CITY OF OTTAWA 2009 DEVELOPMENT CHARGES BACKGROUND STUDY

OFFICE CONSOLIDATION INCORPORATING BACKGROUND STUDY (JUNE 8, 2009) AS AMENDED BY DEVELOPMENT CHARGES POLICY REPORT AS APPROVED BY COUNCIL ON JUNE 24, 2009

City of Ottawa in consultation with
Watson & Associates Economists Ltd.

PREPARED JULY 24, 2009

FOREWORD

This document is an Office Consolidation of the City of Ottawa 2009 Development Charge Background Study. The Background Study was dated June 8, 2009 and amended by the 2009 Development Charges Policy Report as approved by City Council on June 24, 2009.

This document has been prepared for administrative convenience purposes only. Pages that were revised post June 8, 2009 are labelled "REVISED".

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EXECUTIVE SUMMARY

1. Purpose of this Background Study

1.1 This Background Study has been prepared pursuant to Section 10 of the *Development Charges Act, 1997* (DCA) and, together with the proposed by-law, is being made available to the public, as required by Section 12 of the Act, more than two weeks prior to the public meeting of Council, which is to be held June 23, 2009.

1.2 The charges calculated represent those which can be recovered under the DCA, 1997, based on the City's capital spending plans and other assumptions which are responsive to the requirements of the DCA. A decision is required by Council, after receiving input at the public meeting, as to the magnitude of the charge it wishes to establish, for residential, commercial, industrial and/or institutional development. Property tax, user rate or other funding will be required to finance any potentially DC-recoverable capital costs which are not included in the charge which is adopted.

1.3 Other decisions involve finalizing development charge policy and the by-law, including exemptions, phasing in, indexing, applicability to the redevelopment of land, and the schedule of charges by type of land use. It is the purpose of the public meeting to obtain additional input on these matters.

2. The 2009 Development Charge Calculation

2.1 Table ES-1 presents the proposed schedule of residential charges, based on the costing and related assumptions contained in Appendices B & C, in comparison with the City's development charges per single detached unit that were in effect as of April 1, 2009, as this is illustrative of the adopted 2004 charge with indexing to date. (The 2008-09 indexing was subsequently rescinded as of April 22, 2009.) The calculated charges are reflected in the proposed by-law contained in Appendix J.

2.2 Table ES-1A sets out the charges applicable to three residential areas within the City (Figure ES-1):

- Inside Greenbelt;
- Outside Greenbelt;
- Rural.

REVISED (ii)

Table ES-1
City of Ottawa
Calculated Full Recovery Development Charges by Residential Unit Type

Development Location/Type	April 1, 2009 Charge	Calculated Charge	
		$	%
<u>INSIDE THE GREENBELT</u>			
Residential			
• Single and Semi-detached	11,880	15,446	100%
• Apartment (2+ bedrooms)	7,803	7,541	48.82%
• Apartment (less than 2 bedrooms)	4,955	6,123	39.64%
• Multiple, row and mobile dwelling	8,899	10,831	70.12%
Non-residential (per sq.ft. GFA)			
• General	10.65	15.84	
• Commercial	8.67		
• Limited Industrial	4.92		
<u>OUTSIDE THE GREENBELT</u>			
Residential			
• Single and Semi-detached	21,170	21,881	100%
• Apartment (2+ bedrooms)	14,987	12,420	56.76%
• Apartment (less than 2 bedrooms)	8,755	8,623	39.41%
• Multiple, row and mobile dwelling	16,426	16,603	75.88%
Non-residential (per sq.ft. GFA)			
• General	10.65	15.84	
• Commercial	8.67		
• Limited Industrial	4.92		
<u>RURAL</u>			
Residential			
• Single and Semi-detached	8,453	14,579	100%
• Apartment (2+ bedrooms)	5,629	7,639	52.40%
• Apartment (less than 2 bedrooms)	3,639	6,241	42.81%
• Multiple, row and mobile dwelling	6,632	11,504	78.91%
Non-residential (per sq.ft. GFA)			
• General	8.35	15.84	
• Commercial	6.79		
• Limited Industrial	3.85		

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FIGURE ES-1

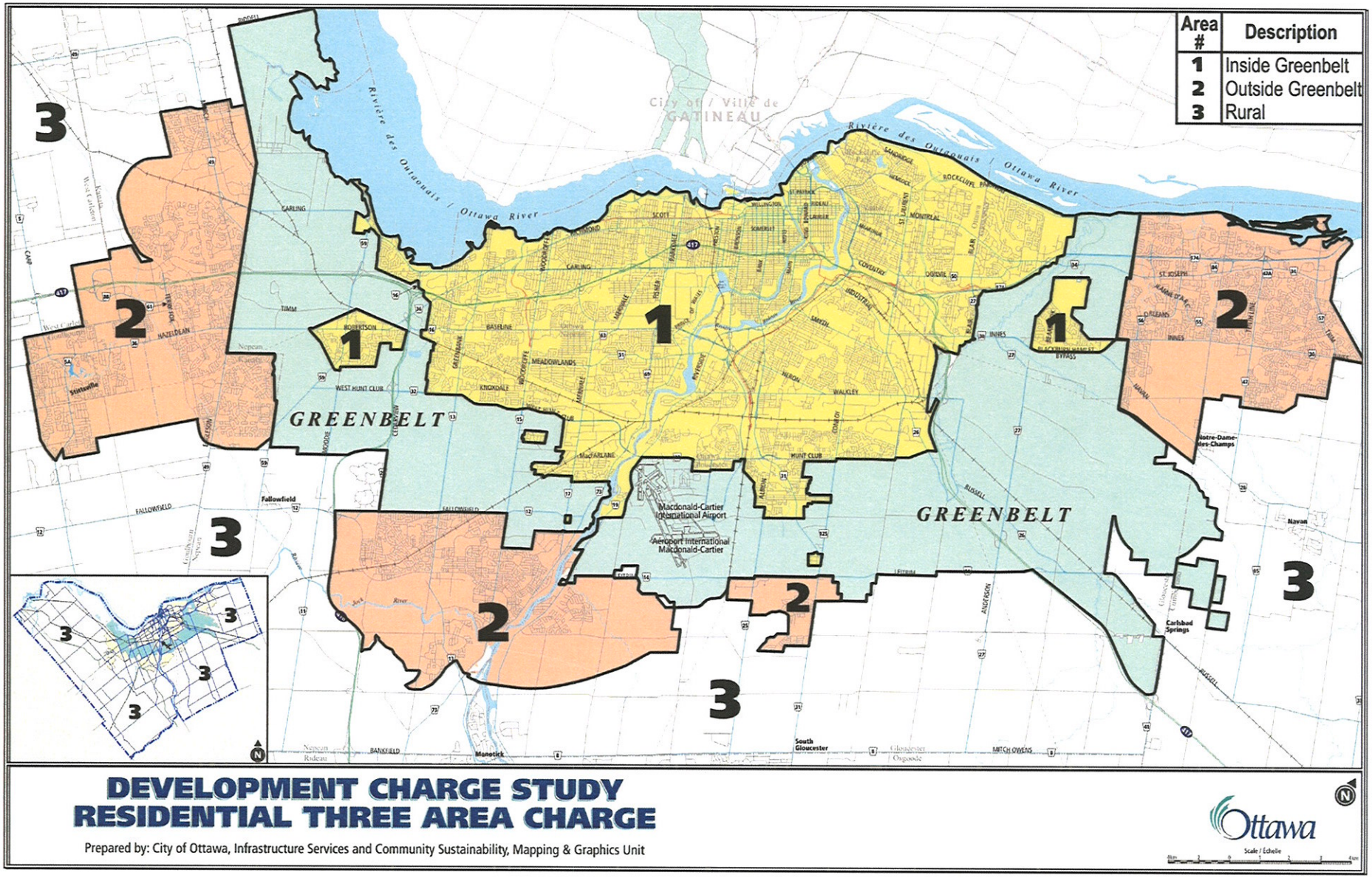
Area #
Description
1
Inside Greenbelt
2
Outside Greenbelt
3
Rural
GREENBELT
GREENBELT
Rivière des Outaouais / Ottawa River
City of / Ville de GATINEAU
Macdonald-Cartier International Airport
Aéroport International Macdonald-Cartier
DEVELOPMENT CHARGE STUDY
RESIDENTIAL THREE AREA CHARGE
Prepared by: City of Ottawa, Infrastructure Services and Community Sustainability, Mapping & Graphics Unit
Ottawa
Scale / Échelle

Table ES-1A
City of Ottawa
Comparison of April 1, 2009 Single Detached Development Charge vs. Calculated

1) Inside the Greenbelt

	Inside the Greenbelt as of April 1, 2009	Calculated			Difference
		City Wide	Inside the Greenbelt	Total	
Roads & Related Services	3,384	6,622	215	6,837	3,453
Sanitary Sewer	1,342	1,102	1,120	2,222	880
Water	344	734	450	1,184	840
Stormwater Drainage	1	39		39	38
Emergency Service (Fire)					
Police	118	27		27	-91
Public Transit	3,105	3,431		3,431	326
Parks Development	946		164	164	-782
Recreation Facilities	1,637	108	175	283	-1,354
Libraries	245	206	226	432	187
Child Care Facilities	50	77		77	27
Paramedic Service	21	47		47	26
Vehicles & Works Yards	526	439		439	-87
Affordable Housing Program		168		168	168
Corporate Studies	161	96		96	-65
Total	11,880	13,096	2,350	15,446	3,566

2) Outside the Greenbelt

	Outside the Greenbelt as of April 1, 2009	Calculated			Difference
		City Wide	Outside the Greenbelt	Total	
Roads & Related Services	9,740	6,622	1,312	7,934	-1,806
Sanitary Sewer	1,844	1,102	929	2,031	187
Water	1,039	734	1,287	2,021	982
Stormwater Drainage	1	39		39	38
Emergency Service (Fire)	196		280	280	84
Police	172	27	323	350	178
Public Transit	3,104	3,431		3,431	327
Parks Development	944		1,148	1,148	204
Recreation Facilities	2,839	108	3,331	3,439	600
Libraries	491	206	137	343	-148
Child Care Facilities	50	77		77	27
Paramedic Service	22	47		47	25
Vehicles & Works Yards	526	439		439	-87
Affordable Housing Program		168		168	168
Corporate Studies	202	96	38	134	-68
Total	21,170	13,096	8,785	21,881	711

3) Rural[1]

	Rural Serviced as of April 1, 2009	Calculated			Difference
		City Wide	Rural Serviced	Total Serviced	
Roads & Related Services	1,645	6,622	775	7,397	5,752
Sanitary Sewer	2,455	1,102		1,102	-1,353
Water		734	135	869	869
Stormwater Drainage		39	3	42	42
Emergency Service (Fire)	61		121	121	60
Police	145	27	222	249	104
Public Transit		1,144		1,144	1,144
Parks Development	945		988	988	43
Recreation Facilities	1,768	108	374	482	-1,286
Libraries	245	206	199	405	160
Child Care Facilities	50	77		77	27
Paramedic Service	22	47		47	25
Vehicles & Works Yards	526	439		439	-87
Affordable Housing Program		168		168	168
Corporate Studies	591	96	953	1,049	458
Total	8,453	10,809	3,770	14,579	6,126

[1] Rural calculations do not include the future water and sanitary sewer infrastructure requirements for villages.

These geographic areas are defined in Schedule "A" to the proposed DC by-law in Appendix J. A portion of the charge was calculated on a uniform, average City-wide basis, which produces a charge per single detached unit of $13,096 in each case ($2,287/SDU lower in the Rural area, as a result of the transit service adjustment). Other components of the charge were calculated based on costs and development quantities which are specific to each of the three geographic areas. Table 5-1 of the study outlines the distinction between these two sets of costs and the associated rationale.

2.3 A similar version of this methodology was applied in 2004. It reflects the City's desire to establish a development charge schedule which reasonably reflects servicing "benefits received" in the broad areas of the City. As a result, the single detached dwelling charges for fully serviced development Inside the Greenbelt are marginally above the Rural area charges and approximately 29% below the Outside the Greenbelt charges.

2.4 The proposed charges for a single detached unit are greater than the current development charges in all three cases, but the increase varies significantly. The increase is the highest in the case of Rural development, mainly for two reasons:

(i) The significant increase in the Rural cost allocation to reflect the City-wide attribution of arterial road costs which are designed to move employment commuters, shoppers and other traffic throughout the City;

(ii) The allocation of a portion (one-third) of transit costs to the Rural area.

The increase in the charge Inside the Greenbelt reflects the same road-related circumstances, as well as an increase in water and sanitary sewer charges based on assigning a growth component to replacement of existing sewers located in intensification areas. For further information, see Appendix H – Development Charges - Rehabilitation in Existing Areas.

It is noted that the development charge for large apartment units located Outside the Greenbelt actually decreased as a result of a significant decline in the updated occupancy statistics for that unit type.

2.5 Table ES-1B sets out the proposed non-residential development charge. This charge has been calculated entirely on a uniform City-wide basis. This was done in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible throughout the City.

Table ES-1B
City of Ottawa
Comparison of Current Non-residential General Development Charges vs. Calculated

1) City-Wide

	Non-res General as of April 1, 2009	Calculated City Wide	Difference
Roads & Related Services	6.34	9.01	2.67
Sanitary Sewer	0.86	1.83	0.97
Water	0.26	0.38	0.12
Stormwater Drainage	0.00	0.05	0.05
Emergency Service (Fire)	0.11	0.23	0.12
Police	0.13	0.31	0.18
Public Transit	2.04	4.02	1.98
Parks Development	0.07	0.08	0.01
Recreation Facilities	0.17	0.23	0.06
Libraries	0.04	0.04	0.00
Child Care Facilities	0.04	0.10	0.06
Paramedic Service	0.02	0.06	0.04
Vehicles & Works Yards	0.46	0.54	0.08
Affordable Housing Program	0.00	0.00	0.00
Corporate Studies	0.11	0.20	0.09
Total	10.65	17.08	6.43
adjustments for prior year's discounting [1]		1.24	Difference
DC net of discounting		15.84	5.19

1 Discount Costs $ 66,115,367
GFA (sq.ft.) 2009-31 53,241,503
= $ 1.24

H:\OTTAWA\DC 2008\[dc calculation (rds +5%ppc).xls]ES-1

The non-residential charge has increased by 49%, as compared to the April 1, 2009 "Non-Residential General" charge (from $10.65/sq.ft. of GFA to $15.84/sq.ft.). This is largely the result of the fact that the DC recoverable cost of Roads, Transit and Sanitary Sewers, which comprise the bulk of the non-residential charges, increased significantly.

2.6 Table ES-2 summarizes the City's Ten Year Development Related Capital Program and the deductions made thereto, in accordance with the DCA. In summary, the gross capital cost of the entire program is $6.67 billion. Of this amount, $2.54 billion has been determined to be DC-recoverable ($1.70 billion from residential development and $0.84 billion from industrial, commercial and institutional development (non-residential)). The difference between the gross and DC recoverable amounts is comprised of the following deductions, pursuant to the *Development Charges Act*:

- $ 250 million Beyond 10 year Service Level Cap
- $1,383 million Benefit to Existing Development
- $ 404 million Post Period Capacity
- $2,093 million Subsidies, Other Contributions, and 10% Statutory Deduction
  $4,130 million

2.7 The calculated charges by type of dwelling unit and by type of non-residential development are set out in the Schedules to the proposed by-law in Appendix J. They reflect geographic differences in persons per unit occupancy averages for various residential unit types, as well as the City's past practice with respect to differentiated non-residential development recoveries.

2.8 The City has taken into consideration past discounting and exemptions applied through the current by-law as part of making the calculation.

3. Policy Issues

3.1 A number of policy issues were addressed in the course of this DC by-law update, beyond those relating to the geographic quantum of the charge. These matters, which include exemptions, redevelopment, phasing in, etc., are discussed in Appendix G of the study and set out in the by-law in Appendix J.

3.2 A policy issue of over-riding importance relates to the potential impact of changes in the development charge quantum for various types of development and geographic locations within the City, on Ottawa's rate of development. The following observations are made in this regard:

TABLE ES-2
CITY OF OTTAWA
DC CAPITAL PROGRAM AND DEDUCTIONS
2009 $ (000's)

Service		Gross Costs	Ineligible re Level of Service	DEDUCTIONS: Benefit to Existing Development $	DEDUCTIONS: Grant/Subsidy/ Other Cost Share	DEDUCTIONS: Post Period Capacity	DEDUCTIONS: 10% Statutory Deduction	DC Recoverable [1]	DC Recoverable Split: Residential $	DC Recoverable Split: Non- Residential $
Roads and Related Services	City Wide	1,683,323		164,162	79,000	183,586		1,256,575	776,028	480,547
	Area Specific	179,812		3,801				176,011	111,051	64,961
Sanitary Sewer	City Wide	332,595		148,920		18,391		165,285	103,011	62,274
	Area Specific	646,375		473,288	51,333			121,754	89,835	31,919
Water	City Wide	99,724		17,933				81,791	72,379	9,412
	Area Specific	202,980		84,875		4,613		113,495	101,306	12,189
Stormwater Drainage	City Wide	24,904		19,773				5,131	3,181	1,950
	Area Specific	192		152				40	26	14
Emergency Service (Fire)		19,456		4,113				15,343	9,298	6,045
Police	City Wide	3,653	1,168	249				2,237	1,355	882
	Area Specific	26,992	6,392	2,041				18,558	11,246	7,312
Transit Corridors & Vehicles		2,881,261	61,614	359,792	1,910,611	197,399	27,455	324,391	196,581	127,810
Parks Development	Area Specific	54,297		3,553			5,004	45,740	43,453	2,287
Recreation Facilities	City Wide	13,003		6,607			639	5,757	5,471	286
	Area Specific	141,833		18,810			10,814	112,209	106,601	5,609
Libraries	City Wide	12,813		639			1,219	10,955	10,407	548
	Area Specific	212,024	171,200	30,911			987	8,926	8,480	446
Child Care Facilities		7,500		375			713	6,413	3,886	2,527
Paramedic Service		6,442	1,788	317			409	3,928	2,396	1,532
Vehicles & Works Yards		57,589	8,194	9,084			3,994	36,317	22,153	14,164
Affordable Housing Program		31,500		22,050			945	8,505	8,505	0
Corporate Studies	City Wide	11,542		3,430				8,112	5,013	3,099
	Area Specific	17,200		8,320				8,880	7,153	1,727
TOTAL DC		$6,667,010	$250,355	$1,383,195	$2,040,944	$403,988	$52,178	$2,536,353	$1,698,815	$837,539
		100.0	3.8	20.7	29.6	4.7	0.7	40.5	66.5	33.5

[1] Excludes allocation of DC reserve fund balance and prior year's discounting/exemption adjustment.

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a) The small proposed increase in the residential DC Outside the Greenbelt is not expected to measurably impact residential development prospects. However, the vast majority (eleven out of thirteen) of area-specific stormwater charges are applicable to Outside the Greenbelt developments and for a number of these, a significant DC increase is proposed.

b) Future development prospects are more likely to be influenced by the widespread recessionary conditions that may be less a factor in Ottawa than in other parts of the Province, but represent an important element with respect to consideration of DC phasing-in and other transition options, particularly in the case of non-residential development.

c) At the same time, the sole purpose of development charges is to fund the servicing costs of growth, thereby enabling that growth to proceed in a timely and efficient manner.

d) The proposed residential development charge in the Rural area represents a 72% increase from the 2009 indexed charge. The increase in the single detached residential charge Inside the Greenbelt is 30% from the 2009 indexed charge.

e) The increase in the full calculated non-residential charge is $5.19/sq.ft., which represents a 49% increase over the April 1, 2009 rate.

f) As of April 22, the 2008/09 indexing was rescinded and development charge rates were rolled back to their 2008 levels (April 1, 2008 to March 31, 2009). Historically, over the past five years, the yearly inflation percentage has been lower than the factors used in other municipalities throughout the Province. For example, the increase for the City of Ottawa DCs from 2004 to 2008 was approximately 17.7%. In comparison, the increase in the prescribed index used by the balance of the Province was approximately 30%.

3.3 It is proposed that the full calculated non-residential charge be imposed on development within the non-residential general category (e.g. retail and hotels). For other categories of non-residential development, the following reductions are proposed:

- Commercial/Industrial/Institutional – reduced to 81% of full calculated charge;
- Limited Commercial - reduced to 46% of the full calculated charge.

These percentage reductions are consistent with the adjustments made in the 2004 DC By-law for these categories of uses.

3.4 It is proposed that the increase in the rates be phased in, according to the following schedule:

- From the time of By-law inforce date to January 15, 2010 the rates in the current by-law will be in effect;
- January 16, 2010 to January 15, 2011 – current rates plus 25% of difference between current and calculated charges (revised to reflect the discounted non-residential charges, as discussed above);
- January 16, 2011 to January 15, 2012 – current rates plus 50% of difference between current and calculated charges;
- January 16, 2012 to January 15, 2013 – current rates plus 75% of difference between current and calculated charges;
- January 16, 2013 to by-law expiry – full calculated rates (including discounting as discussed above).

There are no exceptions to the phase-in of charges over the next four years. Phase-in amounts will vary annually due to indexation of the development charge rates starting on August 1, 2010.

3.5 The following policies relating to exemptions, credits and related matters, are proposed as changes to the existing by-law:

a) Affordable housing was added as a service for which development charges are imposed;

b) DC exemptions for non-profit health care facilities are to be limited to the capital cost that must be raised locally by the community;

c) The types of non-profit uses that will be exempt by resolution of Council was narrowed to include child care and long term care facilities, which are both municipally funded services;

d) The residential DC exemption within the designated areas fronting Isabella Street and Chamberlain Avenue, was removed;

e) Redevelopment credit provisions were narrowed to reduce the time between demolition and new construction to a maximum of five years, starting August 1, 2009;

f) As of August 1, 2011, redevelopment credits are not applicable in cases of demolition of development that is exempt from charges under the by-law;

g) The required distance from a light rail or transitway station was increased from 500 metres to 800 metres for apartment dwellings to qualify for the 50% reduction in the Roads and Related Services component of the charge;

h) Parking spaces allocated for visitors are not considered in the parking space calculations for the apartment reduction of the Roads and Related Services charge (under (g));

i) The City, in the future, will review the possibility of additional development charge exemptions specifically identified within an area defined under a community improvement plan, similar to the brownfields redevelopment policy currently in place.

3.6 The development charge calculations were completed using two methods: the conventional average cost method and the cash flow method, which also addresses cost inflation, reserve fund interest earnings, and carrying costs. The conventional average cost approach is widely used by municipalities and has been adopted herein. The cash flow approach yields virtually identical results if the capital expenditures for "hard services" in the second decade are deferred to the latter part of the time-frame. Otherwise this approach yields marginally higher charges than the average cost approach for sewer, water and roads and virtually the same charge for the other services.

4. Council Approvals Sought

4.1 Following an extensive consultation process, the Background Study and proposed DC by-law are being provided for information purposes, as part of that consultation process. At such time as that process is complete and final DC recommendations are made to Council, approval will be sought for:

- the 2009 DC by-law;
- the Background Study, including the development forecast, the development-related capital program, the DC calculation and associated material, subject to any Addendum which may be produced prior to by-law adoption.

5. Acknowledgements

5.1 The study team wishes to acknowledge, with appreciation, the guidance, input and considerable efforts of the Council Sponsors, the Internal Advisory Committee, the External Advisory Committee and those City staff from all departments who participated in the preparation of this Background Study, including the Study Co-ordinator, Gary Baker.

1. INTRODUCTION

1. INTRODUCTION

1.1 Development Charges Act (DCA) Background Study Requirements

The DCA requires that a development charge background study must be completed by City Council before passing a development charge by-law. The mandatory inclusions in such a study are set out in s.10 of the DCA and in s.8 of O.Reg. 82/98, and are as follows:

a) "the estimates under paragraph 1 of subsection 5(1) of the anticipated amount, type and location of development; (addressed in Chapter 3 of this report)

b) the calculations under paragraphs 2 to 8 of subsection 5(1) for each service to which the development charge by-law would relate; (addressed in Chapter 4 of this report)

c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service; (addressed in Appendix E of this report)

d) the following for each service to which the development charge relates:

1. The total of the estimated capital costs relating to the service.

2. The allocation of the costs referred to in paragraph 1 between costs that would benefit new development and costs that would benefit existing development.

3. The total of the estimated capital costs relating to the service that will be incurred during the term of the proposed development charge by-law.

4. The allocation of the costs referred to in paragraph 3 between costs that would benefit new development and costs that would benefit existing development.

5. The estimated and actual value of credits that are being carried forward relating to the service." (O.Reg. 82/98 s.8 and addressed in Chapter 4 of this report)

FIGURE 1-1
SCHEDULE OF KEY DEVELOPMENT CHARGE PROCESS DATES FOR THE CITY OF OTTAWA

	Step	Timing
1.	Drafting of Background Study and stakeholder consultation	July/08-April/09
2.	Initial review of preliminary DC calculation	April
3.	Additional consultation meetings	April/May
4.	Meeting Notice ad placed in newspaper(s)	By June 1
5.	Proposed By-law and Background Study Available to public	by June 8
6.	Statutory Public Meeting	June 23
7.	Council consideration of By-law adoption	June 24
8.	Existing By-law expiry (unless repealed earlier)	July 14
9.	Newspaper notice given of by-law passage	By 20 days after passage
10.	Last day for by-law appeal	40 days after passage
11.	City makes available pamphlet (where by-law not appealed)	by 60 days after inforce date

1.2 *Development Charges Act* Requirements

1.2.1 Introduction

1. Development charges are payments made by new development in Ottawa (and other municipalities) normally as part of the building permit approval and/or the subdivision/severance agreement process. These payments are made by all such new development, unless specifically exempt by the *Development Charges Act* or the City's DC by-law.

2. These payments are made for the initial capital requirements of providing services to new development anticipated over the next decade. All City-funded services are potentially eligible for DC funding, except those specifically excluded via the *Development Charges Act.*

3. "Capital" is defined in the DCA to include the municipal cost to acquire, lease, construct or improve land or facilities, including rolling stock (7+ year life), furniture and equipment (other than computer equipment), library materials as well as related study and financing costs.

4. The City of Ottawa and many of the former municipalities have imposed development charges under the DCA since 1991 and prior to that as lot levies pursuant to the *Planning Act.* The City's current DC by-law (No. 2004-298) came into effect on July 14, 2004 with a maximum life of 5 years.

5. This by-law provides for development charge payments which vary with the amount and type of new development, as detailed in Chapter 3.

6. These charges are indexed for inflation as of April 1 each year, based on the prescribed Statcan index in the form of the Statistics Canada Infrastructure Development Charge Price Index Catalogue 62-007 for Ottawa. The timing of the indexing of rates will be altered in the new by-law.

7. The monies collected under a DC by-law are maintained in separate reserve funds, one for each of the services involved.

8. Each development charge paid is allocated, as a statutory requirement, to those reserve funds, in accordance with the development charge for each service. It is also required that the monies only be expended for the purposes for which the DC was calculated.

9. In calculating the charge, it is necessary to:

   - establish a new development forecast for population and housing, and for employees and floor area;
   - determine and cost the additional services such new development will require and ensure that the program has Council approval;
   - make the cost deductions required by the Act with respect to service level, benefit to existing development, excess capacity, grants and contributions, the statutory 10%, etc.;
   - calculate development charges by type of use and document this in a Background Study and by-law;
   - take the study and proposed by-law through a public process, seeking Council approval thereof.

10. Development charges represent a significant capital funding source for many services and serve to provide a portion of funding for designated projects.

1.2.2 Development Charge Prerequisites

As per the *Development Charges Act, 1997*, the City can impose development charges for:

1. A City service and funding responsibility other than:

   - cultural or entertainment facilities such as museums, theatres and art galleries;
   - tourism facilities, including convention centres;
   - parkland acquisition;
   - hospital provision;
   - waste management services;
   - Municipal/local board general administration headquarters.

2. A service which will experience an increase in capital needs at least partially attributable to residential and/or non-residential growth in Ottawa mid 2009-2019 (or a 2009-31 planning period in the case of "hard" services).

3. A service for which City Council has or will (as part of the DC process) approve(d) a capital forecast which includes capital capacity expansion projects as per para. 2.

4. Such capital capacity expansion projects are not fully funded by grants, subsidies or developer contributions or other contributions.

5. Such capital projects involve the acquisition, lease, construction or improvement of land, buildings, including furniture and equipment, studies and borrowing costs (as well as library materials).

6. Such capital projects do not include computer equipment and rolling stock with an estimated useful life of less than 7 years.

7. Such capital costs don't relate to a time beyond the next decade (except in the case of roads, water, waste water, fire, stormwater management and police).

8. Such capital costs don't serve to increase the future (per capita/employee) level of service beyond the average attained in Ottawa over the 1999-2008 period.

1.2.3 The following tabular text sets out the method that must be used to determine development charges. The underlining has been added to the quotations for clarification/ emphasis and is not part of the statute or regulation quoted on the left side of the page. The DC calculation process is also summarized schematically in Figure 1-2 which follows.

SUMMARY OF STATUTORY DEVELOPMENT CHARGE CALCULATION REQUIREMENTS

s.s.5(1) of the DCA (and associated Regulations) Para-graph		Commentary
1.	"The anticipated amount, type and location of development, for which development charges can be imposed, must be estimated."	Virtually all municipalities forecast all development (including DC-ineligible) in the first instance. That development is used as the denominator in the DC calculation with the full eligible cost of servicing all such development used as the numerator. That way, growth-related servicing costs are equitably spread over all benefiting development, the municipality does not recover DCs from exempt development and this would ensure that the requirements of s.s.5(6)3 have been met. That is, capital costs have not been offloaded from one type of development to another.
2.	"The increase in the need for service attributable to the anticipated development must be estimated for each service to which the development charge by-law would relate."	This step involves estimating the additional service requirement, individually for police, roads, etc., that is needed by the development increment in paragraph 1. The anticipated development in para. 1 must correspond to the service attribution in para. 2. This involves removing statutorily ineligible development (i.e. municipalities, schools, specified industrial expansions, specified residential intensification and other statutorily exempt public uses) and the servicing cost thereof. However, this would be very difficult to accomplish, particularly because numerous unspecified geographic locations are involved for such development, which makes the servicing cost difficult to identify. As a result, the total cost/total development approach

s.s.5(1) of the DCA (and associated Regulations)		Commentary
		outlined above is used and has the same effect on the DC quantum.
3.	"The estimate under paragraph 2 may include an increase in need only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met."[1] O.Reg. 82/98 s.3. "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 the council has been approved by the council."	The capital forecast underpinning the DC calculation must be formally approved by Council in one of the ways indicated in the Regulation.
4.	"The estimate under paragraph 2 must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 10-year period immediately preceding the preparation of the background study required under section 10.[1] The estimate also must not include an increase in the need for service that relates to a time after the 10-year period immediately following the preparation of the background study unless the service is set out in subsection (5)."	This provision creates a "service level cap" equal to the cost of providing service to the "anticipated development," consistent with the 10-year historical average level of service. In accordance with s.s.5(1)4, services such as emergency medical services, etc., are restricted to a maximum 10-year planning horizon. s.s.5(5) lists water, waste water, storm water, road, police and fire services. These are not subject to a 10 year planning period cap. Services other than those excluded in s.s.2(4), may be defined by the municipality and, in some cases, grouped into "service categories" for purposes of reserve funds and credits (as per s.7).

[1] The Act notes that the provisions may be further governed by regulations.

s.s.5(1) of the DCA (and associated Regulations)	Commentary
O.Reg. 82/98 s.4(1) "For the purposes of paragraph 4 of subsection 5(1) of the Act, 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." s.s.4(1.1) provides that in determining the quality of a service, the replacement cost, exclusive of any allowance for depreciation, shall be the amount used. s.s.4(2) addresses the service level in an excluded geographic area where a service is not provided. s.s.4(4) limits the service level in part of a municipality to the level otherwise applicable to the full municipality. s.s.4(3) modifies the service level cap where a higher level is required by another Act. O.Reg. 206/04 amended s.4 of O.Reg. 82/98 by adding the following subsection: "(1.1) In determining the <u>quality</u> of a service under subsection (1), the <u>replacement cost</u> of municipal capital works, exclusive of any allowance for depreciation, shall be the amount used. (underlining added)	Two "level of service" considerations must be taken into account in satisfying compliance re the 10-year historical average level of service cap. These considerations involve "quantity" (e.g. floor space/capita) and "quality" (e.g. cost per s.m. of floor space). potentially affects area-specific charges affects water and waste water requirements in particular The Reg. clarifies that the quality level of service measure is to be based on the undepreciated replacement cost of municipal capital works.
5. "The increase in the need for service attributable to the anticipated development must be <u>reduced</u> by the part of that increase that can be met <u>using the municipality's excess capacity, other than</u> excess capacity that the council of the municipality has indicated an intention would be paid for by new development."[2] O.Reg. 82/98 s.5. "For the purposes of paragraph 5 of subsection 5(1) of the Act, excess capacity is uncommitted excess capacity	"Uncommitted excess capacity" is available capacity that obviates (part of) the need for new projects. It is different than "Post Period Capacity," which is <u>not</u> needed by development during the planning period and is provided for the use of subsequent, i.e. post-2019 development, which can be required to fund it through future DCs. The Reg. explains the circumstances under which

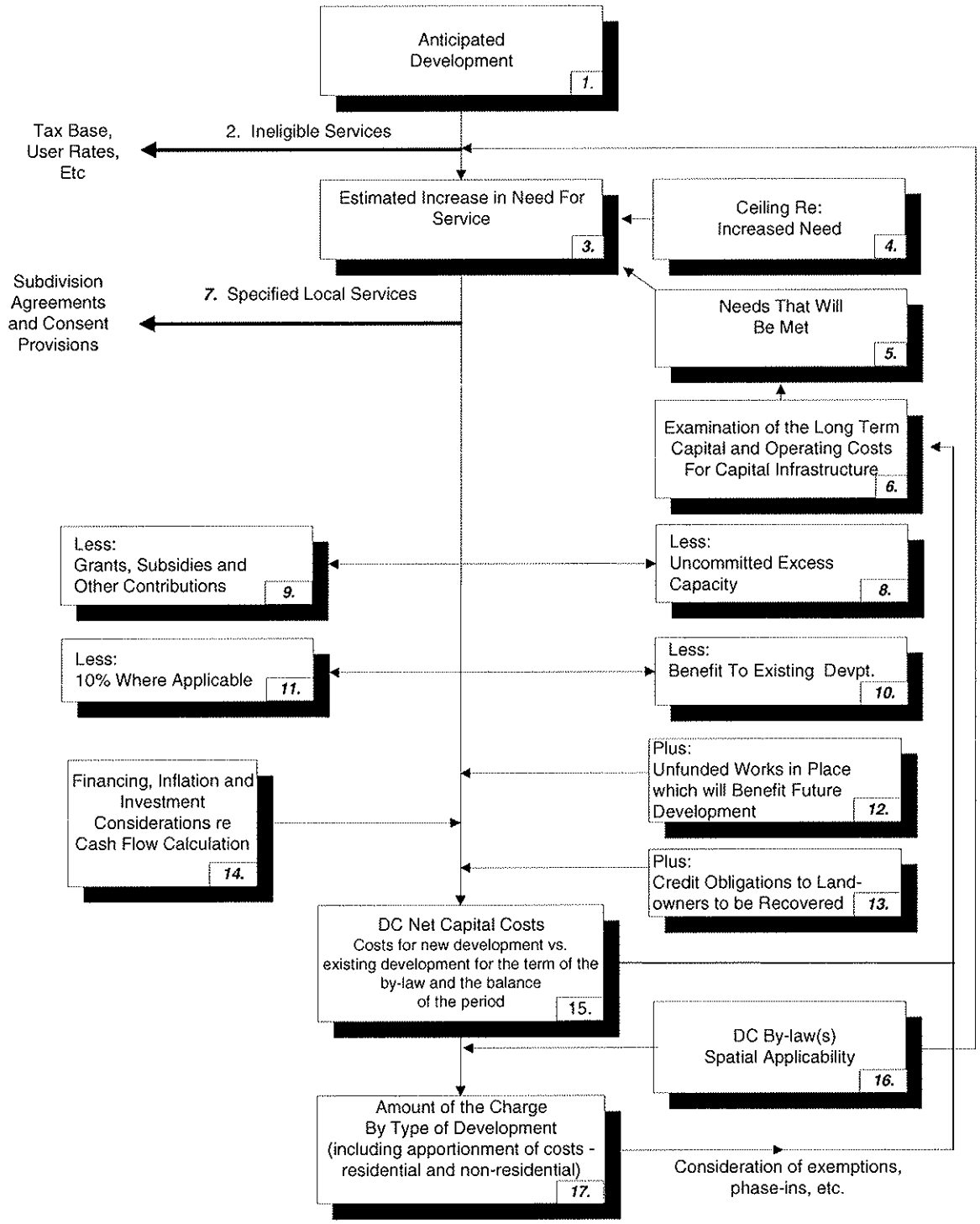
[2] The Act notes that the provisions may be further governed by regulations.

s.s.5(1) of the DCA (and associated Regulations)		Commentary
	unless, either before or at the time the excess capacity was created, the council of the municipality expressed a clear intention that the excess capacity would be paid for by development charges or other similar charges."	(part of) the cost of "committed excess capacity," (i.e. infrastructure in the ground from prior DC by-laws or otherwise), can be recovered via future DC's.
6.	"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."[1] Note: no regulatory clarification has been provided.	Existing development benefits from: • the repair or unexpanded replacement of existing assets; • an increase in average service level or existing operational efficiency; • the elimination of a chronic servicing problem not created by growth; • providing services where none previously existed (e.g. water service).
7.	"The capital costs necessary to provide the increased services must be estimated. The capital costs must be reduced by the reductions set out in subsection (2). What is included as a capital cost is set out in subsection (3)."[1] O.Reg. 82/98 s. 6 indicates that: Unless the person making the grant, subsidy, etc., was specific as to how it is to be applied, the contribution is to be shared between growth and non-growth project components in proportion to the way in which the costs were allocated in s.s.5(1)6. s.s.5(3) defines capital costs to include: • the acquisition or lease of (an interest in) land; • construction, improvement, acquisition or lease (capital component only) costs for buildings/structures/facilities; • 7+ year useful life rolling stock; • FFE, other than computer equipment; • library materials; • studies re above; • DC Background Studies; and • interest on related borrowings.	s.s.5(2) refers to capital grants, subsidies and other contributions made to a municipality or that Council anticipates will be made in respect of the capital costs. These costs exclude "local services" related to a plan of subdivision or a consent approval, to be installed or paid for by the owner (s.s.2(5)). Includes debt payments related to previously constructed growth-related works.

s.s.5(1) of the DCA (and associated Regulations)		Commentary
8.	"The capital cost must be reduced by 10 per cent. This paragraph does not apply to services set out in subsection (5)."	For example, the 10% reduction does apply to Parks, Recreation, Libraries, Transit, Child Care and EMS, for example. The purpose of this reduction is undefined, beyond the Province's expressed wish in 1997 to moderate development charge quantum. The exclusion of various services under s.s.2(4) serves a similar purpose. (i.e. Cultural/entertainment facilities, including museums, theatres and art galleries; tourism facilities, including convention centres; parkland acquisition; public hospitals, waste management services; and general administration headquarters for municipalities/local boards).
9.	"Rules must be developed to determine if a development charge is payable in any particular case and to determine the amount of the charge, subject to the limitations set out in subsection (6)." s.s.5(6): "The rules developed under paragraph 9 of subsection (1) to determine if a development charge is payable in any particular case and to determine the amount of the charge are subject to the following restrictions: 1. The rules must be such that the total of the development charges that would be imposed upon the anticipated development is less than or equal to the capital costs determined under paragraphs 2 to 8 of subsection (1) for all the services to which the development charge by-law relates. 2. If the rules expressly identify a type of development they must not provide for the type of development to pay development charges that exceed the capital costs, determined under	These are mandatory DC by-law inclusions as to how the charge is to be applied to development types and circumstances. These are three over-riding tests to be met by the DC by-law. A municipality cannot collect more than the calculated cost for each service (if the amount of development and resultant revenue outpaces the forecast, then address via a reserve fund deduction in the DC calculation in the next round or other appropriate means). A municipality cannot offload the cost of servicing one type of development onto another type. e.g. Industrial servicing costs cannot be transferred to residential

s.s.5(1) of the DCA (and associated Regulations)	Commentary
paragraphs 2 to 8 of subsection (1), that arise from the increase in the need for services attributable to the type of development. However, it is not necessary that the amount of the development charge for a particular development be limited to the increase in capital costs, if any, that are attributable to that particular development. 3. If the development charge by-law will exempt a type of development, phase in a development charge, or otherwise provide for a type of development to have a lower development charge than is allowed, the rules for determining development charges may not provide for any resulting shortfall to be made up through higher development charges for other development."	development and single detached unit servicing costs cannot be transferred to apartments. It is not necessary that the average municipal-wide per unit servicing costs funded by the DC reflect the needs of any particular development project. Provides further clarification on the inability of the by-law to offload cost recovery from one type of development to another, in this case from exempt or discounted development to non-exempt development.
10. "The rules may provide for full or partial exemptions for types of development and for the phasing in of development charges. The rules may also provide for the indexing of development charges based on the prescribed index."	Optional by-law inclusions such as authority to set rules on discretionary exemptions, phasing in of DCs and indexing of DCs.

FIGURE 1-2
THE PROCESS OF CALCULATING A DEVELOPMENT CHARGE UNDER THE DCA, 1997



2. CURRENT CITY OF OTTAWA DEVELOPMENT CHARGE POLICY

2. CURRENT CITY OF OTTAWA DEVELOPMENT CHARGE POLICY

2.1 Schedule of Charges

On July 14, 2004, the City of Ottawa passed By-law No. 2004-298 under the *Development Charges Act, 1997*. The by-law came into effect on July 14, 2004. It imposes development charges on residential, commercial and industrial uses. The rates in effect for the first period and as of April 1, 2009 are as follows.

TABLE 2-1
CITY OF OTTAWA
SCHEDULE OF DEVELOPMENT CHARGES (SCHEDULES B & C)

USE	EFFECTIVE JULY 14, 2004			EFFECTIVE APRIL 1, 2009[4]			
	Inside Greenbelt[1]	Outside Greenbelt[1]	Rural[1]	Inside Greenbelt[1]	Outside Greenbelt[1]	Rural[1]	
						Serviced	Unserviced
1. **Residential Charges (per dwelling unit)**							
• Single and Semi-detached[2]	$9,534	$16,993	$6,784	$11,880	$21,170	$8,453	$5,998
• Apartment (2+ Bedrooms)[3]	6,262	12,029	4,517	7,803	14,987	5,629	3,988
• Apartment (less than 2 Bedrooms)	3,978	7,028	2,921	4,955	8,755	3,639	2,587
• Multiple, Row and Mobile Dwelling	7,142	13,182	5,324	8,899	16,426	6,632	4,717
2. **Non-residential Charges (per sq.ft. of GFA)**							
• General Use (All retail uses, plus hotels, motels and temporary accommodation structures)	$8.54		$6.70	$10.65		$8.35	$7.49
• Commercial, Industrial, Institutional Use ("Institutional" includes hospitals, nursing homes, homes for the aged, schools (excl. dwelling units). "Industrial" is generally as defined in O.Reg. 82/98 with the exception of "limited." "Commercial" is all other non-residential uses not covered by other categories, including office)	6.95		5.45	8.667		6.79	6.08
• Industrial (Limited) Use (Industrial uses which are not high technology)	3.95		3.09	4.92		3.85	3.45

[1] As per Schedule A, which follows.

[2] The DC for a rooming or boarding house is the single family dwelling rate X the number of persons it is designed to accommodate ÷ 4 and rounded to the nearest lower whole number.

[3] Inclusive of non-apartment dwellings with 3+ bedrooms and 1,000 sq.ft. of GFA or less.

[4] The indexing increase which came into effect on April 1, 2009 was subsequently rescinded on April 22, 2009.

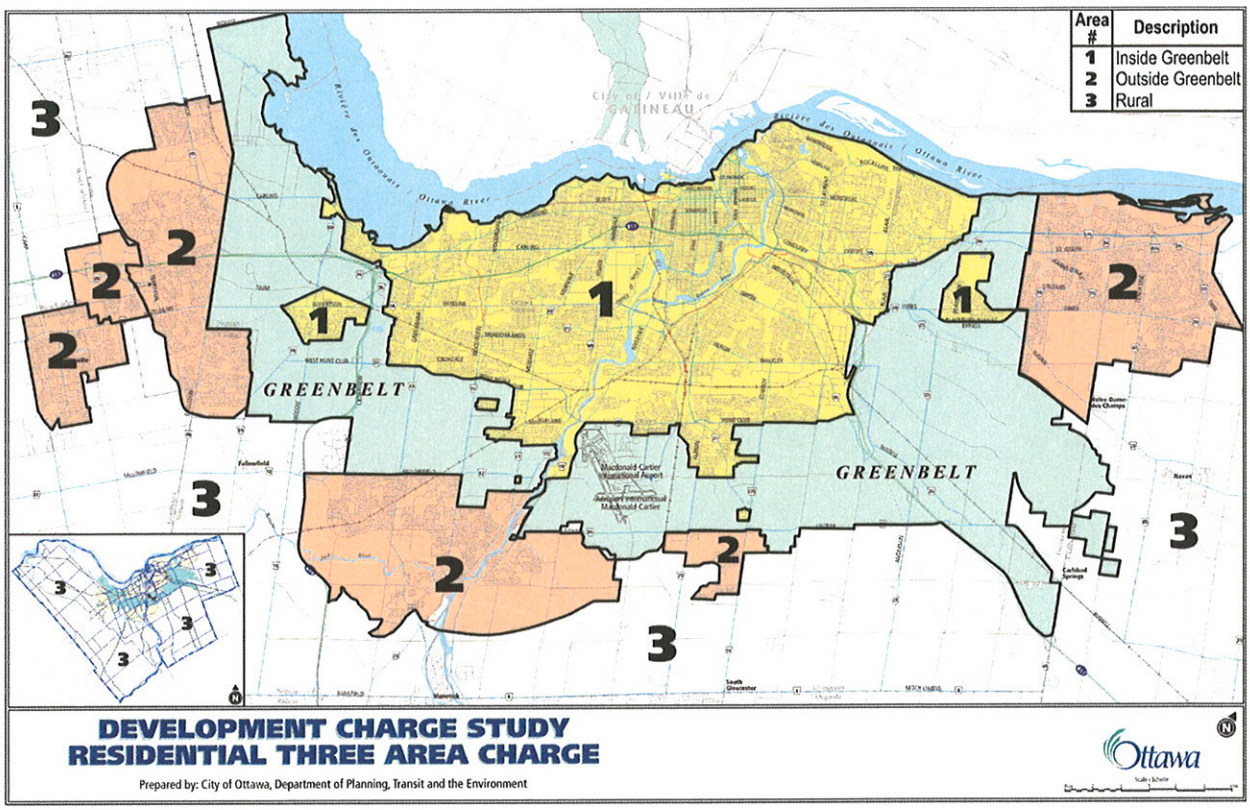
2.2 Services Covered

The following are the services covered under By-law No. 2004-298:

- Roads and Structures;
- Waste Water (Sanitary);
- Water;

SCHEDULE "A"

DESIGNATED AREAS OF THE CITY OF OTTAWA



- Stormwater Drainage (including roads and maintenance equipment, but excluding storm water management facilities and accessory sewers);
- Police;
- Emergency Services (Fire);
- Transitways, Transit Vehicles and Buildings;
- Parks Development;
- Recreation;
- Libraries;
- Child Care;
- Works and Yards;
- Paramedic Service;
- Growth Studies. (s.s.3(2))

2.3 Timing of DC Calculation and Payment

Development charges are calculated and payable upon issuance of a building permit with respect to a building or structure to which the development charge applies. (s.s.4(1))

The City may provide that the development charge is payable immediately upon the parties entering into a subdivision or consent agreement. Further, an owner and the City may enter into an agreement with respect to full or partial payment or the provision of services in lieu and the terms thereof prevail over the by-law provisions. (s.s.14(2))

2.4 Indexing

By-law 2004-298 provides for the mandatory annual indexing of the charges on April 1st of each year commencing on April 1, 2006 (with pro-rating to December 31, 2004 in the first year), based on the most recent annual change in the Statistics Canada Infrastructure Development Charge Price Index, Catalogue 62-007 for Ottawa. Table 2-2 provides a breakdown of the charges by service as of April 1, 2009. (s.s.16(1)). Overall, the City's index has been consistently lower on a yearly basis as well as over the five-year term of the by-law when compared to the index used by the other municipalities in the Province, "The Statistics Canada Construction Price Statistics."

CITY OF OTTAWA
DEVELOPMENT CHARGES (AS OF APRIL 1, 2009)[2]

SERVICE	PER SINGLE/SEMI-DETACHED UNIT				PER SQ.FT. OF NON-RES. GENERAL USE		
	Inside Greenbelt	Outside Greenbelt	Rural			Rural	
			Serviced	Unserviced	Urban	Serviced	Unserviced
Roads and Structures	3,384	9,740	1,645	1,645	6.34	6.34	6.34
Sanitary (Waste Water)	1,342	1,844	2,455	0	0.86	0.86	0.00
Water	344	1,039	0	0	0.26	0.00	0.00
Storm Water Drainage	1	1	0	0	0.00	0.00	0.00
Police	118	172	145	146	0.13	0.13	0.13
Emergency Services (Fire)	0	196	61	61	0.11	0.11	0.11
Transitway, Transit Vehicles and Buildings[1]	3,105	3,104	0	0	2.04	0.00	0.00
Parks Development	946	944	945	944	0.07	0.07	0.07
Recreation	1,637	2,839	1,768	1,768	0.17	0.17	0.17
Libraries	245	491	245	245	0.04	0.04	0.04
Child Care	50	50	50	50	0.04	0.04	0.04
Emergency Medical Services	21	22	22	22	0.02	0.02	0.02
Works Yards	526	526	526	526	0.46	0.46	0.46
Growth Studies[1]	161	202	591	591	0.11	0.11	0.11
TOTAL	11,880	21,170	8,453	5,998	10.65	8.35	7.49

[1] Divided into two separate sub-components.

[2] The indexing increase which came into effect on April 1, 2009 was subsequently rescinded on April 22, 2009.

2.5 Redevelopment Credit

Where development occurs on a site which has or will involve the demolition of a pre-existing building in receipt of the same services available to the building to be constructed, a DC credit will be provided, such that only the net increase in residential dwelling units or non-residential gross floor area is charged.

In the case of a conversion of a non-residential to residential use, the credit is in the amount of the theoretical development charges that would have been payable had a building permit be issued to construct the non-residential use being converted. (s.8)

2.6 Non-Statutory Exemptions

The following discretionary exemptions[1] are provided under By-law No. 2004-298 (subject to more detailed and specific definitions in some cases):

- residential building permits not resulting in the creation of an additional dwelling unit (s.s.7(a));
- places of worship (s.s.7(e));
- churchyard, cemetery or burying grounds (s.s.7(f));
- non-residential buildings used for bona fide agricultural purposes (s.s.7(g));

[1] In addition to the statutory exemptions pertaining to education and municipal structures, residential intensification and industrial expansions.

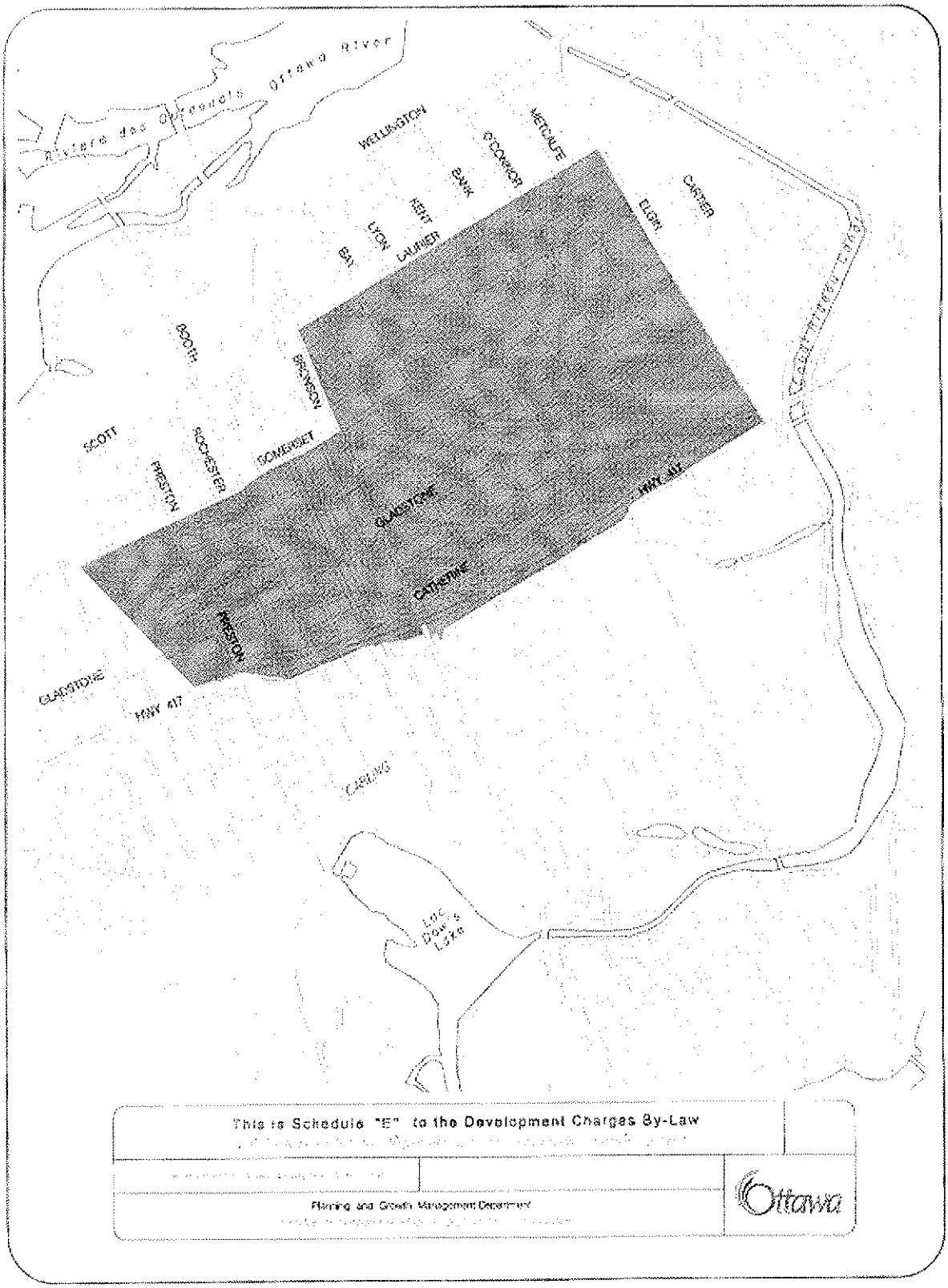
- farm retirement lots (s.s.7(h));
- non-residential development of less than 10 s.m. of GFA (s.s.7(i));
- temporary buildings removed within two years (s.s.7(l));
- a garden suite removed within 10 years (s.s.7(m));
- a gardening and related sales building only in place during the March 15-October 14 interval (s.s.7(n));
- non-profit housing subject to use conditions (s.s.7(n));
- non-profit health care facility (s.s.7(p));
- development on farm help lots severed prior to July 9, 1997 (s.s.7(q));
- all residential development within the area in Schedule "E," bounded generally by Hwy. 417, Elgin, Laurier, Bronson, Somerset (s.s.7(r));
- where specifically authorized by a Council resolution, development on:
    - land owned by a non-profit corporation;
    - contaminated land;
    - land where a public facility is being provided;
    - residential development fronting on Isabella and Chamberlain, between Bronson and Elgin (s.s.7(s-v));
- 50% of the roads and structures component of the DC is not payable for apartments where the nearest exterior wall is within a 500 m radius of a light rail or transitway station and the parking provided does not exceed one place per dwelling unit.

2.7 Transition Measures

Development for which a complete building permit application was filed by September 1, 2004 and for which a building permit was obtained before December 1, 2004 shall be subject to the lower of the total rates in effect as of July 13, 2004 under the then-applicable charges and those enacted on July 14, 2004.

2.8 Services in Lieu/Oversizing

Where a person is permitted by the City to install pipe works in a Greenfield development for storm, water or sanitary infrastructure as well as (major) collector or arterial roads, the person will be reimbursed in accordance with the oversize costs (as indexed annually) beyond 1,650 mm, 405 mm, 375 mm and 11 m for storm, water, sanitary and road infrastructure, respectively, with access to a contingency provision, based on the decision of the Deputy City Manager.


Rivière des Outaouais
Ottawa River
WELLINGTON
BANK
METCALFE
O'CONNOR
KENT
LYON
BAY
LAURIER
ELGIN
CARTIER
BOOTH
BRONSON
SCOTT
ROCHESTER
SOMERSET
PRESTON
GLADSTONE
CATHERINE
HWY 417
CARLING
Lac Dow's Lake
This is Schedule "E" to the Development Charges By-Law
Planning and Growth Management Department
Ottawa

3. ANTICIPATED DEVELOPMENT IN OTTAWA

3. ANTICIPATED DEVELOPMENT IN OTTAWA

3.1 Requirements of the Act

Subsection 5(1) of the DCA sets out the method that must be used to determine development charges. The first step states that:

> "The anticipated amount, type and location of development, for which development charges can be imposed, must be estimated."

Steps 2 and 5 go on to refer to "the increase in need for service attributable to the anticipated development..." Thus, the estimate of anticipated development is an important starting point to the process.

The requirement of the Act is for a development forecast, which refers to residential, commercial, industrial and institutional development. Such development generates increased service needs, via its occupancy and use, which is measured in terms of households, population, employment and visitors (tourists, customers, patrons and suppliers). This chapter therefore addresses both the anticipated increase in development and the users thereof. It covers all forms of development, whether or not they are included in the schedule of development charges, in order to avoid transferring the servicing cost responsibility of exempt development to non-exempt development.

The Act requires that the amount, type and location of development be estimated. "Timing" is not referenced, other than indirectly, in section 8 para 3 of O.Reg. 82/98, where capital costs to be incurred during the term of the proposed development charge by-law, must be set out. Also, s.s.5(1)4 of the Act restricts the estimate of the increase in the need for services other than water supply, waste water, storm water drainage and control, electrical power, police and fire protection, to a maximum of 10 years following the preparation of the background study. Accordingly, this chapter addresses the anticipated timing of development.

3.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast

The growth forecast contained in this Background Study provides the anticipated development for which the City of Ottawa will be required to provide services over a ten year time horizon (2009-2019) and the longer planning horizon (to 2031) applicable to sewer, water and road works. The basis for this particular forecast, which was prepared by City staff on a City-wide and area-specific basis, is outlined in detail in Appendix A. The discussion provided therein,

summarizes the anticipated growth for the City and describes the basis for the forecast which is summarized in Table 3-1.

TABLE 3-1
SUMMARY OF CITY OF OTTAWA GROWTH FORECASTS

		Mid-2009		Mid-2019		Mid-2031
City-wide Population	- Total	902,140		1,009,659		1,135,840
	- Increment		107,519		126,181	
City-wide Housing Units	- Total	368,883		431,217		497,043
	- Increment		62,334		65,826	
City-wide Employment	- Total	558,277		628,120		703,000
	- Increment		69,843		74,880	
City-wide Floor Space (sq.ft.)	- Total	N/A		N/A		N/A
	- Increment		25,972,256		27,269,247	

4. THE RESULTANT INCREASE IN THE NEED FOR SERVICE

4. THE RESULTANT INCREASE IN THE NEED FOR SERVICE

4.1 Introduction

This chapter addresses the requirements of s.s.5(1) of the DCA, 1997 with respect to the establishment of the estimated increased need for service attributable to the anticipated development, which underpins the development charge calculation. These requirements were detailed in section 1.2 above.

4.2 Services Potentially Involved

Table 4-1 lists the full range of municipal service categories that are eligible for inclusion in the DC calculation.

A number of these services are referenced in s.s.2(4) of the DCA, 1997 as being ineligible for inclusion in development charges. These are shown as "ineligible" on Table 4-1. In addition, two ineligible costs defined in s.s.5(3) of the DCA are "computer equipment" and "rolling stock with an estimated useful life of (less than) seven years..." In addition, local water, sanitary sewer, stormwater management and road works are recovered separately under subdivision agreements and related means (as are other local services). Services which are potentially eligible for inclusion in the City development charge are indicated with a "√."

4.3 The Increase in the Need for Service

The development charge calculation commences with an estimate of "the increase in the need for service attributable to the anticipated development," for the services 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 (and s.3 of the associated regulation), which requires that Municipal 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 normally be applicable.

TABLE 4-1
CATEGORIES OF MUNICIPAL SERVICES
TO BE ADDRESSED AS PART OF THE CALCULATION

CATEGORIES OF MUNICIPAL SERVICES	ELIGIBILITY FOR INCLUSION IN THE DC CALCULATION	SERVICE COMPONENTS	MAXIMUM POTENTIAL DC RECOVERY %
1. Services Related to a Highway	✓	1.1 Arterial roads	100
	✓/Dev. Agreements	1.2 Collector roads	100
	Dev. Agreements	1.3 Local roads	0
	✓/Dev. Agreements	1.4 Traffic signals	100
	✓/ Dev. Agreements	1.5 Sidewalks and streetlights	100
	✓/Dev. Agreements	1.6 Urban Design	90
2. Other Transportation Services	✓	2.1 Transit vehicles	90
	✓	2.2 Other transit infrastructure	90
	✓	2.3 Municipal parking spaces - indoor	90
	✓	2.4 Municipal parking spaces - outdoor	90
	✓	2.5 Works Yards	100
	✓	2.6 Rolling stock[1]	100
	n/a	2.7 Ferries	90
	n/a	2.8 Airport facilities	90
3. Storm Water Drainage and Control Services	✓/Municipal Act[2]	3.1 Main channels and drainage trunks	100
	✓/Dev. Agreements[2]	3.2 Channel connections	100
	✓/Dev. Agreements[2]	3.3 Retention/detention ponds	100
4. Fire Protection Services	✓	4.1 Fire stations	100
	✓	4.2 Fire pumpers, aerials and rescue vehicles	100
	✓	4.3 Small equipment and gear	100
5. Outdoor Recreation Services (i.e. Parks and Open Space)	Ineligible	5.1 Acquisition of land for parks, woodlots and ESAs	0
	✓	5.2 Development of local parks	90
	✓	5.3 Development of district parks	90
	✓	5.4 Development of City-wide parks	90
	✓	5.5 Development of special purpose parks	90
	✓	5.6 Parks rolling stock[1] and yards	90
6. Indoor Recreation Services	✓	6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land)	90
	✓	6.2 Recreation vehicles and equipment[1]	90
7. Library Services	✓	7.1 Public library space (incl. furniture and equipment)	90
	✓	7.2 Library materials	90
8. Electrical Power Services	Ineligible	8.1 Electrical substations	0
	Ineligible	8.2 Electrical distribution system	0
	Ineligible	8.3 Electrical system rolling stock[1]	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
	Ineligible	9.2 Tourism facilities and convention centres	0

[1] with 7+ year life time
computer equipment excluded throughout
[2] via area-specific charges

CATEGORIES OF MUNICIPAL SERVICES	ELIGIBILITY FOR INCLUSION IN THE DC CALCULATION	SERVICE COMPONENTS	MAXIMUM POTENTIAL DC RECOVERY %
10. Waste Water Services	✓ ✓ Dev. Agreements ✓	10.1 Treatment plants 10.2 Sewage trunks 10.3 Local systems 10.4 Vehicles and equipment	100 100 0 100
11. Water Supply Services	✓ ✓ Dev. Agreements	11.1 Treatment plants 11.2 Distribution systems 11.3 Local systems	100 100 0
12. Waste Management Services	Ineligible Ineligible Ineligible	12.1 Collection, transfer vehicles and equipment 12.2 Landfills and other disposal facilities 12.3 Other waste diversion facilities	0 0 0
13. Police Services	✓ ✓ ✓	13.1 Police detachments 13.2 Police rolling stock[2] 13.3 Small equipment and gear	100 100 100
14. Homes for the Aged	✓	14.1 Homes for the aged space	90
15. Day Care	✓	15.1 Day care space (owned or leased)	90
16. Health	N/A	16.1 Health department space	90
17. Social Services	N/A	17.1 Social service space	90
18. Ambulance	✓ ✓	18.1 Ambulance station space 18.2 Vehicles[2]	90 90
19. Hospital Provision	Ineligible	19.1 Hospital capital contributions	0
20. Shelter and Housing	N/A ✓	20.1 Emergency Shelters 20.2 Social Housing	90 90
21 Provision of Headquarters for the General Administration of Municipalities and Local Boards	Ineligible Ineligible Ineligible	21.1 Office space (all services) 21.2 Office furniture 21.3 Computer equipment	0 0 0
22. Other Services	✓ ✓	22.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land[1] and facilities, including the DC background study cost 22.2 Interest on money borrowed to pay for growth-related capital	0-100 0-100

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

4.4 Local Service Policy

The City has established guidelines with respect to engineered services in terms of which development-related requirements are incorporated in the development charge calculation versus being a separate and independent requirement of development agreements, over and above the payment of the development charge. Guidelines as to the City's local servicing requirements outside of development charges are set out in Appendix D.

4.5 Credits Carried Forward

Section 8 para. 5 of O.Reg. 82/98 indicates that a development charge background study must set out, "The estimated value of credits that are being carried forward relating to the service." s.s.17 para. 4 of the same Regulation indicates that, "...The value of the credit cannot be recovered from future development charges," if the credit pertains to an ineligible service. This indicates that a credit for eligible services can be recovered from future development charges. A credit is, in effect, a Municipal payment liability linked to the prior provision of infrastructure by a landowner. Credits need to be included in the DC calculation, in order to ensure that the necessary development charge "funding room" has been provided.

All s.14 and other credits that are applicable have been included as line items in Appendix B, for example under Parks Development. All agreements related to stormwater management facilities are separately included in the City of Ottawa Area-specific Development Charges Background Study – Stormwater Management Ponds and Drainage Systems.

4.6 Eligible Debt and Committed Excess Capacity

Section 66 of the DCA, 1997 states that for the purposes of developing a development charge by-law, a debt incurred with respect to an eligible service may be included as a capital cost, subject to any limitations or reductions in the Act. Similarly, s.18 of O.Reg. 82/98 indicates that debt with respect to a now-ineligible service (which was formerly eligible) may be included as a capital cost, subject to several restrictions.

In order for such costs to be eligible, two conditions must apply. First, they must have funded excess capacity that is able to meet service needs attributable to the anticipated development. Second, the excess capacity must be "committed," that is, either before or at the time it was created, City Council must have expressed a clear intention that it would be paid for by development charges or other similar charges. For example, this may have been done as part of previous development charge study processes.

As a result, debt charges for previous oversizing have been included as part of the DC recoverable costs in Appendix B.

4.7 Council's Assurance

In order for an increase in need for service to be included in the DC calculation, City Council must indicate "... that it intends to ensure that such an increase in need will be met" (s.s.(1)3). This can be done if the increase in service forms part of a Council-approved Official Plan, capital forecast or similar expression of the intention of Council (O.Reg. 82/98 s.3). Council approval of the capital forecasts contained herein has been previously provided in many cases, but will be reaffirmed where applicable, as part of the DC by-law approval process.

5. DCA CALCULATION REQUIREMENTS

5. DCA CALCULATION REQUIREMENTS

5.1 Introduction

5.1.1 Subsection 5(1) of the DCA sets out the method that must be used to determine development charges. This method specifically calls for five different types of deductions to be made from municipal servicing costs, where applicable, which relate to the need for service attributable to new development anticipated over the planning period. These are:

- level of service cap;
- uncommitted excess capacity;
- benefit to existing development;
- grants, subsidies and other contributions;
- the 10% statutory deduction for "soft services."

5.1.2 Three other calculation deductions are addressed herein as being implicit requirements. These are:

- post-period capacity;
- uncommitted DC reserve fund balances;
- allocation of the total costs between residential and non-residential benefit.

The basis for, and nature of, each of these DC calculation deductions is outlined below and in Appendix B.

5.2 Level of Service Cap

5.2.1 Paragraph 4 of subsection 5(1) of the DCA, 1997 states that the estimate of the increase in the need for service attributable to the anticipated development, made under paragraph 2 must not include an increase that would result in the level of service exceeding the average level provided in the City over the 10 year period preceding the preparation of the background study.

s.s.4(3) of O.Reg. 82/98 provides for an exception, such that:

> "If the average level of service determined is lower than the standard level of service required under another Act, the standard level of service required under the other Act may be deemed ... to be the average level of service."

Section 4 of the Regulation also provides that:

- both the quantity and quality of a service shall be taken into account in determining the average level of service.
- a geographic area of the municipality may be excluded in determining the average level of service, if the service is not provided there and the area is identified in the by-law. However, the average level of service so determined, cannot exceed that which would be determined if the by-law applied to the whole municipality.

A commonly-used quantity measure is units per capita (e.g. lane kms, square feet, m^3 capacity, hectares, etc.), while quality can be measured in terms of cost per unit, engineering standards or recognized performance measurement systems, depending on circumstances.

5.3 Uncommitted Excess Capacity

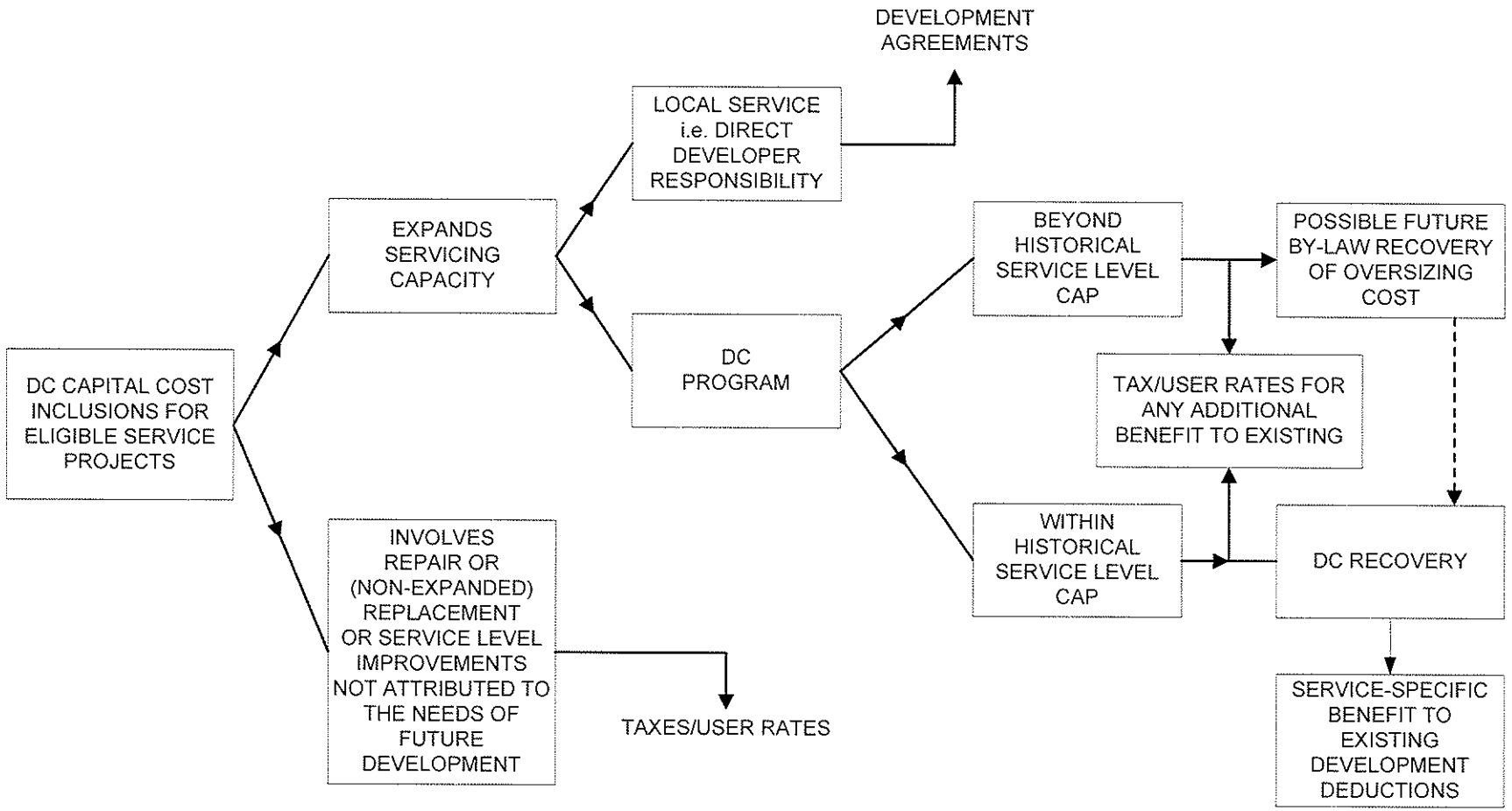
Paragraph 5 of s.s.5(1) of the DCA requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the City's "excess capacity", other than excess capacity which is "committed", i.e. where Council has indicated a clear intention that it would be paid for by DCs or other similar charges, before or at the time the capacity was created (s.5 of O.Reg. 82/98).

"Excess capacity" is undefined in the Act, 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 "excess capacity" from the future increase in the need for service, occurs 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 capacity is already available or is being provided via transit, then that widening would not be included as an increase in need, in the first instance. Another potential consideration is the relationship between the 2008 level of service and the ten year historical average and/or an operational review of the capacity functioning of a particular facility.

5.4 Benefit to Existing Development

Benefit to existing development deductions have been addressed on a service-specific and project-specific basis. The methodology employed is briefly summarized in Figure 5-1 and discussed on a service-specific basis in Appendix B.

FIGURE 5-1
CITY OF OTTAWA - 2008/2009 DC BY-LAW UPDATE
BROAD RATIONALE FOR BENEFIT TO EXISTING DEVELOPMENT DEDUCTIONS



Where the additional program of works is not expected to increase the existing level of service being provided, then the benefit to existing development is normally not extensive. It is, however, necessary to give some consideration to the nature of each type of project and its location in terms of proximity to anticipated new development. It should also be considered that:

- the City's population and employees are not fixed to one location, but move throughout the City to home, work, shopping, entertainment, school, etc., consuming City services in different locations;
- the assessment of the benefit to existing development is to be undertaken on a broad service-specific, City-wide or large area basis and must also have regard for the fact that growth will also occur in many areas of the City not directly benefiting from the service improvements involved.

The primary considerations involved in establishing an appropriate benefit to existing development deduction include:

- Is the project a capacity expansion, necessary to maintain the existing level of municipal service?
- Is the primary service area municipal-wide, large area or small area and how much growth is located in the relevant area?
- Was the project included in previous DC studies and with what level of deduction?
- Is the capital program well beyond the service level cap and to what extent do these projects benefit existing development (rather than representing oversizing for post period recovery)?
- Does the capital expenditure simply represent more of what is already being provided or does it instead offer a broader range of service?
- What is the estimated value of the service change being provided re user proximity, for example?
- Does the project involve a new facility or an existing replacement plus expansion?

5.5 Grants, Subsidies and Other Contributions

s.s.5(1)7 of the DCA requires that the capital costs must be reduced by the reductions set out in subsection (2).

s.s.5(2) states that:

> "The capital costs, determined under para. 7 of subsection (1), must be reduced, in accordance with the regulations, to adjust for capital grants, subsidies and other contributions made to a municipality or that the Council of the municipality anticipates will be made in respect of the capital costs." (underlining added)

Section 6 of O.Reg. 82/98 indicates that any such grant, subsidy or other contribution (including developer contributions) must be used to reduce the s.s.5(1)7 capital costs in the same proportion as the increase in need was reduced under s.s.5(1), para. 6, unless at the time it was made, the person making it expressed a clear intention that all or part be used to benefit existing or new development. In the latter case, a deduction to capital costs must be made, but only to the extent that the funds were intended to benefit new development.

Any grants, subsidies, developer and other contributions anticipated have been reflected in Appendix B, in accordance with the provisions of the Act and Regulation.

5.6 Post-period Capacity

This is a term and a concept which is not specifically referenced in the DCA. It refers to the cost of oversized development-related servicing capacity which is not required by development anticipated over the City's planning period, which will clearly benefit development in a **subsequent** planning period and should therefore be (partially) funded by such subsequent development. This requirement is implicit in s.s.5(1)2 of the DCA, which requires the charge to be based on "the increase in the need for service attributable to the anticipated development...", in this case development 2009-2019 or 2009-2031 in the case of sewer, water, roads. Post period capacity is not a significant deduction item in Ottawa's case for two reasons:

- in the case of services such as parks, recreation and libraries, which reflect a well-defined ten-year service increment based on per capita standards, there is no post period capacity provision; however, in the case of major transit works, a post period capacity deduction is applicable.
- oversizing for sewer, water and roads has been minimized by basing the capital program on long term requirements (to 2031) and by minimizing the provision of oversizing beyond that point. However, post period oversizing is involved in a number of cases and has been appropriately factored out of the DC calculation.

5.7 DC Reserve Fund Balances

There is no explicit requirement under the DCA calculation method set out in s.s.5(1) to account for the outstanding reserve fund balance as part of making a DC calculation; however, s.35 does restrict the way in which the funds are used in future, i.e.

> "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)."

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 growth which occurred earlier in the by-law period). This cost component is distinct from the development-related costs for the next 10 year period, which underlie the DC calculation herein.

The alternative would involve the municipality seeking to spend all reserve fund monies prior to renewing each by-law, which would often not be a sound basis for capital budgeting. Thus, the City will use these "soft service" reserve funds for the City's cost share of applicable development-related projects, which are required, but have not yet been undertaken (i.e. ineligible service level and/or for benefit to existing development). This is a way of directing the funds to the project cost share for which they were collected (rather than to the sole benefit of future development, which will continue to generate the need for additional facilities and development charges, directly proportionate to the amount of growth involved).

As a result, the closing balances of the City's DC reserve fund, as of December 31, 2008, for roads, water, sanitary sewers, storm drainage, stormwater management, transit and growth studies are to be deducted from future DC recoverable spending requirements. These amounts have been accounted for in making the calculations in Appendix C.

These deductions are made in the case of hard services, in that the DC calculation for these services is geared to funding a large group of development-related works that are being implemented over the long term. While these works are also subject to service level caps, each DC calculation is designed to fund an appropriate share of the overall program of works, over a "moving" long term period. The renewal process involves updating cost estimates and project descriptions, removing completed works and netting reserve fund balances, but maintaining the DC recoverable % share, each time a new DC is calculated.

5.8 Other Deductions

Paragraph 8 of s.s.5(1) of the DCA requires that, "the capital costs must be reduced by 10 per cent." This paragraph does not apply to water supply services, waste water services, storm water drainage and control services, services related to a highway and to police and fire protection services. The City services that the 10% reduction does apply to are parks, recreation, libraries, transit, EMS and (some) growth studies and any related financing costs pertaining to these services.

The 10% is to be netted from the capital costs necessary to provide the increased services, once the other deductions (i.e. ineligible, benefit to existing, landowner contributions, etc.) have been made.

5.9 Cost Differentiation by Type of Development

s.s.5(6)2 of the DCA requires that every "type" of development that is expressly identified in the DC by-law cannot be required to pay development charges that exceed the capital costs arising from the increase in the need for service attributable to that particular type of development.

In the first instance, this allocation involves a split between residential and non-residential benefit. This is typically made based on the ratio of incremental growth in population to the total increment in population and employment, with weighting of the relative demands of population vs. employment in the case of paramedic services, water and sanitary sewers. Other methods (e.g. water demand) may be used where applicable.

In Ottawa's case, one of the over-riding development charge objectives is to encourage intensification and development Inside the Greenbelt with infill development contributing proportionally to the costs associated with upgrading capital infrastructure services. (See Appendix H.)

5.10 Area-specific Charges

Development charge by-laws can be imposed on a uniform City-wide basis or on an area-specific basis or, as in the case of the City of Ottawa, as a combination of these two approaches.

Table 5-1 outlines the way in which the development charge schedule herein has been aligned with the City's area-specific recovery regime. The City is seeking the proper balance between charging each individual development its "true" servicing costs, which could produce a complex patchwork of area-specific charges vs. a uniform, City-wide charge, which is more flexible in terms of reserve fund management and cost recovery but may not adequately provide for fairness and incentives for development to occur where services already exist.

Area-specific charges will ensure that development in the Rural area will be required to pay an amount needed to provide for future growth-related infrastructure consistent with the Rural area's unique level of service requirements (other than water and sanitary sewer servicing expansions which are to be separately addressed). The corollary to this objective is that Outside the Greenbelt development pays its fair share, which represents the balance of the residential growth-related cost.

TABLE 5-1
SUMMARY OF PROPOSED GEOGRAPHIC RECOVERY AREAS FOR CITY OF OTTAWA DEVELOPMENT CHARGES

Service	DC Recovery Area			Basis
	City-wide	3 Area-specific[1]	Small area-specific	
City-wide Transportation Programs and arterial roads	✓			Re the functioning of an integrated City-wide road network
Collector roads		✓		Primary use is localized, although in-commuter use is City-wide
Water purification and transmission	✓			Central facilities
Water distribution		✓		City-wide distribution system with large area benefits
Sanitary sewer treatment	✓			Central facilities
Sanitary sewer collection		✓		City-wide collection system with large area benefits
Storm drainage general	✓			Small City-wide program
Storm drainage ponds			✓	Small, well-defined drainage areas
Police equipment and vehicles	✓			Vehicles allocated broadly over entire City
Police stations		✓		Stations have coverage areas which often overlap between two of the areas
Fire stations and vehicles		✓		Fire stations and associated vehicles serve a small response time zone, broadened by back-up responsibility
Transit corridors and vehicles	✓			An integrated City-wide transit system
Parks		✓		Largely localized use and lack of detailed ten year program prevents finer breakdown

[1] 3 Area-specific refers to Inside the Greenbelt vs. Outside the Greenbelt (including serviced rural) vs. Rural
The 3 Area-specific Rural allocation is variable on a service-specific basis

Service	DC Recovery Area			Basis
	City-wide	3 Area-specific[1]	Small area-specific	
Aquatic facilities, studies, etc.	✓			Users are drawn City-wide
Other recreation facilities, e.g. community centres and rec. complexes		✓		Recreation facilities with a more localized service area
Library facilities		✓		Library facilities generally serve a localized area
Library materials	✓			Materials are made available City-wide via inter-Library loans
Child care facilities	✓			Facilities provided at both worker origin and destination on a broad program basis
Paramedic Service	✓			Posts are localized but ambulances are dispatched City-wide, "on the move"
Vehicles and works yards	✓			Needs are met on a broad City-wide basis
Affordable Housing Program	✓			Broad City-wide program which is not detailed for ten years
Corporate studies	✓			These studies have broad City-wide coverage
Servicing studies		✓		These studies have broad area basis

6. DEVELOPMENT CHARGE RULES

6. DEVELOPMENT CHARGE RULES

6.1 Introduction

6.1.1 s.s.5(1)9 of the DCA states that rules must be developed:

> "... to determine if a development charge is payable in any particular case and to determine the amount of the charge, subject to the limitations set out in subsection 6."

Paragraph 10 of the section goes on to state that the rules may provide for exemptions, phasing in and/or indexing of development charges.

6.1.2 s.s.5(6) establishes the following restrictions on the rules:

- the total of all DCs that would be imposed on anticipated development must not exceed the capital costs determined under 5(1) 2-8 for all services involved.

- if the rules expressly identify a type of development, they must not provide for it to pay DCs that exceed the capital costs that arise from the increase in the need for service for that type of development. However, this requirement does not relate to any particular development.

  In order to address this requirement, the following conventions have been adopted:

  1. Costs to residential uses have been assigned to different types of residential units based on the average occupancy for each housing type constructed during the initial years of occupancy.
  2. Costs are allocated to residential uses (as opposed to non-residential uses) based upon a number of factors, as may be suited to each service-related circumstance and as outlined in Appendix B.

- if the rules provide for a type of development to have a lower development charge than is allowed, the rules for determining development charges may not provide for any resulting shortfall to be made up via other development.

6.1.3 With respect to "the rules", Section 6 of the DCA states that a DC by-law must expressly address the matters referred to above re s.s.5(1) para. 9 and 10, as well as how the rules apply to the redevelopment of land.

