



2019 Development Charges Background Study

City of Oshawa

For Public Circulation and Comment

April 10, 2019

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca



Table of Contents

	Page
Executive Summary	i
1. Introduction.....	1-1
1.1 Purpose of this Document.....	1-1
1.2 Summary of the Process.....	1-2
2. City of Oshawa Current D.C. Policy	2-1
2.1 By-law Enactment.....	2-1
2.2 Services Covered	2-1
2.3 Timing of D.C. Calculation and Payment	2-2
2.4 Transition and Phase-In Provisions	2-2
2.5 Redevelopment Credits	2-3
2.6 Exemptions	2-3
3. Anticipated Development in the City of Oshawa	3-1
3.1 Requirement of the Act	3-1
3.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast	3-1
3.3 Summary of Growth Forecast	3-2
4. Approach to the Calculation of the Charge.....	4-1
4.1 Introduction	4-1
4.2 Services Potentially Involved	4-1
4.3 Increase in Need for Service.....	4-1
4.4 Local Service Policy.....	4-7
4.5 Capital Forecast.....	4-7
4.6 Treatment of Credits	4-8
4.7 Eligible Debt and Committed Excess Capacity	4-8
4.8 Existing Reserve Funds	4-9
4.9 Deductions.....	4-10
4.9.1 Reduction Required by Level of Service Ceiling	4-10



Table of Contents (Cont'd)

	Page
4.9.2	Reduction for Uncommitted Excess Capacity 4-11
4.9.3	Reduction for Benefit to Existing Development 4-11
4.9.4	Reduction for Anticipated Grants, Subsidies, and Other Contributions..... 4-12
4.9.5	The 10% Reduction 4-12
5.	D.C. Eligible Cost Analysis by Service 5-1
5.1	Introduction 5-1
5.2	Service Level and 10-Year Capital Costs for Municipal-wide D.C. 5-1
5.2.1	Watercourse Improvements 5-1
5.2.2	Parks, Recreation and Trails 5-2
5.2.3	Library Services 5-3
5.2.4	Administration 5-4
5.2.5	Parking..... 5-5
5.2.6	Waste Diversion 5-6
5.3	Service Levels and Buildout Period Capital Costs for Municipal- wide D.C. Calculation..... 5-16
5.3.1	Transportation 5-16
5.3.2	Fire Protection..... 5-18
6.	D.C. Calculation 6-1
7.	D.C. Policy Recommendations and D.C. By-Law Rules 7-1
7.1	Introduction 7-1
7.2	D.C. By-law Structure 7-2
7.3	D.C. By-law Rules..... 7-2
7.3.1	Payment in any Particular Case..... 7-2
7.3.2	Determination of the Amount of the Charge..... 7-2
7.3.3	Application to Redevelopment of Land (Demolition and Conversion)..... 7-3
7.3.4	Exemptions (full or partial) 7-3
7.3.5	Timing of Collection 7-4
7.3.6	Indexing 7-4
7.3.7	D.C. Spatial Applicability 7-5
7.4	Other D.C. By-law Provisions 7-6
7.4.1	Categories of Services for Reserve Fund and Credit Purposes..... 7-6
7.4.2	By-law In-force Date 7-6
7.4.3	Minimum Interest Rate Paid on Refunds and Charged for Inter-Reserve Fund Borrowing 7-6
7.5	Other Recommendations 7-7
8.	Asset Management Plan 8-1



Table of Contents (Cont'd)

	Page
9. By-Law Implementation	9-1
9.1 Public Consultation	9-1
9.1.1 Public Meeting of Council.....	9-1
9.1.2 Other Consultation Activity.....	9-1
9.2 Anticipated Impact of the Charge on Development.....	9-2
9.3 Implementation Requirements	9-3
9.3.1 Notice of Passage.....	9-3
9.3.2 By-law Pamphlet	9-3
9.3.3 Appeals.....	9-4
9.3.4 Complaints	9-4
9.3.5 Credits	9-4
9.3.6 Front-ending Agreements	9-5
9.3.7 Severance and Subdivision Agreement Conditions	9-5
Appendix A Background Information on Residential and Non-Residential Growth Forecast	A-1
Appendix B Historical Level of Service Calculations	B-1
Appendix C Long -Term Capital Operating Cost Examination	C-1
Appendix D Local Service Policy	D-1
Appendix E Proposed D.C. By-law.....	E-1



List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
D.C.	Development charge
D.C.A.	Development Charges Act, 1997
E.S.A.	Environmentally Sensitive Area
G.F.A.	Gross floor area
L.P.A.T.	Local Planning Appeal Tribunal
N.A.I.C.S.	North American Industry Classification System
N.F.P.O.W.	No Fixed Place of Work
O.M.B.	Ontario Municipal Board
O.P.A.	Official Plan Amendment
O.Reg.	Ontario Regulation
P.O.A.	Provincial Offences Act
P.P.U.	Persons per unit
S.D.E.	Single detached equivalent
S.D.U.	Single detached unit
s.s.	Subsection
sq.ft.	square foot
sq.m	square metre



Executive Summary



Executive Summary

1. Purpose of this Background Study

- 1.1 The Background Study has been prepared pursuant to Section 10 of the Development Charges Act, 1997 (D.C.A.) and, together with the proposed by-law, was 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 on May 2, 2019. It will also be available on the City's website for at least 60 days prior to passage of a new development charges (D.C.) by-law, and remain there for the duration of the by-law.
- 1.2 The charges calculated represent those which can be recovered under the D.C.A., 1997, based on the City's capital spending plans and other assumptions which are responsive to the requirements of the D.C.A. A decision is required by Council, after receiving input at the public meeting, and any other consultation sessions, and receiving the completed study and by-law, as to the magnitude of the charge it wishes to establish, for residential, commercial, industrial and/or institutional development. Property tax, user rates or other funding will be required to finance any potentially D.C.-recoverable capital costs which are not included in the charge which is adopted.
- 1.3 Other decisions are also involved in finalizing development charge policies within 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 and consultation activity, to obtain input on these matters.

2. The 2019 Development Charge Calculation

- 2.1 Table ES-1 presents the proposed City-wide charges per single detached residential dwelling unit and per square metre of non-residential gross floor area, based on the costing and related assumptions contained in this Background Study. This table further compares the proposed charges with the City's existing development charges. The Operations service from the 2014 by-law has been eliminated and the capital needs have been allocated among the Transportation, Parks, Recreation and Trails and Waste Diversion services. The full schedule of



charges for all development types are reflected in Schedule ES-2 and the proposed by-law contained in Appendix E.

Table ES-1
City of Oshawa Comparison of Current and Calculated Development Charges

Residential (Single Detached) Comparison

Service	Current	Calculated
Municipal Wide Services:		
Transportation	10,815	15,415
Operations	470	-
Fire Protection	268	533
Parks, Recreation and Trails	4,381	7,982
Library Services	459	333
Administration	146	61
Watercourse Improvements	1,102	1,003
Parking		16
Waste Diversion		15
Total Municipal Wide Services	17,642	25,358

Non-Residential (per sq.m.) Comparison

Service	Current		Calculated	
	Industrial	Non-Industrial	Industrial	Non-Industrial
Municipal Wide Services:				
Transportation	75.93	75.93	47.47	124.97
Operations	3.78	3.78	-	-
Fire Protection	2.13	2.13	1.61	4.31
Parks, Recreation and Trails	3.68	3.68	3.77	3.77
Library Services	0.38	0.38	0.11	0.11
Administration	1.16	1.16	0.22	0.54
Watercourse Improvements	4.93	8.93	4.31	4.74
Parking	-		-	0.11
Waste Diversion	-		-	0.11
Total Municipal Wide Services	92.00	96.00	57.48	138.64

2.2 The 2019 calculated development charges for residential and non-industrial non-residential development, in comparison with the existing charges, have increased for most services. Some of the factors impacting the charge are:

- Updated costs to reflect current benchmark costs for roads infrastructure;



- Additional road projects from the City's Transportation Master Plan not identified within the 2017 D.C. update;
- Additional trail development projects included in the City's Parks, Recreation, Library and Culture Facility Needs Assessment not identified within the 2017 D.C. update (e.g. links not included within the Part II Plan);
- Regional and City Park Redevelopment projects (e.g. Harbour Park Redevelopment, Second Marsh Redevelopment);
- Additional Operations facility needs to support development over the buildout forecast period, including a new Snow Disposal Dump and North Depot; and
- The inclusion of two new services: Waste Diversion and Parking.

In addition, the calculated industrial charge has decreased from the previous D.C. study while the non-industrial charge has increased. In the previous by-law, a single non-residential charge was calculated for all services except Watercourse Improvements. In this study, a differentiated charge for industrial and non-industrial non-residential development has been calculated for each service.

3. Council Approvals Sought

At this stage in the process, the Background Study and proposed D.C. by-law are being provided for information purposes, as part of the consultation process. At such time as that process is complete and final D.C. recommendations are made to Council, approval will be sought for:

- The 2019 D.C. by-law; and
- The D.C. Background Study, including the development forecast, the growth-related capital program, the D.C. calculation and associated material, subject to any Addendum which may be produced prior to by-law adoption.

The proposed by-law includes a number of policy changes in addition to the updated schedule of charges, including:

- The elimination of the discretionary exemption for block townhouses and apartments in the vicinity of Durham College and the University of Ontario Institute of Technology. A three-year extension is proposed for a specified development that has sufficiently advanced through the approval process;

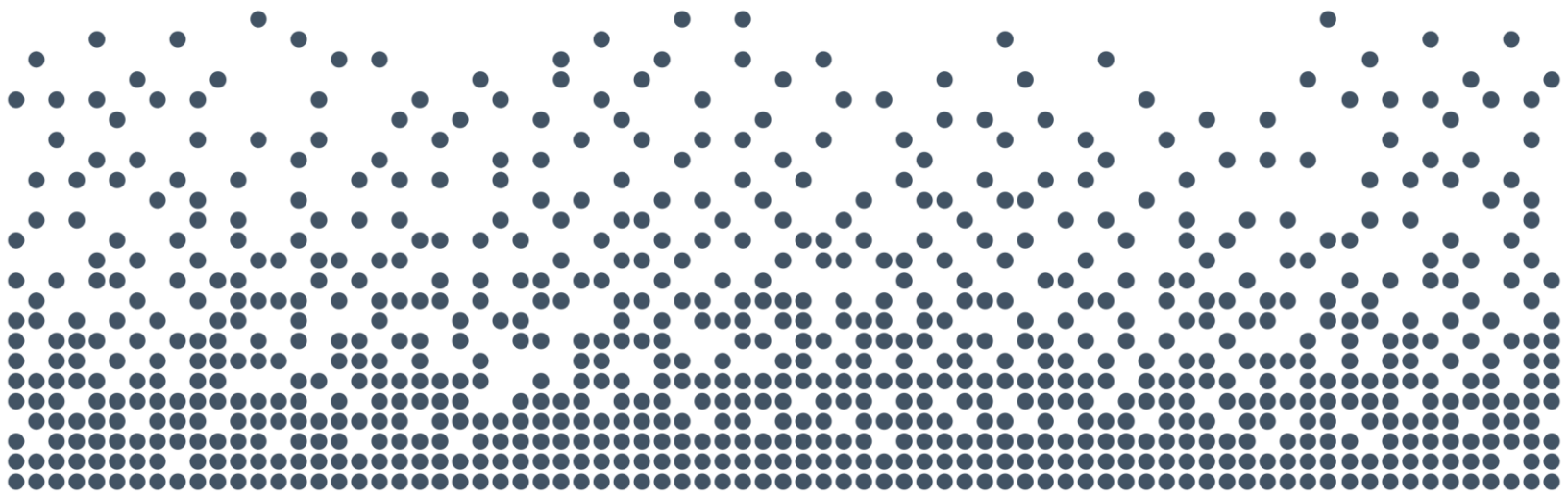


- The imposition of the single detached unit charge on duplex and triplex buildings where permitted under the City's zoning by-law and provided that a single detached dwelling is also permitted;
- The inclusion of stacked townhouse dwelling units within the definition of an apartment dwelling unit;
- The inclusion of back-to-back townhouses dwelling units within the definition of a townhouse dwelling unit;
- The imposition of the small apartment charge on units in a retirement residence; and
- The elimination of credits for the redevelopment of school and places of worship where a demolition permit is issued on or after July 1, 2019.



Table ES-2
Schedule of Development Charges

Service	RESIDENTIAL PER DWELLING UNIT						NON-RESIDENTIAL (per sq.m. of G.F.A)	
	Single and Semi-Detached Dwelling	Duplex (for two units)	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Townhouse Dwelling	Lodging House (per unit)	Industrial	Commercial/Institutional
Municipal Wide Services:								
Transportation	\$15,415	\$19,404	\$9,702	\$5,956	\$12,418	\$5,352	\$47.47	\$124.97
Fire Protection	\$533	\$670	\$335	\$206	\$429	\$185	\$1.61	\$4.31
Watercourse Improvements	\$1,003	\$1,262	\$631	\$388	\$808	\$348	\$4.31	\$4.74
Parks, Recreation and Trails	\$7,982	\$10,048	\$5,024	\$3,084	\$6,430	\$2,772	\$3.77	\$3.77
Library Services	\$333	\$420	\$210	\$129	\$268	\$116	\$0.11	\$0.11
Administration	\$61	\$76	\$38	\$24	\$49	\$21	\$0.22	\$0.54
Parking	\$16	\$20	\$10	\$6	\$13	\$6	\$0.00	\$0.11
Waste Diversion	\$15	\$18	\$9	\$6	\$12	\$5	\$0.00	\$0.11
Total Municipal Wide Services	\$25,358	\$31,918	\$15,959	\$9,799	\$20,427	\$8,805	\$57.48	\$138.64



Report



Chapter 1

Introduction



1. Introduction

1.1 Purpose of this Document

This Background Study has been prepared pursuant to the requirements of the Development Charges Act (D.C.A.), 1997 (s.10), and accordingly, recommends new Development Charges (D.C.) and policies for the City of Oshawa (City).

The City retained Watson & Associates Economists Ltd. (Watson), to undertake the D.C. study process in 2018. Watson worked with senior staff of the City in preparing this D.C. analysis and the policy recommendations.

This D.C. background study, containing the proposed D.C. by-law, will be distributed to members of the public in order to provide interested parties with sufficient background information on the legislation, the study's recommendations and an outline of the basis for these recommendations.

This report has been prepared, in the first instance, to meet the statutory requirements applicable to the City's D.C. background study, as summarized in Chapter 4. It also addresses the forecast amount, type and location of growth (Chapter 3), the requirement for "rules" governing the imposition of the charges (Chapter 7) and the proposed by-law to be made available as part of the approval process (Appendix F).

In addition, the report is designed to set out sufficient background on the legislation, the City's current D.C. policy (Chapter 2) and the policies underlying the proposed by-law, to make the exercise understandable to interested parties. Finally, the D.C. background study addresses post-adoption implementation requirements (Chapter 9) which are critical to the successful application of the new policy.

The chapters in the report are supported by Appendices containing the data required to explain and substantiate the calculation of the charge. A full discussion of the statutory requirements for the preparation of a background study and calculation of a D.C. is provided herein.



1.2 Summary of the Process

As required under Section 12 of the D.C.A., 1997, a Public Meeting will be scheduled prior to Council considering the by-law for passage. Its purpose is to present the study to the public and to solicit public input on the proposed D.C. by-law. The meeting is also being held to answer any questions regarding the study's purpose, methodology and the proposed modifications to the City's D.C. by-law. Figure 1-1 outlines the proposed schedule to be followed with respect to the D.C. by-law adoption process.

In accordance with the legislation, the D.C. background study and proposed D.C. by-law were available for public review by April 10, 2019.

The process to be followed in finalizing the report and recommendations includes:

- consideration of responses received prior to, at or immediately following the public meeting; and
- finalization of the study and Council consideration of the by-law.

Table 1-1
Schedule of Key D.C. Process Dates

Process Steps	Dates
1. Project initiation meetings with City staff	June, 2018
2. Data collection, staff interviews, preparation of D.C. calculations, review of policy matters	July, 2018 to February, 2019
3. Stakeholder Consultation Meetings (Building Industry Liaison Team (BILT))	February 11, 2019 March 6, 2019 April 12, 2019
4. Presentation to Finance Committee on status, timing and proposed policy changes	March 18, 2019



Process Steps	Dates
5. Presentation to Finance Committee on D.C. Background Study Findings and draft by-law	March 27, 2019
6. D.C. Background Study and proposed D.C. by-law available to public (60 days prior to by-law passage)	By April 10, 2019
7. Statutory notice of Public Meeting advertisement placed in newspapers (i.e. Oshawa This Week and Oshawa Express)	April 10, 2019
8. Statutory Public Meeting of Finance Committee	May 2, 2019
9. Finance Committee approval of D.C. background study and recommendation to Council to pass D.C. by-law	June 3, 2019
10. Council considers adoption of D.C. background study and passage of D.C. by-law	June 10, 2019
11. Newspaper notice given of by-law passage	By 20 days after passage
12. By-law effective date	July 1, 2019
13. Last day for by-law appeal	40 days after passage
14. Municipality makes available D.C. pamphlet	by 60 days after in force date



Chapter 2

City of Oshawa Current D.C. Policy



2. City of Oshawa Current D.C. Policy

2.1 By-law Enactment

By-law No. 80-2014, was passed on June 16, 2014 and came into effect on July 1, 2014. It imposes uniform City-wide D.C.'s on residential and non-residential development. The by-law was subsequently amended in 2015, 2016 and 2017. The 2015 and 2016 amendments addressed exemptions for certain types of residential development near specified post secondary institutions and the Downtown Shoulder Area. The 2017 amendment was made on the basis of information derived from the recently completed Parks Recreation Library and Culture (P.R.L.C.) Facility Needs Assessment, the Integrated Transportation Master Plan, and the Active Transportation Master Plan. This resulted in changes to the schedule of charges for four services: Transportation, Parks, Recreation and Trails, Library and Administrative Services.

The following discussion reflects the provisions of By-law No. 80-2014, as amended.

2.2 Services Covered

The following services are included under By-Law No. 80-2014, as amended:

- Administration (Development Related Studies);
- Fire Protection;
- Transportation;
- Operations;
- Watercourse Improvements;
- Parks, Recreation and Trails; and
- Libraries.

The schedule of D.C. rates is adjusted semi-annually on January 1 and July 1 by the Statistics Canada Quarterly “Capital Expenditure Price Statistics (cat. 62-007-X)”.

Table 2-1 provides the charges currently in effect as of February 1, 2019 for residential and non-residential development types, as well as a breakdown of the charges by service.



Table 2-1
City of Oshawa
Schedule of Current Development Charges (as of January 1, 2019)

Service	Residential (per unit)					Per Sq.Ft. GFA
	Single & Semi Detached	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Group Dwellings Townhouse	Lodging House	Commerical/ Institutional
Transportation	10,815	7,793	4,257	8,341	3,433	7.08
Operations	470	339	185	363	149	0.35
Fire Protection	268	193	105	207	85	0.20
Parks and Recreation	4,381	3,157	1,725	3,379	1,391	0.34
Library Services	459	331	181	354	146	0.04
Administration	146	105	57	112	46	0.11
Watercourse Improvements	1,102	794	434	850	350	0.80
Total	17,642	12,713	6,944	13,607	5,600	8.92

2.3 Timing of D.C. Calculation and Payment

In the City of Oshawa, D.C.s are to be paid on or before the date that a building permit is issued in relation to a building or structure on land to which a D.C. applies.

If the development does not require a building permit, the charge must be paid prior to the completion of the applicable action. That is at the time of zoning by-law passage or amendment; minor variance approval; conveyance of land; execution of a plan of subdivision; consent; or, execution of agreement under the Condominium Act.

If all conditions required for issuing a building permit are met, the developer can prepay the D.C. prior to indexing date.

2.4 Transition and Phase-In Provisions

City of Oshawa D.C. By-law 80-2014, as amended, incorporated a number of transition provisions.

For example, for lots within a plan of subdivision that had been draft approved but not registered before May 5, 2014 where:

- the dwelling unit on the lot had been sold by agreement of purchases and sale on or before June 1, 2014;
- the purchaser named in the agreement was the anticipated occupant;
- the vendor was required to bear the risk of any increase in D.C.s; and



- all requirements for the issuance of building permit were satisfied before June 30, 2015.

The charge to be imposed is that in effect just prior to passing the new by-law plus an additional \$500. This represented a reduction of approximately \$3,000 per single detached unit. A similar provision was also made for prepayment of the charge prior to both the adoption of the new by-law and the 2017 amendment.

The charge for new offices and expansions to existing offices with a floor area of greater than 2,322 square metres was phased in over a period of three years with 50% of the full rate imposed in the first year, 75% imposed in the second year and the full amount coming into effect in the third year. This policy was intended to address the effect of phasing out of the 25% reduction provided for these types of uses in the previous by-law.

2.5 Redevelopment Credits

The City of Oshawa's current D.C. by-law provides a credit for the demolition of buildings or structures that have been in existence for a minimum of five years and where the demolition permit issued is within the 10 years preceding the issuance of a building permit. The issuance of the demolition permit and the actual demolition to the satisfaction of the Chief Building Official must occur not later than twenty-four months after the issuance of the building permit.

Credits are also given for the conversion of all or part of a building or structure that has been in existence for a minimum of five (5) years.

Credits are calculated by applying the "applicable charge" to the floor area and units being demolished or converted. Redevelopment of exempt uses, including schools and industrial buildings has qualified for credit. The credit for industrial development is calculated based on the rate in the by-law despite the exemption provisions.

2.6 Exemptions

The City of Oshawa's D.C. By-law 80-2014, as amended, provides for a number of discretionary exemptions. Exempt uses include:



- lands designated under federal law as land reserved for the exclusive use of
 - aboriginal peoples; lands wholly within that part of Oshawa known as the Central Business District Renaissance Community Improvement Area;
 - lands used solely for the purposes of a non-profit institution defined as:
 - a “registered charity” as defined in subsection 248(1) of the Income Tax Act, R.S.C. 1985, c. 1 (5th Supp.), as amended;
 - a corporation that is a non-profit organization for the purposes of paragraph 57(1)(b) of the Corporations Tax Act, R.S.O. 1990, c. C.40; or
 - a “religious organization” as defined in subsection 1(1) of the Religious Organizations’ Lands Act, R.S.O. 1990, c. R.23;
- a Hospital;
- a Nursing Home;
- a new Industrial building or structure or the enlargement of an existing Industrial building or structure;
- a Temporary building or structure. Temporary is defined as a period of 3 years or less; and
- an Agricultural building or structure.

Moreover, while parking structures are not explicitly exempt in the by-law, the definition of total floor area for non-residential development excludes “areas used for parking or loading, whether in the main building or an Accessory building.

Exemptions for certain categories of residential development within designated areas are provided as follows:

- block townhouses and apartments in the areas near the main campuses of Durham College, UOIT and Trent University as shown in Schedules E and F to the By-law; and
- apartments, block townhouses, street townhouses and stacked townhouses within the periphery of Oshawa’s Urban Growth Centre as shown in Schedules G to the By-law.

Finally, a 50% reduction in the development charge is provided for any part of a building used solely for the purposes of a Medical Clinic.



Chapter 3

Anticipated Development in the City of Oshawa



3. Anticipated Development in the City of Oshawa

3.1 Requirement of the Act

Chapter 4 provides the methodology for calculating a D.C. as per the D.C.A. Figure 4-1 presents this methodology graphically. It is noted in the first box of the schematic that in order to determine the D.C. that may be imposed, it is a requirement of Section 5 (1) of the D.C.A. that “the anticipated amount, type and location of development, for which development charges can be imposed, must be estimated.”

The growth forecast contained in this chapter (with supplemental tables in Appendix A) provides for the anticipated development for which the City of Oshawa will be required to provide services, over a 10-year, and longer build-out horizon.

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

The growth forecast provided in the 2019 D.C. Background Study has been updated to embrace the 2016 Statistics Canada Census data along with building permit activity from 2016-2018 to determine the City’s 2019 population, household and employment base. 2016 census data was also used to provide updates to assumptions regarding average persons per unit (P.P.U) in new households and population decline in existing households.

The 2019 D.C. population and housing forecast was prepared by the City of Oshawa Department of Development Services with assistance from Watson & Associates Economists Ltd (Watson). The employment forecast was then prepared by Watson with input from City of Oshawa staff. The following additional information sources were reviewed to assess the residential and non-residential development potential for the City of Oshawa over the forecast period, including:

- Durham Regional Official Plan, May 11th, 2017;



- Growing Durham: Recommended Growth Scenario and Policy Directions, November 18, 2008¹;
- Community population and housing forecast provided by the City of Oshawa Department of Development Services, January 2019;
- City of Oshawa vacant employment land supply inventory; and
- Discussions with City staff regarding recent and anticipated residential and non-residential development trends through several meetings held throughout the summer, fall and winter of 2018/2019.

3.3 Summary of Growth Forecast

A detailed analysis of the residential and non-residential growth forecasts is provided in Appendix A and the methodology employed is illustrated in Figure 3-1. The discussion provided herein summarizes the anticipated growth for the City of Oshawa and describes the basis for the forecast. The results of the residential growth forecast analysis are summarized in Table 3-1 below, and *Schedule 1* in Appendix A.

The population forecast summarized herein as well as in Table 3-1 and Schedule 1 excludes the net Census undercount, which is estimated at approximately 4.0%. The Census undercount represents the net number of persons missed during Census enumeration. All references provided herein to the population forecast exclude the net Census undercount. As identified in Table 3-1 and *Schedule 1*, the City's population is anticipated to reach approximately 194,270 by early 2029, and 235,520 by buildout, resulting in an increase of 26,860 and 68,110 persons, respectively, over the 10-year, and buildout forecast period excluding the Census undercount.

¹ Current population and housing trends observed from the 2016 census reflect a more gradual P.P.U. decline relative to that anticipated through Growing Durham for the City of Oshawa. This, in turn, has resulted in a higher population calculated in this background study to that of Growing Durham. It is noted that the 2019 D.C. housing forecast for the City of Oshawa is generally consistent with Growing Durham. It is further noted that employment growth, most notably industrial employment is not tracking to the Growing Durham forecast. As such, the long-term employment forecast for the City of Oshawa has been moderated in the City's 2019 D.C. Background Study.



Figure 3-1
Population and Household Forecast Model

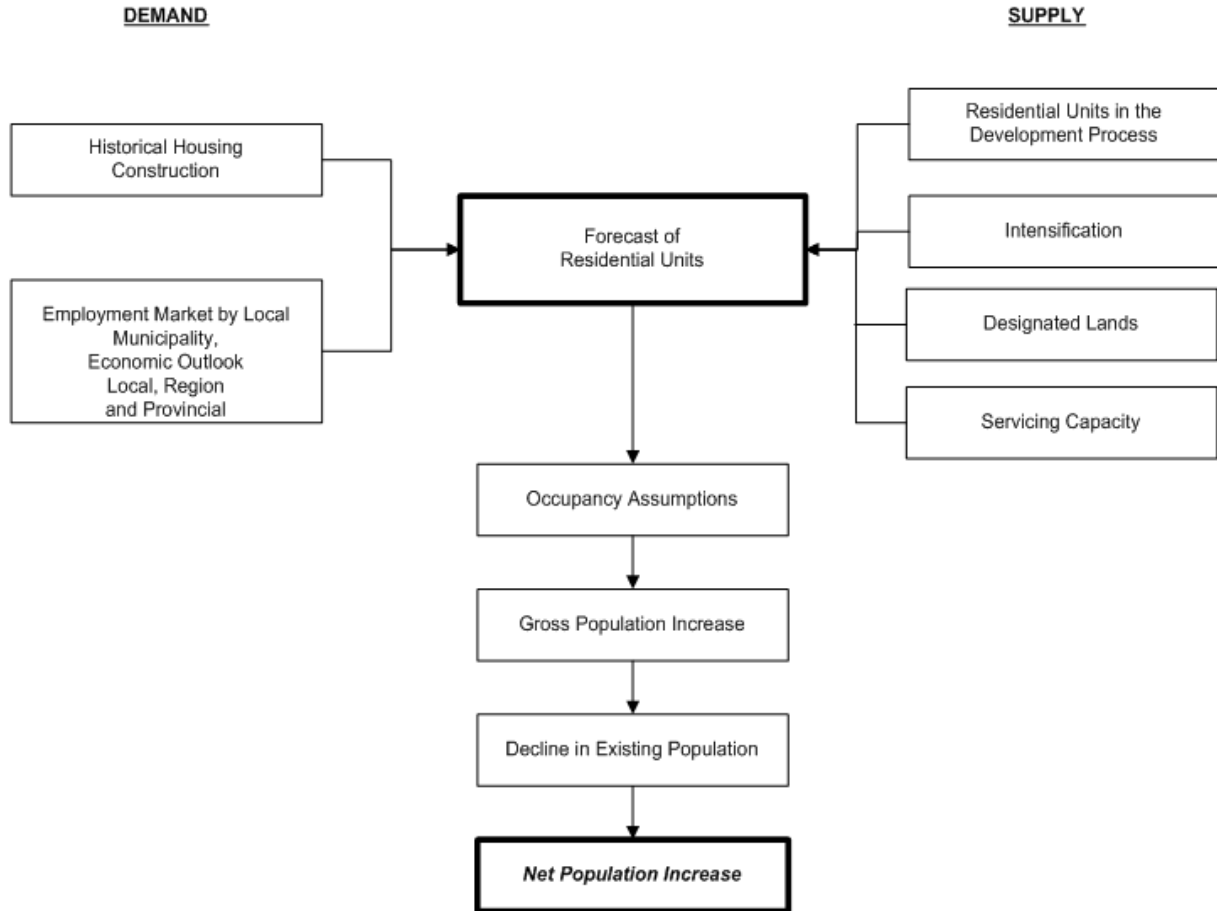




Table 3-1
City of Oshawa
Residential Growth Forecast Summary

	Year	Population (Including Census Undercount) ¹	Excluding Census Undercount			Housing Units					Person Per Unit (P.P.U.): Total Population/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Total Households	Equivalent Institutional Households	
Historical	<i>Mid 2006</i>	147,250	141,590	1,870	139,720	34,850	4,750	15,330	54,930	1,700	2.578
	<i>Mid 2011</i>	155,590	149,607	1,932	147,675	38,224	5,221	15,352	58,797	1,756	2.544
	<i>Mid 2016</i>	165,840	159,458	1,828	157,630	40,340	5,595	16,660	62,595	1,662	2.547
Forecast	<i>Early 2019</i>	174,110	167,416	2,021	165,395	41,571	6,538	18,552	66,661	1,837	2.511
	<i>Early 2029</i>	202,040	194,273	2,522	191,751	44,932	10,787	23,697	79,416	2,293	2.446
	<i>Buildout</i>	244,942	235,521	3,923	231,598	48,643	15,632	34,722	98,997	3,566	2.379
Incremental	Mid 2006 - Mid 2011	8,340	8,017	62	7,955	3,374	471	22	3,867	56	
	Mid 2011 - Mid 2016	10,250	9,851	-104	9,955	2,116	374	1,308	3,798	-94	
	Mid 2016 - Early 2019	8,270	7,958	193	7,765	1,231	943	1,892	4,066	175	
	Early 2019 - Early 2029	27,930	26,857	501	26,356	3,361	4,249	5,145	12,755	456	
	Early 2019 - Buildout	70,832	68,105	1,902	66,203	7,072	9,094	16,170	32,336	1,729	

Source: City of Oshawa, Department of Development Services Residential Forecast, 2018.

