8.19.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible9.19.2Tourism facilities and convention centres0			n/a	5.6	Parks rolling stock ¹ and yards	90
7.Library ServicesYes7.1Public library space (incl. furniture and equipment)90Yes7.2Library vehicles190Yes7.3Library materials908.Electrical Power ServicesIneligible Ineligible8.1Electrical substations B.209.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible9.1Cultural space (e.g. art galleries, museums and theatres)0	6.	Recreation			facilities, community centres, etc. (including land)	
Yesfurniture and equipment)90Yes7.2Library vehicles190Yes7.3Library materials908.Electrical Power ServicesIneligible Ineligible8.1Electrical substations 8.209.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible9.1Cultural space (e.g. art galleries, museums and theatres)09.2Tourism Facilities and Convention CentresIneligible9.2Tourism facilities and convention centres0			n/a	0.2		50
Yes Yes7.2 C.2 Library materials90 908.Electrical Power ServicesIneligible Ineligible8.1 B.2 Electrical distribution system B.2 Electrical system rolling stock0 0 09.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible Ineligible9.1 9.1Cultural space (e.g. art galleries, museums and theatres)0 0 09.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible 0 9.29.1 Cultural space (e.g. art convention centres0 0 0	7.	Library Services	Yes	7.1		00
Yes7.3Library materials908.Electrical Power ServicesIneligible Ineligible8.1Electrical substations09.Provision of Cultural, Entertainment and Tourism Facilities and CentresIneligible9.1Cultural space (e.g. art galleries, museums and theatres)09.2Tourism facilities and Convention CentresIneligible9.2Tourism facilities and convention centres0			Ves	72	· · · /	
8. Electrical Power Services Ineligible Ineligible 8.1 Electrical substations 0 9. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres Ineligible 9.1 Cultural space (e.g. art galleries, museums and theatres) 0 9. Provision of Cultural, Entertainment and Tourism Ineligible 9.1 Cultural space (e.g. art galleries, museums and theatres) 0						
ServicesIneligible Ineligible8.2Electrical distribution system 0 8.30 Electrical system rolling stock09.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible9.1Cultural space (e.g. art galleries, museums and theatres)09.Provision of Cultural, Entertainment and Tourism Facilities and Convention CentresIneligible9.1Cultural space (e.g. art galleries, museums and theatres)0	8.	Electrical Power				
9.Provision of Cultural, Entertainment and Tourism Convention ConventionIneligible9.1Cultural space (e.g. art galleries, museums and theatres)09.Entertainment theatres)9.2Tourism facilities and convention centres0		Services	Ineligible			
Cultural, Entertainment and Tourismgalleries, museums and theatres)And Tourism Facilities and Convention CentresIneligible9.2Tourism facilities and convention centres0						
10. WastewaterYes10.1 Treatment plants100		Cultural, Entertainment and Tourism Facilities and Convention Centres			galleries, museums and theatres) Tourism facilities and	
	10.					
Services Yes 10.2 Sewage trunks 100		Services				
No10.3 Local systems0Yes10.4 Vehicles and equipment1100	1					_

¹with 7+ year life time



Categories of for Municipal Services Inclusion in the D.C. Calculation		Service Components	Maximum Potential D.C. Recovery %
11. Water Supply	Yes	11.1 Treatment plants	100
Services	Yes	11.2 Distribution systems	100
	No	11.3 Local systems	0
	Yes	11.4 Vehicles and equipment ¹	100
12. Waste Management Services	Ineligible Ineligible	12.1 Landfill collection, transfervehicles and equipment12.2 Landfills and other disposal	0
		facilities	0
	Yes Yes	12.3 Waste diversion facilities 12.4 Waste diversion vehicles and	90
		equipment ¹	90
13. Police Services	n/a	13.1 Police detachments	100
	n/a	13.2 Police rolling stock ¹	100
	n/a	13.3 Small equipment and gear	100
14. Homes for the	n/a	14.1 Homes for the aged space	90
Aged	n/a	14.2 Vehicles ¹	90
15. Child Care	n/a	15.1 Child care space	90
	n/a	15.2 Vehicles ¹	90
16. Health	n/a	16.1 Health department space	90
	n/a	16.2 Health department vehicles ¹	90
17. Social Housing	No	17.1 Social Housing space	90
18. Provincial Offences Act (P.O.A.)	No	18.1 P.O.A. space	90
19. Social Services	No	19.1 Social service space	90
20. Ambulance	Yes	20.1 Ambulance station space	90
	Yes	20.2 Vehicles ¹	90
21. Hospital Provision	Ineligible	21.1 Hospital capital contributions	0

¹with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
22. Provision of Headquarters for the General Administration of Municipalities and Area Municipal Boards	Ineligible Ineligible Ineligible	22.1 Office space22.2 Office furniture22.3 Computer equipment	0 0 0
23. Other Services	Yes Yes	 23.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land² and facilities, including the D.C. background study cost 23.2 Interest on money borrowed to pay for growth-related capital 	0-100 0-100

¹with a 7+ year life time ²same percentage as service component to which it pertains

Eligibility for Inclusion in the D.C. Calculation	Description
Yes	Municipality provides the service – service has been included in the D.C. calculation.
No	Municipality provides the service – service has not been included in the D.C. calculation.
n/a	Municipality does not provide the service.
Ineligible	Service is ineligible for inclusion in the D.C. calculation.