6.2 The Amount of the Development Charge Payable in Any Particular Case

6.2.1 The rules for determining if development charges are payable in any particular case and for determining the amount of the development charges involved, are set out in the proposed by-law in Appendix J.

6.2.2 The quantum of the development charge which is payable, is as calculated in Appendices B and C and summarized in the Executive Summary and Schedule "B" of the proposed by-law.

6.2.3 The rules for determining if development charges are payable in any particular case are addressed in the by-law and Background Study and deal with matters such as: multiple charges, the connection between servicing needs and development, the list of services for which charges are being imposed, types of development approval triggering the need for the imposition of development charges, the requirements for the installation of local services in addition to payment of the development charge, the method used in calculating development charges for individual developments, the quantum of the charge, the timing of calculation and payment, and the alternative means of payment.

6.3 Development Charge Exemptions

6.3.1 The rules for exemptions, relief and adjustments for the charge are as set out in the proposed by-law in Appendix J and discussed in Appendix G.

6.4 Phasing-in of Development Charges

6.4.1 The rules with respect to the phasing-in of the development charges are set out in the proposed by-law in Appendix J and summarized in the Executive Summary.

This policy will be based on consideration of the development charge economic impact material in Appendix F, the Long Term Capital and Operating Cost Examination in Appendix E and the public consultation process referenced in section 7.3.

6.5 Indexing of Development Charges

6.5.1 The rules with respect to the indexing of the development charges are as set out in the proposed by-law in Appendix J, that is, that the charges are to be adjusted annually, as of August 1 of each year, commencing August 1, 2010, in accordance with the Statistics Canada

Infrastructure Development Charge Price Index Catalogue 62-007 for Ottawa. This is consistent with the City's current policy.

In March 2003, Council adopted a Statistics Canada Infrastructure Development Charges Price Index to replace the use of the Statistics Canada Construction Price Index that is prescribed by the *Development Charges Act, 1997.* The new inflation factor was considered by the City and industry to better reflect the localized benchmark costs for Ottawa. This has resulted, over the past seven years, in the cumulative inflationary rate increases being lower than the prescribed index over the same timeframe. Currently, indexing takes place annually on April 1 but will be adjusted to correspond to the date of by-law adoption. The development industry has requested this change to better reflect the construction cycle.

6.6 The Application of Development Charges to Redevelopment

6.6.1 The rules with respect to redevelopment are as set out in the proposed by-law in Appendix J. Those credit provisions generally reflect the City's existing policy, except that it is proposed that a 5-year limitation on the time between demolition permit issuance and building permit issuance for the redevelopment be imposed, consistent with general municipal practice and in order to encourage such redevelopment to occur in a timely fashion.

Any demolitions that take place after the passage of the new by-law will be subject to the five-year redevelopment credit expiry period. Credits would remain with the property and would not be transferable to another parcel of land. Demolition allowances would continue to be based on the rate in effect in the active by-law with the overall development charge reduction not exceeding the amount otherwise payable. A credit would not apply, after a two-year period, if a building type were legislatively exempt from paying development charges, i.e. school sites.

7. BY-LAW ADOPTION AND IMPLEMENTATION

7. BY-LAW ADOPTION AND IMPLEMENTATION

7.1 Introduction

This Chapter outlines the process that the City has carried out as part of arriving at development charge policy which is fair and legally defensible, financially appropriate, and has had regard for public comments and possible development implications.

7.2 Long Term Capital and Operating Cost Examination

Subsection 10(2)(c) of the Act requires that a DC Background Study include an examination for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service.

One standard that could be used in scrutinizing the above-referenced costs is the current level of operating costs per capita. Another more detailed standard that goes beyond the specific requirements of the Act, would be the anticipated impact on user rate levels, as determined by the application of a full fiscal impact model.

The revenue to be generated by the DC by-law during its life of up to five years, will be determined by the quantum of the charge, the amount and type of development occurring and the impact of the rules regarding exemptions, phasing in, indexing, land redevelopment, etc. The net stream of revenue which results, in concert with City policy with respect to front-ending agreements and long term debt, will determine the rate at which the City is able to construct the works which underlie the development charge. Consideration of these revenue streams would normally occur as part of the City's annual Capital Budget and Forecasting process.

Appendix E contains the Long Range Capital and Operating Cost examination applicable in this case.

7.3 Consultation

The City has established two Development Charge External Advisory Committees, one including citizen and community representatives as well as developer and B.O.M.A. representatives, and a second Committee consisting of Greater Ottawa Home Builders' Association (GOHBA) and other development industry representatives.

An extensive consultation occurred over the course of the first five months of the year and involved detailed examination of all of the key assumptions underlying the development charge calculation. Further information on this process is contained in Appendix G.

7.4 The By-law Adoption Process

7.4.1 Public Meeting of Council

Section 12 of the DCA, 1997 indicates that before passing a development charge by-law, Council must hold at least one public meeting, giving at least 20 clear days notice thereof, in accordance with the Regulation. Council must also ensure that the proposed by-law and background report are made available to the public at least two weeks prior to the (first) meeting.

Any person who attends such a meeting may make representations related to the proposed by-law.

If a proposed by-law is changed following such a meeting, the Council must determine whether a further meeting (under this section) is necessary (i.e. if the proposed by-law which is proposed for adoption has been changed in any respect, the Council should formally consider whether an additional public meeting is required, incorporating this determination as part of the final by-law or associated resolution. It is noted that Council's decision, once made, is final and not subject to review by a Court or the OMB.

7.5 By-law Implementation

7.5.1 Introduction

Once the City has calculated the charge, prepared the complete Background Study, carried out the public process and passed a new by-law, the emphasis shifts to implementation matters. These include notices, potential appeals and complaints, credits, front-ending agreements, subdivision agreement conditions and finally the collection of revenues and funding of projects.

The sections which follow, overview requirements in each case.

7.5.2 Notice of Passage

In accordance with s.13 of the DCA, when a DC by-law is passed, the municipal clerk shall give written notice of the passing and of the last day for appealing the by-law (the day that is 40 days after the day it was passed). Such notice must be given not later than 20 days after the day the by-law is passed (i.e. as of the day of newspaper publication or the mailing of the notice).

Section 10 of O.Reg. 82/98 further defines the notice requirements, which are summarized as follows:

- Notice may be given by publication in a newspaper, which is (in the Clerk's opinion) of sufficient circulation to give the public reasonable notice, or by personal service, fax or mail to every owner of land in the area to which the by-law relates.
- s.s.10(4) lists the persons/organizations who must be given notice.
- s.s.10(5) lists the eight items which the notice must cover.

7.5.3 By-law Pamphlet

In addition to the "notice" information, the municipality must prepare a "pamphlet" explaining each development charge by-law in force, setting out:

- a description of the general purpose of the development charges;
- the "rules" for determining if a charge is payable in a particular case and for determining the amount of the charge;
- the services to which the development charges relate; and
- a general description of the general purpose of the Treasurer's statement and where it may be received by the public.

Where a by-law is not appealed to the OMB, the pamphlet must be readied within 60 days after the by-law comes into force. Later dates apply to appealed by-laws.

The City must give one copy of the most recent pamphlet without charge, to any person who requests one.

7.5.4 Appeals

Sections 13-19 of the DCA, 1997 set out requirements relative to making and processing of a DC by-law appeal and OMB Hearing in response to an appeal. Any person or organization may appeal a DC by-law to the OMB by filing with the municipal clerk a notice of appeal, setting out the objection to the by-law and the reasons supporting the objection. This must be done by the last day for appealing the by-law, which is 40 days after the by-law is passed.

7.5.5 Complaints

A person required to pay a development charge, or his agent, may complain to the City Council imposing the charge that:

- the amount of the charge was incorrectly determined;
- the credit to be used against the development charge was incorrectly determined; or
- there was an error in the application of the development charge.

Sections 20-25 of the DCA, 1997 set out the requirements that exist, including the fact that a complaint may not be made later than 90 days after a DC (or any part of it) is payable. A complainant may appeal the decision of Municipal Council to the OMB.

7.5.6 Front-Ending Agreements

The City and one or more landowners may enter into a front-ending agreement, which provides for the costs of a project, which will benefit an area in the municipality to which the DC by-law applies. Such an agreement can provide for the costs to be borne by one or more parties to the agreement who are, in turn, reimbursed in future, by persons who develop land defined in the agreement.

Part III of the DCA, 1997 (Sections 44-57) addresses front-ending agreements and removes some of the obstacles to their use, which were contained in the DCA, 1989. Accordingly, the City assesses whether this mechanism is appropriate for its use, as part of funding projects prior to City funds being available.

7.5.7 Severance and Subdivision Agreement Conditions

Section 59 of the DCA, 1997 prevents a municipality from imposing directly or indirectly, a charge related to development or a requirement to construct a service related to development, by way of a condition or agreement under s.51 or s.53 of the *Planning Act*, except for:

- "local services, related to a plan of subdivision or within the area to which the plan relates, to be installed or paid for by the owner as a condition of approval under section 51 of the *Planning Act*;"
- "local services to be installed or paid for by the owner as a condition of approval under Section 53 of the *Planning Act*."

It is also noted that s.s.59(4) of the DCA, 1997 requires that the municipal approval authority for a draft plan of subdivision under s.s.51(31) of the *Planning Act,* use its power to impose conditions to ensure that the first purchaser of newly subdivided land is informed of all the development charges related to the development, at the time the land is transferred.

APPENDIX A
ANTICIPATED DEVELOPMENT
IN OTTAWA 2009-2031

APPENDIX A - ANTICIPATED DEVELOPMENT IN OTTAWA 2009-2031

Introduction

As prescribed in the DCA, the development forecasts prepared by the City of Ottawa estimate "The anticipated amount, type and location of development, for which development charges can be imposed...." More specifically, projections of future population, dwelling units by type, and gross floor area (commercial, industrial and institutional) were prepared by geographic area. All projections represent mid-year of the particular time horizon and are consistent with the revised projections adopted by City Council in November, 2007.

The development forecasts made extensive use of three primary sources of information. Results of the 2001 Census, adjusted for undercounting, in combination with building permit issuances for 2001 onward were used to determine the base year population and dwelling units by type and geographic area[1], the 2006 Census provided average household size (persons per unit) by dwelling unit type, the 2006 City of Ottawa Employment Survey provided employment information by sector, and the forecasts prepared for the Official Plan (OP) and related work provided the estimates of growth by area, including dwelling unit growth by type and employment growth by sector.

Because the intermediate years of the OP projections (2011 and 2021) are different from the DC years (2009 and 2019), the projected timing of growth was prorated to each time period. Using the city-wide forecasts, the final level of development by geographic area for each DC time horizon was determined by adding the assumed share of growth to the 2006 base data.

The above process provided projected employment by sector. However, for DC purposes, it was also necessary to determine the projected gross floor area (GFA) by employment sector. The employment forecasts were converted to projected GFA by sector using the following assumptions, which were based on a detailed analysis of employment and building floor areas: a square foot per employee figure of 350 for commercial, 900 for industrial and 400 for institutional. Also included were vacancy rates of 10% for commercial and industrial space, and 0% for institutional, assumed across the city. The figures are approximate average vacancy rates over the last five years as reported by Cushman and Wakefield LePage and Colliers market surveys. These assumptions were then applied to the projected employment levels. Projected GFA was adjusted to remove work-at-home employment and employment, primarily in construction, that does not generate floor area. However projections of total employment include all job categories.

[1] Using City estimates was judged to provide more accurate measures of development by area than the results of the 2006 Census.

City-Wide Growth, Occupancy and Density Assumptions

Discussion of Tables and Figures

- Table A1 provides Census information for Ottawa for all Census years from 1981 to 2006. This information is presented to provide an indication of population trends and in particular, household size. The population in private households (which excludes institutional population), along with the number of private households, are used to calculate the persons per unit (p.p.u.). The change in p.p.u. from 1981 to 2006, together with the age structure of the population, is used to estimate the rate of decline in the occupancy of existing housing units.
- Table A2 provides information on the age structure of the population of the City of Ottawa. This information is used in the determination of p.p.u. assumptions for the forecast. For example, between 2001 and 2006 the population in the 25-44 age group declined as a percentage of the total population while the 45-64 age group increased. Because this indicates that the group most likely to have children did not grow, and that a group that is, for the most part, past child bearing age grew significantly, a further decline in p.p.u. can be expected.
- Table A3 provides p.p.u. assumptions allocated by geographic area and dwelling type.
- Figure A1 illustrates the assumptions with respect to typical household occupancy over time. Information on average occupancy patterns is required to determine potential differences in the cost of servicing and to provide an equitable means of differentiating development charges by type of unit. An average or "diversified" occupancy figure is used, as it is not possible to anticipate variations in ownership and family composition on an individual unit basis. It is noted that the occupancy averages applicable to recently constructed units will differ from those which apply to the overall occupancy average for the city, as recently constructed units typically have a higher p.p.u. average than older units.
- The overall p.p.u. average in any municipality incorporates persons per household in recently constructed units, but largely reflects the occupancy of older, in many cases much older, units. Figure A1 illustrates the typical household occupancy cycle for a single detached house occupied by a family. It indicates that household size commences at about 2.0 and typically increases to approximately 3.5 p.p.u., as births are completed, when the female is in her mid to late 30's. This is followed by a levelling off period, in terms of occupancy, as the children grow up. Subsequently, the young adults depart the home to establish their own households, on a phased basis. This typically leaves a two-person household (empty nester). At that point, the unit may be recycled to a new, larger family. In the alternative, its occupancy will decline when the first parent dies and then the unit will be re-occupied by a different family when the sole survivor is deceased or moves.

Table A1 City of Ottawa Population and Occupied Private Dwelling Unit Totals, 1981-2006

	1981	1986	1991	1996	2001	2006
Total Census Population	546,849	606,639	678,147	721,136	774,072	812,129
Total Number of Persons in Private Households	532,785	591,490	661,935	708,135	761,160	797,515
Total Number of Occupied Private Dwellings	200,500	228,140	259,830	279,566	301,775	321,100
Persons Per Private Household	2.66	2.59	2.55	2.53	2.52	2.48

Note: Total number of persons in private households excludes institutional residents.
Source: Statistics Canada, 1981, 1986, 1991, 1996, 2001 and 2006 Census of Canada.

Table A2 City of Ottawa Population Age Profile, 1981-2006

Age Group	Population					
	1981	1986	1991	1996	2001	2006
0-14	109,590	114,795	130,840	143,335	146,145	142,750
15-24	105,185	103,035	97,750	94,910	103,120	113,085
25-44	174,675	212,935	247,175	247,015	251,660	238,555
45-64	108,770	116,915	131,515	155,675	184,150	216,865
65+	48,635	58,950	70,860	80,155	88,990	100,860
Total	546,855	606,630	678,140	721,090	774,065	812,115

Age Group	Percent of Population by Age Group					
	1981	1986	1991	1996	2001	2006
0-14	20.0%	18.9%	19.3%	19.9%	18.9%	17.6%
15-24	19.2%	17.0%	14.4%	13.2%	13.3%	13.9%
25-44	31.9%	35.1%	36.4%	34.3%	32.5%	29.4%
45-64	19.9%	19.3%	19.4%	21.6%	23.8%	26.7%
65+	8.9%	9.7%	10.4%	11.1%	11.5%	12.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Age Group	Percent Change in Population				
	1981-86	1986-91	1991-96	1996-01	2001-06
0-14	4.7%	14.0%	9.5%	2.0%	-2.3%
15-24	-2.0%	-5.1%	-2.9%	8.7%	9.7%
25-44	21.9%	16.1%	-0.1%	1.9%	-5.2%
45-64	7.5%	12.5%	18.4%	18.3%	17.8%
65+	21.2%	20.2%	13.1%	11.0%	13.3%
Total	10.9%	11.8%	6.3%	7.3%	4.9%

Note: Totals may vary due to rounding.
Source: Statistics Canada, 1981, 1986, 1991, 1996, 2001 and 2006 Census of Canada.

Table A3
Persons per Unit By Dwelling Type by Geographic Area

	City-Wide	Inside Greenbelt	Outside Greenbelt West	Outside Greenbelt South	Outside Greenbelt East	Outside Greenbelt Total	Rural
Single	3.35	3.38	3.49	3.29	3.38	3.40	3.13
Semi-detached	2.53	2.56	2.57	2.44	2.45	2.48	2.01
Townhouses	2.50	2.37	2.47	2.54	2.72	2.58	2.47
Apartments 2 Bedrooms and Larger	1.79	1.65	1.93	1.93	1.93	1.93	1.64
Apartments Less than 2 Bedrooms	1.34	1.34	1.34	1.34	1.34	1.34	1.34

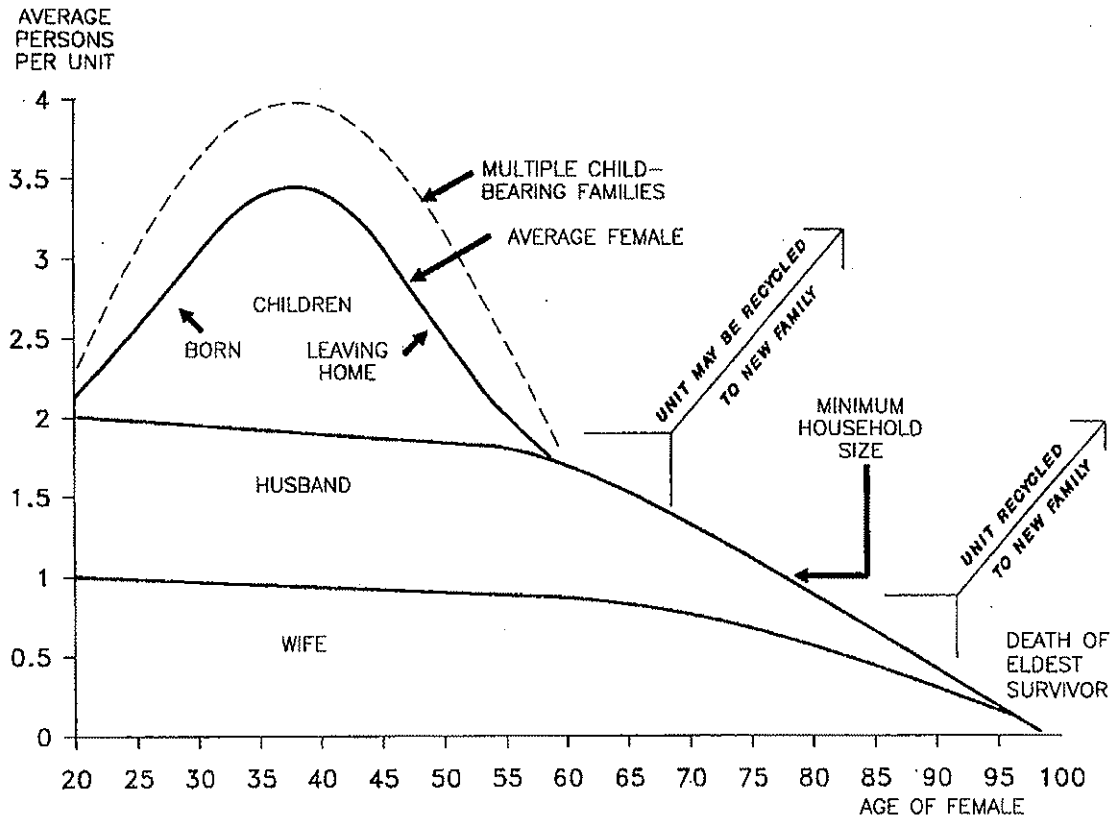
Notes:

1. Other multiples are detached duplexes only.
2. Due to the limited number of units in areas outside the greenbelt, p.p.u. for apartments less than 2 bedrooms and other multiples uses city-wide average.
3. Due to the limited number of units in urban areas outside the greenbelt, p.p.u. for apartments with 2 or more bedrooms uses the average of these areas.

Source: Statistics Canada, 2006 Census, Custom Tabulations.

FIGURE A-1

TYPICAL ONTARIO HOUSING OCCUPANCY CYCLE FOR SINGLE DETACHED UNITS



- The result of this pattern is that recently constructed housing units (particularly those constructed during the past decade) typically have a higher average p.p.u. than older units. Variances occur, depending on whether developments are marketed to renters, first time buyers, the move-up market or retirees. Development charges policy is directed toward financing the cost of services required by new development and is therefore, particularly in the case of single detached housing, focused on occupancies which prevail as households move toward and attain maximum size.

- Table CW1 summarizes the residential population forecast for 2009-2031. The total population increase is determined by adding the projected growth for the two time periods, 2009-2019 and 2019-2031. The starting population for each time period is projected to the final population by taking additional units, multiplied by a weighted (new unit) p.p.u. assumption for the City. This produces a "gross" population increase, the number of people that will occupy the newly constructed units. The gross population increase was factored up by 2.6% to account for unoccupied units, incomplete units and demolition replacements. The anticipated decline in the occupancy of existing housing units is estimated in order to determine the population decrease in existing units. This population decline is then subtracted from the "gross" population increase, yielding the expected "net" or actual population growth. Table CW1 provides the details of this calculation for the city as a whole and also for the transit service area and the water/sewer service areas.

- Table CW2 presents population and total dwelling unit projections for the City of Ottawa by sub-area for 2009, 2019 and 2031. The dwelling unit projections are for total private dwelling units and do not include collective or institutional dwellings (i.e. nursing homes, prisons, shelters, and other lodging with assistance services, and, consistent with Statistics Canada's 2006 Census definition, excluding seniors residences). These types of units are expected to increase at a rate of about 350 rooms per annum and are treated as "institutional" development. Similarly, the number of dwelling units required for non-permanent residents (i.e. diplomats, military personnel, parliamentarians, etc) are also classified as "institutional" development.

- Table CW3 provides total dwelling unit projections by type of dwelling unit and sub-area for each of the three years. This information is used in the determination of the weighted average persons per unit for new dwelling units. Table CW4 follows from Table CW3 and summarizes the growth in total dwelling units by type for each of the sub-areas.

- Tables CW5 and CW6 provide projected employment in the City of Ottawa, along with the forecast increase in gross floor area (GFA) by sector.

Table CW1 City of Ottawa Population Increase in New Housing Units, 2009-2019-2031

	City Wide Total	Transit Area	Serviced Water Area	Serviced Sewer Area	Serviced Water and Sewer Area	Unserviced Rural Area
Population as of Mid-2009	**902,140**	**813,385**	**815,314**	**818,278**	**817,672**	**77,646**
Occupants of New Housing Units						
2009 Total Units	368,883	337,824	338,467	339,455	339,253	27,357
2019 Total Units	431,217	394,547	395,330	396,717	396,305	31,958
Total New Units 2009-2019	62,333	56,724	56,864	57,263	57,053	4,602
% of New Units - Single Detached	41%	36%	36%	36%	36%	99%
% of New Units - Semi-Detached	5%	5%	5%	5%	5%	1%
% of New Units - Row	27%	29%	29%	29%	29%	0%
% of New Units - Apartment	27%	29%	29%	29%	29%	1%
Weighted Average Persons Per Unit	2.65	2.58	2.58	2.59	2.59	3.36
Total Gross Population Increase 2009-2019	**165,043**	**146,463**	**146,899**	**148,141**	**147,488**	**15,441**
Decline In Housing Unit Occupancy 2009-2019						
2009 Total Units	368,883	337,824	338,467	339,455	339,253	27,357
Assumed Persons Per Unit Decline	0.16	0.15	0.15	0.15	0.15	0.28
Total Population Decline in Existing (2009) Units	57,524	49,653	49,669	49,714	49,691	7,757
Population as of Mid-2019	1,009,659	910,195	912,544	916,705	915,470	85,330
Net Population Increase 2009-2019	**107,519**	**96,810**	**97,230**	**98,427**	**97,798**	**7,684**
Population as of Mid-2019	**1,009,659**	**910,195**	**912,544**	**916,705**	**915,470**	**85,330**
Occupants of New Housing Units						
2019 Total Units	431,217	394,547	395,330	396,717	396,305	31,958
2031 Total Units	497,043	454,449	455,378	457,180	456,550	36,833
Total New Units 2019-2031	65,826	59,902	60,047	60,463	60,244	4,875
% of New Units - Single Detached	38%	33%	33%	33%	33%	99%
% of New Units - Semi-Detached	5%	5%	5%	5%	5%	1%
% of New Units - Row	26%	28%	28%	28%	28%	0%
% of New Units - Apartment	31%	34%	34%	34%	34%	1%
Weighted Average Persons Per Unit	2.59	2.52	2.52	2.52	2.52	3.35
Total Gross Population Increase 2019-2031	**170,292**	**150,671**	**151,125**	**152,417**	**151,738**	**16,354**
Decline In Housing Unit Occupancy 2019-2031						
2019 Total Units	431,217	394,547	395,330	396,717	396,305	31,958
Assumed Persons Per Unit Decline	0.10	0.09	0.09	0.09	0.09	0.23
Total Population Decline in Existing (2019) Units	44,111	36,640	36,657	36,704	36,679	7,352
Population as of Mid-2031	1,135,840	1,024,225	1,027,012	1,032,418	1,030,528	94,332
Net Population Increase 2019-2031	**126,181**	**114,031**	**114,468**	**115,714**	**115,059**	**9,002**
Total Gross Population Increase 2009-2031	**335,336**	**297,134**	**298,024**	**300,558**	**299,226**	**31,795**
Factored Gross Population Increase (2.6%)	**344,054**	**304,859**	**305,773**	**308,373**	**307,006**	**32,622**

Notes:

1) 2009, 2019 and 2031 population and dwelling unit projections are based on City of Ottawa, "Growth Projections for Ottawa: Prospects for Population, Housing and Jobs 2006-2031", November 2007 and "Residential Land Strategy for Ottawa 2006-2031", February 2009.
2) To determine the weighted average persons per unit (p.p.u.) the following assumptions were made: Single Detached 3.37 p.p.u., Semi-detached 2.60, Row 2.54 and Apartment 1.66. These figures are based on Census data for units built in Ottawa between 1991 and 2006. The p.p.u.'s are then multiplied by the projected unit type distribution to determine the weighted average p.p.u. in the new units. For the development charge calculation, it was necessary to determine the average p.p.u. for small (bachelor and 1 bedroom) and large (2+ bedroom apartments and 2 bedroom townhouses) apartments. These figures (1.37 for small apartments and 2.46 for large apartments) are based on the average p.p.u., from Census information, for these types of units built in Ottawa between 1991 and 2006.
3) The assumption that the p.p.u. in the existing housing stock will decline is based on the observed trend in Ottawa. From 1981 to 2006 the Census average number of persons per unit declined from 2.66 to 2.48. Decline occurs due to aging of the population and life cycle changes, lower fertility rates and changing economic conditions.
4) Total gross population increase was factored up by 2.6% to account for unoccupied units, incomplete units and demolition replacements.
5) The transit area is defined here as the urban area of Ottawa.
6) The serviced water area is defined as the urban area of Ottawa plus the villages of Notre-Dame-des-Champs, Carlsbad Springs, Vars and Marionville.
7) The serviced sewer area is defined as the urban area of Ottawa plus the village of Richmond.
8) The serviced water and sewer area is defined as the urban area of Ottawa plus the villages of South Gloucester, Munster, Carp, and the serviced portion of Manotick.
9) The unserviced rural area is defined as the rural area of Ottawa excluding the villages listed in 6), 7) and 8).
10) Totals may vary due to rounding.

Table CW2 City of Ottawa, Total Dwellings and Population, 2009, 2019 and 2031

	Dwelling Units			Population			Dwelling Unit Growth		Population Growth	
	2009	2019	2031	2009	2019	2031	2009-2019	2009-2031	2009-2019	2009-2031
Inside Greenbelt	236,852	258,818	280,555	532,140	556,566	585,926	21,966	43,703	24,426	53,786
Urban Outside Greenbelt	100,971	135,729	173,894	281,245	353,629	438,299	34,758	72,923	72,384	157,054
Rural	31,060	36,670	42,594	88,755	99,464	111,615	5,610	11,534	10,709	22,860
City of Ottawa	368,883	431,217	497,043	902,140	1,009,659	1,135,840	62,333	128,159	107,519	233,700
% Inside Greenbelt	64.2%	60.0%	56.4%	59.0%	55.1%	51.6%	35.2%	34.1%	22.7%	23.0%
% Urban Outside Greenbelt	27.4%	31.5%	35.0%	31.2%	35.0%	38.6%	55.8%	56.9%	67.3%	67.2%
% Rural	8.4%	8.5%	8.6%	9.8%	9.9%	9.8%	9.0%	9.0%	10.0%	9.8%

Notes:
1) All figures represent mid-year.
2) Projections are based on the sources noted in footnote 1 to Table CW1.
3) Inner Area includes the Central Area and Inner Area sub-areas.
4) Totals may vary due to rounding.

Table CW3 City of Ottawa, Dwelling Units by Type, 2009-2031

	2009					2019					2031				
	Single	Semi	Row	Apt	Total	Single	Semi	Row	Apt	Total	Single	Semi	Row	Apt	Total
Inside Greenbelt	70,710	13,616	41,807	110,719	236,852	72,230	14,522	47,672	124,393	258,818	73,490	15,343	51,397	140,324	280,555
Outside Greenbelt	57,623	6,337	32,177	4,834	100,971	76,439	8,430	43,026	7,834	135,729	94,849	10,786	55,906	12,353	173,894
Rural	29,604	384	329	743	31,060	34,878	440	553	799	36,670	40,446	499	790	859	42,594
City of Ottawa	157,937	20,337	74,313	116,296	368,883	183,547	23,392	91,251	133,027	431,217	208,786	26,628	108,093	153,535	497,043
% Inside Greenbelt	44.8%	67.0%	56.3%	95.2%	64.2%	39.4%	62.1%	52.2%	93.5%	60.0%	35.2%	57.6%	47.5%	91.4%	56.4%
% Outside Greenbelt	36.5%	31.2%	43.3%	4.2%	27.4%	41.6%	36.0%	47.2%	5.9%	31.5%	45.4%	40.5%	51.7%	8.0%	35.0%
% Rural	18.7%	1.9%	0.4%	0.6%	8.4%	19.0%	1.9%	0.6%	0.6%	8.5%	19.4%	1.9%	0.7%	0.6%	8.6%

Table CW4 City of Ottawa, New Dwelling Units by Type, 2009-2031

	2009-2019					2009-2031				
	Single	Semi	Row	Apt	Total	Single	Semi	Row	Apt	Total
Other Inside Greenbelt	1,520	906	5,865	13,675	21,966	2,780	1,727	9,590	29,606	43,703
Urban Outside Greenbelt	18,816	2,093	10,849	3,000	34,758	37,226	4,449	23,729	7,519	72,923
Rural	5,273	56	224	56	5,610	10,842	115	461	115	11,534
City of Ottawa	25,609	3,055	16,938	16,731	62,333	50,848	6,291	33,780	37,239	128,159
Inside Greenbelt	1,520	906	5,865	13,675	21,966	2,780	1,727	9,590	29,606	43,703
Outside Greenbelt	18,816	2,093	10,849	3,000	34,758	37,226	4,449	23,729	7,519	72,923
Rural	5,273	56	224	56	5,610	10,842	115	461	115	11,534
% Inside Greenbelt	5.9%	29.7%	34.6%	81.7%	35.2%	5.5%	27.5%	28.4%	79.5%	34.1%
% Outside Greenbelt	73.5%	68.5%	64.0%	17.9%	55.8%	73.2%	70.7%	70.2%	20.2%	56.9%
% Rural	20.6%	1.8%	1.3%	0.3%	9.0%	21.3%	1.8%	1.4%	0.3%	9.0%

Notes for CW3 and CW4:

1) All figures represent mid-year.
2) Projections are based on the sources noted in footnote 1 to Table CW1.
3) Inner Area includes the Central Area and Inner Area sub-areas.
4) Totals may vary due to rounding.

Table CW5 City of Ottawa Employment and GFA Projections, 2006-2031

	2006	2009				
	Total Employment	Total Employment	GFA (sq.ft.) Comm	Indust	Instit	Total
City of Ottawa	529,591	558,277	113,010,330	45,135,417	23,172,081	181,317,827

	2019				
	Total Employment	GFA (sq.ft.) Comm	Indust	Instit	Total
City of Ottawa	628,120	129,466,116	50,163,423	27,660,544	207,290,083

	2031				
	Total Employment	GFA (sq.ft.) Comm	Indust	Instit	Total
City of Ottawa	703,000	146,743,663	55,442,516	32,373,151	234,559,330

Table CW6 City of Ottawa Employment and GFA Growth, 2009-2031

	2009-2019				
	Employment Growth	GFA (sq.ft.) Comm	Indust	Instit	Total
City of Ottawa	69,843	16,455,786	5,028,007	4,488,464	25,972,256

	2009-2031				
	Employment Growth	GFA (sq.ft.) Comm	Indust	Instit	Total
City of Ottawa	144,723	33,733,334	10,307,099	9,201,070	53,241,503

Notes for CW5 and CW6:

1. Figures are mid-year.
2. Assumes 350 sq.ft/employee for commercial, 900 industrial, and 400 institutional, and vacancy rates of 10% commercial and 10% industrial.
3. Figures make no allowance for redevelopment or reoccupancy of vacant space.
4. Projected GFA is adjusted to remove work at home jobs and other employment that does not generate GFA.

Area-Specific Growth, Occupancy and Density Assumptions

Discussion of Tables and Figures

- The material provided in this section comes from the city-wide projections and simply presents the same material for a different set of sub-areas within Ottawa. All calculations were carried out in an identical fashion as those described earlier in this appendix. Persons per unit assumptions, outlined in the discussion of the city-wide projections, also apply to the Area-Specific calculations and therefore the details are not repeated here.

- Table AS1 summarizes the residential population forecast for each of the Area-Specific sub-areas for 2009-2031. The details of the calculations can be found in the discussion of the city-wide forecasts.

- Table AS2 presents population and total dwelling unit projections for sub-areas of Ottawa. These projections are provided for 2009, 2019 and 2031.

- Tables AS3 and AS4 summarize projected dwelling unit growth by type of dwelling for each of the areas.

- Tables AS5 and AS6 provide the details of the projected population and dwelling units for the serviced and unserviced portions of rural Ottawa.

- Table AS7 lists projected employment and the forecast increase in gross floor area (GFA) for serviced and unserviced areas of rural Ottawa.

Table AS1 City of Ottawa Area Specific Population Increase in New Housing Units, 2009-2031

	Inside Greenbelt	Urban Outside Greenbelt	Rural
Population as of Mid-2009	**532,140**	**281,245**	**88,755**
Occupants of New Housing Units			
2009 Total Units	236,852	100,971	31,060
2019 Total Units	258,818	135,729	36,670
Total New Units 2009-2019	21,966	34,758	5,610
% of New Units -- Single Family	7%	54%	94%
% of New Units - Semi-Detached	4%	6%	1%
% of New Units - Row	27%	31%	4%
% of New Units - Apartment	62%	9%	1%
Weighted Average Persons Per Unit	2.05	2.92	3.31
Total Gross Population Increase 2009-2019	**45,075**	**101,388**	**18,580**
Decline In Housing Unit Occupancy 2009-2019			
2009 Total Units	236,852	100,971	31,060
Assumed Persons Per Unit Decline	0.09	0.29	0.25
Total Population Decline in Existing (2009) Units	20,649	29,004	7,871
Population as of Mid-2019	556,566	353,629	99,464
Net Population Increase 2009-2019	**24,426**	**72,384**	**10,709**
Population as of Mid-2019	**556,566**	**353,629**	**99,464**
Occupants of New Housing Units			
2019 Total Units	258,818	135,729	36,670
2031 Total Units	280,555	173,894	42,594
Total New Units 2019-2031	21,737	38,165	5,924
% of New Units -- Single Family	6%	48%	94%
% of New Units - Semi-Detached	4%	6%	1%
% of New Units - Row	17%	34%	4%
% of New Units - Apartment	73%	12%	1%
Weighted Average Persons Per Unit	1.95	2.84	3.31
Total Gross Population Increase 2019-2031	**42,288**	**108,383**	**19,621**
Decline In Housing Unit Occupancy 2019-2031			
2019 Total Units	258,818	135,729	36,670
Assumed Persons Per Unit Decline	0.05	0.17	0.20
Total Population Decline in Existing (2019) Units	12,927	23,713	7,471
Population as of Mid-2031	585,926	438,299	111,615
Net Population Increase 2019-2031	**29,360**	**84,670**	**12,150**
Total Gross Population Increase 2009-2031	**87,363**	**209,771**	**38,202**
Factored Gross Population Increase (2.6%)	**89,634**	**215,225**	**39,195**

Notes:

1) 2009, 2019 and 2031 population and dwelling unit projections are based on City of Ottawa, "Growth Projections for Ottawa: Prospects for Population, Housing and Jobs 2006-2031", November 2007 and "Residential Land Strategy for Ottawa 2006-2031", February 2009.
2) To determine the weighted average persons per unit (p.p.u.) the following assumptions were made: Single Detached 3.37 p.p.u., Semi-detached 2.60, Row 2.54 and Apartment 1.66. These figures are based on Census data for units built in Ottawa between 1991 and 2006. The p.p.u.'s are then multiplied by the projected unit type distribution to determine the weighted average p.p.u. in the new units. For the development charge calculation, it was necessary to determine the average p.p.u. for small (bachelor and 1 bedroom) and large (2+ bedroom apartments and 2 bedroom townhouses) apartments. These figures (1.37 for small apartments and 2.46 for large apartments) are based on the average p.p.u., from Census information, for these types of units built in Ottawa between 1991 and 2006.
3) The assumption that the p.p.u. in the existing housing stock will decline is based on the observed trend in Ottawa. From 1981 to 2006 the Census average number of persons per unit declined from 2.66 to 2.48. Decline occurs due to aging of the population and life cycle changes, lower fertility rates and changing economic conditions.
4) Total gross population increase was factored up by 2.6% to account for unoccupied units, incomplete units and demolition replacement.
5) Totals may vary due to rounding.

Table AS2 City of Ottawa Area-Specific, Total Dwellings and Population, 2009, 2019 and 2031

Area	Dwellings			Population			Household Growth		Population Growth	
	2009	2019	2031	2009	2019	2031	2009-2019	2009-2031	2009-2019	2009-2031
Inside Greenbelt	236,852	258,818	280,555	532,140	556,566	585,926	21,966	43,703	24,426	53,786
Urban Outside Greenbelt	100,971	135,729	173,894	281,245	353,629	438,299	34,758	72,923	72,384	157,054
Rural	31,060	36,670	42,594	88,755	99,464	111,615	5,610	11,534	10,709	22,860
City of Ottawa	368,883	431,217	497,043	902,140	1,009,659	1,135,840	62,333	128,159	107,519	233,700

Table AS3 City of Ottawa Area-Specific, Total Dwelling Units by Type, 2009-2031

Area	2009					2019				
	Single	Semi	Row	Apt	Total	Single	Semi	Row	Apt	Total
Inside Greenbelt	70,710	13,616	41,807	110,719	236,852	72,230	14,522	47,672	124,393	258,818
Urban Outside Greenbelt	57,623	6,337	32,177	4,834	100,971	76,439	8,430	43,026	7,834	135,729
Rural	29,604	384	329	743	31,060	34,878	440	553	799	36,670
City of Ottawa	157,937	20,337	74,312	116,296	368,883	183,547	23,392	91,251	133,027	431,217

Area	2031				
	Single	Semi	Row	Apt	Total
Inside Greenbelt	73,490	15,343	51,397	140,324	280,555
Urban Outside Greenbelt	94,849	10,786	55,906	12,353	173,894
Rural	40,446	499	790	859	42,594
City of Ottawa	208,786	26,628	108,093	153,535	497,043

Table AS4 City of Ottawa Area-Specific, New Dwelling Units by Type, 2009-2031

Area	2009-2019					2009-2031				
	Single	Semi	Row	Apt	Total	Single	Semi	Row	Apt	Total
Inside Greenbelt	1,520	906	5,865	13,674	21,966	2,780	1,727	9,590	29,605	43,703
Urban Outside Greenbelt	18,816	2,093	10,849	3,000	34,758	37,226	4,449	23,729	7,519	72,923
Rural	5,273	56	224	56	5,610	10,842	115	461	115	11,534
City of Ottawa	25,609	3,055	16,939	16,730	62,334	50,848	6,292	33,781	37,239	128,160

Notes for AS2 to AS4: 1) All figures represent mid-year.

2) 2009, 2019 and 2031 population and dwelling unit projections are based on City of Ottawa, "Growth Projections for Ottawa: Prospects for Population, Housing and Jobs 2006-2031", November 2007, and "Residential Land Strategy for Ottawa 2006-2031", February 2009.

3) Totals may vary due to rounding.

Table AS5 City of Ottawa Rural Total Dwelling Units and Population, 2009, 2019 and 2031

Area	Dwelling Units			Population			Dwelling Unit Growth		Population Growth	
	2009	2019	2031	2009	2019	2031	2009-2019	2009-2031	2009-2019	2009-2031
Rural Serviced Water Area	643	783	929	1,929	2,349	2,787	140	286	420	858
Rural Serviced Sewer Area	1,631	2,170	2,731	4,893	6,510	8,193	539	1,100	1,617	3,300
Rural Serviced Water and Sewer Area	1,429	1,758	2,101	4,287	5,275	6,303	329	672	988	2,016
Total Rural Serviced	3,703	4,711	5,761	11,109	14,134	17,283	1,008	2,058	3,025	6,174
Total Rural Unserviced	27,357	31,959	36,833	77,646	85,330	94,332	4,602	9,476	7,684	16,686
Total Rural	31,060	36,670	42,594	88,755	99,464	111,615	5,610	11,534	10,709	22,860

Table AS6 City of Ottawa Rural New Dwelling Units by Type, 2009-2031

Area	2009-2019					2009-2031				
	Single	Semi	Row	Apt	Total	Single	Semi	Row	Apt	Total
Rural Serviced Water Area	101	4	31	4	140	206	9	63	9	286
Rural Serviced Sewer Area	388	16	119	16	539	792	33	242	33	1,100
Rural Serviced Water and Sewer Area	237	10	72	10	329	484	20	148	20	672
Total Rural Serviced	726	30	222	30	1,008	1,482	62	453	62	2,058
Total Rural Unserviced	4,547	26	3	26	4,602	9,360	54	9	54	9,476
Total Rural	5,273	56	224	56	5,610	10,842	115	461	115	11,534

Notes for AS5 and AS6:

1) All figures represent mid-year.

2) Projections are based on the sources noted in footnote 1 to Table CW1.

3) The rural serviced water area is defined as the villages of Notre-Dame-des-Champs, Carlsbad Springs, Vars and the serviced portion of Manotick.

4) The serviced sewer area is defined as the village of Richmond.

5) The serviced water and sewer area is defined as the villages of Munster and Carp.

Table AS7 City of Ottawa Rural Total Gross Floor Area (GFA), 2009, 2019 and 2031

Area	2009				
	Total Employment	GFA (sq.ft.)			
		Commercial	Industrial	Institutional	Total
Rural Serviced Water Area	1,011	302,045	12,163	49,035	363,243
Rural Serviced Sewer Area	815	150,388	120,165	70,907	341,460
Rural Serviced Water and Sewer Area	645	78,850	78,223	38,805	195,877
Total Rural Serviced	2,471	531,283	210,551	158,747	900,580
Total Rural Unserviced	22,903	2,825,978	2,448,494	503,782	5,778,254
Total Rural	25,374	3,357,260	2,659,045	662,529	6,678,834

Area	2019				
	Total Employment	GFA (sq.ft.)			
		Commercial	Industrial	Institutional	Total
Rural Serviced Water Area	1,176	348,200	14,081	59,893	422,174
Rural Serviced Sewer Area	948	173,368	139,109	86,608	399,085
Rural Serviced Water and Sewer Area	750	90,898	90,554	47,397	228,850
Total Rural Serviced	2,874	612,467	243,744	193,898	1,050,109
Total Rural Unserviced	26,634	3,257,810	2,834,500	615,336	6,707,645
Total Rural	29,508	3,870,276	3,078,245	809,234	7,757,755

Area	2031				
	Total Employment	GFA (sq.ft.)			
		Commercial	Industrial	Institutional	Total
Rural Serviced Water Area	1,403	411,857	16,726	74,868	503,451
Rural Serviced Sewer Area	1,131	205,063	165,237	108,263	478,563
Rural Serviced Water and Sewer Area	895	107,516	107,563	59,248	274,327
Total Rural Serviced	3,429	724,437	289,525	242,380	1,256,342
Total Rural Unserviced	31,780	3,853,397	3,366,884	769,191	7,989,472
Total Rural	35,210	4,577,834	3,656,409	1,011,571	9,245,813

Notes:

1) All figures represent mid-year.

2) The rural serviced water area is defined as the villages of Notre-Dame-des-Champs, Carlsbad Springs, Vars and the serviced portion of Manotick.

3) The serviced sewer area is defined as the village of Richmond.

4) The serviced water and sewer area is defined as the villages of Munster and Carp.

Table AS8 City of Ottawa Rural Gross Floor Area (GFA) Growth, 2009-19 and 2009-2031

Area	2009-2019					2009-2031				
	Total Employment	GFA (sq.ft.)				Total Employment	GFA (sq.ft.)			
		Commercial	Industrial	Institutional	Total		Commercial	Industrial	Institutional	Total
Rural Serviced Water Area	165	46,155	1,918	10,858	58,930	392	109,812	4,562	25,833	140,208
Rural Serviced Sewer Area	133	22,980	18,944	15,701	57,626	316	54,675	45,072	37,356	137,103
Rural Serviced Water & Sewer Area	105	12,049	12,332	8,593	32,973	250	28,667	29,340	20,444	78,450
Total Rural Serviced	403	81,184	33,193	35,152	149,529	958	193,154	78,974	83,633	355,761
Total Rural Unserviced	3,731	431,832	386,006	111,553	929,391	8,878	1,027,419	918,390	265,409	2,211,218
Total Rural	4,134	513,016	419,200	146,705	1,078,921	9,836	1,220,573	997,364	349,042	2,566,979

Table AS9 City of Ottawa Gross Floor Area (GFA) Growth, 2009-19 and 2009-2031

	2009-2019				
	Total Employment	GFA (sq.ft.)			
		Commercial	Industrial	Institutional	Total
City-Wide Total	69,843	16,455,786	5,028,007	4,488,464	25,972,256
Transit Area	65,709	15,942,770	4,608,807	4,341,759	24,893,336
Serviced Water Area	65,874	15,988,925	4,610,725	4,352,617	24,952,266
Serviced Sewer Area	65,842	15,965,751	4,627,751	4,357,460	24,950,961
Serviced Water and Sewer Area	65,815	15,954,819	4,621,139	4,350,351	24,926,309
Unserviced Rural Area	3,731	431,832	386,006	111,553	929,391

	2009-2031				
	Total Employment	GFA (sq.ft.)			
		Commercial	Industrial	Institutional	Total
City-Wide Total	144,723	33,733,334	10,307,099	9,201,070	53,241,503
Transit Area	134,888	32,512,760	9,309,736	8,852,028	50,674,524
Serviced Water Area	135,280	32,622,573	9,314,298	8,877,861	50,814,732
Serviced Sewer Area	135,204	32,567,436	9,354,807	8,889,384	50,811,627
Serviced Water and Sewer Area	135,138	32,541,427	9,339,076	8,872,471	50,752,974
Unserviced Rural Area	8,878	1,027,419	918,390	265,409	2,211,218

APPENDIX B
DEVELOPMENT CHARGE RECOVERABLE COST CALCULATIONS

Contents

B-1 ROADS AND RELATED SERVICES

B-1 ROADS AND RELATED SERVICES

B-1.1 DC Calculation Planning Period

2010-2031

B-1.2 Service Coverage and Capital Program

Program Coverage: roads and related projects including sidewalks, streetlights, traffic signals, structures, studies, bike lanes, and intersection modifications.

Capital Program: prepared by the Planning and Growth Management Department, based on the Transportation Master Plan update 2008, Council approved population and employment projections for 2006-2031, the Long Range Financial Plan and the following supporting documents: 1) Road Infrastructure Needs Study - 2008 Transportation Master Plan, City of Ottawa, prepared by Delcan, March 2009 revision, and, 2) City of Ottawa Development Charges Study Volume 1 and 2, prepared by Stantec Consulting Ltd.

B-1.3 Local Service and Developer Contribution Policy

The Roads and Related local service policy is documented in Appendix D.

B-1.4 Level of Service Measurement

- Quantity
    - A comparison of road volume/capacity by screenline for 12 screenlines follows and indicates that:
        - in seven cases, road usage is forecast to remain consistent or increase;
        - in three cases the roads level of service is presently well beyond acceptable levels and is being improved as a result of Highway 417 upgrades and improvements;
        - in two cases, unacceptable levels of service are being improved through the capital program and a commensurate benefit to existing development deduction has been made.
- Quality
    - Road cost assumptions are summarized on the table that follows.

Major Screenlines Level of Service Measurement

Screenline	2005 V pcus	2005 C pcus	2005 V/C	v/c >0.9	Benefit to Existing (BTE)	2031 V pcus	2031 ADD C pcus	2031 C pcus	2031 V/C	v/c ≤0.9	Post Planning Capacity (PPC)	Identified Solution to v/c deficiencies at Screenlines (lanes per direction (pcus/dir.)
#13: CNR East	8700	10,400	0.84	N	0	9770	1000	11,400	0.86	Y	5% of Airport Pkwy	+1 lane on Airport Parkway (+1000)
#8: Leitrim	4200	4950	0.85	N	0	6580	2000	6950	0.95	N	0	+1 lane on Bank Street: +1lane on Limebank Road: +2 lanes on Riverside Drive
#12: CNR West	10,800	12,360	0.88	N	0	11,710	1000	13,360	0.88	Y	7% of P.o.W	+1 lane on Prince of Wales Drive (+1000)
#9: Fallowfield	9400	12,990	0.7	N	0	11,220	1000	13,990	0.8	Y		+1 lane on Prince of Wales (+1000)
#45 Bilberry Creek	6600	9800	0.68	N	0	8030	1000	10,800	0.75	Y	20% of BBHBE	+1 lane on Blackburn Hamlet Bypass Extension (+1000)
#16 Greens Creek	11,000	11,080	1	Y	10% of 174 widening	10,730	3000	14,080	0.77	Y	17% for Innes/Walkley/ Hunt Club	+1 lane on RR 174 (+2000 pcus): +1 lane on Innes-Walkley Link (+1000 pcus)
#10a: Eagleson N	6,800	6,270	1.08	Y	MTO 417 widening will provide BTE	8,560	3000	9,270	0.92	N	0	+2 lanes on Highway 417 (3000 pcu):
#10b: Eagleson S	3,100	3,830	0.8	N	0	4,120	1000	4,830	0.85	Y	6% of Hope Side Rd.	+1 Lane opf hope side (1000 pcu)
#19/32 Rideau River Central / Queensway	13,400	13,020	1.03	Y	MTO 417 widening will provide BTE	14,610	3000	16,020	0.92	N	0	+1 lane on Highway 417 (+1500 pcus): +2 lanes on AVTC (+1500 pcus)
#20/42 Rideau River South / Manotick	7200	6350	1.14	Y	21% of Strandherd/Armstrong Bridge	9100	4000	10350	0.88	Y	2% of 2nd Rideau River Bridge	+ 2 lanes on Strandherd/Armstrong Bridge + 2nd new bridge at Fallowfield/Leitrim
#24/25: Western Parkway	18,000	16,300	1.11	Y	0% - will continue to be above 0.9 with all projects	18,380	2000	18,300	1.01	N	0	+ Highway 417 Upgrade (+1000) + Richmond Road Widening (+1000)
#54: Smyth / Hydro	3500	4700	0.75	N	0	4750	1000	5700	0.84	Y	7% of AVTC from Hospital to Walkley	+1 lane on AVTC (+1000)

Note: "pcus" stands for passenger car units.

Per Kilometre Unit Construction Costs ($m/km)

Arterial Cross-Section	Base cost per KM ($Million)	Total Cost Per KM including engineering, management, contingency and property costs
• Widen from a two-lane rural arterial (2 RAU) to a six-lane divided urban arterial (6 UAD)	$7.65M	$11.40M
• Widen from a two-lane rural arterial (2 RAU) to a four-lane divided urban arterial (4 UAD)	$5.35M	$8.00M
• Widen from a two-lane rural arterial (2 RAU) to a four-lane undivided urban arterial (4 UAU)	$5.00M	$7.50M
• Widen from a two-lane rural arterial (2 RAU) to four-lane undivided rural arterial (4 RAU)	$4.20M	$6.30M

Increase in Vehicle Kilometres Travelled (VKT)

Auto Mode

From	To	Vehicle Km Travelled (VKT)			%	%	
		2005	2031	increase			
Inside Greenbelt	Everywhere	564,700	590,600	25,900	8%	8%	Inside Greenbelt
Orleans	Everywhere	178,200	188,800	10,600	3%	65%	Outside Greenbelt
Riverside South and Leitrim	Everywhere	20,500	84,100	63,600	19%		
South Nepean	Everywhere	99,600	157,300	57,700	17%		
Kanata-Stittsville	Everywhere	157,100	241,000	83,900	25%		
Rural	Everywhere	298,600	388,200	89,600	27%	27%	Rural
Total		1,318,700	1,650,000	331,300	100%	100%	

B-1.5 Consideration of Existing (Uncommitted) Excess Capacity

Areas of excess capacity were taken into consideration via traffic modelling in calculating additional need.

B-1.6 Benefit to Existing Development Deduction

No deduction was made in the case of debt payments issued with respect to previously-determined DC recoverable costs. A 5% deduction was made in the case of most projects in order to address the benefit of resurfacing existing lanes in the case of a widening or urbanization, thereby extending the useful life of those existing lanes, to some degree.

A 21% deduction was made in the case of the Strandherd/Earl Armstrong Bridge and 10% in the case of the Ottawa Road 174 project, consistent with the results of the V/C analysis on page B-3. A 50% deduction was made in the case of the Old Prescott Road collector project and 10% in the case of Kanata Ave. and Goulbourn Forced Road collectors, consistent with their circumstances.

Finally, for traffic and parking operations, benefit to existing is assigned as appropriate to the ratio of population growth to existing population for 2009-2031, i.e. 79%. Deductions of 21% and 50% have been made in some cases.

B-1.7 Post Period/Excess Capacity Deduction

A deduction has been made in the case of a number of projects which have been specifically oversized to provide for growth beyond 2031 requirements. The basis for a number of these deductions is outlined as part of the screenline analysis on p. B-3. For all other City-wide projects, excluding traffic and parking operations, to be constructed in the 2020-2031 timeframe, a post period deduction of 25% of gross cost has been made to recognize that these works will accommodate growth beyond the current planning period.

B-1.8 Provision for Grants, Subsidies and Other Contributions

Direct developer contributions have been netted out of gross project costs wherever applicable. A decision was made to include a deduction for funding anticipated from the Federal Stimulus Program prior to confirmation of the extent of the funding in the case of six projects.

B-1.9 10% Statutory Deduction

This deduction is not applicable to roads.

B-1.10 Use of Existing Reserve Funds

The December 31, 2008 uncommitted DC reserve fund balance has been deducted in making the DC calculation for roads.

B-1.11 Residential vs. Non-Residential Split

The population/employment ratio (2009-2031) has been used, as it reflects the full use of the road system, rather than simply considering peak hour traffic trips. This calculation was done on an area basis for major collectors and the ratio therefore varies by Large Area and project, where applicable, i.e.:

- 61.75% Residential City-wide
- 70.2% Residential – West Area
- 68.8% Residential – South Area
- 62.9% Residential – East Area

} Collector Program

B-1.12 Area-Specific Cost Allocation

Residential Charge

A portion of the cost of the road program is allocated based on the additional Vehicle Kilometres Travelled (VKT) generated from each area. This distribution takes into account the increase in trip internalization from the three large geographic areas (see page B-4). This results in the following allocation of future road costs: 8% to Inside the Greenbelt, 65% to Outside the Greenbelt and 27% to the Rural Area. A portion of the program is to be recovered on a uniform City-wide basis, including arterial roads, traffic management, safety improvement, cycling facilities, traffic control signals, etc. In the case of existing debt payments, the 2004 allocation was maintained which was 5% Inside the Greenbelt, 92% Outside the Greenbelt and 3% Rural.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
City-Wide Development Charge Projects
Service - Roads and Related Services

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Less: Post Period Capacity $000	Growth Cost $000	100% Statutory Portion $000	62% Residential Share $000	38% Non-residential Share $000
		Roads - (Master Plan - Arterial)									
1.0764A	2019	Airport Parkway (Brookfield-Lester/Airport)	27,130	5%	1,357	-	1,357	24,417	24,417	15,079	9,338
1.0794A	2012	Alta Vista TC (Riverside-Hospital Ring Road)	55,500	5%	2,775	-	-	52,725	52,725	32,562	20,163
1.0794B	2021	Alta Vista TC (Highway 417-Riverside)	38,400	5%	1,920	-	9,600	26,880	26,880	16,600	10,280
1.0794C	2023-2031	Alta Vista TC (Hospital Ring Road-Walkley)	14,500	5%	725	-	3,625	10,150	10,150	6,268	3,882
1.0814A	2022	Bank Street (Leitrim-Findlay Creek)	14,300	5%	715	-	3,575	10,010	10,010	6,182	3,828
1.0019	2023-2031	Bank Street (Findlay Creek-Mitch Owens/Greely)	31,200	5%	1,560	-	7,800	21,840	21,840	13,488	8,352
1.0029	2023-2031	Barnsdale (Highway 416-Prince of Wales)	15,750	5%	788	-	3,938	11,025	11,025	6,809	4,216
1.0039	2023-2031	Barnsdale - Highway 416 Interchange	16,100	5%	805	-	4,025	11,270	11,270	6,960	4,310
1.0824	2023-2031	Blackburn Hamlet By-Pass (Innes) 6 lanes	15,000	5%	750	-	3,750	10,500	10,500	6,485	4,015
1.0049	2020	Blackburn HBPE (BHBP-Navan) 4 lane	10,700	5%	535	-	2,140	8,025	8,025	4,956	3,069
1.0059	2014	Blackburn HBPE (Navan-Tenth Line)	17,300	5%	865	-	3,460	12,975	12,975	8,013	4,962
1.0069	2014	Blackburn HBPE (Portobello-Trim)	2,000	5%	100	-	-	1,900	1,900	1,173	727
1.0079	2023-2031	Blackburn HBPE (Trim-Frank Kenny)	4,900	5%	245	-	980	3,675	3,675	2,270	1,405
1.0089	2019	Cambrian (New Greenbank-Jockvale)	14,690	5%	735	-	-	13,956	13,956	8,619	5,337
1.1234A	2012	Campeau (Didsbury-Kanata, Huntmar-Didsbury)	30,400	5%	1,520	-	-	28,880	28,880	17,836	11,044
1.1224A	2017	Campeau (Kanata-March)	15,600	5%	780	-	-	14,820	14,820	9,152	5,668
1.0119	2016	Carp (Highway 417-Hazeldean)	12,600	5%	630	-	-	11,970	11,970	7,392	4,578
1.0854	2023-2031	Coventry Road (Belfast-West of St. Laurent)	3,120	5%	156	-	780	2,184	2,184	1,349	835
1.0874	2016	Eagleson Road (Cadence Gate-Hope Side)	10,150	5%	508	-	-	9,643	9,643	5,955	3,688
1.0149	2010	Earl Armstrong (River Road-Limebank)	16,475	5%	824	10,000	-	5,651	5,651	3,490	2,161
1.0884	2023-2031	Earl Armstrong (Limebank-High & High-Bank)	39,000	5%	1,950	-	9,750	27,300	27,300	16,860	10,440
1.0159	2013	Earl Grey/Terry Fox Underpass	3,500	5%	175	-	-	3,325	3,325	2,053	1,272
1.0894B	2013	Fallowfield (Cedarview to Greenbank)	16,800	5%	840	-	-	15,960	15,960	9,856	6,104
1.0894A	2023-2031	Fallowfield (Strandherd-Cedarview & Woodroffe-Prince of Wal	26,000	5%	1,300	-	6,500	18,200	18,200	11,240	6,960
1.1174A	2022	Frank Kenny Extension (Trim Realignment-Innes)	27,400	5%	1,370	-	6,850	19,180	19,180	11,845	7,335
1.0924A	2013	Greenbank Road (Malvern-Strandherd)	26,300	5%	1,315	-	-	24,985	24,985	15,430	9,555
1.0924B	2019	Greenbank Road Realigned (Jockvale-Cambrian) & Bridge	43,200	5%	2,160	-	-	41,040	41,040	25,345	15,695
1.0924C	2010-2016	Greenbank Road (South of Cambrian)	8,500	5%	425	-	-	8,075	8,075	4,987	3,088
1.0934A	2011	Hazeldean Road (Iber/Huntmar-Terry Fox)	22,300	5%	1,115	15,000	-	6,185	6,185	3,820	2,365
1.0934B	2018	Hazeldean Road (Stittsville Main-Iber/Huntmar)	17,300	5%	865	15,000	-	1,435	1,435	886	549
1.0934C	2023-2031	Hazeldean Road (Carp-Stittsville Main)	10,200	5%	510	-	2,550	7,140	7,140	4,409	2,731
1.0944A	2013	Hope Side Road/Crown Ridge (Richmond-Moodie)	6,700	5%	335	-	402	5,963	5,963	3,683	2,280
1.0944B	2016	Hope Side Road (Eagleson-Richmond & Moodie-Highway 416)	29,200	5%	1,460	-	1,752	25,988	25,988	16,050	9,938
1.1304A	2017	Huntmar (Palladium-Maple Grove & Campeau Extension-Cyclo	14,480	5%	724	-	-	13,756	13,756	8,495	5,261
1.0974A	2023-2031	Hunt Club (Riverside-Bank)	15,200	5%	760	-	3,800	10,640	10,640	6,571	4,069
1.0984	2011	Hunt Club Extension (Hawthorne-Highway 417)	34,270	5%	1,714	13,000	-	19,557	19,557	12,078	7,479
1.1004A	2016	Innes/Walkley/Hunt Club (Innes-Highway 417) 2 Lanes	63,400	5%	3,170	-	10,778	49,452	49,452	30,540	18,912
1.1014	2018	Jockvale Road (Jock River-Prince of Wales)	32,600	5%	1,630	-	-	30,970	30,970	19,126	11,844
1.0189	2016	Kanata West N/S Arterial (Hazeldean-Fernbank)	14,700	5%	735	-	-	13,965	13,965	8,624	5,341
1.1344A	2023-2031	Kanata West N/S Arterial (Palladium-Hazeldean)	17,900	5%	895	-	4,475	12,530	12,530	7,738	4,792
1.1034	2023-2031	Katimavik Road (Terry Fox-Eagleson)	21,990	5%	1,100	-	5,498	15,393	15,393	9,506	5,887
1.0209	2023-2031	Leitrim Road (River Road-East of Limebank)	8,750	5%	438	-	2,188	6,125	6,125	3,783	2,342
1.1054B	2023-2031	Limebank (South of Earl Armstrong-Mitch Owens)	26,500	5%	1,325	-	6,625	18,550	18,550	11,456	7,094
1.1324	2023-2031	Maple Grove (Huntmar-Terry Fox)	13,840	5%	692	-	3,460	9,688	9,688	5,983	3,705
1.1074	2023-2031	March Road (Old Carp-Dunrobin)	22,300	5%	1,115	-	5,575	15,610	15,610	9,640	5,970
1.0134-0174	2014	Mer Bleue Road - Commercial Entrance to Navan	28,000	5%	1,400	3,000	-	23,600	23,600	14,575	9,025

City of Ottawa
City-Wide Development Charge Projects
Service - Roads and Related Services

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Less: Post Period Capacity $000	Growth Cost $000	100% Statutory Portion $000	62% Residential Share $000	38% Non-residential Share $000
1.0219	2020	Navan (Blackburn HBPE-Mer Bleue)	23,600	5%	1,180	-	5,900	16,520	16,520	10,202	6,318
1.0914A	2013	Ottawa Road 174 (Highway 417-Blair)	6,100	10%	610	-	-	5,490	5,490	3,390	2,100
1.0914B	2019	Ottawa Road 174 (Blair-Jeanne d'Arc)	25,300	10%	2,530	-	-	22,770	22,770	14,062	8,708
1.1314	2016	Paladium Drive Re-alignment	4,100	5%	205	-	-	3,895	3,895	2,405	1,490
1.1104	2016	Prince of Wales (Fisher-Woodroffe)	69,000	5%	3,450	-	4,830	60,720	60,720	37,499	23,221
1.1114A	2023-2031	Richmond Road (Carling-Golden)	35,000	5%	1,750	-	8,750	24,500	24,500	15,131	9,369
1.0034	2023-2031	Rideau River - 2nd Bridge (Location Undetermined)	42,500	5%	2,125	-	10,625	29,750	29,750	18,373	11,377
1.214B	2023-2031	Riverside Drive (Hunt Club-Limebank) - 6 Lanes	8,700	5%	435	-	2,175	6,090	6,090	3,761	2,329
1.1144	2016	St. Joseph Blvd (Tenth Line-Diary)	9,500	5%	475	-	-	9,025	9,025	5,574	3,451
1.0024	2010	Strandherd/Earl Armstrong Bridge	15,400	21%	3,234	-	-	12,166	12,166	7,513	4,653
1.1154B	2018	Strandherd Drive (Fallowfield-Jockvale)	61,900	5%	3,095	-	-	58,805	58,805	36,316	22,489
1.1154C	2023-2031	Strandherd Drive (Greenbank-Woodroffe) 6 Lanes	14,600	5%	730	-	3,650	10,220	10,220	6,312	3,908
1.0234-1.0264	2014	Tenth Line (Vanguard-Future Street 31)	12,230	5%	612	-	-	11,619	11,619	7,175	4,443
1.1164A	2010	Terry Fox Drive (Flamborough-Richardson Side) 2 Lanes	36,900	5%	1,845	23,000	-	12,055	12,055	7,445	4,610
1.1164B	2019	Terry Fox Drive (Winchester-Eagleson)	27,100	5%	1,355	-	-	25,745	25,745	15,899	9,846
1.1164C	2023-2031	Terry Fox Drive (Campeau-Palladium & March-South of Richar	45,400	5%	2,270	-	11,350	31,780	31,780	19,627	12,153
1.1174-1.0204	2011	Trim Road (Ottawa Road 174-Innes)	26,000	5%	1,300	-	-	24,700	24,700	15,254	9,446
1.0204A	2014	Trim Road (South of Innes to BHBP)	9,903	5%	495	-	-	9,408	9,408	5,810	3,598
1.0964	2023-2031	West Hunt Club Road (Highway 416-Prince of Wales)	35,800	5%	1,790	-	8,950	25,060	25,060	15,476	9,584
1.0249	2010-2031	Environmental Assessment Studies	48,500	5%	2,425	-	12,125	33,950	33,950	20,967	12,983
1.57X9	2016	Fernbank Road (Terry Fox-Eagleson)	3,400	85%	2,890	-	-	510	510	315	195
		Traffic and Parking Operations									
1.1464	2010-2031	Street Light Major Replacements	6,084	79%	4,825	-	-	1,259	1,259	778	481
1.1514	2010-2031	Traffic Signals/Signage - Provincial Highways	450	79%	357	-	-	93	93	57	36
1.1554	2010-2031	Computerized Traffic Surveillance	3,350	79%	2,657	-	-	693	693	428	265
1.1574	2010-2031	Parking Studies	700	75%	525	-	-	175	175	108	67
1.1494	2010-2031	Transportation Demand Management	4,280	50%	2,140	-	-	2,140	2,140	1,322	818
1.1544	2010-2031	New Traffic Control Signal Program	36,604	21%	7,687	-	-	28,917	28,917	17,858	11,059
1.2009	2010-2031	Traffic Incident Management	6,500	21%	1,365	-	-	5,135	5,135	3,171	1,964
1.2019	2010-2031	Advanced Traffic Management Systems(ATMS)	6,500	21%	1,365	-	-	5,135	5,135	3,171	1,964
1.1424	2010-2031	Safety Improvement Program	17,050	50%	8,525	-	-	8,525	8,525	5,265	3,260
1.1534	2010-2031	Network Modification Program	25,564	21%	5,368	-	-	20,196	20,196	12,473	7,723
1.1524	2010-2031	Audible Signal Program	1,345	79%	1,063	-	-	282	282	174	108
1.1564	2010-2031	New Sidewalks & Sidewalk/Pathway Links	10,953	79%	8,653	-	-	2,300	2,300	1,420	880
1.1454	2010-2031	Cycling Facilities Program	34,920	79%	27,587	-	-	7,333	7,333	4,529	2,804
1.1474	2010-2031	New Street Lighting	4,400	79%	3,476	-	-	924	924	571	353
1.1444	2010-2031	Area Traffic Management	7,545	79%	5,961	-	-	1,584	1,584	978	606
		Total	**1,683,323**		**164,162**	**79,000**	**183,586**	**1,256,575**	**1,256,575**	**776,028**	**480,547**

REVISED B-8

City of Ottawa
Area-Specific Development Charge Projects
Service - Roads and Related Services

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less			Growth Cost $000	Residential Share $000	Non-residential Share $000	Allocation of Expenditures by Area		
					Benefit to Existing Development $000	Grants, Subsidies & Contributions $000	Post Period Capacity $000				Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
		Collector Roads											
		West Area											
1.0474	2011	Kanata Ave - Goulbourn Forced Road to Richardson Side Road	1,644	10%	164	-	-	1,480	1,039	441	118	962	400
1.X14C	2011	Goulbourn Forced Road - Rockeries to Walden	2,530	10%	253	-	-	2,277	1,598	679	182	1,480	615
1.X14D	2014	Goulbourn Forced Road - Walden to Terry Fox	10,670	10%	1,067	-	-	9,603	6,741	2,862	768	6,242	2,593
1.5009	2010	Stittsville Main Street Extension-Hazeldean-Maple Grove Road	441	5%	22	-	-	419	294	125	34	272	113
1.5019	2018	Kanata West Main Street	895	5%	45	-	-	850	597	253	68	553	230
1.5459	2010	Second Line Road	924	5%	46	-	-	878	616	262	70	571	237
		South Area											
1.0404	2015-2017	Leitrim Diversion Road - East of Limebank to Bowesville	2,247	5%	112	-	-	2,135	1,469	666	171	1,388	576
1.0434	2011	Spratt Road Extension	337	5%	17	-	-	320	220	100	26	208	86
1.0424	2011	Riverside South Collector Road - Main Street Downtown	1,214	5%	61	-	-	1,153	793	360	92	749	311
1.0444	2015	McKenna Casey - Hwy 416 to Strandherd	2,528	5%	126	-	-	2,402	1,653	749	192	1,561	649
1.0464	2010-2014	Chapman Mills - Strandherd to Woodroffe	2,797	5%	140	-	-	2,657	1,828	829	213	1,727	717
1.0484	2016-2017	Jockvale Road - Marketplace to Longfields	661	5%	33	-	-	628	432	196	50	408	170
		East Area					-						
1.0314	2013	Portobello Blvd - Blackburn Hamlet Bypass to Street #20	159	5%	8	-	-	151	95	56	12	98	41
1.0344	2011	Belcourt Blvd - Renaud to Navan Road	1,030	5%	52	-	-	978	615	363	78	636	264
1.0354	2016	Collector Rd B - Mer Bleue to Belcourt	993	5%	50	-	-	943	593	350	75	613	255
1.0364	2010	Belcourt Blvd - Innes to Walmart Entrance	940	5%	47	-	-	893	562	331	71	580	241
1.0364	2012	Belcourt Blvd - Walmart entrance to Vanguard	310	5%	16	-	-	294	185	109	24	191	79
1.0364	2014	Belcourt Blvd - Vanguard to Renaud	2,247	5%	112	-	-	2,135	1,343	792	171	1,388	576
1.5029	2012	Old Prescott Road - Mitch Owens to Donwel	714	50%	357	-	-	357	225	132	29	232	96
		Traffic Signals and Intersection Program											
		West Area											
1.0654	2011	Terry Fox @ Fourth Line	175	5%	9	-	-	166	117	49	13	108	45
1.0684	2014	Goulbourn Forced Road @ Walden Drive	175	5%	9	-	-	166	117	49	13	108	45
1.0694	2014	Goulbourn Forced Road @ Shirley's Brook Collector North	175	5%	9	-	-	166	117	49	13	108	45
1.0704	2014	Goulbourn Forced Road @ Shirley's Brook Collector South	175	5%	9	-	-	166	117	49	13	108	45
1.0724	2012	Solandt @ Walden	175	5%	9	-	-	166	117	49	13	108	45
1.0744	2011	Terry Fox @ Legget	175	5%	9	-	-	166	117	49	13	108	45
1.5059	2010	Richardson Side Road @ Kanata Ave	175	5%	9	-	-	166	117	49	13	108	45
1.5069	2010-2012	Stonehaven Intersection Improvements - Three Intersections	750	5%	38	-	-	712	500	212	57	463	192
1.5469	2011	Terry Fox Drive @ Kanata Avenue	993	5%	50	-	-	943	662	281	75	613	255
1.5479	2010	Bankfield @ First Line Road	200	5%	10	-	-	190	133	57	15	124	51
1.A229	2010	Silver Seven @ Palladium Drive	900	5%	45	-	-	855	600	255	68	556	231
		South Area											
1.5089	2011	Greenbank @ Existing Jockvale	675	5%	34	-	-	641	441	200	51	417	173
1.0644	2011-2012	South Nepean Warranted Traffic Signals	525	5%	26	-	-	499	343	156	40	324	135
1.X44	2012	Chapman Mills @ Jockvale	200	5%	10	-	-	190	131	59	15	124	51
1.X24	2012	Chapman Mills @ Strandherd	250	5%	13	-	-	237	163	74	19	154	64
1.5099	2012	Strandherd @ Maravista	250	5%	13	-	-	237	163	74	19	154	64
1.5109	2014	Strandherd @ Jockvale	900	5%	45	-	-	855	588	267	68	556	231
1.0624	2011-2014	South Urban Community Warranted Traffic Signals	1,000	5%	50	-	-	950	654	296	76	618	257
1.5119	2010	White Alder Drive @ Bank Street	175	5%	9	-	-	166	114	52	13	108	45
1.5129	2018	Bank @ Analdea Dr. North	175	5%	9	-	-	166	114	52	13	108	45
1.5139	2018	River Rd @ Future Collector 1	175	5%	9	-	-	166	114	52	13	108	45
1.5149	2019	River Rd @ Future Collector 2	175	5%	9	-	-	166	114	52	13	108	45
1.5159	2012	Spratt @ Armstrong	175	5%	9	-	-	166	114	52	13	108	45
1.5169	2017	Armstrong @ Shoreline	175	5%	9	-	-	166	114	52	13	108	45
1.5179	2015	Armstrong @ Canyon Walk	175	5%	9	-	-	166	114	52	13	108	45
1.5189	2011	Armstrong @ Limebank	175	5%	9	-	-	166	114	52	13	108	45
1.5199	2017	Riverside Main Street @ Limebank	175	5%	9	-	-	166	114	52	13	108	45
1.5209	2012	Albion @ Findlay Creek	175	5%	9	-	-	166	114	52	13	108	45
1.6009	2010	Greenbank @ Future Jockvale	175	5%	9	-	-	166	114	52	13	108	45
1.B229	2012	Jockvale and Cedarview Roundabout	600	5%	30	-	-	570	392	178	46	371	154

City of Ottawa
Area-Specific Development Charge Projects
Service - Roads and Related Services

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Less: Post Period Capacity $000	Growth Cost $000	Residential Share $000	Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
		Central Area											
1.5219	2010	Huntclub @ Billy Bishop Private	175	5%	9	-	-	166	66	100	13	108	45
1.5239	2010	Huntclub @ Canadair	200	5%	10	-	-	190	75	115	15	124	51
1.6019	2010-2011	Industrial @ Riverside Drive	2,000	5%	100	-	-	1,900	751	1,150	152	1,235	513
		East Area											
1.0524	2010	Scala @ Portobello	175	5%	9	-	-	166	104	62	13	108	45
1.0574	2011	East Urban Community Warranted Traffic Signals	537	5%	27	-	-	510	321	189	41	332	138
1.5249	2010	Belcourt @ Vanguard	175	5%	9	-	-	166	104	62	13	108	45
1.5259	2011	Belcourt @ Renaud Road	175	5%	9	-	-	166	104	62	13	108	45
1.5269	2012	Belcourt @ Collector Road B	175	5%	9	-	-	166	104	62	13	108	45
1.5279	2014	Belcourt @ Navan Road	175	5%	9	-	-	166	104	62	13	108	45
1.5289	2010	Tenth Line @ Southfield	175	5%	9	-	-	166	104	62	13	108	45
1.5309	2011	Trim @ Montmere	175	5%	9	-	-	166	104	62	13	108	45
1.5319	2011	Blackburn Hamlet Bypass @ Portobello	350	5%	18	-	-	332	209	123	27	216	90
1.5329	2013	2 Blackburn Hamlet Bypass Warranted Intersections for the Mer Bleue Community Design Plan Lands	700	5%	35	-	-	665	418	247	53	432	180
1.5339	2013-2014	Navan @ Renaud	1,500	5%	75	-	-	1,425	896	529	114	926	385
1.5349	2010	Mitch Owens @ Manotick Station Road	560	5%	28	-	-	532	335	197	43	346	144
1.5359	2011	Mitch Owens @ Tranquille Gate	560	5%	28	-	-	532	335	197	43	346	144
1.5369	2011	Manotick Station Road @ Street 8	175	5%	9	-	-	166	104	62	13	108	45
		Roads Programs											
1.5389	2010	Road Development Studies - EUC	100	5%	5	-	-	95	60	35		95	
1.5399	2010-2015	Road Development Studies - Barrhaven South	150	5%	8	-	-	142	98	44		142	
1.5409	2010	Road Development Studies - Leitrim	50	5%	3	-	-	47	32	15		47	
1.5419	2010	Road Development Studies - Kanata West	50	5%	3	-	-	47	33	14		47	
1.5429	2010-2015	Road Development Studies - Riverside South	150	5%	8	-	-	142	98	44		142	
1.5439	2016	Road Development Studies - Barrhaven South	50	5%	3	-	-	47	32	15		47	
1.1644	2010-2019	Development Sidewalks Program	1,390	5%	70	-	-	1,320	800	520		1,320	
1.5449	2010-2019	Major Collector Road EA and Studies	900	5%	45	-	-	855	518	337		855	
		Debt Payments											
1.0044	2010-2029	Mackenzie Ave./Rideau St.Improvements - Debt Payments	260					260	161	99	13	239	8
1.0474	2014-2031	Kanata Ave/Goulbourn Forced Road EA/Design - Debt Payments	6,048					6,048	3,738	2,310	302	5,564	181
1.0224&1.0234	2011-2030	Tenth Line Road - Innes to Lakepointe 3 - Debt Payments	1,900					1,900	1,174	726	95	1,748	57
1.0454	2011-2030	Longfields Drive (Woodroffe to Leikin) - Debt Payments	440					440	272	168	22	405	13
1.0134&1.0174	2010-2029	Mer Bleue Road (Innes to Navan) - Debt Payments	1,580					1,580	976	604	79	1,454	47
1.0194	2011-2030	Trim Road (Innes to BHBP) - Debt Payments	2,860					2,860	1,767	1,093	143	2,631	86
1.0274&1.0324	2011-2030	Portobello Blvd - Debt Payments	7,320					7,320	4,524	2,796	366	6,734	220
1.0024	2015-2031	Strandherd / Armstrong Bridge - Debt Payments	19,057					19,057	11,769	7,288	953	17,532	572
1.0104	2014-2031	Strandherd Drive -Woodroffe-Prince of Wales - Debt Payments	48,456					48,456	29,925	18,531	2,423	44,580	1,454
1.1054	2014-2031	Limebank Road (Riverside to Spratt) - Debt Payments	20,988					20,988	12,962	8,026	1,049	19,309	630
1.1214	2011-2030	Riverside Drive (Hunt Club - Limebank) - Debt Payments	10,980					10,980	6,781	4,199	549	10,102	329
1.1024	2012-2031	Jockvale/Longfields Link - Debt Payments	3,480					3,480	2,149	1,331	174	3,202	104
1.1664	2010-2016	Limebank Road - Debt Payments	432					432	267	165	22	397	13
1.1674	2010-2017	Carriere St. Extension - Debt Payments	256					256	158	98	13	236	8
1.1684	2010-2017	Albion Road - Debt Payments	108					108	67	41	5	99	3
1.1654	2010-2024	Armstrong Road S.U.C. - Debt Payments	975					975	602	373	49	897	29
1.0044A	2010-2025	Mackenzie Ave./Rideau St.Improvements - Debt Payments	176					176	109	67	9	162	5
		Total	**179,812**		**3,801**	**-**	**-**	**176,011**	**111,051**	**64,961**	**10,106**	**149,186**	**16,719**

Res	6,428	93,666	10,956
Non-Res	3,677	55,519	5,763
Total	10,106	149,186	16,719

B-2 SANITARY SEWER

B-2 SANITARY SEWER

B-2.1 DC Calculation Planning Period

2010-2031

B-2.2 Service Coverage and Capital Program

Coverage: collectors and trunks, rehabilitation, flow monitoring program, sewer oversizing, flow diversion, pumping stations, twinning, net of local service requirements.

Capital Program: prepared by staff. Major projects based on the 2009 proposed Infrastructure Master Plan, Community Design Plans and Master Servicing Studies, other servicing studies, Long Range Financial Plans, 10-Year Capital Budgets, and the Stantec Review of studies. Projects are per Provincial standards and City of Ottawa Design Guidelines (CD available if requested) and specifications. Projects have been included in City of Ottawa 10-Year Capital Budgets and/or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-2.3 Local Service and Developer Contribution Policy

The sanitary sewer local service policy is documented in Appendix D.

B-2.4 Level of Service Measurement

- Quantity – Provincial standards and City of Ottawa Design Guidelines for local infrastructure to additional flow monitoring for major infrastructure and other specifications
- Quality – Benchmarks costs for smaller pipes and project costs for larger distribution pipes, elevated tanks, reservoirs and pumping stations

B-2.5 Benefit to Existing Development Deduction

With respect to sanitary treatment capacity projects, no benefit to existing development deduction has been made for existing debt payments which relate to previous DC recoverable costs. A 10% deduction was made for purely capacity-related projects, including the R.O.

Pickard plant expansion and associated outfall, as well as new vehicles and studies in order to reflect minor qualitative improvements.

For the remaining projects, a 79-80% deduction was made, consistent with the size of the existing 2009 population in comparison with the forecast 2031 population, plus a similar 10% upward adjustment to reflect qualitative improvements.

With respect to sanitary sewer projects, a 10% benefit to existing development deduction was made in the case of collectors, trunks and related requirements that are entirely capacity-related. Deductions were made in the case of six projects, ranging from 30% in the case of the Ottawa River Fund, to 90% in the case of intensification area projects involving rehabilitation and collectors.

No deductions were made in the case of sub-area projects.

The calculation basis for the benefit to existing development deductions is summarized in the table which follows.

Some of the considerations involved include:

- Where there is a growth-related need triggering the project and it is a capacity increase project, normally it is 100% development-related.
- Where the trigger is the need to improve reliability and some capacity increase is provided, then the population/employment growth increment is used.
- Where there is a growth-related project need which provides ancillary reliability benefits, an appropriate cost allocation is made for this purpose.
- The existing development's proportionate share of overall system upgrades/ improvements/rehabs which include the cost of providing adequate service reliability, etc., to areas where there are deficiencies.

B-2.6 Post Period/Excess Capacity Deduction

The availability of excess capacity has been addressed in modelling future needs on a net basis. A post period deduction of 25% of net growth cost has been made to the R.O. Pickard Plant Expansion to recognize that this work will be sized to accommodate flows greater than what is needed for the immediate growth forecast.