¹ Census undercount estimated at approximately 4.0%. Note: Population including the undercount has been rounded.

² Includes townhouses.

³ Includes apartments in duplexes, bachelor, 1-bedroom and 2-bedroom+ apartments.



Provided below is a summary of the key assumptions and findings regarding the City of Oshawa D.C. growth forecast update.

1. Unit Mix (Appendix A – Schedules 1 - 5)

- The unit mix for the City was derived from a review of historical development activity (as per Schedule 7), active residential development opportunities within the approvals process, available vacant designated residential land supply and discussions with planning staff regarding anticipated development trends within the City.
- Based on the above indicators, the 10-year household growth forecast is comprised of a housing unit mix of 26% low density (single detached and semi-detached), 33% medium density (multiples except apartments) and 40% high density (duplexes, bachelor, 1-bedroom and 2-bedroom apartments).
- The mid 2019 to buildout household growth forecast is comprised of a housing unit mix of 22% low density, 28% medium density and 50% high density.

2. Planning Period

- Short and longer-term time horizons are required for the D.C. process. The D.C.A. limits the planning horizon for certain services, such as parks, recreation and libraries, to a 10-year planning horizon. Services related to a highway, public works, fire, police, stormwater, water and wastewater services utilize a longer planning period.

3. Population in New Units (Appendix A - Schedules 2 through 4)

- Over the 10-year period, the City is anticipated to average approximately 1,275 new housing units per year. A relatively slower rate of housing growth is anticipated within the first five-year period, followed by a steady increase in annual housing growth in the second 5-year period and thereafter (i.e. post 2024 period).
- Population in new units is derived from Schedules 3, 4 and 5, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit by dwelling type for new units.



- Schedule 8 summarizes the P.P.U. for the new housing units by age and type of dwelling based on a 2016 custom Census data. The total calculated P.P.U. for all density types has been downward adjusted to account for historical P.P.U. trends. Adjusted 25-year average P.P.U.s by dwelling type are as follows:
 - Low density: 3.168
 - Medium density: 2.552
 - High density: 1.705

4. Existing Units and Population Change (Appendix A - Schedules 3, 4 and 5)

- Existing households for 2019 are based on the 2016 Census households, plus estimated residential units constructed between 2017 and 2018 assuming a 6-month lag between construction and occupancy (see Schedule 3).
- The decline in average occupancy levels for existing housing units is calculated in Schedules 3 through 5, by aging the existing population over the forecast period. The forecast population decline in existing households over the 10-year period is approximately 3,910 and 6,980 between early-2019 and buildout.

5. Employment (Appendix A, Schedules 10a, and 10b)

- The employment forecast is largely based on the employment activity rate method. The activity rate method, which is defined as the number of jobs in a municipality divided by the number of residents. Key employment sectors include primary, industrial, commercial retail, commercial non-retail, institutional, and work at home, which are considered individually below.
- 2016 employment data (place of work) for the City of Oshawa is outlined in Schedule 10a. The 2016 employment base is comprised by the 2016 Census data and shown in the following sectors:



- 105 Primary (0%);
 - 3,820 work at home employment (6%);
 - 10,220 Industrial (16%);
 - 20,670 Commercial/Population Related (33%);
 - 17,340 Institutional (28%); and
 - 9,980 No Fixed Place of Work (16%).
-
- 2016 employment by usual place of work, including work at home, is estimated at 52,155. An additional 9,980 employees have been identified within the City in 2016 that have no fixed place of work (N.F.P.O.W.).¹ The 2016 employment base, including N.F.P.O.W., totals approximately 62,130.
 - Total employment, including work at home and N.F.P.O.W., for the City of Oshawa is anticipated to reach approximately 81,440 by early 2029, and 101,430 by buildout.
 - This represents an employment increase of 16,970 for the 10-year forecast period, and 36,960 for the longer buildout forecast period.
 - Schedule 10b, Appendix A, summarizes the employment forecast, excluding work at home employment and N.F.P.O.W. employment, which is the basis for the D.C. employment forecast. The impact on municipal services from these employees has already been included in the population forecast. The need for municipal services related to N.F.P.O.W. employees has largely been included in the employment forecast by usual place of work (i.e. employment and gross floor area (G.F.A.) in the retail and accommodation sectors generated from N.F.P.O.W. construction employment). Furthermore, since these employees have no fixed work address, they cannot be captured in the non-residential G.F.A. calculation. Accordingly, work at home and N.F.P.O.W. employees have been removed from the D.C. calculation.

¹ Statistics Canada defines "No Fixed Place of Work" (N.F.P.O.W.) employees as, "persons who do not go from home to the same work place location at the beginning of each shift. Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc."



7. Non-Residential Sq. ft. Estimates (G.F.A.), Appendix A, Schedule 10b)

- Square footage estimates were calculated in Schedule 10b based on the following employee density assumptions:
 - 1,200 sq. ft. per employee for industrial;
 - 400 sq. ft. per employee for commercial/population related;
 - 690 sq. ft. per employee for institutional employee.
- The City-wide incremental G.F.A. increase is anticipated to be 11.87 million sq. ft. over the 10-year forecast period and 21.03 million sq. ft. by buildout, downwardly adjusted to account for institutional development associated with special care facilities.
- In terms of percentage growth, the 10-year forecast incremental G.F.A. by sector is broken down as follows:
 - industrial – 73%;
 - commercial/population-related – 17%; and
 - institutional – 10%.



Chapter 4

Approach to the Calculation of the Charge



4. Approach to the Calculation of the Charge

4.1 Introduction

This chapter addresses the requirements of s.s.5(1) of the D.C.A., 1997 with respect to the establishment of the need for service which underpins the D.C. calculation. These requirements are illustrated schematically in Figure 4-1.

4.2 Services Potentially Involved

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

A number of these services are defined in s.s.2(4) of the D.C.A., 1997 as being ineligible for inclusion in D.C.s. These are shown as “ineligible” on Table 4-1. In addition, two ineligible costs defined in s.s.5(3) of the D.C.A. are “computer equipment” and “rolling stock with an estimated useful life of [less than] seven years...” In addition, local roads are covered separately under subdivision agreements and related means (as are other local services). Services which are included in the City’s D.C. by-law are indicated with a “Yes.”

4.3 Increase in Need for Service

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



Figure 4-1
The Process of Calculating a D.C. under the Act

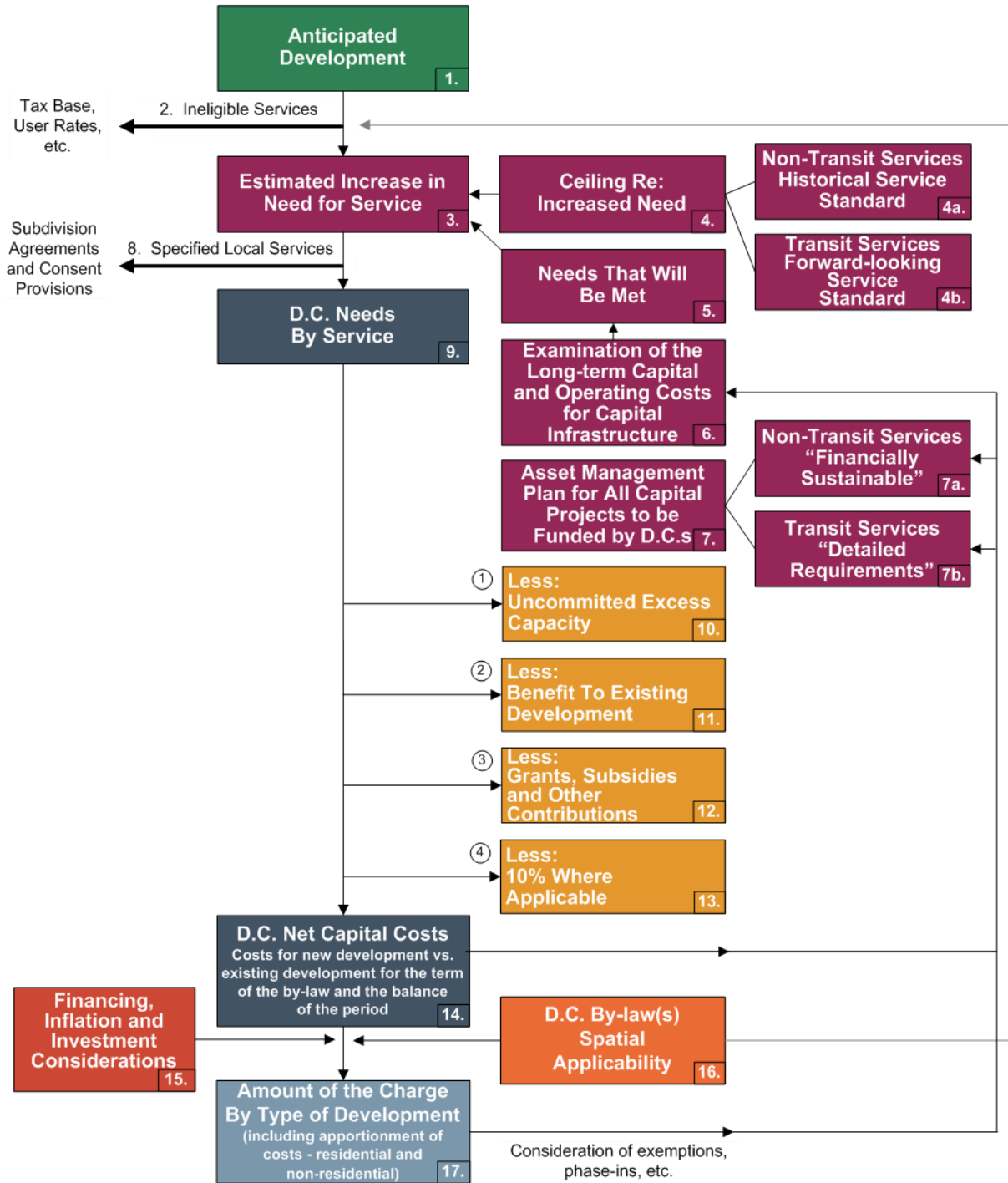




Table 4-1
Categories of Municipal Services
To Be Addressed as Part of the Calculation

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
1. Services Related to a Highway	Yes	1.1 Arterial roads	100
	Yes	1.2 Collector roads	100
	Yes	1.3 Bridges, Culverts and Roundabouts	100
	No	1.4 Local service municipal roads	0
	Yes	1.5 Traffic signals	100
	Yes	1.6 Sidewalks and streetlights	100
	Yes	1.7 Active Transportation	100
2. Other Transportation Services	n/a	2.1 Transit vehicles ¹ & facilities	100
	n/a	2.2 Other transit infrastructure	100
	Yes	2.3 Municipal parking spaces - indoor	90
	Yes	2.4 Municipal parking spaces - outdoor	90
	Yes	2.5 Works Yards	100
	Yes	2.6 Rolling stock ¹	100
	n/a	2.7 Ferries	90
	No	2.8 Airport	90
3. Stormwater Drainage and Control Services	Yes	3.1 Main channels and drainage trunks	100
	Yes	3.2 Channel connections	100
	No	3.3 Retention/detention ponds	100
4. Fire Protection Services	Yes	4.1 Fire stations	100
	Yes	4.2 Fire pumpers, aerials and rescue vehicles ¹	100
	Yes	4.3 Small equipment and gear	100

¹with 7+ year life time

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



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
5. Outdoor Recreation Services (i.e. Parks and Open Space)	Ineligible	5.1 Acquisition of land for parks, woodlots and E.S.A.s	0
	Yes	5.2 Development of area municipal parks	90
	Yes	5.3 Development of district parks	90
	Yes	5.4 Development of municipal-wide parks	90
	Yes	5.5 Development of special purpose parks	90
	Yes	5.6 Parks rolling stock ¹ and yards	90
6. Indoor Recreation Services	Yes	6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land)	90
	Yes	6.2 Recreation vehicles and equipment ¹	90
7. Library Services	Yes	7.1 Public library space (incl. furniture and equipment)	90
	Yes	7.2 Library vehicles ¹	90
	Yes	7.3 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	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
10. Wastewater Services	n/a	10.1 Treatment plants	100
	n/a	10.2 Sewage trunks	100
	n/a	10.3 Local systems	0
	n/a	10.4 Vehicles and equipment ¹	100

¹with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
11. Water Supply Services	n/a	11.1 Treatment plants	100
	n/a	11.2 Distribution systems	100
	n/a	11.3 Local systems	0
	n/a	11.4 Vehicles and equipment ¹	100
12. Waste Management Services	Ineligible	12.1 Landfill collection, transfer vehicles and equipment	0
	Ineligible	12.2 Landfills and other disposal facilities	0
	Yes	12.3 Waste diversion facilities	90
	Yes	12.4 Waste diversion vehicles and equipment ¹	90
13. Police Services	n/a	13.1 Police detachments	100
	n/a	13.2 Police rolling stock ¹	100
	n/a	13.3 Small equipment and gear	100
14. Homes for the Aged	n/a	14.1 Homes for the aged space	90
	n/a	14.2 Vehicles ¹	90
15. Child Care	n/a	15.1 Child care space	90
	n/a	15.2 Vehicles ¹	90
16. Health	n/a	16.1 Health department space	90
	n/a	16.2 Health department vehicles ¹	90
17. Social Housing	n/a	17.1 Social Housing space	90
18. Provincial Offences Act (P.O.A.)	No	18.1 P.O.A. space	90
19. Social Services	n/a	19.1 Social service space	90
20. Ambulance	n/a	20.1 Ambulance station space	90
	n/a	20.2 Vehicles ¹	90
21. Hospital Provision	Ineligible	21.1 Hospital capital contributions	0

¹with 7+ year life time



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
22. Provision of Headquarters for the General Administration of Municipalities and Area Municipal Boards	Ineligible	22.1 Office space	0
	Ineligible	22.2 Office furniture	0
	Ineligible	22.3 Computer equipment	0
23. Other Services	Yes	23.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land ² and facilities, including the D.C. background study cost	0-100
	Yes		23.2 Interest on money borrowed to pay for growth-related capital
	No	23.3 Animal Control	90

¹with a 7+ year life time

²same percentage as service component to which it pertains

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



4.4 Local Service Policy

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

Some of the need for services generated by additional development consists of local services related to a plan of subdivision. As such, they will be required as a condition of subdivision agreements or consent conditions. The City’s general policy guidelines on D.C. and local service funding is detailed in Appendix D to this report.

4.5 Capital Forecast

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

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

The capital costs include:

- costs to acquire land or an interest therein (including a leasehold interest);
- costs to improve land;
- costs to acquire, lease, construct or improve buildings and structures;
- costs to acquire, lease or improve facilities including rolling stock (with a useful life of 7 or more years), furniture and equipment (other than computer equipment), materials acquired for library circulation, reference or information purposes;
- interest on money borrowed to pay for the above-referenced costs;



- costs to undertake studies in connection with the above-referenced matters; and
- costs of the D.C. background study.

In order for an increase in need for service to be included in the D.C. calculation, municipal council must indicate "...that it intends to ensure that such an increase in need will be met" (s.s.5(1)3). This can be done if the increase in service forms part of a Council-approved Official Plan, capital forecast or similar expression of the intention of Council (O.Reg. 82/98 s.3). The capital program contained herein reflects the City's approved and proposed capital budgets and master servicing/needs studies.

4.6 Treatment of Credits

Section 8 para. 5 of O.Reg. 82/98 indicates that a D.C. background study must set out, "the estimated value of credits that are being carried forward relating to the service." s.s.17 para. 4 of the same Regulation indicates that, "...the value of the credit cannot be recovered from future D.C.s," if the credit pertains to an ineligible service. This implies that a credit for eligible services can be recovered from future D.C.s. As a result, this provision should be made in the calculation, in order to avoid a funding shortfall with respect to future service needs.

The City does not have any outstanding D.C. credit obligations for services that have been emplaced by developers on behalf of the City.

4.7 Eligible Debt and Committed Excess Capacity

Section 66 of the D.C.A., 1997 states that for the purposes of developing a D.C. 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 an ineligible service 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 which 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, Council must have expressed a clear intention that it would be paid for by D.C.s or other similar charges. For example, this may have been done as part of previous D.C. processes.



Outstanding debt related to the D.C. recoverable share of a number of projects including the Consolidated Operations Depot, Fire Hall #5, Fire Hall #6 and Delpark Homes Centre.

4.8 Existing Reserve Funds

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

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

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

The City’s D.C. Reserve Funds balances, by service, are presented in Table 4-2 below. The estimated 2019 mid-year reserve fund balances have been adjusted to account for D.C. commitments. These balances have been applied against future spending requirements for all services.

Table 4-2
City of Oshawa
Estimated D.C. Reserve Funds Balances (as at mid-2019)

Service	Reserve Fund Balances To Be Applied
Administration	(\$399,138)
Fire Protection	(\$1,528,572)
Transportation Roads	\$7,697,211
Transportation Operations	\$1,630,090
Watercourse Improvements	\$3,853,494
Parks, Recreation and Trails	\$6,740,104
Library	\$2,924,111
Total	\$20,917,301



4.9 Deductions

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

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

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

4.9.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need included in 4.2 does “...not include an increase that would result in the level of service (for the additional development increment) exceeding the average level of the service provided in the City over the 10-year period immediately preceding the preparation of the background study...” O.Reg. 82.98 (s.4) goes further to indicate that, “...both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service.”

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

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



4.9.2 Reduction for Uncommitted Excess Capacity

Paragraph 5 of s.s.5(1) requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the City's "excess capacity," other than excess capacity which is "committed" (discussed above in 4.6).

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

4.9.3 Reduction for Benefit to Existing Development

This step involves a further reduction to the need, by the extent to which such an increase in service would benefit existing development. The level of services cap in section 4.9.1 is related, but is not the identical requirement. Wastewater (sanitary), stormwater, and water trunks are highly localized to growth areas and can be more readily allocated in this regard than other services such as roads which do not have a fixed service area.

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

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a municipal-wide system basis. For example, facilities of the same type may provide different services (i.e. leisure pool vs. competitive pool), different programs (i.e. hockey vs. figure skating) and different time availability for the same service (i.e. leisure skating available on Wednesday in one arena and Thursday in another). As a result, residents will travel to different facilities to access the services they want at the times they wish to use them, and facility location generally does not



correlate directly with residence location. Even where it does, displacing users from an existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.

4.9.4 Reduction for Anticipated Grants, Subsidies, and Other Contributions

This step involves reducing the capital costs necessary to provide the increased services by capital grants, subsidies and other contributions made or anticipated by Council and in accordance with various rules such as the attribution between the share related to new vs. existing development O.Reg. 82.98, s.6. Where grant programs do not allow funds to be applied to growth-related capital needs, the proceeds can be applied to the non-growth share of the project exclusively. Moreover, Gas Tax revenues are typically used to fund non-growth-related works or the non-growth share of D.C. projects, given that the contribution is not being made in respect of particular growth-related capital projects.

4.9.5 The 10% Reduction

Paragraph 8 of s.s.(1) of the D.C.A. requires that, “the capital costs must be reduced by 10 percent.” This paragraph does not apply to water supply services, wastewater services, stormwater drainage and control services, services related to a highway, police, and fire protection services. The primary services that the 10% reduction does apply to include services such as parks and recreation and libraries. The 10% is to be netted from the capital costs necessary to provide the increased services, once the other deductions have been made, as per the infrastructure cost sheets in Chapter 5



Chapter 5

D.C. Eligible Cost Analysis by Service



5. D.C. Eligible Cost Analysis by Service

5.1 Introduction

This chapter outlines the basis for calculating D.C. eligible costs for the D.C.s to be applied on a uniform basis. The required calculation process set out in s.5(1) paragraphs 2 to 8 in the D.C.A., 1997, and described in Chapter 4, was followed in determining D.C. eligible costs.

The nature of the capital projects and timing identified in this chapter reflects Council's current intention. However, over time, municipal projects and Council priorities change and, accordingly, Council's intentions may alter and different capital projects (and timing) may be required to meet the need for services required by new growth.

5.2 Service Level and 10-Year Capital Costs for Municipal-wide D.C.

This section evaluates the development-related capital requirements for select services over the 10-year planning period (2019-2028). Each service component is evaluated on two format sheets: the average historical 10-year level of service calculation (see Appendix B), which "caps" the D.C. amounts; and the infrastructure cost calculation, which determines the potential D.C. recoverable cost.

5.2.1 *Watercourse Improvements*

The capital program for watercourse improvements totals \$45.7 million and involves improvements to the City's creeks and channels and associated studies. The City established an erosion control program in the early 1980s in order to protect existing creeks by means of bank protection. The City has developed, on a project-by-project basis (as identified in the Official Plan) an anticipated work program, based on existing active erosion conditions and the impact of proposed development upstream.

The level of service provided is based upon City engineering design standards and MOE requirements.

The calculation of share attributable to development during the 2019-2028 period takes into consideration the impact of future development in relation to the needs of existing



development within each respective sub-watershed and ranges from 0% to 95% with the majority of the projects assigned a benefit to existing development of 15%. In total, \$26.9 million has been deducted.

Where applicable, contributions from private property owners and others have been identified and deducted. This amounts to \$260,000. The 10% deduction is not applicable to storm water management.

After deducting \$3.9 million already collected towards these needs, as represented by the uncommitted balance in the D.C. reserve fund, the resulting net growth-related capital costs for inclusion in the calculation total \$14.7 million.

The allocation between residential/non-residential development has been made based on anticipated flow contribution by land use and is variable on a project-by-project basis. The non-residential share has been further subdivided into commercial/institutional and industrial shares using the same approach.

5.2.2 Parks, Recreation and Trails

The City currently maintains approximately 1,430 acres of developed parkland ranging from parkettes to regional parks, and 27 kilometres of paths, trails and pedestrian bridges within its jurisdiction. Park maintenance is facilitated at two locations with almost 40,000 sq.ft. in total assigned to Parks. Further, over 120 separate vehicles and pieces of equipment are used for park maintenance.

Finally, the City operates 911,000 sq.ft. of indoor recreation facility space. The inventory includes the Civic Recreation Complex, Delpark Homes Centre as well as a portion of the Tribute Communities Centre and the Campus Ice Centre.

The City's level of service over the historical 10-year period averaged \$3,412 per capita. In total, the maximum D.C. eligible amount for Parks, Trail and Recreation Services over the 10-year forecast period is approximately \$91.7 million based on the established level of service.

The 10-year capital needs for Parks, Trail and Recreation to accommodate growth have a total gross capital cost of approximately \$151.8 million. These capital needs include costs for a new Recreation Centre in the North Area, Harbour Park and Second Marsh redevelopment, Phase 3 of Lakefront West and major community parks in Windfields,



Kedron as well as numerous other community parks, neighbourhood parks, parkettes, trail development projects, park maintenance equipment and studies.

The City amended its 2014 D.C. by-law in 2017 with the completion of the D.C. Update Study. Part of the amendment was to address the facility needs arising from the completion of the City's Parks Recreation Library and Culture (P.R.L.C.) Facility Needs Assessment, which identified needs for a new recreation complex and provided the basis for the updated cost estimates for specific park and trail projects. In addition, the amendment also included unfunded D.C. eligible amounts for the Delpark Homes Centre omitted from the 2014 D.C. Background Study. These needs have been maintained in this study. Moreover, additional trail developments identified in the City's parks plan have been included and referenced as linkages not included with the Part II Plan, as well as, unfunded growth-related capital costs for the Consolidated Operations Depot.

Almost \$23 million was deducted for benefit to growth that will occur beyond the forecast period. This applied to projects planned for the latter part of the forecast period. A further \$30.8 million was deducted from the project costs for the share attributed to existing development. This deduction was made on a project specific basis with amounts ranging from 5% for parkettes and neighbourhood parks to 50% for redevelopment projects and trail development outside of Park II Plan. The deduction percentages are generally consistent with the approach used in the 2014 D.C. Study.

Deductions in recognition of the statutory 10% capital cost reduction total \$9.8 million. After deducting \$6.7 million in recognition of D.Cs. already collected towards these needs, as represented by the uncommitted balance in the D.C. reserve fund, the resulting net growth-related capital costs for inclusion in the calculation total \$81.6 million.

As the predominant users of this service tend to be residents of the City, the forecast growth-related costs have been allocated 95% to residential and 5% to non-residential

5.2.3 Library Services

The City provides library services through 95,000 sq.ft. of facility space at four separate branches. In addition, the City maintains an inventory of over 350,000 physical collection items as well as access to a broad range of electronic resources for which it pays access and subscription fees.



The average level of service over the past 10 years was \$321 per capita. Based on the application of this level of service to the incremental forecast growth, the D.C. eligible amount is approximately \$8.6 million for library services over the forecast period.

The capital needs required to accommodate growth have a total gross cost of \$13.3 million for the construction of a new branch, additions to the collection and an update to the Facilities Needs Assessment study. The need for additional library facility space was identified in the City's Parks Recreation Library and Culture (P.R.L.C.) Facility Needs Assessment and reflected in the City's 2017 D.C. Update Study, which amended the 2014 D.C. by-law.

\$4.9 million has been deducted as the portion that benefits growth that will occur beyond the forecast period. This is reflective of the P.R.L.C. Facility Needs Assessment identification of needs maintaining a service provision of 0.6 sq.ft. per capita. Moreover, \$1.4 million was deducted from the project costs for the share attributed to existing development. These latter deductions ranged from 5% for additional materials to 50% for the Facility Needs Study.

Deductions in recognition of the statutory 10% capital cost reduction total \$0.7 million. After deducting \$2.9 million of D.C. revenue already collected towards these needs, as represented by the uncommitted balance in the D.C. reserve fund, the resulting net growth-related capital costs for inclusion in the calculation total \$4.1 million.

These costs of been allocated 95% to residential development and 5% to non-residential development.

5.2.4 Administration

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the City's capital works program and to support the preparation of future D.C. background studies. The City has made provisions for the inclusion of future studies undertaken to facilitate this D.C. process, as well as other studies which benefit growth, including an official plan review, a design engineering standards and guideline review and an asset management study. Master plans and needs studies related to specific services have been included in the capital needs for those services.

The cost of the projects included in the Administration service totals approximately \$0.9 million over the 10-year forecast period. No deduction has been made for post period



benefits. \$380,000 has been deducted as the share of benefit to existing development calculated as a percentage of net capital costs. The deductions ranged from nil for D.C. Background Studies to 50% for broader studies.

As the D.C. reserve fund for this service is currently in a deficit position, the negative reserve fund balance of \$399,000 was added to the capital needs. After the 10% statutory deduction of \$27,000, the net growth-related capital costs included in the charge total \$903,000.

These costs have been allocated 66% residential and 34% non-residential based on the incremental growth in population to employment for the 10-year forecast period. The non-residential share was further subdivided into industrial (18%) and non-industrial (16%) development based on the proportion of incremental employment for these two categories of development.

5.2.5 Parking

The City provides off street parking at three parking garages with a total floor area of just over 600,000 sq.ft. and six surface lots with space for 637 vehicles. Other assets include two vehicles and a share of space at the City's Consolidated Operations Depot. The average level of service over the past 10 years was \$820 per capita. Based on the application of this level of service to the incremental forecast growth, the D.C. eligible amount is approximately \$22 million over the forecast period.

The capital needs required to accommodate growth have a total gross cost of \$350,000 and involves a Parking Master Plan.

No deduction has been made for benefits to growth that will occur beyond the forecast period. Approximately, \$88,000 has been deducted from the project cost for the share attributed to existing development.

Deductions in recognition of the statutory 10% capital cost reduction total \$26,000. As this is a new service in the City's D.C. by-law, there are no existing D.C. reserve funds to be considered. Thus, the net D.C. recoverable cost is \$236,000.

As with Administration, the costs have been allocated 66% residential and 34% non-residential based on the incremental growth in population to employment for the 10-year



forecast period. The non-residential share was further subdivided into industrial and non-industrial development based on the proportion of incremental employment.

5.2.6 Waste Diversion

The City of Oshawa is responsible for the collection of waste including materials diverted from landfills. Recent amendments to the DCA, through Bill 73, have removed waste diversion from the list of ineligible services.

The City's service level for waste diversion is comprised of a share of the Consolidated Operations Depot as well as a number of vehicles including those used for waste collection. It is assumed that these latter vehicles are utilized 25% for diversion.

The average level of service over the past 10 years was \$10 per capita. Based on the application of this level of service to the incremental forecast growth, the D.C. eligible amount is approximately \$261,000 over the forecast period.

The capital needs for this service related to growth involve the acquisition of the equivalent of one additional collection vehicle at a gross cost of \$325,000. From this amount, \$65,000 has been deducted as the share attributable to growth beyond the ten-year forecast period. A 5% deduction has been made for benefit to existing development which reduced the gross cost by a further \$16,000.

\$24,000 was removed from the cost as required by the 10% statutory deduction. There is no existing D.C. revenue to be accounted for and the potential D.C. recoverable cost is \$219,000.

This amount has been allocated 66% residential and 34% non-residential based on the incremental growth in population to employment for the 10-year forecast period and further allocated between industrial and non-industrial development.