4.4 Local Service Policy

Some of the need for services generated by additional development consists of local services related to a plan of subdivision. As such, they will be required as a condition of subdivision agreements or consent conditions. The County's Local Service Policy is included in Appendix E.

4.5 Capital Forecast

Paragraph 7 of s.s.5(1) of the D.C.A. requires that "the capital costs necessary to provide the increased services must be estimated." The Act goes on to require two potential cost reductions and the Regulation sets out the way in which such costs are to be presented. These requirements are outlined below.

These estimates involve capital costing of the increased services discussed above. This entails costing actual projects or the provision of service units, depending on how each service has been addressed.

The capital costs include:

- a) costs to acquire land or an interest therein (including a leasehold interest);
- b) costs to improve land;
- c) costs to acquire, lease, construct or improve buildings and structures;
- d) costs to acquire, lease or improve facilities, including rolling stock (with a useful life of 7 or more years), furniture and equipment (other than computer equipment), materials acquired for library circulation, reference or information purposes;
- e) interest on money borrowed to pay for the above-referenced costs;
- f) costs to undertake studies in connection with the above-referenced matters; and
- g) costs of the D.C. background study.

In order for an increase in need for service to be included in the D.C. calculation, Council must indicate "...that it intends to ensure that such an increase in need will be met" (s.s.5 (1)3). This can be done if the increase in service forms part of a Councilapproved Official Plan, capital forecast or similar expression of the intention of Council



(O.Reg. 82/98 s.3). The capital program contained herein reflects the County's approved and proposed capital budgets and master servicing/needs studies.

4.6 Treatment of Credits

Section 8, paragraph 5, of O.Reg. 82/98 indicates that a D.C. background study must set out "the estimated value of credits that are being carried forward relating to the service." Subsection 17, paragraph 4, of the same Regulation indicates that "...the value of the credit cannot be recovered from future D.C.s," if the credit pertains to an ineligible service. This implies that a credit for <u>eligible</u> services can be recovered from future D.C.s. As a result, this provision should be made in the calculation, in order to avoid a funding shortfall with respect to future service needs. The County has no outstanding D.C. credit obligations.

4.7 Existing Reserve Funds

Section 35 of the D.C.A. states that:

"The money in a reserve fund established for a service may be spent only for capital costs determined under paragraphs 2 to 8 of subsection 5(1)."

There is no explicit requirement under the D.C.A. calculation method set out in s.s.5(1) to net the outstanding reserve fund balance as part of making the D.C. calculation; however, s.35 does restrict the way in which the funds are used in future.

For services which are subject to a per capita based, service level "cap," the reserve fund balance should be applied against the development-related costs for which the charge was imposed once the project is constructed (i.e. the needs of recent growth). This cost component is distinct from the development-related costs for the <u>next</u> 10-year period, which underlie the D.C. calculation herein.

The alternative would involve the County spending all reserve fund monies prior to renewing each by-law, which would not be a sound basis for capital budgeting. Thus, the County will use these reserve funds for the County's cost share of applicable development-related projects, which are required but have not yet been undertaken, as a way of directing the funds to the benefit of the development which contributed them



(rather than to future development, which will generate the need for additional facilities directly proportionate to future growth).

The County's adjusted D.C. Reserve Fund Balance by service at December 31, 2018 is shown below. The 2018 year-end D.C. reserve fund balances have been adjusted to account for the unfunded D.C. share of previously completed D.C. eligible projects.

Service	Adjusted Balance
Roads and Related Services	(2,363,240)
Library	444,149
Land Ambulance	313,778
Administration	255,059
Water - Woodstock	236,830
Wastewater - Woodstock	456,875
Water - Tillsonburg	(769,070)
Wastewater - Tillsonburg	5,075,352
Water - Ingersoll	(1,170,136)
Wastewater - Ingersoll	(1,946,310)
Water - Norwich	(317,804)
Wastewater - Norwich	1,910,456
Water - Tavistock	580,118
Wastewater - Tavistock	(1,320,189)
Water - Plattsville	(617,433)
Wastewater - Plattsville	(1,383,234)
Water - Drumbo	90,121
Wastewater - Drumbo	392,957
Water - Thamesford	(782,675)
Wastewater - Thamesford	219,756
Total	(694,641)

Table 4-1December 31, 2018 Adjusted Reserve Fund Balances

Note: Amounts in brackets are deficit balances.

4.8 Deductions

The D.C.A. potentially requires that five deductions be made to the increase in the need for service. These relate to:



- the level of service ceiling;
- uncommitted excess capacity;
- benefit to existing development;
- anticipated grants, subsidies and other contributions; and
- 10% reduction for certain services.