Residential Component of Growth

	Residential - Mld		ICI (Non-residential) Mld		Total - Mld		Growth in Demand Mld	Residential Growth Mld	Non-Residential Growth Mld	Residential Component of Growth
	2009	2031	2009	2031	2009	2031				
Inside Greenbelt	130.8	153.7	69.1	77.0	199.9	230.8	30.9	22.9	8.0	0.74
Outside Greenbelt	59.5	101.2	11.7	22.0	71.1	123.2	52.1	41.7	10.4	0.80
West Urban Community	21.1	36.4	6.5	10.5	27.7	46.8	19.2	15.2	3.9	0.80
South Urban Community	17.0	34.6	2.4	6.8	19.4	41.4	22.1	17.6	4.4	0.80
East Urban Community	21.4	30.2	2.7	4.8	24.1	35.0	10.9	8.8	2.0	0.81
Total	190.3	254.9	80.7	99.1	271.0	354.0	83.0	64.6	18.3	0.78
1e	22.5	28.1	9.0	10.0	31.5	38.1	6.6	5.7	1.0	0.85
2c	34.2	38.3	26.4	28.9	60.6	67.2	6.6	4.0	2.5	0.61
Leitrim	3.3	7.4	0.7	1.0	4.0	8.3	4.3	4.0	0.3	0.93
Manotick	0.1	1.7	0.1	0.3	0.2	2.0	1.8	1.6	0.2	0.87

B-2.7 Provision for Grants, Subsidies and Other Contributions

Provision has been made for $51,333,000 in subsidies for the Ottawa River Fund sewer separation and non-integrated works. Any direct developer funding has been netted out of the gross capital costs included.

B-2.8 10% Statutory Deduction

Not applicable.

B-2.9 Use of Existing Reserve Funds

The December 31, 2008 uncommitted DC reserve fund balance has been netted in making the DC calculation for sanitary sewer works.

B-2.10 Residential vs. Non-Residential Split

The 2009-31 increment in average flow required for residential development vs. non-residential development determines the split, which is 61.8:38.2 (res.non-res.) in the case of most of the sanitary treatment capacity projects. The split for sanitary sewer projects varies depending upon whether the project is Inside the Greenbelt (59:41) or Outside (79.5:20.5), except in the case of several area-specific projects which have somewhat higher residential cost attributions.

B-2.11 Area-Specific Cost Allocation

Residential Charge

The cost of sanitary treatment capacity has been allocated on a uniform City-wide basis. The cost of sanitary sewers has been allocated between the Urban Inside vs. Outside the Greenbelt, with the Rural area addressed separately, where applicable.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
City-Wide Development Charge Projects
Service - Sanitary Treatment

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Less: Post Period Capacity $000	Growth Cost $000	Residential Share $000	Non-residential Share $000
10.104	2010-2029	R.O. Pickard Plant Digester Expansion - Debt Payments	90,700	0%	-	-	-	90,700	56,053	34,647
21.014	2010-2024	Infrastructure Master Planning (Sewer)	4,400	89%	3,934	-	-	466	288	178
10.174	2010-2031	Extraneous Flow Removal	15,852	90%	14,267	-	-	1,585	1,125	460
10.184	2010-2031	Infrastructure Management	29,236	90%	26,312	-	-	2,924	2,076	848
10.154	2010-2031	Flow Monitoring	10,474	90%	9,427	-	-	1,047	743	304
10.114	2010-2031	New Vehicles Waste Water	530	10%	53	-	-	477	295	182
10.104A	2012-2025	R.O. Pickard Plant Expansion	81,736	10%	8,174	-	18,391	55,172	34,096	21,076
10.134	2011-2030	R.O. Pickard Regulatory Impacts - Debt Payments	60	0%	-	-	-	60	37	23
10.024	2010-2031	R.O. Pickard Plant Miscellaneous Upgrades	41,857	89%	37,253	-	-	4,604	2,845	1,759
10.094	2029	Biosolids Program Volume Reduction	55,000	89%	48,950	-	-	6,050	3,739	2,311
21.054	2011-2031	Wastewater EA Studies	2,750	20%	550	-	-	2,200	1,714	486
		Total	**332,595**		**148,920**	-	**18,391**	**165,285**	**103,011**	**62,274**

City of Ottawa
Area-Specific Development Charge Projects
Service - Sanitary Sewers

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Less: Post Period Capacity $000	Growth Cost $000	Residential Share $000	Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
10.264	2011	North Kanata Sewer Phase 2	8,500	10%	850	-	-	7,650	6,083	1,567		7,650	
10.009	2014	Tri-Township Collector & March Road Trunk	4,000	69%	2,760	-	-	1,240	986	254		1,240	
10.019	2012	South Nepean Collector Phase 2	3,000	10%	300	-	-	2,700	2,159	541		2,700	
10.029	2014	South Nepean Collector Phase 3	4,800	10%	480	-	-	4,320	3,454	866		4,320	
10.414	2013-2014	Kanata West PS & FM	21,250	10%	2,125	-	-	19,125	16,639	2,486		19,125	
10.039	2014	Kanata West Trunk Sewer	7,875	10%	788	-	-	7,087	6,166	921		7,087	
10.049	2010	Fernbank Sanitary Sewers	2,500	10%	250	-	-	2,250	1,789	461		2,250	
10.059	2018	March Pumping Station Conversion	950	10%	95	-	-	855	680	175		855	
10.069	2010/2014	Hazeldean Pumping Station Upgrades	3,710	10%	371	-	-	3,339	2,655	684		3,339	
10.334	2010-2030	Bilberry Creek Industrial Gravity Outlet - Debt Payments	5,400	0%	-	-	-	5,400	4,744	656		5,400	
10.219	2010	Orleans-Cumberland Pumping Station	7,100	75%	5,325	-	-	1,775	1,446	329		1,775	
10.324	2010-2013	Ottawa River Fund - Sewer Separation	39,000	30%	11,700	26,000	-	1,300	767	533	1,300		
10.324	2010-2013	Ottawa River Fund - Non-integrated Works	38,000	30%	11,400	25,333	-	1,267	748	519	1,267		
10.074	2010-2031	Local Sanitary Rehab - Intensification Areas	378,783	90%	340,905	-	-	37,878	22,348	15,530	37,878		
10.179	2010-2031	Collector Sewers - Intensification Areas	106,599	90%	95,939	-	-	10,660	6,289	4,371	10,660		
		West Area											
10.434	2014	Kanata Lakes North O/S	48	0%	-	-	-	48	42	6		48	
10.149	2015	Kanata Town Centre Trunk Sewer	360	0%	-	-	-	360	313	47		360	
10.344	2010-2022	Signature Ridge Pumping Station Upgrades	3,718	0%	-	-	-	3,718	3,235	483		3,718	
10.424	2010-2015	Kanata West Sewer O/S	3,278	0%	-	-	-	3,278	2,852	426		3,278	
10.159	2013	Hazeldean Road Sewer	1,301	0%	-	-	-	1,301	1,132	169		1,301	
10.169	2012-2013	Jackson Trails Sewer O/S	200	0%	-	-	-	200	174	26		200	
		South Area											
10.179	2011-2015	South Urban Community Nepean - North of Jock River	477	0%	-	-	-	477	410	67		477	
10.189	2010-2012	South Urban Community Nepean - South of Jock River	1,619	0%	-	-	-	1,619	1,392	227		1,619	
10.204	2010-2018	Riverside South/River Ridge Trunk Sewer O/S	2,975	0%	-	-	-	2,975	2,559	417		2,975	
		East Area											
10.254	2010	Cumberland Trunk Sewer O/S	327	0%	-	-	-	327	271	56		327	
10.354	2013-2014	Orleans South Business Park	605	0%	-	-	-	605	502	103		605	
								-					
								-					
		Total	646,375		473,288	51,333	-	121,754	89,835	31,919	51,105	70,649	-

Res	30,152	59,683
NR	20,953	10,966
Total	51,105	70,649

B-3 WATER

B-3 WATER

B-3.1 DC Calculation Planning Period

2010-2031

B-3.2 Service Coverage and Capital Program

Coverage: supply, distribution and growth component of replacement, including plant expansion, upgrade, water efficiency strategy (including previously incurred debt financed oversizing costs); elevated tanks, reservoirs, pumping stations, feedermains, transmission mains net of local service requirements

Capital Program: prepared by staff. Major projects based on the proposed 2009 Infrastructure Master Plan, Community Design Plans and Major Servicing Studies, approved development studies, reliability and serviceability studies, Long Range Financial Plans, 10-Year Capital Budgets and the Stantec Review of studies. Projects are per Provincial standards and City of Ottawa Design Guidelines and specifications (CD available upon requested). As indicated, projects have been included in City of Ottawa 10 –Year Capital Budgets and/or City of Ottawa Long Range Financial Plans. Otherwise, projects will be approved as part of the DC Background Study.

B-3.3 Local Service and Developer Contribution Policy

The water local service policy is documented in Appendix D.

B-3.4 Level of Service Measurement

- Quantity – Provincial standards and City Design Guidelines and specifications
- Quality – Benchmarks costs for smaller pipes and project costs for larger distribution pipes, elevated tanks, reservoirs and pumping stations

B-3.5 Benefit to Existing Development Deduction

With respect to water treatment capacity projects, no benefit to existing development deduction has been made for existing debt payments which relate to previous DC recoverable costs.

A 10% deduction was made for purely capacity-related projects, including Lemieux and Britannia Plant expansions.

For the remaining projects, a 77%-79% deduction was made, generally consistent with the size of the existing 2009 population, in comparison with the forecast 2031 population with an additional 10% level of service adjustment.

With respect to watermain and related projects, a 10% benefit to existing development deduction was made in the case of new watermains, reservoirs and pump upgrades. A number of 10% deductions were made to cover reliability links and related projects. No deduction was made for outstanding debt payments for prior DC recoverable costs.

Larger deductions of 50%-90% were made in the case of approx. 16 projects where a clear and significant benefit to existing development is involved as a result of improved reliability, main replacement or related considerations. An indication of the flow considerations involved in the calculations is outlined in the table which follows.

B-3.6 Post Period/Excess Capacity Deduction

The availability of excess capacity has been addressed in modelling future needs on a net basis. For watermain projects to be commenced in 2020 or later timeframe, a post period deduction of 25% of the growth component of projects (i.e. the cost remaining after deducting for benefit to existing development) has been made to recognize that these works will be sized to accommodate flows greater than what is needed for the immediate growth forecast.

B-3.7 Provision for Grants, Subsidies and Other Contributions

No project subsidies are currently anticipated. Any direct developer funding has been netted out of the gross capital costs included.

B-3.8 10% Statutory Deduction

Not applicable.

B-3.9 Use of Existing Reserve Funds

The December 31, 2008 uncommitted DC reserve fund balance has been netted in making the DC calculation for sanitary sewer works.

Residential Component of Growth

	Residential - Mid		ICI (Non-residential) Mid		Total - Mid		Growth in Demand Mid	Residential Growth Mid	Non-Residential Growth Mid	Residential Component of Growth
	2009	2031	2009	2031	2009	2031				
Inside Greenbelt	267.1	297.5	63.7	71.6	330.8	369.1	38.4	30.4	8.0	0.79
Outside Greenbelt	152.0	242.1	9.7	18.5	161.8	260.6	98.8	90.1	8.8	0.91
West Urban Community	60.5	93.8	5.6	9.0	66.1	102.8	36.7	33.4	3.3	0.91
South Urban Community	38.3	76.2	2.2	5.9	40.4	82.2	41.7	38.0	3.7	0.91
East Urban Community	53.3	72.0	1.9	3.6	55.2	75.6	20.4	18.7	1.7	0.92
Total	423.5	552.0	73.4	90.2	496.9	642.1	145.2	128.5	16.7	0.88
1e	41.3	48.8	9.1	10.1	50.3	58.8	8.5	7.5	1.0	0.89
2c	70.1	75.5	26.4	28.9	96.5	104.4	7.9	5.3	2.5	0.68
Leitrim	8.1	17.6	0.6	0.8	8.6	18.4	9.8	9.5	0.3	0.97
Manotick	5.4	9.4	0.0	0.3	5.5	9.7	4.2	4.0	0.2	0.95

B-3.10 Residential vs. Non-Residential Split

2009-2031 increment in average flow required for residential development vs. non-residential development determines the split which is 88.5/11.5 (res./non-res.) in the case of water treatment facilities. In the case of watermains and related projects, the split is variable with the benefiting area circumstances, but averages 89:11.

B-3.11 Area-Specific Cost Allocation

Residential Charge

The cost of water treatment capacity has been allocated on a uniform City-wide basis. The cost of watermains has been allocated between the Urban Inside vs. Outside the Greenbelt, with the Rural area addressed separately, where applicable.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
City-Wide Development Charge Projects
Service - Water Services

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Less: Post Period Capacity $000	Growth Cost $000	Residential Share $000	Non-residential Share $000
11.024	2019	Lemieux WPP Expansion	26,000	10%	2,600	-	-	23,400	20,702	2,698
11.134	2012-2014	Britannia WPP Expansion	48,000	10%	4,800	-	-	43,200	38,219	4,981
11.064	2010-2011	Infrastructure Management Support System	1,350	89%	1,207	-	-	143	127	16
21.034	2014	Infrastructure Master Planning (Water)	3,150	89%	2,816	-	-	334	295	39
21.054	2011-2031	Water & Wastewater EA Studies	5,500	20%	1,100	-	-	4,400	3,893	507
11.044	2011-2030	Lemieux Island Transmission Main - Debt Payments	8,160	0%	-	-	-	8,160	7,219	941
11.309	2010	Bronson Feedermain (to Queensway)	5,400	87%	4,719	-	-	681	621	60
11.054	2010-2029	New Vehicles - Drinking Water	1,058	10%	106	-	-	952	842	110
11.014	2016	Water Efficiency Strategy	506	10%	51	-	-	455	403	52
21.024	2013-2028	Water Purification Plant Development Plan	600	89%	534	-	-	66	58	8
		Total	99,724		17,933	-	-	81,791	72,379	9,412

City of Ottawa
Area-Specific Development Charge Projects
Service - Water Services

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Less: Post Period Capacity $000	Growth Cost $000	Residential Share $000	Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
11.204	2011&2014	Hazeldean Road Watermain	15,000	74%	11,149	-	-	3,851	3,502	349		3,851	
11.009	2012	Kanata West Feedermain	6,100	74%	4,534	-	-	1,566	1,424	142		1,566	
11.224	2011	1W/2W Feedermain Link	15,000	74%	11,149	-	-	3,851	3,502	349		3,851	
11.194	2012	Strandherd Watermain	3,750	10%	375	-	-	3,375	3,073	302		3,375	
11.264	2010	2C/2W Feedermain	15,000	59%	8,882	-	-	6,118	5,570	548		6,118	
11.019	2010	SUC Greenbank Watermain	1,600	10%	160	-	-	1,440	1,311	129		1,440	
11.234	2012	Orleans Supply (Blair to St. Joseph)	15,000	83%	12,446	-	-	2,554	2,341	213		2,554	
11.039	2010	Leitrim Supply Watermain	2,250	69%	1,553	-	-	697	678	19		697	
11.049	2013	March Road Pipe Upgrade (to 610 mm)	650	10%	65	-	-	585	532	53		585	
11.059	2011	3C/2W Pressure Zone Separation in SUC	350	10%	35	-	-	315	300	15		315	
11.079	2011	Fallowfield Road Barrhaven Reservoir PS	800	10%	80	-	-	720	656	64		720	
11.089	2011-2018	Limebank Feedermain (Spratt Road to Tank)	4,200	10%	420	-	-	3,780	3,441	339		3,780	
11.099	2015	SUC W/M Woodroffe	6,400	10%	640	-	-	5,760	5,244	516		5,760	
11.109	2018	Britannia Feedermain (Ottawa River Park to Carling)	1,700	74%	1,264	-	-	436	397	39	436		
11.119	2015	Heron Road W/M Upgrade (Finn Walkley)	1,600	10%	160	-	-	1,440	1,311	129	1,440		
11.274	2010	Ottawa South PS Upgrades	2,200	59%	1,303	-	-	897	817	80		897	
11.344	2014	Brittany PS	2,500	90%	2,240	-	-	260	206	54	260		
11.184	2010	Carlington Heights 2W PS Expansion	2,600	72%	1,874	-	-	726	662	64	726		
11.129	2010	Barrhaven PS Conversion to 3C Zone Op	600	10%	60	-	-	540	492	48		540	
11.139	2011	Barrhaven Reservoir PS Upgrades	330	10%	33	-	-	297	270	27		297	
11.159	2014	Woodroffe PS & Connection	6,000	10%	600	-	-	5,400	4,916	484	5,400		
11.169	2015	Glen Cairn PS (Pump Upgrade)	550	10%	55	-	-	495	450	45		495	
11.179	2011	Forest Ridge PS (Pump Upgrade)	600	10%	60	-	-	540	495	45		540	
11.189	2012	Ottawa South Reservoir Storage	3,200	10%	320	-	-	2,880	2,622	258		2,880	
11.199	2010	Glen Cairn Reservoir Expansion	15,500	10%	1,550	-	-	13,950	12,687	1,263		13,950	
11.209	2015	Barrhaven Reservoir Expansion	6,340	10%	634	-	-	5,706	5,195	511		5,706	
11.219	2020-2031	Bronson Feedermain (Queensway to Billings Bridge)	10,000	72%	7,207	-	698	2,095	1,909	186	2,095		
11.229	2020-2031	SUC Fallowfield W/M	3,520	10%	352	-	792	2,376	2,163	213		2,376	
11.239	2020-2031	Britannia 2W PS Expansion	4,620	10%	462	-	1,040	3,119	2,840	279	3,119		
11.249	2020-2031	Hurdman PS 2C Upgrade	500	10%	50	-	113	338	308	30	338		
11.154	2020-2031	Billings Bridge PS 2C Pump Upgrade	500	10%	50	-	113	338	308	30	338		
11.259	2020-2031	River Ridge 3C Elevated Tank	5,600	10%	560	-	1,260	3,780	3,441	339		3,780	
11.269	2020-2031	3W Elevated Tank	5,600	74%	4,162	-	360	1,079	981	98		1,079	
11.279	2020-2031	Tenth Line 2E Elevated Tank	5,600	83%	4,646	-	239	716	656	60		716	
11.289	2010-2031	Groundwater Studies	4,000	89%	3,560	-	-	440	272	168			440
11.299	2010	Groundwater Management Phase 2	500	89%	445	-	-	55	34	21			55
11.154	2010-2029	Billings Bridge Pumping Station Upgrade - Debt Payments	100	0%		-	-	100	50	50	100		
11.214	2010-2029	2W/3W Pumping Station - Debt Payments	3,920	0%		-	-	3,920	3,395	525		3,920	
11.224	2012-2031	1W/2W Feedermain Link - Debt Payments	15,980	0%		-	-	15,980	13,838	2,142		15,980	
11.294	2012-2031	Kanata West Transmission Mains - Debt Payments	100	0%		-	-	100	87	13		100	
11.319	2010-2014	Mer Bleue Reliability Link	1,971	10%	197	-	-	1,774	1,437	337		1,774	
11.214& 11.124	2010	St. Joseph East of Tenth Line to Trim Road Reliability Link	1,197	50%	599	-	-	598	484	114		598	
11.324	2010	Trim Road Reliability Link from Watters to St. Joseph	1,804	10%	180	-	-	1,624	1,315	309		1,624	
11.314	2010	Trim Road Reliability Link from Watters to Portobello	1,241	10%	124	-	-	1,117	905	212		1,117	
11.304	2011	Trim Road Reliability Link from Portobello to Valin	1,168	10%	117	-	-	1,051	851	200		1,051	
11.319	2010	Trim Road Reliability Link from Montmere @ BHBP to Pinnacle @ Trim	1,103	10%	110	-	-	993	804	189		993	
11.334	2010	Watters Road Reliability Link from Montcrest to Trim	152	10%	15	-	-	137	111	26		137	
11.329	2010	Tenth Line Road Reliability Link from the Hydro Easement to Lakepointe Dr.	462	10%	46	-	-	416	337	79		416	
11.124	2010-2019	Off-site Reliability Links O/S	1,000	10%	100	-	-	900	756	144		900	
11.294	2011-2017	Kanata West Transmission Mains O/S	2,522	10%	252	-	-	2,270	1,930	341		2,270	
		Total	**202,980**		**84,875**	**-**	**4,613**	**113,495**	**101,306**	**12,189**	**14,252**	**98,748**	**495**

Res	12,907	88,093	306
Non Res	1,345	10,655	189
Total	14,252	98,748	495

B-4 STORMWATER DRAINAGE

B-4 STORMWATER DRAINAGE

B-4.1 DC Calculation Planning Period

2010-2031

B-4.2 Service Coverage and Capital Program

Coverage: stormwater management and drainage costs which are City-wide in nature or are generally not specifically related to a particular area, including master planning

Capital Program: Projects are per Provincial requirements and City policies, design guidelines and specifications. Projects are included in City of Ottawa capital budgets and/or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-4.3 Local Service and Developer Contribution Policy

The stormwater drainage local service policy is documented in Appendix D.

B-4.4 Level of Service Measurement

The level of service is based on MOE requirements and standard engineering design practice.

B-4.5 Benefit to Existing Development Deduction

Benefit to existing is assigned based on the ratio of population growth to existing population for 2031, i.e. 79% existing and 21% growth.

B-4.6 Post Period/Excess Capacity Deduction

N/A. For the current review, it is assumed that stormwater runoff from infill and redevelopment will be limited, on a site-specific basis, to the existing rate of runoff, i.e. specific rehabilitation projects for storm drainage have not been included. (This does not preclude future studies to identify major and minor drainage system upgrades to improve the existing level of service for which benefit to growth will be apportioned in future DC by-law updates.)

B-4.7 Provision for Grants, Subsidies and Other Contributions

No subsidies are anticipated. Direct developer contributions have been netted out of the gross capital costs.

B-4.8 10% Statutory Deduction

Not applicable

B-4.9 Use of Existing Reserve Funds

The December 31, 2008 uncommitted DC reserve fund balance has been included in the DC calculation for these storm water drainage works. In keeping with the policy enacted in the 2004 Development Charge by-law, any unanticipated surplus funds identified in area-specific stormwater reserve funds are allocated to the City-wide stormwater account, which are then used to fund stormwater project requirements. The intent of this policy is to ensure that the funds which have been collected for this use continue to be designated to finance growth-related stormwater capital projects.

B-4.10 Residential vs. Non-Residential Split

The population/employment ratio (2009-31) of 62:38 (res./non-res.) has been used.

B-4.11 Area-Specific Cost Allocation

Residential Charge

Projects are City-wide as they are included in a program to upgrade, rehabilitate or monitor systems, thereby broadly benefiting infill development. SWM projects that can be allocated to specific growth areas are, in most cases, included in the separate area-specific stormwater DC Background Study.

Non-residential Charge

The calculation was made on a uniform, City-wide basis, in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible throughout the City.

City of Ottawa
City-Wide Development Charge Projects
Service - Stormwater Drainage

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	62% Residential Share $000	38% Non-residential Share $000
3.014	2010-2031	Infrastructure Management Program	8,712	79%	6,917	-	1,795	1,113	682
3.054	2010-2031	Stormwater Management Facilities	8,976	79%	7,127	-	1,849	1,146	703
3.064	2010-2031	Surface Water Short Term Initiatives	3,916	79%	3,109	-	807	500	307
21.044	2010-2031	Infrastructure Master Planning (Storm)	3,300	79%	2,620	-	680	422	258
		Total	24,904		19,773	-	5,131	3,181	1,950

City of Ottawa
Area-Specific Development Charge Projects
Service - Stormwater Drainage

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	66% Residential Share $000	34% Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
3.019	2010	Village of Vars Drainage Culverts	192	79%	152	-	40	26	14			40
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
		Total	192		152	-	40	26	14	-	-	40

B-5 STORMWATER PONDS

(Under Separate Cover)

B-6 POLICE

B-6 POLICE

B-6.1 DC Calculation Planning Period

2010-2019

B-6.2 Service Coverage and Capital Program

Coverage: cost of design, construction, furniture, equipment and site preparation for police detachments, training areas, property warehouse space, etc.; specialty vehicles and traffic escort; and police cars

Capital Program: prepared by Police, based on ten-year average service levels, staff complement approved by Police Service Board in annual budgets and report prepared for DC Background Study. Projects included in City of Ottawa capital budgets or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-6.3 Local Service and Developer Contribution Policy

Not applicable.

B-6.4 Level of Service Measurement

Separate schedules follow for divisional buildings (sq.ft./capita), police vehicles incl. specialty vehicles (vehicles/capita), officer upfit ($/capita) and portable radios (number/capita)

Patrol vehicles have been included, consistent with municipal practice in the Greater Toronto Area, in that they have a standardized, equivalent functional life in excess of six years when considering their "24/7" usage.

B-6.5 Benefit to Existing Development Deduction

Establishment of a new station (South Divisional Facility) will provide for more efficient operations and convenience to those visiting, and a 15% deduction has been made as a result. No deduction has been made for debt payments relating to previous DC recoverable costs for the West Division. 10% deductions have been made for additional vehicles and officer upfit which provide a minor benefit to existing development.

B-6.6 Post Period/Excess Capacity Deduction

The 2008 service level for Police is similar to the City's historical 10-year average. As a result, no excess capacity is involved. The 2019 DC-funded service level for Police is also below the City's historical 10-year average. As a result, no post period capacity is involved.

B-6.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-6.8 10% Statutory Deduction

Not applicable.

B-6.9 Use of Existing Reserve Funds

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-6.10 Residential vs. Non-Residential Split

The incremental population and employment ratio has been applied (i.e., 61% residential and 39% non-residential).

B-6.11 Area-Specific Cost Allocation

Residential Charge

Vehicles and upfit have been allocated on a City-wide basis. Divisional costs have been allocated on a Large Area basis.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Police
Type of Capital Asset: Police Divisional Buildings - Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/s.f.)**	**Total Value**
Elgin Street Head Quarters - Office Space [1]	151,875	151,875	151,875	151,875	151,875	151,875	151,875	151,875	151,875	151,875	$500	$75,937,500
Greenbank - West Division	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	$400	$22,000,000
St. Joseph - East Division	-	-	-	33,000	33,000	33,000	33,000	33,000	33,000	33,000	$400	$13,200,000
Kanata - West Division	8,665	8,665	8,665	8,665	8,665	8,665	8,665	8,665	8,665	8,665	$400	$3,466,000
Leitrim - Division and Quarter Master	22,816	22,816	22,816	22,816	22,816	22,816	22,816	22,816	22,816	22,816	$400	$9,126,400
Swansea - Property Facility	-	-	-	-	30,800	30,800	30,800	30,800	30,800	30,800	$400	$12,320,000
Algonquin College - Training Facility	-	36,711	36,711	36,711	36,711	36,711	36,711	36,711	36,711	36,711	$400	$14,684,400
Elgin Street - Courts Section	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	$400	$4,800,000
Youth Centre	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	$400	$3,400,000
Airport Policing Office	892	892	892	892	2,215	2,215	2,215	2,215	2,215	2,215	$200	$443,000
Drug Section - Offsite Office	2,376	2,376	2,376	2,376	2,376	2,376	2,376	4,691	4,691	4,691	$200	$938,200
Community Police Centres	25,967	25,967	25,967	25,967	25,967	25,967	25,967	25,967	25,967	25,967	$200	$5,193,400
Total	**288,091**	**324,802**	**324,802**	**357,802**	**389,925**	**389,925**	**389,925**	**392,240**	**392,240**	**392,240**		**$165,508,900**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		
Per Capita Service Level	0.3744	0.4127	0.4027	0.4367	0.4685	0.4610	0.4536	0.4505	0.4451	0.4399		**$422**
												(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 Persons	0.4345
Quality Standard [2]	$421.96
Combined Quantity/Quality Level ($/1000 Perso	$183.34

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$183.34
Eligible DC $ Amount	$19,727,476

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Police
Type of Capital Asset: Police Patrol Vehicles - Number of Vehicles/Officer

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/vehicle)	Total Value
Sworn Complement	1,023	1,040	1,040	1,054	1,088	1,161	1,161	1,251	1,266	1,300	$45,000.00	$58,500,000
Vehicles/Officer Ratio	0.3333333	0.3333333	0.3333333	0.3333333	0.3333333	0.3333333	0.3333333	0.3333333	0.3333333	0.3333333	$1.00	$0.333333
Total	341	347	347	351	363	387	387	417	422	433		$19,499,998
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$45,000
Per Capita Standard per 1000 Persons	0.4431	0.4405	0.4298	0.4288	0.4357	0.4575	0.4502	0.4789	0.4789	0.4860		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 Persons	0.4529
Quality Standard	45,000
Combined Quantity/Quality Level ($/1000 Pers	20,381
Combined Quantity/Quality Level ($/capita)	$20.38

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$20.38
Eligible DC $ Amount	$2,192,942

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Police
Type of Capital Asset: Value of Specialty Vehicles

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/vehicle)	Total Value
#0080-56 Ford Cube Van	$18,000	$18,000	$18,000	$18,000	$18,000	18000	0	0	0	0	$1.00	$0
#01001-54 Freightliner Truck			$178,860	$178,860	$178,860	$178,860	$178,860	$178,860	$178,860	$178,860	$1.00	$178,860
#01002-54 Freightliner Truck				$365,000	$365,000	$365,000	$365,000	$365,000	$365,000	$365,000	$1.00	$365,000
#03648-26 Ford F350	$18,000	$18,000	$18,000	$18,000	$18,000	0	0	0	0	0	$1.00	$0
#03661-26 Ford F450	$18,000	$18,000	$18,000	$18,000	$18,000	18000	18000	18000	18000	18000	$1.00	$18,000
#03662-13 Ford E450					$75,500	75500	75500	75500	75500	75500	$1.00	$75,500
#03663-13 Ford E450					$85,380	85380	85380	85380	85380	85380	$1.00	$85,380
#09951-13 Chev Cube Van			$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$1.00	$24,000
#09995-13 GMC Express				$25,200	$25,200	$25,200	$25,200	$25,200	$25,200	$25,200	$1.00	$25,200
#09998-13 Chev Express				$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$1.00	$30,000
#03664-B5 Ford F450					$105,000	$105,000	$105,000	$105,000	$105,000	$105,000	$1.00	$105,000
#03665-B5 Ford F450						$118,000	$118,000	$118,000	$118,000	$118,000	$1.00	$118,000
#03666-C5 Ford E450							$108,000	$108,000	$108,000	$108,000	$1.00	$108,000
#03667-B5 Ford F450							$66,000	$66,000	$66,000	$66,000	$1.00	$66,000
Surveillance Aircraft			$1,017,000	$1,017,000	$1,071,000	$1,071,000	$1,071,000	$1,071,000	$1,071,000	$1,071,000	$1.00	$1,071,000
Total	$54,000	$54,000	$1,273,860	$1,694,060	$2,013,940	$2,113,940	$2,269,940	$2,269,940	$2,269,940	2,269,940		$2,269,940
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		
Per Capita Standard per 1000 Persons	70.1744	68.6172	1579.3741	2067.3891	2419.5279	2499.1518	2640.3739	2606.8462	2575.8740	2545.6319		$1

10 Year Average	1999-2008
Quantity Standard per 1,000 Persons	1907.2961
Quality Standard	1
Combined Quantity/Quality Level ($/1000 Pers	1,907
Combined Quantity/Quality Level ($/capita)	$1.91

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$1.91
Eligible DC $ Amount	$205,225

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Police
Type of Capital Asset: New Officer Upfit - Number of Officers

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/Officer)**	**Total Value**
Sworn Complement	1,023	1,040	1,040	1,054	1,088	1,161	1,161	1,251	1,266	1,300	$1,500.00	$1,950,000
Total	**1,023**	**1,040**	**1,040**	**1,054**	**1,088**	**1,161**	**1,161**	**1,251**	**1,266**	**1,300**		**$1,950,000**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$1,500
Per Capita Standard per 1000 Persons	1.3294	1.3215	1.2894	1.2863	1.3071	1.3726	1.3505	1.4367	1.4366	1.4579		

10 Year Average	1999-2008
Quantity Standard per 1,000 Persons	1.3588
Quality Standard	1,500
Combined Quantity/Quality Level ($/1000 Perso	2,038
Combined Quantity/Quality Level ($/capita)	$2.04

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$2.04
Eligible DC $ Amount	$219,310

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Police
Type of Capital Asset: Portable Radios

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/Radio)**	**Total Value**
Number of Portable Radios	740	817	827	955	1,003	1,003	1,003	1,076	1,083	1,116	$6,000.00	$6,696,000
Total	**740**	**817**	**827**	**955**	**1,003**	**1,003**	**1,003**	**1,076**	**1,083**	**1,116**		**$6,696,000**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		
Per Capita Standard per 1000 Persons	0.9616	1.0382	1.0253	1.1655	1.2050	1.1858	1.1667	1.2357	1.2290	1.2515		**$6,000**

10 Year Average	1999-2008
Quantity Standard per 1,000 Persons	1.1464
Quality Standard	6,000
Combined Quantity/Quality Level ($/1000 Pers	6,878
Combined Quantity/Quality Level ($/capita)	$6.88

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$6.88
Eligible DC $ Amount	$740,116

City of Ottawa
City-Wide Development Charge Projects
Service - Police Services

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Eligible Level of Service $000		Less		Growth Cost $000	61% Residential Share $000	39% Non-residential Share $000
					Benefit to Existing Development %	Benefit to Existing Development $000	Grants, Subsidies & Contributions $000			
13.014	2014	Specialty Vehicles	500	340	10%	34	-	306	185	121
13.019	2013-2019	Police Patrol Vehicles	2,193	1,492	10%	149	-	1,343	814	529
13.134	2013-2019	Officer Upfit	219	149	10%	15	-	134	81	53
13.029	2013-2019	Portable Radios	741	504	10%	50	-	454	275	179
		Total	3,653	2,485		249	-	2,237	1,355	882

Level of Service Cap	
$ 19,727,476	Buildings
2,192,942	Patrol Vehicles
205,225	Specialty Vehicles
219,310	Upfit
740,116	Portable Radios
23,085,069	
- 2,485,000	Vehicles, etc.
- 20,600,000	Facilities
69	Unused Service Level Cap

City of Ottawa
Area-Specific Development Charge Projects
Service - Police Services

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Eligible Level of Service $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	61% Residential Share $000	39% Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
13.064	2012-2019	West Divisional Facility - Debt Payments	6,992	6,992		-	-	6,992	4,237	2,755		6,153	839
13.034	2012	South Divisional Facility	20,000	13,608	15%	2,041	-	11,566	7,009	4,557		10,178	1,388
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
						-	-	-	0	0			
		Total	26,992	20,600		2,041	-	18,558	11,246	7,312	-	16,331	2,227

Res.	-	9,897	1,350
Non-res.	-	6,434	877

B-7 EMERGENCY SERVICE (FIRE)

B-7 EMERGENCY SERVICE (FIRE)

B-7.1 DC Calculation Planning Period

2010-2019

B-7.2 Service Coverage and Capital Program

Coverage: fire stations, including training and ancillary facilities; all forms of fire rolling stock plus ancillary equipment (e.g. hoses) plus loose equipment (e.g. defibs)

Capital Program: prepared by Emergency and Protective Services (Fire Services), based on level of service standards, staff complements, growth projections and response times. Projects included in City of Ottawa capital budgets or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-7.3 Local Service and Developer Contribution Policy

Not applicable.

B-7.4 Level of Service Measurement

Separate schedules follow for Fire facilities (sq.ft./capita), vehicles (number per capita) and firefighter equipment (sets/capita).

B-7.5 Benefit to Existing Development Deduction

No benefit to existing development deduction was made for previous DC recoverable costs for which long term debt has been issued.

A 10% deduction was made from the cost of the Ottawa East Station in order to recognize net response time improvement potential.

Higher benefit to existing development deductions were made for the March Road station upgrade (75%), Rural Water Supply requirements (30%) and vehicles and equipment for the West Station (25%).

B-7.6 Post Period/Excess Capacity Deduction

Some infilling/redevelopment potential in areas served by existing stations can be accommodated, although the 2008 service level for Fire is below the City's historical 10-year average and the service level cap was not consumed by growth-related projects. The 2019 DC-funded service level for Fire is below the City's 10-year average. As a result, no post period capacity is involved.

B-7.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-7.8 10% Statutory Deduction

Not applicable.

B-7.9 Use of Uncommitted DC Reserve Fund Balance

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-7.10 Residential vs. Non-Residential Split

The incremental population and employment ratio has been applied (i.e. 61% residential and 31% non-residential).

B-7.11 Area-Specific Cost Allocation

Residential Charge

All costs are allocated on a Large Area basis, in accordance with the location of the Fire station involved, based on restricted, response time-based service areas (broadened somewhat by back-up support conventions).

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Emergency Services (Fire)
Type of Capital Asset: Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f.)	Total Value
Charlemagne - Station #53 - Fallingbrook	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	466.40	$8,395,200
Cumberland Village - Station #72 - Old Montreal R	6,600	6,600	6,600	6,600	6,600	6,600	6,600	6,600	6,600	6,600	466.40	$3,078,240
Vars - Station #73 - Rockdale Avenue	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	7,970	7,970	466.40	$3,717,208
Navan - Station #71 - Colonnial Road	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	466.40	$2,052,160
Barrhaven - Station #44 - Greenbank Road	24,660	24,660	24,660	24,660	24,660	20,724	20,724	20,724	20,724	20,724	466.40	$9,665,674
Bells Corners - Station #43 - Richmond Road	8,105	8,105	8,105	8,105	8,105	8,334	8,334	8,334	8,334	8,334	466.40	$3,886,978
Viewmount - Station #24 -Viewmount Dr.	11,444	11,444	11,444	11,444	11,444	9,706	9,706	9,706	9,706	9,706	466.40	$4,526,878
Knoxdale - Station #25 - Knoxdale Road	6,578	6,578	6,578	6,578	6,578	6,130	6,130	6,130	6,130	6,130	466.40	$2,859,032
Leitrim - Station #32 - Leitrim Road	9,548	9,548	9,548	9,548	9,548	9,548	9,548	9,548	9,548	9,548	466.40	$4,453,187
South Urban - Station #37 - Earl Armstrong							12,546	12,546	12,546	12,546	466.40	$5,851,454
Blair - Station #55 - Blair Road	21,889	21,889	21,889	21,889	21,889	21,889	21,889	21,889	21,889	21,889	466.40	$10,209,030
Orleans - Station #52 - 6213 Jean D'Arc	7,537	7,537	7,537	7,537	7,537	7,724	7,724	7,724	7,724	7,724	466.40	$3,602,474
Blackburn - Station #54 - Old Innes Road	13,369	13,369	13,369	13,369	13,369	13,369	13,369	13,369	13,369	13,369	466.40	$6,235,302
Teron - Station #42 - Teron Road	7,368	7,368	7,368	7,368	7,368	7,208	7,208	7,208	7,208	7,208	466.40	$3,361,811
Eagleson - Station #41 - Eagleson Road	7,735	7,735	7,735	7,735	7,735	7,645	7,645	7,645	7,645	7,645	466.40	$3,565,628
Riddell - Station #45 - Riddell Drive	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	466.40	$1,738,273
Stittsville - Station #81 - Main Street	5,000	12,000	12,000	12,000	12,000	12,460	12,460	12,460	12,460	12,460	466.40	$5,811,344
Richmond - Station #82 - Perth Street	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	466.40	$3,264,800
Metcalfe - Station #91 - Victoria Road	8,236	8,236	8,236	8,236	8,236	8,236	8,236	8,236	8,236	8,236	466.40	$3,841,270
Osgoode - Station #92 - Nixon Drive	2,500	4,600	4,600	4,600	4,600	4,600	4,298	4,298	4,298	4,298	466.40	$2,004,587
Greely - Station #93 - Parkway Road	5,565	5,565	5,565	5,565	5,565	5,670	5,670	5,670	5,670	5,670	466.40	$2,644,488
Manotick - Station #94 - Main Street	10,520	10,520	10,520	10,520	10,520	8,106	8,106	8,106	8,106	8,106	466.40	$3,780,638
Carling - Station #23 - Carling Avenue	22,093	22,093	22,093	22,093	22,093	21,030	21,030	21,030	21,030	21,030	466.40	$9,808,392
O'Connor - Station #12 - O'Connor Street	11,230	11,230	11,230	11,230	11,230	11,673	11,673	11,673	11,673	11,673	466.40	$5,444,287
Lincoln Fields - Station #22 - Richmond Road, Otta	13,164	13,164	13,164	13,164	13,164	13,858	13,858	13,858	13,858	13,858	466.40	$6,463,371
King Edward - Station #13, King Edward	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	11,235	466.40	$5,240,004
Woodroffe - Station #21 - Woodroffe Avenue	13,029	13,029	13,029	13,029	13,029	13,029	13,029	13,029	13,029	13,029	466.40	$6,076,726
Preston - Station #11- Prestion Street	12,383	12,383	12,383	12,383	12,383	12,383	12,383	12,383	12,383	12,383	466.40	$5,775,431
Conroy - Station #31 - Conroy Road	19,052	19,052	19,052	19,052	19,052	19,447	19,447	19,447	19,447	19,447	466.40	$9,070,081
McCarthy - Station #33 - McCarthy Road	14,225	14,225	14,225	14,225	14,225	13,609	13,609	13,609	13,609	13,609	466.40	$6,347,238
Brookfield - Station #34 - Brookfield Dr.	15,280	15,280	15,280	15,280	15,280	14,571	14,571	14,571	14,571	14,571	466.40	$6,795,914
Dispatch - 1423 Randall Avenue	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	466.40	$2,122,120
Alta Vista - Station #35 - Alta Vista Drive	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	466.40	$5,596,800
Training Centre - Station #36	600	600	600	600	600	600	600	600	600	600	466.40	$279,840
Industrial - Station #36 - Industrial	31,254	31,254	31,254	31,254	31,254	31,254	31,254	31,254	31,254	31,254	466.40	$14,576,866
Montreal - Station #51 - Montreal Road	13,934	13,934	13,934	13,934	13,934	13,934	13,934	13,934	13,934	13,934	466.40	$6,498,818
Coventry - Station #56 - Overbrook	13,084	13,084	13,084	13,084	13,084	13,084	13,084	13,084	13,084	13,084	466.40	$6,102,378
Beechwood - Station #57 - Beechwood Avenue	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	466.40	$7,126,592
North Gower - Station #84	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	466.40	$1,585,760
Outbuilding - North Gower	80	80	80	80	80	80	80	80	80	80	466.40	$37,312
Troop Line Bldg	3,440	3,440	3,440	3,440	3,440	3,440	3,440	3,440	3,440	3,440	466.40	$1,604,416
Kinburn - Station #61 - Kinburn Side Road	3,780	3,780	3,780	3,780	3,780	3,780	3,780	3,780	3,780	3,780	466.40	$1,762,992
Fitzroy - Station #62 - Harbour Street	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	466.40	$1,027,946
Fitzroy Out Bldg	704	704	704	704	704	704	704	704	704	704	466.40	$328,346
Constance Bay - Station #63 - Woodlawn	4,176	4,176	4,176	4,176	4,176	4,176	4,176	4,176	4,176	4,176	466.40	$1,947,686
Carp - Station #64 - Donald B. Munro	4,773	4,773	4,773	4,773	4,773	4,773	4,773	4,773	4,773	4,773	466.40	$2,226,127

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Emergency Services (Fire)
Type of Capital Asset: Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f.)	Total Value
Dunrobin - Station #66 - Dunrobin Road	1,930	1,930	1,930	1,930	1,930	1,930	1,930	1,930	1,930	1,930	466.40	$900,152
Dunrobin Out Bldg	144	144	144	144	144	144	144	144	144	144	466.40	$67,162
Corkery - Station #84 - Old Almonte Road	2,896	2,896	2,896	2,896	2,896	2,896	2,896	2,896	2,896	2,896	466.40	$1,350,694
Total	441,501	450,601	450,601	450,601	450,601	441,940	454,184	454,184	460,354	460,354		$214,709,106
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		
Per Capita Service Level	0.5737	0.5726	0.5587	0.5499	0.5413	0.5225	0.5283	0.5216	0.5224	0.5163		$466.40 (12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 Persons	0.5407
Quality Standard	$466.40
Combined Quantity/Quality Level ($/1000 Perso	$252.18

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$252.18
Eligible DC $ Amount	$27,134,835

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Emergency Services (Fire)
Type of Capital Asset: Number of Vehicles

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/vehicle)	Total Value
71-Hazmat	8	7	7	7	6	7	7	7	7	7	430,000	$3,010,000
73-Equipment	2	2	2	2	2	2	2	2	2	2	240,000	$480,000
74-Pumper	62	63	61	62	63	63	63	63	63	53	475,000	$25,175,000
75-Aerial platform	11	11	11	11	11	11	11	11	11	7	900,000	$6,300,000
76-Aerial	8	8	8	8	8	8	8	8	8	13	900,000	$11,700,000
78-Medical	2	2	2	2	2	2	2	2	2	2	50,000	$100,000
79-Tanker	24	24	24	22	22	22	22	22	22	26	615,000	$15,990,000
54-Command	2	2	2	2	2	2	2	2	2	1	700,000	$700,000
81-Bus	1	1	1	1	1	1	1	1	1	0		$0
FJ-Trailer, Office	2	2	2	2	2	2	2	2	2	0		$0
Total	122	122	120	119	119	120	120	120	120	111		$63,455,000
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$571,667
Per Capita Standard per 1000 Persons	0.1585	0.1550	0.1488	0.1452	0.1430	0.1419	0.1396	0.1378	0.1362	0.1245		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	0.1430
Quality Standard	$571,667
Combined Quantity/Quality Level ($/1000	$81,748
Combined Quantity/Quality Level ($/capita)	$81.75

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$81.75
Eligible DC $ Amount	$8,796,121

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Emergency Services (Fire)
Type of Capital Asset: Number of Equipped Fire Fighters

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/item)**	**Total Value**
Ottawa	516	516	516	516	516	546	546	546	546	546	8,105	$4,425,330
Gloucester	116	116	116	116	116	120	120	120	120	120	8,105	$972,600
Kanata	44	44	44	44	44	48	48	48	48	48	8,105	$389,040
Nepean	123	123	123	123	123	129	129	129	129	129	8,105	$1,045,545
Cumberland	25	25	25	25	25	29	29	29	29	29	8,105	$235,045
Volunteer Fire Fighters	200	200	200	425	425	425	425	425	425	425	8,105	$3,444,625
Total	**1,024**	**1,024**	**1,024**	**1,249**	**1,249**	**1,297**	**1,297**	**1,297**	**1,297**	**1,297**		**$10,512,185**

Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700	**$8,105**
Per Capita Standard per 1000 Persons	1.3307	1.3012	1.2696	1.5242	1.5005	1.5333	1.5087	1.4895	1.4718	1.4545	(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	1.4384
Quality Standard	$8,105
Combined Quantity/Quality Level ($/1000 Perso	$11,658
Combined Quantity/Quality Level ($/capita)	$11.66

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$11.66
Eligible DC $ Amount	$1,254,426

City of Ottawa
Area-Specific Development Charge Projects
Service - Fire Services

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	100% Statutory Portion $000	61% Residential Share $000	39% Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
4.094	2012	Ottawa East Station - Purchase of Land	460	10%	46	-	414	414	251	163		414	
4.104	2013	Ottawa East Station - Design Costs, EUA & Vehicles	1,600	10%	160	-	1,440	1,440	873	567		1,440	
4.114	2014	Ottawa East Station - Construction & Station Equipment	5,925	10%	593	-	5,332	5,332	3,231	2,101		5,332	
4.064	2010	Ottawa South Station - Vehicle & Equipment	525	10%	53	-	472	472	286	186		472	
4.064	2011-2019	Ottawa South Station - Debt Payments	3,195	0%	-	-	3,195	3,195	1,936	1,259		3,195	
4.034	2010	Ottawa West Station - Vehicle & Equipment	525	25%	131	-	394	394	239	155		394	
4.034	2011-2019	Ottawa West Station - Debt Payments	2,007	0%	-	-	2,007	2,007	1,216	791		2,007	
4.014	2012	March Road Station Upgrade	3,500	75%	2,625	-	875	875	530	345		875	
4.124	2010-2019	Rural Requirements - Water Supply	1,683	30%	505	-	1,178	1,178	714	464			1,178
4.124	2011-2019	Rural Requirements - Water Supply - Debt Payments	36	0%	-	-	36	36	22	14			36
		Total	19,456		4,113	-	15,343	15,343	9,298	6,045	-	14,129	1,214

Level of Service Cap	
$ 27,134,835	Building Space
8,796,121	Vehicles
1,254,426	Equipment
37,185,382	
- 19,456,000	
17,729,382	Unused Service Cap

Res.	-	8,562	736
Non-res.	-	5,567	478

B-8 PUBLIC TRANSIT

B-8 PUBLIC TRANSIT

B-8.1 DC Calculation Planning Period

2010-19

B-8.2 Service Coverage and Capital Program

Transitways Coverage:	Ten year program for studies and masterplans; system improvements; priority measures; park and ride; corridor protection, transitways, - includes light rail and Bus Rapid Transit line expansions with associated bridges, park & ride facilities, stations, capital works, corridor protection.
Vehicles & Facilities Coverage:	Vehicles include standard forty foot buses; high-capacity sixty foot articulated and double decker buses; Para Transpo vehicles; light rail vehicles; and some non-revenue light, heavy and equipment vehicles. Facilities include bus garages and outdoor bus storage facilities; rail carhouses; transit shelters and bus stops and the required associated communication systems and technical equipment.
Transitways Capital Program:	Prepared by the Planning and Growth Management Branch based on the 2008 Transportation Master Plan. Projects have been included in recent City of Ottawa capital budgets and/or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.
Vehicles & Facilities Capital Program:	Prepared by Transit Services and the Planning and Growth Management Branches based on the 2008 Transportation Master Plan. Most projects are included in City of Ottawa capital budgets and/or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-8.3 Local Service and Developer Contribution Policy

Not applicable (other than Bus Shelter coverage).

B-8.4 Level of Service Measurement

Separate schedules follow for Transit Building sq.ft./capita, Transit Vehicles/capita, Transit Bus Stops/capita and Transit Corridor/Station value/capita. This yields a level of service cap of $351.8 million, which has been employed.

B-8.5 Benefit to Existing Development Deduction

No benefit to existing development deduction has been made for those transit projects for which debenture debt payments are outstanding relative to previously-determined DC recoverable costs.

A deduction of 47% was made for benefit to existing development for all other projects. This reflects the benefit associated with the planned increase in the Transit modal split and is based on the calculations on the next page, consistent with the 2004 Background Study adjusted for the modal split change in the interim.

B-8.6 Post Period/Excess Capacity Deduction

The transit corridor system contains some oversized capacity to accommodate growth beyond 2019 and a deduction has been made from the 10-year DC recoverable cost as a result. That deduction of 20.5% is based on the calculations on the next page.

B-8.7 Provision for Grants, Subsidies and Other Contributions

Provision has been made for Federal and/or Provincial contributions related to rapid transit expansion. The anticipated two-thirds subsidy is based on official funding agreements and recent announcements of senior governments, is applicable to the vast majority of the program and amounting to 66.5% of gross cost.

B-8.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs pursuant to s.s.5(1)8 of the DCA (other than in the case of previous DC recoverable costs carried forward in the form of debt charges).

B-8.9 Use of Uncommitted DC Reserve Fund Balance

The December 31, 2008 uncommitted DC reserve fund balance has been included in the DC calculation for these Public Transit works.

BTE AND POST PERIOD DEDUCTIONS

BENEFIT TO EXISTING

2009 projected population	= 902,140
2019 projected population	= 1,009,659
Growth (2009-2019)	= 107,519
Existing a.m. transit modal Split	= 23%
2031 a.m. transit modal split target	= 30%
Transit modal split increase by 2019	= (30% - 23%)/22y * 10y = ~ 3%
Projected 2019 transit modal split	= 23 + 3 = 26%

Method

2006 transit ridership/a.m. peak hour	= 44,500
2031 project transit ridership/a.m. peak hour	= 78,000
2009 estimated a.m.p.h transit ridership	= 44,500 + ((78,000-44,500)/25y * 3y) = 48,520
2009 estimated a.m.p.h total trips	= 48,520*100/23 = 210,957
2019 estimated transit ridership	= 44,500 +((78,000-44,500)/25 * 13y) = 61,920
Growth in a.m.p.h transit ridership (2009 – 2019)	= 61,920 –48,520 = 13,400
Increase in transit trips for existing population	= (210,957 * 26%) – 48,520 = 6,329
Increase in transit trips for new growth	= 13,400 - 6,329 = 7,071

Benefit to Existing

= Increase in transit trips for existing population / Growth in a.m.p.h transit ridership (2009 – 2019)
= 6,329/13,400
= **47%**

POST PLANNING PERIOD CAPACITY DEDUCTION

Existing a.m. transit modal Split	= 23%
2031 a.m. transit modal split target	= 30%
Transit modal split increase by 2019	= (30% - 23%)/22y * 10y = ~ 3%
Projected 2019 transit modal split	= 23 + 3 = 26%

Method

2006 transit ridership a.m. peak hour	= 44,500
2031 project transit ridership a.m. peak hour	= 78,000
2009 estimated a.m.p.h transit ridership	= 44,500 + ((78,000-44,500)/25y * 3y) = 48,520
2019 estimated transit ridership	= 44,500 +((78,000-44,500)/25 * 13y) = 61,920

Post Planning Period Benefit

= (2031 project transit ridership a.m. peak hour - 2019 estimated transit ridership) / 2031 project transit ridership a.m. peak hour
= (78,000 - 61,920)/78,000
= **20.5 %**

B-8.10 Residential vs. Non-Residential Split

The population/employment ratio (2009-2031) has been used (i.e. 61% residential and 39% non-residential).

B-8.11 Area-Specific Cost Allocation

Residential Charge

Transit service is provided on a City-wide, integrated basis; as a uniform City-wide charge.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Transit Vehicles
Type of Capital Asset: Number of Vehicles

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/vehicle)	Total Value
Mini Buses ~25'	9	2	2	2	2				1	1	$120,000	$120,000
Mid Sized Buses ~30'	1	0	0	0	0	0	0	0	0	0		$0
Standard Buses 40'	727	760	761	742	724	655	685	715	786	746	$808,000	$602,768,000
High Capacity Buses (60' and Double Deckers)	120	118	135	171	200	227	227	227	227	278	$850,000	$236,300,000
Urban Rail Vehicles			1	3	3	3	3	3	3	3	$6,000,000	$18,000,000
Para Transpo Vehicles										91	$150,000	$13,650,000
Non-Revenue Vehicles												
Light										128	$36,269	$4,642,432
Heavy										46	$119,440	$5,494,240
Equipment/Component										28	$9,518	$266,504
Total	857	880	899	918	929	885	915	945	1,017	1,321		$881,241,176
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$667,102
Per Capita Standard per 1000 Persons	1.1137	1.1182	1.1146	1.1203	1.1161	1.0463	1.0643	1.0853	1.1541	1.4814		

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	1.1414
Quality Standard	$667,102
Combined Quantity/Quality Level ($/1000 Perso	$761,430
Combined Quantity/Quality Level ($/capita)	$761.43

DC Amount (before deductions)	
Forecast Population $ per Capita	96,810
$ per Capita	$761.43
Eligible DC $ Amount	$73,714,013

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Transit Buildings
Type of Capital Asset: Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/s.f..)**	**Total Value**
Transit Bus Garages	715,899	715,899	715,899	715,899	715,899	715,899	715,899	715,899	715,899	715,899	$475	$340,052,025
Transit Outdoor Bus Storage					142,000	142,000	142,000	142,000	142,000	142,000	$45	$6,390,000
												$0
												$0
												$0
												$0
												$0
												$0
												$0
												$0
												$0
												$0
												$0
												$0
												$0
												$0
Total	**715,899**	**715,899**	**715,899**	**715,899**	**857,899**	**857,899**	**857,899**	**857,899**	**857,899**	**857,899**		**$346,442,025**

Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700	$404
Per Capita Standard per 1000 Persons	930.3298	909.6846	887.5955	873.6655	1030.6715	1014.2293	997.9004	985.2290	973.5234	962.0938	(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	956.4923
Quality Standard	$404
Combined Quantity/Quality Level ($/1000 Pers	$386,257
Combined Quantity/Quality Level ($/capita)	$386.26

DC Amount (before deductions)	
Forecast Population $ per Capita	96,810
$ per Capita	$386.26
Eligible DC $ Amount	$37,393,499

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Transit Bus Stop Facilities
Type of Capital Asset: Unit Cost

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/unit)**	**Total Value**
Transit Shelters	1,045	1,064	1,083	1,083	1,092	1,095	1,122	1,118	1,118	1,164	$6,000.00	$6,984,000
Bus Stops	5,300	5,500	5,594	6,129	6,338	6,278	6,290	6,389	6,417	6,450	$500	$3,225,000
Total	**6,345**	**6,564**	**6,677**	**7,212**	**7,430**	**7,373**	**7,412**	**7,507**	**7,535**	**7,614**		**$10,209,000**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		**$1,341**
Per Capita Standard per 1000 Persons	8.2455	8.3408	8.2784	8.8013	8.9263	8.7165	8.6216	8.6212	8.5505	8.5387		

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	8.5641
Quality Standard	$1,341
Combined Quantity/Quality Level ($/1000 Pers	$11,483
Combined Quantity/Quality Level ($/capita)	$11.48

DC Amount (before deductions)	
Forecast Population $ per Capita	96,810
$ per Capita	$11.48
Eligible DC $ Amount	$1,111,661

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Public Transit Program
Type of Capital Asset: Transit Corridors, Stations and ROW

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/km)**	**Replacement Value**
50 km of bus rapid transit roadway (Transitway)	44.40	44.40	46.30	46.30	46.30	46.30	49.50	49.50	50.00	50.00	$15,900,000	$232,380,000
111 Transitway bridges and culverts	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	$26,500,000	$542,210,000
54 Transitway retaining wall systems												
10 Park and Ride facilities (173 485 m^2)												$807,318,000
Transitway Stations (19 platforms / buildings)												
8 km of LRT (O-Train), including stations												$212,000,000
Land												$378,000,000
Total	**52.40**	**52.40**	**54.30**	**54.30**	**54.30**	**54.30**	**57.50**	**57.50**	**58.00**	**58.00**		**$2,171,908,000**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		
Per Capita Standard per 1000 Persons	0.0681	0.0666	0.0673	0.0663	0.0652	0.0642	0.0669	0.0660	0.0658	0.0650		**$37,446,690**

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	0.0661
Quality Standard	$37,446,690
Combined Quantity/Quality Level ($/1000 Pers	2,475,226
Combined Quantity/Quality Level ($/capita)	$2,475.23

DC Amount (before deductions)	
Forecast Population $ per Capita	96,810
$ per Capita	$2,475.23
Eligible DC $ Amount	$239,626,647

City of Ottawa
City-Wide Development Charge Projects
Service - Public Transit

Item	Timing by Year(s) 2010-2019	Summary of Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Less Grants, Subsidies & Contributions $000	Net Costs	Less Post Period Capacity 20.50% $000	Subtotal	Less: Benefit to Existing Development %	Less: Benefit to Existing Development $000	Growth Cost $000	Beyond Service Level Cap	Subtotal	90% Statutory Portion $000	61% Residential Share $000	39% Non-residential Share $000
2.024	2010-2019	Rapid Transit EA Studies	11,500	7,646	3,854	790	3,064	47%	1,440	1,624	216	1,408	1,267	768	499
2.084	2010-2019	Transitway Corridor Protection	20,000	13,298	6,702	1,374	5,328	47%	2,504	2,824	375	2,449	2,204	1,336	868
2.014	2010-2019	Transportation Master Plan	4,800	3,192	1,608	330	1,279	47%	601	678	90	588	529	321	208
2.074	2010-2019	Park & Ride Expansion Program-Studies	750	499	251	52	200	47%	94	106	14	92	83	50	33
2.254	2010-2019	Park & Ride Facilities	20,000	13,298	6,702	1,374	5,328	47%	2,504	2,824	375	2,449	2,204	1,336	868
2.139	2013	Origin-Destination Survey	1,200	798	402	82	320	47%	150	170	23	147	132	80	52
2.149	2010-2019	TRANS Model Redevelopment	1,000	665	335	69	266	47%	125	141	19	123	110	67	43
2.159	2010-2012	Pedestrian Connections/Structures to Rapid Tansit Stations	25,000	16,623	8,378	1,717	6,660	47%	3,130	3,530	469	3,061	2,755	1,670	1,085
		Increment 1													
2.009	2010-2018	LRT Tunney's Pasture to Blair (including Tunnel, Rail Yard & Nicholas Bridge)	1,025,020	681,536	343,484	70,414	273,070	47%	128,343	144,727	19,221	125,506	112,956	68,451	44,505
2.284	2010-2015	Cumberland Transitway Blair to Navan	46,640	31,011	15,629	3,204	12,425	47%	5,840	6,585	875	5,711	5,140	3,115	2,025
2.019	2010-2014	West Transitway Bayshore to Moodie	40,280	26,782	13,498	2,767	10,731	47%	5,043	5,688	755	4,932	4,439	2,690	1,749
2.029	2010-2014	West Transitway Baseline to Norice	196,100	130,387	65,713	13,471	52,242	47%	24,554	27,688	3,677	24,011	21,610	13,096	8,514
2.214	2010-2012	SW Transitway Fallowfield to Strandherd	48,760	32,421	16,339	3,350	12,990	47%	6,105	6,885	914	5,971	5,373	3,256	2,117
2.039	2011-2012	Strandherd / Armstrong Bridge & Strandherd BRT (including Priority on Woodroffe)	31,800	21,144	10,656	2,185	8,472	47%	3,982	4,490	596	3,893	3,504	2,123	1,381
2.049	2015-2018	LRT Vehicles (Tunney's Pasture to Blair)	325,000	216,093	108,908	22,326	86,581	47%	40,693	45,888	6,094	39,794	35,815	21,704	14,111
2.394	2017	Bus Maintenance Facility	63,600	42,288	21,312	4,369	16,943	47%	7,963	8,980	1,193	7,788	7,009	4,247	2,762
2.059	2010-2013	Bus Vehicles	68,720	45,692	23,028	4,721	18,307	47%	8,604	9,703	1,289	8,415	7,573	4,589	2,984
2.069X	2010-2013	Transit Priority Program and Measures	64,506	42,890	21,616	4,431	17,185	47%	8,077	9,108	1,210	7,898	7,108	4,307	2,801
		Increment 2													
2.124	2016-2019	LRT Bayview to South Keys	195,040	129,682	65,358	13,398	51,960	47%	24,421	27,539	3,657	23,881	21,493	13,025	8,468
2.079	2010-2019	LRT Tunney's Pasture to Baseline	86,920	57,793	29,127	5,971	23,156	47%	10,883	12,273	1,630	10,643	9,579	5,805	3,774
2.089	2018-2019	LRT Vehicles (Tunney's Pasture to Baseline)	304,687	202,586	102,101	20,931	81,170	47%	38,150	43,020	5,713	37,307	33,576	20,347	13,229
2.124	2018-2019	LRT Vehicles (Bayview to South Keys)	73,334	48,760	24,574	5,038	19,537	47%	9,182	10,355	1,375	8,979	8,081	4,897	3,184
2.099	2014-2017	Bus Vehicles	68,720	45,692	23,028	4,721	18,307	47%	8,604	9,703	1,289	8,415	7,573	4,589	2,984
2.109X	2014-2017	Transit Priority Program and Measures	64,506	42,890	21,616	4,431	17,185	47%	8,077	9,108	1,210	7,898	7,108	4,307	2,801
		Increment 3													
2.104	2016	LRT South Keys to Riverside South Town Centre	1,855	1,233	622	127	494	47%	232	262	35	227	205	124	81
2.119	2018	Bus Vehicles	51,540	34,269	17,271	3,541	13,730	47%	6,453	7,277	967	6,311	5,680	3,442	2,238
2.129X	2018	Transit Priority Program and Measures	32,253	21,445	10,808	2,216	8,592	47%	4,038	4,554	605	3,949	3,555	2,154	1,401
		Subtotal	2,873,531	1,910,611	962,920	197,399	765,522		359,792	405,730	53,884	351,846	316,661	191,896	124,765
2.264	2011-2019	Rideau Canal Pedestrian Crossing - Debt Payments	63		63	-	63	-	-	63	63	-	63	38	25
2.254	2013-2019	Park and Ride Facilities - Debt Payments	1,323		1,323	-	1,323	-	-	1,323	1,323	-	1,323	802	521
2.1X9	2013-2019	West Transitway (Bayshore to Moodie) - Debt Payments	602		602	-	602	-	-	602	602	-	602	365	237
2.084A	2013-2019	Transitway Priority Measures - Debt Payments	63		63	-	63	-	-	63	63	-	63	38	25
2.084B	2013-2019	Transitway Corridor Protection - Debt Payments	1,267		1,267	-	1,267	-	-	1,267	1,267	-	1,267	768	499
2.194	2012-2019	West Transitway (Pinecrest to Moodie) - Debt Payments	1,544		1,544	-	1,544	-	-	1,544	1,544	-	1,544	936	608
2.214	2014-2019	SW Transitway-Fallowfield to Town Centre - Debt Payments	1,398		1,398	-	1,398	-	-	1,398	1,398	-	1,398	847	551
2.2X9	2015-2019	Woodroffe Station at Strandherd - Debt Payments	600		600	-	600	-	-	600	600	-	600	364	236
2.3X9	2014-2019	West Transitway (SW Twy to Pinecrest) - Debt Payments	870		870	-	870	-	-	870	870	-	870	527	343
		Total	2,881,261	1,910,611	970,650	197,399	773,252		359,792	413,460	61,614	351,846	324,391	196,581	127,810

Level of Service Cap

$ 37,393,499	Transit Buildings
73,714,013	Transit Vehicles
239,626,647	Transit Corridors & Stations
1,111,661	Transit Bus Stops
351,845,819	
- 351,845,819	
-	Unused Service Level Cap

B-9 PARKS DEVELOPMENT

B-9 PARKS DEVELOPMENT

B-9.1 DC Calculation Planning Period

2010-2019

B-9.2 Service Coverage and Capital Program

Coverage: the cost of hard/soft landscaping (other than grading, drainage, seeding, sodding), sports fields, courts, and related development items, capital program for active neighbourhood, community-wide and passive parks as well as trails.

Capital Program: prepared by Recreation and Community Services Branch of the City Operations Department, based on historical 10-year average service levels and anticipated population growth. The parks development program, including trails, has been established based on projected park/ trail need by facility type in specific geographic locations for the period affected by the DC by-law. The capital program was established in recognition of projected cash flow and affordability and identifies parks credits carried forward from previous years.

B-9.3 Local Service and Developer Contribution Policy

Provision of the land, sanitary and stormwater and 50 mm (minimum) water service to the park property line, and vault clearing are the landowner's responsibility. All other development of the land, including grading, drainage, seeding, sodding, landscaping and related items are development charge project components.

B-9.4 Level of Service Measurement

Separate schedules follow for trails (km/capita) and active vs. passive parks (ha/capita).

B-9.5 Benefit to Existing Development Deduction

No deduction for benefit to existing development has been made for park credits carried forward and for the majority of the neighbourhood park projects.

A 5-10% deduction has been made for community parks and active District Parks. Finally, a 25% benefit to existing development deduction has been made for all passive parks and trails.

This higher scale of benefit to existing development recognizes that, although such parks and trails are constructed primarily as a result of growth and within growth areas, they have a broader capture area than active neighbourhood parks which are mostly constructed within, and provide service solely to, new growth subdivisions. However, these passive parks and trails serve only to maintain the City's average service level and, from that perspective, provide no overall benefit to existing development.

B-9.6 Post Period/Excess Capacity Deduction

The 2008 service level for Parks is similar to the City's historical 10-year average. As a result, no excess capacity is involved. The 2019 DC-funded service level for Parks is well below the City's historical 10-year average. As a result, no post period capacity is involved.

B-9.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-9.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs pursuant to s.s.5(1)8 of the DCA.

B-9.9 Use of Uncommitted DC Reserve Fund Balance

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-9.10 Residential vs. Non-Residential Split

95% residential and 5% non-residential, based on estimated service usage and accepted municipal norms.

B-9.11 Area-Specific Cost Allocation

Residential Charge

The Parks program has been allocated on a Large Area recovery basis, consistent with the largely neighbourhood and community focus of the program.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Parks Development
Type of Capital Asset: Hectares of Parks

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/Hectare)	Total Value
Active Parks	1,187.57	1,192.65	1,212.48	1,224.52	1,278.19	1,303.82	1,322.93	1,349.71	1,364.42	1,413.47	$293,284.32	$414,548,588
Passive Parks	1,315.50	1,352.18	1,399.09	1,431.64	1,442.26	1,449.44	1,452.80	1,453.20	1,453.20	1,492.58	$20,057.46	$29,937,364
Total	2,503.07	2,544.83	2,611.57	2,656.16	2,720.45	2,753.26	2,775.73	2,802.91	2,817.62	2,906		$444,485,951
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$152,952
Per Capita Standard per 1000 Persons	3.2528	3.2337	3.2379	3.2415	3.2683	3.2550	3.2287	3.2189	3.1974	3.2590		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	3.2393
Quality Standard	152,952
Persons)	$495,457
Combined Quantity/Quality Level ($/capita)	$495.46

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$495.46
Eligible DC $ Amount	$53,311,193

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Parks Development
Type of Capital Asset: Kilometres of Developed Trails

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/kilometre)	Total Value
Trails (Cumulative Total City Wide)	94.10	100.00	100.00	103.58	104.46	104.46	105.26	106.61	107.84	110.04	88,160.00	$9,701,126
Total	94.10	100.00	100.00	103.58	104.46	104.46	105.26	106.61	107.84	110		$9,701,126
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$88,160
Per Capita Standard per 1000 Persons	0.1223	0.1271	0.1240	0.1264	0.1255	0.1235	0.1224	0.1224	0.1224	0.1234		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	0.1239
Quality Standard	88,160
Persons)	$10,923
Combined Quantity/Quality Level ($/capita)	$10.92

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$10.92
Eligible DC $ Amount	$1,175,317

City of Ottawa
Area-Specific Development Charge Projects
Service - Parks Development

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	90% Statutory Portion $000	95% Residential Share $000	5% Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
5.019	2010-2018	Active Neighbourhood Parks - Inside Greenbelt	1,700	5%	85	-	1,615	1,454	1,381	73	1,454		
5.029	2010-2019	Active Neighbourhood Parks - Outside Greenbelt	10,200	0%	-	-	10,200	9,180	8,721	459		9,180	
5.039	2010-2019	Active Neighbourhood Parks - Rural	2,720	0%	-	-	2,720	2,448	2,326	122			2,448
5.049	2010-2019	Active Community Parks - Inside Greenbelt	720	10%	72	-	648	583	554	29	583		
5.059	2010-2019	Active Community Parks - Outside Greenbelt	15,900	5%	795	-	15,105	13,595	12,915	680		13,595	
5.069	2010-2019	Active Community Parks - Rural	3,600	5%	180	-	3,420	3,078	2,924	154			3,078
5.079	2013-2019	Active District Parks - Outside Greenbelt	15,140	10%	1,514	-	13,626	12,263	11,650	613		12,263	
5.089	2011-2017	Passive Parks - Inside Greenbelt	420	25%	105	-	315	284	270	14	284		
5.099	2010-2019	Passive Parks - Outside Greenbelt	1,400	25%	350	-	1,050	945	898	47		945	
5.109	2010-2019	Passive Parks - Rural	980	25%	245	-	735	662	629	33			662
5.119	2014	Trails - Inside Greenbelt	54	25%	14	-	40	36	34	2	36		
5.129	2012-2018	Trails - Outside Greenbelt	450	25%	113	-	337	303	288	15		303	
5.139	2010-2019	Trails - Rural	319	25%	80	-	239	215	204	11			215
5.014	2010-2012	Park Credits Carried Forward - Neighbourhood	303	0%	-	-	303	303	288	15		303	
5.024	2010-2012	Park Credits Carried Forward - Community	391	0%	-	-	391	391	371	20		391	
		Total	54,297		3,553	-	50,744	45,740	43,453	2,287	2,357	36,980	6,403
											Res.	2,239	35,131	6,083
											Non-res.	118	1,849	320

Level of Service Cap

53,311,193	Parks
1,175,317	Trails
54,486,510	Service Level Cap
- 54,297,000	
189,510	Unused Service Level Cap

B-10 MAJOR INDOOR RECREATION FACILITIES

B-10 MAJOR INDOOR RECREATION FACILITIES

B-10.1 DC Calculation Planning Period

2010-2019

B-10.2 Service Coverage and Capital Program

Coverage: community centres, indoor and outdoor pools, ice pads, major recreation complexes, skateboard parks, indoor sports field facilities, etc.

Capital Program: prepared by the Recreation and Community Services Branch of the City Operations Department, based on historical 10-year average service levels and anticipated population growth and in accordance with the Community Infrastructure Strategy. The capital program reflects projects identified in City of Ottawa capital budgets and/or the City's Long Range Financial Plan. Certain capital projects were identified as part of the DC Background Study. The capital program was established in recognition of projected cash flow and affordability and identifies debt payment requirements carried forward from previous years.

B-10.3 Local Service and Developer Contribution Policy

Not applicable.

B-10.4 Level of Service Measurement

A separate schedule follows for indoor recreation facilities (sq.ft./capita).

B-10.5 Benefit to Existing Development Deduction

No deduction for benefit to existing development was made for future debt payments which fund DC recoverable costs which were previously identified.

These deductions included a basic 5% allowance for improved accessibility associated with new facilities (Goulbourn, East, West, South). 10% was deducted for recreational complexes. A higher percentage (45%) was utilized in several instances (East Skateboard, aquatic facilities, planning studies and Rideauville) and a higher still factor (70-80%) in the case of unique facilities in largely built-out areas which are primarily required to address existing needs (e.g. indoor skateboard park).

B-10.6 Post Period/Excess Capacity Deduction

The 2008 service level for Major Indoor Recreation Facilities is marginally above the City's historical 10-year average and this has been addressed via large benefit to existing development deductions. The 2019 DC-funded service level for Major Indoor Recreation Facilities is below the City's historical 10-year average. As a result, no post period capacity is involved.

B-10.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-10.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs pursuant to s.s.5(1)8 of the DCA.

B-10.9 Use of Uncommitted DC Reserve Fund Balance

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-10.10 Residential vs. Non-Residential Split

95% residential and 5% non-residential, based on estimated service usage and accepted municipal norms.

B-10.11 Area-Specific Cost Allocation

Residential Charge

Project costs were allocated on a Large Area basis, based on the project location except in the case of outdoor aquatic facilities and studies which have a broader, City-wide service area and are addressed accordingly, and one community centre for which the location has not yet been determined.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Recreation Services
Type of Capital Asset: Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f.)	Total Value
Recreation Complex	1,341,243	1,394,523	1,394,523	1,394,523	1,410,723	1,590,723	1,625,723	1,660,168	1,660,168	1,681,168	$363	$610,263,984
Community Centre	627,235	636,158	759,843	759,843	759,843	804,843	847,427	853,102	863,102	872,318	$320	$279,141,760
Community Building	44,903	44,903	44,903	44,903	44,903	50,636	50,636	52,863	52,863	52,863	$304	$16,070,352
Fieldhouse	178,983	179,583	179,583	179,583	179,583	179,583	179,583	179,583	179,583	180,683	$293	$52,940,119
Indoor Pool	464,080	493,680	493,680	493,680	502,680	502,680	502,680	502,680	502,680	502,680	$396	$199,061,280
Indoor Ice Pad						21,000	21,000	21,000	55,000	55,000	$328	$18,040,000
Indoor Soccer						64,200	64,200	64,200	142,200	142,200	$65	$9,243,000
Outdoor District Skateboard Park						30,140	30,140	39,720	39,720	39,720	$23	$913,560
Outdoor Pool	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325	$128	$1,193,600
Stadium	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	$358	$157,670,360
Sportsfield (Lansdowne)	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	$38	$2,760,586
Total	3,178,836	3,271,239	3,394,924	3,394,924	3,420,124	3,766,197	3,843,781	3,895,708	4,017,708	4,049,024		$1,347,298,601
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		
Per Capita Service Level	4.1310	4.1567	4.2091	4.1431	4.1089	4.4525	4.4711	4.4739	4.5592	4.5408		$333
												(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	4.3246
Quality Standard	$332.75
Combined Quantity/Quality Level ($/1000 Persons)	$1,439.00

Note that certain facilities previously inventoried under separate line items in the 1999 to 2003 LOS period have been combined and renamed as noted to match facility types within the 2004 to 2008 LOS period.

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$1,439.00
Eligible DC $ Amount	$154,835,921

City of Ottawa
City-Wide Development Charge Projects
Service - Recreation

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000		Less		Growth Cost $000	90% Statutory Portion $000	95% Residential Share $000	5% Non-residential Share $000
				Benefit to Existing Development %	Benefit to Existing Development $000	Grants, Subsidies & Contributions $000				
6.184	2010	Outdoor Aquatic Facility	620	45%	279	-	341	307	292	15
6.184	2011	Outdoor Aquatic Facility	620	45%	279	-	341	307	292	15
6.019	2018	Indoor Skateboard Park Partnership	2,160	80%	1,728	-	432	389	370	19
21.254	2014	Recreation Planning Studies	660	45%	297	-	363	327	311	16
6.014	2010-2019	Community Centre Space	8,943	45%	4,024	-	4,919	4,427	4,206	221
		Total	13,003		6,607	-	6,396	5,757	5,471	286

City of Ottawa
Area-Specific Development Charge Projects
Service - Recreation

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Less			Growth Cost $000	90% Statutory Portion $000	95% Residential Share $000	5% Non-residential Share $000	Allocation of Expenditures by Area		
				Benefit to Existing Development %	Benefit to Existing Development $000	Grants, Subsidies & Contributions $000					Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
6.029	2010	Goulbourn Recreation Complex Ice Pad (32,000 SF)	1,500	5%	75	-	1,425	1,283	1,219	64		1,283	
6.194	2012	Outdoor District Skateboard Park - East	500	45%	225	-	275	248	236	12		248	
6.124	2010	Pinecrest Community Centre Expansion (12,000 SF)	5,200	70%	3,640	-	1,560	1,404	1,334	70	1,404		
6.059	2012	Rideauview Community Centre Expansion (2,000 SF)	640	45%	288	-	352	317	301	16		317	
6.069	2010	Greenboro Community Centre Expansion (7,000 SF)	3,300	70%	2,310	-	990	891	846	45	891		
6.079	2010	Community Centre - East (21,000 SF)	6,720	5%	336	-	6,384	5,746	5,459	287		5,746	
6.089	2012	Community Centre - South (21,000 SF)	6,720	5%	336	-	6,384	5,746	5,459	287		5,746	
6.099	2014	Community Centre - West (21,000 SF)	6,720	5%	336	-	6,384	5,746	5,459	287		5,746	
6.119	2011	Community Building - Rural West (3,000 SF)	1,616	45%	727	-	889	800	760	40			800
6.129	2014	Community Building - Rural South (3,000 SF)	1,616	45%	727	-	889	800	760	40			800
6.139	2017	Community Building - Rural East (3,000 SF)	1,616	45%	727	-	889	800	760	40			800
6.134	2012	Barrhaven South Recreation Complex (125,000 SF)	44,275	10%	4,428	-	39,847	35,862	34,069	1,793		35,862	
6.039	2012	Riverside South Recreation Complex Land [1]	4,000	10%	400	-	3,600	3,240	3,078	162		3,240	
6.049	2016	Riverside South Recreation Complex (120,000 SF)	42,549	10%	4,255	-	38,294	34,465	32,742	1,723		34,465	
6.044	2012-2019	Indoor Pools - Debt Payments	3,664	0%	-	-	3,664	3,664	3,481	183		3,664	
6.054	2010-2019	Albion Heathereringtion Community Centre - Debt Payments	65	0%	-	-	65	65	62	3	65		
6.084	2010-2019	Goulbourn Community Centre Expansion - Debt Payments	830	0%	-	-	830	830	789	42		830	
6.114	2010-2019	North Kanata Complex Land - Debt Payments	1,420	0%	-	-	1,420	1,420	1,349	71		1,420	
6.094	2011-2019	Hunt Club/Riverside Expansion - Debt Payments	162	0%	-	-	162	162	154	8	162		
6.144	2012-2019	S.E. Nepean Complex Land - Debt Payments	1,544	0%	-	-	1,544	1,544	1,467	77		1,544	
6.104	2012-2019	North Kanata Complex - Debt Payments	4,376	0%	-	-	4,376	4,376	4,157	219		4,376	
6.149	2010-2019	Goulbourn Recreation Complex - Debt Payments	880	0%	-	-	880	880	836	44		880	
6.159	2010-2019	Fred Barrett Arena - Debt Payments	1,920	0%	-	-	1,920	1,920	1,824	96		1,920	
		Total	141,833		18,810	-	123,023	112,209	106,601	5,609	2,522	107,287	2,400

[1] Land component excluded from Service Standard

Res	2,396	101,923	2,280
Non-Res	126	5,364	120
Total	2,522	107,287	2,400

B-11 LIBRARIES

B-11 LIBRARIES

B-11.1 DC Calculation Planning Period

2010-2019

B-11.2 Service Coverage and Capital Program

Coverage: new or expanded branch libraries, main library or ancillary facilities; all forms of circulating materials including books, periodicals, CDs, electronically-available information, etc.

Capital Program: prepared by Ottawa Public Library and approved by the Ottawa Public Library Board. The program is based on the Ottawa Public Library Facility Growth Planning Study (2006), the Service Delivery Framework (2003), previous DC background studies, population projections and ten-year average service levels. Capital projects have been included in City of Ottawa capital budgets and/or the City's Long Range Financial Plan.

B-11.3 Local Service and Developer Contribution Policy

Not applicable.

B-11.4 Level of Service Measurement

Separate Schedules follow for Library facilities (sq.ft./capita) and materials (items/capita).

B-11.5 Benefit to Existing Development Deduction

No deduction for benefit to existing development was involved for future debt charges pertaining to previously allocated DC recoverable costs. A 5% deduction is applicable to additional materials and new Library studies.

A 10% deduction is applicable to Library expansions (East District and South Urban); whereas, an 89% deduction is applicable to the new Central Library project, which benefits existing development and 10-year growth proportionately.

B-11.6 Post Period/Excess Capacity Deduction

The 2008 service level for Libraries is below the City's historical 10-year average. As a result, no excess capacity is involved. The 2019 DC-funded service level for Libraries is also at or below the City's historical 10-year average. As a result, no post period capacity is involved.

B-11.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-11.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs pursuant to s.s.5(1)8 of the DCA.

B-11.9 Use of Uncommitted DC Reserve Fund Balance

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-11.10 Residential vs. Non-Residential Split

95% residential and 5% non-residential, based on estimated service usage and accepted municipal norms.