Infrastructure Costs Covered in the D.C. Calculation – Watercourse Improvements

Prj.No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share varies	Commercial/Institutional Share varies	Industrial Share varies
54-0039	Harmony Creek BR 1 - from King St. E. to approx. 400 m south	2019	625,000	-	625,000	93,750		531,250	504,688	26,563	-
71-0069	Bermuda Ave Structure crossing Goodman Creek	2019	1,620,000	-	1,620,000	696,000		924,000	184,800	46,200	693,000
54-0036	Farewell Creek - Grandview St. S to approx 450m east	2020	550,000	-	550,000	82,500	-	467,500	397,375	70,125	-
54-0065	Oshawa Main - Erie Park at Pedestrian Structure 1-1007	2020	500,000	-	500,000	75,000		425,000	318,750	63,750	42,500
54-0085	Stormwater Improvements - Site 1 at storm outfall 37	2028	1,421,000	-	1,421,000	213,150		1,207,850	905,888	181,178	120,785
54-0085	Stormwater Improvements - Site 2 at storm outfall 301	2028	215,000	-	215,000	32,250		182,750	137,063	27,413	18,275
54-0085	Stormwater Improvements - Site 3 at storm outfall 296	2028	493,000	-	493,000	73,950		419,050	314,288	62,858	41,905
54-0037	Goodman Creek - Park Rd S to Nassau St	2021	440,000	-	440,000	56,100	66,000	317,900	63,580	15,895	238,425
54-0066	Oshawa Main - Bond St W to approx 70m south of King St W	2021	400,000	-	400,000	60,000		340,000	255,000	51,000	34,000
54-0067	Oshawa East at Britannia Bridge	2021	300,000	-	300,000	45,000		255,000	191,250	38,250	25,500
54-0088	King St bridge crossing Oshawa Creek	2021	4,120,000	-	4,120,000	3,897,520		222,480	166,860	33,372	22,248
54-0012	Oshawa Main - Thomas St to approx 200m north	2022	650,000	-	650,000	97,500	-	552,500	414,375	82,875	55,250
54-0013	Oshawa Main - Approx 200m north of Thomas St to Wentworth St W	2022	650,000	-	650,000	97,500		552,500	414,375	82,875	55,250
54-0017	Oshawa Main - Hwy 401 to CPR Railway	2023	1,100,000	-	1,100,000	165,000	-	935,000	701,250	140,250	93,500
54-0068	Oshawa Main - Bond St W to approx 120m north	2023	300,000	-	300,000	45,000		255,000	191,250	38,250	25,500
54-0089	Bond St bridge crossing Oshawa Creek	2023	5,020,000	-	5,020,000	4,748,920		271,080	203,310	40,662	27,108
54-0031	Harmony BR 2 DIV - Rossland Rd E to approx 300m north	2024	900,000	-	900,000	135,000	-	765,000	726,750	38,250	-
54-0029	Harmony BR 2 DIV - approx 300m north of Rossland Rd E to Wilson Rd	2024	800,000	-	800,000	120,000	-	680,000	646,000	34,000	-
54-0069	STUDY* Goodman Creek - Adelaide Ave W to Taunton Rd W	2024	100,000	-	100,000	15,000		85,000	17,000	4,250	63,750
54-0090	CPR Structure crossing Oshawa Creek	2024	14,700,000	-	14,700,000	13,979,700		720,300	540,225	108,045	72,030
54-0033	Harmony BR 1 - Central Park Blvd N to Ritson Rd N	2025	500,000	-	500,000	75,000	-	425,000	403,750	21,250	-
54-0027	Harmony BR 5 - BR 1 confluence to King St E	2025	800,000	-	800,000	120,000	-	680,000	646,000	34,000	-
54-0035	Oshawa Main - Harbour East of Simcoe St S	2026	1,250,000	-	1,250,000	187,500		1,062,500	796,875	159,375	106,250
54-0034	Harmony BR 3 - BR 1 Confluence to Adelaide Ave E	2027	600,000	-	600,000	90,000	-	510,000	484,500	25,500	-
54-0014	Harmony BR 1 - BR3 confluence to Bond St E	2027	400,000	-	400,000	60,000	-	340,000	323,000	17,000	-
54-0030	Goodman Creek - Rossland Rd W to Bermuda Ave	2027	400,000	-	400,000	60,000	-	340,000	68,000	17,000	255,000



Infrastructure Costs Covered in the D.C. Calculation – Watercourse Improvements (cont'd)

Prj.No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share varies	Commercial/Institutional Share varies	Industrial Share varies
54-0070	STUDY* Harmony Br 3 East - from Coldstream Dr to Conlin Rd E	2027	100,000	-	100,000	15,000		85,000	80,750	4,250	-
54-0015	Harmony BR 2 - Hillcroft St to Rossland Rd E	2028	1,700,000	-	1,700,000	225,975	193,500	1,280,525	1,216,499	64,026	-
54-0073	STUDY* Harmony Creek Br 5 - King St E to Grandview St N unopened road allowance	2028	100,000	-	100,000	15,000		85,000	80,750	4,250	-
54-0091	Taunton Rd Structure crossing Goodman Creek	2028	2,020,000	-	2,020,000	-		2,020,000	404,000	101,000	1,515,000
54-0021 to 54-0026 54-0042 54-0054 54-0060 54-0072	Consortium Watercourse Bank Stabilization	2020-2028	90,000	-	90,000	13,500		76,500	65,025	7,650	3,825
	WCI Capital Plan	2019-2028	150,000	-	150,000	22,500		127,500	108,375	12,750	6,375
54-0092	Rossland Rd Structure crossing Goodman Creek	2028	2,310,000	-	2,310,000	1,106,490		1,203,510	240,702	60,176	902,633
40-0047	Storm Water Management Best Practices Study	2020	350,000	-	350,000	175,000		175,000	115,500	31,127	28,373
	Reserve Fund Adjustment							(3,853,494)	(2,581,841)	(346,815)	(924,839)
	Total		45,674,000	-	45,674,000	26,894,805	259,500	14,666,201	9,745,959	1,398,598	3,521,643



Infrastructure Costs Covered in the D.C. Calculation – Parks, Recreation and Trails

PrjNo	Category	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share	
														95%
		2019-2028												
		Consolidated Operations Depot Outstanding D.C. Recoverable Share	2019-2028	2,944,535	-	2,944,535	147,227		2,797,308	279,731	2,517,577	2,391,699	125,879	
50-0046		Development related parks pre-design	2020-2028	225,000	-	225,000	11,250		213,750	21,375	192,375	182,756	9,619	
12-0058		New Recreation Centre in North Area	2021-2025	31,120,332	-	31,120,332	3,112,033		28,008,299	2,800,830	25,207,469	23,947,095	1,260,373	
		Unfunded Delpark Homes Centre Debt Payments	2019-2023	2,706,625	-	2,706,625	-		2,706,625	270,663	2,435,963	2,314,164	121,798	
51-0116	Community	Rotary Park Redevelopment	2022	2,000,000	-	2,000,000	1,000,000		1,000,000	100,000	900,000	855,000	45,000	
50-0005	Community	Windfields Community Park	2023	10,000,000	-	10,000,000	500,000		9,500,000	950,000	8,550,000	8,122,500	427,500	
50-0030	Community	Taunton Part II Plan Community Park Development	2026	160,000	-	160,000	8,000		152,000	15,200	136,800	129,960	6,840	
50-0037	Community	Kedron Part II Plan Community Park	2026	10,000,000	-	10,000,000	500,000		9,500,000	950,000	8,550,000	8,122,500	427,500	
50-0052	Community	Thornton Community Park Development	2028	3,000,000	1,080,000	1,920,000	96,000		1,824,000	182,400	1,641,600	1,559,520	82,080	
50-0003	City	Lakefront West Phase 2 - Detail Design	2020	600,000	-	600,000	60,000		540,000	54,000	486,000	461,700	24,300	
51-0110	City	Lakeview Park Playground and Splashpad Construction	2020	1,560,000	-	1,560,000	780,000		780,000	78,000	702,000	666,900	35,100	
50-0047	City	Lakefront West Phase 3 - Construction	2028	12,000,000	4,320,000	7,680,000	768,000		6,912,000	691,200	6,220,800	5,909,760	311,040	
	City	Downtown Park	2025	2,000,000	-	2,000,000	200,000		1,800,000	180,000	1,620,000	1,539,000	81,000	
51-0051	City	Harbour Park Redevelopment	2028	24,000,000	8,640,000	15,360,000	7,680,000		7,680,000	768,000	6,912,000	6,566,400	345,600	
50-0006	Neighbourhood	Windfields Neighbourhood Park 4	2019	240,000	-	240,000	12,000		228,000	22,800	205,200	194,940	10,260	
50-0008	Neighbourhood	Fittings Subdivision Park	2024	500,000	-	500,000	25,000		475,000	47,500	427,500	406,125	21,375	
50-0028	Neighbourhood	North Central Taunton Park	2024	600,000	-	600,000	30,000		570,000	57,000	513,000	487,350	25,650	
50-0031	Neighbourhood	Kedron Part II Plan Neighbourhood Park 1	2024	600,000	-	600,000	30,000		570,000	57,000	513,000	487,350	25,650	
50-0036	Neighbourhood	Kedron Part II Plan Neighbourhood Park 2	2024	600,000	-	600,000	30,000		570,000	57,000	513,000	487,350	25,650	
	Neighbourhood	Simcoe and Elena Park	2025	600,000	-	600,000	30,000		570,000	57,000	513,000	487,350	25,650	
50-0029	Parkette	Royal Street Park	2023	175,000	-	175,000	8,750		166,250	16,625	149,625	142,144	7,481	
50-0033	Parkette	Kedron Part II Plan Parkette 1	2024	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0034	Parkette	Kedron Part II Plan Parkette 2	2024	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0032	Parkette	Kedron Part II Plan Parkette 3	2024	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0035	Parkette	Kedron Part II Plan Parkette 4	2026	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0039	Parkette	Kedron Part II Plan Parkette 5	2026	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0038	Parkette	Kedron Part II Plan Parkette 6	2026	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0049	Parkette	Kedron Part II Plan Parkette 7	2026	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0040	Parkette	Kedron Part II Plan Parkette 8	2026	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0050	Parkette	Kedron Part II Plan Parkette 9	2026	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
50-0041	Parkette	Kedron Part II Plan Parkette 10	2026	350,000	-	350,000	17,500		332,500	33,250	299,250	284,288	14,963	
	Regional	Second Marsh Redevelopment	2028	10,000,000	-	10,000,000	7,500,000		2,500,000	250,000	2,250,000	2,137,500	112,500	
50-0016	Trail	Taunton Part II Plan - Link 1 (Esterbrook to Salmers/Arborwood)	2023	800,000	-	800,000	80,000		720,000	72,000	648,000	615,600	32,400	
50-0016	Trail	Taunton Part II Plan - Link 3 (Esterbrook to Conlin incl. 1 underpass)	2023	450,000	-	450,000	45,000		405,000	40,500	364,500	346,275	18,225	
50-0015	Trail	Windfields Part II Plan - Link 4 (East Tributary at Britannia west of Simcoe)	2023	683,704	-	683,704	68,370		615,334	61,533	553,801	526,110	27,690	
50-0019	Trail	Windfields Part II Plan - Link 5 (Conlin to Britannia east of Bridle)	2023	300,000	-	300,000	30,000		270,000	27,000	243,000	230,850	12,150	
50-0001	Trail	Not in Part II Plan - Link 6 (between Ormond Dr. South and North)	2023	600,000	-	600,000	60,000		540,000	54,000	486,000	461,700	24,300	
50-0002	Trail	Not in Part II Plan - Link 7 (Ormond Dr. To Ritson)	2023	200,000	-	200,000	20,000		180,000	18,000	162,000	153,900	8,100	
50-0010	Trail	Windfields Part II Plan - Link 12 (East-west link to Neigh Park 4 incl 1 Bridge)	2023	550,000	-	550,000	55,000		495,000	49,500	445,500	423,225	22,275	



Infrastructure Costs Covered in the D.C. Calculation – Parks, Recreation and Trails (cont'd)

Prj.No	Category	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:		Potential D.C. Recoverable Cost	
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 95%	Non-Residential Share 5%
2019-2028													
50-0014	Trail	Windfields Part II Plan - Link 13 (Britannia to Pipeline)	2023	475,000	-	475,000	47,500		427,500	42,750	384,750	365,513	19,238
50-0020	Trail	Windfields Part II Plan - Link 14 (Britannia to Hydro Corr. Incl. 1 Underpass)	2023	475,000	-	475,000	47,500		427,500	42,750	384,750	365,513	19,238
50-0021	Trail	Taunton Part II Plan - Link 15 (Legends to Conlin Rd.)	2023	600,000	-	600,000	60,000		540,000	54,000	486,000	461,700	24,300
50-0023	Trail	Windfields Part II Plan - Link 17 (Conlin to Britannia Incl. 1 Bridge & 1 Underpass)	2023	1,000,000	-	1,000,000	100,000		900,000	90,000	810,000	769,500	40,500
50-0017	Trail	Kedron Part II Plan - Link 18 (Conlin to Planning Area North Boundary at East Ritson)	2023	500,000	-	500,000	50,000		450,000	45,000	405,000	384,750	20,250
50-0025	Trail	Eastdale Part II Plan - Link 19 (Grandview to Townline Incl. 1 Bridge)	2024	425,000	-	425,000	42,500		382,500	38,250	344,250	327,038	17,213
50-0053	Trail	Pinecrest Part II Plan - Link 24 (East of Harmony Rd. and North of Beatrice St. to West of Grandview Rd. and South of Taunton Rd.)	2028	440,000	158,400	281,600	28,160		253,440	25,344	228,096	216,691	11,405
50-0054	Trail	Pinecrest Part II Plan - Link 25 (East of Wilson Rd. and North of Beatrice St. to West of Harmony Rd. and North of Beatrice St.)	2028	480,000	172,800	307,200	30,720		276,480	27,648	248,832	236,390	12,442
50-0055	Trail	Pinecrest Part II Plan - Link 26 (West of Harmony Rd. and North of Beatrice St. to West of Harmony Rd. and South of Taunton Rd.)	2028	520,000	187,200	332,800	33,280		299,520	29,952	269,568	256,090	13,478
50-0056	Trail	Eastdale Part II Plan - Link 27 (East of Harmony Rd. and North of Adelaide Ave. to East of Harmony Rd. and South of Roslin Rd.)	2028	400,000	144,000	256,000	25,600		230,400	23,040	207,360	196,992	10,368
50-0057	Trail	Eastdale Part II Plan - Link 28 (East of Harmony Rd. and North of Adelaide Ave. to Link 27)	2028	120,000	43,200	76,800	7,680		69,120	6,912	62,208	59,098	3,110
50-0058	Trail	Eastdale Part II Plan - Link 29 (East of Harmony Rd. and North of Rossland Rd. to Ridge Valley Park)	2028	200,000	72,000	128,000	12,800		115,200	11,520	103,680	98,496	5,184
50-0059	Trail	Eastdale Part II Plan - Link 30 (East of Grandview St. and North of Rossland Rd. to Link 19)	2028	480,000	172,800	307,200	30,720		276,480	27,648	248,832	236,390	12,442
50-0060	Trail	Eastdale Part II Plan - Link 31 (West of Grandview St. and North of Rossland Rd. to Ridge Valley Park)	2028	240,000	86,400	153,600	15,360		138,240	13,824	124,416	118,195	6,221
50-0061	Trail	Taunton Part II Plan - Link 32 (West of Grandview St. and North of Taunton Rd. to West of Grandview St. and South of Coldstream Dr.)	2028	240,000	86,400	153,600	15,360		138,240	13,824	124,416	118,195	6,221
50-0062	Trail	Taunton Part II Plan - Link 33 (West of Grandview St. and North of Coldstream to West of Grandview St. and Salmers Dr.)	2028	200,000	72,000	128,000	12,800		115,200	11,520	103,680	98,496	5,184
52-0015	Trail	Windfields Part II Plan - Link 34 (Link 11 to Link 10)	2028	160,000	57,600	102,400	10,240		92,160	9,216	82,944	78,797	4,147
52-0016	Trail	Not in Part II Plan - Link 36 (Farewell Park to Florell Park)	2028	520,000	187,200	332,800	166,400		166,400	16,640	149,760	142,272	7,488
52-0017	Trail	Not in Part II Plan - Link 37 (Florell Park to Colonel Sam Dr.)	2028	5,100,000	1,836,000	3,264,000	1,632,000		1,632,000	163,200	1,468,800	1,395,360	73,440
52-0018	Trail	Not in Part II Plan - Link 38 - Colonel Sam Dr. to South of Hwy. 401	2028	720,000	259,200	460,800	230,400		230,400	23,040	207,360	196,992	10,368
52-0019	Trail	Not in Part II Plan - Link 39 - West of Harmony Rd at Easton Park to Harmony Creek Trail	2028	240,000	86,400	153,600	76,800		76,800	7,680	69,120	65,664	3,456
52-0020	Trail	Not in Part II Plan - Link 40 - West of Harmony Rd. and North of Rossland Rd. to East of Attersley and North of Rossland Rd.	2028	280,000	100,800	179,200	89,600		89,600	8,960	80,640	76,608	4,032
52-0021	Trail	Not in Part II Plan - Link 41 - East of Harmony Rd. to Wilson Rd. South and Taunton Rd.	2028	400,000	144,000	256,000	128,000		128,000	12,800	115,200	109,440	5,760
52-0022	Trail	Not in Part II Plan - Link 42 - West of Ritson Rd. and North of Britannia Ave. to Link 59	2028	1,000,000	360,000	640,000	320,000		320,000	32,000	288,000	273,600	14,400
52-0023	Trail	Not in part II Plan - Link 43 - Beatrice Rd. to South of Taunton Rd.	2028	480,000	172,800	307,200	153,600		153,600	15,360	138,240	131,328	6,912
52-0024	Trail	Not in Part II Plan - Link 44 - Beatrice Rd. and West of Wilson Rd. to South of Taunton Rd.	2028	320,000	115,200	204,800	102,400		102,400	10,240	92,160	87,552	4,608



Infrastructure Costs Covered in the D.C. Calculation – Parks, Recreation and Trails (cont'd)

PrjNo	Category	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost				
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 95%	Non-Residential Share 5%		
2019-2028															
52-0025	Trail	Not in Part II Plan - Link 45 - South of Taunton and West of Wilson to South of Whitehall Park	2028	440,000	158,400	281,600	140,800		140,800	14,080	126,720	120,384	6,336		
52-0026	Trail	Not in Part II Plan - Link 46 - Goodman Park to West end of Annapolis Ave.	2028	640,000	230,400	409,600	204,800		204,800	20,480	184,320	175,104	9,216		
52-0027	Trail	Not in Part II Plan - Link 47 - Prestwick Park to South of Taunton Rd. and East of Thornton Rd.	2028	1,040,000	374,400	665,600	332,800		332,800	33,280	299,520	284,544	14,976		
52-0028	Trail	Not in Part II Plan - Link 48 - North of Adelaide and East of Park Rd. to Alexandra St.	2028	320,000	115,200	204,800	102,400		102,400	10,240	92,160	87,552	4,608		
52-0029	Trail	Not in Part II Plan - Link 49 - East / West Link South of Airport	2028	600,000	216,000	384,000	192,000		192,000	19,200	172,800	164,160	8,640		
52-0030	Trail	Not in Part II Plan - Link 50 - West of Ritson Rd and South of Winchester Rd. to Link 13	2028	160,000	57,600	102,400	51,200		51,200	5,120	46,080	43,776	2,304		
52-0031	Trail	Not in Part II Plan - Link 51 - North of Taunton Rd and South of Simcoe St. to Conlin Rd.	2028	840,000	302,400	537,600	268,800		268,800	26,880	241,920	229,824	12,096		
52-0032	Trail	Not in Part II Plan - Link 52 - Link 51 to Link 7	2028	920,000	331,200	588,800	294,400		294,400	29,440	264,960	251,712	13,248		
52-0033	Trail	Not in Part II Plan - Link 53 - Glovers Rd. to South of Camp Samac	2028	440,000	158,400	281,600	140,800		140,800	14,080	126,720	120,384	6,336		
52-0034	Trail	Not in Part II Plan - Link 54 - North of Ormond Dr, to South of Conlin Rd.	2028	120,000	43,200	76,800	38,400		38,400	3,840	34,560	32,832	1,728		
52-0035	Trail	Not in Part II Plan - Link 55 - South of Conlin Rd. and East of Ritson Rd. to Wilson Rd. and South of Conlin Rd.	2028	400,000	144,000	256,000	128,000		128,000	12,800	115,200	109,440	5,760		
52-0036	Trail	Not in Part II Plan - Link 56 - South of Conlin Rd. and East of Ritson Rd. to Quail Run Dr.	2028	120,000	43,200	76,800	38,400		38,400	3,840	34,560	32,832	1,728		
52-0037	Trail	Not in Part II Plan - Link 57 - North of Greenhill Ave. and West of Harmony Rd. to Quail Run Dr.	2028	120,000	43,200	76,800	38,400		38,400	3,840	34,560	32,832	1,728		
52-0038	Trail	Not in Part II Plan - Link 58 - Link 18 to Link 59	2028	520,000	187,200	332,800	166,400		166,400	16,640	149,760	142,272	7,488		
52-0039	Trail	Not in Part II Plan - Link 59 - From Thornton Rd. to Townline Rd.	2028	2,840,000	1,022,400	1,817,600	908,800		908,800	90,880	817,920	777,024	40,896		
52-0040	Trail	Not in Part II Plan - Link 60 - North of Winchester Rd. and West of Grandview St. to Link 59	2028	120,000	43,200	76,800	38,400		38,400	3,840	34,560	32,832	1,728		
52-0041	Trail	Not in Part II Plan - Link 61 - West of Townline Rd. and South of Winchester Rd. to Link 59	2028	240,000	86,400	153,600	76,800		76,800	7,680	69,120	65,664	3,456		
52-0042	Trail	Not in Part II Plan - Link 62 - West of Winchester Rd. and North of Link 59 to South of Columbus Rd.	2028	760,000	273,600	486,400	243,200		243,200	24,320	218,880	207,936	10,944		
52-0043	Trail	Not in Part II Plan - Link 63 - East of Thornton Rd. and South of Columbus Rd. to North of Howden Rd.	2028	1,440,000	518,400	921,600	460,800		460,800	46,080	414,720	393,984	20,736		
40-0033	Studies	Rotary Park Detailed Design	2021	200,000	-	200,000	100,000		100,000	10,000	90,000	85,500	4,500		
51-0103	Studies	Lakeview Park Playground and Splashpad Replacement Design	2019	240,000	-	240,000	120,000		120,000	12,000	108,000	102,600	5,400		
51-0104	Studies	Harbour Park Masterplan	2019	270,000	-	270,000	135,000		135,000	13,500	121,500	115,425	6,075		
	Vehicle	Large Grass Mower	2021	130,000	-	130,000	6,500		123,500	12,350	111,150	105,593	5,558		
	Vehicle	Forestry Bucket Truck 37 foot	2025	155,000	-	155,000	7,750		147,250	14,725	132,525	125,899	6,626		
40-0004		Parks, Recreation, Library and Culture Facility Needs Assessment Update (50%)	2021	40,000	-	40,000	20,000		20,000	2,000	18,000	17,100	900		
		Reserve Fund Adjustment							(6,740,104)		(6,740,104)	(6,403,099)	(337,005)		
		Total		151,845,196	22,903,200	128,941,996	30,785,900	-	91,415,992	9,815,610	81,600,382	77,520,363	4,080,019		



Infrastructure Costs Covered in the D.C. Calculation – Library Services

Prj.No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 95%	Non-Residential Share 5%
1	Addition to Collections System Wide	2020-2024	530,000	-	530,000	26,500		503,500	50,350	453,150	430,493	22,658
2	New Branch (18,000 sq.ft.)	2021-2025	12,168,000	4,880,957	7,287,043	1,346,173		5,940,870	594,087	5,346,783	5,079,444	267,339
3	Addition to Collections System Wide	2025-2028	600,000	-	600,000	30,000		570,000	57,000	513,000	487,350	25,650
40-0004	Parks, Recreation, Library and Culture Facility Needs Assessment Update (50%)		40,000	-	40,000	20,000		20,000	2,000	18,000	17,100	900
	Reserve Fund Adjustment							(2,924,111)		(2,924,111)	(2,777,906)	(146,206)
	Total		13,338,000	4,880,957	8,457,043	1,422,673	-	4,110,259	703,437	3,406,822	3,236,480	170,341



Infrastructure Costs Covered in the D.C. Calculation – Administration

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost			
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Industrial	Non-Industrial
	2019-2028										66%	18%	16%
40-0008	Mobility Hub Transportation and Land Use Study (FIN-18-52)	2018-2022	101,746	-	101,746	25,437		76,310	2,289	74,020	48,853	13,166	12,001
40-0009	Official Plan Review	2020	300,000	-	300,000	150,000		150,000	15,000	135,000	89,100	24,012	21,888
40-0029	DC By-law Background Study	2023	100,000	-	100,000	-		100,000	-	100,000	66,000	17,787	16,213
	Asset Management	2019-2028	200,000	-	200,000	100,000		100,000	10,000	90,000	59,400	16,008	14,592
40-0034	Design Engineering Standards and Guideline Review	2020	210,000	-	210,000	105,000		105,000	-	105,000	69,300	18,676	17,024
	Reserve Fund Adjustment							399,138		399,138	263,431	70,993	64,713
	Total		911,746	-	911,746	380,437	-	930,447	27,289	903,158	596,084	160,642	146,432



Infrastructure Costs Covered in the D.C. Calculation – Parking

Prj.No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost			
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 66%	Industrial 18%	Non- Industrial 16%
40-0046	Parking Master Plan	2022	350,000	-	350,000	87,500		262,500	26,250	236,250	155,925	42,021	38,304
	Total		350,000	-	350,000	87,500	-	262,500	26,250	236,250	155,925	42,021	38,304



Infrastructure Costs Covered in the D.C. Calculation – Waste Diversion

Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less: Other (e.g. 10% Statutory Deduction)	Potential D.C. Recoverable Cost			
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development			Total	Residential Share 66%	Industrial 18%	Non-Industrial 16%
1	Collection Vehicle	2024	325,000	65,000	260,000	16,250		243,750	24,375	219,375	144,788	39,020	35,568
	Total		325,000	65,000	260,000	16,250	-	243,750	24,375	219,375	144,788	39,020	35,568



5.3 Service Levels and Buildout Period Capital Costs for Municipal-wide D.C. Calculation

This section evaluates the development-related capital requirements for select services over the buildout planning period (2019-Buildout). As with the 10-year services, each service component is evaluated based on the average historical 10-year level of service calculation (see Appendix B), which “caps” the D.C. amounts; and the infrastructure cost calculation, which determines the potential D.C. recoverable cost.

5.3.1 Transportation

Transportation Services provided by the City include the provision of roads, bridges and structures, sidewalks and active transportation assets, traffic signals and streetlights.

The assets include:

- 399 kms of collector, arterial and rural roads;
- 69 structures;
- 698 kms of sidewalks and multi-use paths;
- 13,895 streetlights; and
- 36 traffic control signals.

This service also encompasses vehicles, equipment and facilities pertaining to Services Related to a Highway. The City has Operations facilities at three locations. The total floor area of these facilities allocated to Roads is 70,400 sq.ft. In addition, there are the equivalent of 144 vehicles and pieces of equipment.

The average level of service provided over the historical 10-year period based on this inventory is \$10,855 per capita. When applied to the anticipated growth over the 2019 to buildout period, the per capita level of service produces a maximum D.C. eligible amount for Services Related to a Highway of \$739.3 million.

The capital needs provided for in the calculation of the charge include:

- new road construction,
- road widenings
- intersection improvements;
- arterial road resurfacing;



- sidewalks on Regional roads and multi-use paths;
- traffic control and accessible pedestrian signals;
- rural road upgrades;
- streetlights on Regional roads;
- unfunded growth-related capital costs for the Consolidated Operations Depot;
- new North Depot;
- snow disposal dump;
- additional road maintenance vehicles; and
- studies.

The transportation needs arise, in part, for the City's Integrated Transportation Master Plan and the Active Transportation Master Plan. These studies formed the basis for the City's 2017 D.C. Update Study, however the program has been further updated to reflect the City's anticipated long-term needs, capital costs for completed projects, and revised capital cost estimates.

The capital needs are listed in four separate tables: roads and related; sidewalks and multi-use paths; traffic signals and streetlights; and road operations. The gross capital cost estimates for the anticipated Transportation capital needs total \$831.3 million. Approximately \$90.1 million in capital costs have been deducted as a post-period benefit reflecting the anticipated increase in needs for future development beyond the buildout forecast period.

\$68.5 million has been deducted from the growth-related capital costs attributed to development over the forecast period as the share benefiting existing development. Consistent with the City's prior D.C. practice, a deduction was made to recognize the benefit resulting from potential savings on future resurfacing work (e.g. asphalt overlay) that would be unnecessary, in the medium term, as a result of the construction program. Moreover, the higher deductions for the GO station projects have been maintained at 50%, and the Wilson Rd. S. has been updated to reflect existing population relative to the build-out forecast period projections (i.e. 71% benefit to existing).

Furthermore, \$148.8 million in grants, subsidies and other contributions were also deducted, recognizing the local service contributions under conditions of development agreements. The costs were further reduced by the uncommitted D.C. reserve fund balance for this service of \$9.3 million.



The net growth-related costs for Services Related to a Highway of \$514.6 million have been allocated between future residential and non-residential development on the basis of incremental population to employment growth over the forecast period (i.e. 71% residential and 29% non-residential). The non-residential share was further allocated between industrial (11%) and non-industrial (18%) development based on the share of incremental employment over the forecast period.

5.3.2 Fire Protection

The City currently has 74,565 sq.ft. of floor space contained within six firehalls. The City also maintains 32 vehicles as well as equipment including bunker gear and radios. In total, the inventory of Fire Services assets provides an average level of service of \$301 per capita over the previous ten years. The historical level of investment in Fire Services provides for a maximum D.C. eligible amount over the forecast period of \$20.5 million.

In order to meet the needs of growth, the capital program includes the establishment of a seventh fire station with associated equipment and an additional vehicle as well as a new training facility. The gross cost of the capital program, including outstanding debt for previously constructed facilities (i.e. Stations 5 and 6), is \$19.1 million.

No deduction has been made for benefit to development beyond the forecast period; however, \$2.8 million has been deducted as the share benefiting existing development. A 10% deduction was applied to the new fire station, vehicles and equipment and a 25% deduction was made for the training facility.