The requirements behind each of these reductions are addressed as follows:

4.8.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need included in 4.3 does "...not include an increase that would result in the level of service (for the additional development increment) exceeding the average level of the service provided in the County over the 10-year period immediately preceding the preparation of the background study..." O.Reg. 82.98 (s.4) goes further to indicate that "...both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service."

In many cases, this can be done by establishing a quantity measure in terms of units as floor area, land area or road length per capita and a quality measure, in terms of the average cost of providing such units based on replacement costs, engineering standards or recognized performance measurement systems, depending on circumstances. When the quantity and quality factor are multiplied together, they produce a measure of the level of service, which meets the requirements of the Act, i.e. cost per unit.

With respect to transit services, the changes to the Act as a result of Bill 73 have provided for an alternative method for calculating the services standard ceiling. Transit services must now utilize a forward-looking service standard analysis, described later in this section.

The average service level calculation sheets for each service component in the D.C. calculation are set out in Appendix B.



4.8.2 Reduction for Uncommitted Excess Capacity

Paragraph 5 of s.s.5(1) requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the County's "excess capacity," other than excess capacity which is "committed."

"Excess capacity" is undefined, but in this case must be able to meet some or all of the increase in need for service, in order to potentially represent a deduction. The deduction of <u>uncommitted</u> excess capacity from the future increase in the need for service would normally occur as part of the conceptual planning and feasibility work associated with justifying and sizing new facilities, e.g. if a road widening to accommodate increased traffic is not required because sufficient excess capacity is already available, then widening would not be included as an increase in need, in the first instance.

4.8.3 Reduction for Benefit to Existing Development

Section 5(1)6 of the D.C.A. provides that, "The increase in the need for service must be reduced by the extent to which an increase in service to meet the increased need would benefit existing development." The general guidelines used to consider benefit to existing development included the following:

- the repair or unexpanded replacement of existing assets that are in need of repair;
- an increase in average service level of quantity or quality (compare water as an example);
- the elimination of a chronic servicing problem not created by growth; and
- providing services where none previously existed (generally considered for water or wastewater services).

This step involves a further reduction in the need, by the extent to which such an increase in service would benefit existing development. The level of services cap in 4.4 is related but is not the identical requirement. Sanitary, storm and water trunks are highly localized to growth areas and can be more readily allocated in this regard than other services such as services related to a highway, which do not have a fixed service area.



Where existing development has an adequate service level which will not be tangibly increased by an increase in service, no benefit would appear to be involved. For example, where expanding existing library facilities simply replicates what existing residents are receiving, they receive very limited (or no) benefit as a result. On the other hand, where a clear existing service problem is to be remedied, a deduction should be made accordingly.

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a County-wide system basis. For example, facilities of the same type may provide different services (i.e. leisure pool vs. competitive pool), different programs (i.e. hockey vs. figure skating) and different time availability for the same service (i.e. leisure skating available on Wednesday in one arena and Thursday in another). As a result, residents will travel to different facilities to access the services they want at the times they wish to use them, and facility location generally does not correlate directly with residence location. Even where it does, displacing users from an existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.

4.8.4 Reduction for Anticipated Grants, Subsidies and Other Contributions

This step involves reducing the capital costs necessary to provide the increased services by capital grants, subsidies and other contributions (including direct developer contributions required due to the local service policy) made or anticipated by Council and in accordance with various rules such as the attribution between the share related to new vs. existing development (O.Reg. 82.98 s.6). That is, some grants and contributions may not specifically be applicable to growth or where Council targets fundraising as a measure to offset impacts on taxes. Moreover, Gas Tax revenues are typically used to fund non-growth-related works or the non-growth share of D.C. projects, given that the contribution is not being made in respect of particular growth-related capital projects.



4.8.5 The 10% Reduction

Paragraph 8 of s.s. (1) of the D.C.A. requires that, "the capital costs must be reduced by 10 percent." This paragraph does not apply to water supply services, wastewater services, stormwater drainage and control services, services related to a highway, police and fire protection services. The primary services to which the 10% reduction does apply include services such as parks and recreation, libraries, childcare/social services, the Provincial Offences Act, ambulance, homes for the aged, and health.

The 10% is to be netted from the capital costs necessary to provide the increased services, once the other deductions have been made, as per the infrastructure costs sheets in Chapter 5.

4.9 Municipal-wide vs. Area Rating

This step involves determining whether all of the subject costs are to be recovered on a uniform municipal-wide basis or whether some or all are to be recovered on an area-specific basis. Under the D.C.A., it is now mandatory to "consider" area-rating of services (providing charges for specific areas and services), however, it is not mandatory to implement area-rating. Further discussion is provided in section 7.3.8.

4.10 Allocation of Development

This step involves relating the costs involved to anticipated development for each period under consideration and using allocations between residential and non-residential development and between one type of development and another, to arrive at a schedule of charges.