B-11.11 Area-Specific Cost Allocation

Residential Charge

Facility costs are allocated on a Large Area service area basis. Collections are assessed on a City-wide basis as with the present library system, collections can be used by residents from all parts of the City via inter-library loans.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Libraries
Type of Capital Asset: Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/s.f.)**	**Total Value**
Alta Vista	15,198	15,198	15,198	15,198	15,198	15,198	15,198	15,198	15,198	15,198	$301	$4,574,598
Beaverbrook	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	$301	$3,010,000
Blackburn Hamlet	7,333	7,333	7,333	7,333	7,333	7,333	7,333	7,333	7,333	7,333	$301	$2,207,233
Blossom Park	10,250	10,250	10,250	10,250	10,250	10,250	10,250				$301	$0
Carlingwood	19,690	19,690	19,690	19,690	19,690	19,690	19,690	19,690	19,690	19,690	$301	$5,926,690
Carp	5,773	5,773	5,773	5,773	5,773	5,773	5,773	5,773	5,773	5,773	$301	$1,737,673
Centennial	9,744	9,744	9,744	9,744	9,744	9,744	9,744	9,744	9,744	9,744	$301	$2,932,944
Constance Bay	519	519	519	519	519	519	519	519	519	519	$301	$156,219
Cumberland	24,788	24,788	24,500	24,500	24,500	24,500	24,500	24,500	24,500	24,500	$301	$7,374,500
Cumberland - Sir Wilfrid Laurier Storage	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	$301	$903,000
Elmvale Acres	7,493	7,493	7,493	7,493	7,493	7,493	7,493	7,493	7,493	7,493	$301	$2,255,393
Emerald Plaza	5,644	5,644	5,644	5,644	5,644	5,644	5,644	5,644	5,644	5,644	$301	$1,698,844
Fitzroy Harbour	673	673	673	673	673	673	673	673	673	673	$301	$202,573
Greely	946	946	946	946	946	946	946	946	946	946	$301	$284,746
Greenboro								29,000	29,000	29,000	$301	$8,729,000
Hazeldean	9,713	9,713	9,713	9,713	9,713	9,713	9,713	9,713	9,713	9,713	$301	$2,923,613
Main 5th Floor (4th Fl Gen Admin omitted)	13,884	13,884	13,884	13,884	13,884	13,884	13,884	13,884	13,884	13,884	$301	$4,179,084
Main Branch	90,418	90,418	90,418	90,418	90,418	90,418	90,418	90,418	90,418	90,418	$301	$27,215,818
Manotick	4,629	4,629	4,629	4,629	4,629	4,629	4,629	4,629	4,629	4,629	$301	$1,393,329
Metcalfe	1,468	1,468	1,468	1,468	1,468	1,468	1,468	1,468	1,468	1,468	$301	$441,868
Munster	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	$301	$301,000
Nepean Centrepointe	36,940	36,940	36,940	36,940	36,940	36,940	36,940	36,940	36,940	36,940	$301	$11,118,940
Nepean Centrepointe - BFP Offices 2nd Floor	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	$301	$752,500
North Gloucester	14,300	14,300	14,300	14,300	14,300	14,300	14,300	14,300	14,300	14,300	$301	$4,304,300
North Gower	2,364	2,364	2,364	2,364	2,364	2,364	2,364	2,364	2,364	2,364	$301	$711,564
Orléans	17,182	17,182	17,182	17,182	17,182	17,182	17,182	17,182	17,182	17,182	$301	$5,171,782
Osgoode	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	$301	$1,027,012
Richmond	2,804	2,804	2,804	2,804	2,804	2,804	2,804	2,804	2,804	2,804	$301	$844,004
Rideau	7,277	7,277	7,277	7,277	7,277	7,277	7,277	7,277	7,277	7,277	$301	$2,190,377
Rockcliffe Park	3,005	3,005	3,005	3,005	3,005	3,005	3,005	3,005	3,005	3,005	$301	$904,505
Rosemount	6,089	6,089	6,089	6,089	6,089	6,089	6,089	6,089	6,089	6,089	$301	$1,832,789
Ruth E. Dickinson	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100	$301	$5,147,100
Ruth E. Dickinson - Tech Service Storage	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	$301	$812,700
Stittsville	5,140	12,700	12,700	12,700	12,700	12,700	12,700	12,700	12,700	12,700	$301	$3,822,700
St-Laurent	13,540	13,540	13,540	13,540	13,540	13,540	13,540	13,540	13,540	13,540	$301	$4,075,540
Sunnyside	12,014	12,014	12,014	12,014	12,014	12,014	12,014	12,014	12,014	12,014	$301	$3,616,214
Vanier	7,308	7,308	7,308	7,308	7,308	7,308	7,308	7,308	7,308	7,308	$301	$2,199,708
Vernon	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366	1,366	$301	$411,166
Total	397,204	404,764	404,476	404,476	404,476	404,476	404,476	423,226	423,226	423,226		$127,391,026

Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700	
Per Capita Service Level	0.5162	0.5143	0.5015	0.4936	0.4859	0.4782	0.4705	0.4860	0.4803	0.4746	$301 (12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 Persons	0.4901
Quality Standard	$301
Combined Quantity/Quality Level ($/1000 Persons)	$147.52

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$147.52
Eligible DC $ Amount	$15,873,163

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Libraries
Type of Capital Asset: Items of Collection Material

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/item)**	**Total Value**
Rockcliffe Park	17,162	2,212										$0
Rideau Township	70,048	64,167										$0
Goulbourn	69,805	61,350										$0
Osgoode	57,949	75,357										$0
Vanier	57,015	51,746										$0
West Carleton	48,978	50,789										$0
Cumberland	64,033	75,291										$0
Kanata	93,139	105,826										$0
Gloucester	276,633	283,205										$0
Nepean	359,597	338,686										$0
Ottawa	1,039,050	984,029										$0
New Ottawa			2,060,415	2,136,418	2,215,418	2,446,776	2,344,168	2,404,076	2,317,302	2,259,938	$44.39	$100,321,993
Total	**2,153,409**	**2,092,658**	**2,060,415**	**2,136,418**	**2,215,418**	**2,446,776**	**2,344,168**	**2,404,076**	**2,317,302**	**2,259,938**		**$100,321,993**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		**$44.39**
Per Capita Standard per 1000 Persons	2.7984	2.6591	2.5546	2.6072	2.6616	2.8926	2.7267	2.7609	2.6296	2.5344		(12/10)

10 Year Average	**1999-2008**
Quantity Standard per 1,000 Persons	2.6825
Quality Standard	$44.39
Combined Quantity/Quality Level ($/1000	$119.08

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$119.08
Eligible DC $ Amount	$12,813,024

City of Ottawa
City-Wide Development Charge Projects
Service - Libraries

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	90% Statutory Portion $000	95% Residential Share $000	5% Non-residential Share $000
7.019	2010	Collections	1,102	5%	55	-	1,047	942	895	47
7.029	2011	Collections	1,102	5%	55	-	1,047	942	895	47
7.039	2012	Collections	1,102	5%	55	-	1,047	942	895	47
7.049	2013	Collections	1,102	5%	55	-	1,047	942	895	47
7.059	2014	Collections	1,102	5%	55	-	1,047	942	895	47
7.069	2015	Collections	1,102	5%	55	-	1,047	942	895	47
7.079	2016	Collections	1,281	5%	64	-	1,217	1,095	1,040	55
7.089	2017	Collections	1,281	5%	64	-	1,217	1,095	1,040	55
7.099	2018	Collections	1,281	5%	64	-	1,217	1,095	1,040	55
7.109	2019	Collections	1,730	5%	86	-	1,644	1,480	1,406	74
			1,730	5%	86	-	1,644	1,480	1,406	74
		Total	**12,813**		**639**	**-**	**12,174**	**10,955**	**10,407**	**548**

Level of Service Cap	
$ 15,873,163	Facilities
$ 12,813,024	Materials
$ 28,686,186	Level of Service Cap
- 12,813,000	
- 40,824,000	
(24,950,814)	
Less: 25,000,000	Land Costs not included in Cap
0	

City of Ottawa
Area-Specific Development Charge Projects
Service - Libraries

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Eligible Level of Service $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	90% Statutory Portion $000	95% Residential Share $000	5% Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
7.114	2011-2019	West District Library - Debt Payments	36	36		-	-	36	36	34	2		24	12
7.124	2014	East District (Cumberland) Expansion	2,000	2,000	10%	200	-	1,800	1,620	1,539	81		1,442	178
7.009	2010	New Central Library - Land [1]	25,000	25,000	89%	22,350	-	2,650	2,385	2,266	119	2,385		
7.019	2015	New Central Library	180,000	8,800	89%	7,867	-	933	840	798	42	840		
7.144	2017	South Urban Expansion	4,900	4,900	10%	490	-	4,410	3,969	3,771	198		2,897	1,072
21.264	2014	Library Planning Studies	88	88	5%	4	-	84	76	72	4	27	38	11
		Total	212,024	40,824		30,911	-	9,913	8,926	8,480	446	3,252	4,401	1,273
											Res.	3,089	4,181	1,209
											Non-res.	163	220	64

[1] Land component excluded from Service Standard

B-12 CHILD CARE

B-12 CHILD CARE

B-12.1 DC Calculation Planning Period

2010-2019

B-12.2 Service Coverage and Capital Program

Coverage: child care facilities and furnishings which are leased or owned by the City including municipal child care spaces provided in municipal facilities or through leased accommodation from donor agencies.

Capital Program: prepared by Community and Social Services, Children's Services, based on a 10-year average service levels and expected growth in the target population (0-9 years), licensed child care spaces are provided through the most efficient means - either in municipal facilities or through lease of space from partner agencies. Program is included in recent City of Ottawa capital budgets and/or the City's Long Range Financial Plan. Detailed analysis to determine geographical areas of growth will be part of Phase II of the Child Care Fee Subsidy Stabilization Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-12.3 Local Service and Developer Contribution Policy

Not applicable.

B-12.4 Level of Service Measurement

A separate schedule follows for child care spaces (sq.ft./capita).

B-12.5 Benefit to Existing Development Deduction

New spaces are primarily targeted for outside the Greenbelt in growth areas. A benefit to existing development (5%) has been deducted where new municipal child care spaces in facilities in growth areas may offer a proximity benefit to some of the existing population.

B-12.6 Post Period/Excess Capacity Deduction

The 2008 service level for Child Care is well above the City's historical 10-year average; however, a waiting list exists for the service and thus, there is no excess capacity. The 2019

DC-funded service level for Child Care is also below the City's historical 10-year average. As a result, no post period capacity is involved.

B-12.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-12.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs pursuant to s.s.5(1)8 of the DCA.

B-12.9 Use of Existing Reserve Funds

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-12.10 Residential vs. Non-Residential Split

The 2009-19 increment in population and employment ratio has been used, in order to recognize the indirect benefit of this service to non-residential development, in addition to the direct benefit to residential development.

B-12.11 Area-Specific Cost Allocation

Residential Charge

Spaces are located in high need areas on a City-wide basis and the residential DC has therefore been calculated as a uniform, City-wide charge.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Childcare
Type of Capital Asset: Square Feet of Building Area

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f.)	Total Value
Childcare Space(Square Feet of Building Area)	331,470	335,160	350,220	358,200	361,200	362,640	392,370	567,480	570,600	574,320	$310.00	$178,039,200
Total	331,470	335,160	350,220	358,200	361,200	362,640	392,370	567,480	570,600	574,320		$178,039,200
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$310.00
Per Capita Service Level	0.4308	0.4259	0.4342	0.4371	0.4339	0.4287	0.4564	0.6517	0.6475	0.6441		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	0.4990
Quality Standard	$310.00
Combined Quantity/Quality Level ($/1000 Persons)	$154.69

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$154.69
Eligible DC $ Amount	$16,644,644

City of Ottawa
City-Wide Development Charge Projects
Service - Child Care

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000		Less		Growth Cost $000	90% Statutory Portion $000	61% Residential Share $000	39% Non-residential Share $000
				Benefit to Existing Development %	Benefit to Existing Development $000	Grants, Subsidies & Contributions $000				
15.019	2010-2019	Child Care Spaces	7,500	5%	375	-	7,125	6,413	3,886	2,527
		Total	7,500		375	-	7,125	6,413	3,886	2,527

Level of Service Cap

$	16,644,644	Spaces
-	7,500,000	
	9,144,644	Unused Service Level Cap

B-13 PARAMEDIC SERVICE

B-13 PARAMEDIC SERVICE

B-13.1 DC Calculation Planning Period

2010-2019

B-13.2 Service Coverage and Capital Program

Coverage: paramedic posts, ambulances, E.R. and special operation vehicles and misc. facilities.

Capital Program: prepared by Emergency and Protective Services (Paramedic Services), based on the Ottawa Paramedic Accommodations Master Plan. Most projects are included in recent City of Ottawa capital budgets and/or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-13.3 Local Service and Developer Contribution Policy

Not applicable.

B-13.4 Level of Service Measurement

Separate schedules follow for Paramedic Service facilities (sq.ft./capita) and vehicles (vehicles/capita).

B-13.5 Benefit to Existing Development Deduction

All of Ottawa receives ambulance service. The establishment of additional posts is necessary to house the additional vehicles and staff necessitated by growth. A small response time benefit to existing development (5-10%) is involved in some cases as a result of new stations and vehicles. This is, in part, because the ambulances are largely routed "on the move", rather than exclusively from the post.

B-13.6 Post Period/Excess Capacity Deduction

Although the 2008 service level for the Paramedic Service is above the City's historical 10-year average, no excess capacity is involved in the system. The 2019 DC-funded service level for the Paramedic Service is at or below the City's historical 10-year average. As a result, no post period capacity is involved.

B-13.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-13.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs pursuant to s.s.5(1)8 of the DCA.

B-13.9 Use of Existing Reserve Funds

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-13.10 Residential vs. Non-Residential Split

The incremental population and employment ratio has been applied (i.e. 61% residential and 39% non-residential).

B-13.11 Area-Specific Cost Allocation

Residential Charge

All projects have been allocated on a City-wide basis because of the mobility of the fleet. As a result, the residential charge is based on a uniform, City-wide calculation.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Ottawa Paramedic Service
Type of Capital Asset: Number of Vehicles

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/vehicle)**	**Total Value**
Emergency Response Vehicle (ERV)	4	5	11	11	17	17	20	23	23	26	$90,300	$2,347,800
Emergency Support Vehicle (ESU)	1	1	1	1	1	1	1	1	1	1	$301,000	$301,000
Special Service Vehicle (ATV)	0	0	1	1	1	1	1	1	2	2	$48,160	$96,320
Special Support Vehicle (MCI trailers/shelters/C	0	0	2	2	4	3	5	5	5	5	$36,120	$180,600
TRU	0	0	0	0	0	0	0	1	1	1	$541,875	$541,875
Paramedic Unit	35	35	42	49	49	51	57	62	61	69	$222,740	$15,369,060
Others (Trailer)	0	0	0	0	0	0	0	0	1	1	$10,300	$10,300
Total	**40**	**41**	**57**	**64**	**72**	**73**	**84**	**93**	**94**	**105**		**$18,846,955**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		**$179,495**
Per Capita Standard per 1000 Persons	0.0520	0.0521	0.0707	0.0781	0.0865	0.0863	0.0977	0.1068	0.1067	0.1178		(12/10)

10 Year Average	**1999-2008**
Quantity Standard per 1,000 Persons	0.0855
Quality Standard	$179,495
Combined Quantity/Quality Level ($/1000 Pers	15,347
Combined Quantity/Quality Level ($/capita)	$15.35

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$15.35
Eligible DC $ Amount	$1,651,316

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Paramedic Service
Type of Capital Asset: Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/s.f.)**	**Total Value**
2380 St. Laurent Boulevard (exclude admin)	18,000	18,000										$0
1181 Perth Street, Richmond	1,200	1,200										$0
37 Edgewater Drive	1,800	1,800										$0
1181 Parisien Street	2,400	2,400										$0
3207 Vance Road, Osgoode	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	$259	$724,808
738 Gladstone Avenue	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	$259	$900,574
911 Industrial Road			1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	$259	$414,176
1439 Youville, Orleans (Closed 2007)	2,237	2,237	2,237	2,237	2,237	2,237	2,237				$259	$0
1073 Greenbank Road (Closed 2005)	2,400	2,400	2,400	2,400	2,400	2,400	2,400				$259	$0
631 Main Street, Stittsville			2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	$259	$673,036
1655 Maplegrove Road (Closed 2007)			1,000	1,000	1,000	1,000	1,000	1,000	1,000		$259	$0
3045 Baseline Road (Closed 2004)	2,262	2,262	2,262	2,262	2,262	2,262					$259	$0
360 Hunt Club Road	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	$259	$621,264
3510 Kinburn Sideroad, Kinburn (Closed 2007)			1,200	1,200	1,200	1,200	1,200	1,200	1,200		$259	$0
75 Donald B Munro, Carp			1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$259	$310,632
6280 Perth Street, Richmond			1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$259	$310,632
5669 Main Street, Manotick			1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$259	$310,632
8011 Victoria Street, Metcalfe			1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$259	$310,632
1246 Colonial Road, Navan			1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$259	$310,632
530 Tremblay Road (exclude admin) - (Closed 2005)			47,000	47,000	47,000	47,000	47,000					
2465 Don Reid Drive (exclude admin)							85,242	85,242	85,242	85,242	$253	$21,607,568
2445 Old Montreal Rd, Cumberland			1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	$259	$388,290
5670 Carp Road, Kinburn									1,800	1,800	$259	$465,948
200 Montreal Road						1,830	1,830	1,830	1,830	1,830	$259	$473,714
384 St. Patrick Street						1,830	1,830	1,830	1,830	1,830	$259	$473,714
105 Catherine Street						1,830	1,830	1,830	1,830	1,830	$259	$473,714
2851 St. Joseph Blvd						1,830	1,830	1,830	1,830	1,830	$259	$473,714
50 Lord Byng Way									1,830	1,830	$259	$473,714
20 Bexsley Place, Unit 106						2,150	2,150	2,150	2,150	2,150	$259	$556,549
1075 Greenbank Road							2,300	2,300	2,300	2,300	$259	$595,378
Total	**38,978**	**38,978**	**76,478**	**76,478**	**76,478**	**85,948**	**171,228**	**119,591**	**123,221**	**121,021**		**$30,869,320**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		**$255.07**
Per Capita Service Level	0.0507	0.0495	0.0948	0.0933	0.0919	0.1016	0.1992	0.1373	0.1398	0.1357		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	0.1094
Quality Standard	$255.07
Combined Quantity/Quality Level ($/1000 Person	$27.91

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$27.91
Eligible DC $ Amount	$3,002,589

City of Ottawa
City-Wide Development Charge Projects
Service - Ottawa Paramedic Service

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Eligible Level of Service $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	90% Statutory Portion $000	61% Residential Share $000	39% Non-residential Share $000
18.024	2010	Paramedic Post (Nixon Road, Osgoode)	290	290	10%	29	-	261	235	143	92
18.034	2012	Paramedic Post (Gladstone, Preston)	753	753	10%	75	-	678	610	372	238
18.054	2014	Paramedic Post (Carling, Woodroffe)	870	870	10%	87	-	783	705	430	275
18.064	2016	Paramedic Post (Bank, Heron)	920	920	5%	46	-	874	787	480	307
18.114	2015	Multi-Patient Unit	391	391	5%	20	-	371	334	204	130
18.134	2018	Emergency Scene Command	548	540	5%	27	-	513	462	282	180
18.144	2019	Special Operations Vehicle	650	650	5%	33	-	617	555	339	216
18.044	2010-2019	Paramedic Post (West Carleton) - Debt Payments	240	240		-	-	240	240	146	94
		Total	6,442	4,654		317	-	4,337	3,928	2,396	1,532

Level of Service Cap	
$ 3,002,589	Facilities
1,651,316	Vehicles, etc.
4,653,906	
- 4,654,000	Vehicles, etc.
-	Unused Service Level Cap

B-14 VEHICLES AND WORKS YARDS

B-14 VEHICLES AND WORKS YARDS

B-14.1 DC Calculation Planning Period

2010-2019

B-14.2 Service Coverage and Capital Program

Coverage: vehicles (related primarily to road works, some to parks), municipal garage, salt storage, snow disposal facility

Capital Program: prepared by Public Works & Services for Surface Operations, Traffic & Parking Operations and Fleet, based on ten year average level of service and DC Background Report. Most projects are included in City of Ottawa capital budgets and/or the City's Long Range Financial Plan. Otherwise, projects will be approved as part of the DC Background Study.

B-14.3 Local Service and Developer Contribution Policy

Not applicable.

B-14.4 Level of Service Measurement

Separate schedules follow for vehicles/capita, works buildings sq.ft./capita, municipal garages ($/capita), storage facilities m^3/capita, salt storage sq.ft./capita.

B-14.5 Benefit to Existing Development Deduction

No deduction for benefit to existing development was made for future debt payments applicable to previously-established DC recoverable costs. A 15% deduction was made for most projects in order to reflect the benefits of operational efficiencies. A 28% deduction was made for two snow disposal facilities which provide broader benefits to the existing population.

B-14.6 Post Period/Excess Capacity Deduction

No deduction has been made for post period capacity because the ten year service level cap eliminates the requirement.

B-14.7 Provision for Grants, Subsidies and Other Contributions

Not applicable.

B-14.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs pursuant to s.s.5(1)8 of the DCA.

B-14.9 Use of Uncommitted DC Reserve Fund Balance

To be used for the 2004-2008 DC recoverable costs of future DC projects.

B-14.10 Residential vs. Non-Residential Split

61% residential and 39% non-residential, based on the population and employment growth increment.

B-14.11 Area-Specific Cost Allocation

Residential Charge

These vehicles and facilities are deployed and function on a City-wide basis. Therefore, a uniform, City-wide charge has been calculated.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Cubic Metres of Storage Capacity - Surface Operations

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/c.m..)**	**Total Value**
Bayview (7 Bayview)	300,000	300,000	300,000	300,000	400,000	400,000	400,000	400,000	400,000	400,000	$13.22	$5,288,000
Canotek (canotek & Greens Creek Road)	30,000	30,000	30,000	30,000	30,000	30,000	30,000	0	0	0	$13.22	$0
Carp (2110 Carp Road Park & Ride)	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	$13.22	$859,300
Clyde (951 Clyde Ave)	570,000	570,000	570,000	570,000	570,000	570,000	570,000	650,000	650,000	650,000	$13.22	$8,593,000
Conroy (3100 Conroy Road)	810,000	810,000	810,000	810,000	810,000	810,000	810,000	810,000	810,000	810,000	$13.22	$10,708,200
Greenbank (1065 Greenbank Road)	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	0	$13.22	$0
Hunt Club (48 Antares Drive)	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	$13.22	$1,652,500
Industrial (735 Industrial Ave)	155,000	155,000	155,000	155,000	155,000	155,000	155,000	155,000	0	0	$13.22	$0
Kinburn (5751 Carp Road)	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	$13.22	$158,640
Manotick (4244 Rideau Valley Drive)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	$13.22	$661,000
Maple Grove A (1635 Maple Grove Road)	50,000	50,000	50,000	0	0	0	0	0	0	0	$13.22	$0
Maple Grove B (1655 Maple Grove Road)	0	0	0	0	50,000	88,000	88,000	88,000	88,000	88,000	$13.22	$1,163,360
Marlborough (6651 Malakoff Road)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	$13.22	$66,100
Michael (1435 Michael Street)	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	$13.22	$14,542,000
Moodie (1159 Moodie Drive)	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	0	$13.22	$0
Navan (2264 Clonial Road)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	$13.22	$66,100
Orleans (Orleans Blvd)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	$13.22	$0
Rideau (Rideau Rd & Ablion Road)	10,000	10,000	10,000	10,000	10,000	0	0	0	0	0	$13.22	$0
Scrivens (2481 Scrivens Drive)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	$13.22	$132,200
Trim (2630 Trim Road)	10,000	10,000	10,000	10,000	10,000	40,000	40,000	40,000	40,000	40,000	$13.22	$528,800
Innes (Innes Road & Mer Bleue)										225,000	$13.22	$2,974,500
Strandherd (consruction complete 2008; Greenbank and Moodie to close)										355,000	$13.22	$4,693,100
												$0
Total	**3,447,000**	**3,447,000**	**3,447,000**	**3,397,000**	**3,547,000**	**3,605,000**	**3,605,000**	**3,655,000**	**3,500,000**	**3,940,000**		**$52,086,800**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		**$13**
Per Capita Standard per 1000 Persons	4479.4681	4380.0629	4273.7056	4145.6152	4261.3312	4261.9195	4193.3037	4197.4778	3971.7168	4418.5264		(12/10)

10 Year Average	**1999-2008**
Quantity Standard per 1,000 persons	4258.3127
Quality Standard	13.22
Combined Quantity/Quality Level ($/1000 Pers	56,295
Combined Quantity/Quality Level ($/capita)	$56.29

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$56.29
Eligible DC $ Amount	$6,057,331

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Square Feet of Building Space - Surface Operations

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f..)	Total Value
Cumberland Leonard Equip Depot & Office	7,140	7,140	7,140	7,140	7,140	7,140	7,140	7,140	7,140	7,140	$313.05	$2,235,177
Cumberland Leonard Depot Storage	2,579	2,579	2,579	2,579	2,579	2,579	2,579	2,579	2,579	2,579	$145.96	$376,431
Cumberland Leonard Depot Storage	576	576	576	576	576	576	576	576	576	576	$145.96	$84,073
Cumberland Trim (Orleans) Equip Depot & Offi	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600	14,600	$313.05	$4,570,530
Cyrville Depot Storage	21,157	21,157	21,157	21,157	21,157	21,157	21,157	21,157	21,157	21,157	$145.96	$3,088,076
Cyrville Woodworking & Welding	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641	3,641	$193.03	$702,822
Cyrville Works Garage	29,237	29,237	29,237	29,237	29,237	29,237	29,237	29,237	29,237	29,237	$313.05	$9,152,643
Leitrim Works Garage	5,966	5,966	5,966	5,966	5,966	5,966	5,966	5,966	5,966	5,966	$313.05	$1,867,656
Leitrim Nursery Shed	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	$66.00	$264,000
Leitrim Nursery House	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$183.00	$219,600
Leitrim Nursery Car Garage	340	340	340	340	340	340	340	340	340	340	$80.00	$27,200
Huntley Garage	7,873	7,873	7,873	7,873	7,873	13,110	13,110	13,110	13,110	13,110	$313.05	$3,284,364
Huntley Storage Garage	7,850	7,850	7,850	7,850	7,850	0	0	0	0	0	$145.96	$0
Moodie (Nepean) Works Complex	44,050	44,050	44,050	44,050	44,050	44,050	44,050	44,050	44,050	44,050	$313.05	$13,789,853
Moodie (Nepean) Generator Building	420	420	420	420	420	420	420	420	420	420	$650.00	$273,000
Moodie (Nepean) Parks Garage	10,145	10,145	10,145	10,145	10,145	10,145	10,145	10,145	10,145	10,145	$313.05	$3,175,892
Moodie (Nepean) Parks Office & Carpentry	11,518	11,518	11,518	11,518	11,518	11,518	11,518	11,518	11,518	11,518	$313.05	$3,605,710
Scrivens (Osgoode) Garage & Office	7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366	$313.05	$2,305,926
Scrivens (Osgoode) Garage No. 2	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	$313.05	$1,001,760
Bloomfield Yard Flammable Storage	100	100	100	100	100	100	100	100	100	100	$145.96	$14,596
Bloomfield Yard Office & Garage	10,169	10,169	10,169	10,169	10,169	10,169	10,169	10,169	10,169	10,169	$313.05	$3,183,405
Catherine Yard Office & Garage	16,872	16,872	16,872	16,872	16,872	16,872	16,872	16,872	16,872	16,872	$313.05	$5,281,780
Heatherington Yard Workshop	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$313.05	$375,660
Heatherington Yard Office	4,340	4,340	4,340	4,340	4,340	4,340	4,340	4,340	4,340	4,340	$313.05	$1,358,637
Heatherington Yard Summer Storage	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	$145.96	$364,900
Heatherington Yard Chemical Storage	75	75	75	75	75	75	75	75	75	75	$180.00	$13,500
Heatherington Yard Flammable Storage	75	75	75	75	75	75	75	75	75	75	$180.00	$13,500
Heatherington Yard Trailer	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	$105.00	$210,000
Hurdman Yard Flammable Storage	200	200	200	200	200	200	200	200	200	200	$180.00	$36,000
Hurdman Yard Office & Garage	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	$313.05	$5,634,900
Industrial Yard Office & Garage	24,700	24,700	24,700	24,700	24,700	24,700	24,700	24,700	24,700	24,700	$313.05	$7,732,335
Industrial Yard Tool Shed	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	$145.96	$175,152
Industrial Yard Weigh House	800	800	800	800	800	800	800	800	800	0	$80.00	$0
Woodward Yard Flammable Storage	100	100	100	100	100	100	100	100	100	100	$180.00	$18,000
Woodward Yard Office & Garage	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	$313.05	$4,320,090
Roger Stevens (North Gower) Yard	7,840	7,840	7,840	7,840	7,840	7,840	7,840	7,840	7,840	7,840	$313.05	$2,454,312
ROC Carp Yard Office & Garage	5,096	5,096	5,096	5,096	5,096	5,096	5,096	5,096	5,096	5,096	$313.05	$1,595,303
ROC Greely Yard Office & Garage	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	0	$313.05	$0
ROC Greely Yard Storage Shed	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	0	$313.05	$0
ROC Trim Yard Storage Shed s	3,096	3,096	3,096	3,096	3,096	3,096	3,096	3,096	3,096	3,096	$145.96	$451,892
ROC Trim Yard Storage Shed	8,611	8,611	8,611	8,611	8,611	8,611	8,611	8,611	8,611	8,611	$313.05	$2,695,674
735 Industrial (ROC Infrastructure Road Mainte	34,642	34,642	34,642	34,642	34,642	5,349	5,349	5,349	5,349	5,349	$313.05	$1,674,504
Rideau Valley (Manotick) Yard Carpenter Shop	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	$313.05	$428,252
Rideau Valey (Manotick) Yard Cold Storage	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,320	$145.96	$630,547
Rideay Valley (Manotick) Yard Office & Garage	21,480	21,480	21,480	21,480	21,480	21,480	21,480	21,480	21,480	21,480	$313.05	$6,724,314
Rideau Valley (Manotick) Yard Office Trailer	952	952	952	952	952	952	952	952	952	952	$105.00	$99,960
Maple Grove Yard Metal Storage	350	350	350	350	350	350	350	350	350	350	$145.96	$51,086

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Square Feet of Building Space - Surface Operations

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f..)	Total Value
Maple Grove Office & Garage (1655)	23,304	23,304	23,304	23,304	23,304	23,304	23,304	23,304	23,304	23,304	$313.05	$7,295,317
Navan Yard Storage	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	$145.96	$148,879
Navan Yard Office & Garage	5,048	5,048	5,048	5,048	5,048	5,048	5,048	5,048	5,048	5,048	$313.05	$1,580,276
Trim Road Yard Office & Garage	8,308	8,308	8,308	8,308	8,308	8,308	8,308	8,308	8,308	8,308	$313.05	$2,600,819
Trim Road Yard Storage	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	$145.96	$583,840
Rockcliffe Equip Depot & Apartment	3,831	3,831	3,831	3,831	3,831	0	0	0	0	0	$313.05	$0
Rockcliffe Yard Storage	1,429	1,429	1,429	1,429	1,429	0	0	0	0	0	$145.96	$0
Vanier Garage & Office	21,552	21,552	21,552	21,552	21,552	21,552	21,552	21,552	21,552	21,552	$313.05	$6,746,854
Vanier Storage Shed - McArthur	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	$145.96	$291,920
Vanier Storage Shed - St Denis	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	$145.96	$153,258
Vanier Storage Shed - White Fathers	640	640	640	640	640	640	640	640	640	640	$145.96	$93,414
Fitzroy Harbour Garage	595	595	595	595	595	0	0	0	0	0	$145.96	$0
West Carleton (Huntley) Works Garage & Office	6,522	6,522	6,522	6,522	6,522	6,522	6,522	6,522	6,522	6,522	$313.05	$2,041,712
West Carleton (Huntley) Yard Storage Shed	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	$145.96	$168,146
Torbolton (Kinburn) Garage, Office and Storage	5,416	5,416	5,416	5,416	5,416	5,416	5,416	5,416	5,416	5,416	$313.05	$1,695,479
John Shaw (Woodlawn) Works Garage & Office	4,046	4,046	4,046	4,046	4,046	6,189	6,189	6,189	6,189	6,189	$313.05	$1,937,466
												$0
Kanata Maple Grove (1635)	21,915	21,915	21,915	21,915	21,915	21,915	21,915	0	0	0	$313.05	$0
Hazeldean	0	0	0	0	0	0	0	0	20,000	20,000	$313.05	$6,261,000
Loretta (175)	26,640	26,640	26,640	26,640	26,640	26,640	26,640	26,640	26,640	26,640	$313.05	$8,339,652
Total	510,985	510,985	510,985	510,985	510,985	475,367	475,367	453,452	473,452	466,879		$135,501,046
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		
Per Capita Standard per 1000 Persons	664.0386	649.3027	633.5363	623.5935	613.8924	561.9905	552.9426	520.7537	537.2621	523.5830		$290 (12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	588.0895
Quality Standard	290
Combined Quantity/Quality Level ($/1000 Pers	170,680
Combined Quantity/Quality Level ($/capita)	$170.68

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$170.68
Eligible DC $ Amount	$18,365,130

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Square Feet of Building Space

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f.)	Total Value
Municipal Garages	117,199	117,199	84,712	84,712	84,712	84,712	84,712	84,712	84,712	84,712	$378.06	$32,025,880
Total	117,199	117,199	84,712	84,712	84,712	84,712	84,712	84,712	84,712	84,712		$32,025,880
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$378.06
Per Capita Service Level	0.1523	0.1489	0.1050	0.1034	0.1018	0.1001	0.0985	0.0973	0.0961	0.0950		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	0.1099
Quality Standard	$378.06
Combined Quantity/Quality Level ($/1000 Perso	$41.55

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$41.55
Eligible DC $ Amount	$4,470,603

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Square Feet of Salt Storage Facilities - Surface Operations

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/s.f.)	Total Value
Cumberland Leonard Depot	6,654	6,654	6,654	6,654	6,654	6,654	6,654	6,654	6,654	6,654	$206.93	$1,376,912
Cumberland Trim (Orleans) Depot	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	$206.93	$1,655,440
(Gloucester) Cyrville No 1	6,940	6,940	6,940	6,940	6,940	6,940	6,940	6,940	6,940	6,940	$206.93	$1,436,094
(Gloucester) Cyrville No 2	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	$206.93	$1,624,401
(Gloucester) Leitrim Dome	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	$206.93	$1,624,401
(Goulbourn) Huntley Dome	314	314	314	314	314	314	314	314	314	314	$159.54	$50,096
Moodie (Nepean) Salt Dome	10,381	10,381	10,381	10,381	10,381	10,381	10,381	10,381	10,381	10,381	$206.93	$2,148,140
Moodie (Nepean) Salt Shed	1,006	1,006	1,006	1,006	1,006	1,006	1,006	1,006	1,006	1,006	$159.54	$160,497
(Osgoode) Scrivens Dome	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	$206.93	$1,624,401
(Ottawa) Bloomfield Shed	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	$159.54	$331,684
(Ottawa) Catherine Yard Shed	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	$159.94	$383,856
(Ottawa) Heatherinton Yard Shed	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	$159.54	$319,080
(Ottawa) Hurdman Yard Dome	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	$206.93	$2,069,300
(Ottawa) Industrial Yard Dome	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	$206.93	$2,069,300
(Ottawa) Woodward Yard Dome	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	$206.93	$1,655,440
Roger Stevens (Rideau North Gower) Dome	314	314	314	314	314	314	314	314	314	314	$159.94	$50,221
ROC Carp Dome	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	$206.93	$1,655,440
ROC Greely Dome	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	0	$206.93	$0
Antares (ROC Hunt Club) Dome	7,000	7,000	7,000	7,000	7,000	0	0	0	0	0	$206.93	$0
Kinburn (ROC Kinburn) Dome	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	0	$206.93	$0
Rideau Valley (ROC Manotick) Dome	14,250	14,250	14,250	14,250	14,250	14,250	14,250	14,250	14,250	14,250	$206.93	$2,948,753
Rideau Valley (ROC Manotick) Shed	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728	$159.54	$275,685
ROC Maple Grove Dome	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	$206.93	$1,448,510
ROC Marlborough Dome	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	0	$206.93	$0
ROC Navan Dome	7,040	7,040	7,040	7,040	7,040	7,040	7,040	7,040	7,040	7,040	$206.93	$1,456,787
ROC Navan Shed	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	$159.54	$162,731
Roger Stevens (ROC North Gower) Dome	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	$206.93	$744,948
ROC Trim Road Dome	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	$206.93	$1,448,510
West Carleton Huntley Dome	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	$206.93	$1,276,344
Kinburn (Torbolton) West Carleton Kinburn Dor	6,364	6,364	6,364	6,364	6,364	6,364	6,364	6,364	6,364	6,364	$206.93	$1,316,903
John Shaw (West Carleton Woodlawn) Dome	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	$206.93	$1,276,344
												$0
Kanata (Terry Fox)	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	6,168	$206.93	$1,276,344
Scrivens	0	0	0	0	0	0	0	0	2,131	2,131	$206.93	$440,968
Roger Stevens	0	0	0	0	0	0	0	0	2,131	2,131	$206.93	$440,968
Navan	0	0	0	0	0	0	0	0	0	2,131	$206.93	$440,968
John Shaw	0	0	0	0	0	0	0	0	0	2,131	$206.93	$440,968
March Road (2741)	0	0	0	0	0	0	0	0	0	2,131	$206.93	$440,968
Total	187,344	187,344	187,344	187,344	187,344	180,344	180,344	180,344	184,606	176,799		$36,071,400
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		$204
Per Capita Standard per 1000 Persons	243.4585	238.0558	232.2753	228.6300	225.0733	213.2071	209.7745	207.1108	209.4865	198.2718		(12/10)

10 Year Average	1999-2008
Quantity Standard per 1,000 persons	220.5344
Quality Standard	204
Combined Quantity/Quality Level ($/1000 Pers	44,995
Combined Quantity/Quality Level ($/capita)	$44.99

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$44.99
Eligible DC $ Amount	$4,841,409

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Number of Vehicles - Surface Operations and TPO

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/vehicle)	Total Value
19-Truck, Refuse Pickup	4	4	4	5	7	7	7	7	7	7	$125,000	$875,000
21-Truck, Sweeper	5	5	5	6	6	6	6	6	6	9	$280,000	$2,520,000
27-Truck, Rodder	2	2	2	2	2	2	2	2	2	2	$250,000	$500,000
34-Truck, Line Marker	1	1	1	1	1	1	1	1	1	1	$450,000	$450,000
35-Truck, Combination	121	123	125	127	128	130	135	137	139	131	$250,000	$32,750,000
40-Truck w Crane	8	8	8	8	9	10	10	10	11	10	$240,000	$2,400,000
57-Truck, Electrical	17	17	18	20	20	21	21	23	23	21	$140,000	$2,940,000
58-Truck, Road Service	1	1	1	1	1	1	1	1	1	1	$75,000	$75,000
60-Truck w Aerial Ladder	1	1	1	1	1	1	1	1	1	1	$100,000	$100,000
62-Truck, Snow Plow	24	25	27	28	29	30	33	33	33	26	$108,000	$2,808,000
63-Truck, Dump Crw Cab	5	5	5	5	5	5	5	5	5	5	$118,000	$590,000
66-Truck, Flat Bed	2	2	2	2	2	2	2	2	2	2	$85,000	$170,000
6C-Truck, Tanker	1	1	1	1	1	1	1	1	1	1	$150,000	$150,000
6M-Truck, Snow Blower	1	1	1	1	1	1	1	1	1	1	$250,000	$250,000
A2-Car (Compact)	3	3	3	3	3	3	3	3	2	2	$20,000	$40,000
A3-Car (Intermediate)	4	4	4	4	4	4	4	4	4	3	$35,000	$105,000
B1-Pickup (1/4 ton)	21	21	21	21	21	21	21	21	27	25	$19,000	$475,000
B2-Pickup (1/2 ton)	150	160	166	175	180	190	200	215	215	248	$25,000	$6,200,000
B3-Pickup (3/4 ton)	64	64	64	65	65	65	65	65	65	72	$30,000	$2,160,000
B4-Pickup (1 ton)	102	102	104	105	108	108	108	108	108	116	$41,000	$4,756,000
B5-Pickup (1.5 ton)	40	40	40	40	41	41	41	41	44	51	$80,000	$4,080,000
C1-Van (1/4 ton)	5	5	5	5	5	5	5	5	5	3	$24,000	$72,000
C2-Van (1/2 ton)	2	2	2	2	2	2	2	2	2	2	$25,000	$50,000
C3-Van (3/4 ton)	5	5	5	5	5	5	6	6	9	8	$30,000	$240,000
C4-Van (1 ton)	7	7	7	7	8	8	8	8	7	7	$37,500	$262,500
C5-Van (1.5 ton)	3	3	3	3	3	3	3	3	3	2	$48,000	$96,000
C6-Van (1 ton Utility Body)	1	1	1	1	1	1	1	1	1	1	$60,000	$60,000
C8-Van (3 ton)	3	3	3	3	3	3	3	3	3	3	$75,000	$225,000
C9-Van (>3 ton)	9	9	9	9	9	9	10	10	10	10	$130,000	$1,300,000
E6-All Terrain Vehicle	6	6	8	8	8	8	9	9	8	9	$25,000	$225,000
F2-Trailer - Arrow Board	3	3	3	3	3	3	3	3	3	3	$9,500	$28,500
F6-Trailer - Bulk	9	9	9	9	9	9	9	9	13	13	$9,500	$123,500
F8-Trailer - Cargo	1	1	1	1	1	1	1	1	1	1	$7,500	$7,500
FC-Trailer - Dump Box	6	6	6	6	6	6	6	6	6	6	$9,000	$54,000
FD-Trailer - Flat Bed	34	35	36	36	38	39	39	39	40	48	$15,000	$720,000
FH-Trailer - Mower	54	55	58	58	60	61	61	61	63	63	$13,500	$850,500
FJ-Trailer - Office	14	14	14	14	14	14	14	14	13	12	$10,000	$120,000
FK- Pole Trailer	4	4	4	4	4	4	4	4	4	3	$13,500	$40,500

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Number of Vehicles - Surface Operations and TPO

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Value ($/vehicle)	Total Value
FL- Speed Display Trailer			3	3	3	3	3	3	3	2	$15,500	$31,000
FM- Refuse Container									0			$0
FP- Utility Body	1	1	1	1	1	1	1	1	1	2	$4,500	$9,000
FT-Trailer	28	30	30	30	30	33	33	33	31	32	$15,500	$496,000
VMS Trailers (F2's)	5	5	6	11	11	15	22	22	23	23	$35,000	$805,000
G1-Backhoe	11	11	11	11	11	11	11	11	11	10	$100,000	$1,000,000
G5-Loader	48	48	50	50	50	54	54	54	59	43	$275,000	$11,825,000
G9-GradeAll	1	1	1	1	1	1	1	1	1	1	$375,000	$375,000
GF-Motorgrader	36	36	36	36	36	36	36	36	36	47	$300,000	$14,100,000
GH- Paver Asphalt	1	1	1	1	1	1	1	1	1	1	$15,000	$15,000
GJ-Roller	5	5	5	5	5	5	5	5	6	10	$25,000	$250,000
J1-Tractor	84	84	86	86	86	86	86	86	86	80	$35,000	$2,800,000
J2-Tractor, Industrial	110	110	110	110	112	112	112	112	112	98	$100,000	$9,800,000
J3-Forklift	1	1	2	2	2	2	2	2	2	3	$50,000	$150,000
J6- Rake	1	1	1	1	1	1	1	1	3	3	$50,000	$150,000
J8-Field Surfacing	11	11	13	13	14	14	14	14	17	18	$10,000	$180,000
J9-Spreader	7	7	7	7	7	7	7	7	8	8	$5,100	$40,800
JH- Bucket	38	38	40	40	40	42	42	42	42	42	$5,000	$210,000
JS- Bucket	3	3	3	3	3	3	3	3	3	3	$5,000	$15,000
K1-Mower	70	75	80	80	83	85	85	89	89	89	$65,000	$5,785,000
K2-Mower	80	85	90	90	92	95	95	98	98	99	$10,000	$990,000
K4-Mower	3	3	3	3	3	3	3	3	3	4	$5,000	$20,000
K6-Trimmer	1	1	1	1	1	1	1	1	1	1	$20,000	$20,000
K7-Aerator	15	15	15	15	15	15	15	15	19	19	$31,000	$589,000
K8-De-Thacher	14	14	14	14	14	14	14	14	14	19	$20,000	$380,000
K9-Soil Shredder												$0
KB-Chipper	10	10	10	10	10	10	10	10	10	10	$25,000	$250,000
KC- Cutter	2	2	2	2	2	2	2	2	2	2	$20,000	$40,000
KD- Grinder	2	2	2	2	2	2	2	2	2	3	$30,000	$90,000
N0- Spray Pot	1	1	1	1	1	1	1	1	1	1	$15,000	$15,000
N1-Asphalt Paver	2	2	2	2	2	2	2	2	2	2	$25,000	$50,000
N2-Blade, Snow Plow	425	430	435	440	445	447	450	450	450	450	$12,000	$5,400,000
N3-Compactor	1	1	1	1	1	1	1	1	1	1	$15,000	$15,000
N6- Mixer	1	1	1	1	1	1	1	1	1	1	$10,000	$10,000
N7-Roller	11	11	11	11	11	11	11	11	11	6	$25,000	$150,000
N8-Spreader	150	160	165	168	170	170	175	175	175	173	$5,500	$951,500
N9-Calcium Tank, Flusher	7	7	7	7	7	7	7	7	7	6	$15,000	$90,000
NB-Bucket, Sewer large	5	5	5	5	5	5	5	5	8	10	$21,000	$210,000

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Vehicles and Work Yards
Type of Capital Asset: Number of Vehicles - Surface Operations and TPO

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2008 Value ($/vehicle)**	**Total Value**
NC-Sprayer, Skid mount	3	3	3	3	3	3	3	3	3	3	**$30,000**	$90,000
ND- Pallet Lift	4	4	4	4	4	4	4	4	4	4	**$8,000**	$32,000
NG-Stripper Paint	8	8	8	8	8	8	8	8	9	8	**$8,000**	$64,000
P0-Blower, Snow	110	116	120	125	127	128	131	135	139	139	**$10,500**	$1,459,500
P9-Screener, Sand	8	8	8	8	8	8	8	8	9	10	**$20,000**	$200,000
PB-Sweeper	83	83	83	83	83	83	83	84	74	81	**$10,500**	$850,500
R0-Generator	1	1	1	1	1	1	1	1	1			$0
R8-Generator	3	3	3	3	3	3	3	3	3	3	**$8,500**	$25,500
S2- Pump 6"	1	1	1	1	1	1	1	1				$0
S6-Pump	1	1	1	1	1	1	1	1	1	1	**$15,000**	$15,000
SA-Compressor	6	6	6	6	6	6	6	6	5	5	**$25,000**	$125,000
TS-Soda Clnr, Schmidt	1	1	1	1	1	1	1	1	1	1	**$20,000**	$20,000
Y4- Light Tower	1	1	1	1	1	1	1	1	1	1	**$15,000**	$15,000
												$0
Total	**2,164**	**2,212**	**2,268**	**2,304**	**2,340**	**2,378**	**2,417**	**2,448**	**2,478**	**2,507**		**$129,072,800**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		**$51,485**
Per Capita Standard per 1000 Persons	2.8122	2.8108	2.8119	2.8117	2.8113	2.8113	2.8114	2.8113	2.8120	2.8115		(12/10)

10 Year Average	**1999-2008**
Quantity Standard per 1,000 persons	2.8115
Quality Standard	51,485
Combined Quantity/Quality Level ($/1000 Persons	144,750
Combined Quantity/Quality Level ($/capita)	$144.75

DC Amount (before deductions)	
Forecast Population $ per Capita	107,600
$ per Capita	$144.75
Eligible DC $ Amount	$15,575,097

City of Ottawa
City-Wide Development Charge Projects
Service - Public Works

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Eligible Level of Service $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	Statutory Portion $000	61% Residential Share $000	39% Non-residentia Share $000
8.029	2012	Maple Grove Facility Replacement	2,605	2,605	15%	391	-	2,214	1,993	1,216	777
8.039	2014	Antares Yard (growth in South Urban area and Transitway)	6,600	6,600	15%	990	-	5,610	5,049	3,080	1,969
8.049	2013	Trim Road Yard Facility Expansion (growth in East Area Roads & Parks)	4,400	4,400	15%	660	-	3,740	3,366	2,053	1,313
8.059	2016	Huntley Yard Facility Expansion (Servicing of Stittsville & Bridlewood	2,640	2,640	15%	396	-	2,244	2,020	1,232	788
8.069	2011	March Road Yard Facility Expansion	1,760	1,760	15%	264	-	1,496	1,346	821	525
8.054	2010-2019	Winter Material Storage Facilities	4,710	4,710	15%	707	-	4,003	3,603	2,198	1,405
8.079	2014	Antares Snow Disposal Facility Design & Construction	4,200	4,200	28%	1,176	-	3,024	2,722	1,660	1,062
8.089	2012	Rideau Valley Snow Disposal Facility Design & Construction	2,500	2,434	28%	700	-	1,734	1,561	952	609
8.034	2010-2019	Vehicles and Equipment SOP	17,375	13,239	15%	2,606	-	10,633	9,570	5,838	3,732
8.014	2011	Municipal Garage	7,465	4,117	10%	747	-	3,370	3,033	1,850	1,183
8.064	2010-2019	New Vehicles - Traffic	2,980	2,336	15%	447	-	1,889	1,700	1,037	663
8.074	2010-2012	Operation Centre - Debt Payments	354	354	0%	-	-	354	354	216	138
		Total	57,589	49,395		9,084	-	40,311	36,317	22,153	14,164

Level of Service Cap	
$ 6,057,331	m3 of Storage
18,365,130	Building Space
4,470,602.9	Municipal Garages
4,841,409	Salt Storage
15,575,097	Vehicles
49,309,570	
- 49,395,000	
- 85,430	Beyond Service Level Cap

B-15 AFFORDABLE HOUSING PROGRAM

B-15 AFFORDABLE HOUSING PROGRAM

B-15.1 DC Calculation Planning Period

2010-2019

B-15.2 Service Coverage and Capital Program

The program is based on the City investing $3.5 million/year for this purpose as documented herein.

B-15.3 Local Service and Developer Contribution Policy

Not applicable.

B-15.4 Level of Service Measurement

A separate schedule follows, documenting the number of social housing units per capita.

B-15.5 Benefit to Existing Development Deduction

A 70% deduction has been made, which reflects an estimate of the number of the additional social housing units that are expected to be occupied by existing residents over the decade, based on the current waiting list and priorities for assigning units.

B-15.6 Post Period/Excess Capacity Deduction

The 2008 service level for the Affordable Housing Program is below the City's historical 10-year average. As a result, no excess capacity is involved. The 2019 DC-funded service level for the Affordable Housing Program is also at or below the City's historical 10-year average. As a result, no post period capacity is involved.

B-15.7 Provision for Grants, Subsidies and Other Contributions

The gross cost used as the starting point in the calculation is the City's cost, net of any subsidies.

B-15.8 10% Statutory Deduction

A 10% deduction has been made from the DC recoverable costs, pursuant to s.s.5(1)8 of the DCA.

B-15.9 Use of Existing Reserve Funds

Not applicable, as no DC reserve fund has yet been established for this purpose.

B-15.10 Residential vs. Non-Residential Split

100% residential benefit, as there is no direct benefit to non-residential development.

B-15.11 Area-Specific Cost Allocation

Residential Charge

Social Housing is a service providing City-wide benefits and coverage and a uniform, City-wide charge has been calculated as a result.

Non-residential Charge

N/A

City of Ottawa
2009 Development Charge Background Study
Average Level of Service

Service: Social Housing
Type of Capital Asset: Housing units

Quantity Measure	1	2	3	4	5	6	7	8	9	10	11	12
Description	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009 Value ($/unit)**	**Total Value**
Social Housing Units	20,180	20,180	20,180	20,180	20,180	20,180	20,180	20,180	20,131	20,131	$35,000	$704,585,000
New affordable housing	7	21	49	168	308	308	391	602	653	746	$35,000	$26,110,000
Total	**20,187**	**20,201**	**20,229**	**20,348**	**20,488**	**20,488**	**20,571**	**20,782**	**20,784**	**20,877**		**$730,695,000**
Population	769,511	786,975	806,560	819,420	832,369	845,863	859,704	870,761	881,231	891,700		**$35,000**
Per Capita Service Level	0.0262	0.0257	0.0251	0.0248	0.0246	0.0242	0.0239	0.0239	0.0236	0.0234		(12/10)

10 Year Average	1999-2008
Quantity Standard per person	0.0245
Quality Standard - City contribution per unit	$35,000
Combined Quantity/Quality Level ($/Persons)	$857.50

DC Amount (before deductions)	
Forecast Population for $ per Capita calculation	107,600
$ per Capita	$857.50
Eligible DC $ Amount	$92,267,000

Eligible Amount - # of units (quality std * pop'n incr	2,636
Planned production at target of 100 units per year	1,000
% Amount eligible for DC	100.0%

City of Ottawa
City-Wide Development Charge Projects
Service - Housing Services

Item	Summary of Timing by Year(s) 2010-2019	Increased Service Needs Attributable to Anticipated Development - 2010-2019 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	Statutory Portion $000	100% Residential Share $000	0% Non-residential Share $000
22.049	2011	Additional Housing Units (Rental & Supportive - Longfields)	3,500	70%	2,450	-	1,050	945	945	0
22.059	2012	Additional Housing Units (Rental & Supportive - Arrowsmith)	3,500	70%	2,450	-	1,050	945	945	0
22.069	2013	Additional Housing Units (New Rental & Supportive - Site TBD	3,500	70%	2,450	-	1,050	945	945	0
22.079	2014	Additional Housing Units (New Rental & Supportive - Site TBD	3,500	70%	2,450	-	1,050	945	945	0
22.089	2015	Additional Housing Units (New Rental & Supportive - Site TBD	3,500	70%	2,450	-	1,050	945	945	0
22.099	2016	Additional Housing Units (New Rental & Supportive - Site TBD	3,500	70%	2,450	-	1,050	945	945	0
22.109	2017	Additional Housing Units (New Rental & Supportive - Site TBD	3,500	70%	2,450	-	1,050	945	945	0
22.119	2018	Additional Housing Units (New Rental & Supportive - Site TBD	3,500	70%	2,450	-	1,050	945	945	0
22.129	2019	Additional Housing Units (New Rental & Supportive - Site TBD	3,500	70%	2,450	-	1,050	945	945	0
		Total	31,500		22,050	-	9,450	8,505	8,505	-

B-16 CORPORATE STUDIES

B-16 CORPORATE STUDIES

B-16.1 DC Calculation Planning Period

2010-19

B-16.2 Service Coverage and Capital Program

Coverage:	each individual service includes its own growth-related studies as a cost component. As a result, this service category only makes provision for "corporate" (Planning and Finance) studies such as OP, DC by-law, etc.
Capital Program:	Unless already identified in the City of Ottawa capital budget, projects will be approved within the spending envelope indicated in the DC Background Study.

B-16.3 Level of Service Measurement

The study requirement is based on statutory requirements, the requirements of the City's Official Plan and overall capital spending levels.

B-16.4 Benefit to Existing Development Deduction

The percentage varies from nil, in the case of Development Charge Background Studies, to 10% for planning studies for new development areas (e.g. community infrastructure plans, greenfield studies and servicing studies) to 79% for broader planning and policy studies, including redevelopment studies and infrastructure masterplans that benefit existing and new development proportionately.

B-16.5 Post Period/Excess Capacity Deduction

Not applicable.

B-16.6 Provision for Grants, Subsidies and Other Contributions

Any subsidies that may be received have been netted from the costs for which DC funding is sought.

B-16.7 10% Statutory Deduction

The deduction is nil in the case of the DC Background Studies and those pertaining to roads, water, sanitary, storm, fire and police capital requirements which applies to the studies involved.

B-16.8 Use of Existing Reserve Funds

The December 31, 2008 uncommitted DC reserve fund balance has been netted in making the DC calculation for these studies.

B-16.9 Residential vs. Non-Residential Split

The population/employment ratio (2009-2018) has been used.

B-16.10 Area-Specific Cost Allocation

Residential Charge

The costs have been assigned on a Large Area basis where the benefiting area is clearly restricted in geographic coverage; otherwise they have been allocated on a City-wide basis.

Non-residential Charge

The calculation was made on a uniform, City-wide basis in order to reflect current policy, industry input and the objective of encouraging employment growth to the fullest extent possible and throughout the City.

City of Ottawa
City-Wide Development Charge Projects
Service - Studies

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000		Less		Growth Cost $000	62% Residential Share $000	38% Non-residential Share $000
				Benefit to Existing Development %	Benefit to Existing Development $000	Grants, Subsidies & Contributions $000			
21.274	2010-2031	Development Charges Review	2,070	0%	-	-	2,070	1,279	791
21.084	2010-2031	Redevelopment Studies - CDP's	2,398	79%	1,894	-	504	311	193
21.014	2010-2031	Infrastructure Master Planning	1,200	79%	948	-	252	156	96
21.064	2010-2031	Community Infrastructure Plans	3,718	10%	372	-	3,346	2,068	1,278
21.074	2010-2031	Greenfield Studies	2,156	10%	216	-	1,940	1,199	741
					-	-	-	0	0
					-	-	-	0	0
					-	-	-	0	0
					-	-	-	0	0
					-	-	-	0	0
		Total	11,542		3,430	-	8,112	5,013	3,099

City of Ottawa
Area-Specific Development Charge Projects
Service - Studies

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - 2010-2031 Project Description	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	Residential Share $000	Non-residential Share $000	Allocation of Expenditures by Area: Inside Greenbelt $000	Outside Greenbelt $000	Rural $000
21.009	2012-2031	Servicing Studies Development	1,400	10%	140	-	1,260	843	417		1,093	167
21.X64	2010	Riverside South Servicing Study	100	10%	10	-	90	71	19		90	
21.194	2010	Gloucester EUC CDP - Phase 2 Master Infrastructure	100	10%	10	-	90	62	28		90	
21.019	2010	Leitrim Servicing Study	100	10%	10	-	90	64	26		90	
21.029	2010	Shirley's Brook/Kissell Drain Diversion & EA Study	400	10%	40	-	360	254	106		360	
21.039	2010	Manotick SDA Study	100	10%	10	-	90	63	27			90
21.094	2010-2031	Rural Servicing Strategy	9,000	70%	6,300	-	2,700	2,268	432			2,700
21.104	2010-2031	Rural Village Servicing Assessment	6,000	30%	1,800	-	4,200	3,528	672			4,200
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
					-	-	-	0	0			
		Total	17,200		8,320	-	8,880	7,153	1,727	-	1,723	7,157

Res	1,182	5,971
Non-Res	541	1,186
Total	1,723	7,157

APPENDIX C
DEVELOPMENT CHARGE CALCULATION

APPENDIX C -DEVELOPMENT CHARGE CALCULATION

The following tables set out the DC calculations based on the standard average cost method. For services that are not specifically restricted by a per capita service level cap, an adjustment is made to reflect the balance in the DC reserve fund for those services as follows:

TABLE C-1
Summary of Development Charge Reserve Fund Balances (Dec. 31, 2008)

	Allocation of Total Capital Costs				
	City Wide	Inside	Outside	Rural	Total
Water	41.88%	7.30%	50.57%	0.25%	100.00%
Sewer	57.58%	17.80%	24.61%	0.00%	100.00%
Storm	99.23%	0.00%	0.00%	0.77%	100.00%
Roads	88.59%	0.65%	9.67%	1.08%	100.00%
Transit	100.00%	0.00%	0.00%	0.00%	100.00%
Studies	47.74%	0.00%	10.14%	42.12%	100.00%

	DC Reserve Fund				
	City Wide	Inside	Outside	Rural	Total Balance Dec. 31, 2008
Water	6,157	1,073	7,433	37	14,700
Sewer	2,513	777	1,074	0	4,364
Storm	(1,261)	0	0	(9)	(1,270)
Roads	154,666	1,143	16,877	1,891	174,577
Transit	70,413	0	0	0	70,413
Studies	228	0	48	201	477

Agreement was reached with the development industry in 2004 to recoup the cost of the transition in DCs involved at that time, from the 2009-2014 term of the pending by-law. This $8,000,000 cost has not been included in the current DC calculation and serves to offset the entirety of the 2004-09 DC loss attributable to residential DC exemptions.

A "cash flow" development charge calculation has also been completed. This approach considers inflation (in the DC quantum as well as capital spending), interest costs (in terms of debenture debt charges and short term borrowing costs), and the timing of anticipated revenues (interest earnings on the reserve funds as well as the flow of development charge revenues) as well as the forecast timing of capital expenditures, in establishing the initial year development charge required to fund the DC recoverable costs involved. The cash flow approach produces charges which are less than 1% higher than the average cost approach.

Table C-2
City of Ottawa
Calculated Full Recovery Development Charges by Residential Unit Type

Development Location/Type	April 1, 2009 Charge	Calculated Charge	
		$	%
INSIDE THE GREENBELT			
Residential			
• Single and Semi-detached	11,880	15,446	100%
• Apartment (2+ bedrooms)	7,803	7,541	48.82%
• Apartment (less than 2 bedrooms)	4,955	6,123	39.64%
• Multiple, row and mobile dwelling	8,899	10,831	70.12%
Non-residential (per sq.ft. GFA)			
• General	10.65	15.84	
• Commercial	8.67		
• Limited Industrial	4.92		
OUTSIDE THE GREENBELT			
Residential			
• Single and Semi-detached	21,170	21,881	100%
• Apartment (2+ bedrooms)	14,987	12,420	56.76%
• Apartment (less than 2 bedrooms)	8,755	8,623	39.41%
• Multiple, row and mobile dwelling	16,426	16,603	75.88%
Non-residential (per sq.ft. GFA)			
• General	10.65	15.84	
• Commercial	8.67		
• Limited Industrial	4.92		
RURAL			
Residential			
• Single and Semi-detached	8,453	14,579	100%
• Apartment (2+ bedrooms)	5,629	7,639	52.40%
• Apartment (less than 2 bedrooms)	3,639	6,241	42.81%
• Multiple, row and mobile dwelling	6,632	11,504	78.91%
Non-residential (per sq.ft. GFA)			
• General	8.35	15.84	
• Commercial	6.79		
• Limited Industrial	3.85		

Table C-3
City of Ottawa
Comparison of Current Non-residential General Development Charges vs. Calculated

1) City-Wide

	Non-res General as of April 1, 2009	Calculated City Wide	Difference
Roads & Related Services	6.34	9.01	2.67
Sanitary Sewer	0.86	1.83	0.97
Water	0.26	0.38	0.12
Stormwater Drainage	0.00	0.05	0.05
Emergency Service (Fire)	0.11	0.23	0.12
Police	0.13	0.31	0.18
Public Transit	2.04	4.02	1.98
Parks Development	0.07	0.08	0.01
Recreation Facilities	0.17	0.23	0.06
Libraries	0.04	0.04	0.00
Child Care Facilities	0.04	0.10	0.06
Paramedic Service	0.02	0.06	0.04
Vehicles & Works Yards	0.46	0.54	0.08
Affordable Housing Program	0.00	0.00	0.00
Corporate Studies	0.11	0.20	0.09
Total	10.65	17.08	6.43
adjustments for prior year's discounting [1]		1.24	Difference
DC net of discounting		15.84	5.19

1 Discount Costs $ 66,115,367
GFA (sq.ft.) 2009-31 53,241,503
= $ 1.24

H:\OTTAWA\DC 2008\[dc calculation (rds +5%ppc).xls]ES-1 (Cont'd)

Table CW-1-City of Ottawa
City-Wide Summary
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2019) 000's $ 2009$					Development Charge Per:				
	Residential Share		Non-residential Share		Total	SDU $ per unit	re: City Wide	re: Area Specific		$ per sq.ft.
Police	1,355	61%	882	39%	2,237	27	0.03 +	0.28 *	=	0.31
Emergency Service (Fire)						0		0.23 *	=	0.23
Parks Development	0		0		0	0	0.00 +	0.08 *	=	0.08
Recreation Facilities	5,471	95%	286	5%	5,757	108	0.01 +	0.22 *	=	0.23
Libraries	10,407	95%	548	5%	10,955	206	0.02 +	0.02 *	=	0.04
Child Care Facilities	3,886	61%	2,527	39%	6,413	77	0.10			0.10
Paramedic Service	2,396	61%	1,532	39%	3,928	47	0.06			0.06
Vehicles & Works Yards	22,153	61%	14,164	39%	36,317	439	0.54			0.54
Affordable Housing Program	8,505	100%	0	0%	8,505	168	0.00			0.00
Corporate Studies (net of Reserve Fund)	4,872	62%	3,012	38%	7,884	96	0.12 +	0.08 *	=	0.20
Net Growth Related Capital Costs	59,045		22,951		81,996	1,168	0.88 +	0.91 *	=	1.79
Gross Population Increase to 2019	169,334									
Gross Floor Area to 2019			25,972,256							
Per Capita DC Charge	348.69		0.88							
Development Charges Per: Single Detached Unit (3.35 ppu)	1,168									
Sq.ft. of Non-residential GFA			0.88							

Note:

*** A portion of the City-Wide non-residential charge is made up from the non-residential capital costs at the area-specific level.**

Studies Gross Costs=	8,112
Less Reserve Fund	(228)
	7,884

Table CW-2-City of Ottawa
City-Wide
Public Transit
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2019) 000's $ 2009$					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Public Transit	196,581	61%	127,810	39%	324,391	3,431	4.02
Public Transit Reserve Fund	(42,670)		(27,743)		(70,413)		
Net Growth Related Capital Costs	153,911		100,067		253,978	3,431	4.02
Gross Population Increase to 2019	150,271	[1]					
Gross Floor Area to 2019			24,893,336	[1]			
Per Capita DC Charge	1,024.22		4.02				
Development Charges Per:							
Single Detached Unit (3.35 ppu)	3,431						
Sq.ft. of Non-residential GFA			4.02				

[1] City-wide Transit Area forecast.

Table CW-3-City of Ottawa
City-Wide Summary
Roads and Related & Stormwater Drainage
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Roads & Related Service	776,028	62%	480,547	38%	1,256,575		
Roads & Structures Reserve Funds	(95,893)	62%	(58,773)	38%	(154,666)		
Roads Sub-total	680,135	62%	421,774	38%	1,101,909	6,622	7.92
							1.09 *
Stormwater Drainage	3,181	62%	1,950	38%	5,131		
Storm Drainage Reserve Funds	782	62%	479	38%	1,261		
Storm sub-total	3,963		2,429		6,392	39	0.05
							0.00 *
Net Growth Related Capital Costs	684,098		424,203		1,108,301	6,661	9.06
Gross Population Increase to 2031	344,054						
Gross Floor Area to 2031			53,241,503				
Per Capita DC Charge	1,988.34		7.97				
Development Charges Per:							
Single Detached Unit (3.35 ppu)	6,661						
Sq.ft. of Non-residential GFA			7.97				

Note:

No adjustments for prior years discounting.
Road Reserve funds have been allocated : 89% **to City-Wide.**
Storm Reserve funds have been allocated : 99% **to City-Wide.**
As per the allocation of City -Wide Costs to the Total Costs.

*** A portion of the City-Wide non-residential charge is made up from the non-residential capital costs at the area-specific level.**

Table CW-4-City of Ottawa
City-Wide Summary
Sanitary Sewers
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Sanitary Sewers	103,011	62%	62,274	38%	165,285		
Sanitary Services Reserve Funds	(1,558)	62%	(955)	38%	(2,513)		
Sanitary Sewers Sub-total	101,453	62%	61,319	38%	162,772	1,102	1.21
							0.62 *
Net Growth Related Capital Costs	101,453		61,319		162,772	1,102	1.83
Gross Population Increase to 2031	308,373						
Gross Floor Area to 2031			50,811,627	[1]			
Per Capita DC Charge	328.99		1.21				
Development Charges Per:							
Single Detached Unit (3.35 ppu)	1,102						
Sq.ft. of Non-residential GFA			1.21				

Note:
No adjustments for prior years discounting.
Reserve funds have been allocated 58% **to City-Wide.**
As per the allocation of City-wide Sewer Costs to the Total Sewer Costs.

*** A portion of the City-Wide non-residential charge is made up from the non-residential capital costs at the area-specific level.**

[1] City-Wide Sanitary Area total.

Table CW-5-City of Ottawa
City-Wide Summary
Water
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Water Services	72,379	88%	9,412	12%	81,791		
Water Services Reserve Funds	(5,418)	88%	(739)	12%	(6,157)		
Water sub-total	66,961	89%	8,673	11%	75,634	734	0.17
							0.21 *
Net Growth Related Capital Costs	66,961		8,673		75,634	734	0.38
Gross Population Increase to 2031	305,773						
Gross Floor Area to 2031			50,814,732	[1]			
Per Capita DC Charge	218.99		0.17				
Development Charges Per:							
Single Detached Unit (3.35 ppu)	734						
Sq.ft. of Non-residential GFA			0.17				

Note:

No adjustments for prior years discounting.
Reserve funds have been allocated 42% **to City-Wide.**
As per the allocation of City-wide Water Costs to the Total Water Costs.

*** A portion of the City-Wide non-residential charge is made up from the non-residential capital costs at the area-specific level.**

[1] City-Wide Water Area total.

Table IG-1-City of Ottawa
Inside the Greenbelt Summary
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2019) 000's $ 2009$					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Police	0		0		0	0	0.00
Emergency Service (Fire)	0		0		0	0	0.00
Parks Development	2,239	95%	118	5%	2,357	164	0.00
Recreation Facilities	2,396	95%	126	5%	2,522	175	0.01
Libraries	3,089	95%	163	5%	3,252	226	0.01
Net Growth Related Capital Costs	7,724		407		8,131	565	0.02
Gross Population Increase to 2019	46,247						
Gross Floor Area to 2019 (City-wide)			25,972,256 [1]				
Per Capita DC Charge	167.02		0.02				
Development Charges Per: Single Detached Unit (3.38 ppu)	565						
Sq.ft. of Non-residential GFA			0.02				

Note:
Non-residential portion to be added to City-Wide non-residential charge

[1] City-Wide total.

Table IG-2-City of Ottawa
Inside the Greenbelt Summary
Roads & Related Service
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Roads & Related Service	6,428	64%	3,677	36%	10,105		
Roads & Structures Reserve Funds	(732)		(411)		(1,143)		
Roads Sub-total	5,696	64%	3,266	36%	8,962	215	0.06
Net Growth Related Capital Costs	5,696		3,266		8,962	215	0.06
Gross Population Increase to 2031	89,634						
Gross Floor Area to 2031 (City-wide)			53,241,503	[1]			
Per Capita DC Charge	63.55		0.06				
Development Charges Per:							
Single Detached Unit (3.38 ppu)	215						
Sq.ft. of Non-residential GFA			0.06				

Note:

Non-residential portion to be added to City-Wide non-residential charge

Reserve funds have been allocated 1% to Inside the Greenbelt
As per the allocation of Inside Greenbelt Roads Costs to the Total Roads Costs.

[1] City-Wide total.

Table IG-3-City of Ottawa
Inside the Greenbelt Summary
Sanitary Sewers
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Sanitary Sewers	30,152	59%	20,953	41%	51,105		
Sanitary Services Reserve Funds	(458)		(319)		(777)		
Sanitary Sewers Sub-total	29,694	59%	20,634	41%	50,328	1,120	0.41
Net Growth Related Capital Costs	29,694		20,634		50,328	1,120	0.41
Gross Population Increase to 2031	89,634						
Gross Floor Area to 2031 (City-wide)			50,811,627	[1]			
Per Capita DC Charge	331.28		0.41				
Development Charges Per:							
Single Detached Unit (3.38 ppu)	1,120						
Sq.ft. of Non-residential GFA			0.41				

Note:

Non-residential portion to be added to City-Wide non-residential charge

Reserve funds have been allocated **18% to Inside the Greenbelt**
As per the allocation of Inside Greenbelt Sewer Costs to the Total Sewer Costs.

[1] City-Wide Sanitary Area total.

Table IG-4-City of Ottawa
Inside the Greenbelt Summary
Water
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Water Services	12,907	91%	1,345	9%	14,252		
Water Services Reserve Funds	(976)		(97)		(1,073)		
Water Sub-total	11,931	91%	1,248	9%	13,179	450	0.02
Net Growth Related Capital Costs	11,931		1,248		13,179	450	0.02
Gross Population Increase to 2031	89,634						
Gross Floor Area to 2031 (City-wide)			50,814,732	[1]			
Per Capita DC Charge	133.11		0.02				
Development Charges Per:							
Single Detached Unit (3.38 ppu)	450						
Sq.ft. of Non-residential GFA			0.02				

Note:

Non-residential portion to be added to City-Wide non-residential charge

Reserve funds have been allocated 7% to Inside the Greenbelt
As per the allocation of Inside Greenbelt Water Costs to the Total Water Costs.

[1] City-Wide Water Area total.

Table OG-1-City of Ottawa
Outside the Greenbelt Summary
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2019) 000's $ 2009$					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Police	9,897	61%	6,434	39%	16,331	323	0.25
Emergency Service (Fire)	8,562	61%	5,567	39%	14,129	280	0.21
Parks Development	35,131	95%	1,849	5%	36,980	1,148	0.07
Recreation Centres	101,923	95%	5,364	5%	107,287	3,331	0.21
Libraries	4,181	95%	220	5%	4,401	137	0.01
Studies (net of Reserve Fund)	1,149	69%	526	31%	1,675	38	0.02
Net Growth Related Capital Costs	160,843		19,960		180,803	5,257	0.77
Gross Population Increase to 2019	104,024						
Gross Floor Area to 2019 (City-wide)			25,972,256	[1]			
Per Capita DC Charge	1,546.21		0.77				
Development Charges Per: Single Detached Unit (3.40 ppu)	5,257						
Sq.ft. of Non-residential GFA			0.77				

Note:

Non-residential portion to be added to City-Wide non-residential charge

Studies Gross Costs=	1,723
Less Reserve Fund	(48)
	1,675

[1] City-Wide total.

Table OG-2-City of Ottawa
Outside the Greenbelt Summary
Roads & Related Services
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Roads & Related Services	93,666	63%	55,519	37%	149,185		
Roads & Structures Reserve Funds	(10,633)	63%	(6,244)	37%	(16,877)		
Roads Sub-total	83,033	63%	49,275	37%	132,308	1,312	0.93
Net Growth Related Capital Costs	83,033		49,275		132,308	1,312	0.93
Gross Population Increase to 2031	215,225						
Gross Floor Area to 2031 (City-wide)			53,241,503	[1]			
Per Capita DC Charge	385.80		0.93				
Development Charges Per:							
Single Detached Unit (3.40 ppu)	1,312						
Sq.ft. of Non-residential GFA			0.93				

Note:

Non-residential portion to be added to City-Wide non-residential charge
Reserve funds have been allocated 10% to Outside the Greenbelt
As per the allocation of Outside Greenbelt Roads Costs to the Total Roads Costs.

[1] City-Wide total.

Table OG-3-City of Ottawa
Outside the Greenbelt Summary
Sanitary Sewers
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Sanitary Sewers	59,683	84%	10,966	16%	70,649		
Sanitary Services Reserve Funds	(902)		(172)		(1,074)		
Sanitary Sewers Sub-total	58,781	84%	10,794	16%	69,575	929	0.21
Net Growth Related Capital Costs	58,781		10,794		69,575	929	0.21
Gross Population Increase to 2031	215,225						
Gross Floor Area to 2031 (City-wide)			50,811,627	[1]			
Per Capita DC Charge	273.11		0.21				
Development Charges Per: Single Detached Unit (3.40 ppu)	929						
Sq.ft. of Non-residential GFA			0.21				

Note:

Non-residential portion to be added to City-Wide non-residential charge
Reserve funds have been allocated 25% to Outside the Greenbelt
As per the allocation of Outside Greenbelt Sewer Costs to the Total Sewer Costs.

[1] City-Wide Sanitary Area total.

Table OG-4-City of Ottawa
Outside the Greenbelt Summary
Water
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Water Services	88,093	89%	10,655	11%	98,748		
Water Services Reserve Funds	(6,615)	89%	(818)	11%	(7,433)		
Water Sub-total	81,478	89%	9,837	11%	91,315	1,287	0.19
Net Growth Related Capital Costs	81,478		9,837		91,315	1,287	0.19
Gross Population Increase to 2031	215,225						
Gross Floor Area to 2031 (City-wide)			50,814,732	[1]			
Per Capita DC Charge	378.57		0.19				
Development Charges Per:							
Single Detached Unit (3.40 ppu)	1,287						
Sq.ft. of Non-residential GFA			0.19				

Note:

Non-residential portion to be added to City-Wide non-residential charge
Reserve funds have been allocated 51% to Outside the Greenbelt
As per the allocation of Outside Greenbelt Water Costs to the Total Water Costs.

[1] City-Wide Water Area total.

Table R-1-City of Ottawa
Rural Summary
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2019) 000's $ 2009$					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Police	1,350	61%	877	39%	2,227	222	0.03
Emergency Service (Fire)	736	61%	478	39%	1,214	121	0.02
Parks Development	6,020	95%	317	5%	6,337	988	0.01
Recreation Facilities	2,280	95%	120	5%	2,400	374	0.00
Libraries	1,209	95%	64	5%	1,273	199	0.00
Studies (net of Reserve Fund)	5,803	83%	1,153	17%	6,956	953	0.06
Net Growth Related Capital Costs	17,398		3,010		20,408	2,857	0.12
Gross Population Increase to 2019	19,063						
Gross Floor Area to 2019 (City-wide)			25,972,256				
Per Capita DC Charge	912.66		0.12				
Development Charges Per: Single Detached Unit (3.13 ppu)	2,857						
Sq.ft. of Non-residential GFA			0.12				

Note:
Non-residential portion to be added to City-Wide non-residential charge

Studies Gross Costs=	7,157
Less Reserve Fund	(201)
	6,956

[1] City-Wide total.

Table R-2-City of Ottawa
Rural Summary
Roads and Related & Stormwater Drainage
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Roads & Related Services	10,956	66%	5,763	34%	16,719		
Roads & Structures Reserve Funds	(1,248)	66%	(643)	34%	(1,891)		
Roads Sub-total	9,708	65%	5,120	35%	14,828	775	0.10
Stormwater Drainage	26	65%	14	35%	40		
Storm Reserve Funds	6		3		9		
Stormwater Sub-total	32	65%	17	35%	49	3	0.00
Net Growth Related Capital Costs	9,740		5,137		14,877	778	0.10
Gross Population Increase to 2031	39,195						
Gross Floor Area to 2031 (City-wide)			53,241,503				
Per Capita DC Charge	248.50		0.10				
Development Charges Per: Single Detached Unit (3.13 ppu)	778						
Sq.ft. of Non-residential GFA			0.10				

Note:

Non-residential portion to be added to City-Wide non-residential charge

Road Reserve funds have been allocated : **1% to Rural.**
Storm Reserve funds have been allocated : **1% to Rural.**
As per the allocation of Rural Costs to the Total Costs.

[1] City-Wide total.

Table R-3-City of Ottawa
Rural Summary
Water
Development Charge Calculations-Average Cost Method

Service Category/ Component	Net Growth Related Costs (2010-2031) (000's 2009$)					Development Charge Per:	
	Residential Share		Non-residential Share		Total	SDU $ per unit	$ per sq.ft.
Water Services	306	62%	189	38%	495		
Water Services Reserve Funds	(23)		(14)		(37)		
Water Sub-total	283	62%	175	38%	458	135	0.00
Net Growth Related Capital Costs	283		175		458	135	0.00
Gross Population Increase to 2031 (Service Rural)	6,572						
Gross Floor Area to 2031 (City-wide)			50,814,732				
Per Capita DC Charge	43.06		0.00				
Development Charges Per: Single Detached Unit (3.13 ppu)	135						
Sq.ft. of Non-residential GFA			0.00				

Note:

Non-residential portion to be added to City-Wide non-residential charge
Reserve funds have been allocated 0.25% to Rural
As per the allocation of Rural Water Costs to the Total Water Costs.

[1] City-Wide Water Area total.

APPENDIX D

GUIDELINES RE LANDOWNER EMPLACEMENT OF LOCAL SERVICES UNDER DEVELOPMENT AGREEMENTS

APPENDIX D - GUIDELINES RE LANDOWNER EMPLACEMENT OF LOCAL SERVICES UNDER DEVELOPMENT AGREEMENTS

Introduction

The policy guidelines are general principles by which staff will be guided in considering development applications. However, each application will be considered on its own merits regarding, among other factors: the nature, type, and location of the development and any existing and proposed development in the surrounding area; these policy guidelines; the location and type of services required and their relationship to the proposed development and existing development in the area; and the *Development Charges Act*, 1997.

The following guidelines set out the size and nature of engineered infrastructure included in the study as development charge projects. All other engineered infrastructure will be considered as a local service to be emplaced as part of the development.

Water

Subject to the criteria noted below, water works that are identified in an approved master plan or serviceability plan qualify as development charges projects. The detailed engineering requirements of the items below are governed by the detailed engineering standards for the City of Ottawa.

1. Watermains

Local watermains are typically 406 mm and smaller and support direct service connections. Feedermains are typically 610mm and larger, feed/service areas beyond local development and do not support local service connections. Watermains, having a nominal diameter equal to or greater than 610 mm, are considered to be development charges projects and watermains of 405 mm or less are considered a developer's responsibility, subject to the criteria below.

Feedermains are typically located on Arterial or Major collector roads or easements where lot frontage is not normally permitted. Since a watermain of any size located within this right of way has no direct servicing benefit but is required by the developer for local services:

i. The contribution towards "oversizing" through development charges for pipes greater than 610 mm shall be the cost in excess of the cost of a 405 mm watermain and shall increase as the pipe size increases, as follows:

Watermain Size	Charged to DCs
405 mm	NIL
610 mm	(cost of 610mm less cost of 405mm)
750 mm	(cost of 750mm less cost of 405mm)
900 mm	(cost of 900mm less cost of 405mm)
1050 mm	(cost of 1050mm less cost of 405mm)
1200 mm	(cost of 1200mm less cost of 405mm)

ii. Where identified in an approved serviceability study, off-site feeder mains of any size required to provide network integrity or reliability to the distribution network, or to correct health-related water supply concerns having a growth-related component, are considered development charges projects.

iii. All other watermains are considered a direct developer responsibility, including all required looping to service the development lands.

iv. One price per nominal pipe diameter shall apply to all over-sizing costs as set out in the corresponding table in the DC by-law.

2. Booster Pumping Stations and Reservoirs

i. Upgrades to, or construction of, temporary water booster pumping stations and reservoir projects are considered to be the developer's responsibility.

ii. Upgrades to, or construction of, permanent water booster pumping stations and reservoir projects are considered to be development charges projects.

Wastewater

Subject to the criteria noted below, wastewater works that are identified in an approved master plan or serviceability plan, qualify as development charges projects. The detailed engineering requirements of the items below are governed by the detailed engineering standards for the City of Ottawa.

The City may enter into a front ending agreement with a developer for infrastructure not qualifying as a development charges project. The front ending agreement may be used to assist in recovering costs from other benefiting owners.

1. Sanitary Sewers

The development charge benchmark for pipe size and flow is based on a 40 ha (i.e.100acre) town house development (i.e. a town house development is judged a blended average between low and high density housing and is consistent with the current OP). Flow is then estimated in accordance with the latest City design guidelines.

i. Only over-sizing costs for trunk sanitary sewers meeting the combined criteria of having a nominal diameter being equal to or greater than 450 mm and having a flow greater than 80 l/s are considered to be development charges projects. The contribution towards 'over-sizing' through development charges for pipes equal to or greater than 450 mm and having a flow greater than 80 l/s shall be the cost in excess of the cost of a 375 mm sanitary sewer and shall increase as the pipe size increases, as follows:

Size of Sanitary Sewer	**Charged to DCs**
375 mm	NIL
450mm@80l/s	(cost of 450mm less cost of 375mm)
525 mm	(cost of 525mm less cost of 375mm)
600 mm	(cost of 600mm less cost of 375mm)
675 mm	(cost of 675mm less cost of 375mm)
750 mm	(cost of 750mm less cost of 375mm)
900 mm	(cost of 900mm less cost of 375mm)
Larger pipe sizes	(cost of larger pipe less cost of 375mm)

ii. Development Charges funding will also extend to correct a health-related and/or environmental concern with a growth-related component.

iii. All other sanitary sewers are considered to be the developer's responsibility.

iv. One price per nominal pipe diameter shall apply to all over-sizing costs as set out in the corresponding table of the DC by-law.

v. Over-depth for upstream lands and rock excavation will be considered on an individual project basis, up to a maximum allowance of 15% of the over-sizing costs.

2. Pumping Stations

i. Upgrades to, or construction of, temporary sanitary pumping stations are considered to be the developer's responsibility.

ii. Upgrades to, or construction of, permanent pumping stations that are required as a result of an approved serviceability study, service more than one developer, and have a tributary flow greater than 80 l/s are considered to be development charges projects.

iii. New or expanded pumping stations that do not qualify as development charges projects are the developer's responsibility.

Land Acquisition for Water and Wastewater Works

1. Booster Stations and Reservoirs

i. Where the booster stations and reservoirs are not development charges projects, the land acquisition, to the size required by the design of the facility, is to be provided by the developer/landowner as part of the development approval process.

ii. When booster stations and reservoirs are considered development charges projects, the market value of the land is considered to be part of the capital cost of the development charge project.

2. Pumping Stations

i. Where pump stations are not development charges projects, the land acquisition, to the size required by the design of the facility, is to be provided by the developer/landowner as part of the development approval process.

ii. When pumping stations are considered development charges projects, the market value of the land is considered to be part of the capital cost of the development charges project.

Actual Cost Reimbursement

1. Sanitary, Storm and Watermain Oversizing

Engineering 10%
Contingency 15%
No land as these are generally acquired via *Planning Act.*

2. Pumping Stations and Booster Stations

Engineering 10%
Project Management 10%
Land $500,000/ha
Contingency 15%

Storm Water Management Works

Subject to the criteria noted below, storm water management works that are identified in an approved master drainage plan or serviceability plan, qualify as development charges projects. The detailed engineering requirements of the following items are governed by the Stormwater Management Planning and Design Manual (MOE, 2003) and the detailed engineering standards of the City of Ottawa.