The negative reserve fund balance of \$1.5 million was added to the growth costs resulting in a net D.C. recoverable amount of \$17.8 million for Fire Protection Services. These costs have been allocated between future residential and non-residential development on the basis of incremental population to employment growth over the forecast period (i.e. 71% residential and 29% non-residential). As with the Transportation service, the non-residential costs were further allocated between industrial and non-industrial development.



Infrastructure Costs Covered in the D.C. Calculation – Roads

Prj_No	Increased Service Needs Attributable to Anticipated Development	Location	Length (metres)	Type of Work	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Industrial	Non-Industrial
	2019-Buildout											71%	11%	18%
73-0459	First Avenue	Simcoe Street South to Drew Street	606	Widen Collector Road	2022	2,101,511	-	2,101,511	1,050,755	-	1,050,755	746,036	118,590	186,129
73-0459	McNaughton Avenue	Drew Street to Ritson Road South	221	Widen Collector Road	2022	768,155	-	768,155	384,078	-	384,078	272,695	43,348	68,035
73-0467	Wilson Road North	Taunton Road East to Winchester Road East	4,228	Widen Arterial Road/New Arterial Road	2031	24,759,443	-	24,759,443	775,306	8,485,312	15,498,825	11,004,166	1,749,224	2,745,435
73-0468	Bridle Road	North of Highway 407 to Howden Road East	3,162	New Arterial Road	2031	22,275,988	-	22,275,988	-	17,652,739	4,623,249	3,282,507	521,788	818,955
73-0469	Beatrice Street West	Thornton Road North to Simcoe Street North	2,476	Widen Arterial Road	2031	37,731,762	37,731,762	-	-	-	-	-	-	-
73-0479	Britannia Avenue West	West City Limits to Windfields Farm Drive West	1,210	New Arterial Road	2024	24,354,077	-	24,354,077	-	1,324,911	23,029,166	16,350,708	2,599,111	4,079,347
73-0456	Northwood Midblock Arterial (ArtC2)	West City Limits to Stevenson Road North	1,250	New Arterial Road	2024	13,801,551	-	13,801,551	-	-	13,801,551	9,799,102	1,557,667	2,444,783
73-0470	Windfields Hydro-Lands Collector	Windfields Farm Drive West to Winchester Road West	330	New Arterial Road	2024	4,476,913	-	4,476,913	200,000	-	4,276,913	3,036,608	482,700	757,605
	North Columbus Midblock Arterial (ArtC6)	Thornton Road North to Ritson Road North	3,289	New Arterial Road	2028-2031	38,104,115	-	38,104,115	-	8,553,095	29,551,020	20,981,224	3,335,178	5,234,617
	South Columbus Midblock Arterial (ArtC5)	West City Limits to Ritson Road North	3,456	New Arterial Road	2028-2031	27,905,458	-	27,905,458	-	13,868,036	14,037,423	9,966,570	1,584,287	2,486,565
	North Kedron Arterial Road (ArtC3)	Ritson Road North to Grandview Street North	2,515	New Arterial Road		26,316,817	-	26,316,817	-	15,271,421	11,045,396	7,842,231	1,246,602	1,956,563
	Northeast Kedron Collector Road	Grandview Street North to Britannia Avenue East	900	New Collector Road		5,967,530	-	5,967,530	-	5,511,366	456,164	323,876	51,483	80,804
	East Kedron Collector Road	Conlin Road East to North Kedron Arterial Road (ArtC3)	1,504	New Collector Road		9,635,030	-	9,635,030	-	8,876,613	758,417	538,476	85,596	134,345
	West Kedron Collector Road	Conlin Road East to North Kedron Arterial Road (ArtC3)	1,569	New Collector Road		11,236,640	-	11,236,640	-	10,440,354	796,286	565,363	89,870	141,053
	Glenborne Drive	92m East of Benson St to 101m North of Meath Drive	211	New Collector Road		1,359,808	-	1,359,808	-	1,252,180	107,627	76,415	12,147	19,065
73-0471	Grandview Street North	Conlin Road East to Winchester Road East	2,349	New Arterial Road	2028	16,597,858	-	16,597,858	-	8,454,027	8,143,831	5,782,120	919,127	1,442,584
	Grand Ridge Avenue	Wilson Road North to 115m East of Clearbrook Dr	441	New Collector Road		3,291,887	-	3,291,887	-	1,334,982	1,956,905	1,389,403	220,860	346,643
	Townline Road North	Conlin Road East to Columbus Road East	4,067	Widen Arterial Road/New Arterial Road	2031	44,502,995	38,609,346	5,893,649	98,580	473,906	5,321,163	3,778,026	600,556	942,582
73-0473	Townline Road South	Cherrydown Drive to Olive Avenue	512	New Arterial Road	2031	17,865,451	-	17,865,451	28,993	-	17,836,458	12,663,885	2,013,053	3,159,520
	Clearbrook Drive	Future Grand Ridge Avenue to Taunton Road East	317	New Collector Road		2,044,219	-	2,044,219	-	1,882,421	161,798	114,876	18,261	28,661
73-0466	Beatrice Street East	Simcoe Street North to Townline Road North	4,428	Widen Arterial Road/New Arterial Connection	2031	44,439,146	-	44,439,146	2,134,158	-	42,304,988	30,036,541	4,774,613	7,493,834
	Britannia Avenue East	Ritson Road North to Townline Road North	3,745	New Arterial Road		36,261,641	-	36,261,641	-	22,780,003	13,481,638	9,571,963	1,521,561	2,388,114
73-0457	Columbus Road East	Simcoe Street North to Harmony Road North	3,294	Widen Arterial Road/LCB to HCB Upgrade	2024	16,675,211	-	16,675,211	1,794,894	-	14,880,317	10,565,025	1,679,418	2,635,874
	John Street/Eulalie Avenue Connection	Court St to Huron Street	342	New Arterial Road		2,345,384	-	2,345,384	-	2,146,106	199,279	141,488	22,491	35,300
73-0464	Harbour Road	Farewell Street to East Limits	387	New Collector Road	2019	2,769,810	-	2,769,810	-	1,384,905	1,384,905	983,283	156,303	245,320
73-0458	Simcoe Street South	South Limits to Harbour Road	990	Widen Arterial Road	2031	6,720,792	-	6,720,792	604,775	-	6,116,017	4,342,372	690,264	1,083,381
73-0457	Columbus Road West	West City Limits to Simcoe Street North	2,110	Widen Arterial Road	2024	15,504,762	-	15,504,762	1,407,029	-	14,097,732	10,009,390	1,591,094	2,497,248
73-0452	Conlin Road West	West City Limits to Stevenson Road North	1,211	Widen Arterial Road	2022	14,753,963	-	14,753,963	1,475,396	-	13,278,567	9,427,782	1,498,642	2,352,143
73-0465	Mary Street North	William Street East to Agnes Street	386	Widen Arterial Road	2031	5,043,594	-	5,043,594	481,214	-	4,562,380	3,239,290	514,918	808,172
73-0456	Stevenson Road North	Rossland Road West to Conlin Road West	4,069	Widen Arterial Road/New Arterial Connection	2024	21,525,834	13,777,788	7,748,046	639,400	-	7,108,646	5,047,139	802,294	1,259,213
	West Columbus Arterial Road	North of Highway 407 to Howden Road West	3,634	New Arterial Road	2028	27,707,802	-	27,707,802	-	19,090,319	8,617,483	6,118,413	972,584	1,526,486
73-0459	Albert Street	Bloor Street East to Olive Avenue	964	Widen Collector Road	2022	3,342,533	-	3,342,533	1,671,267	-	1,671,267	1,186,599	188,622	296,045
73-0459	Drew Street	Toronto Avenue to First Avenue/McNaughton Avenue	187	Widen Collector Road	2022	646,858	-	646,858	323,429	-	323,429	229,635	36,503	57,292
73-0461	Thornton Road North	Taunton Road West to Howden Road West	8,015	Widen Arterial Road/LCB to HCB Upgrade	2031	66,639,937	-	66,639,937	5,202,518	-	61,437,419	43,620,567	6,933,931	10,882,920
73-0460	Ritson Road North	Winchester Road East to Raglan Road East	6,030	Widen Arterial Road/LCB to HCB Upgrade	2024-2031	31,522,951	-	31,522,951	3,366,702	-	28,156,249	19,990,937	3,177,762	4,987,550
73-0463	Wilson Road South	Raleigh Avenue to Bloor Street East	506	Widen Arterial Road	2031	16,807,641	-	16,807,641	11,947,419	-	4,860,222	3,450,758	548,533	860,931



Infrastructure Costs Covered in the D.C. Calculation – Roads (cont'd)

Prj. No	Increased Service Needs Attributable to Anticipated Development	Location	Length (metres)	Type of Work	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 71%	Industrial 11%	Non-Industrial 18%
73-0453 73-0454 73-0455 73-0480	2019-Buildout Conlin Road East	Simcoe Street North to Townline Road North	4,922	Widen Arterial Road	2019-2028	30,609,476		30,609,476	2,944,089	-	27,665,387	19,642,425	3,122,363	4,900,600
73-0463	Townline Road North Intersection Improvements	At Coldstream Drive and Woodstream Avenue		Intersection Improvement	2024	1,000,000		1,000,000	100,000	-	900,000	639,000	101,576	159,424
73-0474	Howden Road	West City Limits to Townline Road North	7,047	New Arterial Connection/LCB to HCB Upgrade	2031	24,474,886		24,474,886	3,171,205	-	21,303,681	15,125,613	2,404,370	3,773,698
73-0475	Raglan Road East	Simcoe Street North to Townline Road North	4,865	LCB to HCB Upgrade	2031	15,590,810		15,590,810	2,338,621	-	13,252,188	9,409,054	1,495,664	2,347,470
73-0476	Winchester Road East	Grandview Street North to Townline Road North	531	LCB to HCB Upgrade	2026	1,702,384		1,702,384	255,358	-	1,447,026	1,027,389	163,314	256,324
	Misc (Land Acquisition, City Wide Engineering, King/Bond Improvements)	City Wide				6,356,667		6,356,667	-	-	6,356,667	4,513,234	717,424	1,126,009
	GO Mobility Hub Future Identified Projects	Surrounding Future GO Transit Station B2				10,000,000		10,000,000	1,000,000	-	9,000,000	6,390,000	1,015,755	1,594,245
74-0041 74-0043 74-0047 74-0049 74-0051 74-0085 74-0107 74-0121 74-0144	Arterial Road Resurfacing	City Wide		Arterial Road Resurfacing	2019-2031	15,245,949		15,245,949	13,721,354	-	1,524,595	1,082,462	172,068	270,064
75-0104	Geodetic Control Survey Monuments	City Wide		Network Expansion	2019-2031	455,000		455,000	-	-	455,000	323,050	51,352	80,598
40-0040	Grade Separation Study				2021	60,000		60,000	-	-	60,000	42,600	6,772	10,628
40-0043	Transportation Master Plan Update				2020	650,000		650,000	162,500	-	487,500	346,125	55,020	86,355
40-0043	Transportation Master Plan Update				2025	300,000		300,000	75,000	-	225,000	159,750	25,394	39,856
	Reserve Fund Adjustment										(7,697,211)	(5,465,020)	(868,720)	(1,363,471)
	Total					754,250,239	90,118,896	664,131,343	57,354,040	148,782,694	450,297,397	319,711,152	50,821,329	79,764,916



Infrastructure Costs Covered in the D.C. Calculation – Sidewalks and Multi-use Paths

Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-Buildout	Location	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 71%	Industrial 11%	Non- Industrial 18%
75-0033	Stellar Drive	Thornton Road South to Fox Street	2031	182,694	-	182,694	27,404		155,290	110,256	17,526	27,508
75-0059	Adelaide Avenue West	West City Limits to Thornton Road N	2023	184,078	-	184,078	27,612		156,466	111,091	17,659	27,716
75-0120 75-0125	Simcoe Street North	Taunton Road to Existing MUP, Conlin Road to Westview Dr/Steepleview Ct	2019-2031	1,698,472	-	1,698,472	254,771		1,443,701	1,025,028	162,939	255,735
75-0114	Harmony Road North	Coldstream Drive to Winchester Road East	2019-2031	1,248,195	-	1,248,195	187,229		1,060,966	753,286	119,742	187,938
75-0126	Champlain Avenue	Thornton Road South to Stevenson Road South	2019-2024	378,006	-	378,006	56,701		321,305	228,127	36,263	56,915
75-0127	Bloor Street West	West City Limits to Thornton Road South	2020	370,274	-	370,274	55,541		314,733	223,461	35,521	55,751
75-0126	Gibb/Olive Connection	Stevenson Road South to Ritson Road South	2021	1,634,383	-	1,634,383	245,157		1,389,226	986,350	156,790	246,085
75-0021	Bloor Street East	Harmony Road South to Grandview Street South	2026	519,773	-	519,773	77,966		441,807	313,683	49,863	78,261
75-0119 75-0128	Rossland Road East	Wilson Road North to Townline Road North	2022-2028	1,428,132	-	1,428,132	214,220		1,213,913	861,878	137,004	215,030
75-0049 75-0129	Taunton Road	West City Limits to Thornton Road North, Northbrook Street to Townline Road North	2020	2,334,683	-	2,334,683	350,202		1,984,480	1,408,981	223,972	351,527
75-0130	Rossland Road West	West City Limits to Sommerville Street	2024-2028	722,542	-	722,542	108,381		614,161	436,054	69,315	108,791
75-0131	Townline Road South	Olive Avenue to King Street East	2028	322,454	-	322,454	48,368		274,086	194,601	30,934	48,551
75-0122 75-0124	Ritson Road	Ormond Drive to North Kedron Arterial Road (ArtC3)	2022	1,351,292	-	1,351,292	202,694		1,148,599	815,505	129,633	203,461
75-0054 75-0120 75-0135	Thornton Road	Champlain Avenue to Taunton Road West	2019-2028	2,632,158	-	2,632,158	394,824		2,237,335	1,588,508	252,509	396,318
75-0132	Townline Road North	King Street East to Taunton Road East	2020	2,613,864	-	2,613,864	392,080		2,221,785	1,577,467	250,754	393,563
75-0133	Wilson Road North	Rossland Road East to Taunton Road East	2027	798,679	-	798,679	119,802		678,877	482,002	76,619	120,255
75-0134	Active Transportation Connectivity Projects	City Wide	2021-2028	8,000,000	-	8,000,000	4,000,000		4,000,000	2,840,000	451,447	708,553
	Total			26,419,680	-	26,419,680	6,762,952	-	19,656,728	13,956,277	2,218,492	3,481,959



Infrastructure Costs Covered in the D.C. Calculation – Traffic Signals and Streetlights

Prj.No	Increased Service Needs Attributable to Anticipated Development	Location	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 71%	Industrial 11%	Non-Industrial 18%
	2019-Buildout											
	Traffic Signals											
77-0019	New Traffic Control Signals	Coldstream Dr & Clearbrook Dr	2019	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0026	Accessible Pedestrian Signals		2019	170,000	-	170,000	8,500		161,500	114,665	18,227	28,608
77-0030	Accessible Pedestrian Signals		2020	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0032	New Traffic Control Signals	Grandview St N & Ridgemount Blvd	2025	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0033	New Traffic Control Signals	Laval Dr & Smaricentres	2020	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0009	New Traffic Control Signals	Grandview St N between Coldstream and Conlin	2021	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0024	New Traffic Control Signals	Hillcroft & Mary St N	2026	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0035	Accessible Pedestrian Signals		2021	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0039	Accessible Pedestrian Signals		2022	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0041	New Traffic Control Signals	Coldstream Dr & Townline Rd N	2025	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0043	Accessible Pedestrian Signals		2023	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0044	New Traffic Control Signals	Laval Drive & Fox St	2028	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0008	Control and Warning Signals	Harmony Rd N at Legends	2024	250,000	-	250,000	12,500		237,500	168,625	26,805	42,070
77-0046	Accessible Pedestrian Signals		2024	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0049	Accessible Pedestrian Signals		2025	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0053	Accessible Pedestrian Signals		2026	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0055	Accessible Pedestrian Signals		2027	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0059	Accessible Pedestrian Signals		2028	85,000	-	85,000	4,250		80,750	57,333	9,114	14,304
77-0061	New PXO Pedestrian Signal		2020	50,000	-	50,000	2,500		47,500	33,725	5,361	8,414
77-0062	New PXO Pedestrian Signal		2022	50,000	-	50,000	2,500		47,500	33,725	5,361	8,414
77-0063	New PXO Pedestrian Signal		2024	50,000	-	50,000	2,500		47,500	33,725	5,361	8,414
77-0064	New PXO Pedestrian Signal		2026	50,000	-	50,000	2,500		47,500	33,725	5,361	8,414
77-0065	New PXO Pedestrian Signal		2028	50,000	-	50,000	2,500		47,500	33,725	5,361	8,414



Infrastructure Costs Covered in the D.C. Calculation – Traffic Signals and Streetlights (cont'd)

Prj.No	Increased Service Needs Attributable to Anticipated Development	Location	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 71%	Industrial 11%	Non-Industrial 18%
	2019-Buildout											
	Streetlights on Regional Roads											
76-0052	Townline Rd N - New Streetlights	at Winchester Rd	2018	23,000	-	23,000	3,450		19,550	13,881	2,206	3,463
76-0042	Townline Rd N - New Streetlights	at Pebblestone Rd	2019	50,000	-	50,000	7,500		42,500	30,175	4,797	7,528
76-0029	Simcoe St N - New Streetlights	Simcoe St N (Conlin Rd to Northern Dancer)	2020-2022	364,701	-	364,701	54,705		309,996	220,097	34,987	54,912
76-0004	Harmony Rd N - Streetlighting Upgrades	Rossland to Taunton	2020-2022	1,215,671	-	1,215,671	182,351		1,033,320	733,657	116,622	183,041
76-0044	Townline Rd N – Streetlighting Upgrades	Adelaide Ave to Pebblestone Rd	2020-2022	652,311	-	652,311	97,847		554,464	393,670	62,578	98,217
76-0028	Gibb St – Streetlighting Upgrades	East of Stevenson Rd to Simcoe St S	2020-2022	987,362	-	987,362	148,104		839,257	595,873	94,720	148,665
76-0020	Ritson Rd N - Streetlighting Upgrades	Taunton to Conlin	2020-2022	1,186,020	-	1,186,020	177,903		1,008,117	715,763	113,778	178,576
76-0021	Rossland Rd E - Streetlighting Upgrades	Ritson to Harmony Rd	2020-2022	990,327	-	990,327	148,549		841,778	597,662	95,004	149,111
76-0045	Simcoe St N	Northern Dancer Dr to Winchester Rd	2020-2022	933,991	-	933,991	140,099		793,892	563,663	89,600	140,629
76-0047	Harmony Rd N	Coldstream Dr to Conlin Rd E	2020-2022	850,969	-	850,969	127,645		723,324	513,560	81,636	128,128
76-0022	Stevenson Rd	330M S of Gibb St to Bond St W	2020-2022	744,228	-	744,228	111,634		632,593	449,141	71,396	112,057
76-0025	Bloor St W	West city limits to west of Stevenson Rd S	2020-2022	821,319	-	821,319	123,198		698,121	495,666	78,791	123,664
76-0046	Townline Rd N	Beatrice St E to Taunton Rd E	2020-2022	598,940	-	598,940	89,841		509,099	361,460	57,458	90,181
76-0001	Adelaide Ave W	West city limits to Thornton Rd N	2020-2022	260,924	-	260,924	39,139		221,786	157,468	25,031	39,287
76-0050	Harmony Rd N	Conlin Rd E to Winchester Rd E	2020-2023	1,346,133	-	1,346,133	201,920		1,144,213	812,391	129,138	202,684
76-0051	Champlain Ave	Whitby/Oshawa Boundary to Thornton Rd S	2020-2028	254,994	-	254,994	38,249		216,745	153,889	24,462	38,394
76-0048	Consumers Dr	Whitby/Oshawa Boundary to Thornton Rd S	2020-2028	254,994	-	254,994	38,249		216,745	153,889	24,462	38,394
76-0031	Ritson Rd N	Maine St to Winchester Rd E	2020-2028	1,138,579	-	1,138,579	170,787		967,792	687,133	109,227	171,433
76-0027	Thornton Rd - Streetlighting	Champlain Ave to King St	2023-2027	1,156,370	-	1,156,370	173,455		982,914	697,869	110,933	174,112
76-0023	Stevenson Rd - Streetlighting Upgrades	Bond St to Rossland Rd	2023-2027	1,156,370	-	1,156,370	173,455		982,914	697,869	110,933	174,112
76-0026	Bloor St E - Streetlighting Upgrade	Harmony Rd to Townline Rd	2023-2027	1,043,698	-	1,043,698	156,555		887,143	629,872	100,124	157,147
76-0024	Rossland Rd E – Streetlighting	Harmony Rd to Townline Rd	2023-2027	978,467	-	978,467	146,770		831,697	590,505	93,867	147,325
76-0049	Gibb St/Olive Ave	Simcoe St S to Ritson Rd S	2023-2027	521,849	-	521,849	78,277		443,571	314,936	50,062	78,573
76-0005	Bloor St E	Ritson Rd S to Farewell St	2023-2027	735,332	-	735,332	110,300		625,033	443,773	70,542	110,717
	Total			21,451,547	-	21,451,547	2,899,232	-	18,552,315	13,172,143	2,093,846	3,286,326



Infrastructure Costs Covered in the D.C. Calculation – Road Operations

Prj .No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost			
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 71%	Industrial 11%	Non-Industrial 18%
	2019-Buildout										
0777	Consolidated Operations Depot Outstanding D.C. Recoverable Share	2019-2028	3,661,125	-	3,661,125	183,056		3,478,069	2,469,429	392,541	616,099
	Sidewalk Plow Machine	2020	160,000	-	160,000	8,000		152,000	107,920	17,155	26,925
	Tandem Combination Salt Plow Truck	2020	300,000	-	300,000	15,000		285,000	202,350	32,166	50,484
	Snow Disposal Dump (land and construction)	2027	3,000,000	-	3,000,000	150,000		2,850,000	2,023,500	321,656	504,844
	North Depot (new facility)	2027	22,000,000	-	22,000,000	1,100,000		20,900,000	14,839,000	2,358,810	3,702,190
	Operations Needs Study	2019	20,000	-	20,000	10,000		10,000	7,100	1,129	1,771
	Reserve Fund Adjustment							(1,630,090)	(1,157,364)	(183,975)	(288,751)
	Total		29,141,125	-	29,141,125	1,466,056	-	26,044,978	18,491,935	2,939,481	4,613,563



Chapter 6

D.C. Calculation



6. D.C. Calculation

Tables 6-1 and 6-2 present the D.C. quantum calculation for the growth-related capital costs identified in Chapter 5 for Municipal-wide services over the buildout period (i.e. 2019-Buildout) and 10-year (i.e. 2019-2028) planning horizon, respectively. Table 6-3 presents the full calculated schedule of charges.

The D.C. quantum calculation has been undertaken on an average cost basis, whereby the calculated charge seeks to recover the total costs from the anticipated development over the planning period. For the residential calculations, charges are calculated on a single detached unit equivalent basis and converted to five forms of dwelling unit types (single and semi-detached, two bedrooms and larger apartments, bachelor and one bedroom apartments, townhouse dwellings and units in a lodging house). The non-residential D.C. has been calculated uniformly on a per sq.ft. of gross floor area basis for Parks, Recreation and Trails Service and Library Service. For all other services, separate charges were calculated for industrial and non-industrial development.



Table 6-1
Municipal-Wide Services D.C. Calculation
2019 - Buildout

SERVICE	2019\$ D.C.-Eligible Cost				2019\$ D.C.-Eligible Cost		
	Residential	All Non-Residential	Industrial	Non-Industrial	S.D.U.	Industrial per sq.ft.	Non-Industrial per sq.ft.
	\$	\$	\$	\$	\$	\$	\$
1. <u>Transportation</u>							
1.1 Roads and Related	319,711,152		50,821,329	79,764,916	13,490	3.86	10.16
1.2 Sidewalks and Multi-Use Paths	13,956,277		2,218,492	3,481,959	589	0.17	0.44
1.3 Traffic Signals and Streetlights	13,172,143		2,093,846	3,286,326	556	0.16	0.42
1.4 Roads Operations	18,491,935		2,939,481	4,613,563	780	0.22	0.59
2. <u>Fire Protection</u>	12,636,520		2,008,703	3,152,692	533	0.15	0.40
TOTAL	377,968,026	-	60,081,850	94,299,457	15,948	4.56	12.01
D.C.-Eligible Capital Cost	\$377,968,026	-	\$60,081,850	\$94,299,457			
Buildout Gross Population/GFA Growth (sq.ft.)	75,084	21,030,200	13,179,600	7,850,600			
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$5,033.94	\$0.00	\$4.56	\$12.01			
<u>By Residential Unit Type</u>	<u>P.P.U.</u>						
Single and Semi-Detached Dwelling	3.168		\$15,948				
Apartments - 2 Bedrooms +	1.994		\$10,038				
Apartments - Bachelor and 1 Bedroom	1.224		\$6,162				
Townhouse Dwelling	2.552		\$12,847				
Lodging House (per unit)	1.100		\$5,537				



Table 6-2
Municipal-Wide Services D.C. Calculation
2019-2028

SERVICE	2019\$ D.C.-Eligible Cost				2019\$ D.C.-Eligible Cost		
	Residential	All Non-Residential	Industrial	Non-Industrial	S.D.U.	Industrial	Non-Industrial
						per sq.ft.	per sq.ft.
3 Watercourse Improvements	\$ 9,745,959	\$	\$ 3,521,643	\$ 1,398,598	\$ 1,003	\$ 0.40	0.44
4 Parks, Recreation and Trails	77,520,363	4,080,019			7,982	0.35	0.35
5 Library Services	3,236,480	170,341			333	0.01	0.01
6 Admini Studies	596,084		160,642	146,432	61	0.02	0.05
7 Parking	155,925		42,021	38,304	16	-	0.01
8 Waste Diversion	144,788		39,020	35,568	15	-	0.01
TOTAL	91,399,600	4,250,360	3,763,326	1,618,902	9,410	0.78	0.87
D.C.-Eligible Capital Cost	\$91,399,600	\$4,250,360	\$3,763,326	\$1,618,902			
10-Year Gross Population/GFA Growth (sq.ft.)	30,766	11,870,100	8,682,000	3,188,100			
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$2,970.80	\$0.36	\$0.43	\$0.51			
By Residential Unit Type	P.P.U.						
Single and Semi-Detached Dwelling	3.168	\$9,411					
Apartments - 2 Bedrooms +	1.994	\$5,924					
Apartments - Bachelor and 1 Bedroom	1.224	\$3,636					
Townhouse Dwelling	2.552	\$7,581					
Lodging House (per unit)	1.100	\$3,268					



Table 6-3
D.C. Calculated Schedule of Charges

Service	RESIDENTIAL PER DWELLING UNIT						NON-RESIDENTIAL (per sq.m. of G.F.A)	
	Single and Semi-Detached Dwelling	Duplex (for two units)	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Townhouse Dwelling	Lodging House (per unit)	Industrial	Commercial/Institutional
Municipal Wide Services:								
Transportation	\$15,415	\$19,404	\$9,702	\$5,956	\$12,418	\$5,352	\$47.47	\$124.97
Fire Protection	\$533	\$670	\$335	\$206	\$429	\$185	\$1.61	\$4.31
Watercourse Improvements	\$1,003	\$1,262	\$631	\$388	\$808	\$348	\$4.31	\$4.74
Parks, Recreation and Trails	\$7,982	\$10,048	\$5,024	\$3,084	\$6,430	\$2,772	\$3.77	\$3.77
Library Services	\$333	\$420	\$210	\$129	\$268	\$116	\$0.11	\$0.11
Administration	\$61	\$76	\$38	\$24	\$49	\$21	\$0.22	\$0.54
Parking	\$16	\$20	\$10	\$6	\$13	\$6	\$0.00	\$0.11
Waste Diversion	\$15	\$18	\$9	\$6	\$12	\$5	\$0.00	\$0.11
Total Municipal Wide Services	\$25,358	\$31,918	\$15,959	\$9,799	\$20,427	\$8,805	\$57.48	\$138.64



Chapter 7

D.C. Policy Recommendations and D.C. By-Law Rules



7. D.C. Policy Recommendations and D.C. By-Law Rules

7.1 Introduction

This chapter outlines the D.C. policy recommendations and by-law rules.

s.s.5(1)9 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 subsection 5(1) goes on to state that the rules may provide for exemptions, phasing in and/or indexing of D.C.s.

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

- the total of all D.C.s 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 D.C.s 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;
- if the rules provide for a type of development to have a lower D.C. than is allowed, the rules for determining D.C.s may not provide for any resulting shortfall to be made up via other development; and
- with respect to “the rules,” subsection 6 states that a D.C. 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.



7.2 D.C. By-law Structure

It is recommended that:

- the City use a uniform City-wide D.C. calculation for all municipal services; and
- one municipal D.C. by-law be used for all services.

7.3 D.C. By-law Rules

The following sets out the recommended rules governing the calculation, payment and collection of D.C.s in accordance with subsection 6 of the D.C.A., 1997.

It is recommended that the following provides the basis for the D.C.s:

7.3.1 Payment in any Particular Case

In accordance with the D.C.A., 1997, s.2(2), a D.C. be calculated, payable and collected where the development requires one or more of the following:

- a) the passing of a zoning by-law or of an amendment to a zoning by-law 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 Section 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 Section 50 of the Condominium Act; or
- g) the issuing of a building permit under the Building Code Act in relation to a building or structure.

7.3.2 Determination of the Amount of the Charge

The following conventions be adopted:

1. Costs allocated to residential uses will be assigned to different types of residential units based on the average occupancy for each housing type constructed during the previous 25 years. Costs allocated to non-residential



uses will be assigned to industrial, commercial and institutional uses based on the gross floor area (G.F.A.) constructed.

2. Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance. These are summarized in Chapter 5 herein.
3. Stacked townhouses will be included in the definition of an apartment unit; back-to-back townhouses will be treated as a townhouse dwelling unit.
4. Units in retirement homes will be subject to the small apartment charge.

7.3.3 Application to Redevelopment of Land (Demolition and Conversion)

If a development involves the demolition and replacement of a building or structure on the same site, or the conversion from one principal use to another, the developer shall be allowed a credit.

A credit will apply for the demolition of buildings or structures that have been in existence for a minimum of five years and where the demolition permit issued is within the 120 month period (10 years) preceding the issuance of a building permit. The issuance of the demolition permit and the actual demolition to the satisfaction of the Chief Building Official must occur not later than twenty-four months after the issuance of the building permit.

Credits are also given for the conversion of all or part of a building or structure that has been in existence for a minimum of five (5) years.

The credit is calculated by applying the 'applicable charge' to the floor area and units being demolished or converted. No credit will be provided for the demolition of a school or place of worship where the demolition permit is issued on or after July 1, 2019.

7.3.4 Exemptions (full or partial)

Statutory exemptions

- Industrial building additions of up to and including 50% of the existing G.F.A. (defined in O.Reg. 82/98, s.1) of the building; for industrial building additions



which exceed 50% of the existing G.F.A., only the portion of the addition in excess of 50% is subject to D.C.s (s.4(3));

- Buildings or structures owned by and used for the purposes of any Municipality, local board or Board of Education (s.3); and
- Residential development that results in only the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (based on prescribed limits set out in s.2 of O.Reg. 82/98).

Non-statutory exemptions

The City's current exemption policy, as summarized in Chapter 2, has been revised as follows:

- The exemption for block townhouses and apartments in designated areas near Durham College and the University of Ontario Institute of Technology has been removed. A grandfathering provision will be made for the development of 1569 Simcoe Street North that will allow for a three-year extension of the existing exemption policy.
- Small scale infill development such as the creation of a new duplex or triplex building, where permitted under the City's zoning by-law, will be subject to the single detached charge.

Phase in Provision(s)

The proposed D.C. By-law will come into effect on July 1, 2019. Where all requirements for the issuance of a building permit have been satisfied prior to by-law passage, applicants may prepay development charges at the rate in force prior to by-law passage.

7.3.5 Timing of Collection

The D.C.s for all services are payable upon issuance of a building permit for each dwelling unit, building or structure, subject to early or late payment agreements entered into by the City and an owner agreement under s.27 of the D.C.A., 1997.

7.3.6 Indexing

The schedule of D.C.s will be subject to mandatory indexing semi-annually on January 1st and July 1st, of each year in accordance with provisions under the D.C.A.



7.3.7 D.C. Spatial Applicability

The D.C.A. historically has provided the opportunity for a municipality to impose municipal-wide charges or area specific charges. Sections 2(7) and 2(8) of the D.C.A. provide that a D.C. by-law may apply to the entire municipality or only part of it and more than one D.C. by-law may apply to the same area. Amendments to the D.C.A. now require municipalities to consider the application of municipal-wide and area-specific D.C.s. s.10(2)(c.1) requires Council to consider the use of more than one D.C. by-law to reflect different needs from services in different areas. Most municipalities in Ontario have established uniform, municipal-wide D.C.s. This has been the City's approach in its 2009 and 2014 D.C. by-laws. When area-specific charges are used, it is generally to underpin master servicing and front-end financing arrangements for more localized capital costs.

The rationale for maintaining a City-wide D.C. approach is based, in part, on the following:

- The ten-year service level from all applicable services across the City can be included to establish an upper ceiling on the amount of funds which can be collected. If a D.C. by-law applied to only a part of the municipality, the level of service cannot exceed that which would be determined if the by-law applied to the whole municipality. As such, when applied to forecast growth within the specific area, it would establish an area specific level of service ceiling which could reduce the total revenue recoverable for the Municipality, potentially resulting in D.C. revenue shortfalls and impacts on property taxes and user rates.
- City-wide D.C.s ensures a consistent approach to financing the entire cost associated with growth-related capital projects. For example, user rates and property taxes are required to finance the share of growth-related capital projects not recoverable by D.C.s and all associated operating costs. Therefore, the use of area specific D.C.s results in a share of growth-related capital costs being recovered from a specific area, with the remaining capital costs of the projects (i.e. non-D.C. recoverable share) and the associated operating costs with those new assets being recovered from uniform user rates and property taxes, applied to the entire City.
- Attempting to impose an area-specific D.C. potentially causes equity issues in transitioning from a City-wide approach to an area-specific approach. An area of a municipality that is less developed and becomes subject to an area specific



D.C., could face a significant increase in D.C. rates, as the municipality will not benefit from drawing on the pool of D.C. funding and may have contributed D.C.s to fund capital required to support development in other communities of the City. Whereas, another part of the municipality that has experienced significant growth which required substantial capital investments, benefitted from the capital investments being financed by City-wide D.C.s. The implementation of area specific development charges could result in varying D.C.s across the City, which may impact the ability to attract investment into parts of the community.

- Services are generally available across the City, used often by all residents and are not restricted to one specific geographic area. The use of a City-wide D.C. approach reflects these system-wide benefits of service and more closely aligns with the funding principles of service provision (e.g. uniform City-wide property tax rates, etc.).

Based on the foregoing and discussions with City staff, there is no apparent justification for the establishment of area-specific D.C.s at this time. The recommendation is to continue to apply City-wide D.C.s for all services encompassed in this Background Study.

7.4 Other D.C. By-law Provisions

7.4.1 Categories of Services for Reserve Fund and Credit Purposes

It is recommended that the City's D.C. collections be contributed into eight separate reserve funds, including: Transportation, Fire Protection, Parks, Trails and Indoor Recreation Facilities, Library Services, Administration, Watercourse Improvements, Parking and Waste Diversion.

7.4.2 By-law In-force Date

The proposed by-law under D.C.A., 1997 will come into force on July 1, 2019.

7.4.3 Minimum Interest Rate Paid on Refunds and Charged for Inter-Reserve Fund Borrowing

The minimum interest rate is the Bank of Canada rate on the day on which the by-law comes into force (as per s.11 of O.Reg. 82/98).



7.5 Other Recommendations

It is recommended that Council:

“Approve the capital project listing set out in Chapter 5 of the D.C. Background Study dated April 10, 2019, subject to further annual review during the capital budget process;”

“Approve the D.C. Background Study dated April 10, 2019”

“Determine that no further public meeting is required;” and

“Approve the D.C. By-law as set out in Appendix E.”



Chapter 8

Asset Management Plan



8. Asset Management Plan

The changes to the D.C.A. (new section 10(c.2)) in 2016 require that the background study must include an Asset Management Plan (A.M.P) related to new infrastructure. Section 10 (3) of the D.C.A. provides:

The A.M.P. shall,

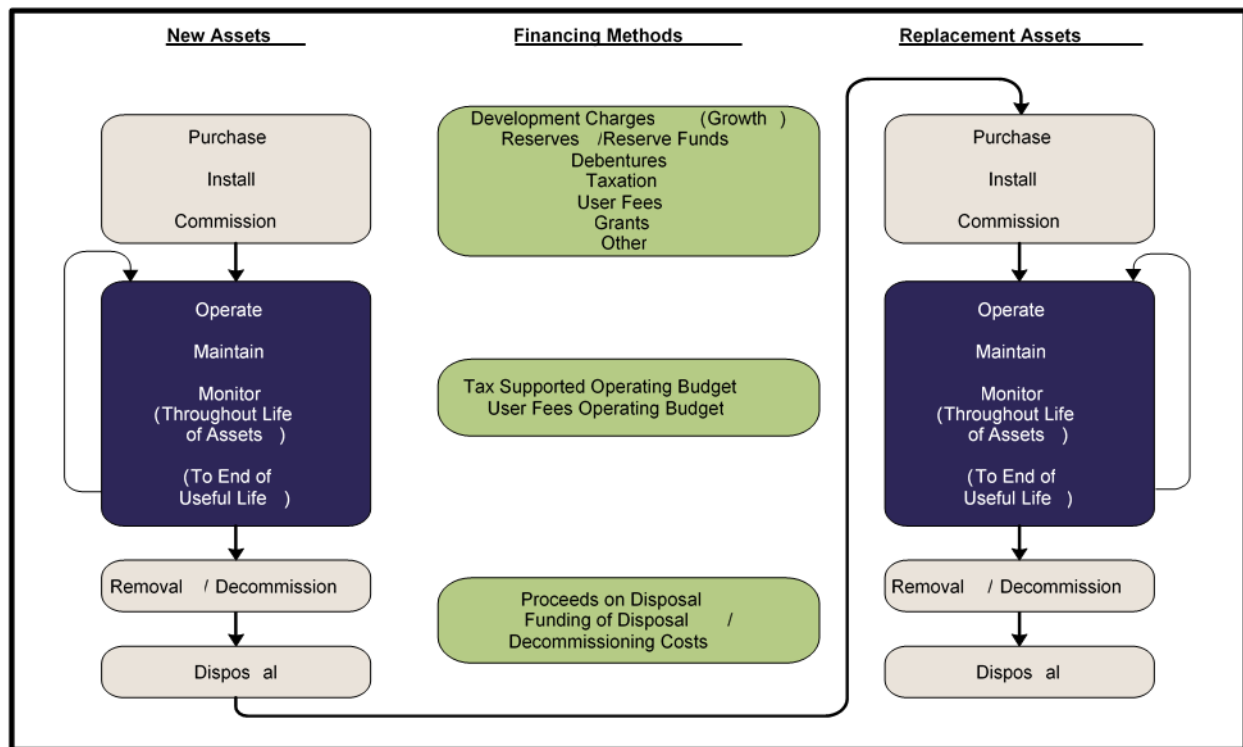
- a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;**
- b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;**
- c) contain any other information that is prescribed; and**
- d) be prepared in the prescribed manner.**

At a broad level, the A.M.P. provides for the long-term investment in an asset over its entire useful life along with the funding. The schematic below identifies the costs for an asset through its entire lifecycle. For growth-related works, the majority of capital costs will be funded by the D.C. Non-growth-related expenditures will then be funded from non-D.C. revenues as noted below. During the useful life of the asset, there will be minor maintenance costs to extend the life of the asset along with additional program related expenditures to provide the full services to the residents. At the end of the life of the asset, it will be replaced by non-D.C. financing sources.

In 2012, the Province developed Building Together: Guide for Municipal Asset Management Plans which outlines the key elements for an A.M.P., as follows:

State of local infrastructure: asset types, quantities, age, condition, financial accounting valuation and replacement cost valuation.

Desired levels of service: defines levels of service through performance measures and discusses any external trends or issues that may affect expected levels of service or the municipality's ability to meet them (for example, new accessibility standards, climate change impacts).



Asset management strategy: the asset management strategy is the set of planned actions that will seek to generate the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.

Financing strategy: having a financial plan is critical for putting an A.M.P. into action. By having a strong financial plan, municipalities can also demonstrate that they have made a concerted effort to integrate the A.M.P. with financial planning and municipal budgeting, and are making full use of all available infrastructure financing tools.

The above provides for the general approach to be considered by Ontario municipalities. At this time, there is not a mandated approach for municipalities hence leaving discretion to individual municipalities as to how they plan for the long-term replacement of their assets. The City has undertaken an A.M.P that meets the requirements as outlined within the provincial Building Together Guide for Municipal Asset Management Plans. The analysis examined an extensive range of asset classes and elements including land, land improvements, buildings, machinery and equipment, vehicles, furniture, linear assets (e.g. roads, storm sewers, etc.). The findings were published in the report City of Oshawa, Asset Management Plan, December, 2016. The City’s current A.M.P. does not address the impact of growth-related assets. As a



result, the asset management requirement for this D.C. Background Study must be undertaken in the absence of this information.

The following table (presented in 2019\$) has been developed to provide the annualized expenditures and revenues associated with new growth. Note that the D.C.A. does not require an analysis of the non-D.C. capital needs or their associated operating costs so these are omitted from the table below. Furthermore, as only the present infrastructure gap been considered at this time within the A.M.P., the following does not represent a fiscal impact assessment (including future tax/rate increases) but provides insight into the potential affordability of the new assets:

1. The non-D.C. recoverable portion of the projects which will require financing from Municipality financial resources (i.e. taxation, rates, fees, etc.). This amount has been presented on an annual debt charge amount based on 20-year financing.
2. Lifecycle costs for the 2019 D.C. capital works have been presented based on a sinking fund basis. The assets have been considered over their estimated useful lives.
3. Incremental operating costs for the D.C. services (only) have been included.
4. The resultant total annualized expenditures are \$92.1 million.
5. Consideration was given to the potential new taxation and user fee revenues which will be generated as a result of new growth. These revenues will be available to finance the expenditures above. The new operating revenues are \$71.4 million. This amount, totalled with the existing operating revenues of \$205.0 million, provides annual revenues of \$276.4 million by the end of the period.
6. In consideration of the above, the capital plan is deemed to be financially sustainable.



Table 8-1
City of Oshawa
Asset Management – Future Expenditures and Associated Revenues (2019\$)

	Sub-Total	2038 (Total)
Expenditures (Annualized)		
Annual Debt Payment on Non-Growth Related Capital ¹		10,232,019
Annual Debt Payment on Post Period Capital ²		4,890,133
Lifecycle:		
Annual Lifecycle - City Wide Services	\$56,110,834	
Sub-Total - Annual Lifecycle	\$56,110,834	\$56,110,834
Incremental Operating Costs (for D.C. Services)		\$25,733,307
Total Expenditures		\$92,076,160
Revenue (Annualized)		
Total Existing Revenue ³		\$204,960,497
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)		\$71,393,199
Total Revenues		\$276,353,696

¹ Non-Growth Related component of Projects including 10% mandatory deduction on soft services

² Interim Debt Financing for Post Period Benefit

³ As per Sch. 10 of FIR



Chapter 9

By-law Implementation



9. By-Law Implementation

9.1 Public Consultation

This chapter addresses the mandatory, formal public consultation process (subsection 9.1.2), as well as the optional, informal consultation process (subsection 9.1.3). The latter is designed to seek the co-operation and involvement of those involved, in order to produce the most suitable policy. Section 9.2 addresses the anticipated impact of the D.C. on development, from a generic viewpoint.

9.1.1 Public Meeting of Council

Section 12 of the D.C.A., 1997 indicates that before passing a D.C. 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. For example, if the 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 Local Planning Appeal Tribunal (L.P.A.T.) (formerly the Ontario Municipal Board (O.M.B.)).

9.1.2 Other Consultation Activity

There are three broad groupings of the public who are generally the most concerned with municipal D.C. policy:

1. The residential development community, consisting of land developers and builders, who are typically responsible for generating the majority of the D.C. revenues. Others, such as realtors, are directly impacted by D.C. policy. They are, therefore, potentially interested in all aspects of the charge, particularly the



quantum by unit type, projects to be funded by the D.C. and the timing thereof, and municipal policy with respect to development agreements, D.C. credits and front-ending requirements.

2. The second public grouping embraces the public at large and includes taxpayer coalition groups and others interested in public policy (e.g. in encouraging a higher non-automobile modal split).
3. The third grouping is the industrial/commercial/institutional development sector, consisting of land developers and major owners or organizations with significant construction plans, such as hotels, entertainment complexes, shopping centres, offices, industrial buildings and institutions. Also involved are organizations such as Industry Associations, the Chamber of Commerce, the Board of Trade and the Economic Development Agencies, who are all potentially interested in municipal D.C. policy. Their primary concern is frequently with the quantum of the charge, G.F.A. exclusions such as basement, mechanical or indoor parking areas, or exemptions and phase-in or capping provisions in order to moderate the impact.

The City met with the Building Industrial Liaison Team several times throughout the process to discuss local service policy, proposed changes to the by-law, the draft service level calculations and capital needs, as well as the emerging schedule of development charges.

9.2 Anticipated Impact of the Charge on Development

The establishment of sound D.C. policy often requires the achievement of an acceptable balance between two competing realities. The first is that high non-residential D.C.s can, to some degree, represent a barrier to increased economic activity and sustained industrial/commercial growth, particularly for capital intensive uses. Also, in many cases, increased residential D.C.s can ultimately be expected to be recovered via higher housing prices and can impact project feasibility in some cases (e.g. rental apartments).

On the other hand, D.C.s or other municipal capital funding sources need to be obtained in order to help ensure that the necessary infrastructure and amenities are installed. The timely installation of such works is a key initiative in providing adequate service levels and in facilitating strong economic growth, investment and wealth generation.



9.3 Implementation Requirements

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 following provides an overview of the requirements in each case.

9.3.1 *Notice of Passage*

In accordance with s.13 of the D.C.A., when a D.C. 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; and
- s.s.10 (5) lists the eight items which the notice must cover.

9.3.2 *By-law Pamphlet*

In addition to providing "notice", the City must prepare a "pamphlet" explaining each D.C. by-law in force, setting out:

- a description of the general purpose of the D.C.s;
- 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 D.C.s 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 L.P.A.T., 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 a copy of the most recent pamphlet without charge, to any person who requests one.

9.3.3 Appeals

Sections 13 to 19 of the D.C.A., 1997 set out requirements relative to making and processing a D.C. by-law appeal and an L.P.A.T. Hearing in response to an appeal. Any person or organization may appeal a D.C. by-law to the L.P.A.T. by filing a notice of appeal with the municipal clerk, 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.

9.3.4 Complaints

A person required to pay a D.C., or his agent, may complain to the municipal council imposing the charge that:

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

Sections 20 to 25 of the D.C.A., 1997 set out the requirements that exist, including the fact that a complaint may not be made later than 90 days after a D.C. (or any part of it) is payable. A complainant may appeal the decision of municipal council to the L.P.A.T.

9.3.5 Credits

Sections 38 to 41 of the D.C.A., 1997 set out a number of credit requirements, which apply where a municipality agrees to allow a person to perform work in the future that relates to a service in the D.C. by-law.



These credits would be used to reduce the amount of D.C.s to be paid. The value of the credit is limited to the reasonable cost of the work which does not exceed the average level of service. The credit applies only to the service to which the work relates, unless the municipality agrees to expand the credit to other services for which a D.C. is payable.

9.3.6 *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 D.C. 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 D.C.A., 1997 (Sections 44 to 58) addresses front-ending agreements and removes some of the obstacles to their use which were contained in the D.C.A., 1989. Accordingly, the City assesses whether this mechanism is appropriate for its use, as part of funding projects prior to municipal funds being available.

9.3.7 *Severance and Subdivision Agreement Conditions*

Section 59 of the D.C.A., 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 D.C.A., 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 D.C.s related to the development, at the time the land is transferred.



In this regard, if the municipality in question is a commenting agency, in order to comply with subsection 59(4) of the D.C.A., 1997 it would need to provide to the approval authority, information regarding the applicable municipal D.C.s related to the site.

If the municipality is an approval authority for the purposes of Section 51 of the *Planning Act*, it would be responsible to ensure that it collects information from all entities which can impose a D.C.

The most effective way to ensure that purchasers are aware of this condition would be to require it as a provision in a registered subdivision agreement, so that any purchaser of the property would be aware of the charges at the time the title was searched prior to closing a transaction conveying the lands.



Appendices



Appendix A

Background Information on Residential and Non- Residential Growth Forecast



Schedule 1
City of Oshawa
Residential Growth Forecast Summary

	Year	Population (Including Census Undercount) ¹	Excluding Census Undercount			Housing Units				Person Per Unit (P.P.U.): Total Population/ Total Households	
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi-Detached	Multiple Dwellings ²	Apartments ³	Total Households		Equivalent Institutional Households
Historical	Mid 2006	147,250	141,590	1,870	139,720	34,850	4,750	15,330	54,930	1,700	2.578
	Mid 2011	155,590	149,607	1,932	147,675	38,224	5,221	15,352	58,797	1,756	2.544
	Mid 2016	165,840	159,458	1,828	157,630	40,340	5,595	16,660	62,595	1,662	2.547
Forecast	Early 2019	174,110	167,416	2,021	165,395	41,571	6,538	18,552	66,661	1,837	2.511
	Early 2029	202,040	194,273	2,522	191,751	44,932	10,787	23,697	79,416	2,293	2.446
	Buildout	244,942	235,521	3,923	231,598	48,643	15,632	34,722	98,997	3,566	2.379
Incremental	Mid 2006 - Mid 2011	8,340	8,017	62	7,955	3,374	471	22	3,867	56	
	Mid 2011 - Mid 2016	10,250	9,851	-104	9,955	2,116	374	1,308	3,798	-94	
	Mid 2016 - Early 2019	8,270	7,958	193	7,765	1,231	943	1,892	4,066	175	
	Early 2019 - Early 2029	27,930	26,857	501	26,356	3,361	4,249	5,145	12,755	456	
	Early 2019 - Buildout	70,832	68,105	1,902	66,203	7,072	9,094	16,170	32,336	1,729	

Source: City of Oshawa, Department of Development Services Residential Forecast, 2018.

¹ Census undercount estimated at approximately 4.0%. Note: Population including the undercount has been rounded.

² Includes townhouses

³ Includes apartments in duplexes, bachelor, 1-bedroom and 2-bedroom+ apartments.



Schedule 2
City of Oshawa
Estimate of the Anticipated Amount, Type and Location of Residential Development for
which Development Charges Can Be Imposed

A	B	C	D	E	F	G
Community	Total Occupied Units May '16	May 2016 Pop'n	Total Units Jan 2019	Early Jan '19 Pop'n	Total Units Dec 2028	Early 2029 Pop'n
Centennial	7,465	16,765	7,482	16,583	7,697	16,542
Central	5,310	11,320	5,363	11,280	7,009	14,019
Columbus	135	375	135	371	1,487	3,486
Donevan	5,045	12,635	5,103	12,596	5,376	13,024
Eastdale	4,725	12,685	4,755	12,608	5,230	13,688
Farewell	190	435	191	431	464	1,038
Kedron	500	1,415	500	1,401	5,000	13,237
Lakeview	7,095	18,020	7,183	18,014	7,474	18,267
McLaughlin	4,830	12,300	5,009	12,481	5,136	12,481
Northglen	1,700	4,555	1,706	4,520	1,726	4,454
Northwood	105	220	105	217	105	211
O'Neill	6,170	12,975	6,286	13,009	7,079	14,006
Pinecrest	4,865	13,930	4,956	13,949	5,439	14,926
Raglan, Rural	295	860	298	861	303	860
Samac	4,295	12,268	5,395	14,025	5,689	14,448
Taunton	3,520	12,870	4,026	14,362	4,904	16,340
Vanier	4,990	11,360	5,012	11,261	5,277	11,434
Windfields	1,360	4,470	3,156	9,254	4,021	11,119
CITY TOTAL	62,595	159,458	66,661	167,224	79,416	193,579

Assumptions:

B: Total occupied units from May 2016 Census based on a 25% sample (non-institutional).

C: Total population from 2016 Census (May) based on 100% sample

D: May 2016 occupied units plus building permits issued May 2016 to December 31, 2018

E: May 2016 Census population - population decline in existing units May 2016 + population in new units. Does not include institutional population growth of 192.

F: Early 2016 occupied units plus projected new development to December 2028

G: Early 2029 Population based on: Early 2019 population - population decline in existing units + population in new units. Does not include institutional population growth of 502.

Source: Data from City of Oshawa, Department of Development Services by Watson & Associates Economists Ltd., 2018.



Schedule 3
City of Oshawa
Current Year Growth Forecast
Mid 2016 to Early 2019

		Population	
Mid 2016 Population		159,458	
Occupants of New Housing Units, Mid 2016 to Early 2019	<i>Units (2)</i>	4,066	
	<i>multiplied by P.P.U. (3)</i>	2,344	
	<i>gross population increase</i>	9,532	9,532
Occupants of New Equivalent Institutional Units, Mid 2016 to Early 2019	<i>Units</i>	175	
	<i>multiplied by P.P.U. (3)</i>	1,100	
	<i>gross population increase</i>	192	192
Decline in Housing Unit Occupancy, Mid 2016 to Early 2019	<i>Units (4)</i>	62,595	
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.028	
	<i>total decline in population</i>	-1,766	-1,766
Population Estimate to Early 2019		167,416	
<i>Net Population Increase, Mid 2016 to Early 2019</i>		<i>7,958</i>	

- (1) 2016 population based on Statistics Canada Census unadjusted for Census undercount.
- (2) Estimated residential units constructed, Mid-2016 to the beginning of the growth period assuming a six-month lag between construction and occupancy.
- (3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.168	30%	0.959
<i>Multiples (6)</i>	2.552	23%	0.592
<i>Apartments (7)</i>	1.705	47%	0.793
Total		100%	2.344

¹ Based on 2016 Census custom database

² Based on Building permit/completion activity

- (4) 2016 households taken from Statistics Canada Census.
- (5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.
- (6) Includes townhouses and apartments in duplexes.
- (7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 4
City of Oshawa
Current Year Growth Forecast
Early 2019 to Early 2029

		Population	
Early 2019 Population		167,416	
Occupants of New Housing Units, Early 2019 to Early 2029	<i>Units (2)</i>	12,755	
	<i>multiplied by P.P.U. (3)</i>	2.373	
	<i>gross population increase</i>	30,264	30,264
Occupants of New Equivalent Institutional Units, Early 2019 to Early 2029	<i>Units</i>	456	
	<i>multiplied by P.P.U. (3)</i>	1.100	
	<i>gross population increase</i>	502	502
Decline in Housing Unit Occupancy, Early 2019 to Early 2029	<i>Units (4)</i>	66,661	
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.059	
	<i>total decline in population</i>	-3,909	-3,909
Population Estimate to Early 2029		194,273	
<i>Net Population Increase, Early 2019 to Early 2029</i>		<i>26,857</i>	

(1) Early 2019 Population based on:

2016 Population (159,458) + Mid 2016 to Early 2019 estimated housing units to beginning of forecast period (4,066 x 9,602) + (62,595 x -0.0293 = -1,836) = 167,224

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (p.p.u.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.168	26%	0.835
<i>Multiples (6)</i>	2.552	33%	0.850
<i>Apartments (7)</i>	1.705	40%	0.688
<i>one bedroom or less</i>	1.224		
<i>two bedrooms or more</i>	1.994		
Total		100%	2.373

¹ Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Early 2019 households based upon 62,595 (2016 Census) + 4,066 (Mid 2016 to Early 2019 unit estimate) = 66,661

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 5
City of Oshawa
Current Year Growth Forecast
Early 2019 to Buildout

		Population
Early 2019 Population		167,416
Occupants of New Housing Units, Early 2019 to Buildout	<i>Units (2)</i>	32,336
	<i>multiplied by P.P.U. (3)</i>	2.263
	<i>gross population increase</i>	73,182
		73,182
Occupants of New Equivalent Institutional Units, Early 2019 to Buildout	<i>Units</i>	1,729
	<i>multiplied by P.P.U. (3)</i>	1.100
	<i>gross population increase</i>	1,902
		1,902
Decline in Housing Unit Occupancy, Early 2019 to Buildout	<i>Units (4)</i>	32,336
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.216
	<i>total decline in population</i>	-6,979
		-6,979
Population Estimate to Buildout		235,521
<i>Net Population Increase, Early 2019 to Buildout</i>		<i>68,105</i>

(1) Early 2019 Population based on:

2016 Population (159,458) + Mid 2016 to Early 2019 estimated housing units to beginning of forecast period (4,066 x = 9,602) + (62,595 x - 0.0293 = -1,836) = 167,224

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (p.p.u.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.168	22%	0.693
<i>Multiples (6)</i>	2.552	28%	0.718
<i>Apartments (7)</i>	1.705	50%	0.853
<i>one bedroom or less</i>	1.224		
<i>two bedrooms or more</i>	1.994		
Total		100%	2.263

¹ Persons per unit based on Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Early 2019 households based upon 62,595 (2016 Census) + 4,066 (Mid 2016 to Early 2019 unit estimate) = 66,661

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6a
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa - Total

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	3,351	3,168	4,360	10,879
<i>% Breakdown</i>	31%	29%	40%	100%
Draft Approved Units	733	958	779	2,470
<i>% Breakdown</i>	30%	39%	32%	100%
Registered Units (No Permits)	79	40	0	119
<i>% Breakdown</i>	66%	34%	0%	100%
Intensification & Greenfield Potential Units	2,907	4,928	11,031	18,866
<i>% Breakdown</i>	15%	26%	58%	100%
Total	7,070	9,094	16,170	32,334
<i>% Breakdown</i>	22%	28%	50%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6b
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa - Centennial

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Draft Approved Units	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Intensification & Greenfield Potential Units	11	75	588	674
<i>% Breakdown</i>	2%	11%	87%	100%
Additional Intensification	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Total	11	75	588	674
<i>% Breakdown</i>	2%	11%	87%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6c
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa - Central

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Proposed Units	0	96	2,265	2,361
<i>% Breakdown</i>	<i>0%</i>	<i>4%</i>	<i>96%</i>	<i>100%</i>
Draft Approved Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Intensification & Greenfield Potential Units	8	290	3,343	3,641
<i>% Breakdown</i>	<i>0%</i>	<i>8%</i>	<i>92%</i>	<i>100%</i>
Total	8	386	5,608	6,002
<i>% Breakdown</i>	<i>0%</i>	<i>6%</i>	<i>93%</i>	<i>100%</i>

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6d
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa - Eastdale

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Proposed Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Draft Approved Units	260	188	0	448
<i>% Breakdown</i>	<i>58%</i>	<i>42%</i>	<i>0%</i>	<i>100%</i>
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Intensification & Greenfield Potential Units	4	154	79	237
<i>% Breakdown</i>	<i>2%</i>	<i>65%</i>	<i>33%</i>	<i>100%</i>
Additional Intensification	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Total	264	342	79	685
<i>% Breakdown</i>	<i>39%</i>	<i>50%</i>	<i>12%</i>	<i>100%</i>

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6e
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa - Farewell

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Proposed Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Draft Approved Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Intensification & Greenfield Potential Units	48	562	677	1,287
<i>% Breakdown</i>	<i>4%</i>	<i>44%</i>	<i>53%</i>	<i>100%</i>
Total	48	562	677	1,287
<i>% Breakdown</i>	<i>4%</i>	<i>44%</i>	<i>53%</i>	<i>100%</i>

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6f
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa - McLaughlin

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Proposed Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Draft Approved Units	0	81	0	81
<i>% Breakdown</i>	<i>0%</i>	<i>100%</i>	<i>0%</i>	<i>100%</i>
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Intensification & Greenfield Potential Units	6	0	40	46
<i>% Breakdown</i>	<i>13%</i>	<i>0%</i>	<i>87%</i>	<i>100%</i>
Additional Intensification	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Total	6	81	40	127
<i>% Breakdown</i>	<i>5%</i>	<i>64%</i>	<i>31%</i>	<i>100%</i>