1. Storm Sewers

As with sanitary sewers, the development charge benchmark for pipe size and flow is based on a 40 ha (i.e.100acre) town house development (i.e. a town house development is judged a blended average between low and high density housing and is consistent with the current OP). Flow is estimated in accordance with the latest City design guidelines.

i. Only over-sizing costs for trunk storm sewers meeting the combined criteria of having a nominal pipe diameter being equal to or greater than 1800 mm and having a flow greater than 3600 l/s are considered to be development charges projects. The contribution towards 'over-sizing' through development charges for pipes equal to or greater than 1800 mm and having a flow greater than 3600 l/s shall be the cost in excess of the cost of a 1650 mm storm sewer and shall increase as the pipe size increases as follows:

Size of Storm Sewer	Charged to DCs
1650 mm	NIL
1800 mm	(cost of 1800mm less cost of 1650mm)
1950 mm	(cost of 1950mm less cost of 1650mm)
2100 mm	(cost of 2100mm less cost of 1650mm)
2250 mm	(cost of 2250mm less cost of 1650mm)
Larger pipe sizes	(cost of larger pipe less cost of 1650mm)

ii. Where identified in an approved serviceability study or master drainage plan, any over-sizing required to service off-site lands and required for system integrity, or as a system improvement to accommodate growth, is considered a development charge project.

iii. Where conditions of a particular development require on-site over-sizing, the on-site over-sizing shall be the developer's responsibility.

iv. Unless identified as a development charges project, all storm sewers are considered to be the developer's responsibility.

v. One price per nominal pipe diameter shall apply to all over-sizing costs as set out in the corresponding table of the DC by-law. Over-depth for upstream lands and rock excavation will be considered on an individual project basis, up to a maximum allowance of 15% of the over-sizing costs.

vi. Where identified in an approved serviceability study or master drainage plan, upgrades or expansions to existing natural channels qualify as part of a large-area development charge, and storm sewers as identified in points i and ii above qualify as part of a small benefit area charge based on the tributary watershed.

2. Storm Water Management Facilities

i. Where the City deems, through an approved study, that it is preferable to provide centralized facilities to serve growth-related projects controlled by multiple owners, they are considered development charges projects.

ii. Quality and quantity works may be considered development charges projects where they have been identified through an approved study and they benefit a broader area of development growth. In some of these cases, the quality and quantity works are to be developed by a single owner, with the works commonly oversized for other benefiting lands. In such cases, the owner on whose lands

the works are located will be responsible for their proportionate share of the work and the project is considered to be a development charges project.

iii. All other stormwater quality and quantity works are a direct developer responsibility.

iv. Storm water management facilities, as identified in point ii, qualify as part of a small benefit area/specific area charge. The benefit area is the tributary area to the SWM facility.

v. Storm water management facilities costs shall include costs for developable land needed for the Storm Water Management Facility.

3. Erosion Control Measures

i. Downstream erosion works and fish compensation works required to mitigate the impact of development and that have been identified through an approved study are development charges projects. In all other cases, a separate City-wide planning level study is required to assess existing stream stability and future impacts of development in order to maintain existing stream conditions and to apportion costs appropriately. The study costs will be considered a development charges project.

Road-Related

Subject to the criteria noted below, road related works that are identified in an official plan or transportation master plan qualify as development charges projects. The detailed engineering requirements of the items below are governed by the detailed engineering standards for the City of Ottawa.

1. City Freeway (as defined in the Official Plan)

i. General principles have not been developed.

2. Arterial Roads (as defined in the Official Plan)

i. New Arterial Roads or the widening of existing Arterial Roads shall be considered development charges projects.

3. *Major Collector Roads (as defined in the Official Plan)*

i. The over-sizing costs of any additional width (over the first 11 m) required for the road surface of new Major Collector Roads are considered to be a development charges project.

ii. The first 11 m of new Major Collector Roads is considered to be the developer's responsibility.

iii. Widening of existing Major Collector Roads is considered to be a development charges project.

4. *Collector Roads*

i. New Collector Roads of 11 m or less are considered to be the developer's responsibility.

5. *Local Roads*

i. New Local Roads are considered to be the developer's responsibility.

6. *Traffic Signals, Traffic Control Systems, and Intersection Modifications*

i. As part of the new construction or widening of Arterial or Major Collector Roads and if warranted, traffic signals, traffic control systems and intersection modifications are considered to be development charges projects.

ii. On Arterial or Major Collector Roads, off-site traffic signals, traffic control systems and intersection modifications, required to meet the needs of projected development growth and resulting in increasing traffic, are considered to be development charges projects, subject to meeting warrants.

iii. Where foreseeable off-site intersection modifications, traffic signals and traffic control systems that are not enforceable under the Planning Act, are required as a result of growth, they will be considered development charges projects provided they have been identified within a development charge program. Identification of annual projects within the program will be through the budgetary process.

iv. Traffic signals, traffic control systems, and intersection modifications are considered to be part of the construction of the road with the lower designation. As an example, traffic signals and intersection modifications at the intersection of an

Arterial Road and a Major Collector are to be part of the Major Collector Road's construction and should follow the guidelines outlined in the Road section.

7. Streetlights

i. Streetlights on Arterial Roads and for the oversized portion of the Major Collector Roads are considered to be development charges projects.

ii. Streetlights on all other roads are considered to be the developer's responsibility.

8. Sidewalks

i. Sidewalks on Arterial Roads are considered to be development charges projects.

ii. Sidewalk(s) (i.e. one/both sides) on all other new Roads are not development charges projects and are considered to be the developer's responsibility.

iii. Sidewalks on Arterial Roads and Major Collectors that are added when widening, are a development charge project.

iv. Sidewalks that are external to a development and are necessary to connect the development to public spaces are considered to be the developer's responsibility.

9. Bike Lanes / Bike Paths

i. Bike lanes within the road allowance are considered to be part of the road construction and should follow the guidelines explained in the road construction section.

ii. Bike paths outside Road Allowances are considered to be the developer's responsibility if they are part of a plan of subdivision.

10. Noise Abatement Measures

i. On Arterial or Major Collector Roads, noise abatement measures, when warranted (i.e., barriers, berms, etc.), are considered to be the developer's responsibility where such roads precede the development or are constructed during the development or are forecast to be constructed within five years of the development's completion.

ii. Subject to 10i) above, on Arterial or Major Collector Roads, any other noise abatement measures, when warranted (i.e., barriers, berms, etc.), are considered to be development charges projects.

iii. Internal to a development, noise abatement measures are the developer's responsibility.

11. Bus Pads

i. When widening existing Arterial or Major Collector Roads, bus pads are considered to be development charges projects.

ii. On all other roads, bus pads are considered to be the developer's responsibility.

12. Cost Reimbursement

Arterial roads:

Engineering 10%
Project Management 10%
Land 10%
Contingency 15%

Collector roads:

Engineering 10%
Contingency 15%
No land as these are generally acquired via *Planning Act*

Land Acquisition for Roads

1. Road Allowances

i. Land Acquisition for Arterial or Major Collector Roads, to the widths required according to the approved engineering standards, is primarily provided by dedications under the Planning Act. In areas where limited or no development is anticipated and direct dedication is unlikely, the land acquisition is considered to be part of the capital cost of the related development charges project.

2. Grade Separations

i. Land Acquisition for Grade Separations (beyond normal dedication requirements) is considered to be part of the capital cost of the related development charges project.

Park Development

1. Provision of the land, grading, drainage, seeding, sodding, sanitary service to the park property line, storm water service(s) to the park property line, 50mm (min.) water service to the park property line and vault clearing are considered to be the developer's/landowner's responsibility.

2. All other development of the land including hard/soft landscaping and related items are considered a development charges project item.

APPENDIX E
2009 LONG TERM CAPITAL AND OPERATING COST EXAMINATION

APPENDIX E - 2009 LONG TERM CAPITAL AND OPERATING COST EXAMINATION

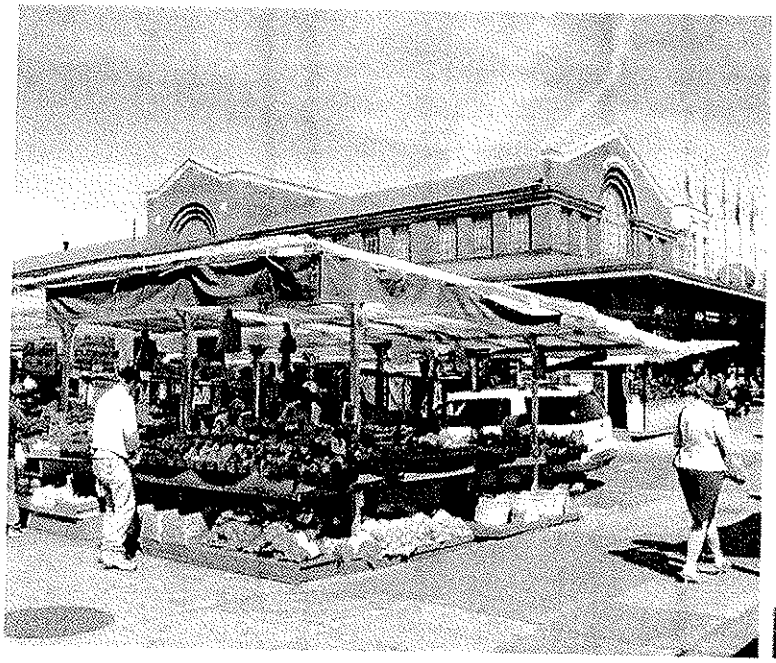
The requirement for a long term capital and operating cost examination relative to the City's growth-related capital program, is addressed by the following reports, relevant excerpts from which have been included herein:

a) "City of Ottawa Long Range Financial Plan III 2006" (Introduction and Capital Forecast – Capital Requirements Funded from Taxation)

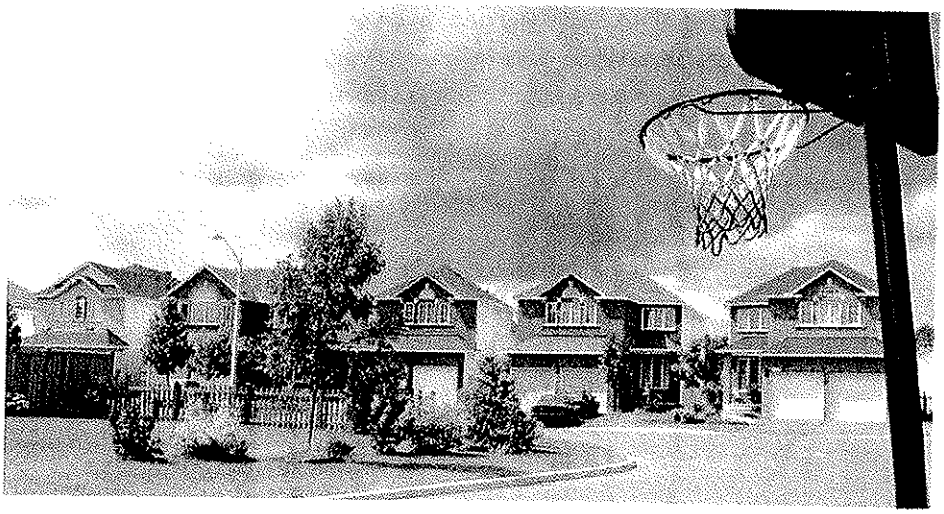
b) "Financial Implications and Affordability of the Official Plan, Infrastructure Masterplan and Transportation Masterplan."

c) "Comparative Municipal Fiscal Impact Analysis – Executive Summary."

d) 2009 Capital Budget and 2010-2018 Forecast.



INTRODUCTION



As continual corporations, municipalities keep and manage community wealth, in the form of assets, for generations. They plan for population growth, asset maintenance, demographic changes, emergency preparedness and a host of other eventualities that affect residents' quality of life. As such, they need a longer-term focus than most companies or other organizations. Since amalgamation, Ottawa City Council has recognized the benefits of long-term planning and incorporated this approach into the decision-making process by creating the Long-Range Financial Plans (LRFP) I and II.

Experts agree structural funding issues impede financial sustainability

The first and second LRFPs focused exclusively on planning capital spending. This third edition of the City's Long-Range Financial Plan (LRFP III) is a comprehensive financial document, which also includes operating and capital expenditures and an overview of the City's assets and liabilities.

The first Long-Range Financial Plan, tabled in 2002, examined concerns regarding the financial sustainability of Canadian cities. It summarized findings of major studies on municipal funding, which emphasized the new importance of cities in the global economy, and examined funding differences between major Canadian, European and American cities. The United States government and national governments in Europe are making major investments in their cities and have made numerous funding tools available to municipalities. The Canadian federal and provincial governments' progress in these areas is well behind Europe and the United States.

Successful cities are essential to the success of the modern Canadian economy

Since 2002, a number of other studies have confirmed that serious concerns remain about the sustainability of the fiscal framework under which Canadian municipalities must operate. These studies note that, while the federal and provincial gas tax provides cities with some help in the area of public transit, very little real progress has been made since 2002.

The major conclusions reached by these studies are outlined below.

One of the major economic and cultural shifts that has occurred with the advent of globalization is the emergence of cities as key drivers of national economies. In short, "...cities matter... Indeed, in Canada, as in most other countries, as large cities go so, increasingly, goes the country."[1]

In Canada, the health of cities is of primary importance to the national economy. It is anticipated that:

> "as much as 80 per cent of economic and population growth will occur in only six broadly defined city regions: the Greater Toronto Area, Vancouver and the lower mainland, Montréal and its environs, Ottawa-Gatineau, and the Calgary and Edmonton regions."[2]

[1] Slack, Enid and Bird, Richard M. "Cities in Canadian Federalism." Presentation. Conference on Fiscal Relations and Fiscal Conditions. Georgia State University, Atlanta. May 2006.
[2] Slack, Enid, Bourne, Larry S. and Priston, Heath. "Large Cities Under Stress: Challenges and Opportunities." Report. External Advisory Committee on Cities and Communities. March 3, 2006.

While there is no single definition for what makes a successful city, there are commonly agreed upon elements. These include high quality social and quality of life services, first-rate cultural infrastructure, good quality municipal infrastructure, an attractive natural environment, a diverse economy and the ability to attract and retain talented people.

Currently, Canadian cities are internationally recognized as successful. They are highly desirable places to live and work. When compared to American cities, they provide good social and cultural infrastructure and services while offering higher levels of personal security and safety. In 2005, Mercer International rated Ottawa 20th in the world for quality of life, ahead of Montréal and Calgary and most American cities. For cost of living, Ottawa ranked 122nd out of 144, making it less expensive to live in than Toronto, Vancouver, Calgary and Montréal.

However, the continued success of Canadian cities is at risk. The most significant reasons can be summarized as follows:

- Federal and provincial governments are "in effect downloading some of their deficits to those at the bottom of the fiscal food chain – local governments."[3] This has been done in a number of ways: by directly offloading services to municipalities (e.g., provincial highways, ambulance service, social services and social housing); by reducing transfer payments to municipalities (e.g., provincial transfers for public transit); by reducing direct government expenditures in areas that directly impact local areas (e.g., reductions to immigrant services and funding for health supports for low income and disabled people); and by imposing "unfunded mandates", where regulations have increased municipalities' expenditure requirements (e.g., water quality standards).
- To remain competitive in the national and international marketplace, cities must provide state-of-the-art transportation and communications infrastructure, high quality cultural and recreation facilities and programming, and reliable emergency and police services.
- Cities experiencing rapid growth are also experiencing higher costs, due to the high costs of building new infrastructure and of maintaining infrastructure that is under stress from a growing population.
- Increased pressures on the expenditure side have not been balanced by corresponding increases on the revenue side. Canadian cities can only raise revenues through property taxes, user fees and development charges. Unlike sales and income taxes, property taxes do not grow with the economy.

[3] Slack, Enid and Bird, Richard M. "Cities in Canadian Federalism." Presentation. Conference on Fiscal Relations and Fiscal Conditions. Georgia State University, Atlanta. May 2006.

All of the studies conclude that, while Canadian cities are providing most of the services that lead to economic growth, they do not have adequate financial tools to fund those services. Economic growth increases federal and provincial revenues far more than those of municipalities. This creates a fiscal imbalance for municipalities.

A fiscal imbalance exists when:

> "The fiscal capacity of one order of government is insufficient to sustain its spending responsibilities while the fiscal capacity of another order of government is greater than is needed to sustain its spending obligations, while both orders of government provide public services to the same taxpayer."[4]

There is a municipal fiscal imbalance that threatens Canada's prosperity

Cities in Canada are creatures of their province. This means that cities do not have control over many of the services they provide and are restricted in their abilities to raise revenues. Cities are subject to the whims of the province in terms of services, service levels and funding. While the current debate in Canada is the federal/provincial fiscal imbalance, most experts agree that the municipal fiscal imbalance is at least as important if not more so.

An analysis of the relative expenditures and revenues of the federal, provincial and municipal governments from 1988-2004[5] reveals the following:

- While its revenues have been increasing, the federal government's expenditures, per capita, have been declining. Provincial/territorial government expenditures have been increasing at a lower rate than revenues. Municipal government expenditures have been increasing at a faster rate than their revenues.
- Provincial/territorial governments have seen the highest average annual growth rate in revenues.
- Federal and provincial tax revenues, per capita, increased over the 16-year period while municipal tax revenues remained fairly flat.
- Federal and provincial/territorial governments rely on personal and corporate income taxes and consumption taxes, along with other tax and non-tax revenues. Some provincial governments (including Ontario) also levy a property tax. Municipal governments rely mainly on one tax – the property tax.
- A greater increase in provincial property taxes for education and relatively smaller increases in municipal property taxes "suggest some crowding out of municipal tax room by the provincial property taxes..."[6]

[4] Kitchen, Harry M. and Slack, Enid. "Trends in Public Finance in Canada." May 24, 2006.
[5] Ibid.
[6] Ibid.

The studies all agree on two key points regarding the municipal fiscal imbalance:

- Municipalities do not have revenue-raising tools to allow them to adequately meet their responsibilities.
- Cities do not have sufficient control over their own destinies and are constrained from solving their own fiscal problems.

The existing funding framework means Canadian cities are not able to adequately maintain infrastructure

With more than 80% of Canada's population living in cities, and the vast majority of its businesses centred there, investments in high-quality infrastructure are vital to Canada's economic success. Specifically, the availability and quality of services provided by local infrastructure – water, sewers, solid waste facilities, public transit and transportation systems, cultural and recreational facilities – are critical factors in improving economic growth, productivity and international competitiveness.[7]

Ottawa's first Long-Range Financial Plan examined the importance of municipal infrastructure, and identified the significant differences between the large-scale investments made by Europe and the United States in municipal infrastructure as compared with Canada's investments.

There is agreement that there is a significant and growing infrastructure gap in Canada, and that it was largely created when federal and provincial infrastructure funding streams were replaced by ad-hoc infrastructure programming. American and European governments have recognized the critical role infrastructure plays as the backbone of every large city's economy; conversely, investment in infrastructure by Canada's federal and provincial governments has been declining. Canada remains the only G8 country without a national transportation infrastructure program. Moreover, given the limits to municipal funding tools, most municipalities have had little choice but to "systematically [under-invest] in infrastructure, both hard and soft infrastructure (e.g., transportation, roads, water, sewers, recreational facilities, community services, etc.)"[8] to balance their budgets and limit their debt.

Statistics Canada estimates the value of Canada's existing public infrastructure at $157 billion.[9] A number of recent studies have attempted to measure Canada's infrastructure gap, and estimates range from $60 billion to $125 billion, depending on the infrastructure included and the methodology used.[10] Even when the lowest estimate is used, the infrastructure gap is significant and the studies agree that it must be addressed if Canada is to remain internationally competitive. Given that municipalities in Ontario have responsibility for most of the province's physical infrastructure assets (62%, compared to 23% for the province and 15% for the federal government), this gap is a particular challenge for Ontario's two largest cities, Toronto and Ottawa.

[7] Government of Canada. Fall 2002. Speech from the Throne.
[8] Slack, Enid, Bourne, Larry S. and Priston, Heath. "Large Cities Under Stress: Challenges and Opportunities." Report. External Advisory Committee on Cities and Communities. March 3, 2006.
[9] Research Analysis Division, Infrastructure Canada. "Productivity and Infrastructure: A Preliminary Review of the Literature." August 2006.
[10] The range varies because each study looks at different parts of the infrastructure and different data. Infrastructure Canada has very recently begun a comprehensive literature review in order to develop a workplan to address existing knowledge gaps about the specific nature of Canada's infrastructure gap.

The conclusion reached by the studies is clear, and can be best summarized by the following:

> "As municipalities grow and age, attention must be devoted to the expansion or replacement of their capital stock. Water plants and sewage treatment facilities must be enlarged or rehabilitated. Transportation and communications facilities must be updated and extended. Brownfield remediation must be addressed and 'blighted' areas of cities revitalized and redeveloped. The need for increased infrastructure funding in Canadian municipalities has been advocated by the Federation of Canadian Municipalities for some time and more recently, by the mayors of the large cities."[11]

Municipalities will not be financially sustainable without new funding tools and without authority over the services they provide.

FOCUS OF LRFP III

The focus in this third LRFP is on improving the City's financial sustainability, including the strategies and policies that need to be implemented to achieve long-term stability. As directed by Council, LRFP III gives an overview of the factors that influence the City's financial situation and outlines strategies the City will need to consider to become financially sustainable in the long-term and provides a forecast of the operating pressures facing Ottawa over the next four years and the capital requirements over the next 10 years. It also provides options for City Council's consideration for the short- and medium-term. The LRFP offers a framework to help develop future budgets and frame discussion with other levels of government and the community.

This document will provide Councillors with the information they need when setting term-of-Council priorities. It will also guide the City's financial development over the next four-year term-of-Council. The document will be updated at the end of the four-year term or earlier, if there are significant changes in the City's financial situation.

Defining financial sustainability

There are many definitions of financial sustainability, but for municipal government purposes, the definition used by the Local Government Association of Australia is the easiest to understand and the most comprehensive. The Association's definition of financial sustainability is:

> "...a government's ability to manage its finances so it can meet its spending commitments, both now and in the future. It ensures future generations of taxpayers do not face an unmanageable bill for government services provided to the current generation."[12]

Using this definition, a municipality's long-term financial performance and position are sustainable when planned long-term service and infrastructure levels and standards are met without unplanned increases in rates or disruptive cuts to services.

[11] Kitchen, Harry M. "Physical Infrastructure and Financing." Research Paper. Panel on the Role of Government in Ontario. December 4, 2003.

A municipality would be considered financially sustainable if the following conditions were met:

- There is a reasonable degree of stability and predictability with respect to taxation;
- Future generations will not face massive decreases in services or unreasonable property tax rate increases to deal with items deferred from this generation;
- The current generation does not bear all the burden of funding items that will benefit future generations; and
- Council's highest priority programs (both capital and operating) can be maintained.

In the last two years, City staff have used a balance beam analogy when presenting the City budget to describe how yearly revenues must equal yearly expenditures. The balance beam analogy also applies to discussions about financial sustainability. To achieve a balanced budget, both sides of the balance beam require adjustment. Every year, some expenditures must be reduced or eliminated and new revenues found to accommodate changes to the individual components that comprise total expenditures and revenues.

The following graph shows the balance beam for a single budget year and includes these expenditure items:

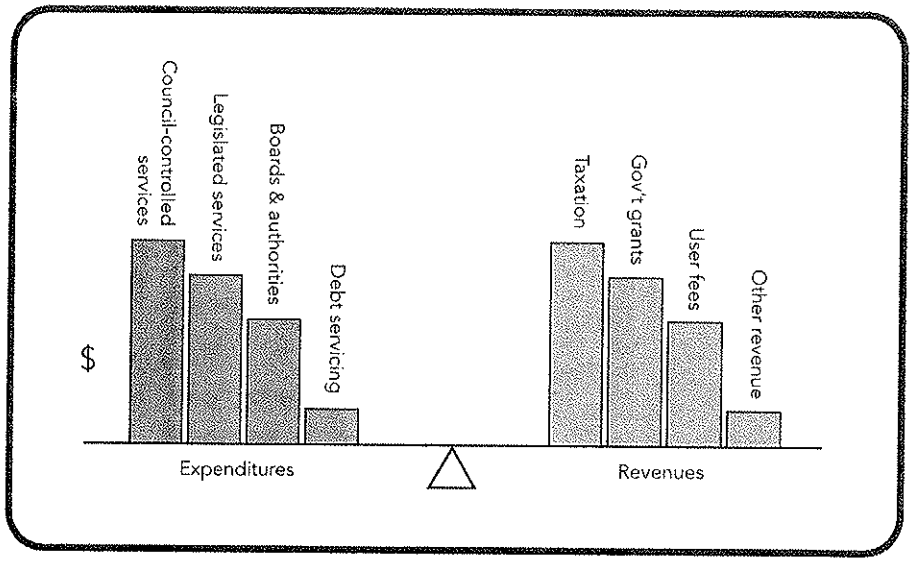
- Council-controlled services (e.g., fire, libraries, contributions to capital)
- Legislated services (e.g., employee and financial assistance, paramedics, housing)
- Boards and authorities (e.g., police services)
- Debt servicing (i.e., the fixed repayments required for previously issued debt)

The revenue items include:

- Taxation derived from property assessment
- Government grants and subsidies (conditional or unconditional)
- User fees (e.g., water consumption fees, recreation fees, transit fares)
- Other revenue (e.g., interest earnings)

[7] Local Government Association Financial Sustainability Program, Australia

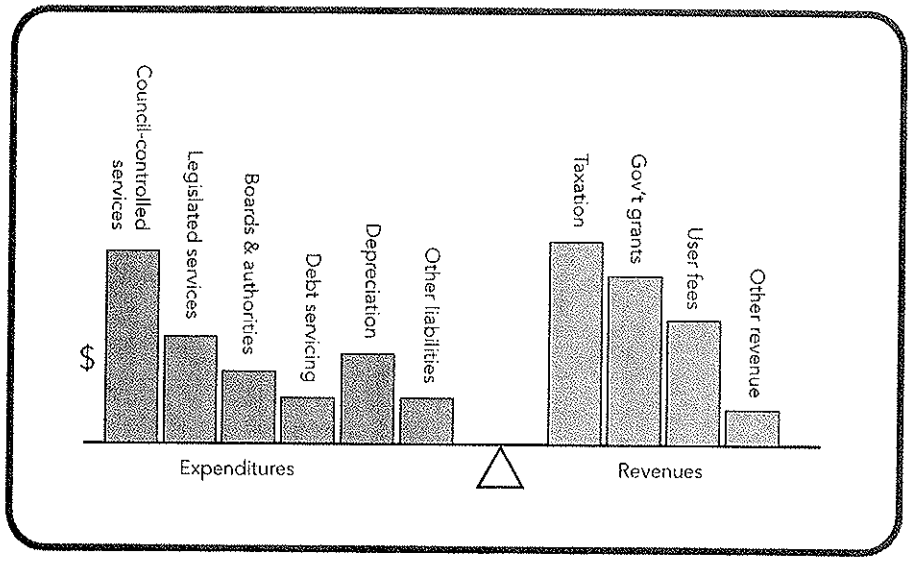
Current year budget balance beam



As each component in the balance beam is subject to long-term fluctuations, organizations that are sustainable over the long-term try to smooth the adjustments required to remain in balance from year to year. One of the ways to accomplish this is to ensure that benefits received today are paid today and that expenditures are not deferred to future generations. This is referred to as inter-generational equity.

The following balance beam demonstrates how financial sustainability should look in a municipality. The expenditure side of the beam would list costs already found in the operating budget (Council-controlled services, legislated or mandated programs, boards and authorities, debt servicing). Longer-term liabilities (costs that will be incurred in the future from actions taken today) and the value of assets consumed during the period (depreciation) would also be added. To offset any increases on the expenditure side, either the existing sources of revenue are adjusted, other expenditures are eliminated, or new sources of revenue are identified.

Municipal year budget balance beam



How LRFP III fits into the City's integrated planning framework

When the first and second LRFPs were presented to Council, the City had not yet developed an overall, integrated planning framework. As a result, these documents became the strategic plans instead of the financial and funding strategies to support longer-term strategic business plans.

Council directed staff to prepare comprehensive planning documents, including a City Corporate Plan, to help set priorities for City spending.

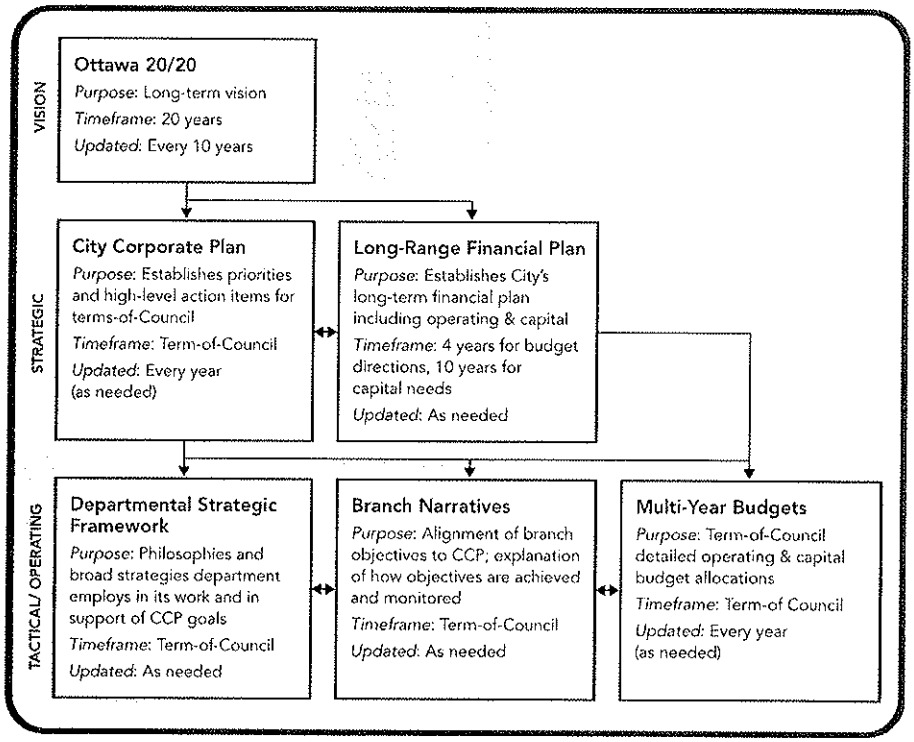
The City Corporate Plan identifies Council priorities and establishes high-level actions and ongoing activities that the City will undertake to work towards delivering those priorities. Each action has a budgeted amount, which is included in the revenue forecasts provided in this LRFP.

The primary point of reference for the City's integrated planning processes is its strategic vision – Ottawa 20/20. Using the City Corporate Plan, Council establishes its priorities for how far and how fast it wants to move towards the Ottawa 20/20 vision. Those priorities must be established within a realistic financial context. Long-Range Financial Plan III outlines the City's financial condition and gives Council the financial context needed to set priorities.

LRFP III also outlines longer-term financial strategies that, if successful, would allow Council to advance its priorities and move towards financial sustainability. Term-of-Council budget directions will be developed to guide the formation of the budget each year. Additional detail on achieving Council's priorities is provided in documents such as

departmental strategic frameworks and the operating branch narratives presented in the Budget. The actual 2007 Budget will not be provided for Council consideration until early 2007. The following graph shows the linkage between the various documents in the Integrated Planning Framework.

Integrated planning framework

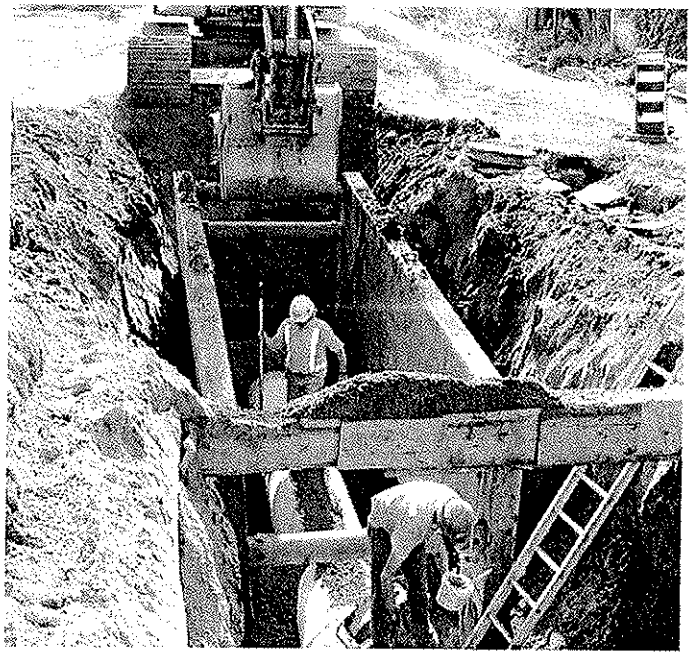


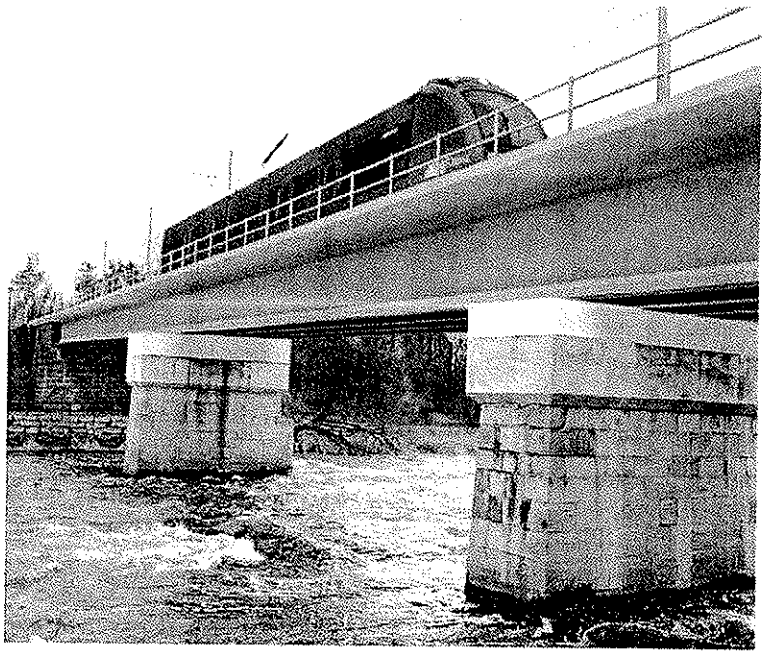
Linkage with the annual budget process

As directed by Council, the City will provide operating and capital budget amounts for the upcoming year, early in 2007, that include a further three years of operating and nine years of capital forecasts. This will allow Council to see the longer-term impact of decisions made as part of the City Corporate Plan and LRFP approval process.

Actions approved in the City Corporate Plan are included in the operating and capital budget estimates, and the amounts included in those estimates are consistent with the forecasts provided in this LRFP. The forecasts for years two to four of the multi-year budget documents will be updated annually to account for any significant changes in assumptions and conditions. Each update will include a four-year budget forecast.

LRFP III outlines the options for Council consideration to continue providing a good quality of life for Ottawa residents while striving to keep property taxes at a reasonable level.





CAPITAL FORECAST – CAPITAL REQUIREMENTS FUNDED FROM TAXATION

Since amalgamation, Council has directed staff to prepare three 10-year capital forecasts to help the City better plan and manage capital projects. Similar to LRFP I and II, the LRFP III analysis includes capital projects funded through taxes. Water and sewer capital projects, which are funded through the water rate, are analyzed separately in this document. Capital projects for the Ottawa Police Service are also excluded and will be provided separately by the Police Services Board.

LRFP III identifies the City's capital requirements from 2007 to 2016. Similar to LRFP II, capital requirements have been grouped into three broad capital project categories to allow Council to prioritize funding. Different funding is available for different kinds of projects, and strategies to address funding gaps may vary between categories. The categories are:

1) Renewal of City assets – This category reflects funding required to maintain and/or replace existing capital assets throughout the full life of those assets. These assets include buildings, structures, roadways, bridges, vehicles, and equipment.

2) Growth – This category includes projects that were identified in the Development Charges Background Study that align with the goals contained in the City's Official Plan. More specifically, growth projects must have a development charge component that is greater than 30% of the total amount requested. This means developers must pay more than 30% of the cost of the project for it to be considered a capital growth project. Projects where the development charge component is 30% or less are usually categorized as renewal of City assets or strategic initiatives.

3) Strategic initiatives – This category includes Council-directed initiatives identified in the City Corporate Plan. These initiatives include projects that implement City master plans and the Ottawa 20/20 Plan, and can be designed to acquire environmental areas or enhance services currently being provided to residents. Also included are management initiatives to enhance organizational effectiveness, implement new legislative requirements, and respond to changes in demand for service. As identified previously, there are now more projects categorized as strategic initiatives due to the reduced number of services eligible for funding through development charges.

Since LRFP II was adopted in 2004, the City has moved the garbage collection component of solid waste services from the tax bill to a separate user fee. This user fee will become part of the water and sewer bill in January 2007. As taxes are no longer the source of funding for this service, the needs and funding analysis for this component of solid waste is provided in a separate section. Transit capital needs and funding analysis are also separate, as contributions to transit capital are not raised from city-wide taxes. All other capital needs funded from city-wide taxes are consolidated in the last section.

CHANGES IN REVENUE SINCE LRFP II

When it was presented to Council in the fall of 2004, LRFP II outlined capital projects requiring funding from taxes for 2005 to 2014. The plan included a number of new non-tax capital revenue sources announced in 2004. Assumptions were made about how these new funding sources would be applied and the amount they would generate for use over the 10-year forecast period. The difference between capital needs and estimated revenue was projected to be $757 million over the forecasted 10-year period.

There have been a number of revisions to revenue assumptions since LRFP II was adopted by Council. Major revisions have resulted from provincial and federal announcements, including municipal use and funding levels of gas tax revenues, clarification of treatment of the GST rebate, and establishment of the Hydro Ottawa endowment fund with its potential rate of return. A description of these changes and their impact on the projected LRFP II funding gap is presented below.

Provincial gas tax

The 2004 assumptions about the provincial gas tax were that Ottawa would be able to access $350 million over the 10-year period. The entire amount was to be used in the capital program, either as a direct cash contribution, or to service debt issued to fund transit capital projects. The Province issued guidelines around the use of gas tax revenues shortly after Council approved LRFP II. These guidelines permitted the funds to be used only for increased transit operating requirements resulting from projects to increase ridership and for capital initiatives. Using these guidelines, Council permanently included $2.1 million in 2005 and a further $5 million in 2006 in the operating budget to fund transit. Applying this revenue to the operating budget, rather than the planned capital budget, means the capital funding gap forecast in LRFP II has increased by $66 million.

Federal gas tax

When LRFP II was presented in 2004, the federal government had just announced it would be contributing a portion of its gas tax revenues to municipalities. The allocation of funds was assumed to be based on a combined transit ridership and per capita basis. It was also assumed funds could be used for capital needs to support all forms of transportation, including roads and bridges. The actual agreement for the transfer of these funds and the application rules were not known until mid-2005.

The first change to affect the LRFP II forecast was that funds would be allocated to each city on a per capita basis only. This reduced the amount the City had forecast by $60 million from 2005 to 2014. In late 2005, the federal government agreed to increase the gas tax transfer for 2006 and 2007, which again changed the forecast revenue and reduced the total funding shortfall to $20 million over the 10-year period. This shortfall increased the net gap forecast in LRFP II.

The second funding change to affect the LRFP II forecast was that the federal gas tax could only be used for capital works in transit, water and wastewater, community energy systems and solid waste. The City funds water and wastewater from the water bill and was already implementing a strategy to deal with capital requirements for that area. Solid waste did not have a significant capital funding problem. This left transit as the only area that could benefit from these funds.

As mentioned previously, the assumptions on how to apply the federal gas tax were much broader in LRFP II. In that plan, $100 million in gas tax-supported debt was applied to non-transit projects. These projects, primarily roads and bridges, are not eligible for funding through the federal gas tax. The direct impact of this change is that the capital funding gap increased by $100 million.

The Municipal Funding Agreement Guide for the Federal Gas Tax, which was issued by the Association of Municipalities in Ontario in October 2005, included the following requirement:

> "Canada and Ontario have agreed not to reduce other infrastructure funding sources and municipalities are agreeing not to displace current capital investment or use the revenue to reduce municipal taxes. The revenue must result in increased investment in environmentally sustainable municipal infrastructure equal to the amount of revenue received."

To ensure the City complies with this clause, reporting requirements have been put in place to monitor the City's capital investment in eligible areas where the gas tax is applied. Contributions to capital from the transit levy cannot be reduced without jeopardizing federal gas tax revenues. The result is that $661 million in federal gas tax debt for transit is no longer needed, since maximizing debt does not free up funds for other non-transit capital works. As this money is no longer available for roads, bridges and other non-transit capital projects, the capital funding gap has increased by $336 million.

Goods and Services Tax (GST)

In 2004, the federal government announced that municipalities would be rebated the full 7% GST, instead of only 4%. Initially, the federal government kept the additional 3% rebate separate from the other 4% and provided it to municipalities as an unconditional grant. LRFP II assumed that the federal government would continue this practice and contribute $170 million to the City of Ottawa over the 10-year period.

Instead, the federal government started combining the two rebates into one in 2005 and the City was no longer able to record the additional rebate as revenue. As a result, the contribution to capital has increased and the cost of projects has decreased for a combined value equal to the forecast.

Development charges

LRFP II was aligned with the Development Charge Background Study and its recommendations as presented to City Council on July 14, 2004. On December 8, 2004, City Council approved revisions to the Study, which reduced development charges and the amount available to fund the growth portion of capital projects. The decrease in development charge revenue is estimated to be $41 million over the 10-year period, which increases the City's funding portion of growth-related capital projects.

Hydro Ottawa endowment fund and Ottawa Hydro dividends

LRFP II recommended the creation of an endowment fund to invest the proceeds of the Hydro Ottawa refinancing ($200 million). It also recommended special legislation allowing investment in a broader range of financial instruments than is allowed under the Municipal Act. The special legislation was approved in December 2005 and the fund was established. An assumption was made in the LRFP II that the fund would have an investment return of 10% for capital projects. However, a more attainable target of 6.5% was established in June 2006 to ensure preservation of the initial $200 million investment. This reduced the amount available for capital projects by $83 million over the 10-year LRFP II period.

Assumptions regarding the Ottawa Hydro dividends also changed, resulting in a $7 million reduction in the forecast revenue over the 10-year period. This reflects actual dividends received, which are dependent on Ottawa Hydro's financial performance.

Contribution to capital

Each year, the City dedicates a portion of taxes as a contribution to funding for capital projects. LRFP II assumed contributions to capital would grow by 2% over 10 years to reflect annual inflation. This added $91 million over the 10-year period. However, costs associated with capital projects were not increased by inflation. LRFP II assumed the entire increase in the contribution would be offset by the increases in cost over time. Therefore, to ensure the costs and revenues are valued at the same time, the $91 million increase has been removed.

The actual decrease to the contribution to capital is only $11 million over the 10-year period, as the elimination of the assumption made about inflation is partially offset by the $80 million increase from GST revenues.

In summary, by re-stating the funding gap of $757 million in LRFP II to reflect changes in the way non-tax revenue can be used, together with the changes in assumptions made in the fall of 2004, the gap between the funding requirement for capital projects and the amount available increases to $1,401 million over the same 10 years. The following table itemizes these changes.

	As per LRFP II ($ millions)	LRFP II Re-stated to reflect changes ($ millions)
Gross City tax-supported capital requirement	**7,584**	**7,494**
Less:		
• Revenues	1,708	1,708
• Development charges	1,889	1,848
Net City tax-supported capital requirement	**3,987**	**3,938**
Less:		
• Contributions to capital from taxation	1,113	1,102
• Revolving debt	400	400
• GST rebate	170	0
• Hydro dividends	57	50
• Hydro endowment fund interest	200	117
• Provincial gas tax	350	284
• Federal gas tax	435	415
• Gas tax-supported debt	761	365
• Debt servicing from gas tax	(256)	(196)
Total needs not met (funding gap)	**757**	**1,401**

LRFP III – CHANGES IN GROSS CAPITAL NEEDS SINCE LRFP II

There have been a number of adjustments made to the capital needs identified in LRFP II's 10-year period. A comparison of gross costs, which includes projected revenues and development charges identified in LRFP II and the 10-year period for LRFP III, is shown below.

Category	Re-stated LRFP II ($ millions)	LRFP III ($ millions)	Change ($ millions)
Renewal of assets	2,399	2,681	282
Growth	4,003	2,809	(1,194)
Strategic initiatives	1,092	1,262	170
TOTAL	**7,494**	**6,752**	**(742)**

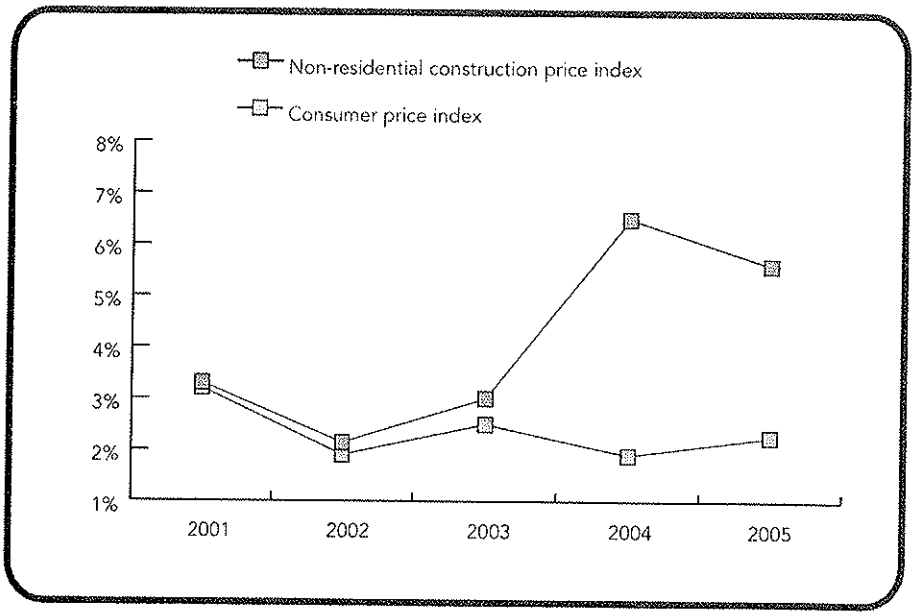
While the total capital funding needs have decreased, the capital funding needs in the renewal and strategic initiative categories have increased. An explanation of the changes affecting each category is provided below.

Inflation pressures within the construction industry

The City's capital projects are delivered by the Ottawa construction sector. The construction industry is subject to price increases that vary significantly from those experienced by most residential consumers. Statistics Canada reported that the Consumer Price Index for the Ottawa-Gatineau metropolitan area increased by 9.1% from 2001 to 2005. At the same time, the non-residential Building Construction Price Index (relates to cost increases in the construction of industrial, manufacturing and institutional structures) increased by 18%, with the largest increases occurring in the last two years.

The following graph shows the percentage change in these two indexes from 2001 to 2005.

Yearly change in Ottawa index



The non-residential Building Construction Price Index increased by almost twice the Consumer Price Index. However, the impact on construction costs can be much more significant (depending on the type of project), as contractors have had to deal with large variations and increases in the cost of construction materials. Examples of materials typically used in City capital projects, and what has happened to prices of each, are listed below (all increases are in Canadian dollars).

1) **Steel – Rebar –** Pricing fluctuations of more than 20% have resulted since a major price increase in late 2004. Rebar is a significant component in retaining walls, bridges, etc. The City purchases approximately 500 tonnes of reinforcing steel every year.

2) **Asphalt –** The cost of asphalt has increased by an estimated 15% between 2004 and 2005. From 2005 to 2006, it increased by another estimated 20%. The City purchases approximately 200,000 tonnes of asphalt per year.

3) **Concrete –** Cement powder and the price of concrete have increased 10-13% from October 2004 to October 2005. This material is a major component of bridges, structures, and sidewalks. The City purchases approximately 7,500 cubic metres of concrete every year.

4) **Petroleum prices –** Petroleum prices have increased 20-30% over the last year. This has had a major impact on costs, as fuel represents a high percentage of trucking and equipment operations. Oil is also a major component of asphalt; it has doubled in price in 2006.

The funding needs in LRFP II were identified in early 2004 and reflected prices known at that time. LRFP III reports project costs in 2006 dollars. Due to inflation, most projects have increased between 5% and 10%, depending on their nature. Inflation is estimated to have added more than $200 million to the cost of capital projects required in the next 10 years.

Additional projects resulting from new initiatives or information

When LRFP II was presented, not all asset management plans had been completed. For example, the recently completed asset management plan for the City's parks identified an additional $100 million in renewal needs over 10 years.

Many new projects in the strategic initiatives category have been initiated since LRFP II. They include:

- Replacement of the main library – total increase of $154 million in 2011 and 2012
- Solid waste facility upgrade program – $100 million identified in 2016
- Vulnerable buildings strategy – increase of $19 million over the next 10 years to ensure the City's most needy buildings receive required maintenance
- Urban natural features initiative – increase of $38 million over the LRFP III 10-year period. In LRFP II, staff submitted an estimated 10-year requirement of $8.3 million. They did this without the benefit of the Urban Natural Areas Environmental Study (UNAEES), which was underway. The $38 million in LRFP III is based on a list of specific land parcels recommended for protection.

Affordable housing funding

LRFP II set a target to develop 500 affordable housing units a year for the subsequent 10 years. The average annual capital funding requirement was also estimated at up to $36 million for the 10-year LRFP II timeframe. This estimate was contingent on matching funding from federal and provincial governments. At the time, there was no federal or provincial funding program in place.

Since then, the Province of Ontario introduced the Affordable Housing Program (AHP), signalling the return of the federal and provincial governments to funding for housing after an absence of more than 10 years. The AHP provides federal and provincial funding to support the provision of new affordable housing. The City of Ottawa participated in the pilot phase of this program in 2004 and matched federal and provincial capital funds to support the development of 271 new housing units. In 2006, the AHP was revised, with the Province now fully matching the federal share. Total current AHP funding to Ottawa is $30.16 million, in three streams: home ownership grants up to $10,000 per unit (232 units); housing allowance subsidies up to $250 per month for five years (400 units); and, rental and supported housing grants up to $70,000 per unit for new development (315 units).

The City has been using funds in the Social Housing Reserve to match the AHP funding for the rental and supported housing stream, bringing the total per unit funding up to an average of $90,000 (varies between projects). This additional funding enables the program to reach the low-income targets established in Action Ottawa — 60% of the units must be rented to low-income households. To produce rents suitable to low-income households, Action Ottawa unit rents will not exceed 70% of the average market rent. Funding for 139 of the 315 AHP units was allocated in October 2005. The remaining 176 units will be allocated in 2007, subject to provision of an additional $1.3 million in capital funding in the 2007 budget.

LRFP III also projects the possible continuation of the AHP to 2013. Based on current information, the City can expect funding from the AHP for 80 additional affordable housing units in 2008. If the federal government delivers on its stated commitment in Bill C-48 for an additional $800 million in funding for affordable housing, it is possible the City could receive funding for approximately 90 units per year until 2013. To ensure these funds are able to meet the Action Ottawa low-income targets, the City would be required to contribute additional funding, approximately $18 million over six years. This projection reflects reliance on federal and provincial funding and clearly demonstrates the gap between that funding and the benchmark target of 500 units per year.

Advancement of the capital growth agenda

The capital growth category has decreased since LRFP II. In 2005 and 2006, $1,156 million in growth projects were authorized, compared to $860 million identified in LRFP II. The increase of $296 million was due to projects on the 10-year list advancing their start date. This reduces the capital growth requirement for the next 10 years by the same amount.

In LRFP II, growth projects were identified from the Development Charges Background Study and were not timed to coincide with the receipt of the development charges. The new development charge funding policy, approved by Council in May 2006, provides a basis for determining when budget authority for projects may be put in place. Under this funding policy, the amount of development charges that must be collected for a project to proceed is linked to the timing of the project in the whole development cycle. For projects such as recreation facilities, which are built towards the end of the development cycle, the development charges must have been collected prior to a request for project authority. Other capital projects, such as sewers, could be constructed prior to collecting the entire amount of the development charge. The result of implementing this funding policy is that there are fewer growth projects. The development community has indicated they are supportive of the current Council process.

The development charge funding policy recognizes that certain infrastructure must be put in place prior to the development that generates the development charge revenue. The funding policy was implemented to ensure the City is meeting the demand for capital growth projects, while minimizing the risk of building too far ahead of receiving the development charges to pay for the project.

Change in the net City requirement

	LRFP II (restated) ($ millions)		LRFP III ($ millions)		% Reduction from gross to net	
	Gross	Net	Gross	Net	LRFP II	LRFP III
Renewal of assets	2,399	2,277	2,681	2,483	5%	7%
Growth projects	4,003	820	2,809	862	80%	69%
Strategic initiatives	1,092	841	1,262	1,132	23%	10%
TOTAL	7,494	3,938	6,752	4,477	47%	34%

LRFP II presented the City's net capital costs, which represent the remaining City funding requirement once revenues and development charges are deducted. The change in the net capital costs since LRFP II is shown in the table above.

The change in the gross amount of required capital funding does not always translate into a corresponding change in the amount the City must fund. The gross capital cost has decreased from LRFP II to LRFP III. However, the net amount to be funded from the City has increased. This is primarily due to the change in the types of projects that are proposed under the growth category. Every service eligible for development charge funding has a component funded from development charges and another amount funded by the City. The percentage funded by the City varies with the type of project. For example, some transit growth projects require 85% City funding, whereas road projects only require 5% City funding. The realignment of growth projects has resulted in the decrease of gross costs, but the net City funding requirement remains fairly constant.

The other change in revenue assumptions is in the strategic initiative category. In LRFP II, the inclusion of $403 million in social housing needs, 50% of which was to be funded from other levels of government, reduced the net requirement. The gross social housing forecast has now been reduced to $98 million. New projects added to the list do not have any revenue sources associated with them. As a result, the net City cost for strategic initiative projects has increased.

Overall, the City has to fund an additional $539 million in capital costs due to the change in the projects included in the forecast and the revenue and development charges associated with each.

TEN-YEAR FORECAST OF NEEDS AND REVENUES – TRANSIT SERVICES

As part of the light rail transit discussion, an analysis of transit capital needs and funding was presented to Council. That analysis was built on information available at the time. Information presented here, while very similar, reflects the work that went into creating LRFP III. The forecast has not changed, as transit capital needs can be met within the next 10-year period.

Ten-year forecast of needs and revenues – Transit ($ millions)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Renewal											
Needs	42	64	75	40	35	28	20	66	137	152	659
Funding											
Revenues (fed & prov)	10	18	22	10	9	7	4	19	42	47	188
Federal and provincial gas tax	28	12	39	29	25	21	16	38	35	11	254
Contribution to capital	4	33	14	1	1	–	–	9	60	94	216
Revolving debt	–	1	–	–	–	–	–	–	–	–	1
	42	64	75	40	35	28	20	66	137	152	659
Funding gap	–	–	–	–	–	–	–	–	–	–	–
Growth											
Needs	120	93	135	248	60	112	202	264	503	383	2,120
Funding											
Revenues (fed & prov)	13	14	65	144	11	74	140	142	274	169	1,046
Federal and provincial gas tax	12	37	13	23	27	25	31	20	15	19	222
Federal and provincial gas tax debt	72	15	3	6	8	–	–	34	83	18	239
Development charges	23	20	16	42	10	13	23	30	65	55	297
Contribution to capital	–	–	4	8	–	–	–	3	33	89	137
Revolving debt	–	7	34	25	4	–	8	35	33	33	179
	120	93	135	248	60	112	202	264	503	383	2,120
Funding gap	–	–	–	–	–	–	–	–	–	–	–
Strategic Initiatives											
Needs	12	7	4	2	2	2	2	2	3	20	56
Funding											
Federal and provincial gas tax	10	5	2	–	–	–	–	–	1	18	36
	10	5	2	–	–	–	–	–	1	18	36
Funding gap	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*20*
All categories											
Needs	174	164	214	290	97	142	224	332	643	555	2,835
Funding											
Revenues (fed & prov)	23	32	87	154	20	81	144	161	316	216	1,234
Federal and provincial gas tax	50	54	54	52	52	46	47	58	51	48	512
Federal and provincial gas tax debt	72	15	3	6	8	–	–	34	83	18	239
Development charges	23	20	16	42	10	13	23	30	65	55	297
Contribution to capital	4	33	18	9	1	–	–	12	93	183	353
Revolving debt	–	8	34	25	4	–	8	35	33	33	180
	172	162	212	288	95	140	222	330	641	553	2,815
Funding gap	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*20*

Assumptions for transit services

In building the revenue forecast, a number of assumptions were made, as detailed below:

- Projects that would fall into the strategic initiatives category were not funded if they required funds from contribution to capital. Council will deal with all strategic initiatives projects as part of the City Corporate Planning process.
- Over the 10-year period, provincial gas tax funding is valued at $373 million, $71 million of which will be transferred to the operating budget and $173 million will be used to service previously authorized or planned debt. This leaves $129 million over the 10-year period to be used as cash contributions to capital or for operating requirements as allowed. In this plan, all available provincial gas tax revenues have been applied to capital.
- Over the 10-year period, federal gas tax revenues are assumed to be $468 million, $85 million of which will be used to service previously authorized or planned debt. This leaves $383 million to be used for transit-related capital projects. The full $383 million is forecast to be spent in the 10-year period.
- Tax-supported debt is referred to as "revolving debt," as it replaces paid debt with new debt. The annual amount of tax-supported revolving debt is assumed to be $40 million per year or $400 million over the 10-year period. In total, $180 million of the $400 million in revolving debt is applied to transit.
- New debt that is beyond the amount covered by the current debt servicing budget is assumed to be repaid from gas tax revenues or other non-tax sources. This is consistent with the LRFP II funding strategy.
- It is assumed that growth-related projects identified in 2010 and later (beyond the current term of the Development Charge By-law) that are eligible for development charge funding will be included in subsequent terms of the By-law. In addition, debt repayments on current-term growth projects are assumed to be included in the next term of the By-law.
- It is assumed that revenues and subsidies for transit projects from other levels of government totalling $1,234 million over the 10-year period will continue. Consistent with past practice, if these revenues or subsidies are not secured at the time of project approval, the project will either be deferred or project spending will occur only when the revenues are secured.
- Consistent with Council direction, the minimum reserve fund balance is $50 million for all tax-supported reserve funds, including the transit reserve fund. As contributions to the transit capital reserve are restricted from being spent on non-transit projects, the tax-supported reserve balances will exceed $50 million by an additional $41 million over the 10-year period with the surplus going to the transit reserve fund.

- As approved by Council, contributions to capital have been increased by the Infrastructure Construction Price Index (5.1%) in 2007, but remain constant over the remaining nine-year period.
- It is assumed that the second phase of the Light Rail Transit project will be cost-shared with the provincial and federal governments at one-third for each level of government.

TEN-YEAR FORECAST OF NEEDS AND REVENUES – SOLID WASTE SERVICES

The garbage collection and disposal program is now funded through the garbage user fee. To recognize the unique source of funds for this service, the capital needs and funding have been identified separately.

Ten-year forecast of needs and revenues – Solid waste services
($ millions)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Renewal											
Needs	1	3	1	–	1	–	–	1	–	–	7
Funding											
Contribution to capital	1	1	2	1	1	–	–	1	–	–	7
	1	1	2	1	1	–	–	1	–	–	7
Funding gap	–	*2*	*(1)*	*(1)*	–	–	–	–	–	–	–
Strategic initiatives											
Needs	10	2	5	1	3	1	4	1	3	101	131
Funding	–	–	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–	–	–
Funding gap	*10*	*2*	*5*	*1*	*3*	*1*	*4*	*1*	*3*	*101*	*131*
All categories											
Needs	11	5	6	1	4	1	4	2	3	101	138
Funding											
Contribution to capital	1	1	2	1	1	–	–	1	–	–	7
	1	1	2	1	1	–	–	1	–	–	7
Funding gap	*10*	*4*	*4*	–	*3*	*1*	*4*	*1*	*3*	*101*	*131*

Assumptions for solid waste services (garbage collection and disposal)

- It is assumed there will be an increase in the solid waste fee in 2007 to allow the renewal category to be fully funded. This funding base will be maintained over the next nine years. As a result, costs identified in 2008 will be deferred and funded in future years.
- The strategic initiatives category has not been funded. Council will deal with these initiatives as part of the City Corporate Planning process. If projects in this category are selected for advancement, the garbage fee will be adjusted accordingly.

TEN-YEAR FORECAST OF NEEDS AND REVENUES – ALL OTHER TAX-SUPPORTED SERVICES

The last category of capital needs is for all other tax-supported services and includes roads, bridges, sidewalks, street lights, City facilities, community and recreation facilities, parks, computers and communication technology, vehicles and equipment.

Assumptions for all other tax-supported projects

The assumptions built into this portion are as follows:

- The growth category has been funded first because the City has a legal obligation to fund its share of growth projects; Council also set this as the first priority in LRFP II.
- Interest earnings from the Ottawa Hydro endowment fund are assumed to be $13 million for each of the years 2007 to 2016.
- Ottawa Hydro dividends available for capital purposes, net of the annual $12 million transfer to the operating fund, are assumed to be $2 million in 2007, $7 million in 2008, $6 million in 2009, and $7 million for each of the remaining years 2010 to 2016. Actual dividends will be subject to the financial performance of Ottawa Hydro.
- Tax-supported debt is assumed to be $40 million every year, which represents the value of the "revolving debt" that is retired and reissued every year. The revolving debt limits have been shared between transit and all other tax-supported services.
- Forecast development charge revenues are based on average revenues collected over the past two to five years. Any changes, increases or decreases to projected revenues will affect the timing of the identified infrastructure projects. Identified growth needs are in accordance with the development charge funding policy that City Council approved May 24, 2006.
- It is assumed that growth-related projects identified in 2010 and later (beyond the current term of the Development Charge By-law) that are eligible for development charge funding will be included in subsequent terms of the By-law.
- It is also assumed that interest costs will be incorporated in the rates of future development charge by-laws and that debt repayment on current-term projects will also be included in the next term of the By-law.
- Revenues and subsidies from other levels of government, totalling $119 million over the 10-year period, have been included for a number of projects. Consistent with past practice, if these revenues or subsidies are not secured at the time of project approval, the project will either be deferred or project spending will occur only when the revenues are secured.

Ten-year forecast of needs and revenues – Other tax-supported ($ millions)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Renewal											
Needs	218	245	194	214	192	199	188	203	189	173	2,015
Funding											
Development charges	1	1	1	1	1	1	1	1	1	1	10
Contribution to capital	87	81	80	81	80	81	82	83	79	78	812
Revolving debt	28	26	-	-	31	36	28	-	-	-	149
	116	108	81	82	112	118	111	84	80	79	971
Funding gap	*102*	*137*	*113*	*132*	*80*	*81*	*77*	*119*	*109*	*94*	*1,044*
Growth											
Needs	129	54	45	79	42	78	56	53	61	92	689
Funding											
Development charges	115	46	37	63	35	73	51	47	53	84	604
Contribution to capital	2	2	2	1	2	1	1	1	1	1	14
Revolving debt	12	6	6	15	5	4	4	5	7	7	71
	129	54	45	79	42	78	56	53	61	92	689
Funding gap	–	–	–	–	–	–	–	–	–	–	–
Strategic initiatives											
Needs											
City Corporate Plan	110	93	80	111	72	89	61	41	64	58	779
Housing	20	10	18	11	11	11	11	2	2	2	98
Libraries	1	1	1	1	20	136	1	1	1	1	164
Regulatory	5	5	4	4	3	3	3	3	2	2	34
	136	109	103	127	106	239	76	47	69	63	1,075
Funding											
Revenues	31	12	12	13	11	12	12	6	5	5	119
Development charges	1	8	2	-	-	-	-	-	-	-	11
Contribution to capital/ Dedicated funding sources	10	8	11	5	6	3	4	3	4	2	56
	42	28	25	18	17	15	16	9	9	7	186
Funding Gap											
City Corporate Plan	93	78	66	103	64	83	54	35	57	53	686
Housing	-	2	11	5	5	5	5	2	2	2	39
Libraries	1	1	1	1	20	136	1	1	1	1	164
	94	81	78	109	89	224	60	38	60	56	889
All categories											
Needs	483	408	342	420	340	516	320	303	319	328	3,779
Funding											
Revenues	31	12	12	13	11	12	12	6	5	5	119
Development charges	117	55	40	64	36	74	52	48	54	85	625
Contribution to capital/ Dedicated funding sources	99	91	93	87	88	85	87	87	84	81	882
Revolving debt	40	32	6	15	36	40	32	5	7	7	220
	287	190	151	179	171	211	183	146	150	178	1,846
Funding gap	*196*	*218*	*191*	*241*	*169*	*305*	*137*	*157*	*169*	*150*	*1,933*

- It is also assumed that revenues and subsidies from other levels of government as identified in the Development Charge Background Study will be forthcoming. There will be an increased cost to the City if these revenues are not realized as identified. This may require projects to be deferred until the required funding is in place.
- As per Council direction, the minimum reserve fund balances for all tax-supported reserve funds, including the transit reserve fund, is $50 million. The forecast assumes that the opening balances are at the minimum level required. Any reduction in the opening balance will result in that year's capital program being constrained to return to the approved minimum balances. In order to fund as much capital as possible, there will be no balance in the city-wide reserve.
- As approved by Council, contributions to capital have been increased by the Infrastructure Construction Price Index (5.1%) in 2007 and remain constant for the full 10-year period. Capital expenditures over the 10 years are also in constant dollars.

SUMMARY

The funding gap from the re-stated LRFP II to LRFP III has increased by $683 million. The difference is attributable to the increase of $539 million in the net City tax-supported capital requirement and a decrease of $144 million in revenue assumptions.

Options to reduce the capital funding gap

	LRFP II Re-stated to reflect changes ($ millions)	LRFP III ($ millions)
Gross City tax-supported capital requirement	**7,494**	**6,752**
Less:		
• Revenues	1,708	1,353
• Development charges	1,848	922
Net City tax-supported capital requirement	**3,938**	**4,477**
Less:		
• Contributions to capital from taxation	1,102	1,048
• Revolving debt	400	400
• GST rebate	0	0
• Hydro dividends	50	64
• Hydro endowment fund interest	117	130
• Provincial gas tax	284	302
• Federal gas tax	415	468
• Gas tax-supported debt	365	239
• Debt servicing from gas tax	(196)	(258)
Total needs not met (funding gap)	**1,401**	**2,084**

The funding gaps vary by category of capital and by available funding sources. The following table shows that while funding gaps exist in the renewal of assets and strategic initiatives category, there is no gap in renewal for transit or solid waste.

Category	Capital needs ($ millions)	Funding available ($ millions)	Funding gap ($ millions)
Transit renewal	659	659	–
Solid waste renewal	7	7	–
All other – renewal	2,015	971	1,044
TOTAL renewal	**2,681**	**1,637**	**1,044**
Transit growth	2,120	2,120	–
All other – growth	689	689	–
TOTAL growth	**2,809**	**2,809**	**–**
Transit strategic initiatives	56	36	20
Solid waste strategic initiatives	131	0	131
All other – strategic initiatives	1,075	186	889
TOTAL strategic initiatives	**1,262**	**222**	**1,040**

Options to address the renewal funding gap

Council has approved a debt strategy where progressively less debt is being applied to the renewal of City assets category of capital. Therefore, the only option to address the funding gap in the renewal of City assets category is to increase the contribution to capital for renewal of City assets from increased taxation.

This option has a direct impact on total taxation. Revenues would be contributed towards requirements identified in the renewal of City assets category, as this category has a higher priority than the strategic initiatives category. A 1% increase in taxation will increase the capital contribution by $9.5 million. A yearly increase of $9.5 million in the contribution to capital would reduce the funding gap by $522 million over the 10-year timeframe.

Options to address the strategic initiatives funding gap

Options to address the funding gap in the strategic initiatives category of capital are as follows:

1) Reduce spending in the strategic initiatives category

Council has heavily scrutinized the strategic initiatives category in the past. However, there are growing pressures from the community to undertake projects in this category that respond to needs resulting from changing demographics.

Changes in the development charge legislation have caused this category of capital to increase, as certain service areas are no longer eligible for funding through development charges. Constraining this category will also limit the achievement of initiatives that implement master plans, acquire environmental areas, and advance the City Corporate Plan. The projects identified as strategic initiatives (excluding regulatory projects) total $1,228 million over the 10-year period, $73 million of which has been funded from dedicated sources like cash-in-lieu, housing reserve, development charges, and some gas tax revenue.

When Council sets its priorities in the City Corporate Plan, it can choose whether or not to proceed with capital strategic initiatives.

2) Increase the amount of debt funded from taxes

LRFP III maintains the City policy regarding debt. Debt supported by taxes will be limited to what can be accommodated by the debt servicing envelope. As approved by Council in LRFP II, all other new debt will be funded from gas tax revenues or other non-tax sources. In total, $239 million of non tax-supported debt has been identified as required over the next 10 years.

Of the shortfall identified in the strategic initiatives category, more than $400 million in the 10-year period is eligible for debt financing. Increasing annual debt levels by $9.5 million per year would reduce the funding gap by $95 million, but would require that debt servicing of $31 million be paid from increased taxation over the same 10-year period.

The City's debt is approximately one-third of the level the Province has set as its debt limit. While the total value of debt financing must be managed in order to maintain the City's credit rating, modest increases to the amount of tax-supported debt are presented as an option because the debt enables more capital projects to be achieved within the 10-year timeframe. As the change in the total debt forecast to be authorized has decreased significantly since LRFP II, the risk of having the credit rating reduced is diminished. Council will consider the options identified above as it sets the guidelines for drafting the 2007 to 2010 budgets.

FINANCIAL IMPLICATIONS AND AFFORDABILITY OF THE OFFICIAL PLAN, INFRASTRUCTURE MASTER PLAN AND TRANSPORTATION MASTER PLAN DOCUMENT 4

OFFICIAL PLAN (OP)

Official Plan and Related Programs

The Official Plan guides, at a high level, all planning and development activities in Ottawa, and ultimately shapes how the city will accommodate growth. The policy direction of the Official Plan will therefore also guide the direction and priorities set within each of the Infrastructure Master Plan (IMP) and Transportation Master Plan (TMP).

Implementing the Official Plan requires the City to undertake tasks and programs that may have budget pressure implications for the City. In accordance with the *Planning Act*, the City is also required to undertake certain on-going tasks to keep the Official Plan current. Many of these also carry budget implications. The Official Plan policies that require funding by the City (as opposed to being funded by developers/private sector) are described below. Budget implications resulting from implementation of the IMP and TMP are discussed in later sections within this document.

On-going Tasks

The first Official Plan approved by City Council for the new amalgamated City of Ottawa was in 2003. The *Planning Act* requires that the Official Plan be reviewed every five years, hence the current 2008 Official Plan Review which will be approved in 2009. To do a review of the Official Plan requires consulting dollars for certain studies and public consultation, as well as funding to defend the amended Official Plan at the Ontario Municipal Board. This operating pressure is estimated at $500,000, occurring every five years, not annually. The on-going five-year review of the OP is funded from tax rates.

The *Planning Act* also requires that all secondary plans within the Official Plan found in Volumes 2A, B, and 2C, also be reviewed every five years. This has yet to be done for those secondary plans that were included in the Official Plan in 2003, of which there are nearly 30, some of which go back two decades from former municipalities. New secondary plans are also being included in the Official Plan every year, resulting in an increasing number of secondary plans to be reviewed. This task is estimated at $150,000 every year, but the number of secondary plans to be reviewed in each year will vary depending on the complexity of the plan to be reviewed and the degree of change required, if any. These reviews will be an on-going activity that need not coincide with the five-year review of the Official Plan. As the number of secondary plans increases, this dollar figure may also increase. Since the review of secondary plans has not been identified as an operating pressure in the past, it has been singled out here as a separate cost from the five-year OP review. Like the OP, these secondary plan reviews will be funded from the tax rate.

To provide current data and statistics for the Official Plan, there is an on-going need to monitor growth, including residents, housing, intensification, employment, retail, etc.

Although primarily done by staff, this activity also requires the on-going purchase of data from Statistics Canada, as well as the use of specialized consultants who undertake studies beyond those done by staff. This operating pressure is expected to be $50,000 annually, and would be funded from the tax rate.

Community Design Plans

Community design plans (CDPs) are the primary means by which the Official Plan's intensification policies will be implemented. The Official Plan designates which areas should have CDPs prepared. These areas are based on where intensification is expected and/or proposed, and fit within six categories, (1) Developing Communities (primarily greenfields), (2) Town Centres, (3) Mixed-Use Centres (major transit stations are included here), (4) Arterial Mainstreets, (5) Traditional Mainstreets, and (6) Villages. Since amalgamation, 22 CDPs have been approved by City Council, and nine are on-going. Over 40 remain to be completed. The cost of developing a CDP varies considerably from one to the next. Some require extensive consultant studies, while others may require little or none, and therefore the cost could vary accordingly from year to year, depending on which CDPs were being undertaken and when, and the staffing available to conduct them. The average annual cost of CDP studies is estimated at $350,000.

CDPs are considered to be eligible for development charge funding based on the items identified in the background study. However, the growth share of the cost of the plan may vary. A "Greenfield" CDP would have a higher growth-related funding percentage, as no development existed on the land prior to conducting the CDP. A CDP review in an existing urban area or rural village, if it is conducted to facilitate and manage future intensification, is also growth-related. In this case, the growth share would be based upon how much the future redevelopment is growth-related, versus how much of it is based on improving and/or rehabilitating the existing urban or village fabric and its infrastructure.

Development charges, tax rate or user rates, and/or the developer of a project as noted above, may fund the "above- or under-ground" implementation of CDPs, depending on their location and context.

Design Priority Areas

Design Priority Areas are closely related to Community Design Plans. The 2008 Official Plan Review (Section 2.5.1) has introduced this term as a focus for coordinating urban design efforts and expenditures in support of the Plan's objectives to direct growth to areas within the six categories noted above, and to achieve the overall design provisions of the Plan. Design Priority Areas are primarily the mixed-use CDP areas where public and private development, as well as community partnerships can contribute to outcomes that enhance the pedestrian environment and the unique character of each community, particularly those undergoing intensification.

Urban design elements to be implemented would include pedestrian amenities, streetscape components, building facades, site improvements, public art, lighting, signage and landscaping.

The cost of these elements would be shared with the private sector, and would generally be implemented at the same time that other rehabilitation work in the right-of-way was already being implemented. Current examples of this "piggy-backing" of street improvements include the reconstruction of Wellington Street West, King Edward Avenue north of Rideau, and Bank Street north of Somerset, which feature wider sidewalks and upgraded finishes and furnishings.

Rehabilitation and reconstruction type projects are generally funded from tax and user rates. If a portion of the proposed capital work relates to intensification and future growth, its cost could be partially development charge-funded. If urban design elements were incorporated into a Greenfield development, they would be eligible for the highest percentage of development charge funding. The cost of this program is estimated to be $500,000 per year. The funding is divided between growth and non-growth sources, and the split between these sources varies from project to project.

Natural Heritage Systems

The Provincial Policy Statement requires that Official Plans identify and protect Natural Heritage systems, comprised of significant wetlands, woodlands, valleylands, wildlife habitat and areas of natural and scientific interests, including linkages by natural corridors. In the City's Official Plan, the Natural Heritage system is found in a variety of OP designations, including Significant Wetlands, Natural Environment Area (NEA), and Rural Natural Feature. Council has also adopted a policy to protect Urban Natural Features (UNF). For two of these designations, Natural Environment Area and Urban Natural Feature, the OP contains a policy that the City will acquire the lands in these designations if approached by a willing seller.

Staff estimate that $65 million dollars may be required over the time frame of the Official Plan to acquire such lands. This requirement relates to designations and policies already in the approved OP. That is, the OP review is not adding additional NEA or UNF designations. This dollar figure will fund the acquisition of approximately one third of NEA and UNF land outside the Marlborough Forest by the end of the 20-year planning period. (Note: the UNF strategy will be reviewed in March 2009 and may change). Funding sources for these acquisitions are property taxes, special levies, or the limited possibility of grants.

These areas, many of which are already in City ownership, entail some ongoing operating costs, primarily to ensure that trees do not fall on abutting private property. In addition, Management Plans are advisable for the larger NEA areas (e.g. Marlborough Forest, Carp Hills Forest). In several cases, these areas already have management plans and only updates are required. Management Statements are desirable for some of the Urban Natural Features. Staff estimate that $240,000 will be required over the next 20 years for the development or update of Management Plans or Statements. Property tax is the source of funding for Environmental Management Plans.

Provincial guidelines and OP policy require that Subwatershed Plans be prepared as the basis for planning new development areas (urban areas or villages). These plans identify natural areas to be protected and provide recommendations to mitigate the negative impacts of development, and guidelines for stormwater management to protect surface and groundwater. The cost of subwatershed plans varies with the size of the subwatershed and the complexity of the issues. This cost is estimated at $300,000 annually.

Environmental Management Plans are prepared where further detail is required, e.g. for a development area in a village. This cost is approximately $50,000 annually. Because stormwater management is the focus of these plans, they will be funded from the wastewater rates. Subwatershed Plans cover a broader range of issues and are funded from property taxes.

One-time Tasks

There are several one-time tasks required by the current Official Plan. The Cultural Heritage Landscape Study is expected to require outside funding for consultants due to the lack of expertise on staff to conduct it. The funding requirement is approximately $350,000 in 2010 and will be funded by the tax rate.

The other tasks can be undertaken by existing staff: 1) updating the Agricultural Resource Boundary after the Province reviews LEAR (Land Evaluation and Area Review), 2) reviewing the Mineral Resource designations in the Official Plan, and 3) amending the Site Plan Control By-law to include design review in response to the Bill 51 amendments to the *Planning Act*. The three preceding tasks will be undertaken by existing staff.

Cost of OP Projects & Tasks, 2009 - 2031

Policy/Task	**Total Cost (Official Plan)**	**Funding Source** **Tax Rate**	**Funded Source** **As noted**
Review of Official Plan (OP)	$500,000	Every five years	N/A
Review of Secondary Plans	$150,000 (subject to increases)	Annually	N/A
Monitoring Growth	$50,000	Annually	N/A
Community Design Plans (CDPs)	$350,000	Annually, funded by tax rate, DC's, and/or the developer of a project	
Design Priority Areas	$500,000	Annually, split between tax rate-funded and DC-funded	
Natural Heritage Systems	$65 million	Funding sources for these acquisitions are from property taxes, special levies, or grants when available. Funding sources to acquire future UNAs are under review with a report to tabled in March.	
Management Statements -- Urban Natural Features	$240,000	$240,000 required over the next 20 years	N/A
Subwatershed Planning & Enviro Mgmt Plans	$300,000	Annually	N/A

One-time Task: Cultural Heritage Landscape Study	$350,000	Funding in 2010	N/A
TOTAL	**$98.5 million**		

INFRASTRUCTURE MASTER PLAN (IMP)

In Annex 1 of the Infrastructure Master Plan, major water, wastewater and stormwater capital works to service Official Plan estimates for population, households and employment to the year 2031 are estimated to cost in the order of $1.6 billion. Of this, costs directly attributable to growth total $932 million.

Cost and Funding Source for IMP Projects to Implement the Official Plan, 2009 - 2031

Facility Type	Total Cost **($million)**	Funding Source Water Rate **($million)**	Funding Source DC **($million)**
Major Water Projects	$211.6	$83.2	$128.3
Major Sewer Projects	$67.4	$4.9	$62.5
Stormwater Management Projects**	$229.6	N/A	$229.6
Community-specific Works	$25.1	N/A	$25.1
Intensification-support Programs ***	$709.0	$627.2	$81.8
Village Water and Wastewater	$43.9	$5.7*	$38.2*
Plant Upgrades Water Sewer	 $74.0 $283.4	 N/A N/A	 $74.0 $283.4
Studies	$25.4	$16.3	$9.1
TOTAL	$1,669.5	$737.3	$932.1

*Where projects include development charge funding, developer funding or local improvement charges, and the proportion of each has not yet been determined, all funding is indicated as development charges in the above table.

** Does not include stormwater retrofit program or other piped solutions. The relevant funding source will be determined once this program has been developed.

*** For investigation, monitoring and rehabilitation programs (only in intensification areas) to support the capacity management strategy.

Subject to Council approval, the updated Infrastructure Master Plan will provide the basis for ongoing annual capital and operating budget preparation, the Long Range Financial Plan and the Development Charges By-laws.

Funding sources for water, wastewater and stormwater infrastructure include:

- Water and sewer rates;
- City-wide and area-specific development charges;
- Stormwater development charges (for individual ponds and works);
- The tax rate, when needed, in conjunction with special government funding programs when they are available (e.g. Green Municipal Infrastructure Funds, Federal Infrastructure Program, Ontario Builds);
- Special tax levy.

The majority of the projects in the Infrastructure Master Plan which are included in the 2009 to 2019 time period ($763 million) have already been funded or included in the draft 2009-2018 capital forecast of the 2009 Capital Budget.
Of the $1.6 billion of works listed in the Infrastructure Master Plan:

For the period, 2009 – 2019:

- $413 million is related to the sanitary portion of intensification-support programs and works which address both level of service issues for existing residents and intensification requirements ($51 million is attributed directly to intensification);
- $176 million relates to major water projects that are required for reliability and growth in areas outside of the Greenbelt;
- $64 million is required for major wastewater works to support intensification outside the Greenbelt and for greenfield areas;
- $25 million is required to support water and wastewater projects that are community-specific. These are primarily for new areas outside the Greenbelt.
- $37 million is required for village water and wastewater projects; and
- $48 million is attributed to the Britannia water purification plant upgrade.

For the period, 2020 – 2031:

- $386 million is estimated for the sanitary portion of annual rehabilitation programs in intensification areas to address levels of service for existing residents and to support intensification. Of this total, about $36 million is attributed directly to intensification;
- $35 million is for water projects to accommodate growth outside the Greenbelt and in greenfield areas;
- $4 million is for wastewater projects to accommodate intensification outside the Greenbelt and in greenfield areas;
- $7 million is required for village water and wastewater projects;
- $26 million is attributed to the Lemieux water purification plant upgrade and $283 million for upgrades to the R.O. Pickard Treatment Plant. Whether upgrades of this magnitude will be required will be the subject of further study;

For the period, 2009 – 2031:

- $230 million for stormwater management ponds and associated works such as erosion control. (This is dependent upon development of particular lands and may not be a complete list).

It should be noted that water rehabilitation projects in intensification areas are not included. Issues such as fire flow, pipe deficiencies and reliability determine the priority of watermain rehabilitation projects. Greater densities can be accommodated without requiring changes to

the existing water system. Local watermains are sized to provide for fire protection; normal user water demand is not the controlling factor. Fire flow requirements are based on land use or zoning. Therefore, unless the fire flow requirements used to determine the pipe rehabilitation or improvement project result from a zoning change, the pipe size will be adequate. When exceptions do occur, there are options to change a development to reduce fire flow requirements or to undertake required capital improvements if they prove to be cheaper.

With older sewer systems, on the other hand, system capacity may not always be available to accommodate intensification without system changes and/or changes to the timing and/or scope of specific sewer rehabilitation projects. The City's sewer investigation and rehabilitation programs seek to identify and replace and/or rehabilitate sewers in areas of the greatest known flooding. These may not coincide with intensification areas having density targets or with specific infill locations. There may also be a need for specific works to support intensification in certain locations in addition to changes in scope and/or timing of rehabilitation program works so that intensification does not contribute to a reduction in service levels for existing residents.

For sewer-related programs in intensification areas, only a small portion of the program is attributed to growth, given that the existing population base is considerably larger than anticipated growth levels. For example, of the $709 million estimated cost for sewer-related programs supporting intensification, only $82 million is attributed to growth. While a target of 40% of the city's growth has been established for intensification, the additional population and employment growth is small relative to existing levels within these areas. As well, many sewer-related projects in intensification areas will be required irrespective of growth. However, they will also provide capacity for intensification to take place without reducing the level of service for existing residents. If there is insufficient funding from water rates and development charges to support investigation and rehabilitation programs, intensification in some areas may not be able to proceed as it may impact on the level of service for existing residents and/or impact the environment of the Ottawa River.

Many priority water projects are driven by both reliability concerns and the need to accommodate growth. Similarly, priority wastewater projects address the capacity for growth and intensification, and also address level of service requirements for existing users. It will be necessary to undertake some water and wastewater projects and programs included in the Infrastructure Master Plan irrespective of the need to accommodate growth but the scale of these projects would be adjusted accordingly. In addition, some major water and sewer works projects are required solely to support growth. These are primarily located in areas outside the Greenbelt (See Table re. "Major Water Projects" and "Major Sewer Projects".)

Adoption of the Infrastructure Master Plan may reduce major water, wastewater and stormwater infrastructure requirements as some policies promote greater emphasis on programs intended to improve the ability of existing systems to service the population. Such programs include: water efficiency, water loss, flow removal, and green infrastructure.

The implementation of these policies has not yet been accounted for in the proposed capital works list. Some policies also encourage the City and the development community to work together to improve the capacity of the existing systems through such means as on-site retention of stormwater and compensation projects, where this is not possible. While the financial impact of this plan and policies cannot be measured at this time, it is expected that cumulatively they will reduce or delay the need for some capital works within the 2009 to 2031 time period. An example would be delaying the need for treatment and purification plant expansions.

Accommodating growth in greenfield locations necessitates extension of road, water and sewer services. This increases the amount of capital infrastructure and, subsequently, life-cycle costs for the City. The same amount of growth achieved through intensification does not increase the amount of infrastructure but still generates potentially the same amount of tax revenue. Thus, not only are capital costs lower for intensification, but operating costs are neutral and revenue is increased. By adjusting and enhancing rehabilitation and other capacity-building programs to accommodate intensification in existing infrastructure systems, overall City costs associated with growth are far less than would be the case to service equivalent development in greenfield sites by expanding the urban boundary. (See the summary on the Hemson report at Document 5).

The Infrastructure Master Plan also includes policies and implementation plans regarding management of groundwater resources. The rural working groups expressed concern that although they supported the direction of the Official Plan and Infrastructure Master Plan policies, the City needed to move more quickly in implementing the policies and to increase resources in this area. Within the $25 million in studies supporting water and wastewater infrastructure growth projects, $7.8 million is for rural servicing, groundwater studies such as groundwater and aquifer characterization studies, monitoring of wells and phase 2 of the groundwater management strategy.

Means of Funding the Growth

Of the $1.67 billion of costs associated with water, wastewater and stormwater works that will support Official Plan's population and employment estimates to 2031, $737 million will be funded through water rates and $932 million will be funded through development charges. The growth component of infrastructure projects can be funded 100% by development charges. User rates normally cover the non-growth component of these projects. Money from both reserve funds should be available to pay for these capital projects, as well as the operating and maintenance costs.

From 2004 – 2007, there was a shortfall in revenues from development charges of $68 million for water and sewer growth-related projects (projected needs for 2004 – 2007 were $84.6 million and revenues were $16.5 million). This resulted in the deferral of some projects. As well, lack of funding reduced the planning and EA studies that could be undertaken prior to 2011 and all projects had to be pushed out to future years to match the amount of money estimated to be available in the accounts. For the water account, only a small amount of money would be available for DC-funded projects prior to 2011. Ultimately, this caused a situation where the 2003 Official Plan and 2003 IMP were adopted, but water and sewer projects intended to support the OP were unfunded and could not be undertaken at the planned point in time to support the OP growth projections.

The water and sewer accounts in the development charges reserve are permitted to go into deficit. However, if water rates and development charges are not established and maintained at levels that will supply the appropriate level of revenue to undertake growth-related works, compensating funds should be provided to the reserve funds through other means such as taxation or through senior government funding programs. For example, compensating funds from other sources should be provided with any changes in levels of development charge funding such as exemptions or transition provisions. Otherwise, it may not be possible to accommodate future greenfield growth and levels of service will be reduced for existing residents in intensification areas. The impact of Council's exemptions to DC's (e.g. places of worship, downtown DC exemptions, etc) will be discussed through a separate report on the DC By-law update exercise, slated for the February 17th Corporate Services and Economic Development Committee meeting.

Subject to Council approval, the updated IMP will provide the basis for ongoing annual capital and operating budget preparation, the Long Range Financial Plan and the Development Charges By-laws. However, the City's ability to pay for projects will influence the identified priorities and the rate of implementing them.

TRANSPORTATION MASTER PLAN

The implementation of the 2008 Transportation Master Plan (TMP), approved by City Council on November 26, 2008, will cost approximately $8.36 billion over 22 years in new infrastructure and services, including $7.24 billion for capital costs and $1.12 billion for operations and maintenance as shown in the following table.

Cost and Funding Source for TMP Projects to Implement the OP

Facility Type	Capital Cost ($ millions)	Operating & Maintenance Cost ($ millions, net of revenues)	Total Cost ($ millions)
Rapid Transit	4,727	900	5,627
Transit Priority	260	8	268
Bus garages	120	30	1520
Transportation Demand Management	25	--	25
Roads Includes walking and cycling facilities	2,112	180	2,292
Total	**7,244**	**1,118**	**8,362**

* City's financial model for the TMP assumes that two thirds of the required funding will come from the Provincial and Federal governments. The City's one-third share will come from sources listed below (e.g. gas tax, etc.) during the first 10 years of the plan.

These sources and new financial tools will be required as a funding source for the remaining 12 years of the TMP.

Subject to Council approval, the updated TMP will provide the basis for ongoing annual capital and operating budget preparation, the Long Range Financial Plan and the Development Charges By-laws. However, the City's ability to pay for projects will influence the identified priorities and the rate of implementing them.

The rapid transit implementation priorities indicates the 2008 TMP will total $3.03 Billion in spending for Phase 1, of which $1.68 Billion is required for the first increment. These costs are in 2007 dollars and do not include the incremental cost of land purchases. In order to determine the ability of the City to fund the priorities, a high level model was built that forecasted the sources of capital funding available for Transit for a 10 and 20 year timeframe.

The funding sources available for Transit capital include:

- Provincial gas tax (assumed not to increase over current levels)
- Federal gas tax (assumed not to increase over current levels)
- Development charges (assumed to increase by 50%)
- Transit levy contributions to capital and debt servicing (increased annually by the rate of inflation, as per policy)
- Provincial bus replacement program revenues (assumed to continue).

Revenue from fares and transit levy contributions are expected to continue to be the main funding sources to support transit operating and maintenance expenses. However, it is assumed that significant operating and maintenance efficiencies and associated cost savings will result from the proposed rapid transit investment.

The model also assumed that the Federal and Provincial governments would each contribute one-third of the funds required for the Transit Plan, which in the first increment would be valued at $560 million from each level. The Federal government's contribution would be coming from the Building Canada fund, which is planned to run until 2015.

Under these assumptions, the City can afford from $560 million to $700 million of funding for the Transit Plan over the next 10 years. Combined with an equal contribution from both levels of government this provides for a total plan of between $1.68 billion and $2.1 billion. The difference between the high and the low of what the City can afford is the difference between how much debt is used, but at either level there is no requirement to increase taxation, as additional debt servicing costs will be paid for through existing sources of revenue. The following table provides a breakdown of the City financing for the first increment.

Transit Infrastructure Financing (Increment 1)

City Financing	$M
Reserves	40
Investing in Ontario	10
DC Cash	20
DC Debt	90
Federal Gas Tax - Cash	40
Federal Gas Tax - Debt	283
Provincial Gas Tax - Cash	-
Provincial Gas Tax - Debt	50
City Debt - debt servicing funded from future taxes	167
Total	**700**

In addition to the above, an investment strategy will be undertaken to outline how the City can best leverage revenue to assist with the transit capital investment. This will include identifying potential new revenue sources and identifying the timing and magnitude of funding gaps that might arise over the full life cycle of the investment, followed by an implementation plan that clearly identifies how the City will fund transit over the long term. This process is underway and Staff will report back to Council on the findings of this assessment in the first half of 2009.

The roads identified in the TMP as being required in the next 10 years have been included in the draft 2009-2018 capital forecast in the 2009 Budget. Growth roads are 95% funded from development charges. The total of $791 million in road infrastructure will require City funding of $40 million over the next 10 years. Current development charge receipts for the road component are approximately $40 million per year, but Council's Development Charge funding policy allows the roads component to be managed on a cash basis. As spending lags behind when the authority is approved, this means that Council can approve capital authority funded from Development Charges above the amount actually received as long as the Development Charge account does not go into a deficit. This will allow these projects to be authorized as indicated in the plan.

DEVELOPMENT CHARGES AS A REVENUE SOURCE

Development charge rates are established by projecting growth, determining the increase in capital infrastructure necessary to service that growth, estimating the costs of infrastructure, apportioning the costs and determining the unit charges, which must be recovered from development to provide the necessary revenue to finance the growth-related expenditures. The general principle underlying development charges is to ensure that growth pays for growth. However, there are several provisions in the current Development Charges Act that appear to be inconsistent with this principle. For example, the inclusion of ineligible services such as waste management, the 10% mandatory discount that must be applied to some services such as Public Transit, recreation, libraries, etc., the service level calculation and the treatment of capital grants under the Act.

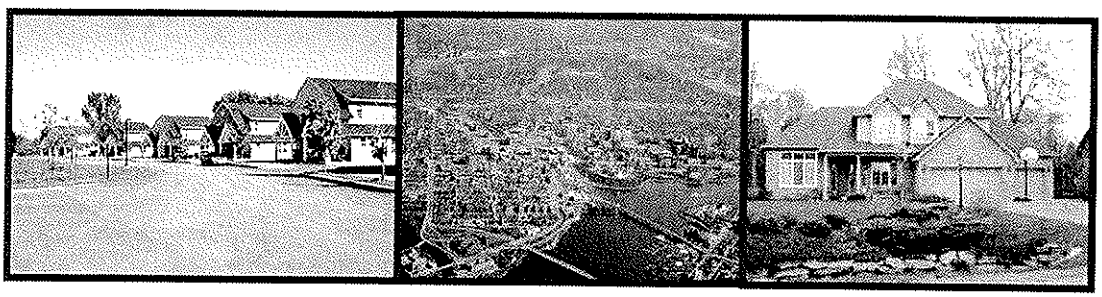
When a non-statutory exemption is granted, there is a real loss in revenues and this shortfall must be funded from another source, specifically user rates and property taxes. In other words, providing discretionary exemptions produces a revenue loss and is therefore an implicit expenditure. The upcoming approach being proposed for all of the non-statutory exemptions will be to discontinue the waiver unless it promotes the use of existing infrastructure (e.g. rehabilitation and redevelopment of brownfields areas), or they are considered sufficiently desirable (e.g. non-profit housing) to warrant a tax-based subsidy.

There are several other factors the City is facing that negatively impact revenues such as decreasing population and employment growth, unstable macro-economic conditions and changing housing consumption patterns. The result is a projected gap or shortfall between revenues and expenditures, which will result in decreasing reserve fund balances over time. The timing of projects within the Official Plan, IMP and TMP must be reviewed and adjustments made to ensure that the infrastructure will be built when required, based on population triggers in order to avoid potential revenue shortfalls. Cash flow modeling will be critical in evaluating potential projects with only the most pressing infrastructure requests receiving funding since slower growth will translate into a reduced requirement for growth-related capital expenditures.

DOCUMENT 5

COMPARATIVE MUNICIPAL FISCAL IMPACT ANALYSIS

Ottawa



HEMSON Consulting Ltd.

January 2009

EXECUTIVE SUMMARY

- The City of Ottawa is currently undertaking an Official Plan review. In the context of this process City Council passed a motion stating:

  BE IT RESOLVED That section c under Transformation Priorities be amended by adding a new point to read as follows,
  "10. Following the principles of Ottawa 20/20, ensure the review of the Official Plan includes:
  a) The impact on the operating and capital budgets of development in each of these areas: inside the greenbelt; within the urban boundary outside the greenbelt; within villages; and in rural Ottawa outside of village boundaries,

  b) A review of the effective measures to direct growth."

- The focus of the analysis was on the net costs of levy-supported municipal services provided to residential development in the four location categories.

- No locational analysis was undertaken for the non-residential development as this sector is relatively fixed in terms of location decisions.

- Rate-based services, in particular water and wastewater, were not analysed. While the capital cost of providing these services varies by type of location, the initial cost is largely borne by developers. Within existing urban areas water and sewer infrastructure costs to service new development can vary widely depending upon factors such as the age, condition and capacity of existing facilities.

- Given the long-term nature of an Official Plan review, a two-stage, top-down allocation approach was used for the analysis. The first stage involved the allocation of the net costs of levy-funded services between the residential and non-residential sectors. The second stage involved the allocation of the residential component of net costs between the four categories of location.

- To undertake the allocation analysis a wide range of factors (or measures) was used. The selection was based on the best available measures of the use or benefit of specific municipal services.

- Stage 1 of the analysis indicated that the residential sector accounts for 69.3% of the net expenditures (operating and capital) of levy-funded services. The non-residential sector accounts for 30.7%. In relation to Weighted Assessment (including amounts for properties subject to Payments-in-Lieu) the residential sector represents 65.5% and the non-residential sector 34.5%. The relationship between shares of net expenditures and shares of weighted assessment indicates there is some subsidization of the residential sector by the non-residential sector.

- Considering only net expenditures development inside the Greenbelt is somewhat less expensive (about 6% per capita) compared to the City-wide average. In contrast, the cost of providing municipal services to development in rural areas is significantly higher (about 15%) than the City-wide average. The cost of providing services to urban development outside the Greenbelt is also about 6% per capita higher than the City-wide average.

- However, when the net costs of providing municipal services and the assessments that new developments generate are considered together the net results by location change. Development inside the Greenbelt continues to demonstrate a "positive" net result. Urban development outside the Greenbelt comes close to meeting net expenditures. For rural areas, because new houses tend to generate high per unit assessments, the comparatively high costs of providing municipal services are in the case of scattered development largely offset although less so in village development. The table below summarizes the results.

Executive Summary Table

ESTIMATED NET VARIANCE BETWEEN POTENTIAL EXPENDITURES & PROPERTY TAXES BY LOCATION

	Urban		Rural	
	Inside Greenbelt	Outside Greenbelt	Villages	Scattered
Projected Expenditures Per Household	$2,398	$3,393	$3,729	$3,628
Projected Taxes Per Household	$3,434	$3,323	$3,227	$3,467
Difference per Household	$1,035	($70)	($502)	($161)
Difference per Capita	$452	($25)	($173)	($56)
Ratio of Tax : Expenditure	1:0.70	1:1.02	1:1.16	1:1.05

- Given the degree to which analysis of this type is influenced both by modelling assumptions and data quality, it is important to treat the study results more as indications of the comparative situation rather than as measures of absolute differences.

APPENDIX F
DEVELOPMENT CHARGE ECONOMIC IMPACT MATERIAL

APPENDIX F - DEVELOPMENT CHARGE ECONOMIC IMPACT MATERIAL

1. Introduction

Probably the most significant policy issue and emerging trend faced by many Ontario municipalities, relates to the widespread impetus to increase development charge quantum. This is in response to:

- high levels of infrastructure construction cost inflation, beyond coverage by the prescribed DC index;
- rapid growth and increasing needs for service, much of which is not coverable by DCs (i.e. the needs of exempt development, ineligible costs and services and expenditures beyond the historical service level cap or which partially benefit existing development). This, in turn, restricts municipalities' ability to finance additional DC reductions.

This need should, however, be considered in the light of the recessionary conditions and world-wide financial turmoil, which have emerged over the past six months and beyond. These circumstances impact growth potential in terms of housing and industrial/ commercial development. They also have the potential to impact directly on municipal revenue sources and short-medium term fiscal prospects. As a result, where significant development charge increases are proposed, careful consideration should be given to their potential impact on development activity in the circumstances involved, in order to determine appropriate transition policies.

2. DC Quantum

The following summarizes the results of previous research conducted by Watson & Associates concerning the potential impact of (increased) development charges on economic development.

1. Many municipalities impose the full residential DC and, in some cases, discount or exempt only a portion of their non-residential (i.e. industrial/commercial) charges, in the interests of attracting more of such development. Their policy position, implicitly or explicitly, is that the rate of industrial and/or commercial development may be impacted by the quantum of their DCs. Their actions suggest that this is not the case with residential development, or at least that the "growth pays for growth" philosophy is expected to be more operative in that case.

Residential Development Impacts

2. A change in DC quantum is thought by some to reflect itself directly and automatically on house prices. However, in a strong market, house prices reflect demand pressures, more than a simple cost recovery formula. DC increases are absorbed in pricing (and/or land purchase), but may not always be a significant determinant of such pricing, due to overall market dynamics. However, in poor markets, house prices may be unable to fully absorb DC increases. As a result, DC increases may impact profits and/or construction activity. Over a longer period of time, DC increases may result in compensating land price decreases, where the selling price of the final product cannot be increased sufficiently. This is particularly the case where there is a high "value-add" to the undeveloped land value.

3. The potential impact of DC quantum shifts on the residential housing market is also impacted by the competitive environment and by the price and nature of the housing involved. For example, Ottawa imposes the highest development charges in Eastern Ontario (marginally higher than Kingston); however, its national presence, land costs, building forms, the planning process, ease of construction, tax rates, municipal and commercial service levels and lifestyle vary significantly within this market and affect demand. It is the cumulative effect of these socio-economic forces which determines whether an addition to Ottawa's residential DCs will diminish its rate of residential growth. This, in turn, raises the question of whether a small reduction in residential growth, resulting from an increase in DC quantum which better equips the City to fund its growth-related servicing needs, is an acceptable trade-off.

4. Housing projects which are geared to the rental market, affordable or assisted housing, or sites which are expensive to service or remediate, could be impacted by a significant increase in DCs. For example, a DC increase of $10,000 is only 5% of a $200,000 housing price, but at the margin, that may be the difference between an acceptable financial return and one which is not. Thus, there may be housing projects which are made less feasible as a result of a significant increase in DCs.

5. When one plots DC quantums against residential development activity amounts in different municipalities, an indirect cause and effect relationship is not apparent. That is, in part, because municipalities which are attractive, high growth areas, are able to impose high DCs as part of maintaining high service levels. Municipalities with lower market appeal tend to moderate DCs in the hopes of encouraging more growth. However, the primary determinants of the amount of residential development in a municipality generally relate more to serviced/zoned land availability, amenity/lifestyle, access to job opportunities, development industry focus, etc.

Industrial/Commercial Development Impacts

6. The decision as to whether or not Ottawa should establish full cost recovery industrial/office/institutional development charges and, if so, how high they should be and whether they should vary between industrial and commercial uses, is an important policy issue. Essentially, it involves a trade-off between increased capital contributions (which must otherwise come from property taxes and/or user rates) and a potential deterrent of indeterminate size to new and expanded development activity within the City.

7. The potential impact of DC quantum shifts on the industrial and commercial market is also impacted by the competitive environment and by the price and nature of the development involved. Land costs, building forms, the planning process, ease of construction, tax rates, municipal and commercial service levels and lifestyle also vary significantly between those two markets. It is the cumulative effect of these socio-economic forces which determines whether a significant increase to Ottawa's industrial and office DCs will diminish the rate of growth. Since DCs provide a one-time contribution, while property taxes establish an on-going revenue stream to municipalities, this, in turn, raises the question of whether a reduction in industrial and office development, resulting from an increase in development charges, improves or diminishes the City's financial position.

   Industrial and commercial properties are generally acknowledged as paying more in property taxes than the cost of the municipal services they consume. It is this net positive contribution to municipal revenues that helps support the services and programs the City provides to its residents. The long-term fiscal sustainability of such municipal services is therefore benefited by maintaining a strong industrial and office property tax base.

8. Municipalities are generally more concerned with attracting industrial/office development, than with residential development, because the former brings local jobs, commercial services, no increased need for some municipal services, economic stimulus and more highly taxed assessment.

   In this regard, industrial and head office development is often given added attention, in comparison with retail and service sector employment, which is generally "population-related". The latter is more captive to urban population centres than industry (for example, the automotive industry, which has located plants in smaller communities such as Alliston, Cambridge and Ingersoll).

9. Industrial site selection analysis generally focuses on non-financial matters, such as transportation access to markets, proximity to labour and suppliers, quality of life/image/

amenity and the suitability of the available real estate. Financial matters are often less important and relate more to land and construction cost, as well as property tax and utility rate costs. DCs are a relatively small component of the latter, but at the margin, can have an impact on a cumulative basis, particularly where property taxes are relatively high.

10. "Market optics" can play a role in a municipality's ability to attract industrial/commercial development. This often relates more to planning approval matters, but having discounted DCs, can be part of sending out a favourable message – once again at a price.

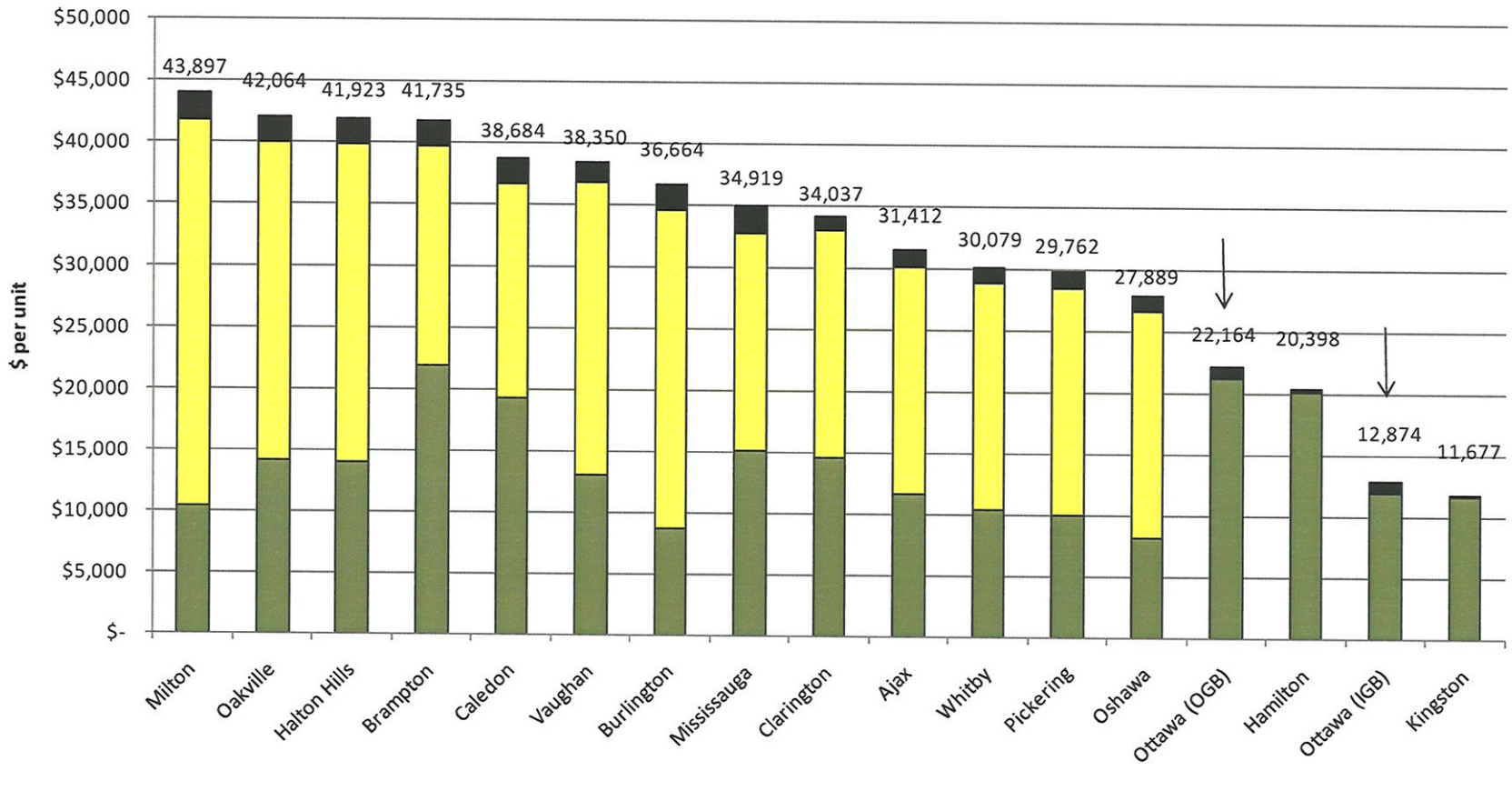
11. The bar graphs which follow compare Ottawa's various development charges with those of a broad GTA sample including Kingston and Hamilton, as of April 1, 2009. It is apparent that the existing City's charges are competitive and at the lower end of the sample. A number of the municipalities involved will be updating their DCs in the next few months.

12. Some of the ways that are sometimes used to moderate the negative impacts of non-residential development charges include transition measures such as:

- "grandfathering" certain types of previous approvals;
- providing a "grace period" for the introduction of the charge;
- phasing in the increase in the charge over a period of years;
- leaving the indexing of the charge as a discretionary annual decision and one which can be waived by Council in poor economic periods;
- fully or partially exempting those types of development likely to be most negatively impacted by a DC increase (subject to difficulties involved in distinguishing one type of development from another at the point of DC collection);
- deferring DC collection post building permit issuance.

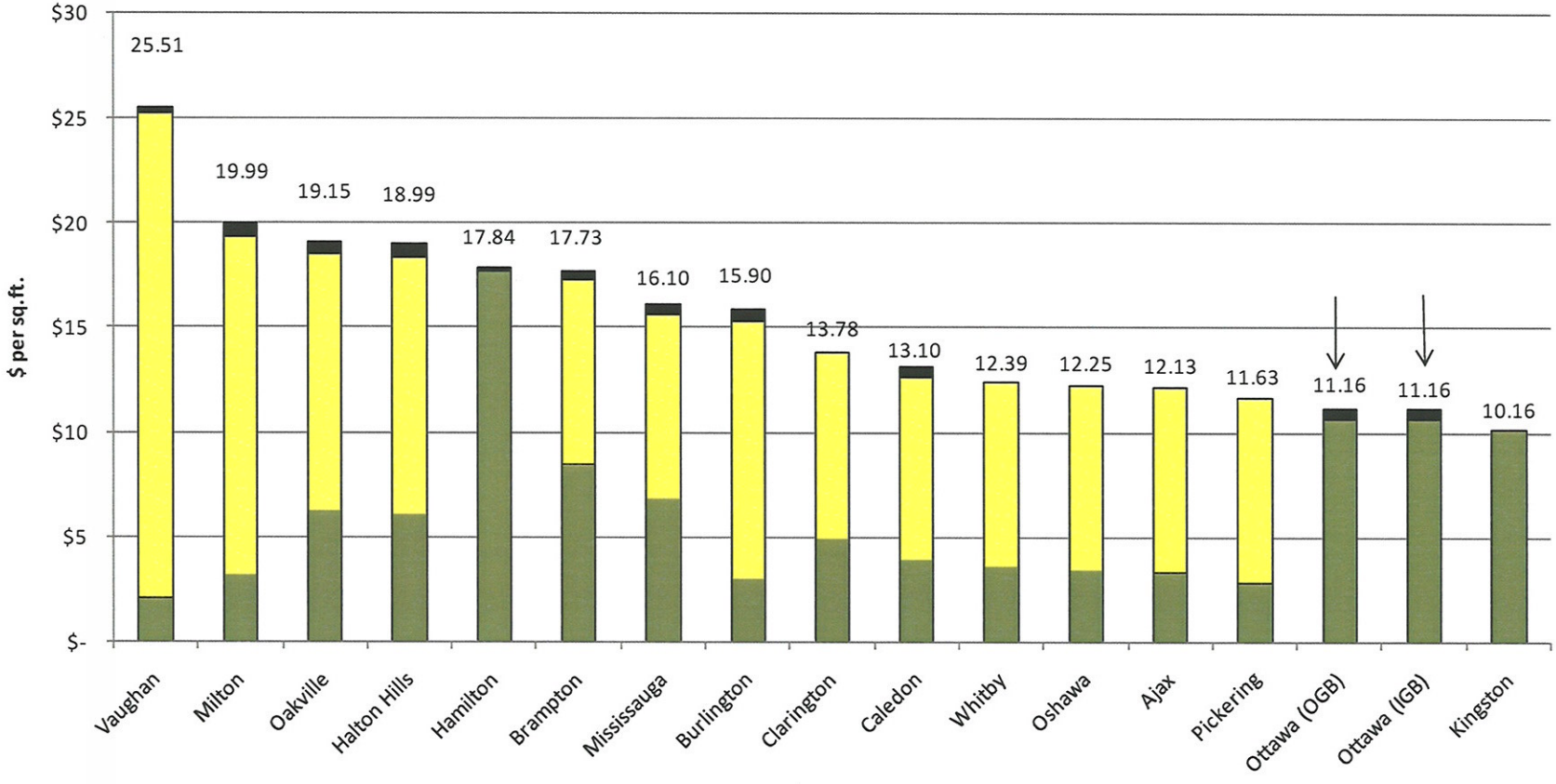
The City has, in the past, used some of these measures. It is evident that all of these measures involve sacrificing capital revenues that must be generated from other sources.

Residential Development Charges Per Single Detached Dwelling For Ottawa, Kingston, Hamilton and Selected Municipalities in Halton, Peel, York and Durham Region April 1, 2009



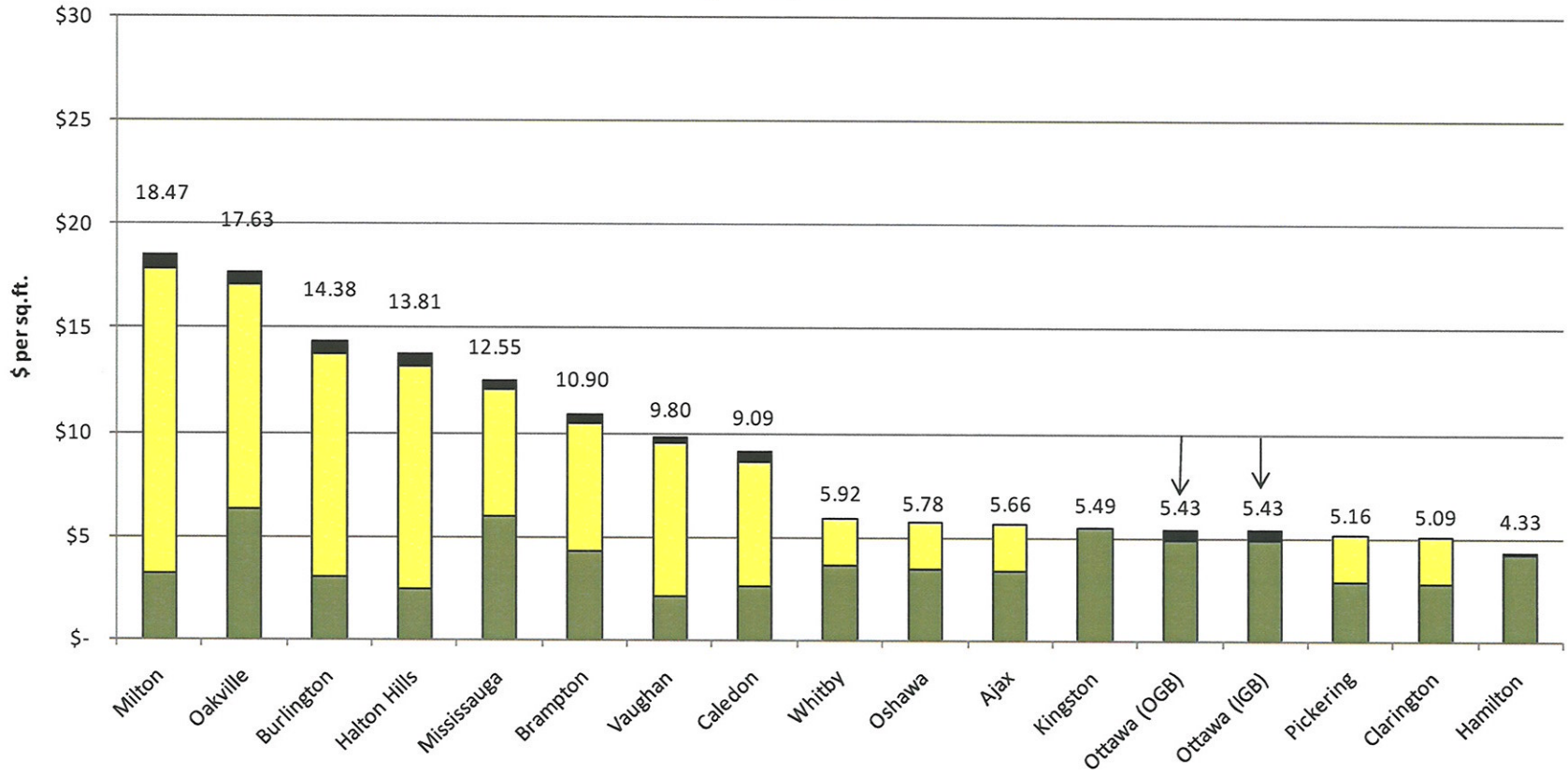
Note: A component of the Mississauga and Vaughan charge has been converted from a per hectare charge to a hypothetical single detached unit charge for the purpose of this chart. Lower Tier Upper Tier Education

Non-Residential Development Charges Per GFA of Retail Floor Area For Ottawa, Kingston, Hamilton and Selected Municipalities in Halton, Peel, and Durham Region April 1, 2009



Note: A portion of the Mississauga & Vaughan charge has been converted from a per hectare charge to a hypothetical GFA charge assuming 30% coverage.

Non-Residential Development Charges Per GFA of Industrial Floor Area For Ottawa, Kingston, Hamilton and Selected Municipalities in Halton, Peel, and Durham Region April 1, 2009



Note: A portion of the Mississauga & Vaughan charge has been converted from a per hectare charge to a hypothetical GFA charge assuming 30% coverage.

Lower Tier Upper Tier Education

APPENDIX G
DEVELOPMENT CHARGE POLICY REVIEW

Development Charge By-law Review Issues Paper

Overview

A development charge (DC) is a fee imposed by a municipality, upon the development or redevelopment of lands, through the enactment of a development charge by-law and is collected at the time a building permit is issued.

DC's are primarily levied to offset a portion of the capital cost of municipal infrastructure and the costs associated with delivering services required to accommodate growth, intensification or redevelopment. They are an important capital financing tool and are integral to the City's long-term fiscal sustainability.

Examples of services where DC's partially cover the cost:

- Major collector and arterial roads, traffic improvements and structures
- Trunk watermains and treatment facilities
- Collector sewers and treatment facilities
- Some citywide storm drainage faciltities
- Transitways, transit vehicles and garages
- Police services
- Fire services
- Recreation facilities
- Park development
- Emergency medical services
- Libraries and collections
- Childcare facilities
- Public works vehicles and garages
- Related studies, (i.e. background studies required for the development of these facilities)
- Stormwater ponds and drainage systems (area-specific stormwater by-laws)

Charges are only applicable on development that requires certain types of municipal approvals, including: granting of subdivisions, minor variances, consents, conveyances subject to part-lot control, subdivisions and condominiums under the Planning Act, and permits for buildings or structures issued under the Building Code Act, 1992.

The current DCs Act (DCA) requires that a background study must be completed before passing a new by-law. This study must include the total capital costs associated with growth allocated across all anticipated development throughout the city.

DCA 1997 also requires municipalities to complete a new background study to determine the amount of levy that will be charged to future development.

The current by-law was adopted in July 2004. Staff began a review of the by-law and related policies in spring 2008. Staff are currently developing a revised growth forecast and capital program calculation, both of which are necessary to updated DC rates.

The work undertaken to date aligns with the Fiscal Framework which directs that the costs of growth be recovered to the full extent permitted by legislation.

A new by-law will be presented for Council's consideration in spring 2009.

This discussion paper will review four key issues that require consideration by the development industry, the public and Council in determining a new by-law:

1. **Managing DCs throughout the City** – To what extent should DCs be based on the part of the City in which development occurs?
2. **How to Fund New Infrastructure** – How does the City strike the proper balance between DCs and other sources of revenue for funding infrastructure identified in the Transportation Master Plan (TMP) and Infrastructure Master Plan (IMP)?
3. **Establishing new Criteria for Development Charge Exemptions and Discounts** – What type of new development, if any, should be exempted from DC collection?
4. **Setting Priorities in Development** – How can the City establish priorities for funding growth-related projects while, at the same time, balancing the affordability of the overall capital program?

Background

A. Development Charge By-law Review

City Council adopted a new DCs By-law on July 14, 2004. By-law 2004-298 replaced the 10 former Region of Ottawa-Carleton and the local municipal by-laws which expired between July and September 2004. In addition, 17 area-specific stormwater and drainage system by-laws were approved. The new by-law simplified and streamlined a previously complex DC rate structure of over 50 areas where DCs were applied.

Several appeals to the by-law were received from developers and resident groups. Council referred these appeals to the Long-Range Financial Committee for consideration and each was resolved through amendments to By-law 2004-298 which was adopted by Council on December 8, 2004. The Ontario Municipal Board (OMB) approved the agreed to amendments and the current rates for DCs came into effect on March 11, 2005. The rates are indexed annually beginning April 1, 2006.

The City's existing DC By-law will expire in July 2009. Before passing a new DC by-law, the DCA 1997 requires that a background study be. To this end the City has retained the consulting services of C.N. Watson & Associates Economists Ltd. to assist in the preparation of the requisite study. Additionally, staff have initiated consultations with key stakeholders including representatives of the land development industry, building industry and community associations.

The City's revised Official Plan and supporting Transportation and Infrastructure Master Plans will facilitate the background study currently underway with a new vision for determining capital

priorities based on current growth projections and council-approved implementation scenarios. The study will estimate the amount, type and location of new development in the community and provide a calculation for each municipal service required. Furthermore the study will examine the split between services that are growth-related and can therefore be funded from DCs (e.g. a school or library) and those that are local in nature and are paid for directly by the developer (e.g. a local road in a new subdivision).

B. Who pays DCs?

DCs are paid before a building permit is issued for a new home or commercial building. The DCA 1997 requires that collections and associated interest be placed in separate reserve funds to be spent according to growth-related infrastructure priorities. These priorities are established in the background study and DC funding is allocated to various eligible projects through the City's annual capital budget process.

To establish the new DC rate for residential/non-residential development, a calculation of the estimated population and employment growth for the city over the planning period is needed. The growth-related capital submissions must also translate into an overall rate that is affordable, as population and employment projections are likely to be lower over the planning period.

C. How Are DCs Applied?

DCs are applied based on:

- Type of development – residential or non-residential, apartment or single-family dwelling
- Size of development – for residential: the number and type of dwelling units; for non-residential development: the floor area

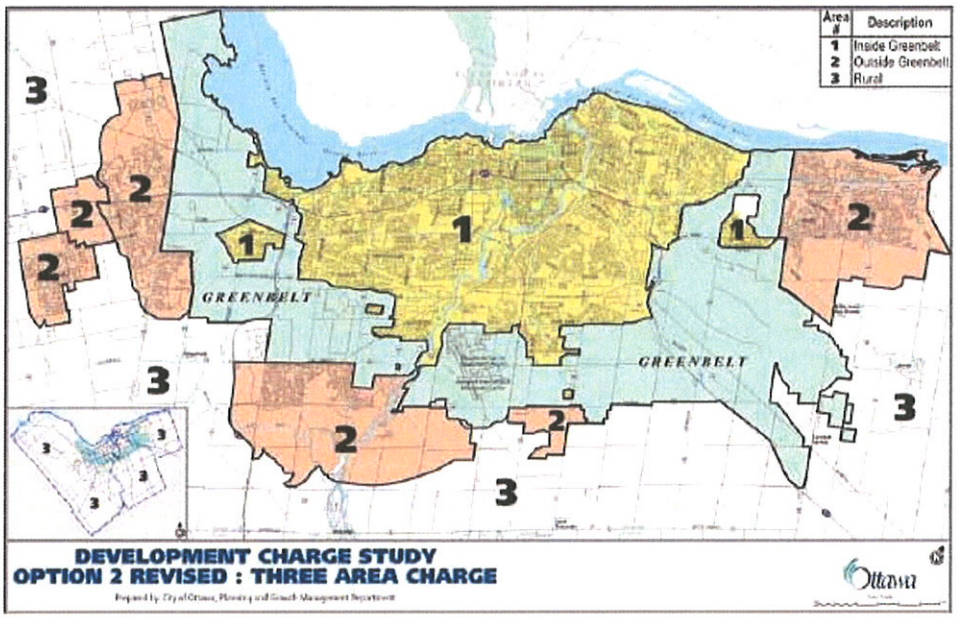
The City's current by-law applies the DC as follows:

New residential development is divided into three city areas:

- Inside the Greenbelt
- Outside the Greenbelt (including Kanata West)
- Rural

Non-residential development is based on a citywide approach, differentiated by type:

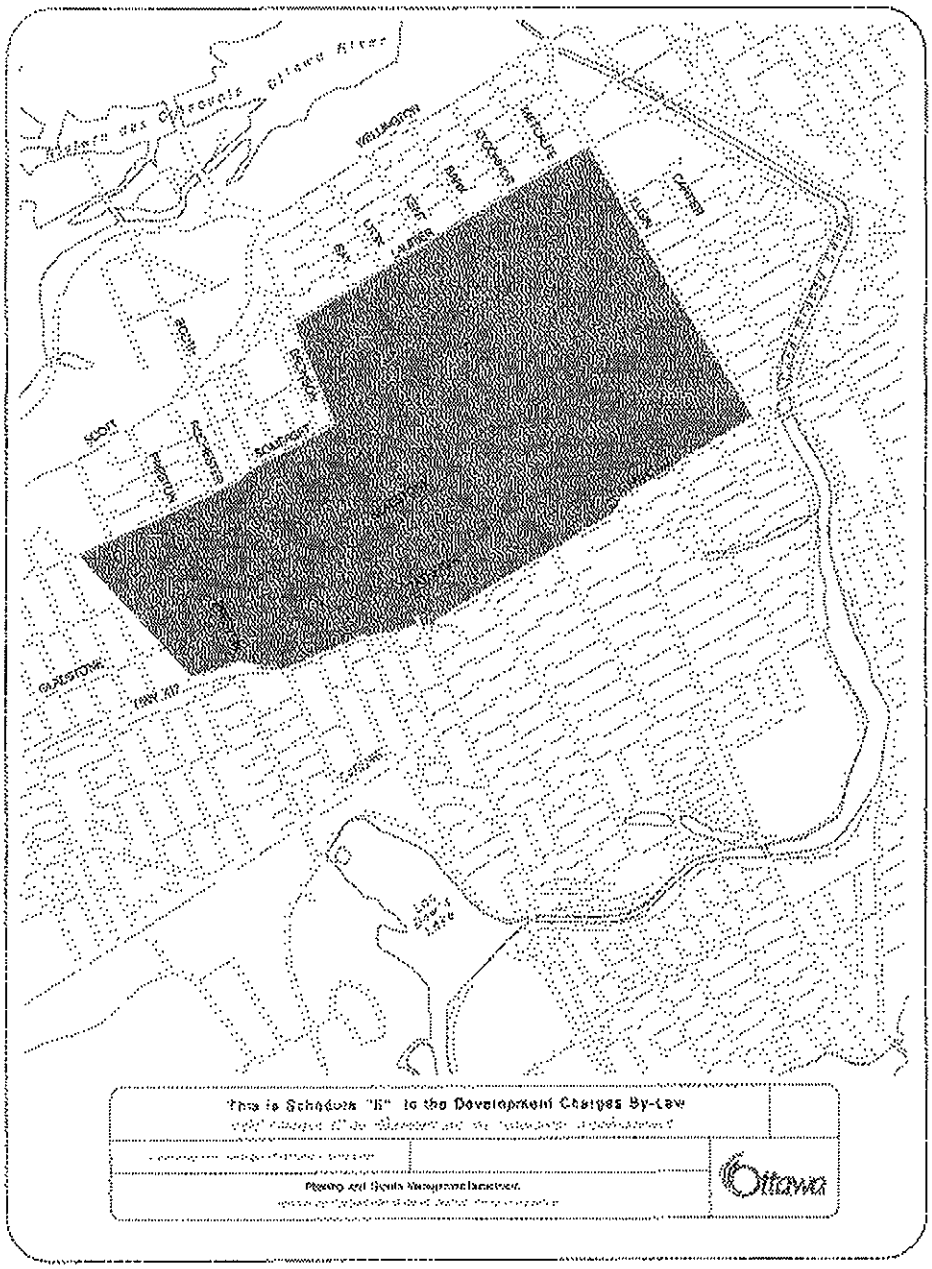
- General (which includes retail, hotel, motel)
- Commercial, industrial, institutional office
- Limited industrial (warehousing)
- Area specific stormwater charge



D. Can the City exempt different forms of development from DCs?

The City's current by-law exempts several categories of development from DCs. The following is the list of Council-approved exemptions:

- Any residential development within the central area defined as Schedule E of the by-law (see page 5).
- Places of worship
- Churchyards, cemeteries or burying grounds exempt under the Assessment Act
- Non-residential use buildings used for bona fide agricultural purposes
- Farm retirement lots in accordance with the Official Plan
- Farm help lots created prior to July 9, 1997
- Non-residential development creating uses with less than 10 square metres of gross floor area
- Temporary buildings provided that they are removed within two years
- A garden suite, provided that such garden suite is removed within ten years
- A building for the sale of gardening and related products provided that such building is not erected before March 15 and is removed before October 15 of each year
- Residential buildings erected and owned by non-profit housing, provided that they meet certain criteria and provide proof to the City Treasurer
- Non-profit health care facilities
- All residential development fronting on Isabella Street and Chamberlain Avenue between Bronson Avenue and Elgin Street
- Certain uniques instances where, for example, development is on land owned by a non-profit corporation or is located on contaminated land or on land where a public facility is being provided and Council passes a motion to exempt these properties



Issues

1. Managing DCs Throughout The City

To what extent should DCs be based on the part of the City in which development occurs?

Discussion

In 2004, the City considered creating a number of sub-areas where different DC rates would apply. Recognizing the challenges of this approach, as referenced previously, the City settled on three geographic divisions – Inside the Greenbelt, Outside the Greenbelt and the Rural Area. The area Outside the Greenbelt was further subdivided into rural and urban, in order to recognize the lower levels of service accessibility and the difference in real estate market dynamics involved in the rural area. The City also imposed different charges for each of a variety of stormwater management benefiting areas.

With fewer area-specific charges the City is better able to:

- Fund its infrastructure priorities from a larger pool of DC revenue
- Maintain flexibility and respond more quickly to infrastructure needs, (e.g. advance growth-related infrastructure as a catalyst for economic development opportunities)
- Be more strategic in its provision of services

Monies collected for services in relation to DCs cannot be used for another purpose therefore care must be taken in the definition of DC collection areas. If areas are too finely established it may remove users of the new service from the requirement to pay the relevant DCs (i.e./ those located outside of the defined area).

Implications:

Citywide

- Charges collected can be spent anywhere throughout the city without restriction.
- A wider collection area results in a larger pool of DC revenue that can be used to fund growth-related projects sooner.
- Fewer appeals to the DC By-law from non-residential developers given their preference for the citywide approach to funding growth-related infrastructure.
- DC funding may be collected in one area of the city and spent on infrastructure in another area, resulting in residents having a geographic separation from the new service and causing concern for those who are less mobile.

Implications:

Area Specific

- Defining DC collection by individual areas ensures investment of those funds is in the areas where development is occurring
- Infrastructure that is to be funded from DCs may be delayed in areas where growth is not occurring
- Area-specific DCs may encourage more development in built-up areas through increased densities and infill as DC rates are typically lower in these areas

2. How to Fund New Infrastructure

How does the City achieve the proper balance for funding infrastructure identified in the Transportation Master Plan and Infrastructure Master Plan between DCs and other sources of revenue?

Discussion

The recent adoption of the Transportation Master Plan and the upcoming adoption of the City's revised Official Plan and Infrastructure Master Plan in early 2009 will establish a new vision for determining capital priorities based on current growth projections.

The structure of the DC by-law(s) can assist in implementing policies such as:

- The use of existing infrastructure
- Promotion of mixed-use development
- Promotion of transit services and transit-friendly development
- Concentration of rural growth in villages

Provincial legislation through the DCA 1997 contains regulations on what infrastructure and services can funded from DCs (e.g., only 90 per cent of the cost of new transit services can be collected from DCs). The City's Fiscal Framework requires that where possible, 100 per cent of growth be paid from DCs.

Growth has historically been partially subsidized by property taxes and other funding sources. To achieve its Fiscal Framework objective and a reasonable funding balance between DCs and other sources of revenue, the City will need to moderate the list of infrastructure projects slated for funding over the next five years. Council should also take the opportunity to review discretionary exemptions to determine which among them will remain in the updated by-law.

Implications

- If the capital program is too ambitious it may result in pushing the DCs to the highest level, regardless of housing affordability and the competitiveness of Ottawa's housing sector
- Taxes, user rates and debt loads could be increased to fund an ambitious capital program. Under the DCA 1997, only a percentage of growth- related infrastructure can be recovered from DCs. The balance will need to come from taxes, user rates and by incurring debt.
- DC rates, if not linked to affordability, could lead to reduced development activity resulting in a higher proportion of funding required through taxes, etc.
- Under the current by-law, intensification in built-up areas results in the collection of less DCs and a legacy of lifecycle replacement that cannot be funded from growth.

3. Establishing new Criteria for Development Charge Exemptions and Discounts

What type of new development, if any, should be exempted from DC collection?

Exemptions from DCs fall into two categories – statutory or discretionary. The Province mandates statutory exemptions (e.g., municipal or school board buildings). Discretionary exemptions are unique to each municipality and must be approved by City Council, (e.g., places of worship).

Implications

- New developments that receive an exemption or discount on the DC rate, still require services and some other means of funding those costs must be found.
- More than $25 million in DCs have been waived for discretionary exemptions and discounts over the past five years. The net effect is that required growth-related infrastructure is being pushed back for delivery at a later stage, often not meeting the community's expectations.
- Consideration should be given to establishing new criteria and a policy that will make Council-approved exemptions promote smart growth/environmental stewardship such as the use of existing infrastructure like (the redevelopment of brownfield areas), or are considered sufficiently desirable to the community such as (non-profit housing) to warrant a tax-based subsidy.

4. Setting Growth-Related Capital Priorities

How can the City establish priorities for funding growth-related projects while balancing the affordability of the overall capital program?

There are two approaches to administering development projects through the use of DCs: the Average Cost Approach, which is currently in use, and the Cash Flow Approach.

Average Cost Approach

The average cost approach to calculating the DC rate involves identifying the total value of anticipated growth-related capital works and then dividing these costs by the forecasted population/employment growth that is expected to occur through the planning period. Unfortunately this approach does not specifically match the timing of expenditures to the collection of DC revenues.

Cash Flow Approach

The cash flow approach requires that priorities within the capital works plan be followed and that if a new priority is added, one must be removed. In order for a project to be accelerated from the original plan, it must either be front-ended by the developer or result in the delay of other projects to maintain cash flow. This approach requires more disciplined yearly capital budgeting, forecasting and a funding arrangement in order to operate effectively.

Implications

- Changes in development patterns, land ownership and intensification targets can change the priority of projects
- At budget time the pressure to add projects without delaying others can constrain the DC

reserve
- The development industry desire to push projects forward through front-ending and other related capital investment proposals could jeopardize the cash-flow approach
- The development industry will want an active role in determining which project has priority over another
- Practicalities relating to prior commitments, work in progress, etc. may limit the ability to choose the cash-flow approach

Summary

DCs are integral to the City's long-term fiscal sustainability and its ability to accommodate growth, intensification or redevelopment. This background study will provide Council with updated estimates for new development and costs for municipal services based on the vision in the revised Official Plan and supporting Master Plans. The four key issues as described in this document require careful consideration in the determination of a new by-law.

Collection Areas

DC collection areas can be citywide or area specific. There are pros and cons to both models but generally, too many specific areas severely limit the use of these charges and a citywide model provides a greater pool to fund growth-related projects (e.g. area specific charges are modified for established areas, encouraging infill projects but not providing for lifecycle infrastructure replacement.). The current system has a citywide approach for non-residential development and three area specific charges, based on geographic areas, for residential development.

Funding New Infrastructure

Ambitious growth plans must be managed to ensure DCs are not set so high that they create unrealistic housing prices. The balance of DCs and taxes must be carefully maintained. Shifting the onus on to DCs can cause a reduction in growth generating less DC revenue and consequently requiring more input from taxes. Clearly a close partnership between the capital program, through the Official Plan vision, and the DC model must be established in order to maintain fiscal sustainability.

Developing Criteria for DC Exemptions

Discretionary DC exemptions are unique to each municipality and must be approved by Council. Over the past five years, $25 million in DCs have been waived in discretionary exemptions. Projects receiving these exemptions have the same service and infrastructure requirements as all other projects. The development of a policy with specific criteria would provide a framework for providing exemptions to those projects that exemplify the City's vision for smart growth and environmental stewardship.

Capital Priorities

There are two models used in administering development projects through DCs. The first involves forecasting anticipated growth – the Average Cost Approach and the second requires

disciplined budgeting and forecasting – the Cash Flow Approach. While the average cost approach is better able to manage last minute projects, changes in priorities and development industry pressure, these accommodations can lead to difficulties in overall management. The cash flow approach applies a much more rigorous process that is less flexible but ensures the program cannot be overextended.

These issues have been described separately but are ultimately interrelated. Decisions regarding collection areas impact growth-related funding concerns; capital priority methodologies will be an integral part of delivering the official plan vision; and the discretionary exemption policy plays a role in providing infrastructure. It is imperative that the resolution of these issues be in the form of a comprehensive re-evaluation of the role DCs play in the development of the city.

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Report to/Rapport au :

Planning and Environment Committee
Comité de l'urbanisme et de l'environnement

06 May 2009 / le 06 mai 2009

Submitted by/Soumis par : Nancy Schepers, Deputy City Manager
Directrice municipale adjointe,
Infrastructure Services and Community Sustainability
Services d'infrastructure et Viabilité des collectivités

Contact Person/Personne ressource : John L. Moser, General Manager/Directeur général,
Planning and Growth Management/Urbanisme et Gestion de la croissance
(613) 580-2424 x28869, John.Moser@ottawa.ca

City Wide/à l'échelle de la Ville — Ref N°: ACS2009-ICS-PLA-0088

SUBJECT: **TABLING OF PRELIMINARY DEVELOPMENT CHARGES ANALYSIS**

OBJET : **PRÉSENTATION DE L'ANALYSE PRÉLIMINAIRE DES REDEVANCES D'AMÉNAGEMENT**

STAFF ACTION

Staff will circulate this report for public comment and input by May 25, 2009 and return to Planning and Development Committee with the final Development Charges report on June 9, 2009.

SUIVI PAR LE PERSONNEL

Le personnel fera circuler le présent rapport en vue de recueillir les commentaires du public d'ici le 25 mai 2009 et présentera le rapport final sur les redevances d'aménagement au Comité de l'urbanisme et de l'environnement le 9 juin 2009.

EXECUTIVE SUMMARY

Assumptions and Analysis:

The *Development Charges Act, 1997* (DCA) states that municipalities must update and complete a new background study to determine development charges within a five-year period of the existing by-law in force date. City staff from various branches collaborated in compiling the necessary data as required to complete the revised study.

As a result, the City of Ottawa must adopt new development charge successor by-laws before July 14, 2009. The basic formula behind the calculation is to input the total value of growth-

related works anticipated over the defined period and then divide these costs by the growth that will occur over the planning period (see below).

$$\frac{\textit{Cost of Capital Works}}{\textit{Growth Projections}} = \textit{Development Charge Rate}$$

The City's Official Plan and related Transportation Master Plan, Infrastructure Master Plan, and strategies and reports have provided the basis for identifying and prioritizing growth-related works required to support future growth in Ottawa. These requirements are divided by the City's future projections for residential and non-residential development over the near (10 years) and long-term (22 years). Issues that are always contentious in preparing a background study relate to the geographic allocation of project costs, deductions for the benefit to existing development, post-period capacity and predicting the timing of future capital works, to name a few.

The draft background study provides a summary of the various inputs into the calculation of the charges that could be imposed. With the help of an external consultant and upon completion of the review process and publication of the draft, staff determined that further consideration be given to various options for adjusting the rates. An intensive series of meetings with Council sponsors were held and the results are outlined in this report.

This report provides a summary of the rate information contained in the City of Ottawa Development Charges Background Study dated April 9, 2009, which sets out the proposed approach to the new by-laws and summarizes the draft calculation methodology. The report addresses some of the cost implications for the City in terms of growth-related municipal services. There is also a brief discussion of other issues such as front-ending agreements and exemption policies.

Legal/Risk Implications:

Development Charge by-laws may be appealed to the Ontario Municipal Board. On appeal, the Board may uphold the by-law or reduce a charge; the Board has no authority to increase the amount of a development charge.

Financial Implications:

The Fiscal Framework requires, to the extent permissible under the legislation, that capital costs related to new development be paid for by growth. This policy protects taxpayers by ensuring they do not bear a disproportionate burden of the cost of capital expenditures which will primarily benefit new development. The revised background study identifies a total overall capital program of $6.6 billion over the next 10 to 22 years. The development charge recoverable portion has increased by $81.5 million over the 2004 total but population/employment projections are now lower; however, the planning horizon is 22 years versus 17 for Roads, Water, Sanitary and Stormwater Management Services. Also, the localized inflation benchmark for amending infrastructure costs has increased 23.8 per cent over the last five years.

However, it should be noted that, despite efforts to forecast development costs and to defray these through development charges, DCA regulations prevent the City from passing on 100 per cent of development-related costs to the development community. For example, there is a 10 per cent statutory deduction applied to all "soft services" including Public Transit. Therefore, $53.8million in costs are borne by taxpayers, beyond the attribution of the benefit to existing development, which is calculated and applied to all capital expenditures.

Public Consultation/Input:

A Development Charge Stakeholders' Group was formed in September 2008 to obtain feedback at key stages of the study process. Staff members from all departments and the various branches have collaborated in compiling the necessary data to complete the study. They have participated in numerous meetings with the external consultant, Watson and Associates, and in consultation meetings with the various groups involved in the process. Staff has for the most part, responded to questions and comments received as a result of the meetings.

This report is being tabled at Planning and Environment Committee meeting on May 11, 2009 for circulation and public comment. Following the meeting on May 11, 2009, there will be a period to receive written comments from the public. The revised Development Charge Background Study will be made available on May 25, 2009. The report, with any subsequent recommendations resulting from the consultation, will return to Planning and Environment Committee on June 9, 2009.

RÉSUMÉ

Hypothèses et analyse :

La *Loi de 1997 sur les redevances d'aménagement* (ci-après la LRE) prévoit que les municipalités doivent, en vue d'établir les redevances d'aménagement, mettre à jour et achever une étude préliminaire dans les cinq ans qui suivent la date d'entrée en vigueur du règlement municipal existant. Des membres du personnel municipal, provenant de différentes directions, ont collaboré afin de réunir les données nécessaires pour terminer l'étude révisée.

La Ville d'Ottawa est ainsi tenue d'adopter avant le 14 juillet 2009 de nouveaux règlements sur les redevances d'aménagement pour remplacer les règlements existants. La formule de base du calcul consiste à diviser la valeur totale des aménagements liés à la croissance pendant la période définie par la croissance qui surviendra au cours de la période de planification (voir ci-après).

$$\frac{\textit{Coût des travaux d'immobilisation}}{\textit{Projections de croissance}} = \textit{Taux des redevances d'aménagement}$$

Le nouveau Plan officiel de la Ville, du Plan directeur des transports, du Plan directeur de l'infrastructure et des stratégies et rapports s'y rattachant constituent la base à partir de laquelle la détermination et la priorisation des travaux liés à la croissance qui sont exigés pour soutenir la croissance future à Ottawa. Ces exigences sont divisées par les projections de la Ville quant à l'aménagement futur résidentiel et non résidentiel à court terme (10 ans) et à long terme (22 ans). Les questions qui posent toujours problème dans une étude préliminaire se rapportent, entre autres, à la répartition géographique du coût des projets, aux déductions pour les avantages

apportés aux aménagements existants, à la capacité pendant la période postérieure aux projets et à la prévision du moment de réalisation des travaux d'immobilisation futurs.

L'ébauche de l'étude préliminaire donne un résumé des divers facteurs qui entrent dans le calcul des redevances qui pourraient être imposées. Grâce à l'aide d'un consultant externe et après avoir achevé l'examen et la publication de l'ébauche, le personnel a déterminé qu'il convenait d'étudier plus à fond diverses options d'ajustement des taux. Une série de réunions intenses ont eu lieu avec des responsables du Conseil, qui ont abouti aux résultats et aux recommandations qui figurent dans le présent rapport.

Le présent rapport donne un sommaire de l'information sur les taux qui était contenue dans l'étude préliminaire sur les redevances d'aménagement de la Ville d'Ottawa, en date du 9 avril 2009, dans laquelle est décrite l'approche proposée pour les nouveaux règlements municipaux et résumée la méthode de calcul projetée. Le rapport porte sur certaines des répercussions de coût pour la Ville en ce qui concerne les services municipaux liés à la croissance. Il comporte également une brève discussion d'autres points, tels que les accords initiaux et les politiques d'exemption.

Répercussions d'ordre juridique et sur les risques :

Un règlement municipal sur les redevances d'aménagement peut faire l'objet d'un appel auprès de la Commission des affaires municipales de l'Ontario, qui est habilitée, en appel, à confirmer le règlement contesté ou à réduire une redevance d'aménagement, mais non à en accroître le montant.

Répercussions financières :

Le cadre budgétaire exige, dans la mesure où la loi le permet, que les coûts d'immobilisation liés à de nouveaux aménagements soient supportés par la croissance. Cette politique protège les contribuables en faisant en sorte qu'ils n'aient pas à supporter une part disproportionnée du coût des dépenses d'immobilisation qui sont faites principalement au bénéfice des nouveaux aménagements. L'étude préliminaire révisée prévoit un programme d'immobilisations d'une valeur totale de 6,6 milliards de dollars au cours des prochains 10 à 22 ans. La partie recouvrable des redevances d'aménagement a augmenté de 81,5 millions de dollars par rapport au total de 2004, mais les projections de population et d'emploi sont maintenant plus faibles; toutefois, l'horizon de planification est de 22 ans, plutôt que 17, pour les routes et les services de gestion de l'eau, des eaux usées et des eaux pluviales. De plus, le taux repère localisé de l'inflation, utilisé pour ajuster les coûts d'infrastructure, s'est accru de 23,8 % depuis cinq ans.

Il importe cependant de signaler que, malgré les efforts pour prédire les coûts d'aménagement et les absorber au moyen des redevances d'aménagement, les règlements d'application de la LRA empêchent la Ville de répercuter la totalité de ces coûts sur les promoteurs des projets d'aménagements. Par exemple, il existe une déduction réglementaire de 10 % qui s'applique à tous les services « immatériels », dont le transport en commun. Par conséquent, 53,8 millions de dollars de ces coûts sont à la charge des contribuables, outre les avantages attribués aux aménagements existants, lesquels sont calculés puis appliqués à toutes les dépenses d'immobilisation.

Consultation publique / commentaires :

Un groupe de parties concernées par les redevances d'aménagement a été formé en septembre 2008 afin d'obtenir une rétroaction aux étapes clé de l'étude. Des membres du personnel, provenant de tous les services et de différentes directions, ont collaboré afin de réunir les données nécessaires pour terminer l'étude. Ils ont participé à de nombreuses réunions avec le consultant, Watson and Associates, et à des réunions de consultation avec les divers groupes participant au processus. Le personnel a répondu à l'essentiel des questions et des commentaires qui lui ont été adressés à la suite de ces réunions.

Le présent rapport est déposé à la réunion du 11 mai 2009 du Comité de l'urbanisme et de l'environnement en vue d'être diffusé et de susciter des commentaires du public. Il y aura par la suite une période pendant laquelle le public pourra envoyer ses commentaires par écrit. L'étude préliminaire révisée sur les redevances d'aménagement sera disponible le 25 mai 2009, après quoi il sera présenté, assorti d'éventuelles recommandations découlant de la consultation, au Comité de l'urbanisme et de l'environnement le 9 juin 2009.

BACKGROUND

The purpose of this report is to present a summary of the proposed City of Ottawa Development Charge rate structure. The *Development Charges Act* (DCA) 1997 was proclaimed by the Province on March 1, 1998. Under the DCA, all development charge by-laws expire five years after they come into force. As a result, the City must have the successor By-laws in place prior to July 14, 2009 in order to be able to continue collecting development charges. The draft Background Study has been prepared pursuant to Section 10 of the DCA.

In March, Council approved the report, "The New Development Charge By-law - Approach and Timetable", which set out for departments the basic methodology in which growth-related municipal services should be assessed in relation to the charges and the timing of the preparation work for the background study.

Background studies are collaborative exercises. After the publication of the initial set of draft rates, further adjustments were made to the proposed capital works program required over the forecast period. The refinement of the calculation methodology contained in this report attempts to reflect this underlying principle of assessing the future growth related infrastructure requirements by establishing a set of residential and non-residential rates, which will produce the corresponding funding amounts.

DISCUSSION

Development Charge Background Studies

The DCA sets out the essential steps necessary to create successor Development Charges By-laws. Most importantly, the DCA requires that a Development Charge Background Study be completed and ultimately approved by Council. Copies of these studies, entitled City of Ottawa Development Charges Background Study Report (dated April 9, 2009), are available for review. The Development Charges Background Study Report clarifies the types of services for which the

City will be imposing charges, provides detailed information on how the draft rates were calculated and the projects intended to be financed from development charges. The Development Charges Background Study charges should be reviewed along with this policy report in order to gain a clear and comprehensive understanding of the proposed polices and rates.

Staff have developed a number of recommendations to address concerns over the initial calculation of the rates. In conjunction with Council sponsors, staff have attempted to make the appropriate adjustments to the capital program that provides a reasonable allocation of project financing between development charges revenue and non-growth sources. For example, of the $6.6 billion in capital costs included in the 2009 study, $2.4 billion is recoverable from development charges. This represents 36 per cent of the total program as compared to 45 per cent in 2004. With lower growth projections, there is a recognized need to allocate a greater percentage of the costs to post period benefit, which is now $269 million more than in 2004, while preserving the overall capital program requirements identified for Roads, Water, Sanitary Sewer and Public Transit in both the Transportation Master Plan and Infrastructure Master Plan, passed in conjunction with the Official Plan update.

Calculation Methodology

The Development Charges Background Study reviewed all City services and infrastructure requirements that will be impacted by the residential and non-residential growth projected in the Official Plan. The service components included are: Roads and Related Services, Public Transit, Water, Sanitary Sewer (Wastewater), Stormwater Drainage, Police, Emergency Services (Fire), Paramedic Services, Recreation, Parks Development, Libraries, Child Care, Public Works, Corporate Studies and the inclusion of a new service for the Affordable Housing Program.

The study methodology reviewed the capital requirements of each of the above service components. Water, Roads, Sanitary, and Stormwater drainage were assessed on a 2010 to 2031 planning horizon. Other qualifying service projects required for growth were assessed 10 years consistent with the DCA. Existing projects from 2004 to 2009 that have unrecovered growth components (where sufficient funds have not been allocated from the reserve fund) were also assessed and any outstanding funding requirements included in the calculation of the charge. To determine the servicing requirements of growth, staff had the benefit of the proposed updated Official Plan, integrated with the Transportation Master Plan and Infrastructure Master Plan (Water and Sanitary Sewer updates). Other Master Plans and Strategies have also been prepared for Council adoption in 2009. As part of the Development Charges Background Study, a report was prepared by Stantec Consulting to address and consolidate information on additional servicing needs related to area-specific Stormwater charges. The Official Plan growth forecast and the Master Plans and studies, City standards and historical service levels provided the basis for identification of projects required to meet future planning objectives.

The basic methodology for calculating the charge for each component, described as follows, is essentially the same for all municipalities:

1. Capital project costs for the particular planning period are based on conceptual estimates founded on service level standards as expressed in the City's historical experience,

Council approved master plans, reports, Provincial regulations and City design guidelines and specifications;

2. The costs are allocated between existing population and growth to arrive at the net growth-related share (with any grants, subsidies and other contributions such as direct developer share, as well as any anticipated benefit to post-2031 growth being netted off);

3. The net growth-related costs are divided between residential and non-residential sectors;

4. The net growth-related costs for the residential sector are divided by the estimated gross population increase. The person per unit values, based on Statistics Canada, 2006 Census data, multiplies this per capita cost by type of housing to arrive at each residential component cost;

5. The net growth-related costs for the non-residential sector are divided by the estimated growth in gross floor area to arrive at a charge per square foot.

6. Where any portions of the capital works are exempted from inclusion in a development charge, this funding must be recovered through non-development charges sources.

Net Growth-Related Capital Program

The growth-related capital program, net of benefit to existing grants and subsidies and other contributions, was developed based on providing municipal services to meet the growth forecast. The service standards (used in the cost estimates) are in accordance with the requirements of the DCA. Table 1, which follows, identifies the net growth-related capital expenditure requirements by service component except for Stormwater Ponds as they are allocated on an area specific basis. The residential and non-residential allocation of this amount is then identified.

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Table 1	Net Growth Related Capital Costs ($2008)		
	($000s) Total	($000s) Residential	($000s) Non-residential
Roads	1,422,990	880,460	542,530
Sanitary Sewers	282,675	189,928	92,747
Water	182,133	162,076	20,057
Stormwater Drainage	8,064	4,972	3,092
Police Stations & Vehicles	20,795	12,675	8,120
Emergency Services (Fire)	15,343	9,360	5,983
Public Transit	253,978	153,911	100,067
Housing	8,505	8,505	0
Parks Development	45,740	43,453	2,287
Recreation Centres	117,852	111,963	5,889
Libraries	19,881	18,886	995
Child Care Facilities	6,413	3,886	2,527
Paramedic Posts & Vehicles	3,928	2,396	1,532
Public Works	36,317	22,153	14,164
Corporate Studies	13,414	8,418	4,996
TOTAL	**2,438,028**	**1,633,042**	**804,986**

Table 2 on the next page summarizes the development charges for a residential single-family unit and the non-residential square foot charge; again, these were calculated in accordance with the DCA.

Table 2

Comparison of Current Single Detached Development Charges

1) Inside Greenbelt

	Current Inside Greenbelt as of April 1, 2009	Draft Inside Greenbelt as of April 9, 2009	Amended Inside Greenbelt as of May 11, 2009[1]
Roads	3,384	8,162	7,826
Sanitary Sewer	1,342	2,933	2,222
Water	344	1,272	1,184
Storm	1	48	48
Fire Stations & Vehicles	0	0	0
Police Stations & Vehicles	118	27	27
Transit Corridors & Vehicles	3,105	3,457	3,431
Parks	946	210	164
Recreation Centres	1,637	1,626	278
Libraries Materials & Central	245	432	432
Child Care Facilities	50	77	77
EMS Posts & Vehicles	21	48	47
Vehicles & Works Yards	526	442	438
Housing	0	170	168
Corporate Studies	161	142	141
Total	11,880	19,046	16,483

2) Outside Greenbelt

	Current Outside Greenbelt as of April 1, 2009	Draft Outside Greenbelt as of April 9, 2009	Amended Outside Greenbelt as of May 11, 2009
Roads	9,740	8,877	8,927
Sanitary Sewer	1,844	2,814	2,031
Water	1,039	2,159	2,039
Storm	1	48	48
Fire Stations & Vehicles	196	280	282
Police Stations & Vehicles	172	350	353
Transit Corridors & Vehicles	3,104	3,457	3,431
Parks	944	719	1,125
Recreation Centres	2,839	2,438	3,434
Libraries Materials & Central	491	343	343
Child Care Facilities	50	77	77
EMS Posts & Vehicles	22	48	47
Vehicles & Works Yards	526	442	438
Housing	0	170	168
Corporate Studies	202	185	184
Total	21,170	22,407	22,927

3) Rural

	Current Rural Serviced as of April 1, 2009	Draft Rural Serviced as of April 9, 2009	Amended Rural Serviced as of May 11, 2009
Roads	1,645	10,111	8,387
Sanitary Sewer	2,455	1,810	1,102
Water	0	1,246	980
Storm	0	51	51
Fire Stations & Vehicles	61	131	122
Police Stations & Vehicles	145	267	250
Transit Corridors & Vehicles	0	3,457	3,431
Parks	945	1,066	999
Recreation Centres	1,768	1,835	459
Libraries Materials & Central	245	421	405
Child Care Facilities	50	77	77
EMS Posts & Vehicles	22	48	47
Vehicles & Works Yards	526	442	438
Housing	0	170	168
Corporate Studies	591	142	141
Total	8,453	21,274	17,057

[1] Includes estimated rate adjustments to both area-specific Parks and city-wide Recreation Centres

Table 2 (Cont'd)
Comparison of Current Non-residential General Development Charges

1) City-Wide

	Current Non-res General as of April 1, 2009	Draft Non-res General as of April 9, 2009	Amended Non-res General as of May 11, 2009[1]
Roads	6.34	12.70	12.43
Sanitary Sewer	0.86	3.21	2.25
Water	0.26	1.05	0.49
Storm	0.00	0.07	0.07
Fire Stations & Vehicles	0.11	0.28	0.28
Police Stations & Vehicles	0.13	0.38	0.38
Transit Corridors & Vehicles	2.04	4.95	4.95
Parks	0.07	0.07	0.12
Recreation Centres	0.17	0.28	0.28
Libraries Materials & Central	0.04	0.05	0.05
Child Care Facilities	0.04	0.12	0.12
EMS Posts & Vehicles	0.02	0.07	0.07
Vehicles & Works Yards	0.46	0.66	0.66
Housing	0.00	0.00	0.00
Corporate Studies	0.11	0.24	0.24
Total	10.65	24.13	22.39
		adjustments for prior year's discounting	1.23
		DC net of discounting	21.16

[1] Includes estimated rate adjustments to both area-specific Parks and city-wide Recreation Centres

The following adjustments contained in this report, includes both a reallocation of costs between benefit to existing (BTE) and post period capacity (PPC). They also reflect the refinement of the calculation methodology, which attempts to accurately assess the future growth-related infrastructure requirements by establishing a set of charges. The basic principle behind the calculation remains the same, with the rates being determined by inputting the total value of growth related capital projects anticipated over the planning period and then dividing these costs by growth that will occur in the future. Key changes to the development charge rates proposed in the draft background study include the following:

Increase in the Post-Period Capacity (PPC) attribution for Road, Water and Sanitary Sewer projects.

Post-period capacity (PPC) is defined as the portion of the growth project that is intended to benefit the increase in population and employment that occurs after the chosen time development time horizon (2031) or 2019 in the case of Transit. An analysis of project timing revealed that various Water, Sanitary Sewer and Road projects were estimated to be constructed during the latter portion of the 22-year planning horizon. These projects were adjusted to include a post-period development percentage with five per cent added to Road projects and 20 per cent added to both Water and Sanitary Sewer items. These changes will result in lower residential and non-residential development charge rates. These new rates are set out in Table 2. Major growth-related capital projects will continue to be funded from development charges. If, in the future, a developer wishes to construct the capital works in advance of the anticipated timing in the study, he may enter into a front-ending agreement. The post period component would be partially recoverable in the next update of the by-law in five years.

Increase in the Benefit to Existing (BTE) for some Water and Sanitary Sewer projects.

Staff have added a 10 per cent BTE to certain Water and Sanitary Sewer projects. This adjustment is an estimate only and is necessary despite staff's careful analysis of the mix between growth and existing population. A more conservative approach is recommended by allocating an additional 10 per cent benefit to existing in recognition that the existing community will benefit from the provision of capital projects. Capital project eligibility or inclusion criteria for the charge have not been addressed in this situation. However, if the entire growth-related project costs were excluded from the background study, they may result in a shortfall in various reserve fund balances.

Move Recreation Complexes to an area-specific charge.

The initial direction from staff in approaching the revised study was to change the allocation of Recreational Complexes from an area-specific to a city-wide charge. Staff is recommending the continuation of the 2004 methodology of assessing the cost of these works as currently imposed. This will a provide continuity in the allocation of existing reserve fund balances to fund the facility costs that are being carried forward into the new charge.

Cost Allocation Methodology.

The development charge was calculated by dividing development charge recoverable residential expenditures by gross population increase for the period involved and multiplying that per capita

recovery by the persons per unit (based Statistics Canada Census data) for each unit type. Upon review by staff, some technical changes were required to align the 2009 background study with the calculation criteria used in 2004. These modifications will provide a more accurate set of occupancy inputs into the underlying rate calculation. Staff have provided the consultant with the changes, which have been incorporated in the amended set of rate calculations found in Table 2.

In 2004, the City calculated Roads based solely on three geographic divisions – Inside Greenbelt, Outside Greenbelt and Rural, on a residential allocation basis. The primary reason for having three large area-specific charges was that the Greenbelt provided a clear delineation for basic sub-areas. The February 2009, Planning and Environment Committee report proposed allocating costs based on the Vehicle Kilometres Traveled (VKT) generated from each of these three areas. However, since services such as transportation involve commuting patterns that are inter-connected network services, through out the city, it has been difficult to allocate costs on a smaller geographic basis. For example, the initial distribution of the costs resulted in a Rural residential single-family dwelling charge of over $30,000.

Therefore, there are two options for allocating costs: keeping the status quo, subject to a review of how costs are differentiated, or adopting the generally accepted municipal practice of using a uniform, city-wide charge. It is recommended to keep current city-wide charges for the arterial roads network, as identified in the Transportation Master Plan. This is similar to the methodology used for Public Transit, which is also calculated on a municipal-wide basis.

OTHER ISSUES

Over the course of the development charge policy review other issues have been raised. Staff have reviewed these issues and provide the following updates since the February 24, 2009 Planning and Environment Committee report (Ref N°: ACS2009-ICS-CSS-0002).

Exemption Policy

It is recommended that existing policies regarding non-statutory exemptions be maintained, subject to certain clarifications. Area-based exemptions for residential properties in downtown Ottawa would be discontinued after two years. These types of area-specific development charge exemption zones create funding gaps, which must then be recovered, in higher municipal taxes or user fees. The proposed Development Charge by-law will attempt to strike a balance between future infrastructure funding requirements and public policy objectives.

Development Charges Category Reductions

Given that there has been increased 'take up' of the former reduction for residential units in the vicinity of transit and light-rail stations due to the qualifying requirement for parking space limits, it is proposed that the reduction be continued in the new bylaw.

Phasing of the Charges

The City will continue to work with the development community to develop financing strategies that will provide the necessary funds to undertake works on a timely fashion and assist with

mitigating the impact of rate increases. For example, this could be achieved by reviewing and adjusting the timing of new infrastructure to better coincide with future requirements of new development. Some of the strategies are currently in place and involve front-ending agreements, along with services-in-lieu payments of a portion of future development charge collections.

Front-ending Agreements

The City currently has a number of front-ending agreements in place. In order to ensure consistency and to limit the City's financial exposure, a revised front-ending agreement policy is being proposed as part of the Background Study.

Often developers want to enter into these agreements as it is in their best financial interest to do so. The major principle is that front-ending agreements should be financially neutral to the City. The advancement of the work should not increase the City's costs related to the construction of the project, as the acceleration will itself increase the City's operating and maintenance costs. In addition, the City will only begin to repay the City share of any projects to the developer in the year the project was forecast to be undertaken in the Background Study. The development industry and City staff will meet to discuss issues and concerns relating to the current policy framework.

Non-residential Development Charges Discounts

Most municipalities calculate a uniform charge applicable to all forms of non-residential development. Any differentiation in the charge by type is based on discounting one or more types of development, resulting in less than full cost recovery, mainly for economic policy objectives.

It would be preferable to differentiate the non-residential charge to the extent permitted by specific service usage data, based on clear differences in the need for service, rather than via DC discounting and the associated revenue loss.

Cash Flow Model

It is proposed that the City use the cash flow methodology in its development charge calculation, recognizing that this approach requires more disciplined yearly capital budgeting, forecasting and funding arrangements. Before project timing can be accelerated, either a front-ending agreement or a commensurate delay in other projects would be mandatory to maintain established annual cash flow plans.

CONSULTATION

As part of a pre-consultation process during the development of the Background Study, the City established a Development Charges Stakeholders' Group to provide feedback at each major phase of the process. The Stakeholders' Group included: Greater Ottawa Homebuilders' Association, Building Owners and Managers Association of Ottawa, the Federation of Community Associations, representatives of community associations, additional developers and consultants. Issues addressed at meetings included:

- Growth forecasts
- Ten year average service levels
- Development Charges Calculation Guidelines
- Growth related infrastructure and cost estimates
- City-wide vs. Area-specific charges
- Indexing

There has also been an increase to both the Parks and Recreation service rate components in order to maximize the unused level of service-cap room. This has resulted in an increase of approximately $34 in the City-wide Recreation Centre charge and a $409 increase in the Outside Greenbelt Parks charge.

CONCLUSION

The amended three large area development charge rate structure is recommended for residential development and the amended city-wide rate for non-residential development. Staff recommends that the full value legislated residential rates as set out in this report be adopted and that the non-residential rates be set at a non-residential (general) full value legislated rate excluding other classes of non-residential development.

Following the period of public consultation, a report will be prepared summarizing the public input, received along with any further recommendations for the consideration of Committee and Council.

LEGAL/RISK MANAGEMENT IMPLICATIONS:

Development Charge by-laws may be appealed to the Ontario Municipal Board. On appeal, the Board may uphold the by-law or reduce a charge; the Board has no authority to increase the amount of a development charge.

FINANCIAL IMPLICATIONS

The background study identifies capital projects with a growth component of $6.6 billion over the next 22 years. The proposed development charges rates will generate, during the term of this by-law approximately $2.4 billion or 36 per cent of the total capital requirement with the City's share of these projects being $1.7 billion.

SUPPORTING DOCUMENTATION

N/A

DISPOSITION

The Department will have the background studies and proposed by-laws available to the public on May 25, 2009 for comment and input at Committee on June 9, 2009. Following the public meeting on June 9th, 15 days will be provided for written submissions regarding the proposed Development Charges By-laws and Background Studies. Upon receipt of comments, staff will

prepare a report summarizing the public input received with further recommendations for the consideration at Council on June 24, 2009.

APPENDIX H
DEVELOPMENT CHARGES – REHABILITATION IN EXISTING AREAS – CITY OF OTTAWA

Development Charges
Rehabilitation in Existing Areas
City of Ottawa

Infrastructure Management Division
Infrastructure Services Branch
Infrastructure Services and Community Sustainability Department
City of Ottawa

March 12, 2009

Table of Contents

1.0 Introduction

Both the Official Plan and Infrastructure Master Plan state the City's goal is to expand through intensification in the urban area, both inside and outside the Greenbelt.

The City's Infrastructure Master Plan (IMP) supports the Official Plan's goals of intensification in existing areas of the City by providing policy for rehabilitation support to growth objectives through consideration of intensification as a part of scheduling prioritization, and the generation of additional capacity where capacity is currently insufficient in existing systems. IMP guiding principles and objectives identify the need to provide growth funding related to those components of rehabilitation programs supporting growth objectives through the Development Charges By-law Review.

The concept for collection of Development Charges for pipe rehabilitation in existing areas was initially introduced in the 2004 Development Charge By-law and this approach is maintained in the development of the proposed 2009 Development Charge By-law.

2.0 Development Charges for Rehabilitation in Areas with Existing Infrastructure

Existing City infrastructure was constructed for existing development and planned growth in place at the time. Currently, some infrastructure is operating at a level that exceeds its design capacity. A requirement for existing infrastructure to accommodate new development without upgrade would further exacerbate the levels of service of the existing systems.

Current rehabilitation strategies that address level of service, environmental and public health issues, provide the opportunity to include additional capacity for growth by providing a global system benefit with the replacement or upsizing of existing infrastructure or by removing extraneous flows, reducing infiltration or improving system hydraulics. Design for rehabilitation is undertaken on the basis of zoning in place at the time, to the standards of the day.

For the term of the proposed 2009 DC by-law, the calculation for development charges for pipe rehabilitation is based upon:

- Gross capital allocations capped to the affordability based ten year capital budget forecasts currently identified in the 2009 budget

- Considering sanitary sewer infrastructure rehabilitation only.

  Assumes watermains in existing areas meet domestic demand requirements, storm water conveyed from site (re)development will be limited to pre-development conditions and road rehabilitation does not incorporate capacity enhancements or intersection improvements.