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6g
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa - Northglen

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Proposed Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Draft Approved Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Registered Units (No Permits)	0	0	0	0
% Breakdown	0%	0%	0%	0%
Intensification & Greenfield Potential Units	0	0	20	20
% Breakdown	0%	0%	100%	100%
Additional Intensification	0	0	0	0
% Breakdown	0%	0%	0%	0%
Total	0	0	20	20
% Breakdown	0%	0%	100%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6h
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Columbus

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Proposed Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Draft Approved Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Registered Units (No Permits)	0	0	0	0
% Breakdown	0%	0%	0%	0%
Intensification & Greenfield Potential Units	1,872	1,817	1,817	5,506
% Breakdown	34%	33%	33%	100%
Additional Intensification	0	0	0	0
% Breakdown	0%	0%	0%	0%
Total	1,872	1,817	1,817	5,506
% Breakdown	34%	33%	33%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6i
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Donevan

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	32	223	0	255
% Breakdown	13%	87%	0%	100%
Draft Approved Units	17	0	0	17
% Breakdown	100%	0%	0%	100%
Registered Units (No Permits)	0	0	0	0
% Breakdown	0%	0%	0%	0%
Intensification & Greenfield Potential Units	7	80	292	379
% Breakdown	2%	21%	77%	100%
Additional Intensification	0	0	0	0
% Breakdown	0%	0%	0%	0%
Total	56	303	292	651
% Breakdown	9%	47%	45%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6j
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Kedron

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	3,060	2,397	1,919	7,376
% Breakdown	41%	32%	26%	100%
Draft Approved Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Registered Units (No Permits)	0	0	0	0
% Breakdown	0%	0%	0%	0%
Intensification & Greenfield Potential Units	519	424	128	1,071
% Breakdown	48%	40%	12%	100%
Additional Intensification	0	0	0	0
% Breakdown	0%	0%	0%	0%
Total	3,579	2,821	2,047	8,447
% Breakdown	42%	33%	24%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6k
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Lakeview

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	180	0	0	180
% Breakdown	100%	0%	0%	100%
Draft Approved Units	0	56	0	56
% Breakdown	0%	100%	0%	100%
Registered Units (No Permits)	0	0	0	0
% Breakdown	0%	0%	0%	0%
Intensification & Greenfield Potential Units	11	448	1,106	1,565
% Breakdown	1%	29%	71%	100%
Additional Intensification	0	0	0	0
% Breakdown	0%	0%	0%	0%
Total	191	504	1,106	1,801
% Breakdown	11%	28%	61%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6l
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Northwood

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Draft Approved Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Registered Units (No Permits)	0	0	0	0
% Breakdown	0%	0%	0%	0%
Intensification & Greenfield Potential Units	0	0	0	0
% Breakdown	0%	0%	0%	0%
Additional Intensification	0	0	0	0
% Breakdown	0%	0%	0%	0%
Total	0	0	0	0
% Breakdown	0%	0%	0%	0%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6m
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – O'Neill

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Draft Approved Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Intensification & Greenfield Potential Units	48	0	1,247	1,295
<i>% Breakdown</i>	<i>4%</i>	<i>0%</i>	<i>96%</i>	<i>100%</i>
Additional Intensification	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Total	48	0	1,247	1,295
<i>% Breakdown</i>	<i>4%</i>	<i>0%</i>	<i>96%</i>	<i>100%</i>

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6n
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Pinecrest

Stage of Development	Density Type			Total
	Singles & Semi-Detached	Multiples ¹	Apartments ²	
Proposed Units	50	126	70	246
<i>% Breakdown</i>	<i>20%</i>	<i>51%</i>	<i>28%</i>	<i>100%</i>
Draft Approved Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Intensification & Greenfield Potential Units	272	269	37	578
<i>% Breakdown</i>	<i>47%</i>	<i>47%</i>	<i>6%</i>	<i>100%</i>
Additional Intensification	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Total	322	395	107	824
<i>% Breakdown</i>	<i>39%</i>	<i>48%</i>	<i>13%</i>	<i>100%</i>

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6o
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Samac

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total
Proposed Units	4	237	0	241
% Breakdown	2%	98%	0%	100%
Draft Approved Units	41	0	19	60
% Breakdown	68%	0%	32%	100%
Registered Units (No Permits)	0	0	0	0
% Breakdown	0%	0%	0%	0%
Intensification & Greenfield Potential Units	59	267	773	1,099
% Breakdown	5%	24%	70%	100%
Total	104	504	792	1,400
% Breakdown	7%	36%	57%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6p
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Windfields

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Proposed Units	9	89	76	174
% Breakdown	5%	51%	44%	100%
Draft Approved Units	115	520	450	1,085
% Breakdown	11%	48%	41%	100%
Registered Units (No Permits)	0	40	0	40
% Breakdown	0%	100%	0%	100%
Intensification & Greenfield Potential Units	0	231	0	231
% Breakdown	0%	100%	0%	100%
Additional Intensification	0	0	0	0
% Breakdown	0%	0%	0%	0%
Total	124	880	526	1,530
% Breakdown	8%	58%	34%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6q
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Raglan Rural

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Proposed Units	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Draft Approved Units	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Intensification & Greenfield Potential Units	5	0	0	5
<i>% Breakdown</i>	100%	0%	0%	100%
Total	5	0	0	5
<i>% Breakdown</i>	100%	0%	0%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6r
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Taunton

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Proposed Units	16	0	30	46
<i>% Breakdown</i>	35%	0%	65%	100%
Draft Approved Units	300	113	310	723
<i>% Breakdown</i>	41%	16%	43%	100%
Registered Units (No Permits)	79	0	0	79
<i>% Breakdown</i>	100%	0%	0%	100%
Intensification & Greenfield Potential Units	30	306	631	967
<i>% Breakdown</i>	3%	32%	65%	100%
Additional Intensification	0	0	0	0
<i>% Breakdown</i>	0%	0%	0%	0%
Total	425	419	971	1,815
<i>% Breakdown</i>	23%	23%	53%	100%

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 6s
City of Oshawa
Summary of Vacant Land Supply Housing Potential
City of Oshawa – Vanier

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ²	Apartments ³	Total
Proposed Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Draft Approved Units	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Registered Units (No Permits)	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Intensification & Greenfield Potential Units	7	5	253	265
<i>% Breakdown</i>	<i>3%</i>	<i>2%</i>	<i>95%</i>	<i>100%</i>
Additional Intensification	0	0	0	0
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Total	7	5	253	265
<i>% Breakdown</i>	<i>3%</i>	<i>2%</i>	<i>95%</i>	<i>100%</i>

Source: City of Oshawa, Department of Development Services, 2018.

¹ Includes townhomes.

² Includes apartments in duplexes, bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 7
City of Oshawa
Historical Residential Building Permits
Years 2007 to 2018

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ¹	Apartments ²	Total
2007	706	64	14	784
2008	447	193	135	775
2009	321	65	133	519
2010	591	16	117	724
2011	329	77	95	501
Average (2007 - 2011)	479	83	99	661
% Breakdown	72.5%	12.6%	15.0%	100.0%
2012	459	75	63	597
2013	418	20	584	1,022
2014	436	150	208	794
2015	759	177	473	1,409
2016	539	267	93	899
Sub-total	2,611	689	1,421	4,721
Average (2012 - 2016)	522	138	284	944
% Breakdown	55.3%	14.6%	30.1%	100.0%
2017	513	626	597	1,736
2018	236	174	1,449	1,859
Sub-total	749	800	2,046	3,595
% Breakdown	20.8%	22.3%	56.9%	100.0%
2007 - 2017				
Total	5,518	1,730	2,512	9,760
Average	502	157	228	802
% Breakdown	56.5%	17.7%	25.7%	100.0%

Source: Statistics Canada Publication, 64-001XIB

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Schedule 8 – 25 Year Average
City of Oshawa
Person Per Unit by Age and Type of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached					Total	25 Year Average Adjusted
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR		
1-5	-	-	2.103	3.529	4.953	3.556	
6-10	-	-	2.125	3.360	4.311	3.379	
11-15	-	-	2.000	3.224	4.830	3.293	
16-20	-	-	1.871	3.052	3.833	3.008	
20-25	-	-	1.529	3.018	3.615	2.981	3.168
25-35	-	-	2.071	2.793	4.082	2.836	
35+	0.600	1.486	1.875	2.559	3.811	2.501	
Total	1.231	1.447	1.900	2.806	4.112	2.774	

Age of Dwelling	Multiples ¹					Total	25 Year Average Adjusted
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR		
1-5	-	1.300	2.176	2.649	-	2.258	
6-10	-	-	-	2.727	-	2.637	
11-15	-	-	1.545	2.745	-	2.818	
16-20	-	1.583	2.176	2.422	-	2.312	
20-25	-	-	2.133	3.143	-	2.897	2.552
25-35	-	-	2.091	2.897	-	2.742	
35+	-	1.261	1.896	2.760	3.350	2.492	
Total	-	1.286	1.935	2.772	3.567	2.536	

Age of Dwelling	Apartments ²					Total	25 Year Average Adjusted
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR		
1-5	-	1.150	1.762	-	-	1.578	
6-10	-	1.235	1.867	-	-	1.444	
11-15	-	-	1.938	-	-	2.000	
16-20	-	1.273	2.156	-	-	1.932	
20-25	-	1.164	1.971	2.667	-	1.675	1.705
25-35	-	1.167	1.927	2.692	-	1.682	
35+	1.091	1.215	1.896	2.562	3.067	1.755	
Total	1.061	1.207	1.908	2.571	3.333	1.739	

Age of Dwelling	All Density Types					Total
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	
1-5	-	1.239	1.977	3.416	4.909	3.178
6-10	-	1.391	1.964	3.275	4.387	3.210
11-15	-	-	1.821	3.184	4.882	3.180
16-20	-	1.444	2.065	2.984	4.115	2.762
20-25	-	1.154	1.921	3.055	3.692	2.535
25-35	-	1.166	1.953	2.804	4.043	2.533
35+	1.538	1.244	1.885	2.593	3.706	2.317
Total	1.674	1.236	1.904	2.793	4.060	2.518

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

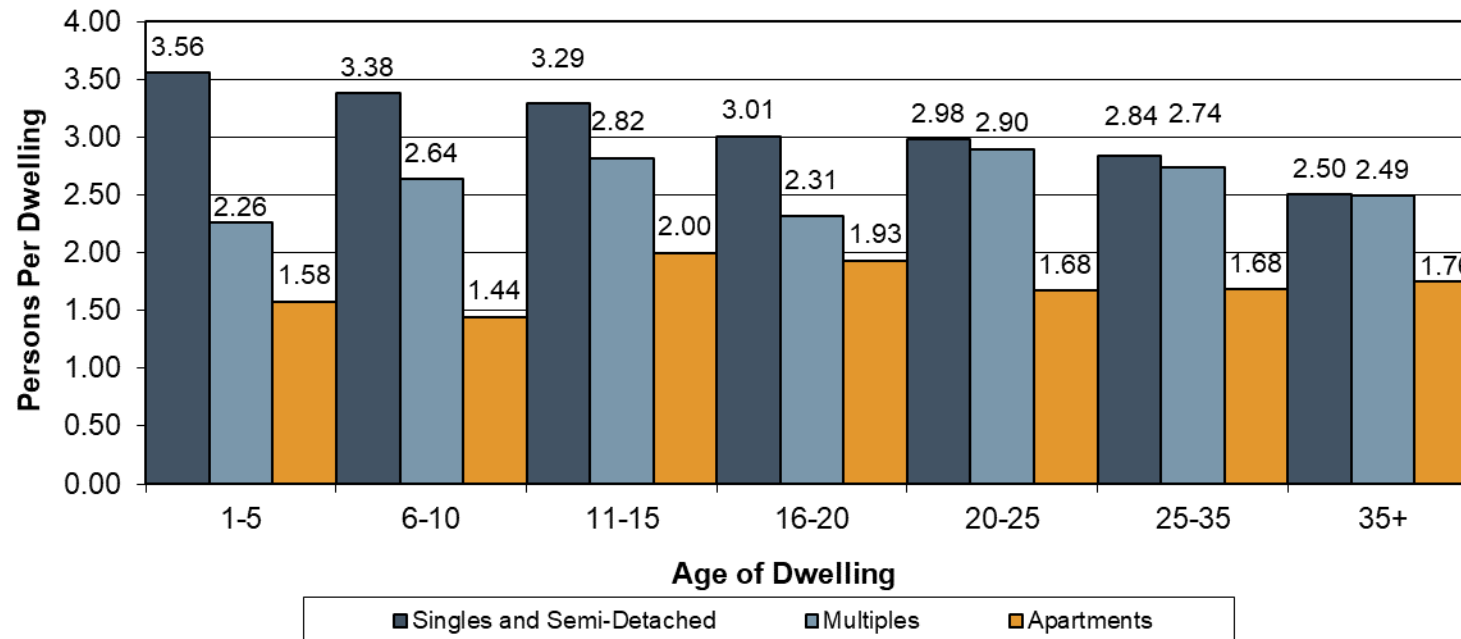
³ Adjusted based on 2001-2016 historical trends.

Note: Does not include Statistics Canada data classified as 'Other'

P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.



Schedule 9
City of Oshawa
Person Per Unit Structural Type and Age of Dwelling
(2016 Census)



Multiple and Apartment P.P.U.s are based on the City of Oshawa.



Schedule 10a City of Oshawa 2019 Employment Forecast

Period	Population	Activity Rate								Employment								Employment Total (Excluding Work at Home)
		Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	N.F.P.O.W. ¹	Total Including NFPOW	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	N.F.P.O.W. ¹	Total Employment (Including N.F.P.O.W.)	
Mid 2006	141,590	0.001	0.024	0.149	0.148	0.104	0.426	0.032	0.457	195	3,345	21,168	20,903	14,680	60,290	4,480	64,770	56,945
Mid 2011	149,607	0.001	0.020	0.090	0.133	0.121	0.364	0.031	0.395	85	2,980	13,448	19,908	18,090	54,510	4,570	59,080	51,530
Mid 2016	159,458	0.001	0.024	0.064	0.130	0.109	0.327	0.063	0.390	105	3,820	10,223	20,668	17,340	52,155	9,979	62,134	48,335
Early 2019	167,416	0.001	0.025	0.062	0.126	0.108	0.323	0.063	0.385	105	4,262	10,420	21,168	18,038	53,993	10,477	64,470	49,731
Early 2029	194,273	0.001	0.027	0.091	0.135	0.103	0.357	0.063	0.419	105	5,245	17,655	26,257	20,019	69,281	12,158	81,439	64,036
Buildout	235,521	0.000	0.029	0.091	0.149	0.098	0.368	0.063	0.431	105	6,938	21,403	35,107	23,138	86,691	14,739	101,430	79,753
Incremental Change																		
Mid 2006 - Mid 2011	8,017	-0.001	-0.004	-0.060	-0.015	0.017	-0.061	-0.001	-0.063	-110	-365	-7,720	-995	3,410	-5,780	90	-5,690	-5,415
Mid 2011 - Mid 2016	9,851	0.0001	0.0040	-0.0258	-0.0035	-0.0122	-0.0373	0.0320	-0.0052	20	840	-3,225	760	-750	-2,355	5,409	3,054	-3,195
Mid 2016 - Early 2019	7,958	0.0000	0.0015	-0.0019	-0.0032	-0.0010	-0.0046	0.0000	-0.0046	0	442	198	501	698	1,838	498	2,336	1,396
Early 2019 - Early 2029	26,857	-0.0001	0.0015	0.0286	0.0087	-0.0047	0.0341	0.0000	0.0341	0	983	7,235	5,089	1,981	15,288	1,681	16,969	14,305
Early 2019 - Buildout	68,105	-0.0002	0.0040	0.0286	0.0226	-0.0095	0.0456	0.0000	0.0456	0	2,676	10,983	13,939	5,100	32,698	4,262	36,960	30,022
Annual Average																		
Mid 2006 - Mid 2011	1,603	-0.00016	-0.00074	-0.01192	-0.00291	0.00345	-0.01229	-0.00022	-0.01251	-22	-73	-1,544	-199	682	-1,156	18	-1,138	-1,083
Mid 2011 - Mid 2016	1,970	0.0000	0.0008	-0.0052	-0.0007	-0.0024	-0.0075	0.0064	-0.0010	4	168	-645	152	-150	-471	1,082	611	-639
Mid 2016 - Early 2019	3,183	0.0000	0.0006	-0.0007	-0.0013	-0.0004	-0.0018	0.0000	-0.0018	0	177	79	200	279	735	199	934	558
Early 2019 - Early 2029	2,686	-0.00001	0.00015	0.00286	0.00087	-0.00047	0.00341	0.00000	0.00341	0	98	724	509	198	1,529	168	1,697	1,431
Early 2019 - Buildout	2,687	-0.00001	0.00016	0.00113	0.00089	-0.00037	0.00180	0.00000	0.00180	0	106	433	550	201	1,290	168	1,458	1,184

Source: Watson & Associates Economists Ltd., 2018.

¹ Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.



Schedule 10b
City of Oshawa
2019 Employment and Gross Floor Area (G.F.A.) Forecast

Period	Population	Employment				Gross Floor Area in Square Feet (Estimated) ¹			
		Industrial	Commercial/ Population Related	Institutional	Total	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	141,590	21,168	20,903	14,680	56,945				
Mid 2011	149,607	13,448	19,908	18,090	51,530				
Mid 2016	159,458	10,223	20,668	17,340	48,335				
Early 2019	167,416	10,420	21,168	17,856	49,549				
Early 2029	194,273	17,655	26,257	19,362	63,379				
Buildout	235,521	21,403	35,107	21,155	77,770				
Incremental Change									
Mid 2006 - Mid 2011	8,017	-7,720	-995	3,410	-5,415				
Mid 2011 - Mid 2016	9,851	-3,225	760	-750	-3,195				
Mid 2016 - Early 2019	7,958	198	501	516	1,214	237,000	200,200	342,800	780,000
Early 2019 - Early 2029	26,857	7,235	5,089	1,506	13,830	8,682,000	2,035,600	1,152,500	11,870,100
Early 2019 - Buildout	68,105	10,983	13,939	3,299	28,221	13,179,600	5,575,600	2,275,000	21,030,200
Annual Average									
Mid 2006 - Mid 2011	1,603	-1,544	-199	682	-1,083				
Mid 2011 - Mid 2016	1,970	-645	152	-150	-639				
Mid 2016 - Early 2019	3,183	79	200	206	485	94,800	80,080	137,120	312,000
Early 2019 - Early 2029	2,686	724	509	151	1,383	868,200	203,560	115,250	1,187,010
Early 2019 - Buildout	2,687	433	550	130	1,113	519,904	219,944	89,743	829,592

Source: Watson & Associates Economists Ltd., 2018. Derived from

¹ Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.

² Square Foot Per Employee Assumptions

Industrial	1,200
Commercial/ Population Related	400
Institutional	690

Note: Institutional forecast employment and GFA has been adjusted downward to account for development captured in special care dwelling units.

Numbers may not add to totals due to rounding.



Appendix B

Historical Level of Service Calculations



**City of Oshawa
Service Standard Calculation Sheet**

Service: Parkland Development
Unit Measure: Acres of Parkland

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Acre)
Neighbourhood	388	394	394	394	404	404	404	408	580	585	\$185,058
Community	336	336	336	336	336	336	336	336	149	149	\$181,213
City	270	270	270	270	270	441	441	441	250	250	\$62,227
Regional									423	423	\$27,281
Parkette									24	24	\$271,412
Total	994	1,000	1,000	1,000	1,010	1,181	1,181	1,185	1,426	1,431	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

10 Year Average	2009-2018
Quantity Standard	0.0074
Quality Standard	\$138,797
Service Standard	\$1,027

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$1,027
Eligible Amount	\$27,584,825



**City of Oshawa
Service Standard Calculation Sheet**

Service: Parkland Trails
Unit Measure: Linear Metres of Paths and Trails

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/ Linear Metre)
Harmony Creek	4,630	4,630	4,630	4,630	5,430	5,856	5,856	5,856	5,856	5,856	\$400
Oshawa Creek	7,580	7,580	7,580	7,680	7,680	8,281	8,281	8,281	8,281	8,281	\$400
Waterfront Trail	4,260	7,459	7,459	7,459	7,459	7,459	7,459	7,459	7,459	7,459	\$400
Michael Starr Trail	4,870	4,870	4,870	4,870	4,870	4,939	4,939	4,939	4,939	4,939	\$400
Pedestrian Bridges	458	458	458	458	458	703	703	703	703	703	\$9,852
Total	21,798	24,997	24,997	25,097	25,897	27,238	27,238	27,238	27,238	27,238	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.15	0.17	0.17	0.17	0.17	0.18	0.17	0.17	0.17	0.17

10 Year Average	2009-2018
Quantity Standard	0.1676
Quality Standard	\$569
Service Standard	\$95

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$95
Eligible Amount	\$2,561,621



**City of Oshawa
Service Standard Calculation Sheet**

Service: Park Maintenance Buildings
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Farewell - Parks share only	14,063	14,063	14,063	14,063	14,063	14,063	14,063	14,063	14,063	14,063	\$284
<u>Parks Share of Consolidated Operations Depot</u>											
Office							9,351	9,351	9,351	9,351	\$240
Heated Inventory Storage							9,518	9,518	9,518	9,518	\$103
Salt Building							1,722	1,722	1,722	1,722	\$119
Covered Storage Building							5,319	5,319	5,319	5,319	\$75
Total	14,063	14,063	14,063	14,063	14,063	14,063	39,973	39,973	39,973	39,973	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.10	0.09	0.09	0.09	0.09	0.09	0.26	0.25	0.25	0.24

10 Year Average	2009-2018
Quantity Standard	0.1558
Quality Standard	\$227
Service Standard	\$35

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$35



**City of Oshawa
Service Standard Calculation Sheet**

Service: Parks and Recreation Vehicles and Equipment
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Vehicle)
Sub Compact	2	2	1	-	-	-	-	-	-	-	\$50,000
Compact SUV/Crossover	-	-	-	-	1	1	1	1	2	2	\$39,000
1/2 Ton Pickup	1	1	1	1	1	1	1	1	1	3	\$45,000
3/4 - 1 ton Pickup	12	12	12	12	12	12	12	7	7	7	\$57,500
Compact Van	2	2	2	2	2	2	2	1	1	1	\$38,000
1/2 1 ton Van	2	2	2	2	2	2	2	2	2	2	\$45,000
1/2 Ton Pickup Compact	7	7	7	8	8	8	8	7	8	8	\$39,000
Dump Stake Hoist Trucks (4600-4900)	7	7	7	7	7	7	7	11	10	9	\$85,000
Dump Trucks (12000-13500K)	1	1	1	1	1	1	1	1	1	2	\$250,000
Dump Trucks (13600K)	-	-	-	1	1	1	1	1	1	1	\$300,000
Special Purpose Light Trucks	2	2	2	2	2	2	2	2	3	3	\$90,000
Utility Truck	2	2	2	2	2	2	2	2	2	2	\$300,000
Small Salt Sanders	2	2	2	2	2	2	2	2	2	2	\$8,000
Lawn Seeder	4	4	4	4	4	4	4	4	4	5	\$30,000
Aerial Lifts	1	1	1	1	1	1	1	1	1	1	\$310,000
Wood Chipper	2	2	2	2	2	2	2	2	2	3	\$110,000
Soil Shreader	1	1	1	1	1	-	-	-	-	-	\$10,000
Turf Sweeper	2	2	2	2	2	2	2	2	2	2	\$35,000
Utility Work Machine	-	-	-	1	1	1	1	1	1	1	\$89,000
Back Hoe 3/8 Yard	2	1	2	2	2	2	2	2	2	2	\$140,000
Tractors and Attachments	12	11	11	10	10	10	10	10	10	10	\$120,000
Tractor with Gang Mower	4	4	4	4	4	4	4	4	4	4	\$130,000
Front End Loaders AWD	1	1	1	1	1	1	1	1	1	1	\$335,000
Skid Steer Loader	1	1	1	1	1	1	1	1	1	1	\$95,000
Wheeled Tractors 13-20 HP	6	6	6	7	7	8	8	8	8	8	\$65,000
Ice Resurfacers	9	7	7	7	7	7	7	7	7	7	\$140,000
Wheeled Utility Vehicle	4	4	4	5	5	5	5	5	5	5	\$30,200
Stump Cutter	1	1	1	1	1	1	1	1	1	1	\$67,200
Litter Vacuum	2	2	2	1	1	1	1	1	1	-	\$77,000
Water Pumps 1-3"	1	1	1	1	1	1	1	1	1	-	\$3,500



**City of Oshawa
Service Standard Calculation Sheet**

Service: Parks and Recreation Vehicles and Equipment
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Vehicle)
Portable Air Compressors	1	1	1	1	1	1	1	1	1	1	\$40,000
Tandem Dump Trailer	1	1	1	1	1	1	1	1	1	1	\$16,000
Trailers	7	7	7	7	7	7	7	7	8	9	\$12,000
Chemical Sprayers	8	8	8	8	8	8	8	8	8	8	\$15,000
Rotary Mowers	9	9	9	8	8	8	8	8	8	8	\$25,000
Portable Welder	1	1	1	1	1	1	1	1	1	1	\$30,000
Total	120	116	116	117	118	118	118	115	118	121	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007

10 Year Average	2009-2018
Quantity Standard	0.0008
Quality Standard	\$70,313
Service Standard	\$56

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$56
Eligible Amount	\$1,510,706



**City of Oshawa
Service Standard Calculation Sheet**

Service: Indoor Recreation Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Donevan Arena/Pool	51,773	51,773	51,773	51,773	51,773	51,773	51,773	51,773	51,773	51,773	\$353
Harman Park Arena	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	\$188
Children's Arena	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	\$272
Civic Recreation Complex	132,978	132,978	211,474	211,474	211,474	211,474	211,474	211,474	211,474	211,474	\$349
Northview Community Centre	23,866	23,866	23,866	23,866	23,866	23,866	23,866	23,866	23,866	23,866	\$386
Bandshell/Music Centre(Memorial Park)	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	\$387
Columbus Community Hall	3,270	3,270	3,270	3,270	3,270	3,270	3,270	3,270	3,270	3,270	\$556
Jubilee Pavilion	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	\$206
Cordova Community Centre	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$266
washrooms/changerooms/storage/field house	14,892	14,892	14,892	14,892	14,892	14,892	14,892	14,892	14,892	14,892	\$357
Neighbourhood Assoc. Community Centres	62,420	62,420	62,420	62,420	62,420	62,420	62,420	62,420	62,420	62,420	\$284
Delpark Homes Centre (excludes Library)	190,901	190,901	190,901	190,901	190,901	190,901	190,901	190,901	190,901	190,901	\$472
South Oshawa Community Centre	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	\$483
Tribute Communities Centre - 50% of total	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	\$538
Arts Resource Centre (excludes theatre)	3,021	3,021	3,021	3,021	3,021	3,021	3,021	3,021	3,021	3,021	\$447
Rotary Pool and Change House	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	\$1,169
Lake Vista Splash Pad Storage building	1,200	-	-	-	-	-	-	-	-	-	\$416
Camp Samac Pool	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	\$105
Campus Ice Centre (86% of floor area)	70,520	70,520	70,520	70,520	70,520	70,520	70,520	70,520	70,520	70,520	\$281
Total	833,841	832,641	911,137	911,137	911,137	911,137	911,137	911,137	911,137	911,137	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	5.6585	5.6210	6.0902	6.0428	5.9817	5.9044	5.8347	5.7140	5.6461	5.5225

10 Year Average	2009-2018
Quantity Standard	5.8016
Quality Standard	\$379
Service Standard	\$2,199

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$2,199
Eligible Amount	\$59,069,823



**City of Oshawa
Service Standard Calculation Sheet**

Service: Library Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Northview Branch	12,800	12,800	12,800	12,800	12,800	12,800	12,800	12,800	12,800	12,800	\$408
Jess Hann Branch	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	\$357
McLaughlin Library	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	\$364
Delpark Homes Centre Branch	9,785	9,785	9,785	9,785	9,785	9,785	9,785	9,785	9,785	9,785	\$357
Total	95,085	95,085	95,085	95,085	95,085	95,085	95,085	95,085	95,085	95,085	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.6452	0.6419	0.6356	0.6306	0.6242	0.6162	0.6089	0.5963	0.5892	0.5763

10 Year Average	2009-2018
Quantity Standard	0.6164
Quality Standard	\$369
Service Standard	\$227

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$227
Eligible Amount	\$6,103,253



**City of Oshawa
Service Standard Calculation Sheet**

Service: Library Collection Materials
Unit Measure: No. of library collection items

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/item)
Hardcover books	295,923	309,728	319,266	311,412	310,018	312,168	301,812	307,549	271,296	258,001	\$35.08
Paperbacks	32,858	34,414	35,474	34,600	36,599	32,895	37,365	32,498	22,685	23,188	\$13.00
Periodical Titles	863	857	828	753	773	762	748	661	444	434	\$116.65
Compact Disks	21,686	25,928	28,162	26,452	20,701	21,880	23,290	23,979	23,271	15,832	\$21.30
CD-ROMS	70	76	76	55							\$26.14
DVD & BluRay	16,501	19,118	22,800	27,248	31,335	36,196	43,613	51,313	52,954	52,986	\$41.42
Books on Tapes/Kits	11,533	11,415	11,452	10,548	10,976						\$60.85
Audiobooks						8,254	8,443	9,392	8,456	8,413	\$55.73
Kits									2,124	1,945	\$24.50
Electronic Audio Books			1,314	3,361	3,865	2,096	2,579	1,816	6,369	6,887	\$93.05
Electronic Books			12,814	13,509	13,162	16,279	20,101	21,004	24,945	26,616	\$37.51
Video Games	565	804	882	1,037	1,192	1,991	2,515	2,865	2,850	2,821	\$67.06
Databases								20	24	26	\$5,470.00
Digital Resources						5	6	7	7	8	\$4,690.00
Makerspace/Coding/VR technology								32	74	119	\$300.00
Realia (equipment)									10	90	\$67.23
Emovies									2,359	3,132	\$3.40
EMagazines						41	25	47	2,296	2,296	\$31.37
EMusic							24,000	30,000	30,605	30,194	\$0.80
Total	379,999	402,340	433,068	428,975	428,621	432,567	464,497	481,183	450,769	432,988	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	2.58	2.72	2.89	2.85	2.81	2.80	2.97	3.02	2.79	2.62

10 Year Average	2009-2018
Quantity Standard	2.8061
Quality Standard	\$34
Service Standard	\$94

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$94
Eligible Amount	\$2,537,181



**City of Oshawa
Service Standard Calculation Sheet**

Service: Parking Vehicles
Unit Measure: No. of vehicles

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Vehicle)
Sub Compact	-	-	-	1	1	1	1	-	-	-	\$50,000
Compact Van	2	2	2	2	2	2	2	2	2	2	\$38,000
Total	2	2	2	3	3	3	3	2	2	2	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per 1,000 Population Standard	0.0136	0.0135	0.0134	0.0199	0.0197	0.0194	0.0192	0.0125	0.0124	0.0121

10 Year Average	2009-2018
Quantity Standard (per 1,000 pop.)	0.0156
Quality Standard	\$40,452
Service Standard	\$1

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$1
Eligible Amount	\$16,920



**City of Oshawa
Service Standard Calculation Sheet**

Service: Parking Spaces
Unit Measure: No. of spaces

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/space)
Surface Lot 4	68	68	68	68	68	68	68	68	68	68	\$12,224
Surface Lot 15	140	140	140	140	140	-	-	-	-	-	\$11,330
Surface Lot 16	106	106	106	106	106	106	106	106	106	106	\$11,120
Surface Lot 18	58	58	58	58	58	58	58	58	58	58	\$11,875
Surface Lot 19		316	316	316	316	316	316	316	316	316	\$11,661
Surface Lot 50	56	56	56	56	56	56	56	56	56	56	\$14,252
Surface Lot 52	33	33	33	33	33	33	33	33	33	33	\$13,258
Total	461	777	777	777	777	637	637	637	637	637	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.0031	0.0052	0.0052	0.0052	0.0051	0.0041	0.0041	0.0040	0.0039	0.0039

10 Year Average	2009-2018
Quantity Standard	0.0044
Quality Standard	\$11,864
Service Standard	\$52

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$52
Eligible Amount	\$1,401,935



**City of Oshawa
Service Standard Calculation Sheet**

Service: Parking Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Parking Garage 1 (Centre Street Parkade)	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	\$101
Parking Garage 2 (McMillan Street Parkade)	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	\$82
Parking Garage 3 (Mary Street Parkade)	267,000	267,000	267,000	267,000	267,000	267,000	267,000	267,000	267,000	267,000	\$106
Consolidated Operations Depot (share of space)								5,607	5,607	5,607	\$240
Total	612,000	612,000	612,000	612,000	612,000	612,000	612,000	617,607	617,607	617,607	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	4.1530	4.1315	4.0907	4.0589	4.0179	3.9659	3.9191	3.8732	3.8271	3.7434

10 Year Average	2009-2018
Quantity Standard	3.9781
Quality Standard	\$193
Service Standard	\$767

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$767
Eligible Amount	\$20,588,039



**City of Oshawa
Service Standard Calculation Sheet**

Service: Waste Diversion - Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Consolidated Operations Depot - Office							292	292	292	292	\$240
Total	-	-	-	-	-	-	292	292	292	292	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	-	-	-	-	-	-	0.00	0.00	0.00	0.00

10 Year Average	2009-2018
Quantity Standard	0.0007
Quality Standard	\$243
Service Standard	\$0

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$0
Eligible Amount	\$4,566



**City of Oshawa
Service Standard Calculation Sheet**

Service: Waste Diversion - Other
Unit Measure: No. of vehicles

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/item)
Compact SUV/Crossover	1	1	1	1	1	1	1	1	-	-	\$39,000
1/2 Ton Pickup	1	1	1	1	1	1	1	1	1	1	\$45,000
Dump Stake Hoist Trucks (4600-4900K)	-	-	-	-	-	-	-	1	-	1	\$85,000
Garbage Packers*	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	\$325,000
* 25% of Garbage Packers utilized for diversion											
Total	6	6	6	6	6	6	6	7	5	6	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.000042	0.000042	0.000042	0.000041	0.000041	0.000041	0.000040	0.000045	0.000033	0.000038

10 Year Average	2009-2018
Quantity Standard	0.000041
Quality Standard	\$233,171
Service Standard	\$10

D.C. Amount (before deductions)	10 Year
Forecast Population	26,857
\$ per Capita	\$10
Eligible Amount	\$256,753



**City of Oshawa
Service Standard Calculation Sheet**

Service: Roads
Unit Measure: km of roadways, number of items

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/km)
Arterials	147	147	147	147	148	150	151	151	152	152	\$3,125,572
Collectors	143	144	144	144	144	149	151	152	162	162	\$3,908,797
Rurals	83	83	83	83	83	85	85	85	85	85	\$2,926,519
Structures (number)	62	62	63	64	65	68	68	68	69	69	\$734,306
Sidewalks & Multi-Use Paths (km)	631	646	663	673	677	687	689	690	698	698	\$370,000
Streetlights	11,882	12,109	12,143	12,280	12,375	12,544	12,884	13,031	13,605	13,895	\$2,625
Traffic Control Signals (City only)	31	33	33	33	33	35	36	36	36	36	\$250,000
Total	12,980	13,224	13,276	13,424	13,525	13,719	14,064	14,214	14,807	15,097	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.0881	0.0893	0.0887	0.0890	0.0888	0.0889	0.0901	0.0891	0.0918	0.0915

10 Year Average	2009-2018
Quantity Standard	0.0895
Quality Standard	\$118,485
Service Standard	\$10,604

D.C. Amount (before deductions)	Buildout
Forecast Population	68,105
\$ per Capita	\$10,604
Eligible Amount	\$722,212,662



**City of Oshawa
Service Standard Calculation Sheet**

Service: Roads Operations
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
North Depot - offices/garages/sand	14,700	14,700	14,700	14,700	14,700	14,700	14,700	14,700	14,700	14,700	\$337
Conant St. East Facility - Traffic Dep/Purchasing	11,500	11,500	11,500	11,500	11,500	11,500	-	-	-	-	\$422
Ritson Rd. Depot	53,300	53,300	53,300	53,300	53,300	53,300	53,300	53,300	-	-	\$244
Farewell - Road Portion Only	4,688	4,688	4,688	4,688	4,688	4,688	4,688	4,688	4,688	4,688	\$284
Consolidated Operations Depot - Office							11,662	11,662	11,662	11,662	\$240
Consolidated Operations Depot - Garage							-	-	-	-	
Consolidated Operations Depot - Heated Inventory Storage							8,438	8,438	8,438	8,438	\$103
Consolidated Operations Depot - Salt Building							16,875	16,875	16,875	16,875	\$119
Consolidated Operations Depot - Covered Storage Building							14,063	14,063	14,063	14,063	\$75
Total	84,188	84,188	84,188	84,188	84,188	84,188	123,724	123,724	70,424	70,424	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.5713	0.5683	0.5627	0.5583	0.5527	0.5456	0.7923	0.7759	0.4364	0.4268

10 Year Average	2009-2018
Quantity Standard	0.5790
Quality Standard	\$251
Service Standard	\$145

D.C. Amount (before deductions)	Buildout
Forecast Population	68,105
\$ per Capita	\$145
Eligible Amount	\$9,892,932



**City of Oshawa
Service Standard Calculation Sheet**

Service: Roads and Related Vehicles
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Vehicle)
Compact SUV/Crossover	1	1	1	1	1	1	-	-	-	-	\$39,000
1/2 Ton Pickup	-	-	-	-	-	6	6	6	6	7	\$45,000
3/4 - 1 ton Pickup	8	8	10	10	10	10	10	4	4	4	\$57,500
Compact Van	1	1	1	1	1	1	1	1	1	1	\$38,000
1/2 Ton Pickup Compact	10	10	7	6	6	1	1	1	1	1	\$39,000
Dump Stake Hoist Trucks (4600-	5	5	5	5	6	6	6	12	14	13	\$85,000
Dump Trucks (12000-13500K)	2	2	2	1	1	-	-	-	-	-	\$250,000
Dump Trucks (13600K)	20	20	20	16	16	16	16	13	13	13	\$300,000
Dump Trucks (16100-22000)	3	3	3	3	3	3	3	3	3	3	\$440,000
Special Purpose Light Trucks	1	1	1	1	1	1	1	1	1	1	\$90,000
Utility Truck	1	1	1	1	1	1	1	1	1	2	\$300,000
Small Salt Sanders	1	1	4	4	4	4	4	4	4	4	\$8,000
Catchbasin Cleaner	1	1	1	1	1	1	1	1	1	1	\$650,000
Street Flusher	1	1	1	1	1	1	1	1	1	1	\$300,000
Snow Blowers Large	3	3	2	2	2	2	2	2	2	2	\$145,000
Street Sweepers	3	2	2	2	2	2	2	2	2	2	\$305,000
Sidewalk Plows	9	9	9	10	10	11	11	11	11	12	\$188,000
Rollers 1-3 Ton	3	3	3	3	3	3	3	3	3	3	\$25,000
Sidewalk Plows Sweepers	1	1	1	1	1	1	1	1	-	-	\$180,000
Roads Graders over 130 HP	6	6	5	4	3	3	3	3	3	3	\$350,000
Fork Lift Truck	-	-	-	-	-	-	-	2	2	2	\$72,000
Back Hoe 3/4 Yard	1	1	1	1	1	1	1	1	1	1	\$315,000
Back Hoe 3/8 Yard	-	1	1	1	1	1	1	1	1	1	\$140,000
Tractors and Attachments	1	1	1	1	1	1	1	1	1	1	\$120,000



**City of Oshawa
Service Standard Calculation Sheet**

Service: Roads and Related Vehicles
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Vehicle)
Front End Loaders AWD	4	4	4	3	3	3	3	3	3	3	\$335,000
Skid Steer Loader	1	1	1	1	1	1	1	1	1	-	\$95,000
Litter Vacuum	-	-	-	1	1	1	1	1	1	2	\$77,000
Water Pumps 1-3"	5	5	5	5	5	5	5	5	5	3	\$3,500
Stream Generators	3	3	3	3	3	3	3	3	3	2	\$39,000
Arrowboard Warning Devices	1	2	2	2	2	2	2	2	6	6	\$19,500
Portable Air Compressors	3	3	3	3	3	2	2	2	2	2	\$40,000
Line Marking Machines	2	2	2	2	2	2	2	2	2	2	\$11,000
Concrete Grinders	3	3	3	3	3	3	3	2	2	1	\$4,000
Portable Electrical Generator	2	2	2	2	2	2	2	2	2	2	\$3,200
Trailers	9	10	10	10	9	9	9	8	7	10	\$12,000
Asphalt Trailer	1	1	1	1	1	1	1	1	1	1	\$20,000
Asphalt Recycler	1	1	1	1	1	1	1	1	1	1	\$50,000
Sewer Cleaner	1	1	1	1	1	1	1	1	1	1	\$120,000
Power Scythes	5	5	5	5	5	5	5	5	5	5	\$1,300
Equipment Power Washer	1	1	1	1	1	1	1	1	1	1	\$18,000
Concrete Saws - Small	3	3	3	3	3	3	3	3	3	3	\$2,000
Concrete Saw - Large	1	1	1	1	1	1	1	1	1	1	\$20,000



**City of Oshawa
Service Standard Calculation Sheet**

Service: Roads and Related Vehicles
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Vehicle)
Breakers - Tampers Air	14	12	6	6	6	6	6	6	6	6	\$2,000
Chainsaw	3	3	3	4	4	4	4	4	4	3	\$900
Tamper - Gas	9	9	9	9	9	9	10	10	10	10	\$3,000
Tar Kettles	1	1	1	1	1	1	1	1	1	1	\$5,000
Total	155	155	149	144	143	143	143	144	144	144	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

10 Year Average	2009-2018
Quantity Standard	0.0010
Quality Standard	\$106,240
Service Standard	\$106

P.C. Amount (before deductions)	Buildout
Forecast Population	68,105
\$ per Capita	\$106
Eligible Amount	\$7,235,475



**City of Oshawa
Service Standard Calculation Sheet**

Service: Fire Facilities
Unit Measure: ft² of building area

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Firehall #1	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	\$495
Firehall #2	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	\$517
Firehall #3	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	\$517
Firehall #4	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	\$514
Firehall #5	17,890	17,890	17,890	17,890	17,890	17,890	17,890	17,890	17,890	17,890	\$517
Firehall #6								10,675	10,675	10,675	\$517
Total	63,890	63,890	63,890	63,890	63,890	63,890	63,890	74,565	74,565	74,565	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.4336	0.4313	0.4271	0.4237	0.4194	0.4140	0.4091	0.4676	0.4621	0.4519

10 Year Average	2009-2018
Quantity Standard	0.4340
Quality Standard	\$509
Service Standard	\$221

D.C. Amount (before deductions)	Buildout
Forecast Population	68,105
\$ per Capita	\$221
Eligible Amount	\$15,038,946



**City of Oshawa
Service Standard Calculation Sheet**

Service: Fire Vehicles
Unit Measure: No. of vehicles and equipment

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Value (\$/Vehicle)
Pumper	8	8	8	8	8	8	8	8	8	9	\$750,000
Tanker	1	1	1	1	1	1	1	1	1	1	\$450,000
Rescue	1	1	1	1	1	1	1	1	1	1	\$800,000
Aerial	3	3	3	3	3	3	3	3	3	3	\$1,550,000
Hazmat Trailer	1	1	1	1	1	1	1	1	1	1	\$500,000
3/4 ton pick-up	1	1	1	1	1	1	1	1	1	1	\$60,000
Command Vehicle	1	1	1	1	1	1	1	1	1	1	\$120,000
Car	9	9	9	9	9	10	10	10	10	10	\$40,000
Pick-up Truck	4	4	4	4	4	5	5	5	5	5	\$60,000
Bunker Gear	323	325	326	323	324	324	308	299	295	294	\$2,200
Portable Radios	120	120	120	120	120	73	73	73	73	73	\$6,700
Mobile Radios	21	21	21	21	21	14	14	14	14	14	\$6,600
Total	493	495	496	493	494	442	426	417	413	413	

Population	147,362	148,130	149,607	150,781	152,320	154,315	156,158	159,458	161,376	164,987
Per Capita Standard	0.0033	0.0033	0.0033	0.0033	0.0032	0.0029	0.0027	0.0026	0.0026	0.0025

10 Year Average	2009-2018
Quantity Standard	0.0030
Quality Standard	\$26,773
Service Standard	\$80

D.C. Amount (before deductions)	Buildout
Forecast Population	68,105
\$ per Capita	\$80
Eligible Amount	\$5,470,194



Appendix C

Long -Term Capital Operating Cost Examination



Appendix C: Long-Term Capital and Operating Cost Examination

As a requirement of the D.C.A., 1997 under subsection 10(2)(c), an analysis must be undertaken to assess the long-term capital and operating cost impacts for the capital infrastructure projects identified within the D.C. As part of this analysis, it was deemed necessary to isolate the incremental operating expenditures directly associated with these capital projects, factor in cost savings attributable to economies of scale or cost sharing where applicable, and prorate the cost on a per unit basis (i.e. sq.ft. of building space, per vehicle, etc.). This was undertaken through a review of the City's 2017 Financial Information Return.

In addition to the operational impacts, over time the initial capital projects will require replacement. This replacement of capital is often referred to as lifecycle cost. By definition, lifecycle costs are all the costs which are incurred during the life of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. The method selected for lifecycle costing is the sinking fund method which provides that money will be contributed annually and invested, so that those funds will grow over time to equal the amount required for future replacement.

Table C-1 depicts the annual operating impact resulting from the proposed gross capital projects at the time they are all in place. It is important to note that, while municipal program expenditures will increase with growth in population, the costs associated with the new infrastructure (i.e. facilities) would be delayed until the time these works are in place.



Table C-1
Operating and Capital Expenditure Impacts for Future Capital Expenditures

SERVICE	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
Transportation	46,338,170	9,219,957	55,558,127
Fire Protection	669,023	9,676,776	10,345,799
Watercourse Improvements	990,961	529,881	1,520,842
Parks, Recreation and Trails	7,392,195	4,843,883	12,236,078
Library Services	692,670	1,244,696	1,937,366
Administration			
Parking	-	-	-
Waste Diversion	27,815	218,115	245,930
Total	56,110,834	25,733,307	81,844,141



Appendix D

Local Service Policy



Appendix D: Local Service Policy

Introduction

This policy sets out the City of Oshawa's general guidelines on determining growth-related engineering infrastructure and parkland development that may be eligible for funding, in whole or in part, by development charges (D.C.).

The Development Charges Act, 1997 (D.C.A.) governs what constitutes eligible services for D.C. funding, and which services are considered ineligible. In the development of a new subdivision or site plan, certain elements that are considered D.C. eligible services may be cost-shared with the developer(s), or creditable or reimbursable if the developer is doing the work on behalf of the City. There are also elements of the developer works that are considered to be local services, which are the infrastructure or component thereof required to facilitate a development, and are deemed to provide local rather than City-wide benefits. Section 59 of the D.C.A. considers local services to be a direct developer responsibility, which means that the capital costs shall be borne entirely by the developer(s), with no credit or reimbursement from the City.

These guidelines are developed in connection with Section 59 of the D.C.A. and Section 51 and 53 of the Planning Act.

The following policy guidelines are general principles by which staff will be guided in considering development applications. However, each application will be considered, in the context of these policy guidelines, as subsection 59(2) of the D.C.A., and the relationship between any existing and proposed development in the surrounding area as well as the location and type of services required and their relationship to the proposed development and to existing and proposed development in the area. Local services are not included in the development charge calculation,



Services Related to A Highway

A developer is financially responsible for all roads which are necessitated by his development and located within and/or abutting the plan of subdivision, with City contributions as follows:

Local Road	nil
Collector Road	Only the centre strip (1.5 m wide) based on a standard pavement width of 10 m.
Type "C" Arterial Road	Type "C" Arterial Road - Only the centre strip (2.5 m wide) based on a standard pavement width of 11 m and 100% for culverts/bridges, if required.
Type "B" Arterial Road	The City will contribute a fixed payment to the developer for the excess pavement capacity for all Type "B" arterial roads within or abutting a plan of subdivision on the basis of the difference in width only between a local residential street (8.5 metres wide) and a Type "B" arterial road (14.5 metres wide);
Type "A" Arterial Road	100% City's cost.

Watercourse Improvements

Developers are required to pay for any erosion protection work to adjacent lands they are developing, where erosion works are necessary to protect the development. This work will be determined on a site basis and is over and above any work for which watercourse development charges are collected.



Parkland Development

With respect to parkland dedications, developer responsibilities include preparation of a concept plan and overall grading plan, grading, top soil, sodding, fencing and sub-surface drainage.



Appendix E

Proposed D.C. By-law



By-law xx-2019 of The Corporation of the City of Oshawa

Whereas:

1. The Corporation of the City of Oshawa currently has and will continue to experience growth through development;
2. Development requires the provision of physical infrastructure and other services by the City;
3. The Development Charges Act, 1997, S.O. 1997, c. 27 (the “Act”) authorizes the Council of a municipality to pass by laws for the imposition of development charges against land;
4. Council desires to ensure that the capital cost of meeting development related demands for, or the burden on, City services does not place an undue financial burden on the City or its taxpayers and that new development contributes no more than the net capital cost attributable to providing the historic level of services and meeting the requirements of s. 5(1) of the Act;
5. The City has undertaken a study of, among other matters, the matters set out in s. 10 of the Act and s. 8 of O. Reg. 82/98, including services, service levels, expected development, development related facilities and the costs thereof;
6. At its meeting on March 18, 2019, Council directed that a public meeting pursuant to s. 12 of the Act be held;
7. The “City of Oshawa 2019 Development Charge Background Study” dated April 10, 2019 prepared by Watson and Associates Economists Ltd. and the proposed development charge by-law were posted to the City’s website at least sixty days prior to the passage of the development charges bylaw, made available to the public at least two weeks prior to the public meeting and Council gave at least twenty days’ notice to the public in accordance with s. 12 of O. Reg. 82/98;
8. A public meeting pursuant to s. 12 of the Act was held on May 2, 2019, and Council heard and received comments and representations from all persons who requested to be heard;

Now therefore the Council of The Corporation of the City of Oshawa hereby enacts as follows:



1. Interpretation

- 1.1 In this By law, where words appear with their first letter capitalized, the words are intended to have the meanings set out for them in the lettered paragraphs of this Section:
- (a) “Accessory”, in reference to the use of a building or structure means that the building or structure is naturally and normally incidental to or subordinate in purpose or both, and is exclusively devoted to a principal use, building or structure;
 - (b) “Act” means the Development Charges Act, 1997, S.O. 1997, c. 27;
 - (c) “Agricultural”, in reference to use, means land, buildings or structures used, designed or intended to be used solely for an “agricultural operation” as that term is defined in section 1 of the Farming and Food Production Protection Act, 1998, S.O. 1998, c. 1;
 - (d) “Apartment Dwelling Unit” means any Dwelling Unit which is not a Single Detached Dwelling, a Semi-Detached Dwelling, a Dwelling Unit within a Townhouse, or either of the two Dwelling Units comprising a Duplex and includes a Stacked Townhouse unit;
 - (e) “Back-to-Back Townhouse” means each of two Townhouses that shares a common rear wall with the other for at least 50% of its width;
 - (f) “Bed and Breakfast Establishment” means a Single Detached Dwelling in which not more than three (3) Bedrooms are made available for the temporary accommodation of travellers, to whom meals may be furnished, but does not include a Hotel or a Lodging House;
 - (g) “Bedroom” means a habitable room used or capable of use for sleeping accommodation, including a den, study or other similar area, but excluding a living room, dining room, kitchen, family room, utility room, recreational room, bathroom, sunroom or porch;
 - (h) “Board of Education” has the same meaning as the term “board” defined in the Education Act;
 - (i) “Building Code Act” means the Building Code Act, 1992, S.O. 1992, c. 23;
 - (j) “By-law” means this By-law, including its recitals and schedules and all



future amendments including successor By-laws;

- (k) “City” means The Corporation of the City of Oshawa;
- (l) “Capital Levy” means a City fee or charge levied or required to be paid prior to November 22, 1991 as a result of development approval, including land division, for arterial and collector roads, recreation and parks facilities and watercourse improvements, but excluding payments collected by the City in consideration of “best efforts” clauses or other agreements to collect and remit monies in partial or full payment for front-ending the payment for the installation of City services or facilities;
- (m) “Commercial”, in reference to use, means land, buildings or structures of any kind whatsoever used, designed or intended to be used for a Non-Residential use other than an Agricultural use or an Industrial use;
- (n) “Correctional Group Home” means a Group Home containing one or more persons who have been placed on probation, released on parole, admitted for correctional purposes, or found to be not criminally responsible for a crime by virtue of mental incapacity;
- (o) “Crisis Care Residence” means an establishment that provides a means of immediate, temporary accommodation and assistance for a short-term period, which is generally less than one week for the majority of the residents and includes a hostel;
- (p) “Development” means:
 - i) any activity or proposed activity in respect of land that requires one or more of the actions referred to in section 2.3 of this By law;
 - ii) the redevelopment of land; or
 - iii) the redevelopment, expansion, extension or alteration, or any two or more of them, of a use, building or structure;
- (q) “Development Charge” means a charge imposed by this By-law;
- (r) “Duplex” means the whole of a building, which was not originally constructed as a Single Detached Dwelling, that consists of two Dwelling Units, one of which has at least 50% of its Gross Floor Area located wholly or partially above the other and each of which has an independent entrance either directly from the outside or through a common vestibule or hallway;



- (s) “Dwelling Unit” means a room or a series of rooms containing toilet and culinary facilities designed for Residential use as a single housekeeping establishment;
- (t) “Education Act” means the Education Act, R.S.O. 1990, c. E.2;
- (u) “Gross Floor Area” means:
- i) for a Residential Development, the total floor area, measured between the outside of exterior walls or between the outside of exterior walls and the centre line of Party Walls dividing the building from another building, of all floors above the average level of finished ground adjoining the building at its exterior walls; and
 - ii) for a Non-Residential Development, the total floor area of all floors, whether above or below grade, measured between the outside of exterior walls, or between the outside of exterior walls and the centre line of Party Walls and, without limitation, includes
 - (A) cellars
 - (B) basements
 - (C) corridors
 - (D) lobbies
 - (E) half-storeys
 - (F) mezzanines and
 - (G) areas occupied by interior walls or partitions
- but does not include
- (A) elevator shafts
 - (B) stairwells
 - (C) roof areas
 - (D) crawl spaces
 - (E) indoor refuse storage or collection areas
 - (F) mechanical or electrical rooms or
 - (G) areas used for parking or loading, whether in the main building or an Accessory building.
- (v) “Group Home” means a Dwelling Unit housing three (3) to ten (10) persons, exclusive of staff, who, by reason of their emotional, mental, social or physical condition or legal status require a group living arrangement for their well-being, and who live under responsible supervision, with the group home licensed or approved for funding under Provincial statutes;



- (w) “Hospital” has the same meaning as the term, “hospital”, defined in section 1 of the Public Hospitals Act, R.S.O. 1990, c. P.40;
- (x) “Hotel” means a building or part of a building or group of buildings mainly used for the purpose of catering to the needs of the travelling public by furnishing sleeping accommodation and includes a motel or motor hotel but does not include a Bed and Breakfast Establishment or a Lodging House;
- (aa) “Industrial”, in reference to use, means land, buildings or structures of any kind whatsoever or any portion thereof, used, designed or intended to be used for or in connection with,
 - i) manufacturing, producing, processing, storing or distributing something,
 - ii) research or development in connection with manufacturing, producing or processing something,
 - iii) retail sales by a manufacturer, producer or processor of something they manufactured, produced or processed, if the retail sales are at the site where the manufacturing, production or processing takes place,
 - iv) office or administrative purposes, if they are,
 - (A) carried out with respect to manufacturing, producing, processing, storage or distributing of something, and
 - (B) in or attached to the building or structure used for that manufacturing, producing, processing, storage or distribution;
- (bb) “Local Board” has the same meaning as the term, “local board”, defined in the Act;
- (cc) “Lodging House” means a building or part of a building, containing no fewer than three Lodging Units, which does not appear to function as a Dwelling Unit, although one may be included with the Lodging Units. It includes, without limitation, a rooming house and a boarding house, a fraternity house, a sorority house, a student residence and an apartment hotel. It does not include a Hotel, a Crisis Care Residence, a Group Home, a Correctional Group Home, a Bed and Breakfast Establishment, a Nursing Home or a Retirement Residence.
- (dd) “Lodging Unit” means one or more rooms within a building used or designed to be used for sleeping accommodations, each of which may contain cooking or washroom facilities, but not both.
- (ee) “Lot” means a parcel of land which is:



- i) shown as a lot or block on a registered plan of subdivision; or
 - ii) described in a single transfer/deed of land of legal effect registered in the Land Registry Office or the Land Titles Office for the Land Registry Division of Durham;
- (ff) “Medical Clinic” means that a building or part of a building in which no less than one thousand four hundred and eighty-six square metres (1,486 m²) of Gross Floor Area is used by physicians, surgeons, dentists, drugless practitioners or any other health care professionals, their staff and their patients, for the purpose of consultation, diagnosis or treatment of humans and may include medical laboratories or an ancillary pharmacy;
- (gg) “Non-profit Institution” means
- i) a “registered charity” as defined in subsection 248(1) of the Income Tax Act, R.S.C. 1985, c. 1 (5th Supp.), as amended;
 - ii) a corporation that is a non-profit organization for the purposes of paragraph 57(1)(b) of the Corporations Tax Act, R.S.O. 1990, c. C.40; or
 - iii) a “place of worship” that is used primarily for worship and is exempt from taxation as a place of worship under the Assessment Act;
- (hh) “Non-Residential” in reference to use, means land, buildings or structures of any kind whatsoever used, designed or intended to be used for other than a Residential use.
- (ii) “Nursing Home” has the same meaning as the term, “nursing home”, defined in subsection 1(1) of the Nursing Homes Act, R.S.O. 1990, c. N.7;
- (jj) “Office” means a building or part of a building in which one or more persons are employed in the management, direction and conducting of a business, agency, brokerage or a labour or fraternal organization or in which professionally qualified persons and their staff provide services to clients or patients but does not include any part of a building in which goods, wares, merchandise, foodstuffs or farm produce or other substances, articles or things are displayed, stored, or offered for wholesale or retail sale or rental;
- (kk) “Oshawa” means the geographical area under the jurisdiction of the City;
- (ll) “Owner” means the legal or equitable owner of land;



- (mm) “Party Wall” means a wall jointly owned and used by two parties under an easement agreement or by right in law and erected at or upon a line separating two parcels of land each of which may be lawfully transferred or conveyed in accordance with the provisions of the Planning Act;
- (nn) “Planning Act” means the Planning Act, R.S.O. 1990, c. P.13;
- (oo) “Residential” in reference to use, means land, buildings or structures of any kind whatsoever or any portion thereof, used, designed or intended to be used for one or more individuals as living accommodations or combined live/work accommodations;
- (pp) “Retirement Residence” means a residential building or the residential portion of a mixed-use building which provides accommodation for persons of retirement age, where common facilities for the preparation and consumption of food are provided for the residents of the building, and where each unit or living accommodation has separate sanitary facilities, less than full culinary facilities and a separate entrance from a common hall;
- (qq) “Retirement Residence Unit” means a unit within a retirement residence;
- (rr) “Semi-Detached Dwelling” means a Residential building originally constructed so as to consist entirely of two Dwelling Units, attached by vertical walls, each having a separate entrance from the exterior;
- (ss) “Single Detached Dwelling” means a Residential building which is separate and detached from other buildings or structures and which contains only a Dwelling Unit but does not include a mobile home;
- (tt) “Stacked Townhouse” means each of two (2) Townhouses that is attached horizontally to the other Townhouse, two (2) Townhouses high;
- (uu) “Street Townhouse Building” means a Townhouse for which each Dwelling Unit with the Townhouse abuts and has its own driveway access to an improved street.
- (vv) “Temporary” in reference to use, means land, buildings or structures of any kind whatsoever or any portion thereof, used, designed or intended to be used for a period not exceeding three (3) years; and
- (ww) “Townhouse” means a building divided vertically into at least three Dwelling Units, attached by common walls at least six metres (6.0m) in length and at least one storey in height, in addition to any basement, with each Dwelling Unit



having a separate entrance from the outside other than a stacked townhouse.