- City-wide DC projects only consider the impact of population growth in the urban area (area served with municipal infrastructure) as part the calculation of BTG/BTE (growth in the rural area is not considered in any calculations).

- Area-specific projects only consider the impact of growth inside the greenbelt, and specifically, growth within the drainage basins served by the existing infrastructure in the calculation of BTG/BTE

- Area-specific DC gross capital costs distinguish between the rehabilitation of large diameter sanitary sewers (i.e. trunks or collectors) and local sanitary sewers. The distinction is made to recognize that trunk sewers are the most downstream sewers in a sanitary sewer network and will receive flow from both growth areas and non-growth areas.

- For area-specific local rehabilitation programs, gross capital costs consider only projects within intensification areas. (overall rehabilitation forecast requirements have been reduced by a representative amount to account for infrastructure rehabilitation in non-growth areas).

Notwithstanding that only the rehabilitation of sanitary sewers is targeted for DC's in the current DC By-law update, this does not preclude specific offsite works, retrofits or other works outside normal rehabilitation undertakings identified on a case by case basis being identified for developer funding or that storm water management retrofits, watermain rehabilitation or environmental projects that are considered to benefit development from being be considered in future DC by-law updates.

3.0 Growth Projection for 2009 to 2031

3.1 Population and Employment Growth

Since the development of the 2004 DC By-law, actual population and employment growth has not progressed as aggressively as originally modeled. New population and employment growth projections have been used in calculating DC's for sanitary sewer rehabilitation.

Projected population and employment growth, to the 2031 planning horizon, is summarized in Table 3.1.

Table 3.1
Summary of Projected Population and Employment Growth*

Area	Population			Employment		
	2009	2009-31 Growth	% Growth	2009	2009-31 Growth	% Growth
Inside Greenbelt	536,849	53,405	9%	447,089	58,711	12%
Outside Greenbelt	276,667	156,449	36%	85,820	76,180	47%
Rural	88,612	23,857	21%	25,367	9,833	28%
City of Ottawa	902,128	233,711	21%	558,277	144,723	21%

* The source for the projected population is the City of Ottawa Official Plan (update is currently being drafted)

The % Growth (population or employment) was calculated using the ratio of *2009-31 Growth/ 2031 (2009+2009-31) population or employment.*

3.2 Impact of Growth on Flowrate

As noted previously, growth includes residential growth and non-residential growth. The growth rates in each sector are different, and a determination of the relative use of the sanitary sewer system by each sector is required. Overall growth can be calculated based on average sanitary flowrate contributions.

City of Ottawa water records indicate that there is some difference in water demand from inside to outside the greenbelt and between the residential and employment sectors. A summary of water usage rates, as provided by Planning and Growth Management Branch, is shown in Table 3.2.

Table 3.2
Summary of Average Water Usage Rates

	Inside Greenbelt	Outside Greenbelt
Residential	243 lpcd	217 lpcd
Non-residential	156 lped	135 lped

lpcd – litres per capita per day
lped – litres per employee per day

These water usage rates have been applied to the population and employment growth figures shown in Table 3.1 to determine the estimated flowrate increase from growth over the planning period. Water use flowrates were calculated for the increase in population and increase in employment.

Projected population and employment growth, using flowrates, to the 2031 planning horizon is summarized in Table 3.3.

Table 3.3
Summary of Projected Growth per Sector (based on flowrates)

Area	Population Flowrate (l/d)			Employment Flowrate (l/d)		
	2009	2009-31 Growth	% Growth	2009	2009-31 Growth	% Growth
Inside Greenbelt	130,454,358	12,977,479	9%	69,745,944	9,158,856	12%
Outside Greenbelt	60,036,795	33,949,456	36%	11,671,520	10,360,480	47%
Rural						
City of Ottawa	190,491,153	46,926,934	20%	81,417,464	19,519,336	19%

In Table 3.3, the impact of growth in the rural area has not been considered in the overall population/ employment projections given that in the term of the current DC By-law update it is anticipated that rehabilitation of the existing sanitary sewer network will be predominantly in the urban sector, and that the rural area would not derive any benefit or capacity generation from this rehabilitation.

The benefits to the existing and growth areas, and the proportional benefit to the residential and non-residential sectors are summarized in Table 3.4.

Table 3.4
Summary of BTE, BTG, Residential and Non-residential percentages

Area	Total Pop & Emp Flowrate (l/d)			% Benefit at 2031		% Split	
	2009	2031	2009-31 Growth	Exist	Growth	Res	Non-Res
Inside Greenbelt	200,200,302	222,336,636	22,136,334	90%	10%	59%	41%
Outside Greenbelt	71,708,315	116,018,251	44,309,936	62%	38%	77%	23%
Rural							
Total	271,908,617	338,354,887	66,446,270	80%	20%	71%	29%

From this table, for the urban area (or city-wide) in the City of Ottawa at the 2031 planning horizon, the benefit to existing development is 80% and the benefit to growth is 20%. Inside the Greenbelt the benefit to existing development is 90% and the benefit to growth is 10%.

Complete calculations are included in Appendix A.

4.0 City-wide and Area-specific DC Contributions

4.1 Background

The City undertakes regular rehabilitation and repair of the existing infrastructure to address physical condition and hydraulic performance deficiencies. Overall network level capital requirements are defined through studies, the IMP, LRFP and Capital budget forecasts. Delivery of the rehabilitation programs is either through stand alone works or the integration of needs in the form of multiple assets consolidated into singular projects by considering both geographic and schedule proximity, to deliver work in as cost efficient and effective manner as possible. The majority of the annual rehabilitation programs for piped infrastructure (excluding major trunks that could be undertaken as stand alone projects) are undertaken through integrated project delivery. The DC calculations in this document are based on the sewer component of the integrated program only.

4.2 Gross Capital Costs for Infrastructure Rehabilitation Projects

The Capital Budget used in the calculation is the 10 year forecast approved by City Council in the 2009 Rate Budget (approved October 29, 2009) and amended in January 2009. The Capital Budget including SAP order numbers, with the annual breakout of costs for the years 2010 to 2018 inclusive, is included in Appendix B for reference.

The 10-year forecast covers the period from 2009 to 2018. The planning period for DC's covers the period from 2010 to 2031. Gross capital costs for the period from 2019 to 2031 for rehabilitation have been calculated based on an average derived from the capital costs for the 10-year forecast programs for the period of 2010 to 2018, with the exception of the ORF-Sewer Separation and ORF Non-Integrated Works projects. The ORF-Sewer Separation and ORF Non-Integrated Works projects cover the period of 2010 to 2013 only. As the ORF projects receive tri-funding from the federal, provincial and municipal levels of government, the gross capital costs shown for sewers in the 10-year forecast have been reduced by two thirds to consider the City's share of the funding only. The BTG for the ORF projects has been calculated based on the reduced City's share of the capital budget.

The 10-year forecast is based on program level allocations representing overall requirements (DC targeted and not) as well as requirements for both the trunk sewer and local sewers combined into one budget amount. In order to generate the gross capital costs for the charge, a preliminary draft of proposed 2009 and three-year rehabilitation candidates was used as a representative sampling of projects in order to:

- separate these program level allocations budgets based on a proportional calculation into large diameter sewer and local sewer projects
- overlay targeted intensification areas and rehabilitation projects in order to generate a proportional calculation of the projects projects within intensification areas

For the term of the by-law, the preliminary draft of proposed 2009 and three-year rehabilitation candidates was considered appropriate to use as a proxy to establish the proportions as:

- it is representative of the annual rehab undertaking,
- it is representative of the anticipated work over the term of the bylaw, and
- it is representative of work most likely to occur in areas targeted for intensification.

On average, approximately 18% of the representative program is allocated to large diameter sanitary sewer projects. Of the remaining budget for local level sanitary sewer rehabilitation an adjustment has been made to account for sewer rehabilitation in non-intensification areas. Based on the representative works program, approximately 22% (average) of the program is directed to non-growth areas, and the calculation for the remaining budget for the representative program (and corresponding DC contribution) for local level sanitary rehabilitation has been reduced by this amount accordingly. The calculation of these percentages is included in Appendix C.

4.3 Implementation of DC's for Sanitary Sewer Rehabilitation

For the purpose of the charge the calculation is based on proportional allocations of the program level allocations. Annual budgets and program delivery will based on projects within rehabilitation programs specifically targeted for DC's. Program areas will be defined in the Capital Budget that introduce a dual tracking system in the following program areas according to the following protocol:

- 2010 Capital Budget Rehab Programs would follow two streams:
    - One program would attract DC's for sanitary sewer rehab and the other program would be for sanitary sewer rehab that does not benefit intensification
    - Projects that are defined as support to targeted intensification areas will be placed in DC supported programs. Projects that get priority consideration to support growth will be placed in DC supported programs

DC Supported Sanitary Sewer Rehab Programs	Regular Sanitary Sewer Rehab Programs (Outside areas of intensification)
Studies and Supports IM program (CCTV, Rainfall etc.) Specific studies Extraneous Flow Removal Flow Monitoring	Studies and Supports IM program (CCTV, Rainfall etc.) Specific studies Extraneous Flow Removal Flow Monitoring
Trunk / Collector Rehab Sewer Only Specific Projects Integrated Projects	Trunk / Collector Rehab Sewer Only Specific Projects Integrated Projects
Local Rehab Sewer Only Specific Projects Integrated Projects	Local Rehab Sewer Only Specific Projects Integrated Projects

For DC supported programs:

- Annual programming will identify projects that occur in areas where an intensification proposal is on the books or where an intensification priority schedule could advance rehabilitation
- These projects would be transferred from the regular rehabilitation program and listed in the DC rehabilitation program
- DC's applied to project would be calculated based on BTG for the program, but applied only to the sanitary sewer estimate.
- Funding would be approved as part the normal capital budget process
- Projects would be listed as programmed, with DC's identified for sanitary sewer rehabilitation only, and likely integrated with quantification of road, storm sewer and water rehabilitation budgets.

- As DC's are being proposed for sanitary sewer rehabilitation only, road, storm sewer and water would not be eligible for DC's. Financial planning would need to look at each project component to segregate sanitary sewer from the other rehabilitation components.

5.0 Planning Period Capacity

The time period for the proposed 2009 Development Charge Bylaw is 2031. All projects in this document are to be funded within this time frame. No projects are considered to extend beyond the 2031 horizon.

It is anticipated that as the Development Charge Bylaw is revised over time, projects will be added that will extend beyond 2031.

Appendix A – Population, Employment Growth and Res/ Non-Res Calculations

2006 - 2031 Benefit to Growth & Benefit to Existing Calculation (All Periods)

Sub-area	Population								Employment							
	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth
Inside Greenbelt	533,127	536,849	556,558	590,254	57,128	19,709	33,697	53,405	432,223	447,089	477,240	505,800	73,577	30,151	28,560	58,711
Kanata-Stittsville	88,447	97,641	128,805	159,311	70,864	31,164	30,506	61,670	43,954	48,121	61,380	77,000	33,046	13,259	15,620	28,879
South Nepean	55,532	63,859	84,355	104,771	49,240	20,497	20,416	40,913	7,181	13,973	27,300	40,700	33,519	13,327	13,400	26,727
Riverside South	7,203	9,448	18,795	31,660	24,457	9,346	12,865	22,211	657	1,103	2,440	4,500	3,843	1,337	2,060	3,397
Leitrim	1,800	3,120	7,769	12,952	11,152	4,650	5,183	9,833	2,164	2,426	3,400	4,800	2,636	974	1,400	2,374
Orléans	99,000	102,599	113,904	124,422	25,423	11,305	10,518	21,823	18,244	20,197	26,860	35,000	16,756	6,663	8,140	14,803
Rural	85,654	88,612	99,464	112,469	26,815	10,853	13,004	23,857	25,168	25,367	29,500	35,200	10,032	4,133	5,700	9,833
City of Ottawa	870,761	902,128	1,009,651	1,135,839	265,078	107,523	126,188	233,711	529,591	558,277	628,120	703,000	173,409	69,843	74,880	144,723

Area	Population								Employment							
	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth
Inside Greenbelt	533,127	536,849	556,558	590,254	57,128	19,709	33,697	53,405	432,223	447,089	477,240	505,800	73,577	30,151	28,560	58,711
Outside Greenbelt	251,981	276,667	353,629	433,116	181,136	76,962	79,487	156,449	72,200	85,820	121,380	162,000	89,800	35,560	40,620	76,180
Rural	85,654	88,612	99,464	112,469	26,815	10,853	13,004	23,857	25,168	25,367	29,500	35,200	10,032	4,133	5,700	9,833
Total	870,761	902,128	1,009,651	1,135,839	265,078	107,523	126,188	233,711	529,591	558,277	628,120	703,000	173,409	69,843	74,880	144,723

2006 - 2031 Benefit to Growth & Benefit to Existing Calculation (All Periods)

Flow Rates based on Water Use Sales (provided by Roman Diduch)

Inside GB:	Residential Use	**243**	lpcd
	Non-Residential Use	**156**	lped

Outside GB:	Residential Use	**217**	lpcd
	Non-Residential Use	**136**	lped

Sub-area	Population Flowrate (l/d)								Employment Flowrate (l/d)							
	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth
Inside Greenbelt	129,549,779	130,454,358	135,243,575	143,431,836	13,882,057	4,789,218	8,188,261	12,977,479	67,426,861	69,745,944	74,449,440	78,904,800	11,477,939	4,703,496	4,455,360	9,158,856
Kanata-Stittsville	19,192,910	21,188,173	27,950,652	34,570,464	15,377,555	6,762,480	6,619,812	13,382,292	5,977,695	6,544,518	8,347,680	10,472,000	4,494,305	1,803,162	2,124,320	3,927,482
South Nepean	12,050,342	13,857,301	18,305,100	22,735,360	10,685,018	4,447,799	4,430,261	8,878,060	976,655	1,900,262	3,712,800	5,535,200	4,558,545	1,812,538	1,822,400	3,634,938
Riverside South	1,563,047	2,050,314	4,078,498	6,870,131	5,307,084	2,028,184	2,791,633	4,819,817	89,393	149,997	331,840	612,000	522,607	181,843	280,160	462,003
Leitrim	390,557	676,957	1,685,961	2,810,617	2,420,060	1,009,005	1,124,656	2,133,660	294,320	329,888	462,400	652,800	358,480	132,512	190,400	322,912
Orléans	21,482,984	22,264,051	24,717,259	26,999,678	5,516,694	2,453,208	2,282,419	4,735,627	2,481,137	2,746,855	3,652,960	4,760,000	2,278,863	906,105	1,107,040	2,013,145
Rural																
City of Ottawa	184,229,619	190,491,153	211,981,045	237,418,087	53,188,468	21,489,893	25,437,042	46,926,934	77,246,061	81,417,464	90,957,120	100,936,800	23,690,739	9,539,656	9,979,680	19,519,336

Area	Population Flowrate (l/d)								Employment Flowrate (l/d)							
	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth
Inside Greenbelt	129,549,779	130,454,358	135,243,575	143,431,836	13,882,057	4,789,218	8,188,261	12,977,479	67,426,861	69,745,944	74,449,440	78,904,800	11,477,939	4,703,496	4,455,360	9,158,856
Outside Greenbelt	54,679,840	60,036,795	76,737,470	93,986,251	39,306,410	16,700,675	17,248,781	33,949,456	9,819,200	11,671,520	16,507,680	22,032,000	12,212,800	4,836,160	5,524,320	10,360,480
Rural																
Total	184,229,619	190,491,153	211,981,045	237,418,087	53,188,468	21,489,893	25,437,042	46,926,934	77,246,061	81,417,464	90,957,120	100,936,800	23,690,739	9,539,656	9,979,680	19,519,336

Sub-area	Total - Population + Employment Flowrate (l/d)							
	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth
Inside Greenbelt	196,976,640	200,200,302	209,693,015	222,336,636	25,359,996	9,492,713	12,643,621	22,136,334
Kanata-Stittsville	25,170,605	27,732,691	36,298,332	45,042,464	19,871,859	8,565,641	8,744,132	17,309,774
South Nepean	13,026,997	15,757,562	22,017,900	28,270,560	15,243,563	6,260,337	6,252,661	12,512,998
Riverside South	1,652,440	2,200,311	4,410,338	7,482,131	5,829,691	2,210,027	3,071,793	5,281,820
Leitrim	684,877	1,006,845	2,148,361	3,463,417	2,778,540	1,141,517	1,315,056	2,456,572
Orléans	23,964,121	25,010,906	28,370,219	31,759,678	7,795,557	3,359,313	3,389,459	6,748,772
Rural								
City of Ottawa	261,475,680	271,908,617	302,938,165	338,354,887	76,879,207	31,029,548	35,416,722	66,446,270

Area	Total - Population + Employment Flowrate (l/d)							
	2006	2009	2019	2031	2006-31 Growth	2009-19 Growth	2019-31 Growth	2009-31 Growth
Inside Greenbelt	196,976,640	200,200,302	209,693,015	222,336,636	25,359,996	9,492,713	12,643,621	22,136,334
Outside Greenbelt	64,499,040	71,708,315	93,245,150	116,018,251	51,519,210	21,536,835	22,773,101	44,309,936
Rural								
Total	261,475,680	271,908,617	302,938,165	338,354,887	76,879,207	31,029,548	35,416,722	66,446,270

2006 - 2031 Benefit to Growth & Benefit to Existing Calculation (All Periods)

	Period 2006 to 2031				Period 2009 to 2031				Period 2009 to 2019				Period 2019 to 2031			
	% Benefit at 2031		Res & Non-Res Split		% Benefit at 2031		Res & Non-Res Split		% Benefit at 2019		Res & Non-Res Split		% Benefit at 2031		Res & Non-Res Split	
Sub-area	Exist	Growth	Res	Non-Res	Exist	Growth	Res	Non-Res	Exist	Growth	Res	Non-Res	Exist	Growth	Res	Non-Res
Inside Greenbelt	89%	11%	55%	45%	90%	10%	59%	41%	95%	5%	50%	50%	94%	6%	65%	35%
Kanata-Stittsville	56%	44%	77%	23%	62%	38%	77%	23%	76%	24%	79%	21%	81%	19%	76%	24%
South Nepean	46%	54%	70%	30%	56%	44%	71%	29%	72%	28%	71%	29%	78%	22%	71%	29%
Riverside South	22%	78%	91%	9%	29%	71%	91%	9%	50%	50%	92%	8%	59%	41%	91%	9%
Leitrim	20%	80%	87%	13%	29%	71%	87%	13%	47%	53%	88%	12%	62%	38%	86%	14%
Orléans	75%	25%	71%	29%	79%	21%	70%	30%	88%	12%	73%	27%	89%	11%	67%	33%
Rural																
City of Ottawa	77%	23%	69%	31%	80%	20%	71%	29%	90%	10%	69%	31%	90%	10%	72%	28%

	Period 2006 to 2031				Period 2009 to 2031				Period 2009 to 2019				Period 2019 to 2031			
	% Benefit at 2031		Res & Non-Res Split		% Benefit at 2019		Res & Non-Res Split		% Benefit at 2031		Res & Non-Res Split		% Benefit at 2031		Res & Non-Res Split	
Area	Exist	Growth	Res	Non-Res	Exist	Growth	Res	Non-Res	Exist	Growth	Res	Non-Res	Exist	Growth	Res	Non-Res
Inside Greenbelt	89%	11%	55%	45%	90%	10%	59%	41%	95%	5%	50%	50%	94%	6%	65%	35%
Outside Greenbelt	56%	44%	76%	24%	62%	38%	77%	23%	77%	23%	78%	22%	80%	20%	76%	24%
Rural																
Total	77%	23%	69%	31%	80%	20%	71%	29%	90%	10%	69%	31%	90%	10%	72%	28%

Appendix B – Capital Budgets and DC Calculations

Program Descriptions

Extraneous Flow Removal – includes development of an overall approach to wet weather flow management, investigation of identified problem areas, implementation of high impact low cost Flow Removal Programs and recommendations to general concerns such as design standards for the components of the system. Priorities are related to further detailing of the strategy components, identification of specific Flow Removal projects, and investigation of alternative approaches to address concerns related to partially- separated areas.

Infrastructure Management – is an ongoing program related to performance monitoring and condition assessment of the City's roadway, watermain, sanitary and combined and storm sewer networks. Funding provides for testing, network level data collection, miscellaneous soil evaluations, and development and updates to approved products, design guidelines, construction specifications and asset management implementation initiatives. The amounts shown relate to the sanitary sewer component of the program only.

Flow Monitoring of the City's wastewater collection system is required to support the operation and maintenance of the existing system. Continuous long term data is needed to establish trends which will be used to determine capacity for growth, effectiveness of rehabilitation programs, identification of infiltrating sewers and flow contributions in problem areas, and control of flows at regulators and diversion structures. This funding request provides for upgrade, renewal, replacement and extension of the City's permanent flow monitoring network.

ORF is the Ottawa River Fund, a fund with one-third funding from each of municipal, provincial and federal levels of government. The amounts shown in this spreadsheet are only the municipal share of the budget. ORF is a program for a collection of undertakings aimed at improving the water quality of the Ottawa River. The strategy to define specific project scope will be finalized in mid-2009. The 2009 budget and forecast is based on accelerating sewer separation and this could be amended once the strategy is finalized. This program has been identified separately from rehab to allow flexibility to reflect a change in strategy once confirmed.

Draft Rehabilitation Program - Bulk Level Allocations

	2010						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$14,050**	$12,180	$550	$770	$550		**$14,050**
	$21,620	$19,680	$570	$800	$570	**$0**	**$21,620**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$1,250**		$1,250				**$1,250**
ORF - Non Integrated Works - **SAP #905065**	**$10,000**		$5,000	$5,000			**$10,000**
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$1,375**		$1,375				**$1,375**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$525**		$525				**$525**
Stand Alone Storm Sewer Rehabilitation Projects	**$17,250**	$0	$10,150	$7,100	$0	**$100**	**$17,150**
Stand Alone Subtotal	**$62,755**	**$36,960**	**$10,720**	**$10,405**	**$4,670**	**$525**	**$62,230**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**	**$20,000**	$5,000	$5,000	$5,000	$5,000		**$20,000**
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$4,251**	$365	$1,260	$1,416	$1,210		**$4,251**
	$25,746	**$5,680**	**$6,650**	**$6,756**	**$6,660**	**$0**	**$25,746**
Envelopes	**$183,860**	**$70,706**	**$34,932**	**$32,475**	**$45,747**	**$525**	**$183,335**
		$183,860					
Bulk Integrated Subtotal	**$95,884**	**$28,066**	**$17,562**	**$15,414**	**$34,842**	**$0**	**$95,359**

10 year Capital Budget Sanitary Funding Envelope
(which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2011						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$17,520**	$15,180	$690	$960	$690		**$17,520**
	$25,090	$22,680	$710	$990	$710	**$0**	**$25,090**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$1,250**		$1,250				**$1,250**
ORF - Non Integrated Works - **SAP #905065**	**$10,000**		$5,000	$5,000			**$10,000**
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$1,430**		$1,430				**$1,430**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$390**		$390				**$390**
Stand Alone Storm Sewer Rehabilitation Projects	**$17,170**	$0	$10,070	$7,100	$0	**$100**	**$17,070**
Stand Alone Subtotal	**$78,130**	**$53,705**	**$10,780**	**$9,185**	**$4,460**	**$350**	**$77,780**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**	**$20,000**	$5,000	$5,000	$5,000	$5,000		**$20,000**
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$3,945**	$660	$1,370	$1,170	$745		**$3,945**
	$24,745	**$5,860**	**$6,570**	**$6,370**	**$5,945**	**$0**	**$24,745**
Envelopes	**$201,604**	**$93,665**	**$39,321**	**$32,780**	**$35,838**	**$350**	**$201,254**
Bulk Integrated Subtotal	**$99,079**	**$34,100**	**$21,971**	**$17,325**	**$25,683**	**$0**	**$98,729**
		$99,079					

10 year Capital Budget Sanitary Funding Envelope
(which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2012						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$22,130**	$19,180	$870	$1,210	$870		**$22,130**
	$29,700	$26,680	$890	$1,240	$890	**$0**	**$29,700**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$750**		$750				**$750**
ORF - Non Integrated Works - **SAP #905065**	**$10,000**		$5,000	$5,000			**$10,000**
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$385**		$385				**$385**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$375**		$375				**$375**
Stand Alone Storm Sewer Rehabilitation Projects	**$15,610**	$0	$8,510	$7,100	$0	**$100**	**$15,510**
Stand Alone Subtotal	**$67,950**	**$39,880**	**$9,400**	**$9,530**	**$9,140**	**$2,600**	**$65,350**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**	**$20,000**	$5,000	$5,000	$5,000	$5,000		**$20,000**
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$3,030**	$705	$880	$830	$615		**$3,030**
	$23,830	**$5,905**	**$6,080**	**$6,030**	**$5,815**	**$0**	**$23,830**
Envelopes	**$227,647**	**$119,446**	**$33,823**	**$33,502**	**$40,876**	**$2,600**	**$225,047**
Bulk Integrated Subtotal	**$138,467**	**$73,661**	**$18,343**	**$18,042**	**$28,421**	**$0**	**$135,867**

10 year Capital Budget Sanitary Rehab Funding Envelope
(which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2013						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$25,010**	$21,680	$980	$1,370	$980		**$25,010**
	$32,580	$29,180	$1,000	$1,400	$1,000	**$0**	**$32,580**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$0**		$0				**$0**
ORF - Non Integrated Works - **SAP #905065**	**$8,000**		$4,000	$4,000			**$8,000**
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$430**		$430				**$430**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$415**		$415				**$415**
Stand Alone Storm Sewer Rehabilitation Projects	**$12,945**	$0	$6,845	$6,100	$0	**$100**	**$12,845**
Stand Alone Subtotal	**$63,740**	**$42,795**	**$7,845**	**$8,850**	**$4,250**	**$100**	**$63,640**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**	**$18,000**	$4,500	$4,500	$4,500	$4,500		**$18,000**
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$3,605**	$650	$1,105	$1,050	$800		**$3,605**
	$22,405	**$5,350**	**$5,805**	**$5,750**	**$5,500**	**$0**	**$22,405**
Envelopes	**$206,389**	**$103,215**	**$35,310**	**$30,292**	**$37,573**	**$100**	**$206,289**
Bulk Integrated Subtotal	**$120,344**	**$55,070**	**$21,660**	**$15,792**	**$27,823**	**$0**	**$120,244**

10 year Capital Budget Sanitary Rehab Funding Envelope
(which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2014						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$27,910**	$24,180	$1,100	$1,530	$1,100		**$27,910**
	$35,480	$31,680	$1,120	$1,560	$1,120	**$0**	**$35,480**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$0**		$0				**$0**
ORF - Non Integrated Works - **SAP #905065**							
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$445**		$445				**$445**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$400**		$400				**$400**
Stand Alone Storm Sewer Rehabilitation Projects	**$4,945**	$0	$2,845	$2,100	$0	**$100**	**$4,845**
Stand Alone Subtotal	**$57,315**	**$43,805**	**$3,965**	**$5,175**	**$4,370**	**$100**	**$57,215**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**							
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$3,320**	$410	$1,140	$1,085	$685		**$3,320**
	$4,120	**$610**	**$1,340**	**$1,285**	**$885**	**$0**	**$4,120**
Envelopes	**$167,952**	**$77,162**	**$27,289**	**$23,568**	**$39,932**	**$100**	**$167,852**
Bulk Integrated Subtotal	**$106,617**	**$32,747**	**$21,984**	**$17,208**	**$34,677**	**$0**	**$106,517**

10 year Capital Budget Sanitary Rehab Funding Envelope
(which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2015						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$27,910**	$24,180	$1,100	$1,530	$1,100		**$27,910**
	$35,480	$31,680	$1,120	$1,560	$1,120	**$0**	**$35,480**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$0**		$0				**$0**
ORF - Non Integrated Works - **SAP #905065**							
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$590**		$590				**$590**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$530**		$530				**$530**
Stand Alone Storm Sewer Rehabilitation Projects	**$5,220**	$0	$3,120	$2,100	$0	**$100**	**$5,120**
Stand Alone Subtotal	**$64,475**	**$48,250**	**$4,240**	**$7,615**	**$4,370**	**$100**	**$64,375**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**							
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$4,885**	$430	$1,510	$1,700	$1,245		**$4,885**
	$5,685	**$630**	**$1,710**	**$1,900**	**$1,445**	**$0**	**$5,685**
Envelopes	**$194,546**	**$76,280**	**$35,344**	**$32,870**	**$50,051**	**$100**	**$194,446**
Bulk Integrated Subtotal	**$124,486**	**$27,400**	**$29,394**	**$23,455**	**$44,236**	**$0**	**$124,386**

10 year Capital Budget Sanitary Rehab Funding Envelope
(which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2016						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$27,910**	$24,180	$1,100	$1,530	$1,100		**$27,910**
	$35,480	$31,680	$1,120	$1,560	$1,120	**$0**	**$35,480**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$0**		$0				**$0**
ORF - Non Integrated Works - **SAP #905065**							
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$610**		$610				**$610**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$550**		$550				**$550**
Stand Alone Storm Sewer Rehabilitation Projects	**$5,260**	$0	$3,160	$2,100	$0	**$100**	**$5,160**
Stand Alone Subtotal	**$57,525**	**$44,200**	**$4,280**	**$4,675**	**$4,370**	**$100**	**$57,425**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**							
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$4,145**	$445	$1,565	$1,325	$810		**$4,145**
	$4,945	**$645**	**$1,765**	**$1,525**	**$1,010**	**$0**	**$4,945**
Envelopes	**$196,788**	**$78,062**	**$36,864**	**$30,559**	**$51,304**	**$100**	**$196,688**
Bulk Integrated Subtotal	**$134,418**	**$33,217**	**$30,819**	**$24,459**	**$45,924**	**$0**	**$134,318**

10 year Capital Budget Sanitary Rehab Funding Envelope (which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2017						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$27,910**	$24,180	$1,100	$1,530	$1,100		**$27,910**
	$35,480	$31,680	$1,120	$1,560	$1,120	**$0**	**$35,480**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$0**		$0				**$0**
ORF - Non Integrated Works - **SAP #905065**							
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$610**		$610				**$610**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$550**		$550				**$550**
Stand Alone Storm Sewer Rehabilitation Projects	**$5,260**	$0	$3,160	$2,100	$0	**$100**	**$5,160**
Stand Alone Subtotal	**$57,525**	**$44,200**	**$4,280**	**$4,675**	**$4,370**	**$100**	**$57,425**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**							
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$4,145**	$445	$1,565	$1,325	$810		**$4,145**
	$4,945	**$645**	**$1,765**	**$1,525**	**$1,010**	**$0**	**$4,945**
Envelopes	**$196,788**	**$78,062**	**$36,864**	**$30,559**	**$51,304**	**$100**	**$196,688**
Bulk Integrated Subtotal	**$134,418**	**$33,217**	**$30,819**	**$24,459**	**$45,924**	**$0**	**$134,318**

10 year Capital Budget Sanitary Rehab Funding Envelope (which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Draft Rehabilitation Program - Bulk Level Allocations

	2018						
	Value	Road	San	Stm	Water	Revenue/Recovery	Net
Resurfacing Program							
Road Resurfacing	**$27,910**	$24,180	$1,100	$1,530	$1,100		**$27,910**
	$35,480	$31,680	$1,120	$1,560	$1,120	**$0**	**$35,480**
Wastewater/Stormwater Collection							
Pollution Control Prevention Plan - Implementations	**$0**		$0				**$0**
ORF - Non Integrated Works - **SAP #905065**							
Trenchless Rehabilitation	**$3,000**		$2,000	$1,000			**$3,000**
Localized Network Repairs and Improvements	**$750**			$750			**$750**
Extraneous Flow Removal - **SAP #901148**	**$610**		$610				**$610**
Flow Monitoring & Network Upgrades - **SAP #902536**	**$550**		$550				**$550**
Stand Alone Storm Sewer Rehabilitation Projects	**$5,260**	$0	$3,160	$2,100	$0	**$100**	**$5,160**
Stand Alone Subtotal	**$57,525**	**$44,200**	**$4,280**	**$4,675**	**$4,370**	**$100**	**$57,425**
Short Term Integrated Projects							
ORF Integrated Sewer Separation - **SAP #905028**							
Scoping/Pre-Post	**$400**	$100	$100	$100	$100		**$400**
ROW/Easement Adjustments	**$400**	$100	$100	$100	$100		**$400**
Infrastructure Management - **SAP #904887**	**$4,145**	$445	$1,565	$1,325	$810		**$4,145**
	$4,945	**$645**	**$1,765**	**$1,525**	**$1,010**	**$0**	**$4,945**
Envelopes	**$196,788**	**$78,062**	**$36,864**	**$30,559**	**$51,304**	**$100**	**$196,688**
Bulk Integrated Subtotal	**$134,418**	**$33,217**	**$30,819**	**$24,459**	**$45,924**	**$0**	**$134,318**

10 year Capital Budget Sanitary Rehab Funding Envelope
(which forms the basis for the DC calculation)
SAP Order #901160 Integrated Program - Bulk Projects

Comparison of SAP Projects & Draft 10 Year Rehabilitation Bulk Forecasts

(Source: Approved Budget - appd Jan 2009)

SAP Order Number	Project Description 2009-2018	2010 $000	2011 $000	2012 $000	2013 $000	2014 $000	2015 $000	2016 $000	2017 $000	2018 $000	Total $000 2010 to 2018	Average
	City-Wide											
901148	SAP - Extraneous Flow Removal	1,375	1,430	385	430	445	590	610	610	610	6,485	
	City Wide - Extraneous Flow Removal	1,375	1,430	385	430	445	590	610	610	610	6,485	721
904887	SAP - Infrastructure Management	4,250	3,945	3,030	3,605	3,320	4,885	4,145	4,145	4,145	35,470	
	City Wide - Infrastructure Management	1,260	1,370	880	1,105	1,140	1,510	1,565	1,565	1,565	11,960	1,329
		(Sanitary budget only) See *Draft Rehabilitation Program - Bulk Level Allocations*										
902536	SAP - Flow Monitoring	525	390	375	415	400	530	550	550	550	4,285	
	City Wide - Flow Monitoring	525	390	375	415	400	530	550	550	550	4,285	476
	Area-Specific											
905065	SAP - ORF Non-Integrated Works	10,000	10,000	10,000	8,000						38,000	
	Area Specific - ORF - Non Integrated Works	10,000	10,000	10,000	8,000						38,000	
905028	SAP - ORF Integrated Sewer Separation	20,000	20,000	20,000	18,000						78,000	
	Area Specific - ORF - Integrated Sewer Separation	10,000	10,000	10,000	9,000	(Only includes sewer budget ie. no water & road $)					39,000	
901160	SAP - Integrated Program - Bulk Projects	95,884	99,078	138,467	120,344	106,615	124,486	134,418	134,418	134,418	1,088,128	
	Bulk Projects from 10yr Capital Budget	95,884	99,079	138,467	120,344	106,617	124,486	134,418	134,418	134,418	1,088,131	
		See *Draft Rehabilitation Program - Bulk Level Allocations*										
	Budget for Bulk Projects is a sub-set of the annual Capital Works funding envelope which also includes the storm sewer, water & roads funding											
	10 year Capital Budget Sanitary Rehab Funding Envelope	34,932	39,321	33,823	35,310	27,289	35,344	36,864	36,864	36,864		35,179
		See *Draft Rehabilitation Program - Bulk Level Allocations*										
	Ddetailed calcs for DC's follows on next sheet - Capital and Growth $ Totals for 2009 DC Update											
	Area Specific - Collector Sewers - Intensification Areas	3,539	4,333	3,680	4,277	4,335	5,669	5,925	5,925	5,925		4,845
	Area Specific - Local San Rehab - Intensification Areas	12,576	15,396	13,075	15,197	15,404	20,144	21,055	21,055	21,055		17,217

NOTE: **10 year Capital Budget Sanitary Rehab Funding Envelope**

1) Extraneous Flow Removal includes development of an overall approach to wet weather flow management, investigation of identified problem areas, implementation of high impact low cost Flow Removal Programs and recommendations to general concerns such as design standards for the components of the system. Priorities are related to further detailing of the strategy components, identification of specific Flow Removal projects, and investigation of alternative approaches to address concerns related to partially- separated areas.

2) Infrastructure Management is an ongoing program related to performance monitoring and condition assessment of the City's roadway, watermain, sanitary and combined and storm sewer networks. Funding provides for testing, network level data collection, miscellaneous soil evaluations, and development and updates to approved products, design guidelines, construction specifications and asset management implementation initiatives. The amounts shown relate to the sanitary sewer component of the program only.

3) Flow Monitoring of the City's wastewater collection system is required to support the operation and maintenance of the existing system. Continuous long term data is needed to establish trends which will be used to determine capacity for growth, effectiveness of rehabilitation programs, identification of infiltrating sewers and flow contributions in problem areas, and control of flows at regulators and diversion structures. This funding request provides for upgrade, renewal, replacement and extension of the City's permanent flow monitoring network.

4) ORF is the Ottawa River Fund, a fund with one-third funding from each of municipal, provincial and federal levels of government. The amounts shown in this spreadsheet are only the municipal share of the budget. ORF is a program for a collection of undertakings aimed at improving the water quality of the Ottawa River. The strategy to define specific project scope will be finalized over the course of 2009. The 2009 budget and forecast is based on accelerating sewer separation and this could be amended once the strategy is finalized. This program has been identified separately from rehab to allow flexibility to reflect a change in strategy once confirmed.

5) The Bulk Integrated Program includes all City rehabilitation projects in addition to sanitary sewers; like projects for roads, storm sewers and water infrastructure.

6) Projects from the 10 year Capital Budget Sanitary Funding Envelope are sanitary sewer projects only.

Capital and Growth $ Totals for 2009 DC Update

(Source: Approved Budget - appd Jan 2009)

SAP Order Number	Project Description 2009-2031	BTG %	Avg. Capital $ 2010 to 2018	2009 $000	2010 $000	2011 $000	2012 $000	2013 $000	2014 $000	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000	2026 $000	2027 $000	2028 $000	2029 $000	2030 $000	2031 $000	Total Capital $000 2009 to 2019	Total Growth $000 2009 to 2019	Total Capital $000 2020 to 2031	Total Growth $000 2020 to 2031	Total Capital $000 2009 to 2031	Total Growth $000 2009 to 2031	Total Capital & Growth $000 2010-2031
				Timing of Expenditures by Year																											
901148	Extraneous Flow Removal		721		1,375	1,430	385	430	445	590	610	610	610	721	721	721	721	721	721	721	721	721	721	721	721	7,206		8,647		15,852		15,852
		20%			275	286	77	86	89	118	122	122	122	144	144	144	144	144	144	144	144	144	144	144	144		1,441		1,729		3,170	3,170
904887	Infrastructure Management		1,329		1,260	1,370	880	1,105	1,140	1,510	1,565	1,565	1,565	1,329	1,329	1,329	1,329	1,329	1,329	1,329	1,329	1,329	1,329	1,329	1,329	13,289		15,947		29,236		29,236
		20%			252	274	176	221	228	302	313	313	313	266	266	266	266	266	266	266	266	266	266	266	266		2,658		3,189		5,847	5,847
902536	Flow Monitoring		476		525	390	375	415	400	530	550	550	550	476	476	476	476	476	476	476	476	476	476	476	476	4,761		5,713		10,474		10,474
		20%			105	78	75	83	80	106	110	110	110	95	95	95	95	95	95	95	95	95	95	95	95		952		1,143		2,095	2,095
905065	ORF - Non Integrated Works				10,000	10,000	10,000	8,000																							
	City share is 33.3% of Total Budget				3,333	3,333	3,333	2,667																							
	BTG calculated on City share	10%			333	333	333	267																		12,667		0		12,667		12,667
905028	ORF - Integrated Sewer Separation				10,000	10,000	10,000	9,000																			1,267		0		1,267	1,267
	City share is 33.3% of Total Budget				3,333	3,333	3,333	3,000																							
	BTG calculated on City share	10%			333	333	333	300																		13,000		0		13,000		13,000
	Collector Sewers - Intensification Areas		4,845		3,539	4,333	3,680	4,277	4,335	5,669	5,925	5,925	5,925	4,845	4,845	4,845	4,845	4,845	4,845	4,845	4,845	4,845	4,845	4,845	4,845		1,300		0		1,300	1,300
		10%			354	433	368	428	434	567	593	593	593	485	485	485	485	485	485	485	485	485	485	485	485	48,454		58,145		106,599		106,599
	Local San Rehab - Intensification Areas		17,217		12,576	15,396	13,075	15,197	15,404	20,144	21,055	21,055	21,055	17,217	17,217	17,217	17,217	17,217	17,217	17,217	17,217	17,217	17,217	17,217	17,217		4,845		5,815		10,660	10,660
		10%			1,258	1,540	1,308	1,520	1,540	2,014	2,105	2,105	2,105	1,722	1,722	1,722	1,722	1,722	1,722	1,722	1,722	1,722	1,722	1,722	1,722	172,174		206,609		378,783		378,783
																											17,217		20,661		37,878	37,878
																									TOTALS	271,550	29,681	295,060	32,537	566,611	62,217	

	2009 $000	2010 $000	2011 $000	2012 $000	2013 $000	2014 $000	2015 $000	2016 $000	2017 $000	2018 $000
901160 Budget for Bulk Projects is a sub-set of the annual Capital Works funding envelope which also includes the storm sewer, water & roads funding										
10 year Capital Budget Sanitary Rehab Funding Envelope		34,932	39,321	33,823	35,310	27,289	35,344	36,864	36,864	36,864
Subtract:										
Extaneous Flow		1,375	1,430	385	430	445	590	610	610	610
Infrastructure Management		1,260	1,370	880	1,105	1,140	1,510	1,565	1,565	1,565
Flow Monitoring		525	390	375	415	400	530	550	550	550
ORF Non-Integrated		5,000	5,000	5,000	4,000					
ORF Integrated Sewer Separation		5,000	5,000	5,000	4,500					
IMA Renewal		190	0	0	0	0	0	0	0	0
ROW/Easement Adjustments		100	100	100	100	100	100	100	100	100
Pollution Control Implementation Plan		1,250	1,250	750	0	0	0	0	0	0
Resurfacing Program		570	710	890	1,000	1,120	1,120	1,120	1,120	1,120
Sub-total:		19,662	24,071	20,443	23,760	24,084	31,494	32,919	32,919	32,919
Sanitary Trunk Program - % of sub-total	**18%** *(appendix C)*	3,539	4,333	3,680	4,277	4,335	5,669	5,925	5,925	5,925
Sanitary Program Budget - less trunks		16,123	19,738	16,763	19,483	19,749	25,825	26,994	26,994	26,994
subtr. % for rehab in non-growth areas	**22%** *(appendix C)*	3,547	4,342	3,688	4,286	4,345	5,682	5,939	5,939	5,939
Net Sanitary Rehab Program Budget		12,576	15,396	13,075	15,197	15,404	20,144	21,055	21,055	21,055

See Draft Rehabilitation Program - Bulk Level Allocations

Collector Sewers - Intensification Areas

Local San Rehab - Intensification Areas

City of Ottawa
City-Wide Development Charge Projects
Service - Sanitary Sewers

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - Project Description 2010-2031	Gross Capital Cost Estimate $000	Less: Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	100% Statutory Portion $000	71% Residential Share $000	29% Non-residential Share $000	2009 $000	2010 $000
	2010-2031	Extraneous Flow Removal	15,852	80%	12,682	-	3,170	3,170	2,251	919		275
	2010-2031	Infrastructure Management	29,236	80%	23,388	-	5,848	5,848	4,152	1,696		252
	2010-2031	Flow Monitoring	10,474	80%	8,380	-	2,094	2,094	1,487	607		105
		Total	55,562		44,450	-	11,112	11,112	7,890	3,222	-	632

Source: Approved LRFP/ Budget - approved by City Council Jan 2009

Timing of Expenditures by Year														
2011 $000	2012 $000	2013 $000	2014 $000	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000
286	77	86	89	118	122	122	122	144	144	144	144	144	144	144
274	176	221	228	302	313	313	313	266	266	266	266	266	266	266
78	75	83	80	106	110	110	110	95	95	95	95	95	95	95
638	**328**	**390**	**397**	**526**	**545**	**545**	**545**	**505**	**505**	**505**	**505**	**505**	**505**	**505**

2026 $000	2027 $000	2028 $000	2029 $000	2030 $000	2031 $000	PPC Beyond 2031 $000	DC Recoverable Cost $000
144	144	144	144	144	144		3,170
266	266	266	266	266	266		5,847
95	95	95	95	95	95		2,095
505	**505**	**505**	**505**	**505**	**505**		**11,112**

City of Ottawa
Area Specific Development Charge Projects
Service - Sanitary Sewers

Item	Summary of Timing by Year(s) 2010-2031	Increased Service Needs Attributable to Anticipated Development - Project Description 2010-2031	Gross Capital Cost Estimate $000	Benefit to Existing Development %	Less: Benefit to Existing Development $000	Less: Grants, Subsidies & Contributions $000	Growth Cost $000	100% Statutory Portion $000	59% Residential Share $000	41% Non-residential Share $000	2009 $000	2010 $000
	2010-2031	Local San Rehab - Intensification Areas	378,783	90%	340,904		37,879	37,879	22,349	15,530		1,258
	2010-2031	Collector Sewers - Intensification Areas	106,599	90%	95,939		10,660	10,660	6,289	4,371		354
	2010-2013	ORF - Sewer Separation	39,000	90%	11,700	26,000	1,300	1,300	767	533		333
	2010-2013	ORF - Non Integrated Works	38,000	90%	11,400	25,333	1,267	1,267	748	519		333
		Total	562,382		459,943	51,333	51,106	51,106	30,153	20,953	-	2,278

Source: Approved LRFP/ Budget - approved by City Council Jan 2009

Timing of Expenditures by Year														
2011 $000	2012 $000	2013 $000	2014 $000	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000
1,540	1,308	1,520	1,540	2,014	2,105	2,105	2,105	1,722	1,722	1,722	1,722	1,722	1,722	1,722
433	368	428	434	567	593	593	593	485	485	485	485	485	485	485
333	333	300												
333	333	267												
2,640	**2,342**	**2,514**	**1,974**	**2,581**	**2,698**	**2,698**	**2,698**	**2,206**	**2,206**	**2,206**	**2,206**	**2,206**	**2,206**	**2,206**

2026 $000	2027 $000	2028 $000	2029 $000	2030 $000	2031 $000	PPC Beyond 2031 $000	DC Recoverable Cost $000
1,722	1,722	1,722	1,722	1,722	1,722		37,878
485	485	485	485	485	485		10,660
							1,300
							1,267
2,206	**2,206**	**2,206**	**2,206**	**2,206**	**2,206**		**51,105**

Appendix C
Representative Program / Large Diameter Pipes / Non-growth Rehab Calculations

Representative Rehab Budget Summary
Sanitary Rehab - Large Diameter Sewers Proportional Calculation

Preliminary draft of proposed 2009 and three-year rehabilitation candidates

Program	Info Source	Budget Amount ($'000) 2009	2010	2011	2012	Total $('000) 2009-2019	
Extraneous Flow							
Preston Street	Representative Program	500	1,000	1,000	1,000	3,500	
Bank Street	Representative Program	1,982	1,602	0	0	3,584	
Argyle Street	Representative Program	0	809	0	0	809	
Catherine Street	Representative Program	0	1,740			1,740	
Cave Creek Collector	Representative Program	0	250	1,463	1,836	3,549	
Local San Rehab - Intensification Areas	Representative Program	235	3,050	0	1,673	4,958	
Representative Program (excl. Non-growth area)		11,175	14,038	22,537	16,929	64,679	See *Representative Program Project Summary*
Total Budget ('000)		13,892	22,489	25,000	21,438	82,819	
Large Dia pipes(Preston, Bank, Argyle, Catherine, Cave Creek)		2,217	7,451	1,463	3,509	14,640	
% Large Dia of Total Budget		**16%**	**33%**	**6%**	**16%**	18%	**Avg = 18%**

Representative Rehab Budget Summary
Sanitary Rehab - Representative Program Projects in Non-growth Areas
Proportional calculation
for Period 2009-2031

Construction Year	Total* Rehab $	Rehab Non-Growth $	% Non-Growth to Growth	Reduce Rehab Budget $
2009	$15,422,372	$4,247,873	28%	$11,174,499
2010	$17,348,145	$3,310,456	19%	$14,037,689
2011	$26,477,515	$3,940,425	15%	$22,537,090
2012	$23,857,754	$6,928,426	29%	$16,929,328
Total	**$83,105,786**	**$18,427,180**	**22%**	$64,678,606

for the period beyond 2012 an average proportion of non-growth rehab projects to rehab in growth areas is 22%

Total budget 2012 to 2031 is $506,968.
Reduced by 22% is $395,435.

***Note:** Total Rehab $ is based on projects above & below the cut-off line in the representative program.

See *Representative Program Project Summary*

Representative Program Project Summary

Preliminary draft of proposed 2009 and three-year rehabilitation candidates

Design Year	Anticipated Construction Year	Street	From	To	Trunk	Ward	Length (m)	Sanitary	Total Project
Start of 2009 Construction									
2009	2009	Sewer Rehabilitation/Repairs/Tren	Various	Various	No	various		$2,000,000	$3,000,000
2009	2009	Extraneous Flow Removal	Various	Various	Yes	various		$500,000	$500,000
2009	2009	Localized Network Repairs/Improv	Various	Various	No			$250,000	$1,250,000
2009	2009	Sewer Struct Rehab - River Outfal	Various	Various	No			$3,000,000	$3,000,000
2009	2009	Inlet Control Device Installation	Various	Various	No			$0	$400,000
					No				$0
2007	2009	Bank St	Somerset St	Arlington	No	14	665	$1,471,000	$11,638,000
2008	2009	Preston	Larch	Young St	Yes	14	378	$1,375,000	$5,500,000
2008	2009	Preston	Beech St.	Pamilla	Yes	14	176	$607,000	$2,428,000
~~2007~~	~~2009~~	~~Real Time Control Chamber~~	~~Lloyd Preston~~	~~Westbound Transitway~~	~~Yes~~	~~14~~	~~0~~	$4,150,000	$8,300,000
2007	2009	Orleans Surface Drainage Improve	Various	Various	No	1/2	0	$0	$2,500,000
2008	2009	Wellington St	Parkdale Ave	Bayswater	No	15	1060	$3,299,250	$13,197,000
2008	2009	King Edward Ave	Rideau Street	Laurier Ave	No	12	450	$1,656,143	$6,879,929
2007	2009	Ring Lane	Wilbrod St	Laurier Ave E	No	12	125		$0
2008	2009	Hwy417-Carling Watermain Relocate			No	15/16		$0	$700,000
2008	2009	Hwy417-Cyrville Watermain Relocate			No	11		$0	$700,000
2008	2009	Churchill Ave	Carling Ave	Scott St	No	15	600	$1,867,500	$7,470,000
2008	2009	Triole St.	Railroad (north of Belfast F	South Dead End	No	18	548	$724,230	$2,679,204
2009	2009	Juniper St - watermain only	Champlain St.	Willow Ave.	No	1	272	$196,138	$855,207
Projects Requiring Design Only Funding					No				$0
2009	2010	Wren Rd - watermain only	Swans Way	Coxford St.	No	11	250	$0	$37,649
2009	2011	Bronson Ave.	Queen	Canal	No	14	2760	$600,048	$2,411,241
2009	2011	Rideau St	Dalhousie	Rideau River	No	12	1600	$167,678	$1,061,034
2009	2010	Sandridge Rd.	Hillsdale Rd.	Merriman Ave.	No	13	860	$59,161	$237,083
2009	2010	Mariposa Ave	Lisgar Rd	Acacia Ave	No	13	750	$76,658	$322,025
2009	2010	Buchan Rd	Mariposa Ave.	Acacia Ave	No	13	240	$19,075	$78,828
2009	2010	Somerset St W	Wellington St	O-Train Overpass	No	14/15	305	$0	$99,419
2009	2010	Cave Creek Collector Improvemer	Carling Ave	Holland	Yes	15	780	$235,409	$845,696
2009	2010	Elgin St	Pretoria Ave	Isabella Street	No	14	85	$35,491	$85,674

Design Year	Anticipated Construction Year	Street	From	To	Trunk	Ward	Length (m)	Sanitary	Total Project
2009	2011	Johnston Road - watermain only	Tapiola Cres (W)	215m east of Tapiola Cre	No	10	1015	$0	$147,178
Anticipated 2009 cut-off line								**$18,139,782**	**$76,323,167**
	Subtract:	Extraneous Flow Removal						$500,000	
	Subtract:	Large Diameter Sewers						$2,217,409	
	Subtract:	Rehab in non-growth areas						$4,247,873	
		Remaining Rehab Budget - Local Rehab - Intensification						**$11,174,499**	
Start of 2010 Construction									
2010	2010	Sewer Rehabilitation/Repairs/Tren	Various	Various	No	various		$2,000,000	$3,000,000
2010	2010	Extraneous Flow Removal	Various	Various	Yes	various		$1,000,000	$1,000,000
2010	2010	Watermain Relining	Various	Various	No	various			$3,000,000
2010	2010	Localized Network Repairs/Improv	Various	Various	No			$250,000	$1,250,000
2010	2010	Sewer Struct Rehab - River Outfal	Various	Various	No			$0	$3,000,000
2010	2010	Inlet Control Device Installation	Various	Various	No			$0	$400,000
					No				$0
2008	2010	Bank St	Arlington	Pretoria Ave	Yes	14	260	$809,250	$3,237,000
2008	2010	Bank St	Rideau Canal	Third Avenue	No	17	775	$2,412,188	$9,648,750
2008	2010	Preston	Pamilla	Carling	Yes	14	225	$700,313	$2,801,250
2008	2010	Preston	Albert	Spruce	Yes	14	290	$902,625	$3,610,500
2006	2010	Sussex Drive	George St	St. Patrick	No	12	390	$1,213,875	$4,855,500
2008	2010	Norfolk	Carling Ave	Adelaine	No	14	120	$209,160	$996,000
2008	2010	Sidney St.	Preston St	Dead End	No	14	92	$160,983	$766,588
2008	2010	Meadowlands	Indian	Thatcher	No	8	550	$1,711,875	$6,847,500
2008	2010	Churchill Ave	Carling Ave	Scott St	No	15	575	$1,789,688	$7,158,750
2008	2010	Cambridge St S	Dead End	Carling Ave	No	14	125	$913,963	$2,582,671
2008	2010	Jackson Ave	Frederick Pl	Dow's Lake Rd (Opeongo	No	17	100		$0
2008	2010	Frederick Pl	Cambridge Ave	Jackson Ave	No	17	85		$0
2008	2010	Stormont St	Apeldoorn Ave	Ortona Ave	No	16	305	$688,203	$2,239,191
2008	2010	Apeldoorn Ave	Stormont St	Normandy (S)	No	16	100		$0
2009	2010	Somerset St W	Wellington St	O-Train Overpass	No	14/15	305	$949,313	$3,797,250
2008	2010	Tweedsmuir Ave	Carling Ave	Clare St	No	15	710	$1,237,530	$5,893,000
2009	2010	Sandridge Rd.	Hillsdale Rd.	Merriman Ave.	No	13	840	$1,464,120	$6,972,000

Design Year	Anticipated Construction Year	Street	From	To	Trunk	Ward	Length (m)	Sanitary	Total Project
2009	2010	Mariposa Ave	Lisgar Rd	Acacia Ave	No	13	750	$1,307,250	$6,225,000
2009	2010	Buchan Rd	Mariposa Ave.	Acacia Ave	No	13	240	$418,320	$1,992,000
2008	2010	Argyle	Cartier St	Elgin St	Yes	14	165	$1,739,883	$4,991,688
2008	2010	Park Ave	Elgin St	Queen Elizabeth Drwy	No	14	250		$0
2008	2010	Queen Elizabeth Way	Park Ave	McLeod St	No	14	120		$0
2009	2010	Wren Rd.	Swans Way	Coxford St.	No	11	250	$0	$376,495
2009	2010	Cave Creek Collector Improvemer	Holland Ave	Clarendon/Geneva	Yes	15	980	$3,050,250	$12,201,000
2007	2010	8th Line Rd	Victoria St.	180 m S of Van Rens St.	No	20	839	$0	$1,900,000
2007	2010	Lloyd Graham Ave.	8th Line Rd.	Bowen St.	No	20	103	$0	$400,000
2007	2010	Bowen St.	Lloyd Graham Ave.	Creek north of Lloyd Grah	No	20	50	$0	$200,000
2009	2010	Elgin St	Pretoria Ave	Isabella Street	No	14	85	$148,155	$705,500
Projects Requiring Design Only Funding					No				$0
2010	2011	Merriman Ave.	Sandridge Rd.	Arundel Ave.	No	13	150	$13,073	$62,250
2010	2011	Dunvegan Rd.	Dead End	Farnham Cr.	No	13	220	$19,173	$91,300
2010	2011	Arundel Ave.	Farnham Cr.	Dunvegan Rd.	No	13	280	$24,402	$116,200
2010	2011	Catherine St	Queen Elizabeth	O'Connor St	Yes	14	470	$250,000	$1,000,000
2010	2011	Scott St.	Lanark Ave	Bayview Overpass	No	15	2240	$0	$400,000
2010	2011	Harvey St	Concord St	Main Street	No	17	240	$20,916	$99,600
2010	2011	Havelock St	Dead End	Greenfield Ave	No	17	250	$21,788	$103,750
2010	2011	Concord St N	Harvey St	Havelock St	No	17	70	$6,101	$29,050
2010	2012	Main St	Echo Drive	Rideau River	No	17	2000	$311,250	$1,245,000
2010	2011	Broadway Ave	Ralph St	Torrington	No	17	387	$33,727	$160,605
2010	2011	Popes Lane	Ralph St	Broadway Ave	No	17	160	$13,944	$66,400
2010	2011	Craig St	Broadway Ave	Findlay Ave	No	17	105	$9,151	$43,575
~~2010~~	~~2012~~	~~Bank St~~	~~Riverside~~	~~Ledbury~~	~~Yes~~	~~17/18~~	~~2350~~	$365,719	$1,462,875
Anticipated 2010 cut-off line								**$25,800,466**	**$106,928,238**
Subtract:		Extraneous Flow Removal						$1,000,000	
Subtract:		Large Diameter Sewers						$7,452,320	
Subtract:		Rehab in non-growth areas						$3,310,455	
		Remaining Rehab Budget - Local Rehab - Intensification						**$14,037,690**	
Start of 2011 Construction									

Design Year	Anticipated Construction Year	Street	From	To	Trunk	Ward	Length (m)	Sanitary	Total Project
2011	2011	Sewer Rehabilitation/Repairs	Various	Various	No	various		$2,000,000	$3,000,000
2011	2011	Extraneous Flow Removal	Various	Various	Yes	various		$1,000,000	$1,000,000
2011	2011	Watermain Relining	Various	Various	No	various		$3,000,000	$6,000,000
2011	2011	Localized Network Repairs/Improv	Various	Various	No			$500,000	$1,500,000
2011	2011	Sewer Struct Rehab - River Outfal	Various	Various	No			$0	$3,000,000
2011	2011	Inlet Control Device Installation	Various	Various	No			$0	$400,000
					No				
2008	2011	Bank St	Third Avenue	Hwy 417	No	17	700	$2,178,750	$8,715,000
2008	2011	Churchill Ave	Carling Ave	Scott St	No	15	575	$1,789,688	$7,158,750
2009	2011	Sussex Drive	St. Patrick	Bolton St	No	12	420	$1,307,250	$5,229,000
2008	2011	Indian	Rita	Meadowlands	No	8	570	$993,510	$4,731,000
2007	2011	Pleasant Park Rd.	Holt	Delmar	No	18	650	$2,023,125	$8,092,500
2009	2011	Rideau St	Dalhousie	Chapel St	No	12	800	$2,490,000	$9,960,000
2008	2011	Scott St.	Holland Ave	Bayview Overpass	No	15	940	$0	$5,640,000
2010	2011	Merriman Ave.	Sandridge Rd.	Arundel Ave.	No	13	150	$261,450	$1,245,000
2010	2011	Dunvegan Rd.	Dead End	Farnham Cr.	No	13	220	$383,460	$1,826,000
2010	2011	Arundel Ave.	Farnham Cr.	Dunvegan Rd.	No	13	280	$488,040	$2,324,000
2008	2011	Tweedsmuir Ave	Clare St	Richmond Road	No	15	680	$1,185,240	$5,644,000
2010	2011	Pinewood	Richmond Rd	Harwood	No	7	450	$784,350	$3,735,000
2009	2011	Bronson Ave.	Queen	Somerset St	No	14	750	$2,334,375	$9,337,500
2008	2011	Tremblay Rd.	Transitway	Avenue R	No	18	700	$2,178,750	$8,715,000
2010	2011	Catherine St	Queen Elizabeth	O'Connor St	Yes	14	470	$1,462,875	$5,851,500
2009	2011	Harvey St	Concord St	Main St	No	17	240	$418,320	$1,992,000
2009	2011	Havelock St	Dead End	Greenfield Ave	No	17	250	$435,750	$2,075,000
2009	2011	Concord St N	Harvey St	Havelock St	No	17	70	$122,010	$581,000
2010	2011	Broadway Ave	Ralph St	Torrington	No	17	387	$674,541	$3,212,100
2010	2011	Popes Lane	Ralph St	Broadway Ave	No	17	160	$278,880	$1,328,000
2010	2011	Craig St	Broadway Ave	Findlay Ave	No	17	105	$183,015	$871,500
2009	2011	Johnston Road - watermain only	Tapiola Cres (W)	215m east of Tapiola Cre	No	10	1015	$0	$2,943,567
Projects Requiring Design Only Funding					No				$0
2011	2012	Onslow Cr.	Elliot Ave.	Clegg St	No	17	480	$41,832	$199,200
2011	2012	Burnham Rd. (easement)	Onslow Cr.	Brantwood Dr (in to park	No	17	70	$10,894	$43,575
2011	2012	Glengarry Rd. (easement)	Onslow Cr.	Brantwood Dr. (past Onsl	No	17	70	$6,101	$29,050

Design Year	Anticipated Construction Year	Street	From	To	Trunk	Ward	Length (m)	Sanitary	Total Project
2011	2012	Bellamy St.	Debra St.	Eiffel Ave.	No	16	175	$15,251	$72,625
2011	2012	Coventry Rd.	Lola St.	St Laurent Blvd	No	18	1300	$113,295	$539,500
2011	2012	Wilton Cres	Monk St	Ralph St	No	17	250	$21,788	$103,750
2011	2012	Wilton Lane	Monk St	Woodlawn Ave	No	17	220	$19,173	$91,300
	2012	Somerset St W	City Centre	Booth St	No	14	555	$138,195	$552,780
2011	2013	Springhurst Ave - Watermain only	Main St	Chestnut St	No	17	443	$38,607	$183,845
~~2011~~	~~2012~~	~~Booth St~~	~~Primrose~~	~~Albert~~	~~Yes~~	~~14~~	~~175~~	$27,234	$108,938
~~2011~~	~~2012~~	~~Albert St~~	~~Empress~~	~~City Centre~~	~~Yes~~	~~14~~	~~726~~	$112,984	$451,935
2011	2012	Willingdon Rd	Lisgar Rd	Manor Ave	No	13	300	$26,145	$124,500
2011	2012	Park Road	Lisgar Rd	Manor Ave	No	13	325	$28,324	$134,875
2011	2012	Minto Pl.	Willingdon Rd	Park Road	No	13	85	$7,408	$35,275
					No				$0
Anticipated 2011 cut-off line								**$28,940,390**	**$118,778,565**
Subtract:		Extraneous Flow Removal						$1,000,000	
Subtract:		Large Diameter Sewers						$1,462,875	
Subtract:		Rehab in non-growth areas						$3,940,425	
		Remaining Rehab Budget - Local Rehab - Intensification						**$22,537,090**	
Start of 2012 Construction									
2011	2012	Sewer Rehabilitation/Repairs	Various	Various	No	various		$2,000,000	$3,000,000
2011	2012	Extraneous Flow Removal	Various	Various	Yes	various		$1,000,000	$1,000,000
2011	2012	Watermain Relining	Various	Various	No	various			$2,000,000
2011	2012	Localized Network Repairs/Improv	Various	Various	No			$250,000	$1,250,000
2011	2012	Sewer Struct Rehab - River Outfal	Various	Various	No			$2,000,000	$2,000,000
2007	2012	Inlet Control Device Installation	Various	Various	No			$0	$400,000
					No				$0
2010	2012	Rideau St	Chapel St	Rideau River	No	12	800	$2,490,000	$9,960,000
2010	2012	Bronson Ave.	Somerset St	Hwy 417	No	14	785	$2,443,313	$9,773,250
2008	2012	Scott St.	Lanark Ave.	Holland Ave	No	15	1300	$0	$7,800,000
2008	2012	Rita	Indian	Cordova	No	8	210	$366,030	$1,743,000
2008	2012	Cordova	Rita	Baseline	No	8	625	$1,945,313	$7,781,250
2010	2012	Sussex Drive	Bolton St	King Edward Ave	No	12	375	$1,167,188	$4,668,750

Design Year	Anticipated Construction Year	Street	From	To	Trunk	Ward	Length (m)	Sanitary	Total Project
2011	2012	Somerset St W	City Centre	Booth St	No	14	555	$1,727,438	$6,909,750
2011	2012	Booth St	Primrose	Albert	No	14	175	$544,688	$2,178,750
2008	2012	Tremblay Rd.	Avenue R	St Laurent	No	18	700	$2,178,750	$8,715,000
2011	2012	Albert St	Empress	City Centre	No	14	726	$2,259,675	$9,038,700
~~2010~~	~~2012~~	~~Bank St~~	~~Riverside Dr~~	~~Belanger~~	~~Yes~~	~~17/18~~	~~715~~	$2,225,438	$8,901,750
2009	2012	Main St	Echo Drive	Hazel	No	17	780	$2,427,750	$9,711,000
2010	2012	Catherine St	O'Connor St	Lyon St	Yes	14	590	$1,836,375	$7,345,500
2011	2012	Wilton Cres	Monk St	Ralph St	No	17	250	$435,750	$2,075,000
2011	2012	Wilton Lane	Monk St	Woodlawn Ave	No	17	220	$383,460	$1,826,000
2011	2012	Onslow Cr.	Elliot Ave.	Clegg St	No	17	480	$836,640	$3,984,000
2011	2012	Burnham Rd. (easement)	Onslow Cr.	Brantwood Dr (in to park	No	17	70	$217,875	$871,500
2011	2012	Glengarry Rd. (easement)	Onslow Cr.	Brantwood Dr. (past Onsl	No	17	70	$122,010	$581,000
2009	2012	Cave Creek Collector Improvemer	Clarendon/Geneva	Carling/Merivale	Yes	15	960	$1,673,280	$7,968,000
Projects Requiring Design Only Funding					No				$0
2009	2012	Harvey St	Main St	Echo Dr	No	17	400	$34,860	$166,000
2008	2012	Concord St N	Havelock St	Echo Dr	No	17	310	$27,017	$128,650
Anticipated 2012 cut-off line								**$28,367,409**	**$121,776,850**
Subtract:		Extraneous Flow Removal						$1,000,000	
Subtract:		Large Diameter Sewers						$3,509,655	
Subtract:		Rehab in non-growth areas						$6,928,425	
		Remaining Rehab Budget - Local Rehab - Intensification						**$16,929,329**	

APPENDIX I
CHANGES TO INFRASTRUCTURE AND CULTURAL PROJECTS FOR ECONOMIC STIMULUS FUNDING

MEMO / NOTE DE SERVICE

To / Destinataire	Acting Mayor and Members of Council	File/N° de fichier:
From / Expéditeur	Deputy City Manager Infrastructure Services and Community Sustainability	
Subject / Objet	Changes to Infrastructure and Cultural Projects for Economic Stimulus Funding	Date: 29 May 2009

The purpose of this memo is to outline the changes that were made to the infrastructure list between the time it was submitted to Council and the application process. As the funding applications required that each project location had to be applied for separately, staff submitted 269 individual applications for the projects on the Council approved list for Infrastructure and Cultural funding.

In general, the majority of these changes reflect updates as a result of ongoing coordination issues. However, a few projects have been removed from the application process: the **Twin Pad Arena** in South East Nepean, **Charlotte Birchard Centre of Early Learning, Albion Heatherington Recreation Centre Parking Lot**, and the **Parkdale Market expansion.**

In completing the applications for the Recreation and Infrastructure Canada Program (RInC) funding, staff have advised that, due to property acquisition issues and the delay in funding approval, they no longer are of the opinion that the **Twin Pad Arena** in South East Nepean is shovel ready and, as a result, will not be in a position to sign the Solemn Declaration of Substantial Completion for this project.

The **Charlotte Birchard Centre of Early Learning** does not meet the eligibility requirements for the RInC funding. Projects must fall within the following eligible project categories to be eligible for funding under the RInC Program in Ontario and Ontario REC:

> Arenas, gymnasiums, swimming pools, sports fields, parks, fitness trails, and bike paths, tennis, basketball, volleyball or other sport-specific courts, and other multi-purpose facilities that have physical recreation activity as the primary rationale.

In discussion with the Canada/Ontario Infrastructure Secretariat regarding the eligibility of the Centre, staff were informed that the Centre would not have qualified as an eligible project under the Infrastructure Stimulus Fund. It is anticipated that there will be a separate application process for NGOs and non-profits.

In addition, there are two projects that are not considered incremental funding but will be completed through other funding arrangements. The **Albion Heatherington Recreation Centre Parking Lot** project will be completed through the existing construction currently underway and the **Parkdale Market expansion** will be completed through the ongoing West Wellington Road Works and Parkdale Market Improvement Projects.

The remaining changes are minor and reflect updates as a result of ongoing coordination issues. For your information attached is an infrastructure list with the changes highlighted in yellow. The following are the most notable changes:

- The resurfacing program has been reduced by $0.5M, as the selective resurfacing projects (spot repairs) did not have identified locations as required to apply for funding.
- The structures program has been increased by $2.5M from $38.3M to $40.8M to reflect the higher estimated cost for the Heron Road Bridge renewal project.

On the appendices, additions are identified in green and deletions are shown in red. Yellow is used to highlight where amounts have changed. The following summarizes the key changes:

- **Appendix B** - Sidewalk Renewal: The same sidewalk sections that were part of the original submission have been included in the application process, but, in order to reduce the number of applications, the sidewalk sections have been redefined under common street segments.
- **Appendix C** - Integrated: The limits for the Churchill project have been defined.
- **Appendix D** - Resurfacing: The project estimates have been updated to include provisions for paved shoulders that were previously identified as separate items. This was required since each street was submitted as an application. The following represent the most significant changes to the list of streets:
    - St. Laurent from Belfast to Russell Rd: removed due to coordination issues with planned intersection modifications
    - Limebank from Rideau to Armstrong: added to the list
    - Kennevale from Weybridge to Cedarview: removed and will be considered as part of the base 2010 resurfacing program
    - Yorks Corner: project limits revised at the request of the ward councillor
    - Ormrod from Ashton Station to Flewellyn: added to the list to be coordinated with Flewellyn
    - Ashton Station from Ormrod to Flewellyn: added to the list to be coordinated with Flewellyn
    - Preservation treatments on Thomas A Dolan, John Shaw, Canon Smith, Greenland, Farmview, Howie and Prince of Wales have been removed and will be considered as part of the base program for 2010.
- **Appendix E** - Rural Road: The following streets have been removed due to higher estimated costs for other street segments:
    - Trepannier from Sparkles to dead-end
    - Manse from east limit to west limit
    - Vaughan Side from Upper Dywer Hill to Peter Robinson
    - Frontier from Burton to Burton

Once we have received notification of project specific funding approval from the other levels of government we will contact the impacted Councillors to provide further information pertaining to the roll out of these projects.

Original signed by:

Nancy Schepers

Attach. 1

c.c. Executive Management Committee
Wayne Newell
Gary Craig
Aaron Burry

City of Ottawa - Council Approved Prioritized List of Projects
Infrastructure Stimulus Fund

Project	Ward	Cost	Cumulative	Job Creation	Spending Plan		Operating Impact		Comment
					to March 31 2010	April 1 2010 to March 31 2011			
		$M	$M		$M	$M	FTEs	$M	
Transit									
SW Transitway Extension (Fallowfield - Barrhaven TC)	3, 22	52.60	52.60	604.60	16.00	36.60	-	0.124	
Baseline Station Tunnel, College Ave Overpass	8	38.00	90.60	436.78	-	38.00	-	-	
Woodroffe Ave. Pedestrian Overpass to Baseline Transit Station	8	5.00	95.60	57.47	-	5.00	-	-	
Council Motion									
904270 Terry Fox (Flamborough to Kanata Ave)	4	47.70	143.30	548.28	-	47.70	-	0.085	
903176 Hunt Club Extension to Hwy 417	10	20.00	163.30	229.89	2.00	18.00	-	0.026	Cost for eligible section (Hawthorne to west of Russell) and dependant on funding agreement with Province for remaining section. Project partially dependant on expedited approvals and property acquisition.
Pedestrian and Cycling									
New Sidewalks (see Appendix A)	CW	5.12	168.42	58.80	1.92	3.20	-	0.089	
Rural Pathways (see Appendix A)	CW	3.40	171.82	39.08	1.28	2.13	-	0.128	Cycling facilities are a portion of this funding envelope
Urban Multi-Use Pathway construction / refurbishment (see Appendix A)	CW	1.09	172.90	12.47	0.41	0.68	-	0.058	Cycling facilities are a portion of this funding envelope.
Sidewalk and Curb Renewal (see Appendix B)	CW	2.07	174.97	23.74	1.55	0.52	-	-	
St Joseph Blvd Streetscaping	1,2	2.50	177.47	28.74	0.50	2.00	-	-	
Renewal									
Real Property Renewal (see Appendix H)	CW	~~3.50~~ 3.50	180.97	40.23	~~1.61~~ 0.41	~~1.89~~ 3.09	-	-	
905149 O- Train Capital Works	CW	0.90	181.87	10.34	0.90	-	-	-	
Integrated Road Water Sewer Program (see Appendix C)	CW	~~63.00~~ 63.00	244.87	724.14	~~18.90~~ 20.30	~~44.10~~ 42.70	-	-	
Resurfacing (see Appendix D).	CW	~~35.56~~ 35.06	280.42	402.99	~~17.78~~ 17.90	~~17.78~~ 17.16	-	-	
Rural Road Upgrades (see Appendix E)	CW	~~2.55~~ 6.38	286.80	73.33	~~2.55~~ 3.97	~~3.83~~ 2.41	-	-	
Structures Program (see Appendix F)	CW	~~38.30~~ 40.80	327.60	468.97	~~11.49~~ 13.00	~~26.81~~ 27.80	-	-	
Traffic Signal Renewal (see Appendix G)	CW	2.15	329.76	24.74	1.32	0.83	-	-0.060	
Transitway Improvement Program	CW	~~2.05~~ 2.11	331.87	24.25	~~0.19~~ 0.43	~~1.86~~ 1.68	-	-	
Growth									
Traffic Signal - Johnston & Albion	10	0.88	332.74	10.06	0.13	0.75	-	0.014	
900427 Hazeldean Road (Terry Fox to Carp)	6	65.00	397.74	747.13	23.00	42.00	-	0.083	
903169 Earl Armstrong (Rideau River - Limebank)	22	35.00	432.74	402.30	11.00	24.00	-	0.114	
904711 Limebank Rd (Spratt to Earl Armstrong)	22	10.00	442.74	114.94	4.00	6.00	-	0.019	
903211 Mer Bleue Road (500 mtrs S of Innes - Hydro Corridor)	2	5.00	447.74	57.47	4.50	0.50	-	0.009	
903219 Tenth Line Road (Lakepointe - BBHBP)	19	7.00	454.74	80.46	2.00	5.00	-	0.017	
903217 Trim Road (Innes to BBHBP)	19	11.00	465.74	126.44	3.00	8.00	-	0.029	
TOTAL		~~463.18~~ **465.24**		~~5,324~~ **5,348**	~~126.01~~ **129.51**	~~337.16~~ **335.73**	**0.00**	**0.735**	

As tabled, the amount was $342M and was revised based on Councillor requests and staff adjustments
Job creation totals based on Federation of Canadian Municipalities (FCM) Infrastructure formula.

City of Ottawa - Council Approved Prioritized List of Projects
Social Housing Initiatives

Project	Ward	Cost	Cumulative	Job Creation	Spending Plan		Operating Impact		Comment
					to March 31 2010	April 1 2010 to March 31 2011			
		$M	$M		$M	$M	FTEs	$M	
OCHC Rehab/Redevelopment Program (see Appendix I)		137.58	137.58	1581.36	67.29	70.28	-	-	
Other Housing Providers - Capital Repair Grant (see Appendix I)		7.40	144.98	85.06	2.00	5.40	-	-	
Acquisition and Rehab of Existing Buildings (see Appendix I)		5.00	149.98	57.47	4.00	1.00	-	-	
New Affordable Housing Development		26.00	175.98	298.85	2.00	24.00	-	-	Assumes that funding provides for 100% of capital and soft costs. Total unit counts, i.e., 100 and 50 units may be less as projects are designed and selected
TOTAL		**175.98**		**2023**	**75.29**	**100.68**	**0.00**	**0.00**	

As tabled, the amount was $84.4M and was revised based on Councillor requests and staff adjustments.
Job creation totals based on Federation of Canadian Municipalities (FCM) Infrastructure formula.

City of Ottawa - Council Approved Prioritized List of Projects
Recreational Infrastructure Fund

Project	Ward	Cost	Cumulative	Job Creation	Spending Plan		Operating Impact		Comment
					to March 31 2010	April 1 2010 to March 31 2011			
		$M	$M		$M	$M	FTEs	$M	
Merivale Arena - Refurbishments	9	2.70	2.70	31.03	0.10	2.60	-	-	Could be impacted by the Twin Pad. $2.7M is minimum investment could be $4.9M with contemporization.
Bell Arena - Refurbishments	9	2.70	5.40	31.03	0.10	2.60	-	-	Could be impacted by the Twin Pad. $2.7M is minimum investment could be $4.9M with contemporization.
Gloucester Splash Pad wave pool - extension of lap pool	11	3.00	8.40	34.48	0.15	2.85	-	-	
Nepean Sportsplex Pool	9	2.00	10.40	22.99	0.15	1.85	-	-	
Carlsbad Springs CC (to replace space lost from school declared surplus and sold)	19	3.20	13.60	36.78	2.70	0.50	2.82	0.163	
Nepean Sportsplex Parking Lot	9	2.00	15.60	22.99	0.10	1.90	-	-	
Hintonberg Park Wall replacement	15	1.00	16.60	11.49	0.35	0.65	-	-	
City Park Redevelopment	CW	1.13	17.73	12.99	0.13	1.00	-	-	
McKellar Park Field House - demolish & rebuild	15	1.00	18.73	11.49	0.46	0.54	-	-	
Park Rehabilitation - Piazza Dante ($600K), Jack Purcell ($650K), St. Luke's ($525K)	14	1.78	20.51	20.46	0.13	1.65	-	-	Need change of focus to extend life of parks.
Greenboro Community Centre Expansion, 363 Lorry Greenberg Drive	10	3.70	24.21	42.53	3.14	0.56	1.50	0.085	
Greenboro Tennis Court Construction	10	0.13	24.34	1.49	0.13		-	-	Demand generated from increased use of Greenboro Library
Albion Heatherington Recreation Centre Parking Lot	10	0.05	24.39	0.57	0.05		-	-	Need to expand parking lot to better serve users of the facility.
Tom Brown Arena - Add Double gymnasium	15	5.00	29.39	57.47	3.90	1.10	3.15	0.042	Require a full-size gym for this area of the city.
Hintonburg Community Centre	15	1.20	30.59	13.79	1.20		-	0.260	Basement of facility was left unfinished and is currently unusable.
Parkdale Urban Park Redevelopment & Fieldhouse	15	1.20	31.79	13.79	1.08	0.12	-	-	Opportunity to redesign to reflect needs of the community.
Lighting at an existing ball field (Fitzroy Harbour)	5	0.15	31.94	1.72	0.15		-	-	
Potvin Park 3 Mini Soccer Fields	2	0.30	32.24	3.45	0.30		-	-	
Rideau Canoe Club	16	1.80	34.04	20.69	0.64	1.16	-	-	There is already a Major Capital Partnership application on this. Report to Committee on April 2nd
Hornet's Nest Field House Expansion	2	0.55	34.59	6.32	0.55		-	-	New infrastructure needed to support local sports needs.
Westboro Beach Mitigation	15	0.60	35.19	6.90	0.60		-	0.035	Gull wiring to minimize closure of the beach.
New Twin Pad arena - South East Nepean (close down 2 existing arenas)	TBD	21.40	56.59	245.98	2.10	19.30	7.60	0.350	To support growing area of Barrhaven South.
Parkdale Market - expand & improve	15	0.50	57.09	5.75	0.50		-	-	
Charlotte Birchard Centres of Early Learning	15	1.05	58.14	12.07	0.14	0.91	-	-	$350K cost sharing from Centre.
Coyote Park	6	0.50	58.64	5.75		0.50			Additional base elements to be included in the new park
Basketball Court in Stittsville	6	0.06	58.70	0.69		0.06			
Splash Pad for Jackson Trails	6	0.06	58.76	0.69		0.06			
Outdoor rink for Findlay Creek	22	0.09	58.85	1.03	0.09				
TOTAL		**58.85**		**676**	**18.93**	**39.91**			

As tabled, the amount was $38.0M and was revised based on Councillor requests and staff adjustments.
Job creation totals based on Federation of Canadian Municipalities (FCM) Infrastructure formula.

City of Ottawa - Council Approved Prioritized List of Projects
Cultural Initiatives

Project	Ward	Cost	Cumulative	Job Creation	Spending Plan		Operating Impact		Comment
					to March 31 2010	April 1 2010 to March 31 2011			
		$M	$M		$M	$M	FTEs	$M	
Centrepointe Theatre Expansion - rehearsal and presentation space	8	12.00	12.00	137.93	3.00	9.00	1.00	0.075	
Cultural Infrastructure Stimulus fund	CW	1.00	13.00	11.49	0.50	0.50	0.00	0.000	Existing policy and program in place was not funded as art of the 2009 budget
La Nouvelle Scene (Health and Safety & bldg rehab)	12	1.70	14.70	19.54	0.30	0.70	0.00	0.000	Not a City Project
Somerset Chinatown BIA Gateway (Net of their $350K in contributions)	14	0.25	14.95	2.87	0.05	0.20	0.00	0.000	Twin-city project on Somerset Street in partnership with the private sector and the City of Beijing, China
Kanata - West District Library	4	11.00	25.95	126.44	2.00	9.00	0.00	0.000	
Vanier and Alta Vista Branches - Renovation	12, 18	1.50	27.45	17.24	0.30	1.20	0.00	0.000	
Sunnyside and Cumberland Branches - Renovations	17, 1	1.50	28.95	17.24	0.30	1.20	0.00	0.000	
Greely - Replacement	20	1.00	29.95	11.49	0.20	0.80	0.00	0.000	
TOTAL		**29.95**		**344**	**6.65**	**22.60**	**1.00**	**0.075**	

As tabled, the amount was $15M and was revised based staff adjustments and Councillor requests.
Job creation totals based on Federation of Canadian Municipalities (FCM) Infrastructure formula.

City of Ottawa - Council Approved Prioritized List of Projects
Infrastructure Stimulus Fund - New sidewalks / Rural Pathways

Candidate Project List - Sorted by Priority Ranking

Sidewalks, Traffic Controls, Sign and Street Lights - $ 2 million

Ward	Street	From	To	Length (m)	Cost ($)	Job Creation	Additional Notes
Major Pedestrian Transit & Destination Link							This list details links connecting major destinations and transit links. They are also of a cost magnitude that would preclude them from being constructed in our annual new sidewalk program, which has limited funding.($180k in 2009)
17	Data Centre Rd (W)	Heron	Riverside	955	360,000	4.14	Would link O-Train to local employment, commercial. Heavy beaten path on both sides. Major transit / destination link and pedestrian safety concern.
13	Coventry	Hardy access	St. Laurent Shopping Centre access	300	150,000	1.72	There is no sidewalk along the north side that connects to an access to the community behind. There are two crossing points to access the sidewalk on the other side, neither of which are accessible for disabled. At the corner access there are no ped ramp
16	Canada Post Transit Link	Brookfield	O-Train - Confed. Station	375	145,000	1.67	This is the connection from Brookfield to O-train station and Heron bus transit. There are beaten paths. Major transit / destination link and pedestrian safety concern.
22	Shoreline-Tewsley Transit Link	Tewsley / River Rd	Shoreline (Rolling River)	335	125,000	1.44	Pedestrian safety concerns along River Rd. from one community to another. Transit / destination link and pedestrian safety concern. Pedestrian orientated Multi-use PATHWAY alternative.
17	Bronson	Brewer	Colonel By	640	240,000	2.76	Programs for disabled people at Brewer Centre.
16	Hunt Club	Bowesville	Paul Anka	1250	470,000	5.40	Sidewalk
16	Hunt Club	Paul Anka	220 m E Billy Bishop	465	180,000	2.07	Sidewalk
18	Belfast	Trainyards	Tremblay	560	210,000	2.41	Sidewalk New retail developments, connection is over bridge structure
23	Eagleson	Michael Cowpland	Rothesay	570	236,000	2.71	Sidewalk
CW	~~Additional Priority Locations~~ City Wide	~~TBD~~ City Wide	~~TBD~~ City Wide	TBD	3,000,000	34.48	A report will be brought to Committee, prior to the end of Q2 2009, to identify which locations can be completed.
Sub-Total					**5,116,000**	**59**	
Urban Multi-use Transit / Destination / Recreation Pathway Links							This list details urban pathway links connecting major destinations and / or transit links. They are considered important but because we don't have a dedicated pathway program usually precludes them from being constructed.
18	Industrial Rd (OR 30)	Riverside Dr (OR 19)	Alta Vista	180	25,000	0.29	Multiuse pathway as per OCP. Provides off-road alternative cycling facility in challenging road environment. Links to local cycling route leading to the hospital complex and Hurdman Station pathway network. On-shelf detail design would need updating.
1	Ottawa River Capital Pathway (city-owned section) Improvements 1	10th Line	Trim Road	1900	110,000	1.26	Off-road Link Surface improvements. Pathway segment is currently of a low quality and is on designated cycling network as Community Link. Add stone dust to existing granular to improve surface for cyclists
1	Ottawa River Capital Pathway (city-owned section) Improvements 2	Hiawartha Park Road	10th Line	3500	350,000	4.02	Surface improvements. Add asphalt surface to improve existing unpaved surface for cyclists Off-road Link. Bring pathway segment up to full multiuse pathway paved standard.
16	Sawmill Creek Pathway Connections	Hunt Club	Walkley	1275	250,000	2.87	Complete pathway connections at South Keys between Hunt Club and Walkley
3, 9	Woodroffe Pathway Extension	Fallowfield	Longfields	1000	100,000	1.15	Extension of existing pathway to serve southern community.
18	Alta Vista Transportation Corridor Pathway	Walkley	Smyth	2235	250,000	2.87	Council approved motion to include in Phase I of OCP Excellent link from Hunt Club and south to Sandy Hill
Sub-Total					**1,085,000**	**12**	
Rural Pathways (Multi-Use Cycling & Pedestrian Connection Details - $2 Million							
NOTE: Two high priority projects are recommended. Option is to consider phasing each project if full funding not available. Additional phases would then be constructed in subsequent years out of Cycling Facilities (OCP Implementation) Program Budget							
2, 19	Prescott-Russell Pathway Linkage	Ottawa City Limits	Innes in Rail ROW	25000	2,000,000	22.99	Improvement of existing abandoned rail corridor to provide new off-road facilities for recreation and utilitarian cycling. Involves primarily regrading, stone dust and signage.
20	Prescott Subdivision Pathway 1	Alert (Urban Boundary, south edge)	Buckles Street (Osgoode)	22000	1,400,000	16.09	As per OCP as Cycling Spine Route and other plans. Connects Osgoode Village to the Urban Area and provides off-road rural cycling corridor in southmost Ottawa Bicycle lanes. Councillor Thompson requested inclusion.
Sub-Total					**3,400,000**	**39**	
TOTAL					**9,601,000**	**110**	

City of Ottawa - Council Approved Prioritized List of Projects
Sidewalks and Curbs Renewal

Ward	Street	From	To	Length (m)	Cost ($)	Cumulative Amount ($)	Job Creation
~~01~~	~~Princess Louise Dr (North Side)~~	~~Brookridge Cr~~	~~De Papillon Pl~~	~~130~~	~~$40,000~~	~~$40,000~~	~~0.46~~
~~01~~	~~Princess Louise Dr (East Side)~~	~~Monterest Dr~~	~~Hautview Cr~~	~~90~~	~~$30,000~~	~~$70,000~~	~~0.34~~
~~01~~	~~Princess Louise Dr (East Side)~~	~~Pathway~~	~~Falwyn Cr East~~	~~90~~	~~$30,000~~	~~$100,000~~	~~0.34~~
~~01~~	~~Princess Louise Dr (East Side)~~	~~Fourth Line Rd East~~	~~Falwyn Cr West~~	~~90~~	~~$30,000~~	~~$130,000~~	~~0.34~~
~~01~~	~~Princess Louise Dr (East Side)~~	~~Fourth Line Rd Weest~~	~~York Mills Dr North~~	~~260~~	~~$80,000~~	~~$210,000~~	~~0.92~~
01	**(1) Princess Louise Dr**	**Montcrest Dr**	**York Mills Dr North**	**660**	**$210,000**	**$210,000**	**2.41**
~~07~~	~~Richmond Rd (RR 36) (East Side)~~	~~Dumaurier Av~~	~~Lovitt Rd~~	~~70~~	~~$20,000~~	~~$230,000~~	~~0.23~~
~~07~~	~~Richmond Rd (RR 36) (East Side)~~	~~Lovitt Rd~~	~~Highfield Cr~~	~~160~~	~~$50,000~~	~~$280,000~~	~~0.57~~
~~07~~	~~Richmond Rd (RR 36) (East Side)~~	~~Highfield Cr~~	~~Grenon Av~~	~~80~~	~~$25,000~~	~~$305,000~~	~~0.29~~
~~07~~	~~Richmond Rd (RR 36) (East Side)~~	~~Bellfield St~~	~~Dumaurier Av~~	~~230~~	~~$70,000~~	~~$375,000~~	~~0.80~~
07	**(1) Richmond Rd (RR 36)**	**Bellfield St**	**Grenon Av**	**540**	**$204,000**	**$414,000**	**2.34**
~~3~~	~~Maravista Dr – South S/W~~	~~Cedarview Dr~~	~~Weybridge Dr~~	~~310~~	~~$93,000~~	~~$468,000~~	~~1.07~~
~~16~~	~~Walkley Rd – South Ramp~~	~~Adjacent to 691 Walkley Rd~~		~~40~~	~~$16,000~~	~~$484,000~~	~~0.18~~
~~15~~	~~Scott St – North Path~~	~~Ross Av~~	~~Huron~~	~~320~~	~~$48,000~~	~~$532,000~~	~~0.55~~
21	Rideau Valley Drive South (OR 13) (East S/W)	North Bridge Limit (180 m Sourg of Old Wellington St)	Commodore Dr	580	$175,000	$589,000	2.01
~~3~~	~~Jockvale Rd – South Path~~	~~Strandherd Dr~~	~~Cedarview Dr~~	~~2,300~~	~~$345,000~~	~~$934,000~~	~~3.97~~
~~3~~	~~Jockvale Rd – North S/W~~	~~Cedarview Dr~~	~~85m East of Cedarview Dr~~	~~90~~	~~$25,000~~	~~$959,000~~	~~0.29~~
3	**(1) Jockvale Rd**	**Strandherd Dr**	**85m East of Cedarview Dr**	**2,390**	**$370,000**	**$959,000**	**4.25**
15	Warwick Pl - East S/W	Sherwood Dr	Dead End	120	$36,000	$995,000	0.41
15	Fairfax Av - East and West S/W	Ruskin St	Kenilworth	270	$81,000	$1,076,000	0.93
~~15~~	~~Clarendon Av – East and West S/W~~	~~Geneva St~~	~~Helena St~~	~~140~~	~~$42,000~~	~~$1,118,000~~	~~0.48~~
3	Cedarview Rd - East Path	Rail Raod Track Overpass	Fallowfield	1,960	$294,000	$1,370,000	3.38
~~21~~	~~Fourth Line Rd – West S/W~~	~~250m South of Community Way~~	~~Roger Stevens Dr~~	~~590~~	~~$175,000~~	~~$1,545,000~~	~~2.01~~
~~21~~	~~Fourth Line Rd – West S/W~~	~~Roger Stevens Dr~~	~~Prince of Wales Dr~~	~~310~~	~~$92,000~~	~~$1,637,000~~	~~1.06~~
~~21~~	~~Fourth Line Rd – East S/W~~	~~275 m South of Community Way~~	~~Roger Stevens Dr~~	~~620~~	~~$186,000~~	~~$1,823,000~~	~~2.14~~
~~21~~	~~Fourth Line Rd - East S/W~~	~~Roger Stevens Dr~~	~~Prince of Wales Dr~~	~~220~~	~~$65,000~~	~~$1,888,000~~	~~0.75~~
21	**(1) Fourth Line Rd**	**275 m South of Community Way**	**Prince of Wales Dr**	**1,740**	**$518,000**	**$1,888,000**	**5.95**
21	Roger Stevens Dr - South S/W	Fourth Line Rd	55 m East of Fourth Line Rd	60	$17,000	$1,905,000	0.20
8	**Iris Street**	**Baxter Road**	**Highgate Road**	**1,320**	**$165,000**	**$2,070,000**	**1.90**
			TOTAL	**9,640**	**$2,070,000**		**24**

Note (1): Sidewalk and Curb sections on the same street rolled-up under one heading (to reduce number of applications) and rolled-up costs adjusted to reflect new estimates.

City of Ottawa - Council Approved Prioritized List of Projects
Integrated Road, Water and Sewer Projects

Ward	Project	From	To	Cost ($M)	Cumulative Amount ($M)	Job Creation
15	Churchill Ave - Phase 1 of 3 Scott Street	~~(limits to be confirmed)~~ Scott Street Churchill Ave.	~~(limits to be confirmed)~~ Byron Avenue 120m E of Winona St.	7.5	7.5	86.2
18	Pleasant Park Rd	Haig Dr	Delmar Dr	5.0	12.5	57.5
14	Argyle Park Ave Queen Elizabeth Way	Cartier St Elgin St Park Ave	Elgin St Queen Elizabeth Drwy McLeod St	5.0	17.5	57.5
12	Sussex Drive	George	St Patrick	6.0	23.5	69.0
16	Stormont St Apeldoorn Ave	Apeldoorn Ave Stormont St	Ortona Ave Normandy (S)	4.0	27.5	46.0
7	Pinewood	Richmond Rd	Harwood	3.5	31.0	40.2
20	8th Line Rd Lloyd Graham Ave. ~~Bowen St.~~	Victoria St. 8th Line Rd. ~~Lloyd Graham Ave.~~	180 m S of Van Rens St. Creek West of Lloyd Graham ~~Creek north of Lloyd Graham~~	2.5	33.5	28.7
11	Triole St.	Railroad (north of Belfast Rd)	South Dead End	3.0	36.5	34.5
18	Tremblay Rd.	~~Transitway~~ Pickering Place	~~Avenue R~~ 315m West of St. Laurent	4.5	41.0	51.7
8	Indian (St Claire Gardens Phase 2)	Rita	Meadowlands	5.0	46.0	57.5
17	Cambridge St S Jackson Ave Frederick Pl	Dead End Frederick Pl Cambridge Ave	Carling Ave Dow's Lake Rd (Opeongo Rd) Jackson Ave	3.0	49.0	34.5
13	Sandridge Rd.	Hillsdale Rd.	Merriman Ave.	8.0	57.0	92.0
15	Tweedsmuir Ave	Carling Ave	Clare St	6.0	63.0	69.0
			TOTAL	**63.0**		**724**

City of Ottawa - Council Approved Prioritized List of Projects
Resurfacing and Preservation Treatments (1)

Ward	Street	From	To	Length (m)	Cost ($)	Cumulative Amount ($)	Job Creation
Resurfacing							
1, 2, 19	Des Epinettes Av	Jeanne D'Arc Blvd (OR 55)	Tenth Line Rd (OR 47)	1790	665,000	665,000	7.6
1	Wayside Ct	Des Epinettes Av West	Des Epinettes Av East	220	56,000	721,000	0.6
4, 7	Herzberg Rd	March Rd (OR 49)	Carling Av (OR 38)	840	259,000	980,000	3.0
2	Viseneau Dr	Boyer Rd	Innes Rd (OR 30)	1140	363,000	1,343,000	4.2
13	Coventry Rd (OR 50)	Vanier Parkway (OR 19)	Lola St	640	433,000	1,776,000	5.0
8	Baseline Rd (OR 16)	Woodroffe Av (OR 15)	~~Merivale Rd (OR 63)~~ St. Helens Place	2950	1,185,000	2,961,000	13.6
21	Fourth Line Rd (OR 5)	Shellstar Dr	Brophy Dr	7510	1,993,000	4,954,000	22.9
21	Fourth Line Rd (OR 5)	Reevecraig Dr (South)	Dilworth Rd (or 13)	2000	539,000	5,493,000	6.2
21	Donnelly Dr (OR 5)	Merlyn Wilson (RR 5)	Reevecraig Dr South	3710	1,099,000	6,592,000	12.6
21	Merlyn Wilson (OR 5)	RMOC South Limit	Donnelly Rd (OR 2)	790	178,000	6,770,000	2.0
14	Lyon St (OR 81)	Somerset St	Catherine St (OR 60)	580	139,000	6,909,000	1.6
20	Glen St	Bruce St	Victoria St (OR 6)	110	19,000	6,928,000	0.2
20	Bruce St	8th Line Rd (or 27)	Glen St	480	87,000	7,015,000	1.0
~~18~~	~~St. Laurent Blvd \ Russell Rd (OR 26)~~	~~Belfast Rd~~	~~Russell Rd (OR 26) (265 m South of Lancaster Rd)~~	~~1540~~	0	7,015,000	0.0
18	Smyth Rd (OR 72)	St. Laurent Blvd (OR 26)	Alta Vista Dr	2980	1,897,000	8,912,000	21.8
1	Amiens St	Tenth Line Rd (OR 47)	Duford Dr	1090	258,000	9,170,000	3.0
19	Trim Rd	~~Blackburn Bypass~~ (~~960~~ 800m south of Millennium Blvd)	Navan Rd	3730	1,098,000	10,268,000	12.6
9	Sunderland St	Bentley Av	West Hunt Club Rd (OR 32)	380	110,000	10,378,000	1.3
9	Jamie Av	Dead End	Merivale Rd (OR 63)	690	195,000	10,573,000	2.2
3	Weybridge Dr	Jockvale (S)	Jockvale (N)	1160	409,000	10,982,000	4.7
20	Nixon Dr	River Rd	~~Jake St~~ Duffy Street	3100	576,000	11,558,000	6.6
21	Roger Stevens Dr	Highway 416	River Rd	4480	1,370,000	12,928,000	15.7
23	Eagleson Rd	Cope Rd	Hazeldean Rd	2580	1,211,000	14,139,000	13.9
5	Kilmaurs Rd	Woodkilton Rd	Dunrobin Rd	1320	256,000	14,395,000	2.9
20, 22	Limebank Road	Rideau Road	Armstrong Road	2070	548,000	14,943,000	6.3
Preservation							
5	Loggers Way	Galetta Side Rd (OR 22)	Morris Island Dr	5300	344,000	15,287,000	4.0
5	Loggers Way	Morris Island Dr	Dead End 1.1 km North of Morris Island Dr	1110	72,000	15,359,000	0.8
~~5~~	~~Thomas A Dolan Pkwy~~	~~Sixth Line Rd~~	~~Barlow Cr~~	~~1710~~	0	15,359,000	0.0
~~5~~	~~John Shaw Rd~~	~~Rabbit Path~~	~~Kinburn Side Rd~~	~~2680~~	0	15,359,000	0.0
~~5~~	~~Canon Smith Dr~~	~~Galetta Side Rd (OR 22)~~	~~Fitzroy St (Market St)(N)~~	~~1960~~	0	15,359,000	0.0
~~5~~	~~Greenland Rd~~	~~Thomas A Dolan Pkwy~~	~~Vances Side Rd~~	~~3100~~	0	15,359,000	0.0
~~5~~	~~Farmview Rd~~	~~Grants Side Rd~~	~~Kinburn Side Rd (OR 20)~~	~~3080~~	0	15,359,000	0.0
~~5~~	~~Howie Rd~~	~~Manion Rd~~	~~385m North of Julia Lake Priv~~	~~1860~~	0	15,359,000	0.0
4	Kanata Av	Goulbourn Forced Rd	Campean Dr	1870	327,000	15,686,000	3.8
~~16, 17~~	~~Prince of Wales Dr (OR 73)~~	~~Baseline Rd (OR 16)~~	~~Preston St~~	~~3010~~	0	15,686,000	0.0
2	Innes Rd (OR 30 Blackburn Hamlet By-pass)	Old Innes Rd (West Leg)	Old Innes Rd (East Leg)	3320	835,000	16,521,000	9.6
~~5~~	~~Canon Smith Dr~~	~~Fitzroy St~~	~~Old Birch Rd~~	~~1360~~	0	16,521,000	0.0
Provision for paved shoulders							
~~Project specific instances to be included as part of cycling review~~					0	16,521,000	0.0

City of Ottawa - Council Approved Prioritized List of Projects
Resurfacing and Preservation Treatments (1)

Selective Resurfacing/Major Maintenance					
~~CW~~	~~Additional Selective Resurfacing/Major Maintenance Sections - Locations To Be Determined~~		0	16,521,000	0.0

City of Ottawa - Council Approved Prioritized List of Projects
Resurfacing and Preservation Treatments (1)

Transit Roads and Park and Ride Lots							
11,13	East Transitway	260m East of Concrete Slab @ St. Laurent Station (lower)	Blair Station	2350	570,000	17,091,000	6.6
8	Eagleson (East) Park and Ride Lots	All Lots	All Lots		720,000	17,811,000	8.3
2	East Transitway Eastbound On-Ramp	St. Joseph Blvd	Eastbound (OR 174 Bus Lane)	370	55,000	17,866,000	0.6
Resurfacing							
21	Barnsdale Rd	Prince of Wales Dr (OR 73)	Greenback Rd	1214	335,000	18,201,000	3.9
10, 22	Leitrim Rd (OR 14)	Limebank Rd	Bowesville Rd	2716	760,000	18,961,000	8.7
10	D'Aoust Av	ALBION RD	45 m E of Timbermill St	305	76,000	19,037,000	0.9
10	Davidson Rd	Bank St (OR 31, HWY 31)	Hawthorne Rd	3050	744,000	19,781,000	8.6
10	Sixth St	Queensdale Ave	Athans Av	641	104,000	19,885,000	1.2
21	Cedarview Rd	435m North of Brophy Rd	680m South of Barnsdale Rd	1780	116,000	20,001,000	1.3
2, 10, 19	Anderson Rd (OR 27)	Innes Rd (OR 30)	~~Dolman Ridge Rd~~ Renaud Road	2914	292,000	20,293,000	3.4
8	Greenbank Rd (OR 13)	Hunt Club (OR 32) (South side of Intersection)	Baseline Rd (OR 16) (Thru Intersection)	2304	1,202,000	21,495,000	13.8
~~3~~	~~Kennevale Dr~~	~~Weybridge Dr~~	~~Cedarview Rd~~	~~973~~	0	21,495,000	0.0
3	Sherway Dr	Fable St	Malvern Dr	1222	391,000	21,886,000	4.5
3	Jockvale Rd	Strandherd Dr	Cedarview Rd	2331	441,000	22,327,000	5.1
5	Carp Rd (OR 5)	Kinburn Side Rd (OR 20)	Galetta Side Rd (OR 22)	6161	1,238,000	23,565,000	14.2
5	Huntmar Dr	Sherruby Way	March rd (OR 49)	797	194,000	23,759,000	2.2
21	Dwyer Hill Rd (OR 3)	Franktown Rd (OR 10)	Bleeks Rd	2840	796,000	24,555,000	9.1
23	Palomino Dr	Eagleson Rd (OR 49)	Eagleson Rd (OR 49)	1053	272,000	24,827,000	3.1
16	Brookline Av	Hampstead Pl	Jasper Av	193	71,000	24,898,000	0.8
16	Crerar Av (Including Bulb/Courts)	Merivale Rd (OR 63)	Fisher Av (OR 69)	868	281,000	25,179,000	3.2
16	Tunis Av	Anna Av	Fisher Av (OR 69)	160	51,000	25,230,000	0.6
5	Galetta Side Rd (OR 22)	Highway 17	Ferry Rd (OR 7)	11280	3,451,000	28,681,000	39.7
11	Ogilvie Rd (OR 50)	St. Laurent Blvd (OR 26)	Aviation Parkway	900	690,000	29,371,000	7.9
20	Yorks Corners Rd	~~South Branch St (Mill St)~~ Mitch Owens Road (OR 8)	~~Marionville Road~~ Victoria Street (OR 6)	6900	1,735,000	31,106,000	19.9
5	Sixth Line (OR 21)	Riddell Rd (OR 109)	Thomas A. Dolan Pkwy	6040	1,105,000	32,211,000	12.7
06, 21	Rothbourne Rd	Highway 7	Lloydalex	2720	653,000	32,864,000	7.5
21	Ormrod Road	Ashton Station Road	Flewellyn Rd	710	212,000	33,076,000	2.4
21	Ashton Station Road	Ormrod Road	Flewellyn Rd	450	135,000	33,211,000	1.6
21	Flewellyn Rd	~~Ormond Road~~ Ashton Station Road	Dwyer Hill Rd (OR 3)	2550	921,000	34,132,000	10.6
21	Flewellyn Rd	Dwyer Hill Rd (OR 3)	Munster Rd	3092	928,000	35,060,000	10.7
Provision for paved shoulders							
~~Project specific instances to be included as part of cycling review~~					0	35,060,000	0.0
TOTAL					**35,060,000**		**403**

Note (1): Estimates updated to include paved shoulders as part of individual street sections.

City of Ottawa - Council Approved Prioritized List of Projects
Rural Road Upgrades

Ward	Street	From	To	Length (m)	Cost ($)	Cumulative Amount ($)	Job Creation
RURAL ROAD OPERATIONAL IMPROVEMENTS							
5	Burnt Lands Rd	1.5 km North of March Rd	Vaughan Side Rd	1550	331,000	331,000	3.80
20	Cooper Hill Rd	20m East of Venna Way	9th Line Rd	520	130,000	461,000	1.49
21	Third Line Rd South	Prince of Whales Dr	Roger Stevens Dr	1920	412,000	873,000	4.74
5	Old Almonte Rd	Corkery Rd	West of Corkery Rd	1000	200,000	1,073,000	2.30
5	Northwoods Dr	Dead End	Buckhams Bay Rd	1660	366,000	1,439,000	4.21
5	Tranquility Lane	Buckhams Bay Rd	Dead End	620	154,000	1,593,000	1.77
~~19~~	~~Trepannier Lane~~	~~Dead End~~	~~Sparkles St~~	~~60~~	0	1,593,000	0.00
~~19~~	~~Manse Rd~~	~~East Limit~~	~~West Limit~~	~~370~~	0	1,593,000	0.00
5	Armitage Ave	Greenland	Sumac Hill	520	85,000	1,678,000	0.98
5	Armitage Ave	Sumac Hill Lane	440m North of Gill Park Lane	540	86,000	1,764,000	0.99
20	9th Line Rd	Marionville Rd	Castor Rd	1870	300,000	2,064,000	3.45
5	Old Almonte Rd	Spruce Ridge Rd	Northshire Rd	1270	205,000	2,269,000	2.36
~~5~~	~~Vaughan Side Rd~~	~~Upper Dwyer Hill Rd~~	~~Peter Robinson Rd~~	~~1510~~	0	2,269,000	0.00
~~19~~	~~Frontier Rd~~	~~Burton Rd~~	~~Burton Rd~~	~~200~~	0	2,269,000	0.00
RURAL ROAD UPGRADES							
4	March Valley Rd	Riddell Dr	Klondile Rd	3080	654,000	2,923,000	7.52
19	Wilhaven Rd	450 m East of Beckett's Creek Rd (Ho. No. 3628)	Canaan Rd.	1200	240,000	3,163,000	2.76
21	Harnett Rd	Paden Rd	Donnelly Rd	1860	370,000	3,533,000	4.25
21	Paden Rd.	Settler's Way (West)	Harnett Rd	830	170,000	3,703,000	1.95
8	Third Line Rd South	Garlock rd	Dilworth Rd	2020	400,000	4,103,000	4.60
20	Stone School Rd	Grey's Creek Rd	360m West of Bank St	730	120,000	4,223,000	1.38
19	O'Toole Rd	Innes Rd	Wilhaven Dr	2100	420,000	4,643,000	4.83
21	Moonstone Rd	Cul-Du-Sac	Rothbourne Rd	1268	203,000	4,846,000	2.33
21	McCordick Rd	Lockhead Rd West	Mackey Rd	1148	184,000	5,030,000	2.11
21	McCordick Rd	Mackey Rd	Cowell Rd	1785	286,000	5,316,000	3.29
21	McCordick Rd	Cowell Rd	Dilworth Rd	1236	198,000	5,514,000	2.28
21	McCordick Rd	Dilworth Rd	McMullen Rd	505	81,000	5,595,000	0.93
19	Tenth Line Rd	700m South of Navan Rd.	Smith Rd	787	126,000	5,721,000	1.45
19	Smith Rd	Tenth Line Rd	Milton Rd	1381	221,000	5,942,000	2.54
19	O'Toole Rd	Innes Rd	French Hill Rd	1812	289,000	6,231,000	3.32
19	French Hill Rd	O'Toole Rd	175m West of Pleasantview Crt	929	149,000	6,380,000	1.71
TOTAL					**6,380,000**		**73**

City of Ottawa - Council Approved Prioritized List of Projects
Structures Program

Ward	Project	Cost ($)	Cumulative Amount ($)	Job Creation
	Renewal / Replacement Misc Structures (<$1M)			
15	Churchill Av/Danforth Av NW Ret. Wall, NW corner Churchill & Danforth [SN010560]	50,000	50,000	0.57
15	Churchill Av/Danforth Av SW Ret. Wall, SW corner Danforth & Churchill [SN010162]	50,000	100,000	0.57
23	Ravine Park Ped Bridge #1, Ravine Park Path, 50m East Old Colony Rd SN751310]	100,000	200,000	1.15
23	Ravine Park Ped Bridge #2 ,Ravine Park Path, 50m W Eagleson Rd [SN751300]	100,000	300,000	1.15
	Corkstown Rd Triple Culvert [118440]	750,000	1,050,000	8.62
7	MacKenzie King Bridge Repairs[SN012200]	600000	1,650,000	6.90
12,14	Terminal Ave O/P [SN056490]	700,000	2,350,000	8.05
11,13	St. Laurent Shopping Centre O/P [SN056020]	800,000	3,150,000	9.20
21	Flewellyn Road Culvert [SN757240]*(Municipal Drain Requirement)*	250,000	3,400,000	2.87
21	Fallowfield Road Culvert [SN757170]*(Municipal Drain Requirement)*	300,000	3,700,000	3.45
21	Mansfield Road Culvert [SN757200]*(Municipal Drain Requirement)*	300,000	4,000,000	3.45
6	Huntley Road Culvert [SN757120]*(Municipal Drain Requirement)*	300,000	4,300,000	3.45
21	Fernbank Road Culvert [SN L758090]*(Municipal Drain Requirement)*	200,000	4,500,000	2.30
21	Flewellyn Road Culvert [SN 750090]*(Municipal Drain Requirement)*	200,000	4,700,000	2.30
21	Paden Rd Culvert [868510] *(Municipal Drain Requirement)*	200000	4,900,000	2.30
	Subtotal 1	**4,900,000**		**56**
	Drainage Culverts (span =1m to 3m)			
19	OR174 Culvert [SN898610]	200,000	5,100,000	2.30
10	Ramsayville Rd Culvert [SN220550]	400,000	5,500,000	4.60
19	Wall Rd Culvert [SN890360]	200,000	5,700,000	2.30
19	Canaan Rd Culvert [SN890070]	500,000	6,200,000	5.75
19	Becketts Creek Rd Culvert [SN890190]	400,000	6,600,000	4.60
19	Birchgrove Road Bridge [SN897090]	300,000	6,900,000	3.45
19	Old Montreal Rd Beckett's Creek Culvert [SN897110]	600,000	7,500,000	6.90
5	Second Line Rd Culvert [SN648150]	300,000	7,800,000	3.45
5	John Shaw Culvert [SN 430200]	200,000	8,000,000	2.30
9	Merivale Rd Culvert [SN 118690]	250,000	8,250,000	2.87
22	Prince of Wales Dr. Culvert [SN 118800]	200,000	8,450,000	2.30
	Subtotal 2	**3,550,000**		**41**
	Drainage Culverts (span<1m)			
19,20	Boundary Rd [A223010], Dalmeny Rd [A882320] & Devine Rd [A892040]	350000	8,800,000	4.02
2	Innes Bypass Culverts [A224300], [A224320], [A224323] & [A224327]	250,000	9,050,000	2.87
21	Carlisle Circ [L758860]	20000	9,070,000	0.23
5	Dunhaven Dr [L332530]	40000	9,110,000	0.46
5	Kilkenny Rd [L332650]	30000	9,140,000	0.34
20	Broadway St [L885730]	10000	9,150,000	0.11
20	Byron St [L884360]	15000	9,165,000	0.17
20	Cooper Hill Rd [L886670]	15000	9,180,000	0.17
20	Lafortune Dr [L885830]	15000	9,195,000	0.17
20	Skylark St [L882360]	10000	9,205,000	0.11
21	Third Line Rd [L871715]	10000	9,215,000	0.11
19	Canary St [L894985]	15000	9,230,000	0.17
19	Barnwell Cres [L894893]	25000	9,255,000	0.29
19	Monique Ave [L896120]	15000	9,270,000	0.17
10	Orville Kemp [L222930]	30000	9,300,000	0.34
	Subtotal 3	**850,000**		**10**

City of Ottawa - Council Approved Prioritized List of Projects
Structures Program

Ward	Project	Cost ($)	Cumulative Amount ($)	Job Creation
	Transitway Structures - Renewal			
14,15	Prince of Wales Bridges over Ottawa River [SN011970-1 & 011970-2]	5,000,000	14,300,000	57.47
11	E Transitway U/P Blair Rd Ramp [SN226790]	1,000,000	15,300,000	11.49
7	SW Transitway U/P Sackville Ped Bridge [SN018380]	200,000	15,500,000	2.30
12	E Transitway U/P Nicholas Ramp [SN016040]	1,300,000	16,800,000	14.94
	Subtotal 4	**7,500,000**		**86**
	Transitway Structures - Preservation			
CW	Seal bridge & retaining wall surfaces exposed to salt	600,000	17,400,000	6.90
CW	Seal bridge & retaining wall surfaces exposed to salt	400,000	17,800,000	4.60
	Subtotal 5	**1,000,000**		**11**
	Renewal of Bridge Structures (>$1M)			
17,18	Billings Bridge [SN013020]	6,000,000	23,800,000	68.97
12	Minto Bridge West [SN013400]	2,500,000	26,300,000	28.74
	~~12,000,000~~	~~38,300,000~~	~~137.93~~	
17	Heron Bridge [SN012120]	14,500,000	40,800,000	166.67
	~~20,500,000~~		~~236~~	
	Subtotal 6	**23,000,000**		**264**
	~~38,300,000~~		~~440~~	
	TOTAL	**40,800,000**		**469**

City of Ottawa - Council Approved Prioritized List of Projects
Traffic Signals and Sign Renewal

Change Flashing Green to Left Turn Arrows - MTO standard					
Ward	**Street**		**Cost ($)**	**Cumulative Amount ($)**	**Job Creation**
21,22	Jockvale & Prince of Wales	Cabinet & Controller 332/MS3200	30,000	30,000	0.34
21	Bankfield & Prince of Wales	Cabinet & Controller 332/MS3200	30,000	60,000	0.34
13	Montreal & Carson-Codds	Cabinet & Controller 338/MS3200	20,000	80,000	0.23
18	Belfast & Tremblay	Underground	70,000	150,000	0.80
17	Main & Hawthorne	Cabinet & Controller 338/MS3200	20,000	170,000	0.23
17	Colonel By & Hawthorne	Cabinet & Controller 338/MS3200	20,000	190,000	0.23
16	Colonel By & Hogs Back	Cabinet & Controller 338/MS3200	20,000	210,000	0.23
20	Bank & Mitch Owens	Signal Heads	5,000	215,000	0.06
Signal Upgrades					
14	Gladstone & O'Connor	Cabinet & Controller 332/MS3200	25,000	240,000	0.29
14	Argyle & O'Connor	Cabinet & Controller 332/MS3200	25,000	265,000	0.29
18	AltaVista & Ridgemount	Cabinet & Controller 338/MS3200	17,000	282,000	0.20
10	Albion & Hunt Club	Controller MS3200	5,000	287,000	0.06
20	Bank & Victoria/Snake Island	Controller MS3200	5,000	292,000	0.06
8	Baseline & Centrepoint/Cobden	Controller MS3200	5,000	297,000	0.06
21,22	Hunt Club & Bridlepath/Daze	Controller MS3200	5,000	302,000	0.06
17	Bronson & Sunnyside	Cabinet & Controller 332/MS3200	35,000	337,000	0.40
7	Carling & DND Entrance	Controller MS3200	5,000	342,000	0.06
7	Carling & Kempster	Controller MS3200	5,000	347,000	0.06
9	Hunt Club & Cleopatra	Controller MS3200	5,000	352,000	0.06
13	Coventry & Vanier Parkway	Cabinet & Controller 332/MS3200	35,000	387,000	0.40
4,5	Terry Fox & Goulbourn	Controller MS3200	5,000	392,000	0.06
8	Holly Acres & Richmond	Controller MS3200	5,000	397,000	0.06
2	Innes & Orleans BLVD	Controller MS3200	5,000	402,000	0.06
14	Lisgar & Metcalfe	Controller MS3200	5,000	407,000	0.06
14	McLeod & Metcalfe	Controller MS3200	5,000	412,000	0.06
8,9	Merivale & Plaza/300 M N of Meadowlar	Controller MS3200	5,000	417,000	0.06
1	Place D'Orleans West & Old Hwy 17 EB	Controller MS3200	5,000	422,000	0.06
9	Hunt Club & Roydon/Sunderland	Controller MS3200	5,000	427,000	0.06
10,18	St-Laurent & Walkley	Controller MS3200	5,000	432,000	0.06
14	Wellington & Portage	Cabinet & Controller 332/MS3200	35,000	467,000	0.40
Signals - Underground Plant & Signal Displays					
18	Innes & St Laurent	traffic signal rebuild & underground plant	100,000	567,000	1.15
18	St Laurent & Tremblay	traffic signal rebuild & underground plant	90,000	657,000	1.03
11,12	Lemieux & St Laurent	traffic signal rebuild & underground plant	75,000	732,000	0.86
11,13	Coventry/Ogilvie & St Laurent	traffic signal rebuild & underground plant	120,000	852,000	1.38
14	Booth & Transitway	traffic signal rebuild & underground plant	90,000	942,000	1.03
9,16	Fisher & Meadowlands	traffic signal rebuild & underground plant	80,000	1,022,000	0.92
11	RR50 & Cadboro	relocate poles on medium	20,000	1,042,000	0.23
12	Montreal & Vanier Pwy	duct run for incident detection loops	25,000	1,067,000	0.29
17	Chamberlain & Kent	relocate controller and replace signal heads	20,000	1,087,000	0.23
9,16	Baseline & Clyde	duct run for incident detection loops	25,000	1,112,000	0.29
8	Woodroffe & Hwy 417 EB Ramp	replace south crossing, revise power supply	25,000	1,137,000	0.29
14	Arlington & Kent	traffic signal rebuild & underground plant	75,000	1,212,000	0.86
13	Vanier Pkwy & Hwy 417 WB ramp	replace foundations	50,000	1,262,000	0.57
11	Elmlea Gate & Ogilvie	traffic signal rebuild & underground plant	110,000	1,372,000	1.26
8	Baseline & Navaho	traffic signal rebuild & underground plant	80,000	1,452,000	0.92
14	O'Connor & Sparks	replace foundations	25,000	1,477,000	0.29
14	O'Connor & Queen	replace foundations	25,000	1,502,000	0.29
14	Metcalfe & Sparks	replace foundations	25,000	1,527,000	0.29
12	King Edward & Stewart	relocate poles SW corner	25,000	1,552,000	0.29
17	Carling & Preston	traffic signal rebuild & underground plant	100,000	1,652,000	1.15
10	Bank St & Queensdale Ave	traffic signal rebuild & underground plant	100,000	1,752,000	1.15
10	Bank St & Rosebella Ave	traffic signal rebuild & underground plant	100,000	1,852,000	1.15
10	Bank St & Conroy Rd	traffic signal rebuild & underground plant	150,000	2,002,000	1.72
20	Bank St & Rideau Rd	traffic signal rebuild & underground plant	150,000	2,152,000	1.72
		TOTAL	**2,152,000**		**25**

City of Ottawa - Council Approved Prioritized List of Projects
Real Property Lifecycle Renewal

Ward	Project	Location/Description	Cost ($000)	Cummulative ($000)	Job Creation
16	Bellevue Manor Community Centre - Roofing	Bellevue Manor CC/Replace roof.	80	80	
15	Fire Administration- HVAC Units	Replace HVAC equipment and controls.	350	430	
CW	Septic System Reconstruction	Leitrim GSCSC & Goulbourn Municipal Office/Replace septic syst.	70	500	
17	Aberdeen Pavillon - Cladding	Aberdeen Pavillion/Cladding restoration.	200	700	
22	Carleton Lodge - Windows/Elevators	Carleton Lodge/replace main elevator and centre core building envelope	750	1450	
12	Arts Court - HVAC System	Arts Court/Replace HVAC system	550	2000	
12	Centre D'Accueil Champlain - Elevators	Centre D'Accueil Champlain/Replace elevators.	400	2400	
			2400		
CW	Accessibility	City Wide/Remove physical barriers.			
	Brewer Pool Main entrance ramp	**Brewer way**	**225**		
	Cyrville Community Center LULA Lift	**Halmont drive**	**275**		
	Nepean Sportsplex LULA Lift	**Woodroffe Avenue**	**350**		
	Nepean Sportsplex Viewing Platform & Ramp at Pool	**Woodroffe Avenue**	**150**		
	Vernon Library Front Entrance	**8682 Bank Street**	**100**		
			1,100		
		TOTAL	**3,500**		**40**

City of Ottawa - Council Approved Prioritized List of Projects
Social Housing Initiatives

Ward	Project	Cost ($M)	Cummulative ($M)	Job Creation
OCHC Rehab/Redevelopment Program				
	Refer to supplementry document for details	137.58		
	Sub-total	**137.58**	**137.58**	**1581.38**
Other Housing Providers - Capital Repair Grant				
CW	Renewal of Exterior Building Envelopes	3.50	141.08	
CW	Other Exterior Repairs	0.50	141.58	
CW	Replacement of Windows and Doors	0.90	142.48	
CW	Interior Renewal	1.00	143.48	
CW	Mechanical and Electric System Upgrades	1.50	144.98	
	Sub-total	**7.40**		**85.06**
Acquisition and Rehab of Existing Buildings				
CW	Acquisition and Rehabilitation Projects	5.00	149.98	
	Sub-total	**5.00**		**57.47**
New Affordable Housing Development				
CW	100 Units of City Initiated Projects	17.50	167.48	
CW	50 Units of Externally identified Projects	8.50	175.98	
	Sub-total	**26.00**		**298.85**
	TOTAL	**175.98**		**2022.76**

As tabled, the amount was $84.4M and was revised based on Councillor
Job creation totals based on Federation of Canadian Municipalities (FCM)

APPENDIX J
CITY OF OTTAWA DEVELOPMENT CHARGES BY-LAW 2009-216

BY-LAW NO. 2009 - 216

A by-law of the City of Ottawa for the imposition of development charges.

WHEREAS the Council of the City of Ottawa may by by-law, pursuant to subsection 2(1) of the *Development Charges Act, 1997*, impose development charges against land to pay for increased capital costs required because of increased needs for services arising from development of the area to which the by-law applies and the development requires certain approvals recited in subsection 2(2) of the *Development Charges Act, 1997*;

AND WHEREAS Council has reviewed all matters required to be considered under the *Development Charges Act, 1997* and the regulations made thereunder, including provision of the proposed by-law and background study;

AND WHEREAS Council has given public notice, held a public meeting and consulted with the public in accordance with the provisions of the *Development Charges Act, 1997*;

AND WHEREAS Council, upon reviewing the matters and after the public consultation, deems it necessary to enact this by-law to provide for the imposition of development charges against land;

THEREFORE the Council of the City of Ottawa enacts as follows:

DEFINITIONS

1. In this by-law:

"Act" means the *Development Charges Act, 1997*, and all regulations made thereunder;

"apartment dwelling" means a dwelling unit within a residential building or the residential portion of a mixed use building containing three or more dwelling units which are:

i) connected by a common hall or stairway;
ii) separated horizontally from other dwelling units within the building; or
iii) defined as a back-to-back townhome dwelling that is developed as a block approved for development at a minimum density of sixty (60) units per hectare, excluding the site area used or intended to be used as common outdoor amenity space, pursuant to an executed agreement entered into under the *Planning Act*, section 41; as amended;

and also includes:

i) a single story dwelling unit less than 1000.0 square feet in size in a building of more than two stories; and
ii) a secondary dwelling unit.

"back-to-back townhome dwelling" means a building containing a minimum of six and no more than sixteen dwelling units that is divided vertically, where each unit is divided by a common wall, including a common rear wall without a rear yard setback and whereby each unit has an independent entrance from the outside accessed through the front yard or exterior side yard;

"bedroom" means any room used or designed or intended for use as sleeping quarters but does not include a living room, dining room, kitchen, den, study or similar area;

"building or structure" means an enclosed or partially-enclosed area and includes an air-supported structure;

"board of education" means a board of education, as defined in subsection 1(1) of the *Education Act*;

"*Building Code Act*" means the *Building Code Act, 1992*, S.O. 1992, c. 23, as amended;

"capital costs" has the same meaning it has in the Act;

"City" means the City of Ottawa;

"commercial use" means a non-residential use other than a non-residential general use, an institutional use, an industrial (limited) use or an industrial use and includes an office use;

"complete building permit application" means the submission of a complete application form clearly identifying the work and occupancy covered by the permit, legal description, contact information and valuation of the proposed building. The application shall be accompanied by the permit fee paid in full pursuant to the City's Building Bylaw and two (2) sets of plans and specifications which indicate the nature and extent of the work (architectural, structural, mechanical and electrical plans sealed and signed by the appropriate professional as required for the complete building including a geotechnical report, site and servicing plans and a survey) in sufficient detail to establish compliance to the *Building Code Act, 1992*, S.O.1992, c. 23, as amended, the Building Code and any other applicable law. For a footing and foundation phased permit approved by the Chief Building Official, a complete building permit application means the submission of a complete application form as indicated above and shall be accompanied by a permit fee for the portion of the work for which the approval is required. This type of application shall be accompanied by two (2) sets of structural plans and specifications (sealed and signed by a Professional Engineer) for the entire building including excavation and shoring details as required, a geotechnical report and complete architectural plans for the above grade;

"complete planning application" means an application for an official plan amendment, zoning by-law amendment, site plan approval, or approval of a draft plan of subdivision under the *Planning Act*, which application is submitted with all of the information and documentation required by the City pursuant to By-law No. 2001-451, as amended;

"council" means the Council of the City of Ottawa;

"designated area" means the area described in Section 2 of this by-law, within which development charges are imposed;

"designated services" means the service recited in Section 3 of this by-law for which development charges are imposed;

"designated uses of land, buildings or structures" means the uses designated in Section 4 of this by-law;

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the size or usability thereof, and includes redevelopment;

"development charge" means a charge against land imposed pursuant to this by-law;

"dwelling unit" means a room or suite of rooms used, designed or intended to be used by one or more persons living together, in which culinary and sanitary facilities are provided for the exclusive use of such a person or persons in a residential use or mixed use building or structure;

"garden suite" means a one-unit detached residential structure, containing bathroom and kitchen facilities that is ancillary to an existing residential structure and that is designed to be portable;

"grade" means the average level of finished ground adjoining a building or structure at all exterior walls;

"gross floor area" means:

(a) in the case of a residential use building or structure or in the case of a mixed-use building or structure with respect to the residential use portion thereof, the total area of all floors measured between the outside surfaces of exterior walls or between the outside surfaces of exterior walls and the centre line of party walls separating the dwelling unit from another dwelling unit or other portion of the building;

(b) in the case of a non-residential use building or structure or in the case of a mixed-use building or structure in respect of the non-residential portion

thereof, the total area of all building floors above or below grade measured between the outside surfaces of the exterior walls or between the outside surfaces of exterior walls and the centre line of party walls separating two uses; and

(i) includes the area of a mezzanine as defined in the Ontario Building Code; and

(ii) excludes those areas used exclusively for parking of vehicles unless the parking of vehicles is the primary use of the building or structure;

"high technology" means having a significant dependence on science and technology innovation that leads to new or improved products and services.

"industrial (limited) use" means an industrial use which is not a high technology use;

"industrial use" means lands, buildings or structures used or designed or intended for use for manufacturing, producing or processing of raw goods, warehousing or bulk storage of goods, distribution centre, research or development in connection with manufacturing, processing of raw goods, storages and includes an "industrial (limited) use" but does not include retail or offices unless it is attached to an building used for an industrial use as defined above;

"institutional uses" means only the following uses:

(a) hospitals;

(b) nursing homes and homes for the aged;

(c) schools; and

excludes any building or part of a building or structure which is a dwelling unit.

"light rail or transitway station" means a location at an existing light rail or transit station or at a proposed light rail or transit station which proposed station is identified by an adopted environmental assessment approved by Council, from or to which passengers embark or disembark;

"local board" means local board as defined in the Act;

"mobile home" means any dwelling that is designed to be made mobile, and constructed or manufactured to provide a permanent residence for one or more persons, but does not include a travel trailer or tent trailer;

"mixed use" means land, building or structures used or designed or intended for a combination of non-residential uses and residential uses;

"multiple dwelling" means a dwelling unit other than a single-detached dwelling, semi-detached dwelling, row dwelling, apartment dwelling or mobile home;

"non-profit health care facility" means non-profit corporations having as the principal objections of incorporation:

(a) community health centres and other non-profit health facilities as defined in the *Charitable Institutions Act, R.S.O. 1990,* c. C.9, s. 1 and the *Corporations Act,* R.S.O. 1990, c. C.38, Part III;

(b) community care access centres as defined in the *Community Care Access Centre Corporations Act, 2001*, S.O. 2001, c. 33, as amended, s. 2;

(c) independent health facilities designated under the *Independent Health Facilities Act*, R.S.O. 1990, c. I. 3, as amended, s. 2(b);

(d) being a service provider, whose services are regulated by the *Long Term Care Act, 1994,* S.O. 1994, c. 26, as amended; or

(e) public hospitals as defined in the *Public Hospitals Act,* R.S.O. 1990, c.P.40.

"non-profit housing" housing which is or is intended to be offered primarily to persons or families of low income and which is owned or operated by:

(a) a non-profit corporation being a corporation, no part of the income of which is payable to or otherwise available for the personal benefit of a member or shareholder thereof; or

(b) a non-profit housing co-operative having the same meaning as in the *Co-operative Corporations Act,* R.S.O. 1990, c. C.35, as may be amended from time to time;

"non-residential general use" means land or buildings or structures or part thereof used for hotels, motels or similar buildings or structures providing temporary accommodation and also includes all retail use;

"office" means lands, buildings or structures used or designed or intended for use for a practice of a profession, the carrying on of a business, occupation or the conduct of a non-profit organization including government;

"official plan" means the Official Plan of the City, as amended or substituted for from time to time;

"owner" means the owner of land or a person who has made application for an approval for the development of land upon which a development charge is imposed;

"place of worship" means that part of a building or structure that is exempt from taxation as a place of worship under the *Assessment Act*, R.S.O. 1990, c. A.31, as amended;

"*Planning Act*" means the *Planning Act*. R.S.O. 1990, c. P.13, as amended;

"prescribed" means prescribed by the regulations made under the Act;

"reasonable cost" for subsection 14(1) refers to the price for reimbursement as set out in Schedule "D" of this by-law, supported by back-up documentation, and indexed accordingly with the provisions of section 16 of this by-law;

"residential use" means land or buildings or structures of any kind whatsoever used, designed or intended to be used as living accommodations for one or more individuals and includes land or a building or part thereof used, designed or intended for a single-detached dwelling, semi-detached dwelling, row dwelling, apartment dwelling, or multiple dwelling;

"retail" means lands, buildings or structures used or designed or intended for use for the sale or rental or offer for sale or rental of goods or services to the general public, or significant portion thereof, for consumption or use and shall include restaurants but shall exclude all offices;

"rooming and/or boarding house" means a dwelling in which lodging is provided to an individual, for gain, which may include communal kitchen or bathroom facilities and where each room or suite of rooms, which may include either individual kitchen or individual bathroom facilities, but not both, constitutes a separate, independent occupancy in which a person sleeps;

"row dwelling" means a dwelling unit in a residential use or mixed use building or structure consisting of more than two dwelling units having one or two vertical walls but no other parts attached to another dwelling unit;

"rural area" means all lands designated and lying outside of the Urban Area Boundary on Schedule "A" to the Official Plan;

"secondary dwelling unit" means a dwelling unit that is subsidiary to and located in the same building as an associated principal dwelling unit; and its creation does not result in the creation of a semi-detached dwelling, row dwelling or a multiple dwelling.

"semi-detached dwelling" means a dwelling unit in a residential use building consisting of two principal dwelling units having one vertical wall or one horizontal wall but no other parts attached to another principal dwelling unit above grade and shall include a duplex;

"single-detached dwelling" and "single detached" means one principal dwelling unit in a residential use building that is not attached above grade to another principal building or structure used for a residential use.;

"theoretical development charge" means the maximum non-residential development charge that the City could impose, for Areas 1, 2 and 3 as set out in Schedule "A" to this by-law, as the case may be, pursuant to the background study endorsed by City Council;

"transit network" means the Rapid Transit Network consisting of:

(a) existing Rapid Transit infrastructure (Transitway and O-Train Rail corridors, and stations) forming part of the Rapid Transit Network of Schedule "D" to the Official Plan; and

(b) those future Transitway and LRT corridors, and stations, where shown on an environmental assessment adopted by the City and forming part of the Rapid Transit Network of Schedule "D" to the Official Plan;

"transit vehicles and buildings" means the buses, trains, vehicles and other accessory buildings or structures supporting transit;

"treasurer" means the City Treasurer or designate;

"urban area" means the lands having a designation on Schedule "B" to the Official Plan.

DESIGNATED AREA

2. (1) The designated area within which development charges are imposed and to which this development charge by-law applies, are all lands within the geographic territorial limits of the City of Ottawa.

(2) The Inside the Greenbelt Area is shown as Area 1 on Schedule "A" and includes the shaded area shown as "Greenbelt" on Schedule "A".

(3) The Outside the Greenbelt Area is shown as Area 2 on Schedule "A".

(4) The Rural Area is shown as Area 3 on Schedule "A".

DESIGNATED SERVICES

3. (1) It is hereby declared by the Council of the City that all development of land within the City will increase the need for services.

(2) Development charges shall be imposed for the following designated services to pay for the increased capital costs required because of increased needs for services arising from development:

(a) Roads and Related Services;
(b) Sanitary Sewer (Wastewater);
(c) Water;
(d) Stormwater Drainage
(e) Police;
(f) Emergency Services (Fire);
(g) Public Transit;
(h) Parks Development;

(i) Recreation Facilities;
(j) Libraries;
(k) Child Care;
(l) Works and Yards;
(m) Paramedic Service;
(n) Corporate Studies; and
(o) Affordable Housing Program.

(3) Once this by-law is in force, the development charge applicable to the development as determined by this by-law shall apply without regard to the services required or used by any individual development.

(4) Notwithstanding subsection (3), in regards to Area 3, development charges shall apply only in respect of designated services provided or intended to be provided by the City.

DESIGNATED USES

4. (1) Development charges are adopted and imposed in accordance with Schedule "B" for the following types of residential use:
(a) Single and semi-detached dwelling;
(b) Apartment dwelling (one bedroom or bachelor)
(c) Apartment dwelling (two or more bedrooms);
(d) Multiple dwelling;
(e) Row dwelling; and
(f) Mobile Home.

(2) Development charges are adopted and imposed in accordance with Schedule "C" for all of the following types of non-residential use:
(a) non-residential general;
(b) commercial;
(c) institutional;
(d) industrial (limited); and
(e) industrial.

(3) The development charge payable for a rooming and/or boarding house shall be the rate for a single family dwelling multiplied by R where R is the number of persons the rooming and/or boarding house is designed to accommodate divided by four and rounded to nearest, lower whole number.

DEVELOPMENT CHARGE RULES

5. (1) The development charges herein have been calculated in the background study such that the total of all development charges on anticipated development do not exceed the capital costs determined under paragraphs 2 to 8 of subsection 5(1) of the Act. In addition, the charges for the residential use and non-residential use

development and the sub-types noted therein, have been calculated such that they do not exceed the capital costs that arise from the increase in the need for service for each individual type of development;

(2) The development charges established in Schedule "B" to this by-law shall be and are hereby imposed on Areas 1, 2 and 3 as set out in Schedule "A" to this by-law, as the case may be, in respect of the designated uses of land, buildings or structures within the designated area for the designated services with respect to residential use development;

(3) The development charges established in Schedule "C" to this by-law shall be and are hereby imposed on Areas 1, 2 and 3 as set out in Schedule "A" to this by-law, as the case may be, in respect of the designated uses of land, buildings or structures within the designated area for the designated services with respect to non-residential use development;

(4) The development charges established in Schedule "B" and Schedule "C" to this by-law shall apply in the case of a mixed-use development based upon the applicable residential and non-residential use portions of the development under subsections 5(2) and 5(3) of this by-law, respectively;

(5) The development charges imposed pursuant to subsections 5(2) and 5(3) of this by-law shall apply, in accordance with this by-law and the Act, to any development which requires:
- (a) the passing of a zoning by-law or of an amendment thereto under Section 34 of the *Planning Act*;
- (b) the approval of a minor variance under Section 45 of the *Planning Act*;
- (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act*, applies;
- (d) the approval of a plan of subdivision under Section 51 of the *Planning Act*;
- (e) a consent under Section 53 of the *Planning Act*;
- (f) the approval of a description under the *Condominium Act*; or
- (g) the issuing of a permit under the *Building Code Act* in relation to a building or structure.

IMPOSITION OF CHARGE

6. The development charges described in Schedule "B" and Schedule "C" shall be imposed with respect to the designated use of any land, building or structure which requires any of the approval actions described in subsection 5(5) of this by-law and shall be calculated as follows:

(a) in the case of residential use development or the residential portion of a mixed-use development based upon the number and type of dwelling units;

(b) in the case of non-residential use development or the non-residential use portion of a mixed–use development, based upon the gross floor area and type of such development;

(c) notwithstanding subsection 6(a), in the case of residential use development charges described in Schedule "B", all mobile homes, single-detached dwellings, semi-detached dwellings, row dwellings and multiple dwellings with three or more bedrooms and less than or equal to 1000.0 square feet of gross floor area and for which development charges are imposed by this by-law, shall pay a development charge rate on the same basis as an apartment dwelling with two or more bedrooms.

EXEMPTIONS

7. The following shall be exempt from development charges:

(a) All residential use building permits not resulting in the creation of an additional dwelling unit;

(b) The creation of one or two additional dwelling units in an existing single-detached dwelling provided that the total gross floor area of the additional one or two dwelling units does not exceed the gross floor area of the existing single-detached dwelling;

(c) The creation of one additional dwelling unit in a residential use building, other than a single-detached dwelling, provided that the additional dwelling unit does not have a gross floor area greater than:

(i) in the case of a semi-detached dwelling or row dwelling, the gross floor area of the existing dwelling, or

(ii) in the case of any other residential use building, the gross floor area of the smallest dwelling unit contained in the residential use building;

(d) Buildings or structures owned by and used for the purpose of a city, or school board, as defined in subsection 1(1) of the *Education Act*;

(e) Every place of worship and the land used in connection therewith;

(f) Every churchyard, cemetery or burying ground exempt under the *Assessment Act* for taxation purposes;

(g) Non-residential use buildings used for *bona fide* agricultural purposes;

(h) Farm retirement lots in accordance with the official plan;

(i) Non-residential use development involving the creation or addition of accessory uses containing less than ten square metres of gross floor area;

(j) Non-residential use building permits not resulting in the creation of additional gross floor area;

(k) The enlargement of the floor area of an existing industrial use building, including an existing industrial (limited) use building, to the extent that the existing floor area is enlarged by 50 percent or less;

(l) Subject to clause (m), temporary buildings provided that such buildings are removed within two years of the issuance of the building permit;

(m) A garden suite, provided that such garden suite is removed within ten years;

(n) A building for the sale of gardening and related products provided that such building is not erected before 15 March and is removed before 15 October of each year;

(o) A residential use building erected and owned by non-profit housing, provided that satisfactory evidence is provided to the Treasurer that the residential use building is intended for persons of low or modest incomes and that the dwelling units are being made available at values that are initially and will continue to be below current market levels in the City;

(p) A non-profit health care facility only with respect to the capital cost that is not reimbursed or subsidized by either the Provincial or Federal Governments;

(q) Farm help lots, severed prior to 9 July 1997;

(r) Where specifically authorized by a resolution of Council; development on land owned by a non-profit corporation provider of child care and long-term care facilities;

(s) Where specifically authorized by a resolution of Council, development on land where a public facility is being provided;

(t) Where specifically authorized by a resolution of Council, development on contaminated land in accordance with the Guideline for Development Charge Reduction Program due to Site Contamination, approved by Council on March 28, 2007.

REDEVELOPMENT OF LAND CREDITS

8. (1) Where development occurs on a site which involved the demolition of a previously existing building or structure in receipt of the same services, at the time the original building was constructed, available to the building or structure to be constructed or will involve such demolition to permit the issuance of a building permit for the construction of the subject development no later than 1 January 2019, a credit will be provided against the development charge so that only the net increase in residential use dwelling units or non-residential use gross floor area is charged.

(2) Where a non-residential use building, or portion, is to be converted to a residential use, or a non-residential use building demolished and a residential use building erected in its place, a credit, not to exceed the amount of the development charges payable, will be provided in the amount of the theoretical development charges that would have been payable had a building permit been used to construct the non-residential use building, or portion thereof, being converted at the rate in accordance with this by-law, provided that the issuance of a building permit to permit the construction of the subject development occurs no later than 1 January 2019.

(3) The credit to be provided pursuant to subsection (2) shall be determined in accordance with Schedule "C" according to the gross floor area of the building that had been used for non-residential uses.

(4) Where a credit for a non-residential use building, or portion thereof, is provided pursuant to subsection (2), no credit for that non-residential use building or portion thereof shall be provided pursuant to subsection (1).

(5) The credits provided under this section relate only to the land, including any parcel subject to the same site plan approval for the proposed development, upon which the building was demolished or converted and are not transferable to another parcel of land.

(6) Subject to subsection (7), after July 31, 2011, the credits provided under this section do not apply based upon an existing or previously existing development, which is exempt under the provisions of this by-law.

(7) Credits provided under this section based upon an existing or previously existing development, which is exempt under the provisions of this by-law will continue to be provided after July 31, 2011 where, on or prior to July 31, 2011, the owner of the subject lands and the City have signed a site plan agreement in respect of such redevelopment.

DEVELOPMENT IN THE VICINITY OF TRANSIT STATIONS

9. (1) The development charges otherwise imposed by this by-law in respect of apartment dwellings shall be reduced by an amount equivalent to 50% of the roads and related services component of such development charge where all of the following criteria are met:

(a) The lot upon which the apartment dwelling is to be located is located within 600 metres of a rapid transit station on the transit network. The 600 metre distance is measured as the shortest perpendicular distance between the lot lines of the lot containing the use and the centre of the existing or proposed rapid transit station platform.

(b) The parking places provided in respect of the apartment dwellings shall not exceed one parking place per dwelling unit excluding visitor parking in such calculation.

(2) Despite clause (1)(a), where the lot is separated from the rapid transit station by a highway, grade-separated arterial roadway, railway yard, watercourse, private lands or any other major obstacle such that the actual walking distance to the rapid transit station is increased to beyond 800 metres, the reduction will not be applicable.

(3) If additional parking is made available in excess of the standard set forth in subsection (1) at a later date, the full roads and related services component of the development charge will then be payable by the then owner of the lands in respect of which the reduced development charge payment was made.

SERVICES-IN-LIEU CREDITS

10. Where the City has previously permitted the provision of services-in-lieu of the payment of all or any portion of a development charge, the development charge payable by the owner will be reduced by an amount equal to the reasonable cost to the owner of providing the service in accordance with the agreement, less any credit or payment that has already been provided by the City to the owner in respect of such services-in-lieu.

TRANSITIONAL PROVISIONS

11. (1) The applicable development charge under this by-law for the period from the date of the enactment of this by-law to January 15, 2010 shall be the lesser of the rate that would be in effect under this by-law, but for this section and the rate that would have been in effect under by-law 2004-298, as amended, on 23 June 2009 (the "former by-law rate")

(2) The applicable development charge under this by-law for the period from January 16, 2010 to January 15, 2011 shall be the rate that would have been in effect under the former by-law plus 25% of the difference between the rate that would otherwise be in effect under this by-law and the former by-law rate.

(3) The applicable development charge under this by-law for the period from January 16, 2011 to January 15, 2012 shall be the rate that would have been in effect under the former by-law plus 50% of the difference between the rate that would otherwise be in effect under this by-law and the former by-law rate.

(4) The applicable development charge under this by-law for the period from January 16, 2012 to January 15, 2013 shall be the rate that would have been in effect under the former by-law plus 75% of the difference between the rate that would otherwise be in effect under this by-law and the former by-law rate.

(5) The full charge under this by-law shall be applicable commencing January 16, 2013.

(6) Subject to subsection (7), residential development on the lands shown on Schedule "E" to By-law 2004-298, as amended, and residential development fronting on Isabella Street and Chamberlain Avenue between Bronson Avenue and Elgin Street shall be exempt from development charges imposed pursuant to this by-law until July 31, 2011 after which date the exemption ceases and the provisions of subsections (3) and (4) above shall be applied as if the lands had not been exempt on 23 June 2009.

(7) Residential development on the lands shown on Schedule "E" to By-law 2004-298, as amended, and residential development fronting on Isabella Street and Chamberlain Avenue between Bronson Avenue and Elgin Street shall continue to be exempt from development charges under this by-law after 31 July 2011 if the

owner of the subject lands and the City have signed a site plan agreement in respect of such residential development on or before 31 July 2011.

COLLECTION PROCEDURES

12. (1) The Treasurer shall collect the development charge in accordance with the provisions of this by-law and the Act.

(2) Where an agreement has been entered into between the City and the owner providing for payment of the development charge at any time other than the issuance of the building permit, then the Treasurer shall collect the applicable development charges.

(3) Where a development charge or any part thereof remains unpaid after it is payable, the Treasurer shall add the unpaid amount to the tax roll and shall be collected in the same manner as taxes.

CONFLICT

13. Where a conflict exists between the provisions of this by-law and any agreement between the City and the owner, with respect to land to be charged under this by-law, the provisions of such agreement prevail to the extent of the conflict.

SERVICES IN LIEU OF DEVELOPMENT CHARGES AND OVERSIZING

14. (1) The City may agree to allow a person to perform work that relates to a service on which this development charge by-law is based.

(2) Where a person is permitted by the City to install works identified in Schedule "D" to this by-law, the person, subject to subsection (3), will be reimbursed for the reasonable cost of such works in accordance with the amounts set forth in Schedule "D".

(3) To receive the contingency amount identified in Schedule "D", the person shall apply to the Deputy City Manager, Infrastructure Services and Community Sustainability, or the Deputy City Manager's designate, providing justification as to why such person is entitled to such amount and the decision of the Deputy City Manager, or the Deputy City Manager's designate, as to the entitlement of such person to the contingency amount shall be final.

(4) No person shall receive development charge credits for works done by such person by any amount in excess of the total development charge payable for the service provided by the owner to the City or for any part of the cost of the work that relates to a level of service beyond that described in paragraph 4 of subsection 5(1) of the Act.

TIMING OF THE CALCULATION AND PAYMENT

15. (1) The development charge shall be calculated as of and shall be payable on the date a building permit is issued in relation to a building or structure on land to which the development charge applies.

(2) Notwithstanding subsection (1), the City may provide that the development charge is payable immediately upon the parties entering into a subdivision or consent agreement. Further, an owner and the City may enter into an agreement respecting the timing of the payment of development charge or a portion thereof or for the provision of services in lieu of the payment of all or any portion of development charge and the terms of such agreement shall then prevail over the provisions of this by-law.

(3) Unless otherwise directed by Council, the development charge shall be payable in money.

(4) All residential development charges imposed by this by-law shall be rounded to the nearest dollar and all other development charges imposed by this by-law and the amounts set out in Schedule "D" shall be rounded to the nearest cent.

(5) Despite subsections (1) and (2), in respect of non-residential development, the development charges in respect of the services not enumerated in the *Development Charges Act*, subsection 5(5) are due two years after the date a building permit is issued if the site plan or subdivision agreement in respect of such development contains a provision permitting the City to call, for payment of the outstanding development charges, upon the security provided for the development in the event of non-payment of development charges at the expiry of the two year period.

(6) The amounts, payment for which are deferred under subsection (5), shall be indexed in accordance with section 17.

(7) Subsections (5) and (6) do not apply to institutional development.

RESERVE FUND

16. (1) The development charges imposed by this by-law for Roads and Related Services shall be paid into the Roads and Related Services Development Charges Reserve Fund and all development charges imposed by the City by any development charge by-law for roads and related services purposes shall be deemed to be in respect of a single service.

(2) The development charges imposed by this by-law for Sanitary Sewer (Wastewater) services shall be paid into the Sanitary Sewer Development Charges Reserve Fund and all development charges imposed by the City by any

development charge by-law for waste water purposes shall be deemed to be in respect of a single service.

(3) The development charges imposed by this by-law for Water services shall be paid into the Water Development Charges Reserve Fund and all development charges imposed by the City by any development charges by-law for water purposes shall be deemed to be in respect of a single service.

(4) The development charges imposed by this by-law for Stormwater Drainage services shall be paid into the Stormwater Drainage Development Charges Reserve Fund and all development charges imposed by the City by this development charges by-law for storm water purposes shall be deemed to be in respect of a single service.

(5) The development charges imposed by this by-law for Police services shall be paid into the Police Services Development Charges Reserve Fund and all development charges imposed by the City by any development charge by-law for police purposes shall be deemed to be in respect of a single service.

(6) The development charges imposed by this by-law for Emergency Services (Fire) services shall be paid into the Emergency Services (Fire) Development Charge Reserve Fund and all development charges imposed by the City by any development charge by-law for fire services shall be deemed to be in respect of a single service.

(7) The development charges imposed by this by-law for Public Transit shall be paid into the Public Transit Development Charges Reserve Fund and all development charges imposed by the City by any development charge by-law for transitway, transit vehicles and buildings purposes shall be deemed to be in respect of a single service.

(8) The development charges imposed by this by-law for Parks Development services shall be paid into the Parks Development Charges Reserve Fund and all development charges imposed by the City by any development charges by-law for parks development purposes shall be deemed to be in respect of a single service.

(9) The development charges imposed by this by-law for Recreation Facilities shall be paid into the Recreation Facilities Development Charges Reserve Fund and all development charges imposed by the City by any development charges by-law for recreation purposes shall be deemed to be in respect of a single service.

(10) The development charges imposed by this by-law for Libraries shall be paid into the Libraries Development Charges Reserve Fund and all development charges imposed by the City by any development charges by-law for library purposes shall be deemed to be in respect of a single service.

(11) The development charges imposed by this by-law for Child Care shall be paid into the Child Care Development Charges Reserve Fund and all development charges imposed by the City by any development charges by-law for child care purposes shall be deemed to be in respect of a single service.

(12) The development charges imposed by this by-law for works and yards shall be paid into the Works and Yards Development Charges Reserve Fund and all development charges imposed by the City by any development charges by-law for works and yards purposes shall be deemed to be in respect of a single service.

(13) The development charges imposed by this by-law for Paramedic Services shall be paid into the Paramedic Services Development Charges Reserve Fund and all development charges imposed by any development charges by-law for emergency medical services purposes shall be deemed to be in respect of a single service.

(14) The development charges imposed by this by-law for Development Charge Corporate Studies purposes shall be paid into the Corporate Studies Reserve Fund and all development charges imposed by the City by any by-law for City Development Charges Growth Study purposes shall be deemed to be in respect of a single service.

(15) The development charges imposed by this by-law for Affordable Housing Program purposes shall be paid into the Affordable Housing Program Reserve Fund and all development charges imposed by the City by any by-law for City social housing purposes shall be deemed to be in respect of a single service.

INDEXING

17. The development charge rates set out in Schedules "B" and "C" shall be adjusted by the Treasurer, without amendment to this by-law, commencing on August 1, 2010 in accordance with the most recent annual change (1 October to 30 September) in the Statistics Canada Infrastructure Development Charge Price Index, Catalogue Number 62-007. For greater certainty, the Infrastructure Construction Price Index from Catalogue Number 62-007 for Ottawa will be used.

SCHEDULES

18. The Schedules appended to this by-law shall be deemed to form part of this by-law and all information contained therein shall have the same force and effect as though it had been recited directly in the sections of this by-law.

APPLICATION OF THE ACT

19. Any matter not otherwise provided for in this by-law shall be subject to the provisions of the Act.

REPEAL

20. By-law Nos. 2004-298 to 2004-315, inclusive, 2005-241, 2005-474, 2005-489, 2006-153, 2006-203, 2006-204, 2008-354, 2008-396, and any amendments thereto, are repealed as of the in force date of this by-law.

TERM OF BY-LAW

21. This by-law shall continue in full force and effect for a term of five (5) years from the date of its enactment, unless it is repealed at an earlier date.

NUMBER

22. In this by-law, a word interpreted in the singular number has a corresponding meaning when used in the plural.

HEADINGS FOR REFERENCE ONLY

23. The headings inserted in this by-law are for convenience of reference only and shall not affect the construction or interpretation of this by-law.

SEVERABILITY

24. It is the declared intention of the Council of the City that any section or part thereof or any Schedule of part thereof which may be held to be void or ineffective shall not be deemed to affect the validity of any other section or Schedules to this by-law.

ADDITIONAL DEVELOPMENT CHARGES

25. Additional development charges may be imposed pursuant to other by-laws.

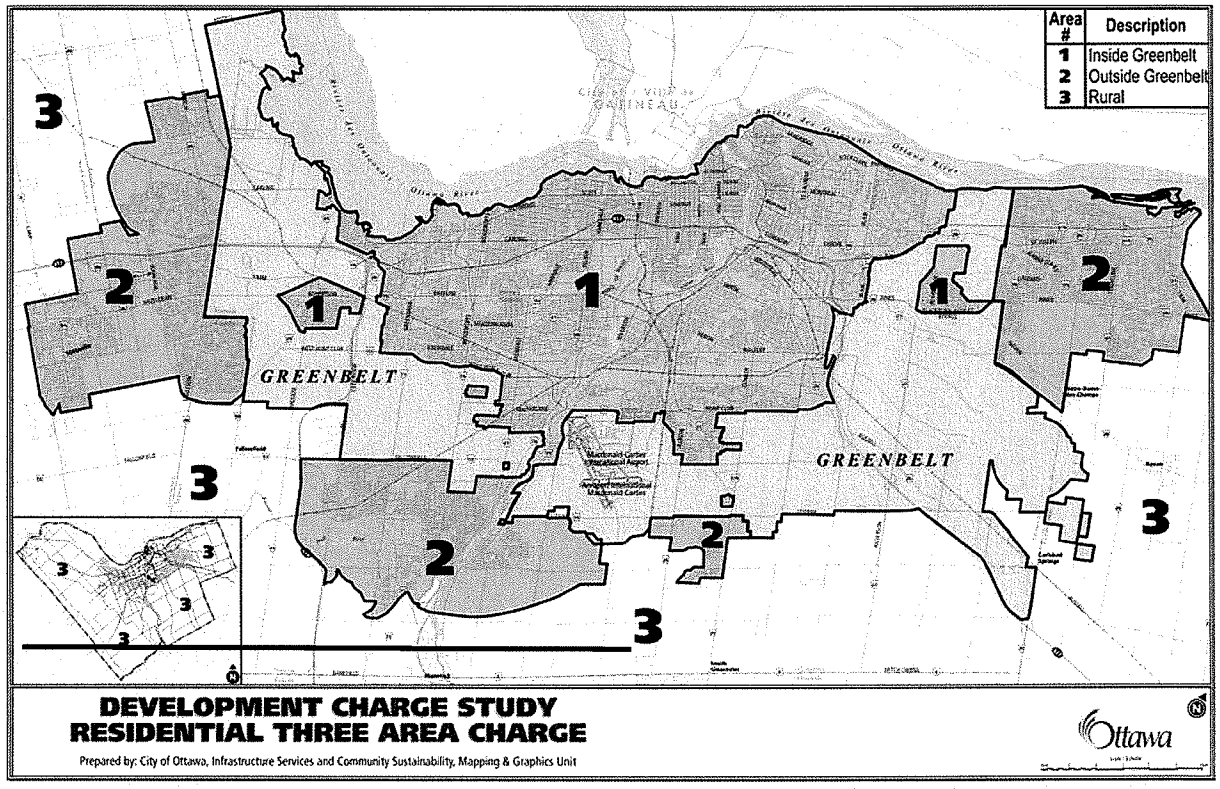
SHORT TITLE

26. This by-law may be cited as the Development Charges By-law, 2009.

ENACTED AND PASSED this 24th day of June, 2009.

CITY CLERK DEPUTY MAYOR

Schedule "A" – DESIGNATED AREAS OF THE CITY OF OTTAWA



SCHEDULE "B" - RESIDENTIAL DEVELOPMENT CHARGES
Inside the Greenbelt (Area # 1)
Development Charge per Dwelling Unit
Type of Residential Use

	Single and Semi-detached (per unit)	Apartment Dwelling and Back to Back and Stacked Townhouse (2+ bedrooms) (per unit)	Apartment (less than 2 bedrooms) (per unit)	Multiple, row and mobile dwelling (per unit)
Roads & Related Services	6,837	3,338	2,710	4,795
Sanitary Sewer	2,222	1,085	881	1,558
Water	1,184	578	469	830
Stormwater Drainage	39	19	15	27
Emergency Service (Fire)	0	0	0	0
Police	27	13	11	19
Public Transit	3,431	1,675	1,360	2,406
Parks Development	164	80	65	115
Recreation Facilities	283	138	112	198
Libraries	432	211	171	303
Child Care Facilities	77	38	31	54
Paramedic Service	47	23	19	33
Vehicles & Works Yards	439	214	174	308
Affordable Housing Program	168	82	67	118
Corporate Studies	96	47	38	67
Total Inside the Greenbelt	15,446	7,541	6,123	10,831

SCHEDULE "B" - RESIDENTIAL DEVELOPMENT CHARGES
Outside the Greenbelt (Area #2)
Development Charge per Dwelling Unit
Type of Residential Use

	($ per Unit)			
	Single and Semi-detached (per unit)	Apartment Dwelling and Back to Back and Stacked Townhouse (2+ bedrooms) (per unit)	Apartment (less than 2 bedrooms) (per unit)	Multiple, row and mobile dwelling (per unit)
Roads & Related Services	7,934	4,503	3,129	6,021
Sanitary Sewer	2,031	1,153	800	1,541
Water	2,021	1,147	796	1,534
Stormwater Drainage	39	22	15	30
Emergency Service (Fire)	280	159	110	212
Police	350	199	138	266
Public Transit	3,431	1,947	1,352	2,603
Parks Development	1,148	652	452	871
Recreation Facilities	3,439	1,952	1,355	2,609
Libraries	343	195	135	260
Child Care Facilities	77	44	30	58
Paramedic Service	47	27	19	36
Vehicles & Works Yards	439	249	173	333
Affordable Housing Program	168	95	66	127
Corporate Studies	134	76	53	102
Total Outside the Greenbelt	21,881	12,420	8,623	16,603

SCHEDULE "B" - RESIDENTIAL DEVELOPMENT CHARGES
Rural Serviced (Area # 3 Part)
Development Charge per Dwelling Unit
Type of Residential Use

	($ per Unit)			
	Single and Semi-detached	Apartment Dwelling and Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Multiple, row and mobile dwelling
	(per unit)	(per unit)	(per unit)	(per unit)
Roads & Related Services	7,397	3,877	3,166	5,836
Sanitary Sewer	1,102	577	472	870
Water	869	455	372	686
Stormwater Drainage	42	22	18	33
Emergency Service (Fire)	121	63	52	95
Police	249	130	107	196
Public Transit	1,144	599	490	903
Parks Development	988	518	423	780
Recreation Facilities	482	253	206	380
Libraries	405	212	173	320
Child Care Facilities	77	40	33	61
Paramedic Service	47	25	20	37
Vehicles & Works Yards	439	230	188	346
Affordable Housing Program	168	88	72	133
Corporate Studies	1,049	550	449	828
Total Rural Serviced	14,579	7,639	6,241	11,504

SCHEDULE "B" - RESIDENTIAL DEVELOPMENT CHARGES
Rural Unserviced (Area #3 Part)
Development Charge per Dwelling Unit
Type of Residential Use

	($ per Unit)			
	Single and Semi-detached (per unit)	Apartment Dwelling and Back to Back and Stacked Townhouse (2+ bedrooms) (per unit)	Apartment (less than 2 bedrooms) (per unit)	Multiple, row and mobile dwelling (per unit)
Roads & Related Services	7,397	3,877	3,166	5,836
Sanitary Sewer	0	0	0	0
Water	0	0	0	0
Stormwater Drainage	0	0	0	0
Emergency Service (Fire)	121	63	52	95
Police	249	130	107	196
Public Transit	1,144	599	490	903
Parks Development	988	518	423	780
Recreation Facilities	482	253	206	380
Libraries	405	212	173	320
Child Care Facilities	77	40	33	61
Paramedic Service	47	25	20	37
Vehicles & Works Yards	439	230	188	346
Affordable Housing Program	168	88	72	133
Corporate Studies	1,049	550	449	828
Total Rural Unserviced	12,566	6,585	5,379	9,915

SCHEDULE "C" - NON-RESIDENTIAL DEVELOPMENT CHARGES
City-Wide
Development Charge per Square Foot
of Non-Residential Gross

	Non-Residential - General Use $ Per Sq.ft.	Commercial Use, Institutional Use, Industrial Use $ Per Sq.ft.	Industrial (Limited) Use $ Per Sq.ft.
Roads & Related Services	8.36	6.77	3.84
Sanitary Sewer	1.70	1.37	0.78
Water	0.35	0.29	0.16
Stormwater Drainage	0.05	0.04	0.02
Emergency Service (Fire)	0.21	0.17	0.10
Police	0.29	0.23	0.13
Public Transit	3.73	3.02	1.71
Parks Development	0.07	0.06	0.03
Recreation Facilities	0.21	0.17	0.10
Libraries	0.04	0.03	0.02
Child Care Facilities	0.09	0.08	0.04
Paramedic Service	0.06	0.05	0.03
Vehicles & Works Yards	0.50	0.41	0.23
Affordable Housing Program	0.00	0.00	0.00
Corporate Studies	0.19	0.15	0.09
Total	15.84	12.83	7.29

SCHEDULE "D" – PAYMENTS FOR OVERSIZING

Benchmark Costs for Water Infrastructure in a Greenbelt Development, No contingency

	Pipe Dia.		Total Pipe Costs	Eng. Costs	GST	Total Costs	Oversize Costs Per Metre >405mm
	in	mm					-405mm
Green	16	400	373.51	37.35	12.33	423.19	0.00
	24	600	529.24	52.92	17.47	599.63	176.45
	30	750	776.28	77.63	25.62	879.52	456.33
	36	900	956.83	95.68	31.58	1,084.08	660.90
	42	1050	1,257.37	125.74	41.49	1,424.60	1,001.41
	48	1200	1,442.78	144.28	47.61	1,634.67	1,211.49

Benchmark Costs for Water Infrastructure in a Greenbelt Development, Contingency Included

	Pipe Dia.		Total Pipe Costs	Cont. Cost	Eng. Costs	GST	Total Costs	Oversize Costs Per Metre >405mm
	in	mm						-405mm
Green	16	400	373.51	56.03	42.95	14.17	486.66	0.00
	24	600	529.24	79.39	60.86	20.08	689.58	202.91
	30	750	776.28	116.44	89.27	29.46	1,011.45	524.78
	36	900	956.83	143.52	110.03	36.31	1,246.70	760.03
	42	1050	1,257.37	188.61	144.60	47.72	1,638.29	1,151.62
	48	1200	1,442.78	216.42	165.92	54.75	1,879.87	1,393.21

Benchmark Costs for Sanitary Infrastructure in a Greenbelt Development, Contingency Not Included

	Pipe Dia.	Total Pipe Costs	Eng. Costs	GST	Total Costs	Oversize Costs Per Metre >375mm
	in					-375mm
Green	15	251.01	25.10	8.28	284.39	0.00
	18	265.98	26.60	8.78	301.36	16.97
	21	298.88	29.89	9.86	338.64	54.24
	24	356.65	35.66	11.77	404.08	119.69
	27	451.80	45.18	14.91	511.89	227.50
	30	555.35	55.53	18.33	629.21	344.82
	33	674.47	67.45	22.26	764.17	479.78
	36	735.47	73.55	24.27	833.29	548.90
	39	868.55	86.85	28.66	984.06	699.67
	42	990.48	99.05	32.69	1,122.22	837.82
	48	1,214.46	121.45	40.08	1,375.98	1,091.59
	54	1,452.34	145.23	47.93	1,645.50	1,361.11
	60	1,742.96	174.30	57.52	1,974.77	1,690.38

Benchmark Costs for Sanitary Infrastructure in a Greenbelt Development, Contingency Included

	Pipe Dia.	Total Pipe Costs	Cont. Cost	Eng. Costs	GST	Total Costs	Oversize Costs Per Metre >375mm
	in						-375mm
Green	15	251.01	37.65	28.87	9.53	327.05	0.00
	18	265.98	39.90	30.59	10.09	346.56	19.51
	21	298.88	44.83	34.37	11.34	389.43	62.38
	24	356.65	53.50	41.01	13.53	464.69	137.64
	27	451.80	67.77	51.96	17.15	588.67	261.62
	30	555.35	83.30	63.87	21.08	723.59	396.54
	33	674.47	101.17	77.56	25.60	878.80	551.74
	36	735.47	110.32	84.58	27.91	958.28	631.23
	39	868.55	130.28	99.88	32.96	1,131.67	804.62
	42	990.48	148.57	113.91	37.59	1,290.55	963.50
	48	1,214.46	182.17	139.66	46.09	1,582.38	1,255.33
	54	1,452.34	217.85	167.02	55.12	1,892.33	1,565.28
	60	1,742.96	261.44	200.44	66.15	2,270.99	1,943.94

Benchmark Costs for Roadways, No Contingency

Type of Road	Amount ($/m)	Storm Drainage ($/m)	Engineering	GST	Total Cost	Oversizing Cost Per Metre of Total Width
Collector Road, 11m on 24m	$872.80	$359.47	$123.23	$40.66	$1,396.16	$0.00
Major Collector, 18m on 30m	$1,293.20	$389.20	$168.24	$55.52	$1,906.16	$510.00
Arterial Road	$3,753.80	$734.55	$448.84	$148.12	$5,085.30	$3,689.14

Benchmark Costs for Roadways, Contingency Included

Type of Road	Amount ($/m)	Storm Drainage ($/m)	Contingency	Engineering	GST	Total Cost	Oversizing Cost Per Metre of Total Width
Collector Road, 11m on 24m	$872.80	$359.47	$184.84	$141.71	$46.76	$1,605.59	$0.00
Major Collector, 18m on 30m	$1,293.20	$389.20	$252.36	$193.48	$63.85	$2,192.08	$586.50
Arterial Road	$3,753.80	$734.55	$673.25	$516.16	$170.33	$5,848.10	$4,242.51