(xx) “Triplex” means an apartment building comprising 3 dwelling units.

- 1.2 The captions, article and sections names and numbers appearing in this By-law are for convenience of reference only and have no effect on its interpretation. This By-law is to be read with all changes of gender and number required by the context.
- 1.3 If any section, subsection, paragraph, clause, sub-clause, item or any of the words contained in this By-law are held wholly or partially illegal, invalid or unenforceable by any court or tribunal of competent jurisdiction, the remainder of this By-law shall not be affected by the judicial holding, but shall remain in full force and effect.
- 1.4 Each reference to Provincial legislation in this By-law is a reference to the most current version of that Provincial legislation and, in every case, includes all applicable amendments to the legislation, including successor legislation.

2. Application

- 2.1 This By-law applies to all land within Oshawa unless specifically exempted by this By-law or by statute or regulation.
- 2.2 All Development in Oshawa, unless expressly excluded or exempted in this By-law, is deemed to increase the need for the services set out in Schedule “A” to this By-law.
- 2.3 Subject to the provisions of this By-law, Development Charges shall be imposed against all Development which requires any of the following:
 - (a) the passing of a zoning by-law, or an amendment to a zoning by-law under section 34 of the Planning Act;
 - (b) the approval of a minor variance under section 45 of the Planning Act which involves a change in use, intensification of use or expansion of use;
 - (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 section 9 of the Condominium Act, 1998, S.O. 1998, c. 19; or
 - (g) the issuing of a permit under the Building Code Act in relation to a building



or structure.

- 2.4 No Development Charge shall be imposed where the only effect of an action mentioned in section 2.3 of this By-law is to permit the
- (a) enlargement of an existing Dwelling Unit;
 - (b) creation or enlargement of an Accessory building for a lawful Residential use;
 - (c) creation of one or two additional Dwelling Units within an existing Single Detached Dwelling; or
 - (d) the creation of one additional Dwelling Unit in any other existing Residential building where the total Gross Floor Area of the additional Dwelling Unit is equal to or less than the Gross Floor Area of the smallest Dwelling Unit contained within the Residential building.
- 2.5 No Development Charge shall be imposed with respect to any Development:
- (a) on lands designated under federal law as land reserved for the exclusive use of aboriginal peoples;
 - (b) by, on behalf of, or on lands owned by and used for the purposes of a municipality, a Local Board or a Board of Education;
 - (c) on lands wholly within that part of Oshawa partially known as the Urban Growth Centre and as depicted in Schedule “D” to this By-law;
 - (d) on that part of lands used solely for the purposes of
 - i) a Non-Profit Institution;
 - ii) a Hospital; or
 - iii) a Nursing Home;
 - (e) respecting a new Industrial building or structure or the enlargement of an existing Industrial building or structure;
 - (f) respecting a Temporary building or structure;
 - (g) respecting an Agricultural building or structure;
 - (h) respecting an Apartment Dwelling Unit on lands within that part of Oshawa shown as the shaded portion on the maps in Schedule “E” to this By-law;
 - (i) respecting a Townhouse Dwelling other than a Street Townhouse Building on lands within that part of Oshawa shown as the shaded portion on the maps in Schedule “E” to this By-law; or
 - (j) respecting an Apartment Dwelling Unit or a Townhouse Dwelling Unit, except back to back townhouses, on lands within that part of Oshawa as shown as the shaded portion of the map in Schedule “F” to this By-law; or



(k) respecting an Apartment Dwelling Unit or a Townhouse Dwelling other than a Street Townhouse Building on the property shown on Schedule “G”, provided building permits are issued for the units within three years of the in force date of this by-law.

2.6 The Development Charge imposed with respect to that part of a building used solely for the purposes of a Medical Clinic shall be equal to 50% of the Commercial Development Charge.

2.7 No more than one Development Charge for each service designated in Schedule “A” to this By-law shall be imposed upon any lands, buildings or structures to which this By-law applies even though two or more of the actions described in section 2.3 of this By-law are required before the lands, buildings or structures can be developed for a single Development. However, nothing in this section prevents the imposition of a Development Charge in respect of subsequent Development.

2.8 This By-law does not limit the City’s ability to require, as a condition or in an agreement pursuant to sections 50, 51 or 53 of the Planning Act, 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, or local services to be installed or paid for by the Owner as a condition of approval under section 53 of the Planning Act.

3. Rules for Calculation and Collection of Development Charges

3.1 The Development Charges set out in Schedule “B” to this By-law shall be imposed on Residential uses of lands, buildings or structures, including Residential uses Accessory to a Non-Residential use and, in the case of a mixed use building or structure, according to the type of Residential use, and calculated with respect to each of the services according to the type of Residential use.

3.2 Notwithstanding section 3.1, residential duplex and triplex buildings developed on lands within that part of Oshawa, where zoning permits a single detached dwelling, will be subject to the charge for a single detached dwelling unit.

3.3 The development charges imposed on a retirement residence unit shall be payable at the rate applicable to an apartment of one bedroom or smaller.

3.4 The Development Charges set out in Schedule “B” to this By-law shall be imposed on Non-Residential uses of lands, buildings or structures and, in the case of a mixed used building or structure, on the Non-Residential uses in the mixed use building or structure, calculated with respect to each of the services according to the Gross Floor Area of the Non-Residential use.



- 3.5 Schedule “C” to this By-law prescribes the rules for determining whether a Development Charge is payable in any particular case and for determining the amount of the Development Charge.
- 3.6 Development Charges shall be adjusted semi-annually on January 1 and July 1 each year, commencing the 1st day of January, 2020, by the Statistics Canada Quarterly “Capital Expenditure Price Statistics (cat. 62-007-X)”, published each year or such other equivalent publication or as otherwise prescribed by regulation pursuant to the Act.
- 3.7 Development Charges shall be payable by cash or by certified cheque in Canadian funds.
- 3.8 If a Development does not require a building permit pursuant to the Building Code Act but does require one or more of the other actions described in section 2.3 of this By-law, then the Development Charge will nonetheless be payable in respect of such Development.

4. Credits and Prepayments

- 4.1 Notwithstanding any other provision of this By-law, where a Development involves
- (a) the demolition of buildings or structures that have been in existence for a minimum of five (5) years pursuant to a demolition permit issued pursuant to the Building Code Act within the one hundred twenty (120) month period preceding the issuance of a building permit pursuant to the Building Code Act respecting the Development, or
 - (b) the conversion of all or part of a building or structure that has been in existence for a minimum of five (5) years from one principal use to another principal use on the same land.

the Development Charge otherwise payable with respect to such Development shall be reduced by the following amounts:

- (c) in the case of a Residential building or structure, or the Residential uses in a mixed-use building or structure, an amount calculated by multiplying the applicable Development Charge set out in Schedule “B” to this By-law by the number representing the type of Dwelling Units that have been or will be demolished or converted to another principal use; and
- (d) in the case of a Non-Residential building or structure, or the Non-Residential uses in a mixed-use building or structure, an amount calculated by multiplying the applicable Development Charge set out in Schedule “B” to this By-law by



the Gross Floor Area that has been or will be demolished or converted to another principal use;

provided that such amounts shall not exceed, in total, the amount of the Development Charge otherwise payable with respect to such Development.

(e) Where a demolition permit of a building or structure is issued on or after July 1, 2019, no credit will be provided for the demolition of schools or places of worship that are exempt under this by-law.

4.2 For the purpose of section 4.1(a) of this By-law, the issuance of the demolition permit and the actual demolition to the satisfaction of the Chief Building Official may post date the issuance of the building permit by no more than twenty-four (24) months.

4.3 Notwithstanding section 3.6 of this By-law, where, in respect of a Development,

(a) all requirements for the issuance of a building permit under subsection 8(2) of the Building Code Act have been satisfied before the date of an adjustment of Development Charges pursuant to section 3.6 of this By-law; and

(b) an amount equal to the Development Charge in effect as at the date of payment has been paid before the date of the particular adjustment of Development Charges contemplated by paragraph (a) of this section 4.3

the applicable Development Charge is the amount contemplated by paragraph (b) of this section 4.3.

4.4 Notwithstanding sections 4.3 and 6.2 of this By-law, where, in respect of a Development,

(a) all requirements for the issuance of a building permit under subsection 8(2) of the Building Code Act have been satisfied before July 1, 2019; and

(b) an amount equal to the Development Charge in effect as at June 30, 2019 pursuant to the City's By-law 80-2014 as amended, has been paid by or before July 1, 2019

the applicable Development Charge is the amount contemplated by paragraph (b) of this section 4.4.

4.5 Where, as demonstrated to the satisfaction of the Chief Building Official, a Capital Levy was paid to the City in respect of a development approval on a Lot and a Development Charge is payable under this By-law as a result of Development on that same Lot, a credit will be provided against the Development Charge to the current Owner of that Lot upon that Owner making a written request to the City's Chief



Building Official subject to the following:

- (a) the amount of the credit shall be limited to the amount of the Capital Levy paid for services that are being funded under this By-law,
- (b) no credit for payment of a Capital Levy was previously provided to any person in respect of any Development on that same Lot, whether heretofore or hereafter occurring,
- (c) this credit shall not operate to reduce a Development Charge to less than zero, and
- (d) no credit shall be given for any interest on or indexing of the Capital Levy paid;

however, notwithstanding subsections (a) through (d) hereof, where, as demonstrated to the satisfaction of the Chief Building Official, a Capital Levy was paid to the City in respect of a development approval on a Lot and a Development Charge in relation to a Single Detached Dwelling is payable under this By-law as a result of Development on that same Lot, no Development Charge shall be payable subject to the following:

- (e) no credit for payment of a Capital Levy was previously provided to any person in respect of any Development on that same Lot, whether heretofore or hereafter occurring,
- (f) this credit shall not operate to reduce a Development Charge to less than zero,
- (g) no credit shall be given for any interest on or indexing of the Capital Levy paid, and
- (h) the credit contemplated under this section 4.5 shall only be applied to the first sixteen (16) Lots that comply with the criteria prescribed by this section 4.5.

5. Front Ending Agreements

- 5.1 The City may enter into front-ending agreements with Owners in accordance with the provisions of the Act.

6. Miscellaneous

- 6.1 All complaints pursuant to section 20 of the Act or section 257.85 of the Education Act, R.S.O 1990, c. E.2 shall be heard by City Council sitting in Committee of the Whole. The City Council shall conduct hearings in accordance with the provisions of the Statutory Powers Procedure Act, R.S.O. 1990, c. S.22 and other applicable law.
- 6.2 On the date this By-law comes into force By-law 80-2014, as amended, shall be repealed.



6.3 This By-law shall come into force and take effect on July 1, 2019.

6.4 This By-law may be cited as the “Development Charges By-law”.

By-law passed this tenth day of June, 2019.

Mayor

City Clerk



Schedule “A” to By-law xx-2019 of The Corporation of the City of Oshawa

Designated Municipal Services

The following are the designated municipal services for each of which the City maintains a reserve fund:

1. Transportation
2. Fire Protection
3. Parks, Recreation and Trails
4. Library Services
5. Administration (Development Related Studies)
6. Watercourse Improvements
7. Parking
8. Waste Diversion



Schedule “B” to By-law xx-2019 of The Corporation of the City of Oshawa

Schedule of Development Charges

Service	RESIDENTIAL PER DWELLING UNIT						NON-RESIDENTIAL (per sq.m. of G.F.A)	
	Single and Semi-Detached Dwelling	Duplex (for two units)	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Townhouse Dwelling	Lodging House (per unit)	Industrial	Commercial/ Institutional
Municipal Wide Services:								
Transportation	\$15,415	\$19,404	\$9,702	\$5,956	\$12,418	\$5,352	\$47.47	\$124.97
Fire Protection	\$533	\$670	\$335	\$206	\$429	\$185	\$1.61	\$4.31
Watercourse Improvements	\$1,003	\$1,262	\$631	\$388	\$808	\$348	\$4.31	\$4.74
Parks, Recreation and Trails	\$7,982	\$10,048	\$5,024	\$3,084	\$6,430	\$2,772	\$3.77	\$3.77
Library Services	\$333	\$420	\$210	\$129	\$268	\$116	\$0.11	\$0.11
Administration	\$61	\$76	\$38	\$24	\$49	\$21	\$0.22	\$0.54
Parking	\$16	\$20	\$10	\$6	\$13	\$6	\$0.00	\$0.11
Waste Diversion	\$15	\$18	\$9	\$6	\$12	\$5	\$0.00	\$0.11
Total Municipal Wide Services	\$25,358	\$31,918	\$15,959	\$9,799	\$20,427	\$8,805	\$57.48	\$138.64



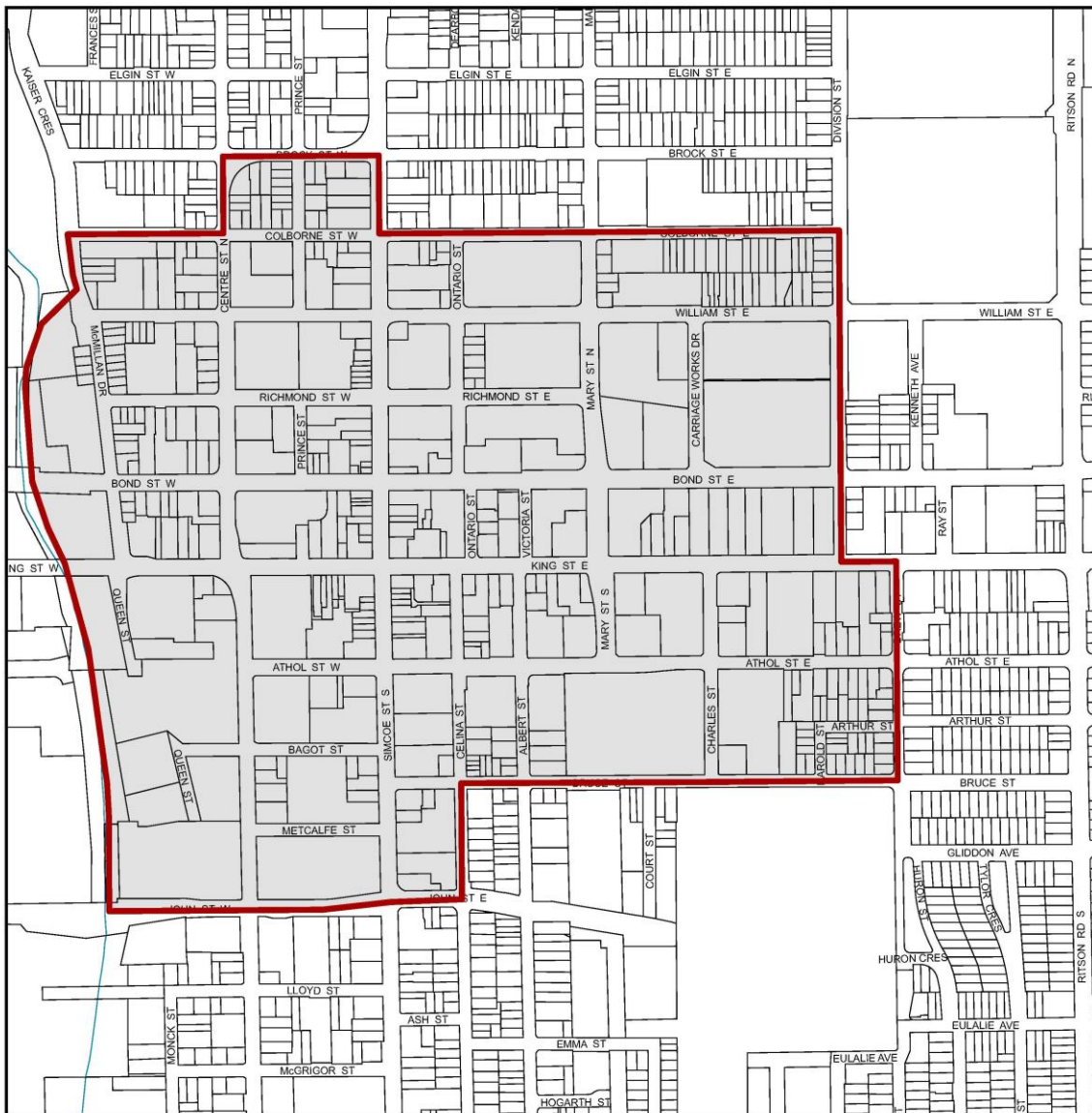
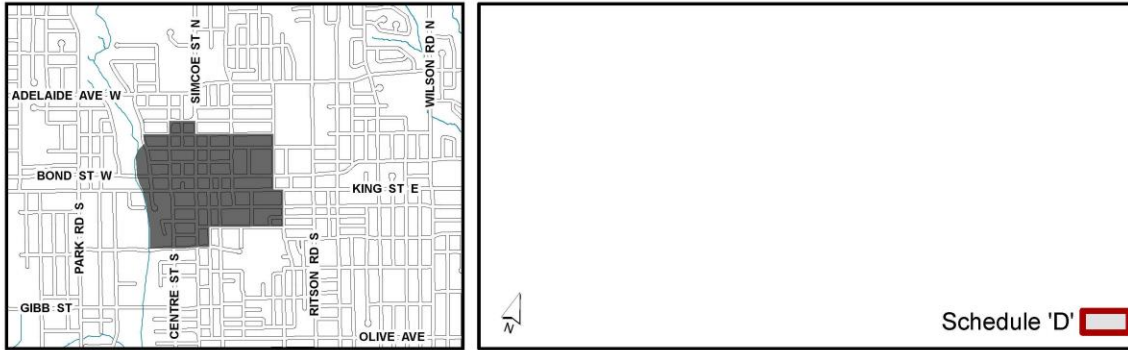
Schedule “C” to By-law xx-2019 of The Corporation of the City of Oshawa

Rules for Application of the Development Charges By-law

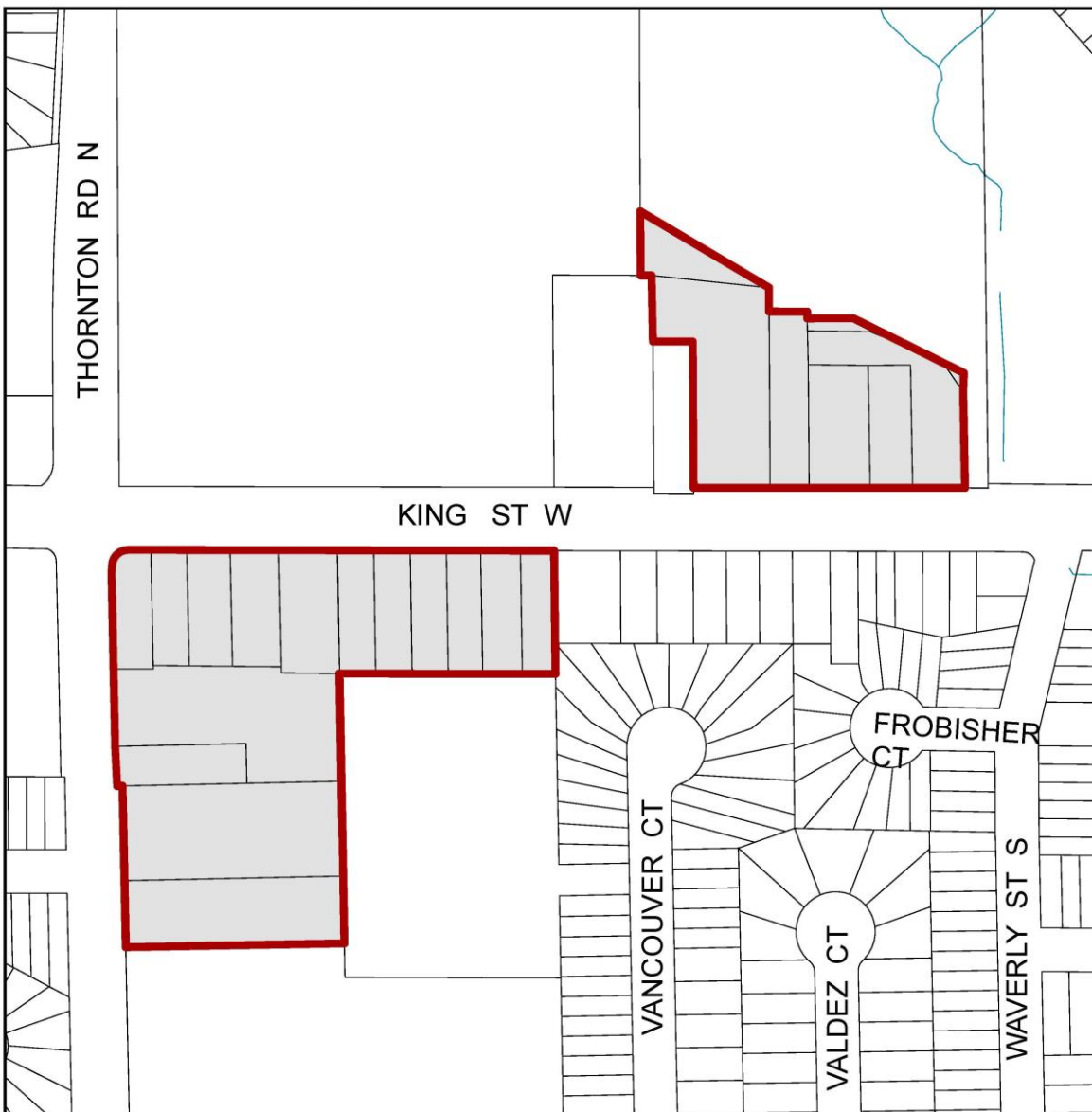
1. Where a Development is proposed which requires any of the actions set out in section 2.3 of this By-law, the rules in this Schedule shall be applied to determine the application of this By-law. These rules apply to all Development.
2. The Development must be reviewed to determine whether it is exempt in whole or in part pursuant to one or more provisions of this By-law.
3. The Development must be reviewed to determine whether it qualifies for the phasing of Development Charges in accordance with sections 4.3 or 4.4 of this By-law.
4. Subject to rule 3, the figures in Schedule “B” must be examined to determine the effect of any indexing which has occurred pursuant to section 3.6 of this By-law. The figures to apply must reflect any such indexing.
5. The figures in Schedule “B” do not need to be adjusted in accordance with paragraph 5 (1) 6 of the Act because the Study has taken those considerations into account in determining the figures in Schedule “B”.
6. The Development must be classified as Residential, Non-Residential or mixed-use Development.
7. For Residential Development, the total number and type of Dwelling Units set out in Schedule “B” must be determined. The rates as shown in Schedule “B” (adjusted, if applicable, in accordance with rules 3 or 4) are then applied to the number of Dwelling Units contemplated by the Development to determine the total amount of Residential Development Charges payable.
8. For Non-Residential Development, the Gross Floor Area of the Development must be determined. The rates as shown in Schedule “B” (adjusted, if applicable, in accordance with rules 3 or 4) are then applied to the Gross Floor Area contemplated by the Development to determine the total amount of Non-Residential Development Charges payable.
9. For mixed Residential and Non-Residential Development, Development Charges are determined by applying each of rules 7 and 8 to each part of the Development comprising, respectively, Residential Development and Non-Residential Development.
10. The Development must be examined to determine whether any credits contemplated by article 4 of this By-law. If so, such credits are applied against the total Development Charges payable pursuant to rules 7, 8 or 9, as applicable.

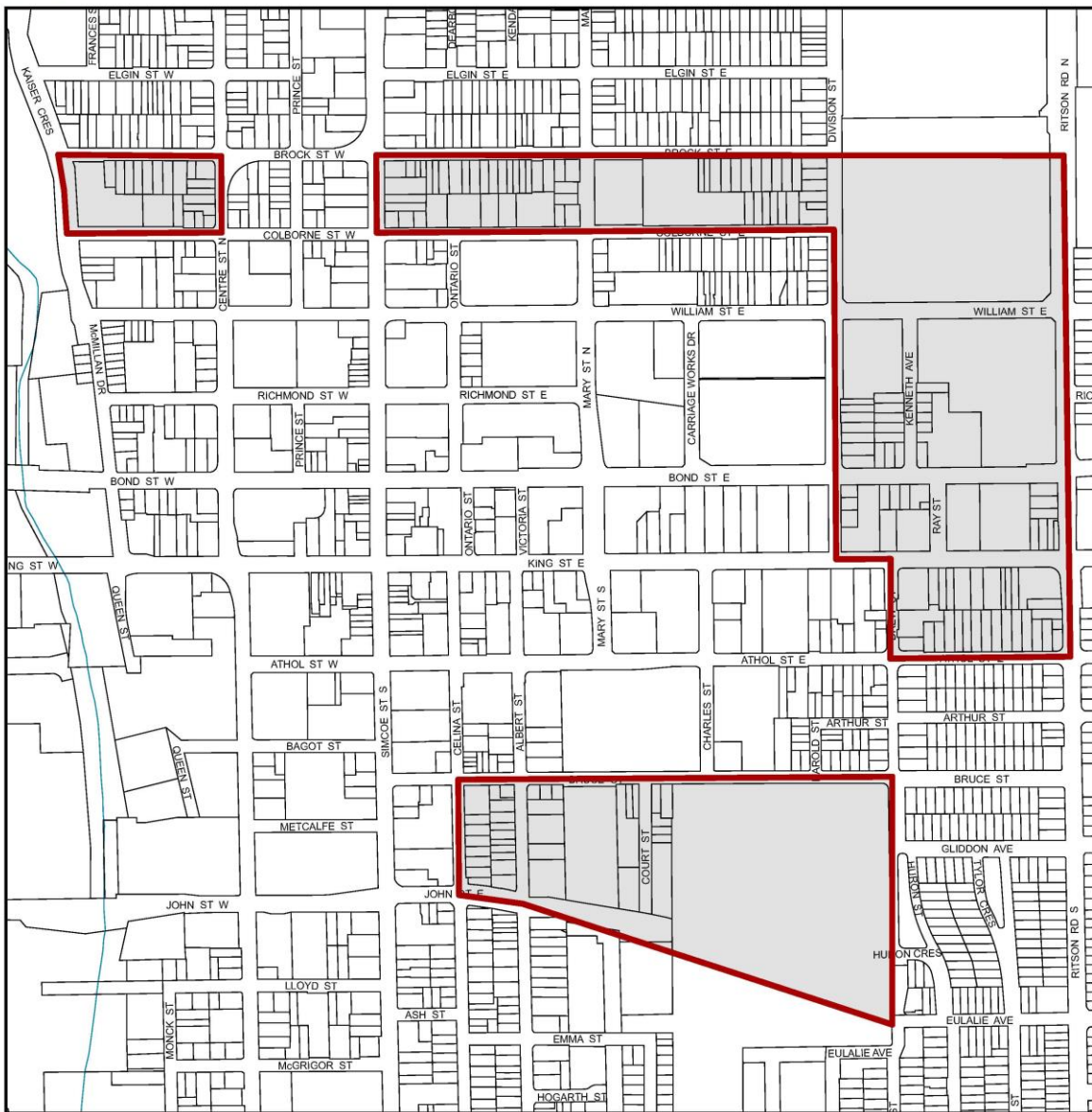
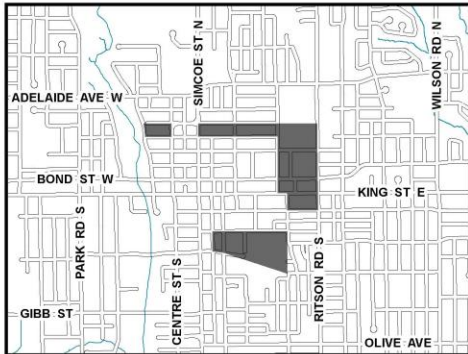


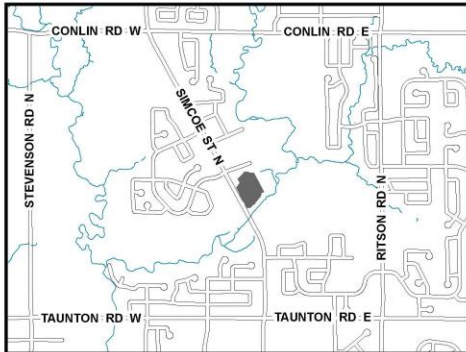
11. Subject to the provisions of the Act, the City may enter into an agreement to permit an Owner to perform work that relates to a service to which this By-law relates. In such circumstances, the City shall give the Owner a credit toward the Development Charge subject to the provisions of the Act.
12. A Development Charge shall be paid on or before the date that a building permit is issued pursuant to the Building Code Act in relation to a building or structure on land to which a Development Charge applies. No building permit shall be issued until the Development Charge is paid. Where the Development Charge is payable pursuant to section 3.8 of this By-law, the Development Charge must be paid prior to the completion of the applicable action or actions referenced in section 2.3 of this By-law. For this purpose, the date of completion of the approvals contemplated by paragraphs 2.3(d) and 2.3(f) of this By-law shall be the date on which all agreements imposed as a condition to an approval pursuant to subsection 51(26) of the Planning Act have been duly executed by all parties to such agreements.
13. If any or all of a Development Charge remains unpaid after it has become payable, the amount unpaid shall be added to the tax roll for the land which was the subject of the Development and shall be collected in the same manner as taxes.
14. The City's Treasurer shall collect all Development Charges imposed by this By-law when those Development Charges are due and payable, together with all development charges payable upon the issuance of a building permit imposed in accordance with any development charge by-law passed by the Regional Municipality of Durham and by any Board of Education.
15. Where a complaint results in a refund, the City's Treasurer shall calculate the amount of any overpayment to be refunded to any Owner who made the payment, and the refund shall be paid with interest to be calculated from the date on which the overpayment was collected to the date on which the refund is paid.
16. The interest rate to be used for any refund shall be the Bank of Canada rate in effect on the later of the date that this By-law comes into force, or the date of the most recent quarterly adjustment as set out in rule 17.
17. For the purpose of determining the quarterly adjustments contemplated by rule 16, the Bank of Canada interest rate in effect on the date that this By-law comes into force shall be adjusted on the first day of January, 2020 to the rate established by the Bank of Canada on that date, and shall be adjusted quarter-yearly thereafter on the first business day of each of April, July, October and January, to the rate established by the Bank of Canada on the day of the adjustment.




K:\data\members\2019\DC\Map\19-XX\GBC\RC\CA_SchD_mxd\06/06/2019








Schedule 'G'



1569 Simcoe Street North 



K:\Attachments\2019\03 Mar\FIN-19-XX\1569simcoeSN_SchG.mxd\04/10/2019